PROPOSALS FOR A EUROPEAN EQUITIES MARKET THROUGH LINKAGE OF THE COMMUNITY STOCK EXCHANGES

A Report presented to the Commission of the European Communities and the Committee of Stock Exchanges of the E.E.C.

Prepared by:
Michael HALL and Malcolm G DUNCAN
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Directorate-General XV of the Commission of the European Communities and the Committee of Stock Exchanges in the EEC jointly commissioned Messrs. Michael HALL and Malcolm DUNCAN to produce this study in January 1982.

The Consultants' first step was to visit all the Community Exchanges, meeting stock market authorities and major financial intermediaries specialising in international—more particularly European—dealing in equity securities.

They then presented three interim reports, the first in September 1982, the second in May 1983 and the third in September 1983. Following discussions with the Committee of Stock Exchanges in the E.E.C and Directorate-General XV of the Commission of the European Communities, these were used as the basis for the final report produced in May 1984.

At the request of several Stock Exchanges, this final report was also discussed and some amendments were made.

As the Report now stands, the following points should be made:

1. The main objective is to review the whole range of problems posed, at the time of drafting, by cross-frontier dealing in European securities listed on several Community Exchanges. As such, it constitutes a source of information and opinions hitherto unequalled in scope and value.

2. Secondly, the Report discusses various working hypotheses for achieving interconnection of European Stock Exchange floors, with the aim of ensuring that the majority, if not all, of the securities transactions in question are, by a quite natural process, concentrated on Exchange floors.

3. Finally, the tenor of the Report and the suggestions it contains are the sole responsibility of the authors, Messrs. Hall and Duncan. They do not in any way commit either the Committee of Stock Exchanges in the E.E.C or Directorate-General XV of the Commission of the European Communities.

It should therefore be clearly understood that the Report is, and should only be used as, a reference, research and discussion document. It should not be seen in any way as a work programme.

Yves FLORNOY
Chairman of the Committee of Stock Exchanges in the E.E.C.
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SECTION 1 – TERMS OF REFERENCE AND THE SCHEME OF THE REPORT

1.1 Introduction

This Report is presented to the Directorate-General, Financial Institutions and Fiscal Matters of the Commission of the European Communities (the Commission), and the Committee of Stock Exchanges of the E.E.C. (the Committee) in response to terms of reference set for the Consultants by the Directorate-General and agreed by the Committee.

The terms of reference from the Commission required the Consultants to undertake detailed studies with a view to developing a European securities market on a progressive basis, and to make appropriate proposals in this connection. They clarified that any moves towards the gradual integration of the securities markets of the European Communities should be built on the existing official markets. The studies were to acknowledge the overall objective of progressive development of a European Securities Market by means of the interlinking of the existing Stock Exchanges. It was specified that the improvements, modifications or projects of harmonisation proposed should be capable of gradual implementation.

Accepting the terms of reference of the Consultants, the Committee accepted and supported the Project as a study only, and affirmed that any decisions related to it would be made by the General Assembly of E.E.C. Stock Exchanges in conjunction with the Commission. The co-operation of the Stock Exchanges was accorded on the basis that the work of the Consultants was to be strictly limited to a study of the possibilities of establishing a European securities market. The scope of the study was further limited to the secondary equities market, considered to be the main priority.

With the support of the Committee, the Consultants carried out two tours of the Community capital markets in 1982 and 1983. All the E.E.C. countries were visited, most twice, and in the case of Germany three Stock Exchanges in different regional centres were visited and
contact established with a fourth. Detailed discussions were carried out, on an individual basis with 400-500 market participants, who, as well as Stock Exchange members and officials, included investing institutions, non-member banks, the securities depositaries and relevant central bank or Government departments.

The Consultants would like to express their appreciation of the help given to them on these visits which, in all cases, enabled them to obtain expert local opinion on matters related to international dealing and linkage, and which permitted them to assemble material from which an appreciation of the national situations could be further developed. A list of the Consultants' market contacts is appended.

The Consultants would also like to thank the officials of Stock Exchanges who commented on the sections of the Report covering individual Member States. The Association of German Stock Exchanges, in particular, undertook the task of redrafting much of Section 7 and the part of Section 20 which relates to the German market.

1.2 The Benefits of Linkage of the Community Stock Exchanges

The elaboration of the benefits of linkage of the Community equity markets which, in itself, could be a major task, was not within the Consultants terms of reference, in which the general advantage of linkage was implied. While the evidence and commentary in the Report endorse the urgent need to create a euro-equities market through linkage of the Stock Exchanges, it is in the main concerned with the technical difficulties of linkage and the routes through which it might be achieved. For the purposes of the Report, the broader justification of linkage is, in summary, considered to be as follows:

(i) It would broaden the base of operations in specified equities to permit the national European Stock Exchanges to participate in a European linkage which would attain World scale. It would encourage development of a euro-equity market, extending the issue of and dealing in shares of the major European companies across the Community. To date, euro-finance has only been sought by the major European companies in the bond markets.

(ii) It would support the Community principles of free capital flows across the national boundaries and of the right of the individual to best execution of transactions across all the official markets, and advance the aims in this respect of the Treaty of Rome.
(iii) The existence of the system, assuming its success, would put pressure on certain national Governments to remove obstacles such as Exchange Control, which deprive their nationals of the advantage of participating in the international securities market. It would stimulate the removal of fiscal, legal and regulatory obstacles at Government level which at present impede the efficient operation of the international equities market within the Community, and the attainment of its economic and financial objectives.

(iv) It would stimulate Community-wide information flows and investor interest across an increasing range of European securities, and increase cross-border trading.

(v) By broadening the market it would lead to increased business on all the national Stock Exchanges.

(vi) It would assist the growth of European securities houses of international scale and full range of function and assist the Stock Exchanges in meeting the competition of the major foreign intermediaries, who are increasingly active in Europe.

(vii) It would provide a market base sufficiently strong to absorb inflow or outflow of foreign funds into Europe, without undue destabilisation of the European capital markets, and reduce the present dependency of their performance on the stock markets outside Europe.

(viii) It would stimulate inter-European equities trading by making possible well-ordered dealing within defined procedures and understood conventions.

(ix) It would present the opportunity to rationalise commission and reduce transaction costs across the Community Exchanges and remove other similar anomalies of charging which at present impede international trading in the Community.
(x) It would offer improved capability to the exchanges to meet the growing competition in the international securities markets from dealing off the official markets and enable them on a European base to draw the present diffused international business of Stock Exchange members back into the official markets, under appropriate Stock Exchange regulation and supported by services as efficient as those available to the domestic markets.

(xi) It would offer opportunities to develop an efficient international settlement linkage based on the existing institutions, which could, with the co-operation of the depositaries, service the specific needs of the European international market.

(xii) It would allow the official markets to pre-empt other initiatives to provide the mechanisms of a euro-equity market which are almost certain to be taken by non-member intermediaries if the Exchanges do not act.

1.3 Structure of the Report

The Report divides into three parts, - the facts, the obstacles to linkage and recommendations.

Sections 2 to 13 present short synopses of the present international equities market in each country, followed by a review of the European market as a whole. Guided by their terms of reference, and the interpretation of them by the Committee of Stock Exchanges, the Consultants consider a major purpose, possibly the major purpose, of their Report is to convey to the sponsors of the study the present situation in the European international equities markets and a reflection of the views of the expert market participants interviewed.

Due to the scope of coverage of the Report, across ten national capital markets, only a summary account of the situation in each is possible. Comprehensive description of each national market is not attempted, and the synopses are limited to the salient features of each market and participants' views on future market development which have particular relevance to linkage. Each individual market could have been the
subject of a report the length of the present document. A plethora of material on each was made available to the Consultants. Throughout the Report footnotes have been avoided unless particularly apposite, but a bibliography of sources is appended.

The important question of quantitative assessment of the present European international equities market is not dealt with in the individual Sections on each country, but it is considered in context of them all in Section 12. The problem of estimation of this business is broadly similar in all the Community countries with active international markets, and it is best addressed in this manner. For similar reasons a joint résumé of settlement and depositary facilities is deferred until Section 20.

Sections 13 to 18 analyse the main ranges of obstacles to linkage of the Community Stock Exchanges. Comment on such obstacles has been guided in the main by market opinion. Although attaching the highest importance to such opinion, the Consultants have not considered it totally definitive as it is mainly inspired by an existing situation, in which many participants have material interest. It cannot be expected to take adequate account of the potential benefits of any re-structured linked situation. An attempt has been made to present an analysis which strikes a balance between the two attitudes; the first an idealistic view of the potential of a European capital market, and the second, a scepticism based on preoccupation with the practical obstacles.

The final Sections, 19 to 22, attempt to draw together the present framework of thought on linkage of the markets. The Report does not attempt any trite 'conclusions and recommendations' of the type which would be expected in a report of more limited scope. The Consultants believe that to set out a neat and well-defined schedule of activities through which a fully-linked European equities market might be achieved, even if it were proved to be valid, might be counter-productive at this stage.
Achievement of the linked market has three requirements: first, a profound knowledge of the present and complex international market, second, a sound appreciation of the theoretical and ideal possibilities of a Euro-equities market and third a will amongst all parties to exploit these possibilities. It is in the third of these conditions that the real problem of establishing effective linkage lies. The Consultants do not infer that this problem arises from thoughtless inertia on the part of the Governments and their capital market authorities. Institutional conservatism may, in some circumstances, be well-advised and justifiable. The effectiveness of the Stock Exchanges as the central intermediaries of the national financial systems crucially depends on the viability of their members, and any changes in their operating environment have to be cautiously evaluated in hard business terms. Moreover, changes to stock markets are difficult to achieve due both to statutory definitions of structure and functions and to representative control within the exchanges.

The changes required, in course of time, to produce a Community equities market which will accord with the provisions of the Treaty of Rome and which will provide the European capital market intermediaries with a market base big enough to meet overseas competition, involve issues of the greatest magnitude for the individual national exchanges. It is the general theme of this Report that these issues are being faced and are resulting in significant changes at national level. It is submitted that the Community capital markets are, in all likelihood, on a convergent course towards more similar structures which will, in a future that begins to be foreseeable, permit their full linkage into a European equity market of World scale. The Consultants believe that it is of paramount importance, from a Community standpoint, that these changes are accelerated at national level and internationally co-ordinated within the Community. If the objectives of the Treaty of Rome to which all the E.E.C. nations have subscribed are to be achieved, the emergence of a Community equities market is predicated by deterministic economic and financial logic. It is, therefore, not surprising that major developments - such as, for example, the reconstruction of the London capital market, the institution of a
continuous market in Amsterdam, the development of contrapartiste functions in Paris, or the re-thinking in Germany on the effectiveness of present systems of corporate finance - are all likely to lead to changes which will facilitate ultimate linkage.

It will, however, be recognised that while the Consultants may legitimately consider commentary on such current issues to be within their brief, it would be grossly inappropriate to make them the subject of recommendations in this Report.

The concluding Sections, therefore, attempt to draw together the observed state of thought on these major questions and identify from them a general strategy towards a Community euro-equities market based on an information, dealing and settlement network between the Stock Exchanges, appropriately assisted by electronic processing and high-speed telecommunication. Within this longer term framework - progress towards which will be governed by the rate of resolution of the major issues discussed in the Report - more precise and limited recommendations on immediate action are made. These the Consultants have attempted to relate firmly to the present stance of the Commission and the Committee of Stock Exchanges of the E.E.C.
2.1 The Local Market in Foreign Equities

The market floor in Brussels plays an important role in foreign equities dealing. More than a third of the companies listed on the Bourse are foreign. Discounting the period beginning in 1982 (with the de Clercq Law), during which the market in domestic securities has for various reasons become more active, dealing in these foreign stocks represented more than 50% of total share turnover. The Brussels Bourse is pre-eminent in Europe in the development of an effective localised market in foreign securities. As discussed more fully below, this system of Bourse quotation in Belgian Francs of an extensive range of major securities listed on the Canadian, French, German, Italian, Japanese, Luxembourg, Dutch, South African, Swedish, U.K. and Commonwealth, and American Exchanges responds to the investment preferences and needs of the Belgian investor for foreign stocks. It is supported by well regulated issue of Belgian bearer certificates which, linked to advanced depository facilities, permit effective local dealing and CIK book transfer of the securities.

While the Bourse market in foreign equities is, as has been said previously, admirably suited to the needs of the Belgian private investor, who can obtain bearer certificates (although there is nothing to prevent the listing of registered securities), the localisation principles on which it rests raise a series of complications. These have a relevance to the development of full linkage between Brussels and the other Community Exchanges. To develop this point it is necessary to sketch briefly the relationship between the parties who are involved in the three segments of the Brussels foreign securities market. The three market segments are the floor market, the Brussels arbitrage dealings and the direct dealings between Brussels investors and foreign centres which do not pass through the Bourse or the brokers. The parties are the brokers, the banks and the investors - (private and institutional).
The Belgian Brokers

The status of the broking profession in Belgium is mainly defined under Chapter 5 of Book 1 of the Code of Commerce, together with a series of Decrees issued between 1934 and 1980 which have tightened the provisions of the Code. The profession is protected by a series of monopolies, the exclusive right to title and function of Agent de Change, the monopoly (shared with the banks) of receiving Stock Exchange orders, handling foreign currency and dealing in foreign exchange and an absolute monopoly of execution of orders on the Exchange. The interpretation of these provisions substantially confines securities transactions to the Exchange, and the law defines an 'ordre de Bourse' as an instruction to buy or sell whether the securities are quoted or not. Similarly 'reception' of an order is deemed to be any receipt of an order, even if only for transmission within Belgium or abroad without personal liability in the transaction.

In addition to the Stock Exchange orders described above, it is possible to trade off-Bourse by the direct transfer of equity, whether listed or unlisted, by a broker or a bank, or by using their services as financial intermediaries. These transfers are governed by legal provisions. It should be noted, however, if the sum involved in the transfer of Belgian listed securities amounts to less than 10 million Belgian Francs, the confirmation statement must be drawn up by a broker. There are two exceptions which make it possible to by-pass the financial intermediaries - off-setting transfers amounting to at least 10 million BF; or occasional transfers by parties who do not habitually engage in this type of operation.

In return for these monopoly privileges, the law imposes a series of strict obligations on the Agents de Change. He may not undertake any outside profession without seeking the prior approval of the Stock Exchange Committee. He may not contract business agreements with a bank. He may, however, 1) become a partner, either in a general partnership or in a limited partnership, 2) set up financial undertakings either as a shareholder or as a partner. The articles of association and the role of the founders must be approved by the Stock Exchange Committee. The financial undertakings cited in point 2 cannot undertake brokerage activities. The broker is held to the
minimum commission scale. The restrictions imposed on the Belgian 'Agent de Change' however are less severe than those imposed on his French counterpart. Notably, he is permitted to act as principal, under the constraint of a clear indication that he is doing so in any client transaction. Beyond their agency business, the largest broker firms in the Brussels Bourse are able to operate a wide range of services including research, portfolio management, foreign and domestic bond market and C.D. market operations, trading, market-making and underwriting in the Eurobond market, foreign exchange dealing and money broking. The broking community in Brussels which amounts to about 280 members, and the size of the brokerage firms varies greatly, and reflects its highly diversified, even very specialised, role. Leading the market, some ten to fifteen major firms have emerged which transact the majority of Bourse business. Amongst them are several braking houses of full international scale. As a result, although the broking community is more than usually complex, it reflects the intuitu personae nature of the profession desired by the legislators. Its members may well have diverging views in respect of any plans for European linkage.

2.3 The Belgian Banks

The formal relationship between the brokers and the banks is readily defined in principle, in that banks share the brokers' monopoly of receiving orders, but are never permitted to execute the transactions. Orders, wherever they originated, must be channelled to the official market and executed on the floor.

This system is well adapted to the collective price system and is particularly suited to handling small and medium-sized orders. It maximises opportunity for computer pre-processing of the indicative equilibrium prices. Four recent surveys, two commissioned by the Exchange and two by a financial newspaper, indicated that banks' orders transmitted to brokers represented between 45% and 60% of broker turnover. Both bank and broker intermediaries receive orders from private clients and institutional investors alike. On orders transmitted to brokers, banks benefit from a 40% reduction on official commission charges.
Price fixing is carried out in Brussels using an efficient system specifically designed for this purpose. This system does, however, impose some rigidity with regard to the times at which price fixing is carried out, and could, therefore present certain difficulties where a continuous market is concerned. Supplementary procedures are currently being examined.

The banks via their trust companies and a system begun in 1952, have an important role in the Belgian equities market as issuers by the use of trustees of local certificates transforming foreign nominative securities into bearer form of the type demanded by the local market. The issue of such bearer certificates is strictly supervised by the banking commission which assures that local certificates are backed by foreign nominative stock and generally exercises audit control over the system. As at June 30, 1981, the aggregate value of issued bearer certificates was $1,230 million. It is estimated that the vast majority of private investors still prefer holding bearer certificates. Alternatively, it is possible to trade CIK nominee securities, in which transactions in these shares are effected by transfers in the accounts of CIK. Corresponding registered entries are held on behalf of the CIK by foreign organisations nominated by the CIK. (see also Section 20.1.1).

As is inevitable in a situation which is part-competitive and part structured by legislative arrangements considered in the best interest of the capital market, certain tensions exist between the banking and broking communities and with regard to their mutual functions in the secondary market. In the Belgian market, as elsewhere, however, tensions arising basically from the domestic market find their outlet in international dealing in which the parties concerned have greater freedom to act.

In the domestic market, the Belgian banks are contained in a well-structured situation. They are confined to being intermediaries between the client and the broker. They are admitted to the clearing system but are not members of the Bourse. Any order, of whatever
amount and whether for Belgian or foreign listed securities, must be transmitted by the bank to the broker and by the broker to the official market. With regard to direct transfer for large orders, reference should be made to Section 2.2. It should also be mentioned that no foreign bank in Belgium may receive Belgian Stock Exchange orders unless it is registered with the banking commission and therefore subject to the obligations entailed in this registration.

It could be said that the BF10 million limit fixed by the Royal Decree of November 10, 1967, is now out of date and unrealistic and that it constitutes a major barrier to concentrating transactions on the Exchange floor. The average transaction by an institutional investor in Belgium is increasingly large and greatly exceeds the BF10 million limit. It should be said that it is currently difficult to provide exact figures since the situations and sums involved are constantly changing. A 'continuous telephone market' has developed strongly. It should, however, be noted that Stock Exchange rules to which brokers are subject oblige brokers to charge official brokerage fees for any off-Bourse transaction. The average transaction by an institutional investor in Belgium tends to be between BF5 and BF10 million. Although some block transactions by insurance companies can be well above the average, most large transactions are the result of portfolio restructuring or divestment of family portfolios rather than of traditional operations. Informed observers consider that such share movements and block transactions represent less than 3% of bargain volume, but possibly 20% of value. The opinion was expressed that the general approach of detaching block transactions from the floor price was valid and that it was a fantasy to assume that large blocks should move at an official price derived from smaller transactions.

Under the regulations on this matter, buy and sell orders for Government, public sector and local authority listed funds, whether Belgian or foreign, can only be traded on the Stock Exchange floor. This rule applies only for trading within Belgium - foreign trading being subject to local regulations. An order may be given to a bank or a broker with specific instructions for it to be transacted abroad, but this is rare. The regulations provide the banks with two
alternatives, depending on client instructions; - the order can be transmitted to a broker, in which case brokerage fees would be divided between the broker and the bank - 60% to the broker and 40% for the bank; - the order can be routed directly to a foreign market which, given the international structure of banking, it is easy to do. As with a broker, the bank will then charge the full foreign brokerage fee plus 50% of the Brussels brokerage fee. This would only be of advantage to clients where the transaction had taken place at a much more advantageous price than that available in Brussels, the spread between the two prices compensating for the higher costs entailed in international settlement. About two thirds of foreign securities orders originating from Belgian banks are placed abroad. This market estimate carries the implication that Belgian dealing in foreign securities across the Bourse is broadly one third of total Brussels foreign dealing by value, and this appears broadly consonant with the balance of payments portfolio transaction figures.

Apart from their issuing and order-routing functions, Belgian banks have significance in the equities market as investors. Management of their portfolio investments makes them large institutional investors in their own right. They also are permitted to deal for their own account, holding stock for short periods to assist their primary market functions. Such positioning is clearly distinguished in their accounts from other investments, and is subject to regular audit by the Commission Bancaire.

2.4 The Belgian investing institutions* (1)

The role of the Belgian investing institutions in the foreign equities markets is in the general stereotype which prevails in most of the European countries. Amongst the most important institutions are the insurance companies, whose assets might typically be 50% portfolio investment in securities, 30% mortgage loans, 10% real estate, with the remainder in individual policy loans and other miscellaneous investment. Taking an example of the overall portfolio structure of a major group of life assurance companies, of the securities investments, 73% were in bonds, virtually all Belgian, and
27% in company shares. Of the company shares, 64% represented core holdings in Belgian stocks, while 36% were foreign. European securities tended to represent less than 25% of the portfolio investment in foreign equities. This is an individual case in general, the average portfolio distribution appears to be as follows:

- Bonds: 82% of which: Government and public sector borrowing 40% - 50%, corporate bonds 22.36%, foreign loans 26%.
- Shares: 18% of which: Belgian shares 13% - 15%, foreign shares 3%.

The proportion of overall investment in foreign equities is seen to be small, due to actuarial need to cover Belgian franc liabilities with Belgian franc investments, to Government regulations designed to support the local market, and to clear preference for bond-or property-based investment. Even so, it is not an insignificant volume of business: the largest of the insurance companies has, for example, an annual cash flow of BF10 billion.

The order routing of the Belgian institutions illustrates the difficulty of attempting to localise dealings in foreign securities on the floor of the national Bourse. As pointed out above, the Belgian Bourse has achieved greater success in this respect than any other of the European Exchanges, thanks to quotation in Belgian francs, specialised local instruments and highly efficient technical support. Ironically, it is these localised characteristics of the Bourse foreign equities market, combined with the inability of the present collective price system to handle block orders, which renders the Bourse market unattractive to the institutions in their foreign dealing. The institutions do not in general carry out their foreign transactions on the Brussels Bourse, especially with regard to US shares, but go directly to the main foreign markets.

(1)* Definition of an institutional investor as provided by the Belgian Central Bank - 'An institution whose main activity is to acquire savings for the purposes of investment or to provide credit'.
The reasons for this are conventional ones, - access to a larger market, efficiency of information, diversity of investment opportunity particularly in the technology stocks, and liquidity which would permit easy withdrawal from the investment if required. To these are sometimes added the advantages of negotiated commission and absence of stamp duty. Business lost to local intermediaries in this way is unlikely to be regained. Although the Belgian foreign exchange regime is liberal, unless there was a major development, business undertaken outside the barrier of the financial franc is likely to be left abroad.

It appears an irony that the very characteristics which render the Brussels floor market in foreigns well adapted to the needs of the small local investor, mitigate its usefulness to the institutions. The system of collective price, which is seen as a protection to the small investor, cannot accommodate the block transactions required by the institutions. The market is further narrowed by the provision of the local bearer instrument. This constitutes a separate market in the security. Although the price of the local bearer is driven by that of the underlying stock in the main market, the bearer price may vary 2% - 3% from that of the underlying stock. The bearer stock price itself sub-divides and the official list quotes two prices, one for certificated and one for CIK form. Conversion of bearer to the original nominative incurs a cost of 2% going to the issuing trustee, with a 1% charge on reconversion. The Brussels institutions acknowledge that they have 'basic loyalties', but these cannot override the tangible business factors which direct their foreign transactions abroad.

2.5 Foreign Brokers

Brokers from the European Community benefit from the Treaty of Rome with regard to freedom of establishment. They can, therefore, become members of the Brussels Stock Exchange provided that they meet the requirements laid down by Belgian law. Non-Community brokers who are not members of a national Stock Exchange cannot, under the law, operate in any way in Belgium.
Arbitrage operations may only be carried out by professional inter-
mediaries who therefore ensure interaction between various markets
where the same security is listed. The aim of arbitrage operations
is either to benefit from a price difference or to hedge on a
market with greater liquidity. Arbitrage brokers thereby supply
foreign securities to the market. Based on successful developments
of this function, they operate more broadly in the international
markets. Since 1955 all brokerage firms have been free to under-
take arbitrage. The rules permit them to act as principals and
moreover, exchange regulation is very liberal. In the first decades
after the 1955 change the number of arbitrage brokers grew to about
twenty. In more recent years, factors such as improvement of
communications, volatility of currency and direct international
dealing by banks have tended to tighten the arbitrage margins and
increase its risk. Now, it is estimated that 80% of the foreign
securities arbitrage dealing is in the hands of about ten brokerage
firms. It should be noted that the majority of brokers have
correspondents on various foreign exchanges who will execute client
orders routed to them by Belgian brokers. The majority of arbitrage
brokers have a foreign exchange desk and, as has already been
mentioned, the very liberal foreign exchange regime is of considerable
advantage to the profession in comparison with the situation in
other countries. The Belgian two-tier foreign exchange market
facilitates all forms of securities and foreign exchange transactions.
There are also smaller family firms which are highly specialised
in arbitraging stocks from specific markets onto the Brussels floor.
In these arbitrage operations the risks of positioning are minimised.
The arbitrage broker takes up stock as a principal but aims to undo
the transaction immediately in another market.

The function is complex. The prices of the international stocks,
possibly as many as six or seven main markets, have to be
watched over the 24-hour cycle and related to the existing Brussels
price. The transaction costs, particularly those related to
financing settlement, have to be taken into account. Settlement
might range from two days in Germany or four days in Tokyo to a
month in Paris. Several weeks might have to be bridged between the two sides of the transaction. Conversion of Belgian bearer to the original stock, even for a major security in the North American market, may take up to five weeks. Financing of money positions in such operations may easily erode the narrow margins obtained between the buying and selling prices.

The building of all these factors into the prices, in a highly competitive situation, is the essential skill of the arbitrageur. An informed estimate was given that the arbitrage spread could be halved if international settlement were brought to the levels of efficiency which are normally obtained in domestic markets. In Brussels, arbitrage onto the floor is supported by a well-established system of stock borrowing. The larger Brussels brokers carry out highly sophisticated arbitrage operations, which extend beyond the function of servicing the Brussels demand. An order received from Switzerland, for example, might be only part met in Brussels, with the greater proportion executed through transactions on other overseas Exchanges.

It is clear, also, that the large arbitraging brokers play an important role in meeting large foreign orders for Belgian stocks, thus defending the incapacity of the local floor to handle such large bargains. A Brussels broker for example, receiving a large order from a Dutch institution for say 20,000 Petrofina, might immediately make a net price from his own position. Such an order to sell would be considered as a 'cession', a transfer, and not a 'Bourse order'. This practice avoids reference to the market of a large order which might unstabilise the day's price. In fact, were it required to pass such transactions 'beyond the capacity of the market' through the floor, an informed opinion was given that the transaction would have to be split between several days' trading sessions which would complicate the operation considerably.

A large Brussels broking house undertaking arbitrage might have some 50% of its business off the floor. These arbitrageurs are permitted to deal net with foreign intermediaries. In Europe, they relate
effectively to the continuous markets in U.K., Germany, France, Holland and Switzerland. The main point of focus of their activities is, nevertheless, the United States.

The activities of the Belgian arbitrage firms demonstrate clearly the role and value of efficient arbitrage in supplying foreign securities to a local market. They level price differences between the markets and they perform various functions, under the regulation of the Bourse, which the floor market itself cannot perform. To represent the arbitrageur as a redundant intermediary, exploiting international market price differences without contribution, is to misunderstand the essential nature of the tasks he performs. If the European markets were harmonised, linkage would partially substitute for arbitrage, but, on the other hand, such linkage would lead to a considerable expansion of international activities overall. The function will certainly remain necessary. To illustrate, an information system might transmit the current price of an Amsterdam security to the Brussels floor, but the ability to undo such a transaction in the Brussels market is limited by the whole range of technical differences between the markets. The gap between the nature of a transaction in Amsterdam and that in Brussels is bridged by the skill and the risk-taking of the arbitrage broker. Moreover no single common currency has been envisaged for this harmonised market.

The arbitrageur, moreover, is subject to intense competition. The fact that the arbitrage function exists in Belgium in the classical form, more than is the case in other European Exchanges, is due to the existence of a large clearly identified local market in foreign securities which must be serviced. In that sense, the arbitrage function is less exposed to the full competitive forces which have minimised the role of arbitrage in other markets in Europe. The Belgian arbitrage brokers are nevertheless subject to competition from foreign activities of local investors, to tightening of margins due to electronic communications, volatile currencies, and high interest rates, and, more recently, rapid movements of the equity markets themselves. A valid indication of the action
required to set up a fully-linked European equities market could be obtained from straightforward analysis of what the essential functions of the present arbitrageurs are.

The problem of designing an appropriate interface between the Belgian market and any system of European linkage is likely to hinge on the complex local situation outlined above, the need to avoid disturbance to the delicate equilibria within it. The final factor to be taken into account, however, is the technical difficulties which might arise in linkage of the floor itself.

2.7 The Market Floor

It is not within the scope of this Report to discuss fully the structure and procedures of the Brussels trading floor. Such description is available in previous E.E.C. Reports. Summary consideration is, however, necessary due to the general problem of interfacing the floors, and, in particular in the Belgian case, due to the strong floor market in foreign equities and its potential relationship to the European linkage.

The Belgian floor procedures are closely analogous to those of the Paris Bourse. Quotation is firmly based on collective price formation, and the price is the same whether for a purchase or a sale. Although there is evidence of some opinion that, at least in international securities, continuous prices might be required, the official opinion of the Bourse is that the present price formation systems best suit the needs of smaller orders on the local market. They are considered to induce stability, minimise intermediation costs and offer apparent fairness to the investing public at large. The relevance of collective price systems to international dealing is more generally considered in Section 16. The indications are, however, that should it become apparent that other methods would provide distinct advantages for the local or international market, the system would evolve. Studies on this matter are currently being undertaken. It should be noted that individual prices subsequent to the opening price are already being officially shown for the major securities.
The Brussels Bourse thus operates trading procedures similar to the traditional operations of the Paris Bourse criticised in the Perouse Report. The cash market (Marché du Comptant) categorises stock into the 'Marché des Rentes', 'Marché des Corbeilles', and the 'Marché du Parquet', respectively comprising Government or Government supported bonds, heavily-dealt shares at collective and successive price, and lightly-dealt shares at single price. As a distinct concept, the forward market (Marché à terme) is established, mainly overlapping the Corbeilles market and including the major foreign. Across this securities structure there are a number of methods of quotation, by call over (par criée), supported in the case of the forward market by computer pre-processing of par easier type, to which is added broker interest on the auction floor. This method, but without computer pre-processing, is also used in the cash market but is dependent on the proposition of a price by the specialist. In the 'corbeille' section of the cash market individual prices may be established by order-matching (par opposition).

The majority of floor business is transacted on the forward market. This market, initially an outlet for speculation (forward positioning) has gradually evolved into a round-lot market and is used rather as a cash market with deferred settlement. This analogy with a round lot market is reinforced by the practice of setting the minimum lot value at 100,000 BF. Eligibility amongst brokers is limited to those who are members of the Co-operative de Liquidation du Terme, who must meet certain criteria as regards experience and credit worthiness. Belgian law requires that forward operations are margined to a value of not less than one quarter of the value of the transactions.

Daily fluctuation limits apply to Bourse prices, - 10% in the case of the Corbeilles market, except where the shares are simultaneously traded on the forward market (where there are no limits). This applies in particular to foreign securities, which are permitted to follow price movements of the markets of origin. There is a limit of 5% for the 'Marché du Parquet' and no limit is applied to the forward market.
It should be noted that the Quotations Committee, established under statute within the Stock Exchange Commission, closely supervises the market. Where a suggested price is likely to cause a considerable distortion, measures are taken to inform both professionals and investors prior to official price fixing. The Quotations Committee ensures that prices fluctuations reflect movements in the markets of origin. The problem posed by price differences between the forward and cash markets is less severe than the similar situation on the Paris Bourse. This is due partially to the fact that forward settlement is set at every two weeks, rather than once a month, and partly to the active role played by specialists operating as principals, who to some extent even out the spread between the two markets. This aspect, as with all other questions relating to price fluctuations, is closely supervised by the Quotations Committee.

As implied above, equities dealing on the floor of the Bourse mainly comprises the execution of smaller investor orders, with some larger orders or arbitrage operations transacted either on the floor or, in the case of internationally traded securities on foreign markets or finally, via the so called block telephone market between local professionals.

The trading hours of the Brussels Bourse conform to the traditional pattern of the Continental Exchanges. They permit assembly of orders on which opening prices are struck until the time at which the official price is fixed, and the calling of successive groups of stocks and limited dealing at successive prices continues through to 2.30 p.m. In respect of synchronisation of Bourse hours, two views were expressed in the Belgian market. Firstly, it was suggested that synchronisation of Bourse hours and simultaneous price fixing would help inter-market transactions. Conversely, the view was expressed that it was only due to the chance of unsynchronised fixing that the Bourses were able to relate their foreign collective prices coherently.
Summary of Market considerations affecting European linkage

The dominant considerations likely to influence the Belgian Stock Exchange in approaching the problems of European linkage are likely to be:

(i) The preservation of the present equilibrium of interests of the brokers and the banks, or reflection, within the linkage scheme of any modifications likely to occur in Brussels in respect of that balance of interest;

(ii) The preservation of the existing vigorous floor market in foreign equities. Any scheme of floor linkage would pose an immediate challenge to the present arrangements of this market, which are ideal under a general concept of a localised market in foreign securities, but which by definition are likely to be at odds with any scheme to link the European international equities markets. Foreign shares listed under original bearer form should present no real problem except with regard to any scarcity that might result from dematerialisation. Foreign shares in original registered form would pose considerably more problems. Private investors and also corporate investors (who seek confidentiality with regard to certain major transactions being undertaken) prefer the bearer form. This preference leads to the creation of bearer certificates representing registered shares. If these representative certificates were to be in an international form and therefore admissible to other markets, the problem would have been solved. One consequence of floor linkage would be that imbalances in the various markets would directly find an outlet in foreign markets. It seems unlikely and, indeed, undesirable that small and medium-sized orders would be transacted other than on the traditional markets.

(iii) The present complex floor dealing procedures are considered ideal for the domestic market. They may have to be adjusted so that, at least in the section of the market dealing in international securities, an effective floor interface with the linkage system could be found. While the insistence of the Brussels Bourse on concentration of foreign transactions in the Exchange is understandable, it is
submitted that this could only be achieved in two ways. The first would be to rule that the arbitrage operations at present balancing the markets should be brought onto the floor. The second would be to accept commitment to a homogeneous European international equities market which would permit genuine linkage of floors, but which would most likely involve substantial change in the Brussels procedures.

(iv) There are likely to be divisions within the brokering community on the form of linkage appropriate to adopt. The large majority of smaller brokers may favour a form of linkage which would continue to concentrate both sides of the transaction in a foreign security on the local floor. The larger firms, which at present operate in the international market, would be more likely to insist on acknowledgement of the present order routing as the only realistic course of development.

(v) The Bourse authorities would not wish to change structures which are designed to benefit the local public, and any plans for linkage would have to take this into account.

(vi) With linkage a problem may emerge with regard to the mechanisms involving conversion of registered certificates of foreign listed securities to bearer form. Such operations take place off-Bourse, mainly on foreign markets and are handled directly by trustee organisations issuing bearer certificates. Floor linkage would require liquidity to be provided by functions carried out on the market floor itself. A related problem would be that the off-Exchange net dealing of large transactions, carried out by specialised brokers, and defending the present floor price formation system, would not be possible. The linkage system itself would require to have the capacity for these large-size deals.
3.1 The Impact of Exchange Control

At the time of the Consultants' Survey in 1982, the Copenhagen international market in equities was virtually non-existent due to the Exchange Control restrictions prohibiting Danish nationals from acquiring foreign securities. The concession permitting investment of Dkr. 7,000 abroad, later increased to Dkr. 10,000, was not significant, being in a quantity too small to offset handling costs of foreign transactions. Danish nationals were permitted to invest in bonds of foreign institutions of which Denmark was a member, in effect, Community institutions. The Danish Government removed the Exchange Control restrictions in January 1984.

At the time of the study, the equities market was depressed. This was the combined result of recession, an endemic problem of adverse balance of payments, and a Government whose prime concern was to fund annual budget deficits by high-rate bond issues, rather than to develop the equities market. As the bonds had to compete against the strong mortgage bond market, the rate of interest available on bonds at the time of the study was over 20%, against a yield on industrial shares which was estimated as low as 3% - 5% by Copenhagen brokers.

During the course of the study, and notably in 1983, the investment climate in Denmark radically changed. There began to be indications that the new Danish Government would address itself to the problem of the budget deficit. The balance of payments on current account markedly improved. A large influx of foreign funds moved into the Danish equities market. During the course of 1983, the Danish index out-performed all the major markets and all but two of the world capital markets. Equities trading, which had been running at Dkr. 1.8m per day in 1982 rose to triple this rate in the first half of 1983. The effective yield on bonds, which had been 22% in 1982, had by mid-1983 fallen to 13%. From May 1 1983, certain
Exchange Control regulations, as discussed in Section 14, were eased, and prospects of further concessions indicated.

The period of the study was thus concurrent with a complete change in the situation in the Danish equities market. In this new context it must be accepted that much of the investment comment obtained by the Consultants in 1982 has now only retrospective relevance. The new economic, financial and Exchange Control situation is likely to stimulate changes in the Danish stock market. As yet, however, no major changes have occurred in the structure of the Danish market. The situation observed by the Consultants in 1982 remains that which must be taken into account in considering European linkage, in which it appears increasingly likely that Denmark will be a participant. The problems which might stimulate latent changes in the Danish market were visible in 1982.

3.2 The Corporate Status of the Copenhagen Stock Exchange

Although the Copenhagen Stock Exchange is one of the oldest in Europe, - its first commission rules in fact date from 1684 - the status and regulation of the Exchange at the time of the study was based on the Copenhagen Stock Exchange Law of 1972, as amended by Law No. 524 of December 27 1979. This has since been supplemented by a new Law enacted on January 19 1982.

Unlike the other Community Exchanges, the Copenhagen Stock Exchange is governed by a broadly-based Committee on which the Exchange members are a minority. Of the twelve members, all of which are technically appointed by the Ministry of Industry, three are recommended by the members of the Stock Exchange after election by the Brokers Association, three by the Central Bank and 2 commercial banks, 3 by the Mortgage Credit Institutions, and three jointly recommended by the Copenhagen Chamber of Commerce, Federation of Danish Industries, and the Danish Shipowners Association. The 1972 changes represented a diminution of broker representation on the Committee, as under previous arrangements, brokers had had 50% of the membership. An advantage derived by the
brokers is that they are responsible only for a small element of Stock Exchange costs, finance being derived 45% from bond issuers, 45% from quoted companies and only 10% from the broker members of the Stock Exchange. The Chairman of the Committee and his Deputy are appointed on a three year renewable term by the Minister.

Under the 1972 governance, the Stock Exchange is constituted as an independent institution with the exclusive right to operate an Exchange for public trading in and quotation of shares, bonds and similar securities. However, in Denmark, there is no legal provision confining securities transactions to the central market, and there is no legal provision conferring a monopoly of securities dealing on the members of the Exchange. The Committee under which the Exchange operates has broad coverage of the securities industry. This may be a factor of significance in the manner in which the Exchange operates, the important aspects of which are determined more by the equilibrium of interests of the institutions involved than by any formal structure provided by the regulations.

In the 1972 Law, in line with the general move to modernise Stock Exchange regulation, a Supervisor of the Stock Exchange and of members of the Stock Exchange was provided. The function was assigned to the Bank Inspectorate of the Ministry of Industry, operating under the Commercial Banks and Savings Banks Consolidated Act of January 30 1981. The Inspectorate is represented, without a vote, at the Stock Exchange Committee, and, as discussed below, its functions provide important financial assurances for investors.

The Committee has charge of the Secretariat of the Stock Exchange, at present comprising fourteen full-time and six part-time staff.

A Broker Association exists, which has no role in the administration of the Stock Exchange, but which maintains dealing standards and disciplines, and which carries out such functions as the representation of stockbrokers to the Securities Centre Board of Directors.
3.3 The Major Characteristics of the Danish Capital Market

Although 1983 has seen a considerable resurgence in dealing in equities, the Danish market remains predominantly a bond market. Within this sector, the bonds issued by the Mortgage Credit Institutions are by far the most important, and it is estimated that they have tended to constitute 60% of bond transactions. Though these instruments are of interest to other Community investors, (inward capital investment having been permitted in mortgage bonds during the period of Exchange Control, and in Government bonds since May 1 1983) they are not the direct subject of the Consultants' study, and analysis of this major sector of the Danish securities market is not required in the present context. It should however be noted that Danish interest in European linkage would clearly be increased if bonds were to be included in any proposed inter-Community information and dealing system. The extent of the dominance of the bonds market is summarised in the following table of market capitalisation.

<table>
<thead>
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<tbody>
<tr>
<td>Government</td>
<td>188,971</td>
</tr>
<tr>
<td>Unit Mortgage Credit</td>
<td>44,918</td>
</tr>
<tr>
<td>Special institutions</td>
<td>37,876</td>
</tr>
<tr>
<td>Mortgage Credit (1st &amp; 2nd)</td>
<td>313,934</td>
</tr>
<tr>
<td>Convertible bonds</td>
<td>400</td>
</tr>
<tr>
<td>TOTAL</td>
<td>586,099</td>
</tr>
<tr>
<td>Banks</td>
<td>9,758</td>
</tr>
<tr>
<td>Transport etc.</td>
<td>4,197</td>
</tr>
<tr>
<td>Commerce</td>
<td>4,696</td>
</tr>
<tr>
<td>Shipping</td>
<td>7,248</td>
</tr>
<tr>
<td>Industry</td>
<td>20,301</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>250</td>
</tr>
<tr>
<td>Investment Associations</td>
<td>1,778</td>
</tr>
<tr>
<td>TOTAL</td>
<td>48,230</td>
</tr>
</tbody>
</table>

The equities market is demonstrably the narrower. At the end of 1983, 215 companies with an average market capitalisation of D.kr.485m were quoted. The subject of the Consultants' Report being the secondary equities market, it is not appropriate to analyse the deficiencies of the new issues market in detail, or the vigorous activities undertaken by the Danish Stock Exchange during the period of the Study to rectify the situation. It should be noted that, in common with other Community
Exchanges, the flow of new issues had dried up in the period prior to 1982 due to the high cost of equity finance to the issuer. The capital gearing of Danish companies, and thereby reliance on loan finance, was extremely high. The normal situation obtains whereby interest on loans is deductible from tax while dividend payments are not. This fiscal discrimination was reinforced by the fact that, during the recession, overdrafts of large companies were held at 6%-8% below the normal bank lending rates.

In Denmark the shortage of new issues was compounded by a convention of issuing new equity capital at 105% of its nominal value. In an issue of rights to existing shareholders this represented payment of a premium which might offset low dividend yields, but it was clearly invalid in respect of the real market situation, and a considerable deterrent to the issue of new capital onto the market. In general, considering the relationship between nominal value and market value, new issues of existing securities should have been at a modest discount to three times the nominal value. Although this problem was broadly perceived in the markets in 1982, none of the banks appeared ready to take a lead in rectifying it. Danish issuers had been driven to foreign markets so that they might issue at an economic price.

The Danish issuer, Bang and Olufsen, confronted the problem, by a compromise, by which existing shareholders participated in an issue at 105%, with new shareholders subscribing at a price closer to the market. The shares of newly listed companies have, however been offered by tender for ten years, and note must also be made of vigorous action by the Exchange to encourage new listing of small and medium-sized enterprises through the 'after' market. While this type of initiative is of value in the longer term development of the market, resolution of the structural problems inhibiting further issue of equity in Denmark by the major companies is more important in the short term.

The major participants in the bond market are the banks, the insurance companies and the private and public pension funds. Some private investors are also active in it, but in aggregate they are not significant in comparison
with institutions, between whom a bond transaction would tend to be of average value of D.kr.10m to D.kr.25m.

The institutions similarly dominate in the share market. A market estimate was given that 60%-70% of shares issued are in the hands of the institutions. Government regulation of institutional portfolio structures is liberal compared with most Community countries. In the case of the insurance companies, the rules relate to limiting the proportion of the portfolio in any one company, and participation in any company to 15%. Currently the main effect of this provision is beneficial, in that it limits the holdings of the two large public pension funds, the A.T.P. and the L.D., and permits limited corporate investment to be more widely spread. During recent years the institutions have shown an expected and logical preference for the bond market. The life insurance companies nevertheless still constitute the main investors in equity, in which they are permitted to hold up to 20% of their assets. In 1982, 5% was considered more typical.

In 1982, private investor interest in equities was negligible, and breaking opinion was that the private investor might be out of the share market altogether. With the resurgence of the equity market in 1983, the situation may have changed, but not, as yet, significantly. An important development in 1983 was the authorisation of the Scandinavian Investment Company, a U.K. subsidiary of a Danish Investment Company, to transfer funds abroad for investment in United Kingdom Unit Trusts. This represented both a concession to the prohibition of purchase of foreign shares by Danish nationals which has existed since 1931, and an encouragement of private investment. In late 1981, the Confederation of Danish Industry made proposals for a Monory type scheme. While this did not materialise, new tax rules were introduced giving relief from capital gains for shares held for three years. A wealth tax is payable in Denmark on assets of over D.kr. lm.
3.4 The Broker Members of the Stock Exchange

Membership of the Copenhagen Stock Exchange is confined to brokers. Banks and savings banks, whether Danish or foreign, are not eligible. The conditions under which a licence may be obtained are set out in Section 10 of the Stock Exchange Law 1979. Licences are only granted to natural persons; proposals for corporate membership have been recently reviewed and rejected. As well as specifying conventional criteria of age, experience etc., the Order stipulates that the broker should be supported by adequate net capital. This is at present specified as a minimum of D.kr. 600,000 and fidelity guarantees and insurance policies are prescribed by the Minister of Industry to secure other members and clients respectively. The order also imposes a reserve requirement supervised by the Inspector, by which 8% of the total balance of a broker firm must be represented by own capital. The brokers are audited by spot checks and submission of annual accounts to the Inspectorate. The Inspectorate has progressively tightened its financial monitoring, there having been several broker defaults in the 1970's, and in 1980 and 1981. In 1982 the Guarantee Fund totalled about D.kr.12m, with further member firm guarantees of D.kr.5 m.

The Minister of Industry may limit broker applications according to turnover of the Stock Exchange. Applications for new firms however are rare, the normal procedure being to buy into existing firms.

The Act contains a requirement that a broker should have Danish residence, but this is relieved in respect of nationals of other E.E.C. countries, who may be granted membership on similar terms to those available to Danes. At the time of the study, no second country E.E.C. nationals had taken advantage of such eligibility.

At the end of 1982, there were 34 stockbrokers grouped into 24 broking firms, of which 2 or 3 might be considered substantial, with up to 50 or 60 employees. The Copenhagen brokers can act
across the whole range of securities market functions, there being virtually no technical limit to their activities. The brokers may act both as agent and as principal, the latter subject to declaration in the case of the client transactions. Brokers may cross transactions in their office if at the same price. They may sell short, other than in bank shares.

The larger broker firms, as well as undertaking securities dealing, are active in the short-term money market, the Eurobond primary and secondary markets, and authorised foreign exchange dealing and in one case, new issues. Notably, while not technically considered banks by the Inspectorate, they undertake private banking functions. They are not permitted to advertise for banking business, but they may take deposits, operate cheque accounts and pay interest. In respect of these activities, they are not subject to banking control, but deposits are secured by bonds of appropriate value. The deposit taking function appears specialised, and tends to be available only to larger clients in amounts of over D.kr. 1m. The brokers do not compete with commercial banks for small deposit business, which they do not want.

While in effect the broking and banking functions are separated within the broking firms at present, the Inspectorate anticipates regulation which will formally enforce this.

Expansion of the larger broking firms has been facilitated by their ability to seek external capital, though such holdings incur unlimited liability. The firms are also permitted to introduce partners who are not members of the Exchange. The need of the member partners of the Exchange to ensure the default liabilities of the firm are proportionately covered results automatically in agreements within the firms associating the non-member partners with the firm's liabilities. The larger firms tend to have three or four partners, one or two of whom may be non-brokers.
3.5 The Floor Trading

While over the last decade much progress has been made in improving the regulatory framework, the physical operation of the Danish market floor has continued under traditional procedures. The Exchange moved to new premises in 1974, and since that time facilities have been enhanced by the installation of key-to-disk equipment for more efficient recording of transactions and publishing of prices. The structure and procedures of the markets did not change.

The Copenhagen market is divided into two floors. The most important, on which 80%–90% of business is conducted, is the bond market which is not the subject of this Report.

The equities market has been traditionally divided into two segments, hitherto called the Hovedbors or main market, and the Efterbors or the after-market. Trading sessions commence at 1030 hours. In the main equities market, which comprises those securities for which a nominal value of D.kr. 15m. or over has been issued, prices are determined in an auction system. The Quotations Official calls each security in list order, identifying the lowest offer and the highest bids from the brokers, and striking a price once a bid matches an offered price. In heavy dealing, further business may be indicated by the brokers with further prices made. The form of dealing may be exemplified as follows:-

Quotations Official - Calls security in list order with indicative price e.g. 84
Buying broker - Calls 85
Selling broker - Calls 86
Buying broker - Calls 4
Quotations Official - Calls 54 ...... etc.
Selling broker - Calls 'selling'
Quotations Leader - Calls 'broker X to broker Y at (selling price)'

- 34 -
Similar calls could then continue, until the Quotation Official declared the end of dealing and the final spread of bids and offers, e.g. 85%-86. The next stock would then be called. A key rule within the dealing system is that the broker may not, during the trading session, sell cheaper than he has bought and may not buy higher than he has sold. Dealing in equities under the auction system is in percentage of nominal value, ranging from 1% covering prices between 100%-150%, to 5% for prices over 1,000%. Dealing is in round lots of D.kr. 8,000 nominal if the price is below 1,000%, and D.kr. 4,000 if above 1,000%. Each transaction is for one lot, which is generally considered too small for current market needs. The procedure becomes very distended in heavy trading.

During the trading, representatives of the banks, several of which have offices in the Stock Exchange building, may signal to the brokers, but they are not permitted to take direct part in the dealing. The esoteric aspects of such signalling is an unusual characteristic of the Copenhagen Exchange.

The Efterbors comprised dealing in the less active minor issues with a nominal value of issued shares of not less than D.kr.1m.* The price formation principle is similar to that of the main equities market, but dealing is made more expeditious by the use of four trading boards which carry the more active securities of this market. Each board is dealt with in turn. Under the supervision of a quotations official assisted by two clerks, members are free to make bids and offers for any of the securities on the board being traded, without any particular order being observed. The calls are marked on the board and the transactions achieved by matching bids and offers. As calls for the securities diminish, the official declares sixty seconds to final trading which is signified by a clock bell. The conventions with regard to bid intervals and lot sizes are the same in both of the equities markets. The Efterbors operates under a procedure which is brisk, each board normally taking little more than five minutes, but which is not well adapted to heavy trading.

* Under the more recent arrangements the shares of newly admitted companies must be of not less than D.kr.15m value. Older issues of less value remain in the market also.
All dealing is for three day settlement. Though, as discussed in Section 19, bonds settlement is very advanced and supported by the Vaerdipapircentralen procedures, settlement of the equity, which is virtually all bearer, remains by physical delivery.

Some amendments were made to the trading system by the Stock Exchange Order of January 1982. The main market innovation was the creation of a special market of shares in small and medium-sized companies, designated as Stock Exchange Market III, and which offers easy conditions of listing for companies of D.kr. 1m-15m capital.

At the same time the Hoverbors and Efterbors were respectively re-designated Stock Exchange markets I and II. The change of name was meant to remove an invidious meaning which might have been seen in the previous distinction, and to pave the way for more flexible movement of securities between the new markets I and II according to the volume of transactions. The reforms of 1982 related to the drive to bring more securities to the equities market, and floor procedures remain substantially the same.

3.6 The Banks and the Off-Market dealing

It is understood that the Exchanges at present are considering methods by which the floor procedures could be modernised. Even at the low transaction levels which preceded the recent boom, there was an awareness in Copenhagen that the floor procedures might not be optimal.

It was considered that the traditional floor system might be contributing to certain characteristics of the Copenhagen capital market about which concern was evident. Chief amongst these was the division of securities dealing between the brokers and the banks, and the extent of business carried out off the market, i.e. off the Exchange floor. As is the case in all capital centres of the Community, no figures exist to establish this proportion. Market opinion was that 90% of the bond dealing was outside the market. The off-market equities dealing was considered to be of much the same order.
Two factors have combined to produce this result. The first is the freedom available to any individual or institution, including the banks, to deal off the Exchange. There is no legislation concentrating securities transactions on the Stock Exchange. The institutions are thus free to deal between themselves. The investing institutions rarely do, for conventional reasons which are as valid in Denmark as elsewhere. There is, however, a very substantial bank market. The banks operate as brokers on behalf of their private and institutional clients. They also deal on their own account with other Danish banks and investing institutions or with foreign capital market intermediaries of all types.

The large commercial banks, such as Copenhagen Handelsbank, Den Danskebank and the Privatbanken operate full-scale securities functions. These are rigorously separated from the credit departments. While the banks are acting as brokers they only take orders, and they do not exploit their position as banks in their Stock Exchange dealing. The split between the broking and dealing functions and loan departments is normally absolute.

Although some 10% of bank business is thought to go to the market floor, the actual distribution of the business between banks and brokers is more complex. The banks acknowledge the importance of the central market as the only agency through which an official and standard quotation can be assured. They therefore have an incentive to use it to the extent required to establish a price. Such a price having been established and published, all transactions off the market are influenced by the market price of the day, though this arises from public pressure rather than, as is the case in Paris, from any rule.

At the time of the study, the off-market business was preponderant. Subsequently, heavy volume trading has resulted in all-day floor dealing, with less opportunity for price-making outside the Exchange.

Even at the time of the study the fact that 80%-90% of equity transactions were dealt off the market did not imply that the brokers were not associated with them. An important element of broker business is on behalf of insurance companies and pension funds and, possibly with bank involvement, is
arranged off the market. The banks frequently find it convenient to operate behind the broker, on or off the market, particularly in the case of large transactions in which their own direct participation would reveal too much about their position. It was estimated that about 50% of the off-Exchange equities market might be transacted through the brokers. A client had the right to insist that the broker should deal for him on the Exchange.

The second factor compounding the importance of the off-market is the inherent narrowness of the floor trading system. The procedure of dealing lots is slow, and the lot size of D.kr. 8,000 nominal bears no relation to and can not accommodate the size of the off-market transactions. The technique of open calling of bids and offers, if not supported by central positioning, for example by a jobber or a specialist and by a block-passing system, necessarily introduces conventions whereby brokers have to conceal the real size of any large business they may have. Although the brokers are permitted to take positions in equities, they generally consider it a risk to do so, and although they hold shares in their portfolios they regard these as assets and the securities are not dealt. Any positioning which does occur in the Danish markets is a by-product of the banks' own holdings, and, as has been noted, their participation in floor dealing is indirect. Any intervention required to stabilise the market is normally undertaken by the banks, which carry out the role of 'company brokers' for issues which they have sponsored and which attempt to protect the interests of such issuers in the market.

While recent heavy trading volumes may have brought increased liquidity to the Copenhagen market floor, the situation in 1982 clearly demonstrated the deficiencies of the trading system. In an equities market which has suffered low activity for several years, a vicious spiral appeared to have occurred. The reluctance of market participants to
unsettle the market resulted in fewer of the transactions going through the Stock Exchange floor. As a result, the Exchange market became weaker, and even less able to accommodate significant orders. The result was that by 1982 brokers admitted that no equity transactions of any importance could be handled by the floor system. The only possible technique was to evaluate a share on 'fundamentals'. To permit a transaction arranged off-market at a price determined on this basis, the brokers would then enter the market to move it to the price at which the transaction might be executed off the market.

While this problem might be resolved by increased volume, the floor procedures are not well adapted to handling it. The trading procedures withstood the surge of business in 1983 when the volume of transactions tripled, but this was only achieved by trading sessions which continued late into the evening. The excessive trading hours and the constant strain on dealers and supporting services demonstrated the clear need for a more flexible high-volume trading system.

A further factor taking business into the off-exchange market is that while forward dealing is permitted in Denmark, the Exchange does not operate either a forward or an Options market. Any such covering transactions have to be undertaken in the bank market.

There was evidence during the survey that banks, though benefiting from their ability to transact a proportion of their dealings free of broker commissions because of the off-Exchange market, were nevertheless concerned at the general situation. The major commercial banks are developing strong securities functions. One of their prime requirements is a transparent and concentrated market, on which a genuine price can be established and market trends observed. The need for a continuous market in major stocks is also seen, as is a requirement for more company and price information, particularly to assist in the banks' international dealing.
The Danish banks appeared to be faced with a quandary with regard to the development of a stock market. On the one hand, passing all their business through the brokers would involve them in further costs, which they might consider to be an excessive expense of broking remuners. On the other hand only by doing so will they secure the broad market which is essential for the bank's more significant and potentially lucrative securities functions. For example, the banks play a prime role in share issues of all the major companies. To date, the banks' achievement in this field have been impeded by the narrowness of the Danish stock market which has driven at least one Danish company to the practice of issuing its shares in foreign markets.

In summary, there appeared substantial opinion among both the Stock Exchange authorities and the participants in the market that the existing equilibrium prevailing between broker privileges and bank financial power, though working in many ways constructively, might not fully meet the capital market's current needs. Nor had it generated the type of central market which would meet the modern requirements of the financial system. The Stock Exchange authorities have indicated that they intend to review the trading procedures of the Copenhagen floor. It is accepted that the present floor system is incapable of handling more than 10% of the transactions, and, if any moves are to be made to concentrate the market, the floor trading procedures would have to change. It is not possible, at present, to predict the form of such changes, nor the implications that they might have for any European linkage based on market floors.

3.7 The Market for International Equities in Denmark

In January 1984, due to a marked improvement in the country's balance of payments, Danish nationals were relieved of the Exchange Control restrictions which had previously prevented their acquisition of foreign equities. The possibility now exists that the Copenhagen Stock Exchange could participate in any Community linkage. A brief comment on the situation which prevailed at the time of the study, and which, broadly, had existed since the 1930's, is, however, relevant to indicate the threshold from which the Danish capital market will move into free international equities trading.
Prior to 1984, Copenhagen activity in the international equities market had been severely restricted by Exchange Control regulations, and by the preference of investors for bonds. The main foreign investment carried out by the brokers was in the permitted Eurobond markets. As a special provision, Danish institutions with a Deutschmark risk could offset this by buying short-term Deutschmark securities, with the permission of the Central Bank. In terms of direct portfolio investment in equities abroad by Danish nationals, prohibition had been almost total, apart from minor concessions mentioned above. Switching of stock already held abroad was permitted as was dealing in the three foreign securities which, by quirk of history, had been permitted to remain listed on the Danish Stock Exchange.

An important characteristic of the Danish Exchange Control system was that inward direct portfolio investment by foreigners had always been permitted, - the one restricted area, Government bonds, also being made accessible in May 1983. Added to this, the large Danish companies had been liberally permitted to raise funds abroad, and, subject to Central Bank permission and commitment to remit profits, to acquire foreign subsidiaries. As a result, the foreign dealing activities of the banks were not unimportant. The Danish banks, possibly in syndicates which might include brokers, were, during the period of Exchange Control, active in the international financial markets. While their prime activities were in the bond markets, the banks were the natural counterparts for foreign investors wishing to acquire Danish equities. There was evidence that the banks were vigorously developing such contacts and providing analysed data on the Danish equities market to foreign dealers. The main concern of the banks in this respect was the loss of business to themselves, and to the Danish Stock Exchange as markets in Danish securities moved abroad.

The impression was gained that the banks' foreign equities business was distorted and constrained by the Exchange Control regulations, but that in the event of liberalisation they would be well placed to assume the international dealing roles carried out by their counterparts in most of the other Community countries. Their contribution in this respect will now be enhanced by their access to other Scandinavian markets.
3.8 Summary of Market considerations affecting European Linkage

Several aspects of the above brief review of the role of the Copenhagen Stock Exchange in the Danish capital market may indicate the likely attitude and approach of the market participants to European linkage.

(i) The removal of the Exchange Control restrictions previously prohibiting the purchase of foreign equities now opens the way for the Danish Stock Exchange to participate in any Community equities dealing linkage. On the other hand, the development of a Copenhagen international equities market is likely to be the first pre-occupation of the Stock Exchange authorities. Until the local balance of this situation is resolved, and its local centre of gravity determined, external linkage will be a secondary priority.

(ii) A second major consideration is that in spite of the revival of the equities market, the traditional source of finance through the Exchange is through the bond market, notably the mortgage bond market. A European linkage system confined to equity will, in the foreseeable future, be only of secondary interest to the Danish brokers. The European system would presumably be more favoured in Denmark if it covered both shares and bonds.

(iii) It seems questionable whether the present equilibrium between the brokers, the Exchange market and the banks is well adjusted to the current needs of the Danish capital market. Moves to strengthen the Stock Exchange market may be anticipated. Increased concentration of transactions on the Exchange is needed to permit the market floor to perform its functions effectively, to carry out all the broker business on the floor, and to provide the banks with a strong central market which is essential to their own major corporate finance and new issue functions. There is little indication that this will be achieved by radical change in the Exchange structure, such as admission of banks to Stock Exchange dealing. The present division of market functions between brokers and banks appears to work well, is constructive, and
avoids some of the stresses which arise in certain other Community markets. The correct balance may be achievable, in the main, from adjustment of technical detail such as the commission received by the banks. A technical requirement to increase concentration on the market is likely to be some procedure for putting block transactions through the Exchange. During the next few years it is likely that a major pre-occupation of the Danish authorities, the Stock Exchange and the market participants will be the development of the domestic equities market, and the assertion of its appropriate position in Danish securities. Any proposal for European linkage will have to accommodate this, and avoid any technique of linkage which might compromise these domestic objectives.

(iv) The present reactivation of the Danish equities market, and the massive increase in transactions associated with it make it likely that the Danish market floor procedures will be modernised. It is premature to suggest what the form of the new market is likely to be, but it will have to achieve a much higher rate of execution of transactions than the traditional system. It is further likely that the new system will require devices to ensure liquidity of the market. If this need is accepted, the introduction of formal market-making or specialist functions may be required. The need for forward and Options markets on the Exchange will presumably also be considered in the review of trading procedures.

(v) The main interface for foreign equities dealing in Denmark, with the removal of Exchange Controls and as new trading procedures are implemented, is difficult to forecast. A major aim of any re-organisation in the Danish Exchange which would be likely to be endorsed by the banks, would be to create a market capable of playing a full international role as the market of origin of the major Danish stocks. The development of such international

* 0.75% up to consideration of D.kr.100,000; 0.5% in larger transactions in Share Market I.
business would, on a reciprocal basis, require the quotation of major foreign securities in the Danish Exchange. As matters presently stand, it is likely that a system of foreign dealing along the lines of that in Amsterdam would emerge, with the banks exploiting their international position, capital base and dealing expertise to play the prime role in this market. The problem of reconciling the development of floor trading with the development of international equities business would take the same form and pose the same questions as it does in Amsterdam.

Both in relation to the development of the strong central floor, and in establishing the position of the floor in foreign dealing, the ability of the Copenhagen brokers to operate as banks offers constructive possibilities. It is open to question, however, whether the increased element of risk involved in positioning in the domestic market or in foreign securities would be acceptable to the broking members.
4.1 The negative effect of Exchange Control

When it was announced by the Taoiseach, on November 15 1978, that the Irish Government had decided to participate in the European Monetary System right from its outset on December 18 1978, Irish investors and brokers may have justifiably anticipated that investments abroad, as from that date, would no longer have to be limited to scheduled territories*, as established by the previous Exchange Control Law of 1954. In such a case, besides their traditional foreign investment market, the United Kingdom, Irish investors, and particularly institutional investors, would have been able to diversify further their investments within the boundaries of the European Community.

On the contrary, and totally against the spirit of the European Monetary System, which was intended as the first concrete step towards a European monetary unification, the existing Exchange Controls were immediately extended to include Ireland's main trading partner - the United Kingdom - with which it had maintained a de facto monetary union since the early 19th century.

The Central Bank of Ireland justified these restrictive measures as indispensable to safeguard official external reserves and to regulate the effects of capital movements on the exchange rate of the Irish pound.

Experience appears to have proved the ineffectiveness of the restrictive policies, as official external reserves have continued to deteriorate. The measures have proved inadequate to regulate capital movements, as speculative capital operations may be channelled through more liquid assets than investments in securities. A straightforward purchase and sale operation between the Irish and London Stock Exchanges immediately involves a bargain cost (commission fees, jobbers turn and stamp duty)

* The United Kingdom, Channel Islands, Isle of Man, the Republic of Ireland and Gibraltar.
of over 7% and the total switching operation may only be achieved in some three weeks.

Since December 1978, Irish residents, apart from certain institutional investors, have not been permitted to acquire additional foreign currency securities other than through acceptance of rights issues on existing holdings. However, investments held prior to that date could be switched into other foreign securities within a three month period of the sale, and all such transactions had to be executed with non-resident investors and through an approved agent. No distinction was made either between the E.E.C. and non-E.E.C. securities issues, except for authorised loan issues of E.E.C. authorities, which might have been reasonably expected on Ireland's admission to the E.M.S.. However, further controls have been placed on the latter which makes the purchase of authorised loan issues of E.E.C. authorities unattractive.

The consequences were drastic for both the Dublin Stock Exchange (the Irish unit of the amalgamated U.K. and Irish Stock Exchanges) and Irish investors. The funds already invested abroad, either by private or institutional investors, tended to remain permanently locked out of the Irish stock market. In the case of private investors, it was estimated that this amounted to between three-quarters and two-thirds of their investment portfolios at that time, which were for the greater part invested in the U.K.. The local market therefore tended to lose much of its liquidity which was previously assisted by a frequent switching back and forth of funds between Ireland and the U.K. (its principal foreign investment partner) according to the available yields of each market.

At the same time institutional investment in Irish listed companies also tended to become permanently locked in, owing to the limited size of the local market, whose aggregate capitalisation was equal to half the annual cash flow of the Irish insurance companies alone. The situation was further aggravated by the fact that the top seven listed equities represented well over 70% of the market capitalisation of the 78 listed shares, and were and remain the only truly marketable stock for Irish institutional investors.
The same measures also rendered the well-known company, Arthur Guinness, with its traditional strong links with the Republic of Ireland, subject to the same restrictions. As only the U.K. registered holding company is listed, the company was deemed a foreign enterprise. Irish investors could therefore only acquire further Guinness stock from the proceeds of the sale of other foreign stock. The Guinness company made a proposal to overcome this difficulty by use of the Irish register, but this was turned down by the Government who feared creating a general precedent. The number of Irish shareholders has subsequently fallen by an estimated 30% and in 1982 only about 14,000 of the 37,000 shareholders were Irish residents. In addition, the proportion of the shares in Irish hands was believed to have diminished from about 27% to 21%-22%.

Irish institutional investors have therefore increasingly turned to seek other investment outlets, such as property, Government stock etc., such recourse as there has been to foreign equity investment has mainly been towards the UK & US with the other European and non-European markets figuring to a lesser extent, within the limits imposed by the Exchange Controls. Exchange Controls have therefore considerably distorted the pattern of Irish investments.

On September 4 1979, deferring to the strong case put forward by the Irish institutional investors, the Government granted authorised insurers and pension funds the possibility of investing either 10% of their net actuarial or technical reserves or 10% of their net cash flows in foreign currency securities.

Apart from Exchange Control, there are no rules or regulations for institutional investors, though guidelines have been laid down by the supervisory bodies in Ireland. Life insurance companies had, generally speaking, kept foreign investments within a maximum of 20% of their assets prior to December 1978.
It was estimated that at the time of the study about 40% of portfolio investments by insurance companies were invested in equities, with 25% to 30% in gilts and 25% to 30% in property. With regard to equities portfolios, it was estimated that about 40% to 50% would be invested in foreign securities and foreign currency loans would be utilised in order to top up overseas investments.

The Stock Exchange authorities in Ireland have repeatedly remonstrated against the discriminatory nature of Exchange Control regulations which undeservedly penalised the individual investors; who unlike the institutional investor, have no concessions for limited investment in foreign equities. The Stock Exchange Committee originally made a proposal for a £(1)10,000 per year concession which later, in view of the continual deterioration of the currency situation was halved to only £(1)5,000 per annum.

The Exchange Controls have proved incapable of protecting Ireland's external reserves. Whereas net external indebtedness of the public sector and the banking system amounted to £(1)732m (12% of GNP) in December 1978, by the end of 1981 it had deteriorated to £(1)4.5 billion (about 42% of GNP). Furthermore the separation of the Irish pound from the British pound and its subsequent depreciation against other hard currencies has forced up the yield rates required from Irish Government stock. Whereas previously there had been a mere half a point difference between the yields of U.K. and Irish Government stock, the difference is now as much as three to four points and it would probably be much greater if freedom of investment was allowed.

In view of the huge running deficit of the Irish Government, this is hardly likely to occur in the near future.

A further discriminatory aspect of the currency controls is that they are in practice limited to portfolio investments, possibly because such restrictions are more easily imposed in this area.
Consumer durables may be freely purchased, gold and silver coins (the so-called 'biens de refuge') may be acquired and the purchase of foreign property within the E.E.C. is permitted. Irish residents may take up to £1,500 per person in foreign currency and £1,100 on foreign holidays. There is no effective check on the observance of these travel allowances, nor on the utilisation of credit cards outside Ireland.

The generally depressed state and lack of growth of the Dublin stock market was also caused by fiscal laws which had been in force for some years and which were made all the more onerous to investors in 1982. The previous 30% tapered capital gains tax was doubled to 60% and whereas previously it was reducible to 25.5% after three years and 21% after six years, it now is only reducible to 50% after one year and remains constant at 40% from three years onwards. However, the previous annual exemption threshold of £1,500 has now been increased to £1,2,000 per person. This tended to reduce the already low market-ability of most listed shares. It inhibited the reasonable amount of short term investment essential to assure an acceptable level of market liquidity.

Pension funds are exempt from such taxation while insurance companies are taxed at 60% of annual realised gains. Unlike individual investors, institutional investors may offset minus balances and losses calculated on indexed book values, even though it is not possible to offset gains on one security directly against a loss on another.

At the end of 1982, the ordinary shares quoted on the Dublin Stock Exchange were valued at £1,091m, and two banks and the five largest industrial companies represent nearly 70% of this value. At the time of the study, the depressed level of the market was making it increasingly difficult for listed companies to raise additional equity capital through rights issues, causing increased recourse to bank lending and State assistance. In the past Irish listed companies have successfully raised considerable sums on the Dublin Stock Exchange (Table 4.1).
Table 4.1

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The increase in the capital gains tax will also lead to a reduction in tax revenue on stock market transactions. It will discourage the realisation of capital gains and therefore tend to render the existing market progressively more rigid and illiquid and will interfere negatively in the efficient management of portfolios by the Irish institutions.

4.2 The operations of the Dublin Stock Exchange

In March 1982, the 86 member brokers were organised in nineteen firms, sixteen located in Dublin, two in Cork and one in Limerick. Trading takes place on the floor of the Dublin Stock Exchange in two sessions (at 9.30 hours and 14.15 hours) and the securities are traded by a collective price call-over system at a trading ring. Trading is for a two week account period as in London.

Owing to the limited size of the local market and market volume, many large orders will either be traded by 'put throughs', or will be traded directly with a London jobber. In fact Irish brokers are permitted under the current Exchange Control regulations to have foreign currency cover in order to facilitate trading with Irish shares dual-listed in London.

Irish brokers are basically subject to the same discipline as members of the U.K. Stock Exchange, though, in their case a broker licence must also be obtained from the Irish Minister for Finance. The Irish Unit complies with most of the Rules established by the amalgamated U.K. and Irish Stock Exchanges which has its main administration in London. For example, it adheres to the City Code, to the regulations on mergers,
to the commission rates, and is advised by the Quotations Department of the London Stock Exchange. Admission and after-listing requirements are also identical. However, in Ireland, owing to less stringent statutory regulation, the Stock Exchange often has some difficulty in imposing Stock Exchange Rules, particularly on smaller Irish listed companies.

Even though the Irish Government recently seems to have modified its opinion of the role of the Stock Exchange in the development of the national economy and a promising Unlisted Securities Market seems to be growing, the viability of the Irish Unit may be further aggravated by the forthcoming implementation of negotiated commission fees in London.

4.3 Future Developments

In August 1983 the Committee of the Irish Stock Exchange presented a report to the Irish Minister for Industry and Energy which contained recommendations for Government action to stimulate the issue of equity capital by Irish companies and encourage the listing of their shares on the Irish Stock Exchange.

The report mentioned the absence of any new full listings since 1975. In spite of the proven ability of the Stock Exchange in helping listed companies to obtain new risk capital, new issues had tended to average £(1)40m per annum, with a value of £(1)110m in 1981. There has been a gradual erosion of the official list during the last ten years. The sixty one fully listed corporations had a capitalisation on June 30 1983 of £(1)1,132m. This represented less than 10% of GNP, as opposed to 50% ratios in the U.K. and the U.S.

In the opinion of the Stock Exchange and a leading merchant bank, at least thirty private Irish companies could potentially be listed and would add an estimated £(1)280m to market capitalisation. This would be more than the aggregate capitalisation of the present Official List - Irish.
if the top seven enterprises are excluded. Other potential listings relate to Unlisted Securities Market traded securities, subsidiaries of the U.K. and U.S. firms, and State companies which might be privatised. Such listings are estimated to represent a further increase in market capitalisation of £(1)450m, which is nearly half the present total value.

In order to achieve such goals the Stock Exchange's report makes several recommendations. The capital gains tax should be reduced from the present 60%/50% and 40% (after three years) to the previous 30% level with roll-over relief for gains re-invested within two years. There should be an increase in the tax credit on dividends. A change of public attitude with regard to corporate profits should be encouraged. Present Exchange Controls should be eased to encourage repatriation of Irish owned foreign portfolios. A Monory-type law to stimulate investments in new equities, particularly new venture corporations, by private investors should be passed. Lastly, more favourable conditions should be provided to encourage the development of management share option schemes.

It may be hoped that recent improvements in the Irish economy and promising prospects offered by the recent offshore oil developments may induce the Irish Government to consider implementation of the innovations proposed by the Irish Stock Exchange. The Dublin stock market has already reacted strikingly to the growing optimism. Business volume in 1983 increased by some four to five times compared with 1982 and turnover in the third quarter of 1983 was seven times that of the same period of 1982. The aggregate market value of listed equities at the end of 1983 was approximately £(1)1.5 billion as opposed to £(1) 826m in December 1982, and the stock market index had risen by approximately 60% over the same period from 172.3 to 275.6.
SECTION 5 - THE INTERNATIONAL EQUITIES MARKET IN FRANCE

Summary analysis of the international dealing of equities in France must focus on the roles of the Agents de Change, the banks and the French private and institutional investor. The main issues arising relate to the principle of 'unicité de Cotation' and the Agents de Change monopoly and the degree of adaptability of traditional Bourse structure and systems to the demands of modern securities dealing, particularly with regard to international markets, and to the securities activities of the banks. Assessment of the situation with regard to any potential European linkage is complicated by current and proposed changes which in the course of the next few years could radically alter the Paris official market.

5.1 The French Agents de Change

The principles of operation of the French Agents de Change are specified in Titre V of Livre I of the Code de Commerce and remain, in essence, those laid down in 1807. The Agent de Change is restricted to commission-oriented functions, and may not, apart from a limited technical concession, take positions in securities. To assure the integrity of his function as an Agent, he may not undertake commercial or banking operations on his own account. The law further prohibits him from having any interest, direct or indirect in any commercial enterprise.

Given these restrictions, a monopoly of securities trading is conferred on the Agents de Change. Article 76 gives to them the exclusive right to negotiate business in quoted and unquoted securities. The current interpretation of the law is that this requirement to effect securities transactions through the Agents applies to both corporate bodies and individuals. The sole exceptions are share transactions within the same company group and share transactions related to mergers.

Since 1967 the Chambre Syndicale, the governing body of the Compagnie Nationale des Agents de Change, have permitted an order of concentration of Agents. Prior to that time each firm had only one Agent. In face of
an obvious increasing requirement for a strengthened capital base for the broking functions, mergers of two or three Agents were permitted. The Chambre Syndicale considered that it had an obligation to assure competition in the market, and was concerned at any undue concentration of firms. As a result, mergers of smaller firms only were permitted. Concessions have also been made in the form of incorporation, and in recent years the trend has been away from partnerships and sociétés en commandite simple towards sociétés anonymes. The degree of concentration of the Agents in 1982 was sixty one offices of which:

- 32 had 1 Agent de Change
- 22 had 2 Agents de Change
- 6 had 3 Agents de Change
- 1 had 4 Agents de Change

(Total: 98 Agents De Change)

In corporate form the firms comprised thirty seven sociétés en commandite simple, sixteen S.A. à conseil d'administration, four S.A. directoire, four sociétés en gestion personnelle. Most of the mergers had been of Paris Agents de Change. The provincial Agents, whose business is largely in their traditional field of management of large private portfolios still, in the main, operate on an individual basis.

The privileges and obligations of French Agents remain heavily personalised. Although since 1890 the Agents have been permitted to delegate floor dealing functions to Commis Principaux, the Agents are still required to be on the floor. This can, from time to time, cause a loss of international business, though it appears to have little relevance to the telephone market operated almost totally by employees.

The firms are permitted infusion of outside capital, subject to the absolute prohibition of association with banks, and of bank directors entering broker firms. There are no legal rules on the holding of such capital, control by the Agent being assured by his personal responsibility
for 80% of the capital or, in the case of a firm with several Agents, a similar proportion shared between them. Outside capital must, however, be approved by the Chambre Syndicale and the Minister of the Economy. Directors related to such outside funding have the benefit of their shares but no rights in the direction of the firms.

As a result of these arrangements it has over the last two decades, been possible to build up substantial broking firms in Paris, but they tend to be small by international standards or in terms of the French economy. The Chambre Syndicale has, moreover, applied a policy whereby the largest firms permitted should not be greater than three to four times the size of the smallest. The resultant situation is that of sixty-one firms from both Paris and the regions, some 38% have a capital value of FF10m - FF25m, 15% lie between FF7.5m - 10m, with the remaining 53% below FF7.5m. If only the Paris firms are taken into account, the proportion of firms in the top band is greater. In the opinion of the investors, these developments have permitted the growth of firms which can, within present market arrangements, fully discharge the functions of their domestic agency business. The adequacy of the present capital base is thought more questionable in relation to international dealing, both now and with regard to the possible development of the Paris market into a full-scale international financial centre in the future.

The monopoly of the Agents operates with full force in the domestic market, considered to be domestic and foreign securities listed on the Bourse, and the hors cote stocks. French clients, private or institutional, must deal through Agents de Change in all French securities. Incoming foreign orders for French securities must be placed with an Agent, or, if placed with a bank, must be executed through an Agent. This requirement applies equally to orders for French securities originating from foreign brokers' offices in Paris. The monopoly obviously does not apply to French shares dealt abroad. This exclusion can be significant, and a single major foreign intermediary stated that on certain days their turnover in French stocks had exceeded the total equities turnover on the Paris Bourse.
The position with regard to dealing in foreign securities is however more complex. The domestic role of the French Agent results in limitation of his ability to take participation in foreign securities firms. He may not participate in any foreign firm carrying out dealing functions, and is thus excluded from participation in firms operating on other Exchanges. His foreign office can be no more than a 'bureau de representation' carrying out remisier-type functions. This apart, considerable flexibility is available to the Agent in his foreign securities dealing. In this field, provisions of the monopoly do not apply, and the Agent is to a considerable degree released from the tight disciplines and capacity rules of the domestic market.

A distinction must be made in this regard between foreign securities listed in Paris and unlisted foreign securities. The Bourse market in foreign services 2 types of investors, - the private investor mostly in small amounts, for whom Paris quotation and dealing is more appropriate, and certain of the institutions, notably the insurance companies, who are only permitted to deal in foreign securities which are listed on the Paris Bourse. Opinion was expressed that discretion was available to deal directly to the foreign market if the client so instructed. Such instruction is rarely received, so the de facto position is as stated above. It should be noted that no such convention is observed by foreign securities houses in Paris, who may and do place private client business in foreign securities in the markets of origin.

With regard to foreign stocks not listed on the Bourse, the Agent de Change has complete freedom of operation. He may address any market intermediary or investing institution in a foreign market. The fixed commission scale relating to Paris transactions does not apply in this case; he may remit commission. He may deal with foreign centres on a net basis, though normally, for reasons discussed below he does not. The Agent can thus buy, for example, I.B.M. for a client in New York, transmitting the purchase order abroad. He can deal with a Dusseldorf bank in Volkswagen as this security is unlisted while he would, on the whole, deal Bayer, which is listed, on the Bourse. He might deal Bayer in Germany if the client requested.
A further element of flexibility accorded to the Agent de Change is the ability to deal off the Bourse outside official trading hours. While this is principally significant in context of the fast-developing off-market in block trading in French securities, it permits the Agents to relate to foreign markets throughout their trading hours. From the foreign intermediaries' point of view it is difficult to deal during Bourse trading, unless they are prepared to deal 'at best' and risk the opening price. It is therefore more normal for them to place orders and arrange execution by the Agent off the market. This the Agent is entitled to do. If the security is listed in Paris, its transaction must be made within the Bourse prices of that day, or if he is ready to take the risk, at a price he is confident will be obtained the next. Such transactions are normally in French securities in which case they must be reported, and are subject to normal commission rules in respect of any client involvement.

In terms of his privileges, which substantially assure him his domestic market, and in terms of the flexibility available to him to interface with the wider market in Paris in foreign securities, the French Agent appears favourably placed. The complications in the present situation arise from the changes in the nature of the markets themselves. There is evidence of substantial opinion in France, both at the formal level of such studies as the Perouse and Dautresmes Reports and informally at professional level, that to cope with the market situation which has developed in the last 2 decades, considerable adaptation of the traditional market system may be required. There is already tangible evidence of such changes in recent developments on the Paris Bourse.

The nature of the problem may be summarised by briefly reviewing the roles of the other two main participants in the French equities market, the banks and the investing institutions.

5.2 The French Banks
As already noted, the French banks are precluded from securities dealing by the Code of Commerce, not subject to the exception quoted below, can they be associated with firms of Agents de Change. Their roles in the securities industry are, however, extremely significant. Those relevant
The prime importance of the banks in the Paris equities capital market lies in the securities movements which they initiate, either on behalf of their own portfolios, managed funds, or on behalf of the institutions, and the transactions which they execute, either in Paris or abroad. One major bank alone owns 3%-4% of French companies by market capitalisation, and if its managed funds are included this figure rises to 4%-5%. The banks also manage investment for clients, and manage or receive investment instructions relating to institutional portfolios. In course of such investment management large share transactions are effected, an average institutional bargain being perhaps between FF1m and FF2m value, with larger transactions involving possibly up to 200,000 shares taking place in the block market.

The resultant inter-bank market is of considerable importance. It has existed for many years, and until 1964 was regulated by the Commission Bancaire. In its relations with the Bourse this market divides into 2 segments. As regards French listed securities, all inter-bank transactions are required to be formally executed by the Agents de Change. This provision has had the constructive effect of linking the block market in domestic stocks with the Agents. It further links the transaction to the Bourse price, though this appears an artificial aspect of the system. It has allowed the Agents to play a constructive and important role in the creation of an effective block market in Paris. Due to the market system, the low capitalisation of Agents’ firms, the prohibition of counterparty activity and general considerations of prudence, the Agent is rarely able to act in his own right as a block positioner. He cannot respond to a large order, with a view to putting it through the market, in the manner
for example available to American brokers. Within the market itself, 
the French specialist, as a Coteur is a functionary and cannot take a 
position. In these circumstances the type of involvement in block 
trading which has developed, though suspect from the standpoint of theoretical 
price formation, has been successful in linking the large volume 
transactions with the Bourse, and as a result the market retains its 
dominant position for French securities. The system appears to 
involve some technical market problems, and can lead to complex 
inter-Agent deliveries with problems of delay and delivery of 
immediate payment for large lines of stock.

In the second segment of the inter-bank market, foreign equities, the 
Bourse plays a far less definitive role. In respect of these 
dealings, the banks are free to establish their own contact with 
foreign securities houses, and are in direct contact with all 
appropriate intermediaries in Europe. The international network of the 
banks is fully exploited as the mechanism for international securities 
dealing. Nationalisation of the major French companies which removed 
from the Bourse some 15% of capitalisation but possibly 40% of dealable 
stocks, and other factors have stimulated interest in foreign equities. 
It is believed that at times the Paris inter-bank market in Gold Mine 
A.D.R.'s has exceeded the daily value of the total equities trading 
on the Bourse. Estimates of the proportion of dealing in Paris in 
foreign shares varied, and there are no absolute figures, but an 
estimate based on the figures of a major bank which might be 
representative suggested that of all Terme stocks (i.e. the great 
majority of business) 20%-30% of transactions would be dealt off 
the Bourse under normal market conditions, while the proportion during 
periods of high activity was likely to be 40%-50%. As this off 
market dealing is likely to comprise mainly of foreign stocks, it 
lends credibility to the higher estimates of 60%-80% off market 
dealing for this sector. The great majority of this business by-passes 
the Agents de Change, with the institutions placing their orders with the 
banks who then deal abroad, or with the institutions transmitting their 
orders direct to foreign markets. Within Paris, these securities may be 
dealt direct between the banks and institutions.
The market in international equities in Paris is thus sharply divided into a 'genuinely' international market in the hands of the banks, and a domestic market in foreigns dealt by the brokers on the Bourse, in the main on the instructions of private investors. It is an open question which is the price leader. In the case of Gold shares it is suggested that the inter-bank price leads the Bourse.

A degree of dissatisfaction with the structure of the international equities market in Paris was expressed by the banks. The interface between the Bourse and the international market was felt to be complex. While the strong domestic role of the Bourse was endorsed, the need to harmonise Bourse procedures was stressed. The Bourse procedures were criticised as being too traditional for the current international market, and in particular, it was suggested that the Paris market should be integrated. The dual existence of the floor market and the telephone market should be replaced by a single market system. It was suggested that if the Bourse did not move effectively into this field, there was a probability that the banks, frustrated with the deficient international system of the Stock Exchanges, would use Swift to set up an international securities market. One of the major Paris banks had already arranged to use an international depository for its European settlement and an initiative of a similar type on the dealing front was possible.

5.3 The Agents de Change and the International Market

While most of the larger Paris Agents are highly active in international dealing in French securities, their participation in the international market as such is limited. As noted above this appears less due to technical restrictions than to the inadequacy of capital available for a market which calls for a rapid response to any communicated offer or bid. The French Agent approached by a foreign broker or institution with an order for French stocks has the business virtually guaranteed to him by the monopoly. The strength of the Agent de
Change in this respect is illustrated by the direct recourse to him by foreign intermediaries or institutions. In the case of business originating in London, for example, one active Agent receives 70% of his orders direct from investing institutions, with only 20%-30% from London brokers and 10%-20% from jobbers.

With regard to the wide market in international securities, however, any business must be found on an entrepreneurial basis. The Agent needs to be in a position in which, if he wishes, he can take up an offer from a New York broker involving, for example, FFSm on the spot. The financial resources to do this are, however, not available to him. The Agent is entitled to purchase shares to the extent of the net liquid assets of his firm, but the convention is to invest such resources in bonds, and not in risk capital. Although it is possible to obtain a dispensation of the Chambre Syndicale to take up shares as a principal, the procedure is, for obvious reasons, never used. The Agent is thus effectively deprived of the opportunity to penetrate the foreign equities market.

Dynamic changes are, ironically, impeded by one of the strongest features of the Paris market, the 'guarantee'. In the case of the default of an Agent de Change, the 'fonds propres' of each firm are liable, with a stipulated minimum of FFSm for each Agent. At the second level the Agents are liable in respect of their personal assets. Most significantly, through the Guarantee Corporation, the liability is collective across all Agents. Any move from an agency to a risk taking function implies a common vulnerability, which has instilled understandable caution. The Agent de Change firms are similarly concerned that the new private investor interest in equities, stimulated by the Monory measures, should not be discouraged by any default or instability in the market. They are aware that, with the institution of a wealth tax, there is incentive for the private client to make his financial resources more mobile. Attempt to wean French investment preferences away from real estate into risk investments would be deflected by any evidence of instability amongst the Bourse firms. The extension of a Bourse firm's present rights in order to permit it to position to a multiple of its liquid assets is unlikely to be considered.
One method of resolution of this quandary, the participation by Agents in foreign intermediaries which might be officially admitted to the Bourse, appears to have found little favour. The real solution is likely to emerge from the resolution of the problem of increasing the capital base of the domestic firms themselves.

The Perouse Report advocated the adoption of the contre-partiste principle to increase liquidity of the market. The most important development in this respect has possibly been the proposal, within the Second Marché, for joint Agent-bank organisations which are to be permitted a regulated market-making role. As regards the Second Marché this arrangement has the advantage of uniting the marketing skills of the Agents with the corporate finance contacts and the capital resources of the banks. While initial negotiations are being retarded by difficulties in reconciliation of the requirements of the two parties, the arrangement may well prove a laboratory for the future structure of the French market. The Government continues to support the concept of unicité de cotation, providing the necessary assurance for the brokers. At the same time the relation between the Agents and the banks is constructive, in that the banks no longer press for seats on the Bourse, nor do they consider a universal banking system appropriate to Paris. In the broking community there is increasing recognition of the dependence of the liquidity of the market on adequate capital, and of the urgent necessity to resolve the potentially vulnerable status of the Agent, while preserving the significant aspects of his traditional social role.

The problem of re-establishing a revised relationship between the French banks and the Agents de Change, which would permit more dynamic development of the Bourse into a capital market which more appropriately reflected the strengths of the French economy and played an appropriate role in it, appears to be being positively addressed. A difficulty in its resolution may arise from the extreme disparity in the size of the two types of institutions involved. French banking is highly concentrated, with two or three of the French banks amongst the largest in the world, and abnormally large for the size of the economy. The
firms of Agents de Change are, on the other hand, in international terms small for the task they potentially have to perform. However the understanding reached over the years between the two parties preceding the Second Marché proposals augurs well for the development of a constructive relationship. The banks appear ready to acknowledge the continuing need for the Agent in his traditional role, they further appear to support the concept of a unified market concentrated on the Bourse. It is understood that a report on off-market business is to be presented as a background study to the Seventh Plan, and it is possible that a similar need for joint institutions in the international market may be identified.

5.4 Adverse effects of Exchange Control Measures

Apart from constraints in developing international business due to weakness of his capital base and his inability to position, the Agent is at present further hampered by Exchange Control measures. Under the controls introduced in May 1981, French residents are permitted to deal in any foreign securities subject to the use of intermediaries agreed by the Banque de France and to a proviso with regard to foreign bonds of less than five years maturity. The financing of such operations has, however, to be through Devise Titre through which the foreign investment currency is acquired, and which is available only from the proceeds of sales of foreign securities held by residents. The available funds are thus limited to a pool, the Devise Titre attracting a premium or discount according to the general view held of the commercial (official) French Franc. The acquisition of securities denominated in French Francs is permitted through currency acquired in the official foreign exchange market.

Since the reintroduction of Exchange Control, partly as a by-product of the lack of confidence such measures themselves normally instil, interest in dealing in foreign securities has been markedly increased. Within two years the Devise Titre premium doubled and opinion was expressed that the dealing in foreign securities which underlay it had likewise doubled. The Bourse figures suggest that the Agents have seen very little of this increased business, the total of foreign
equities dealt on the Bourse having fallen between 1981 and 1982. Most of it tended to go direct to foreign markets, although the figures for 1983 show some increase in the proportion of trading in foreign securities on the Bourse. The Agent, for obvious reasons, is not able to play any role in the management of French assets abroad which were not declared in the amnesty when French Exchange Control was imposed in 1968, and which are widely alleged to be substantial. A further consequence of the Exchange Control measures is that the Agent de Change may not hold a foreign currency account in a foreign bank.

5.5 Paris Arbitrage

The present situation regarding arbitrage of foreign stocks to and from the Bourse is complex and difficult to establish. The Paris market is an international capital centre of long standing. Bourse dealing in the major European internationals is significant. At certain times for example, Royal Dutch has been dealt more heavily in Paris than in Amsterdam and the market for R.T.Z. has been larger than that in London. As there is no transformation of the securities from the underlying stock as in the Belgian case, the arbitrage function is less clear-cut than it is in Brussels. Traditionally, a 'classical' arbitrage function (i.e. the taking up of stock as a principal on one market to undo the transaction on another) was carried out by the banks. Over the past two decades, due to the increase of inter-bank and institutional dealing, improved telecommunications, and increased direct recourse of large investors to the main foreign market, the distinction between true arbitrage and international dealing has become blurred. The function of the arbitrageur has become compromised by his potential local demand being satisfied by the channels which he himself uses. Concurrent with these developments, exchange rates entered a period of unprecedented volatility. Interest rates, and thereby the cost of money, rose to unprecedented heights. These latter factors had a particularly forceful effect on inter-market arbitrage in Europe and, most notably, in the French case where the uniquely long dealing period of the Terme market brought particular exposure.
As a result, the French banks have tended to withdraw from arbitrage, and to close the departments which carried it out. Now only a handful of banks are left in this field, and their activities are ambiguous. The large securities movements between the markets tend to arise from the direct execution of orders. The implication of this appears to be that the needs of the smaller investors for foreign securities through the Bourse are satisfied through disposal from large French-held portfolios. In cases where the stock on one side of the local transaction is not found on the Bourse, an arbitrage transaction is likely to be sought by the Agent from a bank. If so executed the small client suffers both the natural higher cost of his small bargain, and also incurs two commissions. The present system does not appear to be of advantage to the smaller investor.

There may be a case for the Bourse assuring that somewhere within the structure of the official market, adequate local positions are taken to assure economic supply and liquidity of foreign securities dealt on the Bourse for the private investor. Some 5 or 6 Agents de Change are reputed to carry out arbitrage, but it seems questionable whether this is in the true sense of the term. Certainly, the general view expressed in the firms was that the French Agent de Change was not well placed to deal net, in size, at any time and in any currency in the way that effective arbitrage requires.

5.6 French Investing Institutions and the International Equities Market

The stance of the institutions in their dealing in foreign equities is the corollary of the situation described above. The major institutional investors are the banks, the insurance companies and the funds, the SICAVS and the Fonds Communs de Placement. The pension funds are less significant, as pensions are mainly based on the system of repartition and not on capitalised funds. The activity of the insurance companies and the SICAVS in foreign equities is limited partly by Exchange Control and partly by structural require-
ments for portfolios which are designed to stimulate the domestic capital markets, such as those laid down in Article 332 of the Code d'Assurance. The insurance companies are further limited to acquisition of only those foreign securities which are quoted on the Bourse, and they may only invest in SICAVS with less than 50% of investments in foreigns. Due to their purpose, the Monory SICAVS must hold 60% of French stocks. The pension funds have relative freedom in that apart from the required 50% holding in government or government-supported bonds, their investments may be placed either in French or foreign equities.

The restrictions have one anomalous consequence in the Devise Titre market, since the funds have to trim their portfolios to the required structure quarterly. This has tended to produce a false currency market at that time. Despite these restrictions, the foreign equities holdings of the French institutions are considerable. The larger nationalised insurance companies might be expected to have 10% of their assets in foreign equities, the smaller private insurance companies possibly up to 20%. A not untypical structure might be derived from the vast aggregate of the portfolios managed by the Caisse des Dépots et Consignations. Of the total shares held or managed which in 1979 were of $1,750 billion value, the great majority represented core holdings of French shares, the 14.4% which represented holdings of foreign shares nevertheless was of $252 billion value. Of these some 20% were equities of other Community countries. In terms of dealing, the foreign section of the portfolio has more importance than the proportional holdings indicate, the activity level in these securities being much higher than that for the French securities which, by and large, the institutions are committed to hold.

Institutional trading in foreign shares reflects the situation described above. The investing institution normally places its order for foreign equities with a French bank (as intermédiaire agréé) or direct in the foreign market, nominating the French bank for clearance. An example of the negligible involvement of the Bourse in this type of business is
that of a major merchant bank whose transactions were 60% through the Bourse and 40% in foreign markets, and whose Bourse transactions in listed foreigns represented only 1% of their Bourse business.

The main reason for institutions dealing into foreign markets is the better information, the better execution possible, and the liquidity offered by the broader foreign markets. For such reasons, 40%-50% of their foreign investments tend to be made in the U.S. market, and around 20% in Japan. The failure of the Bourse to capture this business (apart from that which is prescriptively placed with it) is not basically due to the structure of the French Exchange, and it is a Europe-wide phenomenon. On the other hand, adverse comment was received from the investing institutions on the way in which the practices of the Exchange had caused the Agents to be excessively orientated to the domestic market. They questioned whether the system was responding adequately to the increased growth of international dealing.

As a result, the institutions appear to have taken a more positive role themselves, in following the foreign markets, processing research information, and in setting up so-called dealing functions. This level of international activity is comparatively recent. Before 1973, few direct investments were made in the foreign market by the French institutions. Their dealings were in the few foreign stocks listed in Paris, and other foreign markets were accessed through fund managers in foreign centres. With the recent trends towards more international investment, which were stimulated through the SICAVS, the institutions have tended to move into direct foreign investment functions. Their foreign order-routing is supported by a system of custodian banks, inter-connected by Swift, which adds to the efficiency and identity of the international market.

This development implies an erosion of the potential functions of the Agents and of the official market itself in the international field unless the Bourse responds to the challenge. This does not only apply to institutional transactions. There is even evidence that international
brokers are transmitting private client orders in foreign securities to the market of origin. While the former convention was to execute such business on the Bourse, the administrative inconvenience of maintaining two sets of records, one for institutional orders abroad, and one for private clients orders on the Bourse in the same security, has caused them to channel orders into a single stream.

A further though less important factor which is taking international business out of the hands of the French broking community is the effect of Exchange Control on portfolio management. With volatile exchange rates, the institutional investor has to devote considerable effort to the management of foreign exchange risks. Due to exchange controls, the tools to avert this are not available in Paris. The funds associated with it have therefore to be operated in a capital centre outside France where the necessary flexible currency investments can be effectively undertaken, so detracting from the development of Paris as an international capital centre. Portfolio management in general is complicated by the necessity to treat foreign currency assets under the Devise Titre system, and by the division of portfolios between French Franc investments and the portefeuille financier.

5.7 Bourse Trading Procedures.

The trading structure and procedures of the Paris Bourse have until recently remained in their traditional form, uncompromisingly orientated to the domestic market, and dedicated to the provision of the fairest conditions of execution in a market dominated by private investors. The private investor remains important in the French market, and is thought still to be responsible for 50% of turnover, with his interest increasing since the Monory measures. As elsewhere, however, collective investment by the thrift institutions and international business are rising in significance and the Bourse is responding by embarking on a programme of reforms.

The changes so far implemented are only the first tenuous steps in an evolution which could radically change the form of the Paris capital market over the next decade. Consideration of the possible stance of
Paris towards European linkage is complicated by the need to assess the effect of this evolution on the existing structures and procedures of the Bourse, and the rate at which the changes will take place. The traditional Paris system had many strengths. Firmly based on collective price formation, it assured a fair price so long as all transactions were concentrated in the Bourse fixing, and the single price for the buyer and seller avoided the cost of intermediation through a principal operating in the market. The 'criée', though crude and based on personalised market expertise without computer pre-processing, is generally agreed to be highly effective. The opening establishes, within perhaps twenty seconds, the day's price at which large volumes of transactions can immediately and effectively be executed.

French opinion appears concerned at three possible inadequacies of the trading system in the contemporary environment. First, as the Perouse Report asserted, Bourse procedures are complex. They are difficult for the French small investor to understand. The foreign professional investor is at a similar disadvantage, and has difficulty in placing orders at fine limits in the French market.

The complexity of the French market arises from the need to diversify any collective price system to accommodate the needs of different lines of securities according to the volume of dealing, and at the same time to provide facilities for forward or cash dealing. The Marché à Terme, in which are quoted some 260 of the leading French and foreign securities with transactions settled 7 working days before the end of the month, has been the most important segment of the market, and the great majority of transactions are executed through it. The practice of dealing round lots in the Terme market tended to complicate execution of transactions as the shares had to be made up in the cash market. The methods of quotation are various; 'à la criée in the forward market, 'par easier', in the cash market, 'par opposition' in respect of quotations in the cash market for securities
quoted in the forward market. In each of these types of quotation, the capacity permitted to the Agent slightly differs. The market is further complicated by facilities of great local value such as the reports and options markets, but which have little relevance to foreign dealing.

The first major move towards rationalisation of the Bourse was carried out in October 1983 with the institution of the Marché Unique. The new market amalgamates the previous Terme and cash-Terme markets, and unifies the quotations, implementing special commission arrangements for odd lots which would previously have been made up in the Marché Comptant du Terme. The new system avoids the costs of the arbitrage which was necessary to balance the cash market, which some observers considered more expensive than the use of a principal would have been. The step is significant as the first move to reconstruct trading procedures in line with the second set of recommendations of the Commission Perouse. This preliminary rationalisation of quotation will remove a minor complication in international dealing, but opinion appeared to be that it would not make dealing in Paris notably easier for foreign investors.

The more significant developments, related both to the capacity of the Bourse as a market and to international dealing, are likely to flow from the further objectives of the second recommendation. These envisaged institution of a continuous market with screen transmission throughout the greater part of the working day, of last price and quantity dealt, the highest outstanding bid and lowest outstanding offer, with quantity of stock bid for or offered at that price. Agreement in principle was given by the Minister of Economy and Finance to the Chambre Syndicale to carry out trials of such a continuous market.

As yet, it appears that discussions on the Marché Continu are not complete, and no information is available on its proposed procedures. In general terms the Bourse has stated that it envisages the introduction
of the system by 1986. Before that time it has stated that it will be necessary to resolve the method of dealing in the continuous market, the equipment needed by the various intermediaries, the procedure for routing of orders. The confrontation of orders and their screen display, the scope of participation permitted to the various intermediaries and the obligations imposed on users of the system require definition. The transcending principle of design of the system will be to attain transparency and liquidity greater than that normally found in most of the world's official markets. While this statement of the Bourse only defines objectives, it represents terms of reference sufficiently precise to permit the system to be broadly visualised.

The target of increased liquidity with all transactions handled in a re-centralised and transparent Bourse system appears particularly relevant to the weaknesses of the present market. The Bourse floor is no longer dominant in dealing in the international market, but it retains its importance in French securities. Even in these operations, however, the market is considered to be narrow and thereby illiquid by standards of modern institutional needs. Agents de Change consider that only in the case of a very few companies could they go to the floor with an order of 10,000 shares.

An Agent de Change active in foreign business expressed the opinion that handling the increased flow of U.S. funds to Europe was likely to be a severe test of the Bourse. A circular of a leading Agent de Change pointed out that for such investors 'the fundamental criterion is the size of the market'. The international reservation that the Bourse floor is a narrow market is much off-set by the skill of the Agents de Change in arranging off-market block transactions. Leading Agents affirm that, given the chance, they are able to meet most large U.S. institutional orders. But the dual system of floor and off-market dealing, linked only by the artificial device of observing the Bourse price, cannot be conducive to strong development of the market as a whole, and the proposals for the Marché Continu appear, in this regard, both significant and constructive.
The Agents de Change believe that the Marché Continu would challenge present procedures in two principal ways. First there is likely to be conflict between the floor prices and the prices established outside the market floor on the network. It would appear unrealistic to limit the continuous dealing system to the limits of the day's official prices, if it is to develop effectively. Further, the principles of price formation will differ. The screen system, as envisaged, is based on bid and offer prices, and will make a continuous price. This appears a challenge to the present sacrosanct collective price. The equilibrium which should be attained between the two price systems is likely to present a difficult problem.

The main challenge, however, will arise if it materialises that the Marché Continu will necessarily require a strong contra-partiaste function within the official market. Amongst the Agents there appears a strong current of opinion that the Bourse is now embarked on an almost deterministic process whereby the Marché Unique will lead inevitably to the institution of the Marché Continu, and the Marché Continu will, as a technical necessity, require contra-partiastes to make it function effectively. If this were to prove the case, a profound challenge would be posed to the French broking community.

The credibility of this prospect is endorsed by the contra-partiaste function permitted in the Second Marché. This role is carefully defined, and must be operated under a 'contrat de liquidité' under which positioning is only permitted for the specific purpose of assuring liquidity of the market. As noted above, neither the brokers or the banks have moved with alacrity to form the associations needed to operate the system. The Agents are concerned about potential erosion of their functions and the banks are insistent on commitment of broker firm capital to ensure that there is a mutual participation in the risk. There is also concern about the system of dual management implied. Nevertheless the need for contra-partiaste activity has been acknowledged in an important growth sector of the Paris market, and it has been authorised under conditions which are
considered compatible with the principles of the market. The further extension of the function therefore becomes a credible possibility.

As implied above, the further area in which contra-partiste activity might prove desirable is in arbitrage and foreign dealing. The Agents are concerned at their inability to respond to foreign dealers on the normal terms of international business. At present their pre-occupation with this problem relates to New York, but with the growth of European dealing the same limitation will become apparent in their liaison with the Continental banks or the London jobbers. A proposal encountered in this field was the institution of 'maison titres' which would be less heavily capitalised than the banks and thereby more dependent on market operations, but which would be adapted and permitted to carry out positioning functions.

5.8 Summary of Market considerations affecting European Linkage
Summary appreciation of the present situation in the Paris international equities market suggests that the attitude of the Bourse towards a European dealing linkage will be heavily conditioned by a number of domestic considerations.

(i) The prime target of the French Government and the Chambre Syndicale is to re-concentrate transactions onto the Bourse. At present this must be interpreted literally as a concentration of transactions on the physical floor. The future may call for a more complex interpretation. Published policy has stated that in three to four years from now, the Marché Continu network will be carrying the present off-Exchange business of the Agents. Assuming this occurs, the French official market, at that point, will constitute some form of compromise between the floor and the network system. Published statements suggest that the network will generate continuous prices, while presumably the Bourse price formation system will remain collective. In one sense this may be disadvantageous to European linkage, for which any proposals will have to be cautious, and will have to take account of the sensitive
internal negotiations through which the continuous market in Paris must be progressed. In another sense, the proposed development in Paris will be conducive to European linkage. The Marché Continu network, though not primarily designed for that purpose, may be an ideal interface with the European linkage under the control of the Bourse.

(ii) The second pre-occupation is likely to relate to the present limited ability of the Agents de Change to operate competitively in the international markets. This, however, is secondary to the more important problem of whether the French broking system is adequate to cope with the future needs of the domestic market. The main debate on this question in Paris will be focussed on the role of the Agents in French stocks. In the meantime, until the problem is resolved and securities firms which have adequate capital funds and functions to be competitive at international scale have evolved in the official market, proposals to link the Bourse with any European network may simply be interpreted as increasing exposure.

(iii) The third pre-occupation may relate to the banks. As noted, the strict limitation of the Agents' monopoly and functions to commission-oriented dealing has caused the broader capital market functions to be assumed by the banks. The search for a re-adjusted equilibrium appropriate to modern needs is being explored constructively. The solution required however is a local one, and the entry of the European dimension which linkage might bring into this dialogue is unlikely to be welcomed.

(iv) The Bourse might be expected to be concerned at any prospect of incurring extra cost due to European linkage. The broking community is not large. The rates of commission are low by international standards. The recommendations of the Commission Perouse for their revision to a level which would permit the development of a wider range of securities services have not yet been implemented. The resources available to the Bourse authorities are likely to be fully absorbed by the forthcoming modernisation of the Paris market itself.
The interest of the Paris Bourse in European linkage is likely to be dampened by the exchange control restrictions. The inherent weakness of the Agents de Change in international dealing has been exacerbated by the Devise Titre system, which tends to keep business in foreign centres once an initial purchase has occurred. It is likely that, in any planned European linkage, the Bourse would attach importance to any scheme which permitted the Agent to re-introduce himself into the routing of orders abroad. A prime example could be removal of the double commission.
SECTION 6 – THE INTERNATIONAL EQUITIES MARKET IN GREECE

6.1 Introduction

Of all the European Stock Exchanges the Greek stock market is at present the most isolated from the international securities markets. However, it must be remembered that Greece only joined the E.E.C. in January 1981 and that the transitional period, which originally should have terminated in 1984, was later extended to 1986. The modest size of the Greek financial market and of the gross domestic product and the serious economic problems with which Greece is encumbered are the justifications given by national authorities for the continuing imposition of currency restrictions which totally prevent Greek participation in the international markets. The restrictions even limit portfolio investments in Greece from abroad, apart from foreign investments directed towards the open or closed end investment funds which were established by Security Law no. 606 in 1970.

However, although the official figures issued by the Bank of Greece indicate that Greek foreign portfolio transactions are zero, the credit institutions and the authorised investment funds mentioned above have considerable sums invested abroad. One leading banking institute declared that it had some one billion drachmas invested in foreign securities and total foreign investments by investment funds are estimated to be about $15m. As in some cases such values are still calculated at purchase prices they are, in fact, of much higher real value due to a series of drachma devaluations. The last was in January 1983, when the exchange rate of the drachma to the dollar fell from 69 drachmas to 93 drachmas. The value of the portfolios has been further enhanced by the excellent performance of most international markets, particularly the U.S., where the greater part of Greek foreign portfolio investment is concentrated.

The Greek population has always been internationally minded and it is believed that Greek investors remain active in foreign markets, possibly assisted by foreign intermediaries who may be able to interpret the present laws and regulations more flexibly than the Greek brokers can.
This propensity for foreign investments is also fully understandable, bearing in mind that the only profitable securities in recent years have been foreign ones and Government stock aligned to foreign currencies such as U.S. dollars.

Leading exponents of the Greek securities market were not optimistic that the situation would improve in the near future, and declared that, as in many other European countries, the Greek financial market is overmanaged by non-market forces.

Apart from the formidable competition to the official market and to equity securities in particular from issues of short-term bank bonds offering interest rates as high as 21%, the Greek Government now intends to create new public investment funds the chief objective of which will be to help out large Greek enterprises in financial difficulties. Though this will help many banks to unlock themselves from otherwise blocked investment positions in loss-making industries, this will probably result in the indirect nationalisation of Greek industry. At the same time, it is not likely to stimulate any recovery of or growth in the perenially depressed domestic equity market.

The criteria on which the Government will decide on assistance to depressed industries will be the contributions of such industries to the national balance of payments, the extent to which the company's domestic production could replace imports, and its consequent ability to help reduce the balance of payments deficit. It is of interest to note that the financial problems of most such enterprises are largely due to bad capital structures and over-gearing rather than to their inability to sell the finished products.

Exchange control regulations are even more longstanding than in Italy and have existed on and off ever since national independence in 1821. However, in view of the need to adhere to the European Community provisions contained in the Treaty of Rome (art.68.2) with regard to the free circulation of capital once the present transitional period has elapsed, disappointment was expressed that the last drachma
devaluation in early 1983 and the three month period recently granted by the Greek Government for residents to open foreign currency accounts was not exploited by the Government to begin a process of opening the Greek financial market to the outside world. During the same three month period some U.S.100m dollars were deposited in foreign currency accounts by Greek residents. Most of this capital was thought to derive from the abusive accumulation of the foreign currency by foreign tourism.

6.2 The main characteristics of the Greek capital market

The Athens Stock Exchange, the only Greek Exchange, is a self-managed public institution regulated by law. It is chiefly financed by annual listing fees paid on both equity and bond securities by the one hundred or so quoted companies. Government stock is exempt from such charges. A contribution is made by the authorised brokers equivalent to 1% of commission fee income. The Exchange balance sheet, prepared by the Stock Exchange Council, is duly controlled by the Ministry of Commerce and every major item of expense must receive the prior authorisation of the same Ministry. The present building is owned and rented from the National Bank of Greece. However the Stock Exchange Council hopes eventually to have its own building and has already acquired a nearby property for this project. Plans are at present held back by a lease on the adjoining building which will have to be acquired in order to provide sufficient space for the planned construction.

The daily management of the Exchange and the admission to listing of equities and bonds is the responsibility of a Council composed of 7 brokers elected by their colleagues, and a Government supervisor who attends all Council meetings in an 'ex-officio' capacity. The Government supervisor has a right of veto on all important matters and may postpone voting for twenty four hours in order to refer any question to the Minister of Commerce.

The Stock Exchange Council has a staff of forty five which is responsible for the daily organisation of the three main areas of Stock Exchange activities: administration and the secretariat, accounting and clearing, and statistics and research.
A nine man stock market consultative body was also set up by the Government in 1976, called the Capital Market Committee. Representatives of three Ministries, the Banks, the Chambers of Commerce and brokers are duly appointed to the Committee. Its duties include the regulation of all loan issues and the suspension and de-listing of any securities.

The present Official List of equity securities only represents about 25% of the two hundred largest Greek corporations and little over one hundred out of approximately 4,000 joint stock companies are quoted on the Official market. These equities, together with some forty seven bonds, are traded daily at one ring on the Athens Stock Exchange trading floor. The purchase and sale of securities is effected by a call-over system and the equities and bonds are traded by Sector* in twenty minute periods. During each period securities appertaining to each sector may be called and traded freely in multiples of pre-arranged minimum lots.

Though equities may be traded forward (15 days) or cash (next day), the depressed state of the Greek stock market has discouraged any forward trading, due to fear of provoking further weakening of the market. All transactions at present are therefore computer checked and settled the next day with the physical exchange of security certificates.

This system of clearing and settlement is possible on a cash market owing to the bearer nature of most securities (only bank, insurance and investment company equities are registered securities) and to the limited market volume. In 1981 aggregate market turnover in equities only represented about 1.85% of total market capitalisation of listed equities. The possibility of excessive price fluctuations is avoided by a limitation imposed, in exceptional cases, by the President of the Stock Exchange, when such fluctuations are not considered justifiable. A further cause of the lack of market volume is the narrow range of stocks dealt, which at the time of the Consultants' visit (October 1983) comprised only 20 or 30 of the 115 listed equities.

* The Official List of equities is divided into the following five Sectors for trading purposes: 1) Banking, insurance and investment companies; 2) Textiles; 3) Cement, ceramics and fertilisers; 4) Mining, metals and electrical engineering; 5) Commerce, communications, hotels and miscellaneous.
Most participants in the Greek stock market who were interviewed
considered the main shortcomings of the Athens Stock Exchange to be a
lack of equity issues and the limited degree of market liquidity and
depth in almost all listed securities. Total Stock Exchange equity market
capitalisation at the end of 1982 was approximately 135 billion drachmas
against a gross national product of approximately 30 trillion drachmas.

Though limited national industrialisation and family dominated enter­
prises may be held partly responsible for the limited dimensions and lack
of expansion of the Athens equity market, current legislation in favour
of loan issues, the forced accumulation of the greater part of bank
deposits by the Central Bank of Greece in order to finance the growing
public debt and the high interest rates offered by short-term loan
issues are probably the determining factors. The greater part of
savings by Greek resident investors, who are traditionally renowned
savers, is therefore directed towards property and short-term issues
which, in the past, have offered high returns and absolute security.

The general lack of enthusiasm for equity investments by Greek residents
also derives from the attractive 21% interest rates offered by short-term
bonds and the safeguards against inflation and currency depreciation
offered by Government bonds which are linked to hard currencies such
as sterling and the dollar. The considerable favour enjoyed by the
short-term loan securities is confirmed by the total market volume in this
stock which is twice that of the entire official market.

Furthermore, most of this volume in short-term bonds and, in particular,
in the primary market for such securities, is executed within the
banking system, as such issues are normally only quoted on the Stock
Exchange some two or three months after their original placing. Only
a very limited secondary market exists in these bonds due to the fact
that their short-term sale usually leads to a loss of 3 monthly accrued interest
when bought back by the issuing bank, even though investors may get a
better bargain by going through the broking profession.
6.3 The operation of the Greek Securities Market

Membership of the Athens Stock Exchange is limited to stockbroking professionals of whom there are at the present moment twenty eight. The present maximum number permitted by law is thirty five and, in accordance with a Security Law passed in 1971, the maximum limit could be further increased to fifty by an appropriate ministerial decree. However, in view of the chronically depressed state of the Greek stock market, largely neglected by political authorities, this need is not likely to arise. The existence of some of the present brokers is probably only assured by the voluntary surrender of 20% of the daily commission fees by all brokers to a common fund. The accumulated fees are then distributed at the end of the month on an equal basis among the twenty eight brokers. This regulation was introduced some thirty years ago to assist the broking profession and, in particular, newly appointed brokers.

The Securities Law also replaced the previously required professional experience by a University degree. All applications to become a broker must be addressed to the General Government Commissioner, following the request to the Stock Exchange Council. All applications must also be accompanied by evidence of a good conduct record, that military service requirements have been duly fulfilled and that the candidate has attained the minimum age of thirty years. The Stock Exchange Council finally submits all applicants to an interview and a test of their sound financial standing and professional preparation. Official appointment is made by a Ministerial decision following a proposal made by the General Assembly meeting of Brokers.

Prior to commencing business, the newly appointed brokers must also deposit a sum of about 11m drachmas (about $120,000). This is allotted to the Stockbrokers' Common Guarantee Fund, which is managed by an appropriate elected Committee of Brokers of the Stock Exchange. This sum is subsequently returned to the brokers on leaving the profession or to their heirs on their death, on the basis of their proportion of the accumulated value of the fund.
Partnerships and companies are permitted as long as the main partner is a Stock Exchange broker. Brokers may in fact have only one representative who may substitute for them on the official floor. Consequently most, if not all, of the business activities are limited to pure intermediary business. The limited capital of brokers generally precludes any possibility of position taking even though this is permitted. The brokers' income derives from a scaled commission fee which amounts to 1% plus 0.3% on registered shares up to 1m drachmas as shown in the commission fee table in Section 18. However, as previously mentioned, 1% of such commission is paid to the Stock Exchange Council as a contribution to financing the organisation and functioning of the Stock Exchange, a fixed minimum is awarded to the brokers' pension fund, and 20% of his daily commission fee income is credited to a general fund for redistribution among all brokers on an equal basis at the end of each month.

6.4 The Credit Institutions

Traditionally Greek credit institutions have always been active on the domestic capital market and, though not compulsory, it is the custom for bank securities to be listed on the Athens Stock Exchange.

The present day activities of the banks in the national stock market are heavily curtailed by the extent to which their deposits are frozen within their accounts in the Central Bank to finance Government expenditure and the public deficit. An estimated 71.75% of aggregate bank deposits are frozen in a special account at the Central Bank earning an average interest rate of about 14.5%, whereas loans to private industries are charged at 21.5% for working capital and 18.5% for long-term fixed investments. Furthermore, all loans granted on the remaining 30% of deposits immediately require a contemporary deposit of 20% of their value at the Central Bank and are subject to a further 1% charge in favour of Greek exports. Such 20% compulsory deposits are granted no interest whatsoever. The only exceptions to such regulations are loans to small industries which are also encouraged by the authorities inasmuch as 12.5% of the value of loans granted to such enterprises by the banks may be subsequently released from the obligatory deposits.
Such a draconian policy of financial dirigisme is probably tolerated by the banking system due to the fact that the four biggest credit institutions are either directly or indirectly (through the national pension funds) owned by the State. The Commercial Bank of Greece was indirectly taken over by the State in 1977 when only State pension funds were permitted to subscribe to a share issue which increased the capital by some two and a half times.

Nevertheless, the banking institutions have often invested in domestic industrial enterprises in a disproportionate manner in view of the limited dimensions of the Athens Stock Exchange. These holdings have often been built up with the aim of supporting depressed industries and such capital is therefore often frozen and extremely difficult to divest. For instance, the portfolio of the National Bank of Greece, which plays a most active role in the domestic securities market, is estimated to be about 25 billion drachmas, which is equivalent to nearly 20% of total market capitalisation of listed equities (based on end of 1982 figures). If the capitalisation of the listed equities of the same bank is also added, the resultant value far exceeds 20% of the Athens aggregate market capitalisation. However, it must be borne in mind that some of such investments are in unlisted stock and the ratio of equities to Government stock in the total portfolio is approximately ten to ninety.

In 1963, the National Bank of Greece also set up a subsidiary institution, the National Investment Bank, whose main objective was to assist the development of the domestic stock market and to encourage the change from loan to equity capital in Greek private industry. The respective ratio of the two forms of finance were often as high as 80:20.

Unfortunately the chronic depressed state of the Greek economy and political events have impeded such developments and many of the shareholdings in some seventy national industrial enterprises remain caught within the bank securities portfolio.
Other institutional investors are the pension funds, insurance companies and a number of friendly societies. Though all but 10% of the capital resources of the pension funds must be deposited in the Central Bank, the funds may buy up a limited percentage of securities, other than short-term bonds. Insurance companies may also have certain resources invested in securities, but they direct most of such portfolio investments to the bond market.

0.5 The Investment Companies and Mutual Funds

In 1970 a legislative decree was passed authorising the setting up of closed-end investment companies and open-end mutual funds with the sole objective of favouring investments in securities. It was hoped that, after the fiscal concessions and encouragement granted to investors and listed companies by law No. 148 of 1967, this would assist the development of the Athens Stock Exchange.

After prior authorisation, such investment companies and mutual funds are permitted to invest up to one-fifth of all funds or capital in foreign listed securities, and non-resident investors who invest in these funds may freely repatriate capital disinvested and all income from dividends and interest as well as capital gains acquired from investments in such funds.

Furthermore all income from capital gains, interest payments or interest on deposits paid to investment companies and mutual funds are exempt from any income tax, while income from dividends is taxed at the low rate*, after a 100,000 drachma allowance to all investors, as long as the investor is not using this privilege for any other investment in shares. In addition, transactions executed on behalf of such institutions are exempt from all stamp duty charges. However, early optimism has proved unfounded and today there are six closed-end investment companies and only two mutual funds.

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* The normal withholding tax on dividends is 43% and 45% respectively on listed registered and bearer securities. Dividends on unlisted shares are subject to a withholding tax rate of 47% and 53% respectively.
The reason commonly given for their lack of success are present economic and political circumstances, the acutely depressed state of the domestic stock market, the limitations on foreign investment (in fact only four investment companies and mutual funds have obtained authorisation to invest abroad), and the fact that the setting up and development of such institutions may only be organised and administered by bank-owned or controlled companies. At least 51% of the capital of investment companies and of the management companies of the mutual funds must be bank owned.

Although such investment companies and mutual funds were originally addressed to private investors, approximately 75% of all shares and unit certificates issued are estimated to be in the hands of institutional investors, with pension funds alone possessing 32%-33% of the total value of the investment companies and mutual funds.

The fact that authorisation to invest up to 20% of capital or accumulated funds in foreign securities has been suspended is particularly disappointing. Only four such organisations can at present take advantage of the promising performance of international stock markets. This excludes the biggest investment company (the National Investment Company of the National Bank of Greece), which has a share capital of 3.2 billion drachmas (approximately $38m) and comprise approximately 30% of the total capital represented by the seven investment companies and mutual funds.

Those investment companies and funds which are authorised to invest abroad have in fact reaped enormous benefits from the concession. The value of each unit of one such fund which at January 1 1980 was 438.78 drachmas, was valued at 698.23 drachmas on June 30 1983. This represented an approximate 59% appreciation in a period in which the index of the Athens Stock Exchange had dropped by about 24%. The 20% concession is also extended to annual cash flows and there is no
surrender clause on disinvestments. As a result, the initial 20% investment of one fund now represents about 46% of aggregate portfolio value, due to the recent high performance of international markets as well as the benefit which has accrued by investing in hard currencies which have revalued in respect of the drachma. Though the Head Offices of the National Investment Company is in Athens, all foreign portfolio investments are directed through foreign investment advisers and foreign-owned securities are deposited at international custodian banks.

6.6 Considerations with regard to the future and to the linkage of European Securities Markets

While those interviewed admitted that future market performance and development will greatly depend on Government policy, they felt that the long-term market prospects were potentially favourable, provided that the E.E.C. capital markets were effectively liberalised and that the transitional period for Greece's entry into the European Community were not further extended. Greeks are well known for their propensity to save and for their international attitude to financial affairs. With the weakness in the property market, a preference for investment in securities might re-assert itself if an attractive opportunity presented itself. The opinion of Greek financial experts was that if the Greek financial system were freed from its present dirigiste constraints and if exchange control, at least between Greece and the other Member Countries were removed in respect of equity investment, the Greek investor and the Athens capital market, possibly linked with Greek communities abroad, would respond strongly to the new opportunity.

The Greek authorities appear to be reflecting on their attitude towards the stock market. There is a growing feeling on the part of the central authorities that membership of the Stock Exchange Council should not be restricted to brokers, but as in the United Kingdom, should be extended to lay directors, and that the banking community and the Chambers of Commerce should also be suitably represented on this body. On the other hand the brokers feel that a more constructive alternative would be to make the present Capital Market Committee play a more positive and dynamic role in the development of the Greek securities market.
As regards the proposal to link the European securities markets, the Athens Stock Exchange at present lacks any form of computer price display or dissemination system and it is also without any security depositary which would eventually facilitate the international clearing and settlement of security transactions. However, perhaps encouraged by European initiatives like the present one, discussions are already under way in order to implement such facilities by a recourse to European Community financial resources.
SECTION 7 - THE INTERNATIONAL SECURITIES MARKET IN GERMANY

Trading and issuing of securities in Germany is undertaken by the universal banks. This makes the German system fundamentally different from the stock exchange systems in most countries where investment banking is separated from commercial banking. Since in Germany the banks handle all aspects of securities business, the German stock exchanges are sustained by the banks.

A further major difference between the structure of the German exchanges and the situation in the other Community countries is that as a result of its history and its federal political structure, Germany has a strongly decentralized stock exchange system. In Belgium, France, the United Kingdom, Italy and the Netherlands, securities transactions are concentrated on specific markets. The associated broadening of the market naturally offers more favourable conditions for improved price formation. The inherent disadvantage of a decentralized stock exchange system is, however, largely eliminated by arbitrage between the individual German markets, made possible by an efficient communications system. The regional stock exchange system also offers advantages, which will be dealt with in greater detail in Section 7.3.

Under the Stock Exchange Act (Börsengesetz), the German stock exchanges are subject to the supervision of the Land regional governments, which also give permission for a stock exchange to be established. The general task of supervising stock exchanges consists of ensuring that the relevant rules are observed and that stock exchange business is conducted in an orderly manner. Supervision extends to stock exchange business, bodies, and facilities. It is, however, merely a matter of maintaining overall legal supervision of self-regulating stock exchange bodies within the law. Because of their legal character, the German stock exchanges are to be regarded as public institutions. Accordingly, the activity of the stock exchange bodies must be evaluated on the basis of public law.
Any proposals for closer linkage between the German and the other Community stock exchanges must take into account not only the fundamental differences in the stock exchange systems and their structure, but also the basic conditions, rooted in history, under which they operate. Such proposals must pay regard in particular to the complex inter-linked legislation and regulation which governs the German market, and to economic and political objectives, in particular investor protection, which has absolute priority.

7.1 The German credit institutions

In some respects, the banking structure of the Federal Republic of Germany differs substantially from that of other industrialized countries. Under Article I of the Banking Act (Kreditwesengesetz), credit institutions may conduct nine different types of banking business. The main ones are deposit taking, credit, discount, giro, securities deposit and investment business. Under Article 1 of the Banking Act, undertakings pursuing any one of these types of business are deemed to be acting as credit institutions.

Under the Banking Act, the sale or purchase of securities for a third party is considered to be a banking function. It can only be undertaken, therefore, by a credit institution which has received the relevant permission from the Federal Banking Supervisory Office. Such approval is dependent on criteria related to professional abilities, business integrity and adequacy of capital. Once approval is given, it renders the institution subject to continuous supervision by the Federal Banking Supervisory Office (Bundesaufsichtsamt für das Kreditwesen).

The commercial banks are divided into universal banks and specialist banks according to the combination and breadth of the services offered. As a rule, the universal banks conduct most types of banking business under one roof. These include not only deposit taking and credit business, and the handling of payment transactions, dealing in foreign currencies, coins and precious metals, but also all aspects of securities business. They act as issuers, traders on an agency basis and for their own account, and they undertake securities custodian functions.
The term universal bank covers private credit banks (major commercial banks, regional banks and private banks), savings banks (savings banks, Landesbanks and central giro institutions), the cooperative sector (credit cooperatives, central institutions of credit cooperatives, and the Deutsche Genossenschaftsbank) and branches and subsidiaries of foreign banks. The private credit banks account for some 30% of the universal banks' total volume of business, the savings banks for some 50% and the cooperative banks for some 20%. It should, however, be noted that the market share of the private credit banks in the service area, in particular in securities and foreign business, is substantially higher than the market share of the universal banks across the board. This is particularly true of commission business in securities, where the private credit banks' share is disproportionately large. The major banks hold an absolutely dominant position in the issuing business.

Alongside the universal banks there are also numerous specialist banks, whose activities are concentrated on specific areas of business. These include the private and public law mortgage banks, instalment credit institutions, credit institutions with specific tasks, e.g. the Reconstruction Loan Corporation (Kreditanstalt fur Wiederaufbau), investment companies, building societies and collective security-deposit banks. The market share of the specialist banks in the total volume of business of the commercial banks is just under a quarter.

Dominating the commercial bank sector are three major banks, Deutsche Bank, Dresdner Bank and Commerzbank, and their Berlin subsidiaries. These three are among the world's largest banks.
After the three major commercial banks come a group of private banks, the regional banks, whose business is largely carried out on a regional basis. Nevertheless, some of them have branches throughout the Federal territory and in West Berlin. They are also very active in international business. This applies to the Bayerische Vereinsbank, the Bayerische Hypotheken- und Wechsel-Bank and the Bank für Gemeinwirtschaft, whose volumes of business come close to that of the three largest banks. Some way behind come the Berliner Handels- und Frankfurter Bank (BHF-Bank), the Berliner Bank, the Westfalenbank and the Vereins- und Westbank.

At the end of 1984, the unconsolidated business volume of all the 96 regional banks - DM 316 000 million - exceeded that of the large banks - DM 254 000 million - by DM 62 000 million. The large number of independent regional banks and their financial power provides strong support for maintaining the regional structure of the German exchange system.

Finally, the private credit banks group also includes the 72 private bankers, whose business volume at the end of 1984 stood at DM 41 000 million and represented a share of just under 6% in the business volume of all private credit banks. But this relatively small share does not reflect their general importance. The German private bankers are frequently active in areas which are not, or only partly, reflected in business volume. This applies in particular to all areas of securities business, in which many private bankers are particularly active. Among the major private banking houses in Germany are Sal. Oppenheim jr. & Co., Trinkaus & Buckhardt, Merck, Finck & Co. and M.M. Warburg-Brinckmann, Wirz & Co.

The category of universal banks in Germany also includes the credit institutions of the savings banks and cooperatives sector. Germany now has 600 savings banks with approximately 17 000 branches. At the end of 1984, they had a business volume of DM 679 000 million as compared with a total business volume of DM 684 000 million for the private credit banks.
Although the liabilities side of savings bank business is still concentrated on the traditional area of savings deposits and the assets side on the long term financing of residential construction and public authority investment, the savings banks are also becoming increasingly involved in securities business and in securities trading for their own account.

The 11 central giro institutions are the central regional organisations of the savings banks. Together with the Deutsche Girozentrale their business volume totalled DM 495,000 million at the end of 1984. The central giro institutions are active in the securities business as traders on their own account and as agents for the affiliated savings banks. In recent years, a growing proportion of their business has also involved new issues - including international issues. The Westdeutsche Landesbank Girozentrale is the largest of the German central giro institutions. At the end of 1983, its business volume totalled DM 168,000, placing it third amongst the universal banks. The Bayerische Landesbank and the Hessische Landesbank are the next largest of the German central giro institutions.

Another important group amongst the German universal banks is the commercial and agricultural cooperative banks. At the end of 1984, the business volume of the 3,750 or so credit cooperatives and the 9 central institutions of the credit cooperatives, including the Deutsche Genossenschaftsbank, totalled DM 493,000 million. Like the savings banks, the credit cooperatives, in collaboration with the central banks, have, in recent years, increased their issuing activities and own account trading in securities. The Deutsche Genossenschaftsbank is the leading credit cooperative: at the end of 1983, it had a business volume of DM 51,000 million, making it one of the major German universal banks.

Since movements of money and capital across Federal frontiers are not restricted, the activities of the branches and legally independent subsidiaries of foreign banks and securities houses have, in the last two decades, become increasingly important in Germany. This applies not only to the handling of foreign trade transactions and the business of the subsidiaries of foreign companies in Germany, but also to the securities business. In many cases, foreign securities brokerage houses
have established credit institutions under German law, which - like branches of foreign banks - are eligible for membership of the German stock exchanges without any restrictions or discrimination as compared with domestic credit institutions. At the end of 1984, 28 of the 97 members firms of the Frankfurt stock exchange were branches or legally independent subsidiaries of foreign banks or securities houses. The United States and Japanese banks are each represented with seven members. The Community countries are represented by four British, three French, two Italian and two Dutch banks. This situation has some significance for the development of a European market since, as a result of the liberal policies of the German Government, subsidiaries or branches of foreign banks and securities houses may be admitted to the stock exchanges, subject to their compliance with the Banking Act. This has already put the stock exchange membership of foreign firms on a broad basis, unparalleled in any other country. To that extent, it might serve as a model for a potential European system.

This total lack of restrictions equally applies to the admission of foreign issuers' securities to official listing on the German stock exchanges. Here too foreign and domestic issuers are on an equal footing. At the end of 1984, 180 foreign companies, with a nominal share capital of DM 82,000 million, were officially listed on the Frankfurt Stock Exchange - which has an exceptional concentration of international securities business. In the area of officially listed fixed interest securities, 635 of the issues were foreign, with a nominal value of DM 68,000 million. Of the total DM 121,000 million in business done on the Frankfurt Stock Exchange in 1984, 24% related to business in foreign securities.
The regulations under the Banking Act confer a monopoly of securities dealing on the German banks and permit them both to act as agents on behalf of clients and, since the banks' right to deal on their own account is not restricted, to act as principal. The conditions under which banks must deal with their clients are contained in the General Business Conditions of Credit Institutions and the Rules of the Code of Dealing. The banks must observe them and must ensure that the clients' transactions in listed securities are carried out at the official stock exchange price prevailing at that time. The effectiveness of this legal provision was enhanced by the Gentlemen's Agreement concluded in 1968 between the Associations of Credit Institutions, under which all client transactions in equities must be put through the stock exchange, unless the client expressly requests otherwise. This agreement was included in the General Business Conditions of the Credit Institutions (Allgemeine Geschäftsbedingungen der Kreditinstitute - AGB) (in the case of private banks, Article 29 (1) of the AGB).

7.2 The Framework of the stock exchange

The second legal pillar which, together with the Banking Act (Kreditwesengesetz), referred to above, and the Securities Deposit Law (Depotgesetz) considered in Section 20, forms the main structure of the German securities market, is the Stock Exchange Act (Börsengesetz) of 1896 in its expanded form of 28 April 1975. This Act which affirms the traditional autonomy of the German exchanges, vests the right to establish and regulate the Exchanges in the Länder Governments. It further lays down principles for the organization of the exchanges, the fixing of stock-exchange rules relating to the function of the "Kursmakler" (accredited broker who sets the official price for the stock in which he acts as specialist and may only act as agent in other stocks), the admission of securities to stock exchange dealing and forward trading on the stock exchange. The provisions on the fixing of prices on the Exchanges (Article 29) and those relating to the official Kursmakler (Articles 30-34) have particular significance for the German secondary market. The system whereby the stock exchange price is officially fixed enables stock exchange members to transact client business at this price, without having to give the client any more detail of its execution on the Exchange. Accordingly the General Business Conditions of the banks (Article 29) states that all client orders for the purchase or sale
of officially listed securities shall be executed by the bank acting as principal, whilst charging commission to the customer, and also that, as a rule, all client orders in officially listed equities are to be put through the stock exchange. The method of price fixing – single or continuous quotation – is not prescribed in the Stock Exchange Act itself, but has its basis in the relevant stock exchange rules.

The Stock Exchange Act requires a Board of Governors to be formed, on which all groups involved in stock exchange trading are represented. The Board is responsible for running the stock exchange. It draws up the rules of the exchange and the business conditions applying to the transaction of exchange business. Such rules and regulations are subject to the approval of the Land authorities.

The firm rules of the German Stock Exchange Act must be taken into account when designing a system of European linkage. The membership structure of the exchange and the system of official Kurzmarkler are tried and tested in terms of the requirements of the capital market and investor protection, and therefore no changes in the structure of the stock exchanges can be expected.

A further factor to be taken into account in considering European linkage is the fact that Germany is hardly likely to reduce its high level of investor protection simply in the interest of a system of European linkage. It is immaterial whether investor protection is governed in detail by law or whether it is brought about voluntarily by market participants as, for example, in the case of rules covering insider dealing. Lastly, the system of independent regional exchanges results in prices in principle being set by the official brokers on each exchange independently of the others. Wide differences in the prices of a security are in practice, however, avoided by exchange members carrying out arbitrage operations between the individual exchanges.

7.3 The regionalization of the German stock exchanges

Germany has eight exchanges, situated in Berlin, Bremen, Düsseldorf, Frankfurt/Main, Hamburg, Hannover, Munich and Stuttgart, each of which
has its own regional importance. In terms of stock exchange business, Frankfurt and Düsseldorf are the leaders. As a result of the federal stock exchange system, the other exchanges have developed as the focal points of their respective economic areas.

A similar development has taken place in Frankfurt and Düsseldorf as regards foreign securities listed in Germany: in terms of both the number of such securities and the volume of business, Frankfurt and Düsseldorf have a considerable lead over the other markets, but there too foreign equities and bonds are actively traded.

The system of regional stock exchanges has its origins in history. The spread of the railways and the industrialization of Germany boosted share dealing substantially in the second half of the last century. The country's increasing economic strength formed the basis for the further expansion of the exchanges already in existence around the country. This federal character is today still mirrored by the constitutional status of the German exchanges. On the basis of the constitution (Article 74 point 11 of the Grundgesetz), the law relating to the economy – including that relating to banking and stock exchanges – is governed by Land legislation, insofar as there is no need for a constitutional rule to safeguard legal or economic unity. In accordance with Article 1 of the German Stock Exchange Act, the Land governments are responsible for authorizing the setting up and supervision of stock exchanges.

In 1975, the Federal Government reformed sections of the Stock Exchange Act. The preamble to the draft law explicitly states that regional stock markets have considerable importance for the economic area they serve. Even then, however, the legislator was predicting that competition between the individual markets would lead to further technical modernization; this development has since started – on the basis of electronic data processing – but is still a long way from completion. The objective is to maintain the competitiveness of the German exchanges – in particular in international securities dealing – in the interests of a securities market as varied and yet as united as possible. Therefore moves afoot to develop a national market, the components of which – the eight German Exchanges – continue to maintain their existing independent position.
This programme is in line with the Federal Government's social policy, which aims to attract an ever-wider section of the population to invest in securities - especially in equities - so that ownership of the German economy's productive assets is spread more widely. As the central market for trading in securities, the Exchanges have, in this respect, an important role as intermediaries, promoting the necessary formation of equity capital by German companies.

To fulfil these tasks, the Exchanges must have close contacts with the public, since the saver wishes to have as wide and as sound a selection of easily available investment opportunities as possible. It is also in his interest that the execution of his orders - especially in regional securities - should be as easy as possible for him to follow on "his" local exchange. These conditions are most likely to exist where investors can use personal contacts to obtain their information. The direct advice and management of "his" own bank, which is itself represented on the market, is another important factor.

The German stock exchange system is more strongly federal than that of other European countries, where trading is heavily concentrated on a single main stock exchange. The German regional system allows the full participation of the smaller regional banks on the Exchanges, and avoids total domination by the large commercial banks which would inevitably occur with a centralized market.

Dealing between the Exchanges and the evening out of prices are assured by the existence of the strong national bank network, whose technical links are used by the banks' stock exchange departments. This highly effective exchange of information has been achieved by the stock exchange members themselves. Secondly, the settlement of stock exchange transactions is considerably facilitated by computerization, which has also been financed by the member firms.
The two computer centres, Börsen-Daten-Zentral (BDZ) in Frankfurt and Betriebsgesellschaft Datenverarbeitung für Wertpapiergeschäfte (BDW) in Düsseldorf, process the transactions and provide linked giro settlement through the seven Kassenvereine (security-clearing associations or collective security-deposit banks). The German settlement system is considered in more detail in Section 20.

In some respects, the linkage of the German Exchanges might serve as a model for broader European linkage. Close analysis of the characteristics which make it effective may indicate the more promising lines of advance at a European level. It should be noted, however, that as yet the German system has not attained full floor linkage; only the member firms - in some cases admitted to several or all German Exchanges - are linked with one another. The Association of German Stock Exchanges (Arbeitsgemeinschaft der deutschen Wertpapierbörsen) are at present studying methods by which the unity of the German market can be strengthened further. It must be assumed that any proposals for European linkage between the EEC Member States must respect and accommodate the federal system of the German Exchanges, given that the regional structure of the stock exchange system, which is enshrined in law, will be maintained - at least for the present.

7.4 German Market Trading Procedures

The difficulties in linking the German markets with the other Community Exchanges might be grouped into three areas:
- the rigorous membership requirements of the German Exchanges;
- their commitment to the "Kursmakler" system; and
- the division between on-market and off-market trading by members.
Securities dealing is considered to be a banking function and, apart from the "Freimakler" (brokers trading on their own account or who may act as a form of jobber between credit institutions), the dealing members of the Exchanges are banks subject to the provisions of the Banking Act (KWG). The Board of Governors of the Exchanges grants admission to membership not only to banks themselves but also to those persons who may deal on their behalf. In doing so they examine the applicants' reliability and professional suitability. Such persons are divided into two categories: those who may deal independently and clerks only authorized to deal on behalf of their firms. The level of investor protection offered by these membership criteria is higher than that of other European Exchanges. For this reason, from the German point of view, European linkage with a resultant reduction in investor protection might meet with difficulties.

Official prices may only be established by the official Kursmakler. Because of the special importance of this price fixing for the banks' settlement with their customers, the Kursmakler functions are set out in the Stock Exchange Act. The price must correspond to "the actual state of business on the Exchange" (Article 29(3) of the Stock Exchange Law). The general principle in determining the price is that the official price must be the one at which the largest number of orders can be executed. Prices can be fixed at the official quotation or - when the more active equities and convertible debentures are traded - by consecutive (variable) quotation. The Kursmakler calculates the official quotation once a day by comparing buy or sell orders in a specific security that are submitted to him and the price fixed is the one at which he can execute the maximum number of orders.

As well as the official quotation, trading under a system of variable quotation takes place on German Exchanges. The decision to include specific securities in the system of variable quotation is made by the Board of Governors of the stock exchange.
Electronic data processing has considerably simplified and accelerated the settlement of stock exchange transactions. Brokers feed details of individual transactions and all daily stock exchange prices via an input unit to the computer centre: the data is then processed to provide the necessary documents for brokers, credit institutions and security-clearing associations (collective security-deposit banks). The security-clearing associations, whose account holders are the dealer credit institutions, have an important role to play in the transfer of securities in collective custody: the settlement of stock exchange transactions and the relevant transfer of ownership from seller to purchaser is completed simply by a book entry in the securities accounts of the participants. The physical transfer of share certificates is thus avoided and the securities lodged with the security-clearing associations remain immobilised.

Alongside the credit institutions which execute client orders and the Kursmakler, there are others who play an important role. There are the credit institutions who deal for their own account and the Freimakler— who act as intermediaries in transactions between banks and trade on their own behalf on the stock exchange floor. The role of these participants is to observe the market situation and to use their own financial resources in helping to stabilize the official price level.

In Germany it is unanimously felt that universal banking—namely deposit-taking and lending and own-account and third-party securities dealing—has many advantages over a separate banking system, the main one being that securities dealing, which is particularly cost-intensive, can be handled more safely by a credit institution, with its diversified business structure and broader capital base, than by a firm of brokers which depends exclusively on this specialized line of business. Under the universal banking system, the investor also benefits from the fact that the bank does not depend on producing turnover to achieve sufficient profits. Unlike a firm of brokers, the universal bank is therefore better able to await market developments, and thereby exploit particularly favourable opportunities for its clients.
The German floor market is supplemented by continuous markets operated by the banks throughout the day outside exchange hours. The German system therefore already ensures a linkage between the individual exchanges. The question of whether and to what extent changes in its international interface recommend themselves will be examined more fully below by reviewing the role of the universal banks in the international securities markets.

7.5 The role of the German banks in the international securities markets

The activity of the German banks on the international securities markets comprises:
- the handling of large institutional orders;
- the execution of private client orders, and
- own-account dealing by banks.

Amongst the institutions, the insurance companies are the most significant, pension fund liabilities being in the main met by reserves built up by companies and shown in the company accounts. According to Deutsche Bundesbank statistics, insurance company investments at the end of 1984 totalled DM 430 000 million; of this figure, DM 170 000 was invested in registered bonds, claims backed by borrower's notes and loans, DM 132 000 million in securities (excluding debt register claims), DM 11 000 million in holdings in other undertakings, and DM 37 000 million in land and equivalent titles.

This means that almost 70% was invested in securities. Assuming that most holdings in undertakings were probably in the form of equities, this corresponded to just under 3% of total investment, but it should be noted, however, that the equity portfolio of the insurance companies is mainly included under the item 'securities', and its true size is therefore unknown. On the whole, investment in fixed interest securities, notes and the like is by far the largest category. Investment in foreign equities by life assurance companies is restricted to those securities which are quoted on the German exchanges.
The investment funds are another large group of institutional investors. These are trust companies set up by the banks in the legal form of a private limited company (Gesellschaft mit beschränkter Haftung - GmbH). They are divided into:
- open-ended funds for the general public with a conventional broad-based unit-holding, and
- special investment funds, designed to meet the needs of individual companies, usually large firms.
Both types of investment fund are active on foreign securities markets. At the end of 1984, the total assets of the German security funds stood at DM 72 000 million, of which:
- DM 39 000 million was invested in funds for the general public
  (DM 10 000 million in investment funds specialising in equities and DM 29 000 million in fixed-interest security investment funds);
- and DM 33 000 million in special investment funds.
DM 2 000 million or 21% of the DM 10 000 million in total assets of the funds specialising in equities were invested in shares of foreign issuers. For fixed-interest security investment funds this proportion was only 0.1%, and for the special investment funds, 6.7%.
Dealing in international equities is of increasing importance to German institutional investors, although their interest lies overwhelmingly in the fixed interest markets. The limited availability of German equities, which results in trading being heavily concentrated in internationally known German blue chip companies widely held both inside and outside Germany, arises out of the fact that the equities of many major German companies tend to be concentrated in a small number of hands and are therefore not available for trading on the stock exchange. This structure of the German equity market encourages institutional investors to purchase foreign securities. Block transactions in foreign securities tend to be placed directly on the foreign markets.
Outside stock exchange hours, the German banks are permitted to trade in German and foreign securities at home and abroad. They are subject to no restrictions in foreign securities business. They may therefore deal directly with foreign banks and securities firms, either to execute customers' orders or to trade on their own account.

The attitude of credit institutions to own-account trading varies considerably. Notwithstanding this, the international market operated by the German commercial banks throughout the business day is extremely effective.

At the same time, in so far as the bank is not obliged to pass via the exchange, large incoming foreign orders relating to the purchase or sale of German securities may either be handled through the exchanges or outside them.

The stock exchange departments of the banks, which execute German orders for foreign securities and foreign orders for German securities, trade across the international markets partly on their own account and partly on behalf of clients.

The private client departments of the banks are supported by their extensive network of branches, which are responsible for advising clients. In this, they are largely supported by the banks' economists, business consultants and financial analysts. While large private client transactions might be executed on foreign markets, small orders are generally carried out on the German exchanges. This system is in the interests of the client, as a small transaction in a foreign security traded on a German exchange can be dealt more cheaply for him on the German exchange than in the market of origin. This is accounted for by the fact that minimum fees are usually high in other countries. At the same time, the Kassenverein system simplifies his holding in the foreign stock.

The international dealing of German credit institutions must be seen as an important extension of the classical German market system. It is clearly identifiable as such by foreign counterparties, who tend to refer to "the international market operated by the German banks". This market is considered to be an effective interface between the German domestic markets and the foreign capital centres. It is not considered to be a challenge to the integrity of the German domestic market system. To that extent, there is no need to change anything in current practice.
7.6 Summary of considerations affecting the attitude of the German Exchanges to European linkage

The likely attitude of the Association of German Stock Exchanges towards proposals for closer linkage of the Community Exchanges may partly be deduced from the statements made in its Position Paper of November 1982 and partly inferred from the general situation described above.

In respect of any increased internationalisation of business within the framework of dealing which has already evolved between the markets, the German position is extremely strong. The capital base of member institutions of the German stock exchanges is generally substantially broader than that of firms of brokers. The capital endowment of the German banks equips them to operate on a scale required by increased international competition. The banking regulations to which they are subject provide assurance to the investor. On the other hand, there is, in principle, no restriction on the banks' trading capacity in the international securities markets. The limitation of forward dealing in Germany to options does not apply to the banks' international trading. Apart from this, the banks are subject to no restrictions on cross-frontier capital movements. Their activities are based on a strong internationally active domestic market. The German banks are, in consequence, in a much more free and flexible situation in their international trading than are almost any other stock exchange intermediaries in Europe, and can exploit this advantage from a strong resource base.

The equilibrium between domestic security business and the international market operated by the banks is considered satisfactory by the German banks and the Exchanges.
In the light of this situation, it might be assumed that the German banks and exchanges are not interested in a change in the existing system.

The German Position Paper of November 30, 1982, confirms this to be the case. The Paper further affirms the belief that European linkage will develop naturally, through existing market channels, provided the national equities markets are permitted to develop vigorously. It stresses that the real priority is the abolition of fiscal and other artificial obstacles, and for Government action to encourage equity investment by tax measures which would increase the return on equity and the ratio of share capital. In this way the equity base of companies could at the same time be strengthened.

Developments since 1983 show that, following a change in the political environment, the banks have successfully brought a number of new issues to the market, thereby improving company financing with equity capital. In 1984, the ruling parties in Government also took an initiative in Parliament to make it easier for small and medium sized enterprises to gain access to the exchanges and at the same time to create the preconditions for the supply of venture capital. Accordingly, a bill amending the Stock Exchange Act and another on the formation of finance companies will shortly be submitted to the legislator.

The German Bundesbank has also stated that from May 1, 1985, it is prepared to allow foreign-owned German credit institutions to act as syndicate leaders for foreign DM issues - which also includes option contracts, convertible debentures and currency option contracts. In doing so, the Bundesbank is assuming that the home countries of the institutions concerned will extend the same facility to German-owned credit institutions. This has brought the liberalisation of the German capital market to a level which can be an example to others.
Proposals, which might lead to a change in the existing organisations of the Exchanges, have also been under discussion for some time. On the whole, it remains to be seen how banks and exchanges will react to the new situation. However, there is no prospect of a departure from the traditional, well-tried banking system.

The German stance is therefore summarised in the Position Paper as follows:

"that the various different European stock exchange systems cannot be harmonised without causing lasting damage to the workability of those institutions that have developed traditionally and historically. The implication, from the German standpoint, is that the only acceptable linkage would follow the channels of the existing international markets, which in the case of the Federal Republic permits effective international dealing and at the same time preserves the traditional and legal characteristics of the German market."

Frankfurt am Main, 3 Mai 1985
Corporate Form of the Amsterdam Stock Exchange

The structure of the Amsterdam Capital market is unique in Europe, in that a full range of market intermediaries are integrated into the membership of the Stock Exchange. The Vereniging Voor de Effectenhandel comprises the banks, the 'commissionairs', the brokers and 'hoeklieden', the market specialists. The activities of the Vereniging, which is the corporate body under whose articles of association the Exchange operates, centre on the Stock Exchange, the Amsterdamse Effectenbeurs (A.E.B.).

The structure of the Amsterdam market thus occupies a middle position between the universal banking system of Germany and the 'broker' Bourses of Belgium, France and Italy. The incorporation of the banks within the Exchange is a major reason for the strength of the international equities market in Holland. In any consideration of possible future developments in Europe in response to the increasing internationalisation of securities business, the Amsterdam precedent, and the conventions under which the banks, the brokers and hoekmen operate together is of particular interest. The present trading system is not without flaws, and the A.E.B. recognises that an order of modernisation is required. As discussed below, these changes are being implemented and a radical review of market organisation is currently in hand, but the changes resulting from these reforms will be technical rather than fundamental.

Unlike the broker Bourses, the structures of which are either laid down or implied by statute, the A.E.B. has been in constant evolution over the last one hundred years. Its form has reacted to the development needs of an effective modern market, and its membership practices have evolved primarily in response to concentration of the banking system. The present structure of the Exchange is based on the 1972 Commission, of which the main recommendation was to strengthen the dealing system by separating the capacity of hoekmen from that of broker.
In 1981, the last full analysis available to the Consultants, there were 144 member firms of the A.E.B., divided into 95 broking firms and 49 hoeklieden. The broking firms divided into 59 commission brokers and 36 banks. A distinction of local importance is the division by the Nederlandse Bank of the A.E.B. brokers into Nieuw-krediet-instellingen (NEKIS) and Effecten-krediet-instellingen (EKIS). NEKIS, into which category fall the majority of the non-bank brokers and all the hoekmen, are not permitted to carry out financial functions or hold securities for clients. These functions are undertaken for them by the Kas-Associatie. Kas-Ass is a bank acquired by the A.E.B. in 1973 to operate as an 'inter-professional institute'. It provides facilities for the brokers, the hoekmen, and certain small banks which cannot offer financial and stock deposit services to clients. At the same time, the monitoring and audit role of the Kas-Ass provides financial assurance in the market, and its central stock payment function allows it to act as an important interface in foreign dealings. The EKIS, into which category most of the bank members fall, are permitted to carry out all financial and securities services in-house, their solvency being regulated under the Credit System Supervision Act, and thus not requiring assurance under Stock Exchange procedures. In 1981 there were 39 NEKI and 20 EKI members carrying out commissionaire functions.

The main concentration of membership occurred on the A.E.B. in the twenty years between 1955 and 1975, with the number of firms falling from 455 to 175. Since then, the trend for banks and hoekmen has been more stable, with these categories reducing by 8% - 9% respectively. The percentage reduction in broking firms since 1975 is higher at 28%. One quarter of the present 250 personal members are believed by the Exchange authorities to be inactive.

8.2 The Dutch Banks

Trading in the Amsterdam market is dominated by the banks. No figures exist to confirm the banks' share of the Amsterdam market, but the known proportion of commission income suggests that it is over 80%. Bank members include the large commercial banks such as A.B.N., A.M.R.O. or N.M.B., for whom networks of
many hundreds of branches provide the base for huge retail business. Bank client orders are normally assembled by computer in the Amsterdam securities departments of the commercial banks, and are received in the Exchange the next day for execution. Client orders given early in the morning are executed the same day.

The commercial banks' share of such Dutch institutional business in equities as exists is less than that in the private client business. In spite of concentrated client orders, the securities departments of the major banks have not been profitable over recent years, and in 1972-73 all the banks were loss-making in their securities functions. The reasons for this were linked to settlement rather than dealing, and are considered elsewhere.

The Dutch banks, unlike their German counterparts do not hold large equity portfolios. This does not appear to be due to any specific regulatory provision, but to the general belief of the financial authorities and the banks that such holdings would not be appropriate. This situation permits banks to operate a full range of securities services which are well-defined and discrete operations, and, possibly for that reason, highly professional. This is particularly the case with the merchant banks. The positioning function of the commercial banks is somewhat blurred by the concept that the bank is buying or selling in anticipation of bank client orders it expects to receive. In the merchant banks there is no such ambiguity and the positioning, particularly in the international dealing is a technical activity.

The larger banks' securities business tends to be split into two organisational divisions. The first handles 'the Stock Exchange business', routing private client orders to the A.E.B. Related to this they offer portfolio management services which are supported by appropriate research capability. The second organisational division, which is of central importance in considering the present form of international dealing in Amsterdam and its relation to any proposed linkage, transacts business on the banks' own account, and conducts its
arbitrage and market-making. These operations, in which the banks are at liberty to carry out net transactions with any intermediaries in foreign capital centres, - banks, brokers or jobbers, - both meet the arbitrage needs of the Amsterdam market, and extend into active and large-scale international dealing. Continuous two-way prices are made in a market which can potentially be operated over twenty four hours, and no commissions are involved. The size of the market is internationally competitive, with, for example, prices made in Philips in 20,000 or 30,000 shares, though the smaller domestic securities would normally be quoted in 2,000-5,000.

Backed by their substantial capital, the arbitrage departments of the Dutch banks are in a strong position to respond to bids or offers from the North American market which is the fulcrum of the international equities dealing system, and with which Amsterdam has long traditional connections. They link effectively with the Wall Street brokers handling U.S. institutional business. Spreads are held close by competitive pressure, though they may be widened if immediate execution is required. Normally it is possible to obtain part execution, with a continuation order to complete an entire large transaction. The Dutch banks are not afraid to take and manage large positions and to set their margins according to risk. Their connection with the London market, both in respect of U.K. business and of U.S. business managed in or channelled through London, is strong. There is at least one case of a joint stock account arrangement between a London jobber and a Dutch bank, which permits positioning across the two markets and broadens the base of dealing with the U.S. clients who may seek to deal in large size.

The Dutch banks tend to conduct their arbitrage with a narrow range of foreign counterparties, and accept that the business is based on a limited range of contacts with institutions of comparable standing. They would strongly affirm, however, that it is highly competitive, and that the arrangements result in effective international movement
of large lines of stock at fine prices. Moreover, in international business at this scale, reliability of information and assurance of execution and efficient settlement are required. These are most effectively achieved through well-known contacts in an established network.

The Dutch banks appeared to consider that the problem of the European international market did not relate to dealing contacts or communication, which were adequate and effective, nor to fiscal obstacles which were invariably disregarded if a strong economic incentive to invest existed. There appeared general agreement that the main complication arose from the difficulties of international settlement and from covering the money positions arising from them. The valuation of arbitrage contracts in face of these imponderables could be difficult. It was accepted that rationalisation of dealing conditions was a pre-requisite to improvement of settlement, and a constructive proposal was made by one major bank that European international securities should be dealt and settled within a single system agreed by all the Exchanges.

It is apparent that the arbitrage activities of the Dutch banks perform a dual role. They provide liquidity for dealing on the Exchange floor. International dealing tends, at any time, to be one sided, i.e. heavy demand for domestic securities by foreigners or vice-versa. This results in an imbalance in the local market, which can only be rectified by the intervention of the professional international dealer. Secondly, the ability of the banks to deal with foreigners from their own positions defends the Exchange market from instability which might result from the direct impact of large foreign orders on the floor, all on one side of the hoekman's book. During 1982-83 the system effectively accommodated a large flow of U.S. funds into the Dutch market. As this international money moved to rectify the unduly depressed price-earnings ratios of the Dutch stocks (a process which is not yet over), the market tended to re-concentrate in Amsterdam. The Dutch banks and foreign intermediaries were essential agents, re-cycling stock from U.S. sellers in New York to meet U.S. buyers in Amsterdam.
The foreign intermediary may deal with the bank as a principal, or may require the bank to deal on the floor. The Rules of the A.E.B. result in the clear definition and delimitation of the arbitrage function. Any orders from Dutch clients, private or institutional, must go through the Hoekmen, as described below. An important function of the Dutch banks' foreign dealing departments is the direct placing of the larger Dutch client orders for foreign securities abroad. Neither these transactions nor the orders transmitted to foreign markets by the institutions themselves are included in the A.E.B. statistics. These, in consequence, give a false and much understated picture of the true volume and patterns of Dutch investment in foreign equity. Small client orders for foreign securities would, assuming they are listed locally, be carried out on the floor of the A.E.B. Orders for, possibly D2100,000 and above will be transmitted abroad. De Nederlandsé Bank capital account figures give a truer picture of the real situation, for example, in respect of German securities in which Dutch clients and institutions are heavily invested, than the Stock Exchange figures, which give the opposite impression.

As is the case in all the other Community markets, no figures are available which accurately indicate the scale or scope of the Amsterdam international equities market. A consistent picture of the proportion of transactions emerged from the discussions, which, though variable from one year to another, suggested that 30%-40% of the business was in U.S. securities and 20% in Japanese. Amongst the Community markets, London and the German Exchanges were the most important, with Paris and to a lesser degree Brussels following. Virtually all transactions in German securities are carried out in Germany. The Paris transactions of the Dutch banks are largely carried out off the Bourse.
8.3 The Dutch Brokers

The co-existence in the Amsterdam market of the bank members and brokers is of relevance to any proposed scheme of European linkage between Exchanges which tend to have as members only banks or brokers. In terms of financial resources and of share of business the bank members dominate the brokerage market. Rather than having their role eroded, however, the brokers are demonstrating increasing resilience and capacity to survive, and at the time of the study they appeared to be increasing their share of the retail business.

The reason for this appears to be that the broking firms have to be more entrepreneurial in their dealing. They tend to be closer to the market, and may thus be able to make or respond to investment propositions more quickly. In the past there has been a tendency for the banks to place insufficient stress on floor dealing functions. They are now reviewing and rectifying this situation.

Many of the brokers, though not the larger, have little or no research functions and are able to operate at lower overhead costs than the banks' securities departments. The banks further contend that the brokers are subject to less rigorous regulation than are the banks, and this gives them greater flexibility of operation.

The trends affecting the non-bank brokers appear mixed. They attract a certain amount of institutional business. The smaller institutions tend to acknowledge the dealing expertise of the brokers and place orders through them. Some of the larger institutions are ready, when placing a scale order, to give the brokers several days in which to find the necessary counterparties. The base of their equities business, however, appears to be private clients, notably those who prefer to relate to a broker on a basis which can be more intimate than that possible through the large computerised Stock Exchange.
departments of the banks. On the other hand, the relative importance of the private investor in the secondary market as, elsewhere, has declined. At the time of the study, it was considered that the Dutch private clients had become disenchanted with equity investment and had been attracted to fixed interest securities by high interest rates. It is possible that the trend is being reversed in consequence of the present, striking revival of the Amsterdam equities market.

Amongst the brokers are a number of large firms which operate international dealing functions in much the same manner as the foreign dealing departments of the banks. They are, of course, permitted access to the same full range of international contacts, and are similarly permitted to deal net for their own account. The positions assumed, however, are in more immediate relationship to their own anticipated business and appear less significant in the general supply of the market than the arbitrage functions of the banks. The large Amsterdam international non-bank broker may only draw 20% of his business from Dutch private clients. Of the 80% of the business which is institutional, more than half may be from orders placed directly with the Dutch broker from institutions outside the Netherlands.

The Dutch broker is able to offer a valuable service to the foreign investor through his knowledge of the second-line securities, the Amsterdam market being markedly divided in this respect. He is also likely to be expert at handling the narrower trading situations which exist in these stocks.

The international brokers considered that the concept of a network linking the international dealers was constructive but that at this point any scheme to link the European market floors would be impracticable.

The brokers were somewhat critical of the adequacy of the present market function of the hoekmen, believing that it should be strengthened.
It was believed that the full development of the continuous market would render the present practice of finding counterparties for equity transactions and then 'moving the price' unnecessary. The brokers believed that any technical improvements in the liquidity of the market would without doubt increase their business.

Foreign brokers in Amsterdam are permitted access to Dutch client orders for foreign securities, but are required to sign 'a gentleman's agreement' with the Stock Exchange that they will not seek business in local shares. Apparently all except one of the foreign broking houses have made such an undertaking, and the convention is generally observed.

8.4 The Hoeklieden

The hoeklieden are the central and unifying mechanism of the Amsterdam market and its trading procedures. Their present functions remain based on the re-organisation of 1972. This excluded the firms which wished to remain dealers from broking functions and likewise excluded the commissionairs from dealing. The market system thus operated is close to the model of the North American specialist system, though there are elements of the hoekman's role which are similar to those of the German Kursmakler. The theoretical principle of the system is to concentrate all orders on the A.E.B. floor, with negotiations carried on in the hoeks. Each of these contains several hoekmen designated, more by tradition than by market rationale, as dealers in certain stocks and bonds. The system is competitive, and up to four hoekmen may exist in the major stocks. In the strictest application of the principle, the hoekmen take all orders onto his book, establishes the equilibrium price which maximises the satisfaction of demand, makes up the minor balancing sale or purchase at this price, and executes all possible transactions at the official price. The positioning function in this traditional procedure is minor, and the hoekmen revenues are derived principally from the 11% of the commission which he receives on either side of the transaction. Under the system, the seller and the buyer self-evidently receive or pay the same price.
In fact, it never proved practicable or desirable to apply the collective price system in its full rigour, and it appears to have been implemented fully only in the 'closed hoeks' for the less active securities. Unlike the German Exchanges, in which the collective price principle can be preserved in its purest form due to the ability of the banks to ignore it in the continuous market they operate outside the Exchanges (other than for their private client transactions), the Amsterdam market is, at least formally, centred on the Exchange. The concept of 'Exchange business', which is central to the organisation of Amsterdam trading, is founded on the 1947 law which provides that all securities transactions in Holland must be undertaken through a bank or broker. As members of the Stock Exchange, the banks and brokers have undertaken that all securities transactions in Holland shall go through the Exchange except for the previously mentioned professional net-trading. A further clarifying definition is that all client transactions, either private or institutional, must go through the Exchange. The clear right of the Hoekmen to see and appropriately handle all local transactions is thus apparent, and it is respected by the members of the Exchange.

The right is mirrored by an obligation on the part of the Hoekman and the market in which he operates to accommodate and provide the necessary dealing facilities required by the various sides of the Amsterdam capital market. The history of trading procedures on the A.E.B. over the last ten years has been dominated by the attempt to develop the hoekman into market intermediaries capable of this role.

The nature of this evolution, which has led to a continuous market in all major stocks and to the final moves which are the major current pre-occupation of the A.E.B., was first visible in the institution of the open hoek. It was recognised that the collective price system alone could not respond to the needs of the market in 'internationals', the group of five or six Dutch stocks of world scale, which are dealt in overseas markets as heavily as they are in Holland. In the open hoek trading, set up for dealing in these securities and state bonds, a single collective price was made in the hoekman's books (at 11.30), essentially as a facility for settling the smaller transactions. Throughout the rest of the day,
trading was possible between commissionairs or between commissionairs and the hoekmen. As designed, this trading was to take place in the hoek. In fact, market realities asserted themselves, and the brokers and banks found it easier to telephone the hoekmen and the concentration on the floor was not attained. The hoekmen however, retained their technical role in this more diffused trading. All transactions which were not dealt with them had to be reported to them, the prices accepted by them and as appropriate the commission paid to them. While either the banks or brokers can and normally do find the other side of a large equity transaction and 'take it across the office', such transactions must, subject to the provisos mentioned below, go through a hoekman. Technically, brokers and banks are supposed to show the full extent of their bid and offer to the hoekman, but this idealistic requirement is, not unnaturally, not observed.

The continuous trading principles applying to the open hoek were extended to 'continuous trading closed hoeks'. More recently they have been applied to all the first and second line equities, with opening collective prices at 1000 hours and closing prices at 1315 hours, but with continuous trading 1000 hours to 1630 hours. The A.E.B. anticipated some rationalisation of this arrangement.

Concurrently the Exchange is studying the adequacy of the present role of the hoekman system to meet the needs of the future market in the context of the full development of Amsterdam into a modernised international capital market. This involves several inter-related problems. The first is whether the hoeklieden, as at present organised, are strong enough to perform their essential function of genuinely concentrating the market. While the form of reference to the hoekman is followed, and all transactions in this sense 'go through' the market, there must be some doubt as to the validity of his price formation if that function is based primarily on the collective price established across a less and less important segment of the market's business. There is not a strong tradition of domestic equities dealing in Holland, and some major institutions are shy of
equities. As a result the main problem in equities dealing of any scale is to find a counterparty. In this situation the narrow base of floor dealing in equities has tended further to drive large business away from the market floor. Both brokers and banks have in recent years become more aggressive in seeking both sides of arranged business, and it appears likely that this trend will increase unless something is done to strengthen the role of the hoekmen.

The type of situation which can result is that, for example, a bank might receive a selling order at a limit price from an institution. The bank might then approach the hoekman, who would not be able to deal because the limit was outside the permitted margin of the Exchange price. The bank would use its international contacts to find buyers at the seller's limit, which it might well be able to do. The procedure for completing the transaction would require the bank to go into the Amsterdam market as a buyer to the limited extent needed to raise the Exchange price to the seller's limit. It would then be possible to execute the transaction through a hoekman who would receive commission on one quarter of the transaction. This type of case causes stress within the local system, since the bank dealer resents paying the floor commission under such circumstances, and it must also raise a question as to the validity of the price formation system which will become more acute unless the market floor can be established as the genuine centre of continuous trading.

It proved extremely difficult to obtain any real feel of the extent of block business off the market floor. It is considered that there is virtually none in the small group of 'internationals', in which quotation in any size can be found in the floor market. The A.E.B. officials considered that (in 1982) there had been 'less than twenty such transactions in the last two years. These Bourse estimates relate only to floor business, and cannot take account of the professional inter-bank market. One major merchant bank carried out 50% of its business net and 50% gross. The former proportion would include dealing abroad so it is impossible to infer
how much represents local business. The definition of a put-through is a transaction in which a bank or broker has a buyer and a seller at a transaction value of more than DG500,000. It was further stated that much of the off-market business related to foreign holdings of Dutch securities.

The problem of attaining adequate confrontation of large equity orders on the market floor is compounded by the limited scale of operation of the hoekmen as principals. One solution is seen as the emergence of hoekmen with stronger capital base, who would be able to undertake more extensive positioning. This would involve no change in the rules. The hoeklieden are permitted capital infusion so long as such capital does not come from a bank or broker. Non-member participation is permitted so long as there is no association with any company in which the hoekman deals. Hoeklieden are permitted to operate under limited liability corporate form. The problem in developing firms of adequate size is less technical than historical. As the re-organisation into single capacity dealers took place over the last ten years, much of the status quo had to be accepted. Due to their inevitable commissionair role no bank could be permitted to act as a hoekman. There were initially many small hoekmen. The vested rights of the dealers under the re-organisation to deal in particular securities with particular hoeks had to be respected and rationalisation of the specialist system has been a slow process. Re-allocation of existing stocks was not possible, and there had been virtually no new issues through which any progress towards rationalisation could be achieved. At the same time, the combined role of the Effectencielearing and the Ka3-Ass. in managing the hoekmen's position and facilitating and monitoring their liquidity had assisted the survival of the small market-maker.

The hoekmen appear to believe that the system is in fact responding adequately to current need and that there is more position-taking than is generally believed. It is possible that as the growth of the continuous market progressively removes the need for brokers to find counterparties for their sold and bought orders, floor
market-making will automatically strengthen in response to the increased flow of orders. The banks appear to be in two minds about the continuous market, appreciating its potential to strengthen the present market, but concerned that it might erode some of their own off-market activities. This view appears to endorse the more positive role which will become apparent for the hoekmen in the new continuous market.

The role of the hoekman in foreign securities is stronger than that of the price-official type specialist of other continental Exchanges. Hoekmen are highly active in U.S. securities, supported by the A.S.A.S. system, and do take substantial positions in these stocks. The dual listing permits them to deal directly on New York. Alternatively, the local prices are determined by arbitrage. The hoekman has freedom to trade with professionals but, of course, not with clients. He is free to go abroad to markets of origin, and for markets in the European time zones normally would do so. His ability to do this cross-cuts the arbitrage functions of the banks, who tend to question this practice. The banks are likely to retain their hold on arbitrage, Foreign exchange factors in which they are expert are significant in this business, and other relationships between the banks and the hoekmen will tend to restrain the hoekmen from too much initiative in this field. In international transactions, it appears fair to say that the hoekmen, although technically able to cover all necessary functions play a role which is responsive to that of the banks.

8.5 Current Reform of the Dutch Capital Market

The proposed new Stock Exchange law, which has been under consideration for some time, does not directly affect the hoekmen, but as the legislation aims to consolidate and concentrate the market, it implies a stronger market-making role for them. Meanwhile the Members and the Officials of the A.E.B. are engaged on a step-by-step review of Exchange structures and procedures. Three Committees have been set up. The first is reviewing the formal structure of the Exchange and has a brief to modernise the rules. The objective of the second is to speed up the immobilisation of securities. The third is to review the dealing
procedures in the light of future demands and the increased internationalisation of the market. The function of the hoeklieden is seen as the central question. Alternative foreign systems are being reviewed. The ultimate aim is a system which will achieve a single price in a unified market on which all trading will be concentrated. Until this Committee, which is balanced in composition between brokers, banks, hoekmen and officials, reaches its conclusions and its findings are accepted or otherwise, the ultimate stance of the AEB towards any proposal for European linkage will not be clear.

8.6 Summary of market considerations affecting European linkage

(i) The Amsterdam Stock Exchange is, of all the Exchanges, possibly the best adapted to participate in European linkage. Within the A.E.B. the problem of co-existence of broker and bank membership has been resolved. A strong international market exists, supported primarily by the capital resources of the bank members, but in which the brokers also play a significant role. The organisation of the Exchange is flexible, and it has proved its capacity to evolve effectively to meet current needs. Any weakness of the A.E.B. has arisen from the fiscal, economic and social environment in which it has operated, rather than from deficiencies of the Exchange or the machinery of the Amsterdam capital market.

(ii) The type of linkage for which the A.E.B. is likely to opt may be indicated by the proposal for a new Stock Exchange Law and by the current local initiatives to modernise the market. The key-note of the proposed developments is clear, - to strengthen the central market functions, concentrating all Amsterdam transactions within it to the fullest extent possible. The aim is to secure convergence of transactions into a single price system. Having open-mindedly reviewed the role of the market-floor in the modern context, the view of the A.E.B. appears to be that whatever the future may hold the physical market floor should for the present remain the fulcrum of the more concentrated market and of its price formation. The consequent need to strengthen the hoekman specialist role is acknowledged, as is a requirement for
market-making on a scale which relates to the larger scale dealing to be attracted onto the floor.

(iii) Concentration of the Amsterdam market will present a two-level problem. The first-level solution will aim to establish a bona-fide and effective function for the hoekman in the domestic market. The present trend of finding counterparties outside the market for large-size transactions, with nominal association of the hoekman in the bargain, possibly with a 'moved' price as it is put-through him, would be substituted by a central continuous market of adequate liquidity.

The second level solution would relate to the attraction into this central price system of the professional dealing of the banks in the listed securities, and as far as possible, of the Amsterdam-based business in foreign equities.

(iv) This latter solution would be more complex, and has bearing on the general problem of European linkage. In attempting to integrate the present telephone markets with a more concentrated floor system it might be found that a revised local market system was required which combined conventional floor facilities with an electronically-assisted dealing system covering the banks' local operations in international securities. Such a solution has already been posed theoretically in Paris, where it would be far more difficult to implement. If such a system were to emerge in Amsterdam, the interface for European linkage would be without complication. The link would be with a integrated local market system which comprised both tele-communication and floor dealing, making central prices and under the control of the Amsterdam Stock Exchange.

(v) In the present situation, it is difficult to assess whether the A.E.B. would, in the event of a choice, favour linkage based on the market floors or on the arbitrage network. As stated above, the Exchange authorities are, in the interest of a concentrated market, likely to favour a form of linkage which will assist their objective of
increased concentration of business on the floor. On the other hand, it is likely that the banks and international brokers would insist that the European linkage should accommodate their present international dealing channels. This was regarded as essential by all the Dutch bank members interviewed who, in general, were sceptical about any immediate prospect of inter-Community floor linkage. If, however, the concentration of the present dual market, i.e. on and off floor, in Amsterdam is resolved, there will be no problem finding an appropriate point of entry for linkage with the other European Exchanges.
SECTION 9 - THE INTERNATIONAL EQUITIES MARKET IN ITALY

9.1 The paralysis of the International Equities Market

Although Italy was one of the founder States of the European Community and has always participated actively and constructively in most areas in the financial sector, Italy is one of the most isolated European member countries. Its securities market has remained at an almost embryonic level of development in spite of the fact that it has become the seventh or eighth industrial power in the world. Italy has essentially become an industrial and not an industrialised economy. There is therefore little to say about international dealing methods and activities.

The total abyss between Italy's industrial economy and its capital markets are due to both technical and political reasons, the latter being by far the more important.

The permanency of Exchange Controls - in total transgression of the Treaty of Rome which even apply to investments within European Community member countries, is undoubtedly the main impediment to the development of an international market in securities.

Exchange Controls in Italy have existed on and off since they were first introduced in 1917. When the special branch of the Bank of Italy, Ufficio Italiano Cambi, was set up in 1945 to replace the previous institution (I.N.C.I.), it was, however, hoped that once post-war reconstruction was completed, such restrictions would be gradually and finally phased out. In 1955 the Lira was made a fully convertible currency and, in 1962, Italian residents and companies were finally allowed to deal in foreign securities, provided that the securities were officially quoted on a recognised foreign Stock Exchange. Many leading banks and insurance companies subsequently developed foreign security operations and investment funds based in Luxembourg. Initially interest was mainly concentrated on fixed interest securities, particularly after the bitter experience of the debacle of the offshore investment fund organisation IOS. All such trading was however executed outside the
official market as no foreign securities (bonds or equities) were listed on the Italian Stock Exchange.

At the beginning of the seventies, a certain number of foreign companies, many of which already had close industrial relations with Italy, became interested in listing their shares on the principal Italian stock market, the Milan Stock Exchange. There was a list of over 20 European, American and Japanese companies potentially interested in such a quotation. The development was unfortunately killed at its birth by the re-introduction of Exchange restrictions in July 1973, as a temporary measure to counteract the run on the Lira. In fact only one foreign holding company, C.T. Bowring of London, gained entry before the doors were finally closed to foreign investment by Italian individual and corporate residents.

Such dispositions, established by a Ministerial decree and effectively enacted by an appropriate circular of Ufficio Italiano Cambi, require the deposit of a sum equivalent to 50% of the amount invested in foreign securities, whether European or otherwise, at an agent bank of the Bank of Italy. Such deposits bear no interest and are only reimbursable on the sale of the same securities.

The same dispositions obliged the fourteen Luxembourg-based investment funds which had been developed in the preceding years by leading Italian banks and insurance companies to invest all sums dis-invested in Italian securities. Previously they had been permitted to operate in Italy provided that at least 50% of available funds was invested in Italian corporations. The only concession made was that sums acquired from dis-investment in foreign securities could be re-invested in other foreign securities with an identical or earlier date of redemption. This obviously excluded any re-investment in foreign equities. In addition, all profits had to be repatriated and were subject to a 30% withholding tax.

This was particularly damaging in a period of a rapidly depreciating Lira. It also prevented such funds from investing in foreign stock
giving good yields and was obviously also detrimental to the Italian balance of payments. The only exception to such restrictions and compulsory deposits are investments in fixed interest stock issued by authorised European Community bodies such as E.I.B., Euratom and the European Coal & Steel Community.

These restrictive measures, authorised by European Community authorities only on the understanding that they were temporary, were later made even more severe in 1976 when penal sanctions were also imposed for even minor transgressions.

The measures largely closed Italian frontiers to investors in both directions. In order to demonstrate the extent of the negative consequences, it is sufficient to say that, prior to 1973, a leading Milanese broker earned about one-third of his total commission income from investments from abroad. The restrictions resulted in total loss of this business. Nevertheless it is far from true to say that there has been no Italian activity in foreign securities. In fact, data provided by the Bank of Italy shows that, over the period 1976-1982, the activity in foreign securities equities by Italian resident investors averaged 16% of the value of total equities trading on the Exchange over that period. In 1977 the value of this foreign dealing relative to equities trading on the Exchange was 80%. It fell in the exceptional boom year of 1981 to 8%, rising again in 1982 to 30%.

If portfolio investment in Italy by non-residents is also added, as a legitimate dimension of the international market, the resulting volume of foreign business is equal to almost 50% of that carried out on the Exchange.

As most outward business is effected abroad, little or nothing of this tends to be transacted by an official Italian market intermediary. Though most inward investment was directed towards equities, to judge from broker comments little of this business has tended to be executed through the brokers, apart from during the boom year, 1981.
<table>
<thead>
<tr>
<th>Year</th>
<th>Portfolio transactions in Italy by (2) residents (3)</th>
<th>International stock transactions by residents (2)</th>
<th>Milan Stock Exchange turnover (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aggregate Turnover in Securities (in billion of Lira)</td>
<td></td>
<td>bonds (at par value)</td>
</tr>
<tr>
<td>1976</td>
<td>839</td>
<td>930</td>
<td>1,092</td>
</tr>
<tr>
<td>1977</td>
<td>687</td>
<td>1,076</td>
<td>1,209</td>
</tr>
<tr>
<td>1978</td>
<td>1,041</td>
<td>1,176</td>
<td>1,359</td>
</tr>
<tr>
<td>1979</td>
<td>1,485</td>
<td>1,023</td>
<td>1,690</td>
</tr>
<tr>
<td>1980</td>
<td>2,848</td>
<td>1,885</td>
<td>3,594</td>
</tr>
<tr>
<td>1981</td>
<td>4,384</td>
<td>1,845</td>
<td>5,234</td>
</tr>
<tr>
<td>1982</td>
<td>3,222</td>
<td>2,299</td>
<td>3,770</td>
</tr>
</tbody>
</table>

(1) The Milan Stock Exchange represents over 80% and 90% of aggregate market turnover in bonds and equities respectively.
(2) Data obtained from the annual reports of the Bank of Italy.
(3) Data obtained from the annual reports of the Milan Stock Exchange.

(N.B. - all figures have been rounded off to the nearest billion.)
This is completely contrary to developments in other important European market places where ever closer links are being formed between Bourse members to facilitate international security transactions. As the compulsory 50% deposit requirement is generally waived in the case of direct investment, the greater part of the value of such deposits (Table 9.2) obviously refers to portfolio investments. It is therefore surprising to note that, in spite of the detrimental financial effects of such measures, outward investment has generally continued to expand and, in 1981, reached a figure which was more than ten times the value deposited in 1973, when such restrictive measures were first introduced.

Such information may justify such a so-called 'temporary' restriction. Otherwise the outflow of capital would have been much greater than it was. This may be true, but the abandonment rather than the conservation of monetary measures and currency restrictions would seem to imply the exact opposite. The fortunate adherence of Italy to the European Monetary System has played a considerable role in awakening Italians and national authorities, including Trade Unions, to the need to regain industrial and commercial efficiency and profitability, as the Lira has been inexorably devalued with all the dire consequences at both social and economic level. There is also adequate proof of the many advantages which have accrued to the United Kingdom after the abolition of Exchange Control in 1979, which had no adverse effect on the position of Sterling.

In 1981, the first year in which the beneficial effects of the liberalisation of capital movements were really felt, the United Kingdom attained the third strongest balance of payments position in the World, preceded only by the United States and Switzerland. Its surplus in invisible earnings deriving from investments abroad quadrupled to reach the figure of $3.4 billion.
TABLE 9.2

NON INTEREST BEARING DEPOSITS ON FOREIGN INVESTMENTS BY
ITALIAN RESIDENT COMPANIES AND INDIVIDUALS
(in billions of lire)

<table>
<thead>
<tr>
<th>Year</th>
<th>Credits</th>
<th>Debits</th>
<th>Cumulative Balance at year end</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>11.5</td>
<td>2.1</td>
<td>9.4</td>
</tr>
<tr>
<td>1974</td>
<td>20.6</td>
<td>17.4</td>
<td>12.6</td>
</tr>
<tr>
<td>1975</td>
<td>14.1</td>
<td>16.4</td>
<td>10.3</td>
</tr>
<tr>
<td>1976</td>
<td>31.7</td>
<td>18.1</td>
<td>23.9</td>
</tr>
<tr>
<td>1977</td>
<td>36.7</td>
<td>32.0</td>
<td>28.6</td>
</tr>
<tr>
<td>1978</td>
<td>27.7</td>
<td>27.1</td>
<td>29.2</td>
</tr>
<tr>
<td>1979</td>
<td>18.8</td>
<td>18.2</td>
<td>29.8</td>
</tr>
<tr>
<td>1980</td>
<td>44.1</td>
<td>18.3</td>
<td>55.6</td>
</tr>
<tr>
<td>1981</td>
<td>80.1</td>
<td>30.6</td>
<td>97.1</td>
</tr>
<tr>
<td>1982</td>
<td>91.1</td>
<td>144.3</td>
<td>43.9</td>
</tr>
</tbody>
</table>
9.2 The Attitude of the Foreign Investor to the Italian Stock Market

In Italy, the inability to make reciprocal investments has paralysed Exchange trading in foreign securities. There is constant fear, bearing in mind experiences in other countries, that restrictions imposed on resident investors might be extended to non-resident investors. This was in fact a point which was repeatedly raised at a recent promotional meeting organised by the Milan Stock Exchange in London, directed towards British and American institutional investors.

From a purely technical and Stock Exchange viewpoint, there has in the recent past been little interest in Italy from abroad, apart from certain short periods when interest was aroused for purely speculative reasons, such as in 1979, 1980 and 1981.

This has been due to the excessive volatility of Italian stock prices, the general depressed level of security prices, limited timely corporate disclosure and, above all, the Lira risk. Other aspects of the Italian political and economic situation have contributed to this lack of foreign interest. Successive political regimes have created a political climate in which companies and credit institutions have all shown little interest in risk capital and the stock market, and have preferred to favour debt capital. Special and advantageous fiscal concessions for debt financing have been granted.

For many years, the public authorities have preferred to favour the development of loan capital on special conditions, and companies have preferred this form of finance to issuing new shares and thus diluting the share ownership and control of the companies. Consequently, the public authorities acquired extensive control over the industrial sector and the companies remained in the hands of a few majority shareholders. At the same time, individual savers and investors were persistently offered high interest rates on the bond market and in bank current and deposit accounts, and had little incentive to invest in equity.
The result is that although the gross domestic products of the United Kingdom and Italy are broadly similar (respectively £270,970m and £198,898m in 1982), the number of listed companies on the London and Milan Stock Exchanges at the end of 1982 were respectively 3,232 and 155.

There is an obvious need to expand an official list of a mere 190 equities (end of 1982) and a total market capitalisation which barely exceeded the value of a monthly issue of short-term treasury bills in 1982.

The situation is further aggravated by the limited public ownership of all but ten or twelve leading companies. The investment interests of potential foreign institutional investors are therefore very much restricted. A case was quoted where a U.S.A. offshore fund agreed to buy a large unit (3%) of a leading Italian enterprise in the early eighties. Owing to the narrowness of the market such a holding had to be built up over a period of about three months. Subsequently, on the first symptoms of a possible price slump, which materialised in June 1981, the foreign investor was only able to sell off half of his holding before the feared price fall actually took place. A loss was therefore suffered on the sale of the further half, which was only limited due to the intervention of a domestic institution interested in defending the price of the shares. This illustrates the problem of large-scale portfolio investment from abroad in the Italian securities market.

9.3 The need for Modernisation of the Stock Market

The limited and occasional interest of foreign investors in the Italian stock market has deprived the market of the obvious advantages of the pressure which might otherwise have been exerted on national authorities and bodies to bring about the much discussed reforms. These were clearly outlined in the conclusions of the Senate Commission of Inquiry on the functioning of the Italian stock market which reported in 1977. There is still no regulation of takeover bids,
public offers for sale, mergers or block orders. There has been no opportunity to put into effect the codes of conduct carefully prepared by the Executive Committee of the Milan Stock Exchange, the leading national marketplace, based on the experience of its international colleagues of the Federation Internationale des Bourses de Valeurs. There is also no concentration of transactions in domestic securities (either bonds or equities) and practically total lack of concentration of all dealings in foreign stock (mainly bonds). The European Code of Conduct approved in 1977 is not observed. The three E.E.C. Directives, with regard to listing requirements, prospectuses and after listing disclosure requirements, and which have been already introduced in many other European countries, have, in Italy, been the subject of unending procrastination.

It is in fact estimated that frequently as much as 75% of trading in equities and over 90% of trading in fixed interest stock is matched within the banking system, and this exacerbates the illiquidity of the official market in most securities.

The isolation of the Italian securities market results in lack of any external pressure to bring about the type of market reforms and innovations which are being vigorously implemented on other European stock markets, which are subject to foreign intervention and interest.

A detailed description of the activities of the main protagonists (stockbrokers, banks, commission dealers and institutional investors) will serve to illustrate the present limitations and malfunctions of the national securities market.

9.4 The Italian Stockbrokers

The functions and activities of the Italian stockbroking fraternity are still basically defined by the Securities Law No. 272 of March 20, 1913 and integrated by the 'Usi e Consuetudini delle Contrattazioni di Borsa' (Uses and Practices Regulating Dealing on the Stock Exchange) of the ten national Stock Exchanges.
Italian stockbrokers are public officials and, like their French colleagues, are appointed by Presidential decree after having successfully passed a competitive examination. The maximum number of brokers for each Stock Exchange is stipulated by the Ministry for the Treasury (140 brokers in the case of the Milan Stock Exchange).

Stockbrokers are often accused by the banking sector of limiting their interest to commission business and not supplying other services, available from many of their foreign counterparts, such as research and investment analysis. This is hardly surprising when the constraints imposed upon them by law are considered. They may only act as pure intermediaries. In fact on buying shares or private bonds in their own name, they are obliged to communicate the purchase to the local Inspector of the National Commission of Control, CONSOB, and are also obliged to keep such securities for a minimum period of 6 months. They are also obliged to communicate the subsequent sale. They are therefore unable to take professional positions in securities. They are forbidden from forming companies or partnerships, though some have formed associations in order to share office expenses.

They may have up to a maximum of three official representatives (procuratori) who may act on their behalf on the trading floor, regardless of the fact that there are some seven trading rings which function at the same time during the morning session. An average stockbroking firm has fifteen to twenty personnel.

The Italian stockbroker is therefore precluded from any possibility of developing an adequate capital and operating capital base from which he might provide professional services such as financial analysis and portfolio management, even though such needs are now pressing. This lack of ability to provide medium to long-term investment strategy, based on carefully accumulated data, has tended to preclude all but short term speculative investment. Few banks have attempted to cover this void, and it is only in recent years that the larger brokers have begun to provide the range of investment services needed.

The stockbrokers' monopoly in trading in listed securities only covers floor transactions, and the greater part of actual turnover is in fact executed outside the official market.
The auction system whereby listed securities, bonds and shares, are called in turn at trading rings tends to discourage the concentration of trading on the floor as the market is only capable of absorbing small to medium-sized orders. The banks themselves admit that it is a 'mercato dei saldi' (a market for the balances between bids and offers). Share and bond securities are traded term (one month) and cash (three days) respectively.

It would be unjust to say that the stockbroking profession has been oblivious to the need for market reforms. In the late sixties technical visits were organised to leading international marketplaces to reap the benefit of the greater expertise of foreign colleagues. These investigations led to official proposals to the national authorities.

A Government Bill in favour of the setting up of stockbroker companies dates back to the sixth legislature and May 1973. The representative Stock Exchange bodies have participated actively and continually in the many Parliamentary initiatives and inquiries, such as the Senate Commission of Inquiry in 1976 and 1977 mentioned above.

The brokers themselves are the first to admit the need to reduce the number of the present 120 individual stockbroking firms to about forty stockbroking companies with adequate capital bases to cater for the continuous market procedures of the type which are being introduced on other European stock markets.

The inadequacy of the capital resources of Italian brokers led the security depository Monte Titoli, set up in November 1981, initially to refuse to accept the direct participation of the broker community in the activities of the new institution. They first required the provision of guarantees against possible contestation or demands for damages from third parties.
The Italian Banks and the Commissionari (Commission Dealers)

The leading participants in the Italian securities market are undoubtedly the credit institutions. Most significant are the top four banks which are indirectly controlled by I.R.I. (Istituto per la Ricostruzione Industriale) which is a Government-owned agency.

The credit institutions have hundreds of branches located throughout the Italian peninsula. Many of them have developed inter-bank computer facilities to match the greater part of bids and offers within the same credit institution, and therefore only take the balances to the official market floor. As opposed to brokers, credit institutions are also permitted to hold short-term positions in stock in order to satisfy possible client demands. They may hold long positions through financial subsidiaries.

It is believed that as much as three quarters of trading in equities is conducted in this manner. The banks also service the greater part of business from foreign institutional investors. This is due to their network of foreign branches and to the fact that all foreign owned securities must either be deposited at an Italian bank or exported through the banking system stamped 'circolante all'estero' (certificates circulating abroad). The general preference of foreign institutional investors to invest through an Italian credit institution also derives from their obligation to open either a special or capital account at an Italian bank from which to finance all purchases of Italian securities. This requirement was established by Law No. 43 of February 7 1956, in order to safeguard the rights of foreign investors to repatriate all investments at the commercial rate of exchange on the temporary introduction of a financial Lira market.

One such major bank has some 442 branches in Italy alone and has some 42,000 clients in the City of Milan with securities portfolios with an average value of about Lit.90m per investor. The same credit institution has over 800 foreign clients, mainly institutional
investors, who are principally interested in equity investments, and, as opposed to resident investors, usually prefer to place orders 'al meglio' (at best).

The same bank however admitted that it had developed no effective research or analysis departments and advised its investors mainly on the basis of opinions and market 'feel'.

Foreign institutional investors appear to adhere quite willingly to Italian trading procedures and the one month settlement of transactions in equities. It must be borne in mind that only a handful of Italian equities are quoted on other European Stock Exchanges and there is therefore little chance of arbitrage. In all probability, the 40% and 60% deposits which are respectively required on purchases and sales are temporarily financed by the credit institutions dealing on behalf of the foreign client. On the other hand the Italian banks are quite capable of effecting seven day settlement in their foreign market activities in Eurobonds and authorised E.E.C. fixed interest issues, which they are also permitted to underwrite.

In addition to the banks and the brokers, commission dealers (commissionari) are also permitted to operate on the Italian stock market. The membership of commission dealers to the local Stock Exchange is limited to a maximum of one-third of the number of brokers and all securities transactions of commissionari must be effected through the services of a broker. Although at present there are only 121 stockbrokers who are members of the Exchange, the maximum is 140. There are some 44 commission dealers operating on the Milan Bourse and most of them are organised in the form of partnerships or joint stock companies.

The commissionari mainly cater for a private clientele and manage average portfolios of about Lit.200m. Thanks to their larger capital resources such dealers have, however, also developed into other financial sectors and are often involved in the money market, leasing and trading in other financial instruments.
9.6 The Italian Institutional Investors

The final participants on the Italian Stock Exchange, though mainly dormant at present, are the institutional investors, the most important of which are the insurance companies. A distinction must be made between life and non-life insurance activities, which are under separate regulation. The life funds may only invest in short-term (maximum five years) bond issues. Non-life insurance funds have greater freedom in investing in securities. Maximum levels of investment exist for all types of investment in securities and minimum amounts are established only for certain stocks such as mortgage issues. The insurance companies, as opposed to other institutions, may invest abroad without the 50% deposit requirement as a form of hedging against re-insurance risks.

A leading insurance company explained that they have largely ignored investment in equities in recent years and rarely use the greater part of the quota permitted, owing to the limited number of listed equities and the low marketability of most such securities. In their activities in foreign securities, they generally prefer to execute such transactions, particularly in American securities, directly on the domestic market and through the services of a foreign broker. In their activities in domestic securities, they normally prefer to go to the brokers direct for equity transactions and to the banks for the purchase and sale of fixed interest securities.

There is, however, a degree of optimism in the stock market that the present lack of interest and involvement of institutional investors in the equities market may soon be a thing of the past. Law No. 77 of March 23 1983 has created the long-awaited investment funds. The first such institutions, of an open end nature, should begin to operate in early 1984.

The investment funds had been the subject of numerous initiatives and Parliamentary Bills since the early sixties, but their introduction was delayed owing to concern at the failure of an offshore fund in the
early sixties, and the fear that such funds might have diverted capital much needed to finance growing public deficits.

Though the investment funds will initially be obliged to direct most accumulated money towards fixed interest securities, some funds should overlap the equities market, and create the necessary pressure on the public authorities finally to deal with all present organisational and functional shortcomings of the Italian stock market.

Optimism is also motivated by the gradual realisation of the public authorities, industry and the work force of the need for a more competitive and viable economy.

The investment funds should also create the necessary conditions for a gradual opening of Italian financial horizons at least at European Community level. One leading Italian bank has already suggested that any investments in wholly-owned Italian foreign subsidiaries should be exempt from the 50% depository requirement.

9.7 Stock market reform

It would be unfair to say that the participants in the Italian securities market are indifferent to the need to reform and modernise present market structures. It is hoped that, thanks to the changing political climate, it will finally be possible to tackle the much denounced inefficiencies of the market. All interested sectors, including the companies, now agree on the need to promote and develop the stock market and concentrate trading on the official market. Proposals are also afoot to introduce continuous trading procedures, regulate block trading, takeovers, public offers for sale and to protect the interests of minority shareholders. The banks and brokers have each made separate proposals which, in view of long-standing and deep-rooted Italian political attitudes, have unfortunately little hope of success. These proposals may lead, as frequently occurs, to compromise solutions which will be to the detriment of all market sectors and, above all, to the investing community in general.
In their proposal for stock market reform, for example, the National Association of Italian Banks, while admitting the existence of off-market matching of stock market orders and the fact that the official market is a 'mercato dei saldi', lays equal blame on the broking community, in spite of its lilliputian dimensions. The banks also propose that broker activities should be limited to pure price-fixing functions, and that all broking and market-making functions should be assigned to appropriate separate banking institutions.

This appears to be in complete contrast with present international developments and the present effort to create ideal conditions for a more integrated European securities market.

The justification for restricting stockbroker activities in such a drastic fashion is the need for greater market solidity and guarantees. However, in recent years, it is the Italian banking sector which has more often had to deal with the consequences of bankruptcies whereas the stockbroking community has already made efforts to improve on present guarantees against market insolvencies. Bearing in mind the close affinity, in the organisation and functioning of the Italian stock market with the French Bourse, the Italian financial community might be well advised to take into careful consideration present and forthcoming reforms on the French market. These have the objectives of increasing market liquidity by the development of continuous trading and of developing contra-partite capacities of the stock-broking fraternity in co-operation with the banking sector.
10.1 The Eurobond Market

Geographical, economic, financial and political considerations have all determined the international orientation of the Luxembourg Stock Exchange right from its foundation in April 1928. Its subsequent expansion was however delayed by the economic depression followed by the Second World War, and the market only really developed in the 1950's.

Liberal securities and banking laws, particularly with regard to foreign investments, freedom of capital movements, advantageous corporate taxation, and the general lack of any prohibition from acquiring majority shareholdings in Luxembourg companies have all contributed to make Luxembourg an important international market centre.

A tax law passed in 1929 exempts all Luxembourg holding companies from income, capital and capital gains taxes, as well as any taxation on dividends or interest. Such fiscal concessions were later extended to include investment funds. Furthermore there is no withholding tax on interest paid on bonds. Consequently, Luxembourg banks are very active paying agents for international bond issues floated in Europe.

The event which probably determined the development of Luxembourg as a leading international securities market was the passing of the Interest Equalisation Tax in the United States in 1963 which impelled American corporations to finance their foreign corporate developments and activities abroad, and which led to the massive growth of the Eurobond market. Luxembourg, with the facilities it offered for international banking became the principal centre for the Eurobond primary market.

This has led to a situation in which in 1982 the amounts outstanding of international bonds quoted on the Luxembourg Stock Exchange were of a value equivalent to Flux $3,412.6 billion. Of this
amount only Flux 53.6 billion were issued in Luxembourg francs. In 1981 alone, some 206 Eurobond issues were admitted to listing on the Luxembourg Stock Exchange at fortnightly intervals, after the prior approval of the Board of Directors. 90% of the 2,000 securities listed on the Exchange are Eurobonds, some 86% in value of which are U.S. dollar issues.

The fully international character of the Luxembourg Stock Exchange is well illustrated by comparison of this amount outstanding in Eurobond issues with that in Luxembourg Government bonds, which in the same year was Flux 8.5 billion.

It would be inappropriate not to note the pre-eminent position of several Luxembourg banks in the Eurobond primary market, due to the inherent importance of this market and because it forms the context of any comment on equities dealing in Luxembourg. The bond markets do not have any direct relevance to the Consultants' study of the equities market, and therefore this major activity of the Luxembourg capital market is not covered in this Report. The only relevance of the Eurobond market is indirect, in terms of the implications that certain efficiencies of that market may have for the development of the international equities market.

10.2 The Luxembourg Equities Market

Luxembourg has not, at least as yet, established any position for itself in the international equities market comparable to that which it holds in Eurobonds. In 1982 the Bourse quoted thirty one Luxembourg companies, which included only six commercial companies. The remaining 25 were Luxembourg holding companies. At the time of the study, floor dealing tended to be concentrated in a minority of high capitalisation stocks. In 1981, some 70% of floor equities dealing in Luxembourg stocks was concentrated in 5 securities, and the shares of larger companies tend to
dominate trading. The development of an adequate market in local securities has presented difficulty and is a present concern of the Bourse authorities. Very few securities of local industry are available to the market. Most local enterprises have a large proportion of their capital in foreign hands. Many of the companies have limited issued capital, and are, in the main financed by bank loans. Formally within the domestic market also is a relatively strong sector of some fifty Luxembourg investment funds.

In addition to the local shares, the equity of some 30 to 40 European securities companies is quoted on the Luxembourg Exchange, three North American and 57 Far East stocks. The most actively traded stocks are Dutch multi-nationals, together with some U.S. and German investment funds.

The foreign equities are often dealt on the Exchange in Luxembourg francs, as a service to local investors who prefer this form of quotation, in spite of the marginally unfavourable price compared with that of the market of origin. At the end of 1983, the equity of 3 companies was listed in foreign currency. There is, however, substantial holding by non-residents of Luxembourg accounts in foreign currency. Orders for foreign securities related to these accounts tend naturally to be executed in the foreign markets. While the Luxembourg banks handle the cash settlements for these transactions, the share movements have no relevance to the Luxembourg Bourse. The arbitrage and foreign dealing is in the main carried out by the members off the Bourse. Its volume is not known. Linkage of the Exchanges, under a principle of re-concentration of European international business onto the official Exchanges might offer an opportunity for the Luxembourg Bourse, as an element in the linkage, to play an important role in inter-market dealing.
As matters stand at present, the Bourse authorities appear to prefer to maintain the present system of floor quotation of foreign shares in Flux, attuned to local investors, thus maintaining a small but assured local market in these stocks. It is considered that local quotation in the original currency would cause this floor market to lose its identity, and that its business would be absorbed in the off-floor trading of members in markets of origin.

In terms of approximate balance of equities trading volume, on the Luxembourg Exchange, 45% is equally divided between Luxembourg and foreign equities, 50% is in investment funds with foreign funds twice the level of the domestic funds, while the remaining 5% is dealing in bearer certificates.

The recent success of various laws giving incentives for investments in equities in Belgium (Monory and de Clercq) has led to some reflection on the part of the Luxembourg authorities on the opportuneness of introducing similar fiscal incentives in Luxembourg to encourage the listing of some domestic equities which, at the present moment, are traded over-the-counter or at the occasional ‘ventes publiques’.

Difficulties of international clearing and settlement of transactions in equities, (as opposed to bonds), are somewhat aggravated in the case of Luxembourg by the limited dimensions of the domestic equity market. This is a further reason for the clear preference allocated to fixed interest stock, which, in contrast, is settled with ease in a unique seven day settlement period through a large network of intermediaries who are all members of the local international securities depositary CEDEL. This is more fully considered in Section 20.
10.3 The organisation of the Stock Market in Luxembourg

The Luxembourg Stock Exchange was established as a self-regulated public company with a ninety nine year concession by a special law decree approved on December 30 1927. The Exchange officially opened on May 6 1929, just four months before the Wall Street crash which heralded the beginning of the great economic depression.

The management of the Stock Exchange is the responsibility of a fourteen man Board of Directors elected at the annual General Assembly. The day-to-day organisation of the Exchange activities is assigned to a technical body, the Commission de la Bourse.

The majority of member firms are credit institutions. The 3 main banks account for an estimated 80% of aggregate market volume. Only 12 of the 46 appointed member firms are pure brokers, whereas before the law of December 1927, stockbrokers had a total monopoly over trading in securities. In addition there are many other non-member Luxembourg-based banks which are also licensed to do business in securities outside the Stock Exchange. A law passed in 1970 strictly prohibits the door-to-door canvassing of securities and, in particular, of investment funds.

The Bourse considered only sixteen of the members to be active in the market at the time of the study, the others acting mainly as soliciting agents, passing orders to other active floor members. In the main, the small local client orders are picked up by the banks. The great majority of the broker firms are local offices of foreign firms and have foreign clientele. There is one Japanese broker with a Luxembourg office as well as four Japanese banks, but they do not seek local client business, and a 'gentleman's agreement' exists with the foreign banks that they should not open their offices for resident business. If they obtain such orders they tend to pass them to floor members of the Exchange.

The conditions for the admission of member firms to the Stock Exchange were set out in the original law, in the decree of enactment dated...
May 1928, as well as in the 'Règlement d'Ordre Intérieur'. Though
individual broker membership is still foreseen in the present Bourse
regulations, all broker firms are joint stock companies. Brokers must
have a Flux 5m minimum capital and effect a guarantee deposit with the
Luxembourg Stock Exchange of Flux 250,000. They may operate in an
identical fashion as banks as far as securities business is concerned.

Though self-governed, the Stock Exchange is subject to the control of
the State Commissioner of the Ministry of Finance and all changes in
stock market rules must receive the prior approval of the Minister of
Finance. In addition, the bank members of the Stock Exchange are also
subject to the supervision and control, as banking institutes and not
as members of the Bourse, of the Luxembourg Monetary Institute. This
body is also responsible for the regulation and control of all open and
closed-end investment funds and companies falling under the law of
August 25 1983, whether they are listed or not.

10.4 Equities trading on the Luxembourg Exchange

Floor trading of equities is carried out in Luxembourg under the criée
system, the principles and procedures of which are officially specified
under the 1928 regulations and subsequent Orders. The minimum quantity
of quotation is ten shares or Flux 5,000.

Price fixing is carried out in trading sessions on the Stock
Exchange floor which commences at 11.00 hours, the dealing members
seated in a single ring presided by a market official (greffier)
who calls each stock in turn. The dealers then indicate vocally
whether they wish to trade, and from the bids and offers made a price
is fixed at which the majority of the orders can be executed. All
orders declared must then be executed at this price, insofar as the
balance of bids and offers permits. As the dealing proceeds it is
permissible to make further bargains in a security already called, the
price of such transactions being notified to the Market Official by
slip, who acknowledges them. Several prices may be made in a security
during a session, and a broker not finding a counterparty may declare
a price as 'seller' or 'buyer', which will stand in the list for that
day.
Luxembourg securities laws do not require that trading takes place through a broker or on the Stock Exchange floor. Most official market prices, particularly for Eurobonds, are for small market lots for transactions on behalf of private investors, and therefore may have little or no relation to off-market prices for large blocks of securities which are normally effected over the telephone.

Nevertheless, Stock Exchange officials believe that the increase in Exchange trading volume figures in recent years is a sign of an increased concentration of trading on the Stock Exchange. The volume of dealings on the Luxembourg Stock Exchange in 1982 rose by 47.65% compared with the previous year. Fixed interest securities increased by 53.5% and variable income securities by 27.2%. The expansion of the Exchange is being achieved by vigorous promotion and by the provision of enhanced services, particularly in the field of computerised information. The market data available from the Luxembourg Exchange is of the highest quality.

10.4 Considerations affecting linkage

The aspects of interest arising from review of the present Luxembourg markets relate less to the existing floor market in foreign securities, which is an efficient service to local investors but is not significant in European terms, than to developments which may in the future take place in Luxembourg, or which are happening there now and have indirect relevance to equities linkage.

It is argued elsewhere in this Report that the Luxembourg-based clearing system CEDEL is already setting important precedents, to which those responsible for international equities settlement should pay close attention. It is of some interest that both CEDEL and EUROCLEAR operate from within the Union Economique of Belgium and Luxembourg.
The development of ECU issues in the international bond markets may have significance in future multiple quotation of equities in a linkage system. Luxembourg has long experience of this development which began with the creation of the European Unit of Account (EUA), to provide greater currency stability to investors and, at the same time, to increase the stability of the individual European currencies. Other basket currencies were later introduced such as the European Composite Unit (EURCO), Special Drawing Rights (SDR's) and the European Currency Unit (ECU).

The ECU, now based on the European Monetary System, has developed remarkably since 1981 when the first bonds, linked to the European Monetary System, were issued. Already, by the end of 1982, it was the second biggest underlying currency utilised in new issues on the Eurobond market (see Tables 10.1 and 10.2). As opposed to the other previous basket currencies, the ECU which is the keystone to a new monetary system, is not linked to the U.S. dollar.

The utilisation of this currency in international listing and quotation of Euro-equities has already been proposed by a leading Italian bank in its efforts to break the perennial impasse with regard to Italian resident investments in foreign equities.

The success of the ECU bond issues has proved remarkable in light of the relatively short period since their introduction on the Eurobond market. The first ECU denominated bond, linked to the European Monetary System, was launched as recently as Spring 1981 and, already by the end of 1982, ECU issues were third in number, preceded only by U.S. dollar and Canadian dollar denominated bonds. By the end of 1983, ECU issues had already far surpassed listed Canadian dollar securities and the aggregate value of ECU listed bonds at the end of 1983 was equivalent to ECU 4,483m, and total market turnover in such issues in 1983 was equivalent to a par value of ECU 56,923,500. In the period from January to October 1983, thirty one ECU issues were included in the
classification of the one hundred most actively traded bond issues and all top six performers were denominated in this currency.
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<td>$ F</td>
<td>9</td>
<td>2,175 &quot; 18,044</td>
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<tr>
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<td>YEN</td>
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<tr>
<td>SDR</td>
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<tr>
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<tr>
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<td>DLRs AUST</td>
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* Rounded off to the nearest whole number

Source: Luxembourg Stock Exchange
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<th>Aggregate market value</th>
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SECTION 11 - THE INTERNATIONAL EQUITIES MARKET IN THE UNITED KINGDOM

11.1 Corporate Status and Self-Regulation

Valuation of the factors in the London market which will influence the views and the attitudes of the Stock Exchange towards European linkage is rendered difficult because of the present rapid rate of change of the U.K. capital market. While the same problem applies in all the other European markets, any likely changes in them are predictable and are unlikely to result in immediate and radical alteration of market structures. The current course of events in London is widely considered to imply fundamental changes of the traditional structure of the U.K. market, and of the manner in which it has operated during the present century. It should be noted, therefore, that descriptions of the regulatory and dealing systems in the U.K. which follow relate to the time in which the study was being made (1982-83).

The Stock Exchange is a self-regulating institution, operating under a Deed of Settlement, which constitutes it as a mutual association. Traditionally it has been governed by a Council comprised of and selected by its members of whom there are some 4,000 brokers and jobbers. The Rules and Regulations of the Stock Exchange, which are the responsibility of the Council, regulate not only the admission and activities of members and member firms, and the operation of the Exchange, but also, through the linked Listing Requirements, broader aspects of the securities industry. At the time of the study there was no securities legislation in the generally accepted sense of that term in the U.K.. The position of the Stock Exchange was acknowledged in certain statutes but it was not incorporated or directly regulated under any. There existed a range of minor legislation related to the prevention of fraud and licensing of dealing, the substance of which is under current Government review. There was a substantial body of case law relevant to securities dealing, to the rights and obligations of members of the Stock Exchange and clients. The Listing Requirements of the Stock Exchange were linked with, and in various aspects enhanced the Companies Acts, but were independent of them. The Stock Exchange has traditionally operated in close liaison with the Bank of England and Government
departments, and more recently has participated in the Council of the Securities Industry, but none of these agencies had any formal day-to-day control over it.

The system of self-regulation is considered to have a number of justifications. It is flexible. At operating level, procedures can be rapidly altered to meet the needs of the market. Overall, the system allows the market to respond more dynamically to new financial or economic requirements than would be the case if its form were constrained by legislation. The self-regulating system permits control by professionals. The securities industry is highly technical. Its problems are considered most effectively resolved and its potential best developed by its participants. Given that the Rules are fair, discipline of the market is best secured by professionals and peers who are able to operate a system alert in its detection of abuse and, in mutual self interest, rapid to rectify any default. In recent years the Stock Exchange has taken steps to assure that its disciplinary actions receive full publicity.

11.2 Single Capacity

The capacities in which members of the Stock Exchange are able to operate are thus, under this system, not determined by law, as is the case in the majority of the Community Exchanges, but are determinable by decisions of the Exchange itself.

Since the first decade of this century, the London market has been characterised by the separation of those member firms permitted to deal as agents (brokers) and those permitted to deal as principals (jobbers). The single capacity system has determined the structure of the London market and the physical nature of the market floor and its operations. In the domestic market (i.e. U.K. Sterling-denominated securities) the principle is strictly observed. All client business must be taken by brokers to jobbers, who as a corollary, have no access to clients. Other than in exceptional circumstances, broker-broker dealing is prohibited. The jobber, who is obliged in normal circumstances to make
a continuous two-way quotation in the securities in which he is
authorised to deal, makes a market between the selling and buying
brokers, and by managing his securities and money positions provides the
liquidity of the market. Fairness of price is assured by competition between
the jobbers, of whom there must not be less than 2 in any security.

The single capacity system, with its avoidance of conflict of interest
and its development of market-makers with a large capital base has
resulted in a near-total concentration of the U.K. domestic market
without any legislation of the type which induces such concentration
in the continental markets. This is consonant with the attitude of
the London market, which considers its strength to lie in its open and
international character, and its freedom from legislative regulation.

11.3 Adaptation of the Single Capacity Rules to International Trading

The London Rules have, however, always acknowledged that the rigorous
separation of capacity observed in the domestic market cannot be
applied to members' arbitrage and international dealing. During the
whole period of single capacity operation, concessions have been avail­
able permitting brokers to deal as principals, with forms of dual
capacity operation in international dealing, and, until the unification
of the U.K. and Irish Stock Exchanges in 1973, in transactions between
the provincial U.K. Exchanges.

Throughout the 1960's and more intensely during the 1970's, linked
with the entry of the United Kingdom into the E.E.C., the Rules
governing members' international dealings have been under constant
review. Although the re-establishment of the role of the Stock Exchange
as an international capital market was not a realistic issue until the
abolition of the U.K. Exchange Control in 1979, an active debate on the
various formulae through which members might competitively establish
their position in international business had been going on for twenty
years. Rules changes which began to implement the new pattern of dealing
were made during the period of the Consultants' survey.
The increasing internationalisation of equities business appears to have been first acknowledged by a Council Committee in 1968-69, set up to review the issues involved in an application of an N.Y.S.E. broker to become a member of the London Exchange. Although the Committee reported in favour of creating a category of membership which would accommodate this, the Council did not accept the proposal. In 1973 the Hamilton Committee proposed an alternative formula for foreign membership which it considered of particular importance if the London Exchange was to play an appropriate role in the E.E.C. Its findings were deferred. In October 1974 a Committee inconclusively considered the admission of British registered banks. A major and possibly definitive contribution to the debate came with the Marriot proposals for international dealer members, under which limited corporate members might be formed by the brokers and jobbers together to deal in registered international stocks for settlement in currencies other than sterling. Forty nine per cent outside capital would be permitted in these firms, and their business would be outside the protection of the Compensation Fund. The Marriot proposals were at the time considered to constitute too great a challenge to the single capacity system, and were not progressed.

Following a series of Council Committee reports which indicated increasing awareness of the growing activities of foreign brokers in London, the Planning Committee of the Council in 1977 made advanced proposals related to the concept of a European market (the Wills Report). This envisaged an international market which would be part of, but separate from, the Stock Exchange. A dealing network with market-making and an information and recording system was proposed, to which institutions or institutionally-controlled firms would have secondary but privileged access. The proposals, which might have done much to formulate and support members' international market activities which were becoming dangerously diffused, were not accepted. The Council turned in effect to a solution of relaxation of international dealing rules which would offer greater opportunity to members to compete in international off-market business. The proposals of the Steel Committee to
offer the members broader access to a register of market-makers limited to non-banking members of foreign Stock Exchanges which made continuous prices in foreign currency securities were accepted as an alternative.

The system in force during the period of the Consultants' study was based on these 'designated dealer' rules. The concessions were defined in two dimensions. First they identified 'overseas securities' in which, under certain conditions, brokers might deal outside the market. This categorisation was essentially by type of security, and not based on whether the security was listed or not, as opposed to the case in other Community markets. Secondly the rules identified designated dealers with whom such transactions might be undertaken.

The register of designated dealers was constructed by applications from member firms and, rising immediately to some 300 major foreign securities houses, proved more comprehensive than had been anticipated. Any London firm was permitted to deal with any securities house on the register. The original intention of limiting the register to category one 'members or member firms of overseas' Stock Exchanges based overseas excluding banks' proved inappropriate for the European markets. A category 'member or member firms of Stock Exchanges within the E.E.C. including banks and associates of banks provided that the ultimate control lies within the country within which the Exchange is situated' was inserted. London offices of designated dealers which made a genuine market in the specified securities were also permitted on the register. In light of the activity of banks in international securities dealing in those E.E.C. countries where banks are not members of Stock Exchanges, a further category was added which gave the Council discretion to include such institutions. In practice this covered Belgian, French and Italian banks.

Under these arrangements jobbers were freed to deal as principals with any of the designated dealers, and their previous restriction to a single arbitrage correspondent in each centre was removed. While this concession meant that the jobbers were able to deal with any of the designated intermediaries in the major overseas market, including those of the Community, the provisions of Rule 88a were primarily framed to permit them to compete effectively in the overseas markets in which the Stock Exchange had strong traditional business connections,
in particular in the U.S. and the gold markets. The international dealing rules continued to prevent the jobbers from having any access to clients or institutions.

From the standpoint of the brokers, the most significant aspect of the arrangement was that, subject to Rule 88b, they could deal outside the Stock Exchange in non-sterling securities with a wide range of external market-makers. Before dealing with such an external London market-maker or in an overseas centre, the broker was obliged to ensure that the price was more favourable to his client than that quoted by the London jobber, but an alternative clause permitting the broker to deal abroad if he considered it in the interest of his client left the situation very open. The extent to which the intent of this Rule was respected was, at the time of the survey, a point of contention between jobbers and brokers. As discussed elsewhere, although the jobbers make effective markets in the whole range of major European securities, they only see a minority of U.K. brokers' European business. On the broker side, the old type of arbitrage operations traditionally carried out by them has been superseded by the increased access of the jobbers to the foreign markets. But other external factors, such as more effective communication had already eroded arbitrage. In the European markets there is virtually no position-taking by the London brokers.

The designated dealer arrangements introduced greater regulation into members' international dealing, and permitted increased member access to such business in a way which protected the domestic market and held it firmly within the single capacity system. It nevertheless imposed strains between the brokers and jobbers and only questionably met the full force of competition from overseas' brokers established in London. The foreign securities houses were able to operate in London under several significant advantages, being backed by the strong natural business of their own market, having offices in appropriate time zones. Under the 'designated dealer' arrangements they were able to deal with both clients and Stock Exchange firms and offer negotiated rates of commission.
The unstable aspects of the 'designated dealer' system were apparently recognised in the Council decision of December 1983 to set up international securities houses, under a scheme which is likely to be definitive as long as the domestic market retains its present form. International Dealer (I.D.) firms, for the purpose of dealing in overseas securities, may now be set up by a member firm, or by a consortium of brokers, jobbers or brokers and jobbers together. Non-members may participate in such a consortium, provided that it is more than 50% owned by one or more member firms.

The I.D. firms may deal only as principals. Though under Stock Exchange regulation in respect of such matters as minimum capital requirement (which is provisionally set at £500,000) and financial regulation, the new firms will be dealing mainly in telephone markets with professional counterparties, and they will not be permitted to deal on the Stock Exchange floor. The I.D.'s will be subject to rules in respect of checking and settlement of bargains, and their transactions must be recorded for inspection by the Exchange authorities when called for. Internal transactions, those between an I.D. and its parent Member Firm must be reported to the Exchange the same day. Other than in exceptional circumstances, it is not intended that transactions or any other activity in an I.D. firm will be covered by the Stock Exchange Compensation Fund.

Although the I.D. firms are limited to acting as principals, they appear to be a new dimension in the London market. Operated jointly by jobbing and broking firms they will permit the promotion of international markets, with principal and client business integrated in a way which was impossible under previous arrangements. Not only brokers but also investors may deal with the I.D.'s. While it is anticipated that, in the main, such investors will be professionals, it is acknowledged that general investors may have access to the new firms.

Under the new scheme the designated dealer arrangements are abolished. The Rules have been amended to permit member firms to execute business with any member of a recognised overseas Stock Exchange or approved...
association, which is interpreted to include any existing designated dealer (such as a French bank) which does not qualify under that definition.

The London international equities market studied by the Consultants in 1982 and 1983 was in a state of transition. This culminated in the I.D. firm system which is likely to provide a stable arrangement for development of London international business. The Consultants have considered it worthwhile to note briefly the nature of this transition in the Report, as they believe aspects of it may have relevance to the general problems of the European Stock Exchanges in their approach to linkage.

First, the London example confirms that modification to Rules can be made to create, within the regulatory framework of an Exchange, modified arrangements for international dealing compatible with the domestic market. Second, it is an illustration of a gradual and progressive approach to this problem. Third, it makes clear that the definition of such arrangements by security type and by type of foreign counterparty can, in market terms, result in a workable scheme.

Moreover, the mechanisms of the London European securities market, developed through these arrangements, are worthy of review as a successful initiative in European equities dealing.

11.4 The London European Equities Market

The natural business of the London brokers in European equities is predominantly institutional. The pension funds, the life and general insurance funds, and the unit and investment trusts provide a stronger flow of funds for investment than is available in any other Community market, and, in face of declining direct individual investment, are primarily responsible for the comparatively large value of London transactions. The increased investment of the U.K. institutions in foreign equities, figures of which are given in Section 12.4, clearly
indicates the growing importance of the international market. In 1979, of institutional assets of £103.7 billion, only 6% was invested in foreign equities. By 1982 the proportion was 11% of total assets of £196.9 billion. In absolute terms this represented an increase of 3.5 times in foreign equities holdings, involving £15.7 billion new investment. The activity level of this foreign investment implies dealing business of at least twice this figure.

If present trends continue, overseas equities will be a more important element of U.K. institutional portfolios than U.K. equities by the end of the decade. If this were to be so, institutional dealing in foreign equities would exceed that in U.K. equities well before that time due to the different local activity levels of the two types of securities.

There are no discriminate figures which permit the proportion of investment in Community securities to be determined. Those available from the Stock Exchange statistics are, for reasons discussed in Section 12, partial, and are positively misleading as the growth has occurred off the floor and, in the main, is not included in Stock Exchange transaction records. On the other hand, there tended to be consistency, not only in the U.K., but also across Europe, in the structure of portfolios with regard to outward investment in equities. Among the institutions interviewed, a general position emerged, within foreign equities, of 50%-60% in U.S., 15%-25% in Japanese, 10% in Far Eastern and 5%-10% in second-country European securities. The current transaction levels related to this are submitted in Section 12.

The lesser interest in second-country European securities is much due to the fact that the institutions are committed to hold the larger proportion of their investments in Sterling, against Sterling liabilities, and have tended to see little incentive in acquiring securities of countries which are considered to have the same problems of economic structure as the U.K.. To this are added the disincentives of narrower markets in which dealing operations are restricted and in
which limited ranges of securities offer less potential for diversified investment.

During the survey a considerable change in attitude to European investment was evident. In 1982 comments by major London investors were highly coloured by ten years inactivity and turgid performance in the European markets. By 1983 however, several of the Community markets, notably Denmark, the Netherlands, West Germany and France had out-performed the major world markets, and investment in European equities again became attractive. During 1983, while the number of London investors in the European markets did not markedly increase, the sums invested became much larger. This, and the relative rises of the European stock market indices and capitalisations, presumably increased the proportion of European equities in the assets of the U.K. institutions in 1983.

A further important source of London European business are the funds managed by the U.K. merchant banks on behalf of foreign institutions, such as the American pension funds. Flows of ERISA funds through London have contributed considerably to the resurgence of the European markets during the last year.

No figures exist to indicate the participation of the private investor in London European equities dealing. In the main it is assumed that, relative to the institutions, this is of low and decreasing significance. The private investor shares of the overall equities market fell, between 1975 and 1981, from 37.5% to 28.2%. Moreover only the larger and more informed private investor is likely to take direct holdings of European shares. At least one of the London brokers specifies a minimum marketable quantity which, in the case, for example, of a major German stock represents a transaction of £5,000-£6,000 value. There has been a growth in specialist European unit trusts, but these, at an aggregate capitalisation of some £30-£40m are not significant in comparison with the institutional investment.
11.5 London Jobbing in European Equities

The growth rate of foreign equities business in London has resulted in the emergence of a small but strongly organised activity which has attained an informal identity as the London European equities market. Four jobbers, of which three are major, have been active in it for some ten years, and in 1983 a further jobber entered the market. As has been observed, the European equities market operated by the jobbers is an Exchange market, within the single capacity system, and fully regulated and partially serviced by the Stock Exchange.

The jobbers quote continuous two-way prices in securities listed on any European Exchange whether listed in London or not. They are able to quote major securities in sizes comparable with their normal U.K. scale of operation. London institutional comment acknowledged the value of the jobbing system in this respect. Although the price information from the competitive jobbing system was inevitably less transparent than that available from, for example, the specialist system on the N.Y.S.E., it was recognised that this permitted the jobbers to handle very large transactions without excessive effect on market price. It was suggested that occasionally large lines of stock could be moved more easily in London than they could in New York. In the European market, the operation of a joint stock account by a U.K. jobber and a Dutch bank broadens the market further in a manner which may be a constructive indication of future European trends.

The jobber's European market is operated off the Exchange floor in dealing rooms appropriately equipped with information and telecommunications devices for international business which could not be accommodated on the present market floor. Normal floor conventions are observed in this telephone dealing. The normal course of business is to receive an approach from a broker in an E.E.C. stock, establish a price and deal at that price, assuming a long or short position as the case may be, and then undo the transaction on the appropriate continental market. There is little genuine arbitrage, due to the efficiency of communication and immediacy of dealing. Quotation in the London market is normally in Sterling with the jobber...
running a foreign exchange book and absorbing the currency risk. The jobber not only satisfies the London European business, but executes total foreign business by dealing in the European markets within their prices.

The international market is highly dependent on mutual advice of foreign counterparties and, within its conventions, it is normal to open a dealing position more than would be the case in domestic business. The market thus relies heavily not only on formally transmitted price information, but also on personal contacts established by telephone, which constitute the normal dealing channels. The London European market is thus ambiguous in terms of the two alternatives in which European linkage has tended to be considered, - via members or via the floor. While the jobber's European dealing is off the market, it is, in all senses integral to the Stock Exchange dealing and the inclusion of the jobber dealing rooms in any European scheme based on floor linkage would be both necessary and correct.

There appears evidence that the London jobbers have made an effective sally into European market-making. Their success in this respect is assisted by the under-development or diffusion of this function on the Continental Exchanges. One major jobber reported that on certain days his firm had transacted more business in the securities of a given country than that reported on the foreign Stock Exchange. The efficiency of the system is vouched by the ability of the jobbers both to operate their positions, and at the same time quote prices which are fully competitive with those derived from collective prices which, in theory, should be finer. Comparison of the London Sterling quotations with the Continental market prices, using current spot exchange rates, suggests that the jobber's prices are rarely more than 1% away from the price of the main market, and the jobbers ability to position allows him to quote competitively in moving markets.

Although the jobbers' European dealing represents a small proportion of their overall business, it has in recent years risen to a significant proportion of their foreign dealings, with a very high rate of growth.
The European dealing was little affected by the adverse effects of the designated dealer system, effects which arose more from access available to the brokers than from competition from the London branches of foreign securities houses.

The jobbers' counterparties in the other Community capital centres tend to be the Stock Exchange intermediaries carrying out comparable roles, normally the banks. An inherent weakness of the London system at the time of the Consultants' survey was that the split in capacity inhibited the development of the full potential of the business. Jobbers who had invested in professional expertise and facilities to develop the European market had no access to clients. The market could therefore be promoted and developed only through the brokers, on whose part no great commitment could be assumed, and only if the brokers took their business to the U.K. jobber. Both these factors presented difficulty.

11.6 London Broker Activity in European Equities

Until recent years the European markets have been of limited interest to the broker members. Europe did not constitute a traditional area of business. While an acknowledged function of the London brokers has been to 'open' foreign markets to U.K. investors, as was notably the case with the Scandinavian markets, the initial attempts to develop European business in the early 1970's, in anticipation of E.E.C. membership, both fell upon unfortunate times and, in the case of the funds, were badly mismanaged. At the same time it was recognised that dealing and settling in the European markets was complex and called for specialist brokers and staff. Thus during the 1970's although substantial dealing took place in various securities such as Dutch internationals, and in particular the two switching stocks R.D. Shell and Unilever, European dealing tended to be at a low ebb, subject in the main to currency-driven vogues. Under these circumstances only a small nucleus of committed brokers maintained their expenditure on European specialisation.

The situation appeared to change with the removal of Exchange Control and by 1982, evidence suggested that about 30-40 of the London brokers,
including most of the large brokers and certain of the smaller brokers active in the European markets, maintained some form or other of European specialisation in research, dealing and settlement.

Typically, the larger London brokers' European dealing is office-based. The dealing desks, possibly operated by six to ten dealers, are likely to be divided between the old Sterling area markets - South Africa and the Far East, - the U.S. market and the Dutch and other European markets, with the dealers specialised in one or other of these fields. The operation is likely to be fully active from 0800 hours to 2100 hours daily, taking advantage of the favourable London time situation, which falls in the middle of the major international markets.

Little of the business is in the arbitrage functions which predominated twenty or thirty years ago, the scope for which has been eroded by tight dealing and communications. The majority of the dealing effort comprises constant contacting of foreign correspondents, in the European case mainly banks, advising them of prices and of the market, and generating business in this manner. The expertise and goodwill of such foreign correspondents is a vital element of the market. The London brokers carry out research on the major Continental companies, but for such investment analysis to be successfully applied, day to day knowledge of foreign markets is necessary and this has to be achieved by close contact with trusted correspondents.

Random quantitative evidence from several of the more active brokers indicated that growth of European equities business exceeded that both of other foreigners and of the market as a whole. As the brokers are permitted access to the foreign markets and can deal with any of the designated Continental brokers and banks, the greater part of this increased agency business has tended to go direct to the markets of origin. The value of this increased business cannot be obtained from Stock Exchange statistics, as such transactions are not London-dealt. It is submitted in Section 12 that it might be deduced as a ratio of the jobbers' transaction figures.
Two factors limit the extent to which the London broker can fully exploit his local institutional market. The first is the internationalisation of portfolios which may have been an important factor breaking the link between the local broker and the local institution. As long as the institution was investing either in the U.K. market or in related markets, in which the skills and contacts of the London broker and the services of the London market were unquestioned, there was little need for institutional research functions and no need for institutional dealing. Once investment strategies diversified and institutional investment moved into markets with which London brokers did not have first-hand familiarity, fund management became more dependent on foreign advice and services. An apparent need then arose for functions within the institutions to process such advice and, more arguably, a 'dealing' function to give the instructions. The emergence of the institutional dealer facilitated direct transmission of orders to a broker or bank in a foreign centre, by-passing the local broker. While the London investing institutions are not unready to accept advice from brokers who are expert in the European markets, and place possibly 30%-40% of their European equities business on this basis in London, the majority of business is placed directly abroad. The proportion placed abroad by the London-managed funds is higher.

A factor compounding this loss of business to London brokers is their obligation to charge a minimum commission to the institution, which thus incurs a double commission on the transaction. As indicated above, this does not totally cut out the London broker, and the disadvantage can be offset by quality of service. It represents nevertheless a considerable basic disadvantage. Negotiable commissions were permitted in non-Sterling securities from May 1984.

The U.K. brokers are permitted, under revised Rules promulgated in 1980 to set up overseas organisations controlled by London firms which may operate according to the rules of the foreign Exchange subject to provisos protecting the U.K. market and, at present, the commissions structure. These have little relevance to the situation in the European markets. There have been one or two attempts to establish offices in
Europe, but, to the knowledge of the Consultants, these have only survived within the Eurobond market. The maintenance of offices in Europe was found to be expensive and unnecessary to cover markets in the same time zone serviced by effective international telecommunications. The attraction of business from foreign investors to the U.K. domestic market - the main justification of an overseas office - was not feasible, or in some cases impossible, in the European markets.

Business has in consequence developed through the network of counterparties on a reciprocal basis. Notwithstanding this, certain of the more active broker firms with long standing involvement in Continental markets consider that development of some form of associate membership between the European Exchanges would be a constructive plan. It is appreciated that such membership links would raise complex problems. They would technically be most easily achieved under present circumstances between the Exchanges in which the broker function is defined similarly to the U.K. convention. There was scepticism as to whether in these cases effective membership concessions could, in fact, be obtained in the foreseeable future.

11.7 **Current and future development of the London International Equities Market**

Fully effective linkage of the European Exchanges will be a long process which, on the most optimistic construction, will take a decade to achieve. During the period, the structure of the Stock Exchange is likely to change so radically that its influence on linkage plans must be assessed from a hypothesis of its likely future form rather than from the present situation.

In recent years, the structure of the Stock Exchange has been faced by a double challenge. The first was from the Government's reference of certain procedures fundamental to the present operation of the Exchange to the Restrictive Trade Practices Court. The second, was from the competition to which the members have become subject, in an open international market, from foreign intermediaries free to establish in London and free, in their operation, from the constraints of the single capacity system.
In 1973, the Restrictive Trade Practices Act, originally passed in 1959 to combat producer cartels and responsible for much of the concentration of U.K. industry in the 1960's, was extended to cover services. The first matter to be referred to the Court was travel agents' commission, and second the Rule Book of the Stock Exchange governing one of the world's largest and most complex capital markets. Many key elements of the Rules and Regulations were registered as 'restrictive practices'. Amongst these the most important were the minimum commission scales and the restriction of capacity in which members might act, i.e. the broker-jobber system. The Stock Exchange strongly and consistently opposed the reference to the Restrictive Trade Practices Court, not on the grounds that no review of the market was necessary, but because both the Act and the nature of the jurisdiction of the Court were inappropriate to proceedings relating to the capital market and its future. During the extended period prior to and during the case, all documents relating to changes in the practices registered were considered 'discoverable', thus severely inhibiting any re-organisation of the London market in response to the urgent competitive situation which confronted it. Moreover the Court had jurisdiction only to require termination of the practices adjudged restrictive, and no powers to advocate any constructive alternative procedures.

After some three years of extensive legal preparation by the Office of Fair Trading and the Stock Exchange, at the cost of several millions of pounds on what promised to be the most expensive case in British legal history, which it was becoming increasingly obvious was deferring the very changes it was designed to secure, the Government conceded that it would legislate to remove the Stock Exchange from the competence of the Court, subject to certain specified conditions. The most explicit of these required that the minimum commission scales should be abolished by December 31 1986, and that the Council of The Stock Exchange should be opened to a minority of lay members. An indication appears to have been given at the same time that the system of single capacity should be preserved as long as it was commercially desirable. The Stock Exchange thus became free to re-organise the market, with the Bank of England and Department of Trade and Industry monitoring developments.
The removal of the Stock Exchange from the jurisdiction of the Court acknowledged that the pressures on the U.K. market from normal open competition were more significant than legal threat, and that the Stock Exchange would be likely to respond rapidly to the need for change, once the dead hand of legal action was removed. The real nature of the threat to the traditional form of the Stock Exchange lay in the increasing and substantial activities in London of foreign banks, investment banks and securities houses which were tending progressively to erode the position of the members in the international markets. The prime example is that of gold shares, in which London and the members of the Exchange once held a dominant position, but which, due to the more highly-resourced and more flexible operation of international off-market operators, had been largely lost to the Stock Exchange.

At the same time, the scale of competition increased, reinforced by the North American development of even larger and diversified securities firms following May 1 1975. The London firms and the Stock Exchange as a whole faced local competition from U.S. and Japanese securities houses, each able to offer a full range of securities market services from a strong capital base, able to access U.K. institutional clients, jobbers and brokers alike, and able to deal both as principals and agents.

By the end of the 1970's, the structure of firms of the Stock Exchange had already responded to a considerable degree to the need for concentration. Concentration of broker and jobber firms had been evident for twenty years. The permitted capital participation of a non-member in a member firm was raised to 29.9% in 1982. At the same time, the long standing concern of the Stock Exchange over bank or institutional involvement appears to have been modified, and such holdings by banks and institutions in member firms are now permitted, subject to an undertaking relating to the proportion of business from the owner flowing to the firm.

In parallel with these pressures from international operators, the relationship between the Stock Exchange and the London banks and
institutions began to show signs of change. The banks have in recent years, increased their capital market activities. Each of the major clearing banks has either an in-house or a subsidiary merchant bank. Concurrently there has been a degree of pressure from investing institutions for closer access to the market. The traditional form of the Stock Exchange, and its division into broker and jobber functions, has stood as a deterrent to such access or participation.

During the period of the reference to the Court, a delicate equilibrium existed whereby the twin pillars of the existing market system, single capacity of members and the minimum commission scale, protected the Stock Exchange against both the full impact of London based international competition and any radical change in the domestic equities market. International securities firms who had no need or wish to suffer these competitive disadvantages were deterred from serious incursion into the official market. At the same time, the broker-jobber system offered no obvious point of access to the market to any subsidiary organisation of the U.K. banks and institutions.

Three basic points emerge from this summarised review of the present situation in the London market. First, an array of competitive forces suggests that the market could be poised for abrupt change. Second, while the single capacity system has been justified primarily on grounds of ethics and market efficiency, it has also been the keystone protecting the domestic market from both international and local pressures. Third, without minimum commissions it is widely believed that the broker-jobber system cannot be sustained, at least in its present form. The Stock Exchange by vote of its members, has agreed to abolish minimum commission by 1986. The reasonable assumption might be that a scheme for European linkage, which will take several years, will be faced by a London market which is in significantly re-cast form.

The first moves towards the new structure were already evident towards the end of the study. Several institutions had already taken a 29.9% stake in Stock Exchange member firms, and it was strongly rumoured that the major U.K. commercial banks were considering links with leading
member firms*. It seemed likely that the U.K. merchant banks, who had been closely watching developments from the touch-line for some years would decide that the time was ripe to move. It was already widely thought that these acquisitions anticipated relaxation by the Stock Exchange of the 29.9% participation rule with holding up to and beyond 50% permitted in due course.

The potential impact of negotiated commissions on the floor of the Stock Exchange was soon recognised, and became the subject of public debate. A City Capital Markets Committee paper of November 1983 argued that the jobbing system was unlikely to survive negotiated commissions.

The Stock Exchange in November 1983 formed two Committees, each under a Deputy Chairman. One studied the constitutional changes required in return for exemption from the Restrictive Trade Practices Act, the other studied the implications of change in the market, and matters related to outsiders acquiring permitted participation in, or possibly control of member firms. The Discussion Paper issued in April 1984 gave the results of these Committees' deliberations and acknowledged that negotiated commissions would be likely to change the entire structure of the London trading system and the procedures of its market floor.

* The first such link, between National Westminster bank and the jobbers Bisgood, Bishop & Co. Ltd. occurred during the preparation of this Report.
11.8 **Key London considerations affecting European Linkage proposals**

The implications of the London situation briefly reviewed above for any scheme of European linkage may be summarised as follows:

First, any anticipated changes will have a beneficial impact on the potential dealing interface between the London jobbers and brokers and their Community counterparts. As described, the existing arrangements, now consolidated by the institution of international dealing firms, allow both brokers and jobbers freedom of access to any necessary counterparties in the Community capital markets. Any further move towards dual capacity would, from a London standpoint, simplify rather than complicate the European dealing interface.

Second, although the London European market is developing strongly as a growth area of international equities dealing, it is most unlikely to be accorded highest priority by the Stock Exchange during the next few years. The Stock Exchange is entering what could well prove to be the most significant period of change in its history, with negotiated commissions bringing an enormous impact on the structure of its domestic market and on its international position. Nor is this situation in the full control of the Stock Exchange authorities. Much of their action will be responsive to financial forces which, in the ultimate event will determine the form of the future market. In such a situation, it would be realistic to assume that the attention of both Council and members will be on matters related to the domestic market and the development of members' major overseas markets.

Third, in the long term, assuming the premises of present capital market policy in London are correct, and that the U.S. precedents may be validly treated as an indication of what is likely to happen in London, the differences between the London Exchange and most of its Community counterparts will in the short-term become intensified. In the longer-term, as argued elsewhere in this Report, these developments may prove to take London on a convergent course with the other Community Exchanges.
In the first instance, a number of present elements of commonality with other Community Exchanges, in which monopoly privileges and restriction of capacity tend to prevail, would go. It might be assumed that the Stock Exchange would be unwilling, and possibly be technically unable to support a linkage system which was based on, or which unduly accommodated practices which it had itself by force of competition been compelled to abandon.

Fourth, in the longer-term if the dual capacity system were to go, the form of trading on the London floor would certainly change. While no confident prediction can be made, there appears at least a possibility that, within five years, London market procedures might move to a form more compatible with the other Community Exchanges, assuming that they, in turn, modernise the functions of their floor price officials and concentrate members' transactions in central markets.

Fifth, the implementation of negotiable commissions in London is likely to pose a serious obstacle to floor linkage. Floor linkage will require either a common scale or negotiable commissions throughout the system. Fixed or minimum commission scales are an integral element of the structures of several Community Exchanges.
12.1 Introduction

An attempt to establish the value of dealing in E.E.C. equities between the Community Stock Exchanges is clearly essential to the study of linkage. An accurate quantitative assessment of the E.E.C. international equities market and its apparent rate of growth in relation to other business would be of highest relevance to decisions of the Commission and the Committee. It would permit them to assess the relative significance of present trading and its apparent potential. The examination of the differences in patterns of European, foreign and total equities business in the different Exchanges would have bearing on the nature and the degree of interest of each Exchange in the development of a more effectively linked European market. Such figures would also permit sound decisions on the extent of the financial resources appropriate to the project, using conventional analysis of cost and benefits.

Regrettably, the statistics available are either misleading or fragmentary. The Consultants nevertheless believe that the available quantitative evidence should be submitted for two reasons. The first is that, despite deficiencies of the data, where it is possible to piece evidence together, consistent indicators of the real volume of the market tend to emerge.

Second and possibly more important, the deficiencies in the statistics may, of themselves, be of interest to the Stock Exchanges and the Commission. The European Stock Exchanges at present have two principal problems of policy, which are closely related - the existence of off-market trading, especially by Members, and the stances of the Exchanges towards the international market. The statistics required to evaluate the European linkage proposals are precisely those required to support judgement on these two local issues. A significant aspect of this Section of the Report is that the inadequacy of the statistics which, it should be noted, relates not only to its immediate topic, but also to wider issues with which the Exchanges and the Commission are presently concerned.
The figures are therefore included in the Report, with fully stated provisos, for evaluation by the Commission and the Committee.

12.2 Data Sources

Two sets of data are available to the study. They are independent - collated by different agencies from different sources. The first are the official statistics of the Stock Exchanges, which, for present purposes, are treated in the summary form available from the F.I.B.V. and the Milan Stock Exchange*, supplemented by the responses to the questionnaire of the Chairman of the Committee of Stock Exchanges February 1983.

The second set of figures is the gross transaction data of portfolio equity investment used to compile the balance of payments on capital account of each country. The Consultants are obliged to M. Lancetti of the Statistical Office of the European Community and to Dr. Wolff of DG XV for their help in obtaining this data.

Given that the two sets of data were validly-based, standardised, complete and consistently dis-aggregated to the level required, only basic statistical analysis would be required to present an important picture of transactions on and off the floor by Stock Exchange members from the Stock Exchange figures, and the overall market, from the balance of payment figures. It would be possible to establish the proportion of foreign equities dealt in each centre on the floor by members, off the floor by members, off the floor by non-members, total dealing by members and the total market. These dimensions are of considerable significance to many of the questions being considered by the European Stock Exchanges at the present time. There has been no serious attempt to set up this data in any of the Community capital markets.

* "F.I.B.V. Statistics" prepared for the F.I.B.V. - New York Stock Exchange, and, the E.E.C. Stock Exchanges "Dimensional Aspects - Borsa Valori di Milano" (Annual Reports) - both of which constitute invaluable pioneer work in this difficult field of statistics.
The data available to the Consultants, though useful, does not fill this gap. Both sets of data suffer from severe deficiencies in the present context. Those from the Stock Exchanges, though precisely compiled and more or less complete in terms of what they express, are of little help to establish the real level of international dealing. The data is, in fact, demonstrably misleading and, in its under-expression of the importance of international and E.E.C. dealing, may account for the low interest of some of the Stock Exchange authorities in European linkage.

The Stock Exchange figures cannot be used to express the size of the European international equities market. The figures comprise only those transactions which go through the official market, normally where seller and buyer are in that market. A foreign order executed on the floor of, for example, the market of origin, though in fact international business, would be concealed in domestic turnover figures. Further, the off-floor business which members are permitted to carry out cannot be in any way deduced from the floor-based exchange figures. The nature of this bias varies from market to market, so comparative use of the foreign dealing figures might be misleading. A significant point is that no inference of growth of foreign equities dealing can be made from the Stock Exchange figures. It cannot be assumed that the proportion of floor and off-floor business in foreigns has remained constant over the period. Indeed, there is wide evidence that, in European business much of the growth is occurring outside the floor trading.

The second data set, the balance of payments figures, are, theoretically, of much greater use as an expression of the international market, but, regrettably, the responses to the E.E.C. questionnaire were incomplete. In many cases they failed to provide the degree of dis-aggregation sought and thus form an inadequate basis for a full comparative analysis.

The transaction figures collated by the Community Statistical Office from the balance of payments data nevertheless represent the best base for estimation of the size of the European international equities market. The Office sought to obtain from the appropriate central banks or statistical offices two-way figures (inward and outward) of gross
securities transactions (discriminating foreign and domestic securities) between the reporting country and the 'World', the ten E.E.C. countries, the U.S., Japan and Switzerland for the years covered by the Stock Exchange questionnaire, 1975 and 1981-82. Information on four categories of capital movements was sought - portfolio and direct investment in corporate securities, and long and short-term bonds. Of these only the first, corporate securities portfolio investment, has relevance to the potential volume of business available to the Exchanges in foreign equities. The assets side of this account gives bought and sold transactions by nationals (i.e. 'residents') in foreign stocks; the liabilities side, the transactions by foreigners in domestic stocks. The Statistical Office asked that the returns should be compiled according to the Balance of Payments Manual standards*.

Had the information sought by the office been fully available, it would have permitted the construction of a matrix based on the assets side of the statement which would have provided a comprehensive picture of the international portfolio investment flows in equities between Community member countries.

This is not possible due to incompleteness of data. While certain countries, notably Belgium and Luxembourg (U.E.B.L.), Denmark and Germany were able to provide full responses, the data from certain other countries might best be described as vestigial. Beyond this, the data contained certain complications. While the international market might best be expressed by taking the assets and the liabilities side of the account together (i.e. international business in a capital centre in both foreign and domestic securities), it appeared correct only to use the foreign securities side. The liabilities side (i.e. purchase and sale of domestic securities by foreigners) is already, at least to a degree, in the published Stock Exchange figures of domestic trading. The Report thus limits the figures to trading by nationals in...

foreign securities only, nevertheless aware that it involves some under-expression of the total international market.

A further cause of understatement is that transactions which do not involve foreign exchange, e.g. a transaction in a foreign security on a local floor in local currency, naturally do not enter the balance of payments figure. Such transactions may be in the Stock Exchange foreign transactions statistics which are therefore, to an unknown proportion, additional to the balance of payments figures. A further understatement of the true level of foreign dealing is that stock and funds in foreign currency held abroad and re-invested abroad involve no foreign exchange transactions and therefore may not figure in the account. For these reasons the figures used from balance of payment sources in this Section might be considered a lowest estimate of the international market.

The deficiencies of the statistics have been stated at some length, to make clear that they are recognised by the Consultants. They believe however that they are in some respects illuminating and, on balance, worth submitting to the Committee's attention. Sub-section 12.3 considers the Stock Exchange data which are then in Sub-section 12.4 related to the balance of payments figures.

12.3 Review of the Stock Exchange figures

12.3.1 The general perspective

The diversity of form and functions of the Stock Exchanges in the E.E.C. is immediately implied by consideration of the two basic dimensions of market capitalisation of listed domestic equities and total share turnover. The relation which might logically be expected between them and the size of the national economies, using the G.N.P. indicator, does not exist. The activity of the markets, expressed by turnover as a percentage of capitalisation, bears no relation to either the relative size of the Stock Exchange or to the scale of equity turnover itself. Table 12.1 illustrates that apart from a weak relationship between the scale of capitalisation and value of turnover, all other values are
random. Even this basic data illustrates the lack of homogenity of the Community Exchanges, and implies the variance in the economic role they perform.

Table 12.1

<table>
<thead>
<tr>
<th>Country</th>
<th>1. Market Capitalisation</th>
<th>1. as a % of G.N.P.</th>
<th>2. Total Equity Turnover</th>
<th>2. as a % of 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>8,346</td>
<td>10.4</td>
<td>1,815</td>
<td>21.7</td>
</tr>
<tr>
<td>Denmark</td>
<td>5,564</td>
<td>10.3</td>
<td>57</td>
<td>1.0</td>
</tr>
<tr>
<td>France</td>
<td>29,646</td>
<td>5.6</td>
<td>9,285</td>
<td>31.3</td>
</tr>
<tr>
<td>Germany</td>
<td>68,953</td>
<td>10.2</td>
<td>16,963</td>
<td>24.6</td>
</tr>
<tr>
<td>Greece</td>
<td>1,907</td>
<td>5.2</td>
<td>35</td>
<td>1.8</td>
</tr>
<tr>
<td>Holland</td>
<td>25,713</td>
<td>18.8</td>
<td>10,339</td>
<td>40.2</td>
</tr>
<tr>
<td>Italy</td>
<td>19,927</td>
<td>5.8</td>
<td>2,752</td>
<td>13.8</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1,574</td>
<td>39.0</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>U.K.</td>
<td>197,798</td>
<td>43.5</td>
<td>30,260</td>
<td>15.2</td>
</tr>
</tbody>
</table>


While validly indicating the relative scale of the Stock Exchange floor operations, the above figures are a more questionable statement of the magnitude of the domestic capital markets, due to the omission of off-Exchange business. An extreme comparison is between U.K. and Denmark. The high turnover figure for U.K. total equities trading reflects the effective concentration secured within the stock market of U.K. shares.

In Denmark, at the time of the survey, the informed general estimate was that 90% of domestic equities dealing was off the floor. The French and German markets, to a much lesser degree, are understated in respect of off-market dealings in which the members are involved but which do not enter Bourse statistics. As no Exchange has any figures for the off-market dealing by its members, bias towards understatement is discernible, even in the above overall transaction figures.

The picture becomes more seriously distorted when the Exchange figures for dealings in foreign securities are considered. The significance to
any Exchange of any given level of trading in foreign securities will much depend upon the proportion which it apparently represents of its total trading volume.

Table 12.2

<table>
<thead>
<tr>
<th></th>
<th>1982 $m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Value of transactions in foreign equities.</td>
</tr>
<tr>
<td>France</td>
<td>2,476</td>
</tr>
<tr>
<td>Germany</td>
<td>2,123</td>
</tr>
<tr>
<td>U.K.</td>
<td>2,219</td>
</tr>
<tr>
<td>Belgium</td>
<td>850</td>
</tr>
<tr>
<td>Eire</td>
<td>387</td>
</tr>
<tr>
<td>Holland</td>
<td>243</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>41</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
</tr>
<tr>
<td>(Italy,Greece)</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Stock Exchanges.

It might be questioned whether this table, even though confined to the foreign equities dealings of members, presents a credible statement of the relative levels of activity. It is accurate in respect of Italy and Greece. It also correctly represents the situation in the Danish Exchange, on which foreign dealing was, in 1982, only permitted in three anomalous foreign stocks. The table affirms the strong local market in foreigns in Brussels relative to the size of that Exchange, and it may give a valid impression of the situation in France. But in respect of the three markets that are generally considered the most active in foreigns, Germany, U.K. and Holland, there appears to be substantial under-expression of foreign business. The fact that foreign equities dealing in London, an acknowledged equity-oriented and international centre, is in value below that in France and Germany has little face credibility. A statement that only 4.6% of Amsterdam equities business is in foreign stocks does not seem consonant with the large-scale activity of Dutch member banks in that field. The German figures
appear very low in light of the substantial international dealings of
German banks.

A disturbing interpretation which emerges from this table is that the
more active the international business of a Stock Exchange becomes,
the less will it be carried out on the Stock Exchange floor and be
reflected in the official Stock Exchange statistics. The evidence of
the London market, considered below, supports this point. The policy of
The Stock Exchange Council has been to release members from the
constraints of domestic floor dealing to permit them to compete fully
in international business off the market. Similar freedoms in foreign
securities business are available to the German and Dutch banks. An
unfortunate effect of this is that the Stock Exchange statistics not
only fail to include this business, but, if this business moves
increasingly off the market floors, may actually give an inverse
reflection of the true development.

12.3.2 Value of transactions in second-country E.E.C. equities

The Committee questionnaire of February 1983 sought the proportion
of the total value of foreign equities business represented by E.E.C.
securities. Not all the Exchanges were able to supply the breakdown, and
Table 12.3 below sets out the data received.

Table 12.3

<table>
<thead>
<tr>
<th>Country</th>
<th>1. E.E.C. equities transactions value</th>
<th>2. As % of all foreign equities transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.K.</td>
<td>395</td>
<td>17.8%</td>
</tr>
<tr>
<td>France</td>
<td>340</td>
<td>13.7%</td>
</tr>
<tr>
<td>Belgium</td>
<td>205</td>
<td>24.1%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>14</td>
<td>34.1%</td>
</tr>
<tr>
<td>Holland</td>
<td>6</td>
<td>2.5%</td>
</tr>
<tr>
<td>Italy, Greece</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Stock Exchange
The German Association supplied a figure for the Frankfurt Stock Exchange only. While this cannot be included in the above table, it should be mentioned, due to the pre-eminent position of the Frankfurt Stock Exchange in German international dealing. In 1982 dealing in second-country E.E.C. equities in Frankfurt was of $294m value. This represented a proportion of 20.6% of all dealing in foreign equities on that Exchange in that year.

The E.E.C. transaction figures are likely to be a more marked under-expression of the real business transacted than the total figures for all foreign equities. The increasing institutional practice, in European dealing, of direct recourse to the markets of origin can be expected to exclude the bulk of their E.E.C. equities transactions from the Stock Exchange figures of dealing in foreigns. The ability of Exchange members to go direct to the foreign markets has similar effect. A proportion, of unknown level, of such transactions would be within the reported domestic business of the main markets, but it would not be identifiable within it.

The aspect of the table which may be of some validity is the percentage of total foreign equities dealing represented by deals transacted in E.E.C. countries. It might be argued, in the case of each Exchange, the same order of shortfall in the reporting will tend to apply both to 'total foreign' and 'E.E.C. transactions'. This would be valid regardless of the varying practices of each Exchange. The figures in this respect have a certain face credibility, as they illustrate the known activity of the Belgium and Luxembourg Exchanges in European equities. The settlement currency and amount have been used to compile the statistics. Ideally, however, the settlement figures given for European transactions should not be in a non-European currency (e.g., dollars). This is common practice but can falsify the statistical results. The percentages shown for UK and France bear a relationship to the institutional portfolio structures in these stocks. The figure for Amsterdam is anomalous, possibly confirming the known practice of the Dutch banks of dealing direct in the other European markets, notably the German market.

In Section 12.3 below it is submitted that these proportions might be applied to the broader estimate of the foreign equities markets obtainable from the balance of payments figures to give a truer idea of the real Community market in E.E.C. securities.
12.3.3 Growth Rates of total, total foreign and E.E.C. equities business.

The Committee questionnaire of February 1983 sought figures for total, total foreign and E.E.C. equities business for 1975, 1980, 1981 and 1982. Not all the Exchanges were able to provide figures for 1975. The responses for the 3 year period 1980 - 1982 were also incomplete and, in any case, the period is too short and insufficiently typical to provide any analysis of trends. A further problem exists in choice of currency in which to express comparative growth. While standardisation to U.S. dollar would base comparison on uniform values, the volatile appreciation of that currency over this period would give a false understatement of such growth that may have occurred in Community markets in local currency terms.

Table 12.4: Growth of Foreign Equities Transactions

<table>
<thead>
<tr>
<th>Country</th>
<th>Growth of total equities transactions</th>
<th>Growth of foreign equities transactions</th>
<th>Growth of E.E.C. equities transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>+17.6%</td>
<td>+0.25%</td>
<td>+9.2%</td>
</tr>
<tr>
<td>Denmark</td>
<td>+20.1%</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Eire</td>
<td>+53.8%</td>
<td>+10.8%</td>
<td>+3.4%</td>
</tr>
<tr>
<td>France</td>
<td>+5.2%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Greece</td>
<td>-16.7%</td>
<td>-0.1%</td>
<td>n.a.</td>
</tr>
<tr>
<td>Germany</td>
<td>+10.8%</td>
<td>-0.1%</td>
<td>n.a.</td>
</tr>
<tr>
<td>Holland</td>
<td>+13.5%</td>
<td>+12.7%</td>
<td>-5.7%</td>
</tr>
<tr>
<td>Italy</td>
<td>-28.8%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>+30.4%</td>
<td>+30.0%</td>
<td>-7.2%</td>
</tr>
<tr>
<td>U.K.</td>
<td>+10.2%</td>
<td>-15.4%</td>
<td>+2.3%</td>
</tr>
<tr>
<td>(Spain)</td>
<td>+18.6%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Stock Exchange Statistics

As these compound annual rates of growth are based on the Stock Exchanges' official figures, which, as argued above, understate the level and falsely express the trends of international dealing in Europe, the table has no real meaning. It appears to show that the rate of
increase of foreign business (with the exception of U.E.B.L.) falls below that of total business. In the U.K., it suggests that there has been negative growth of foreign dealing. Within foreign transactions, it implies that dealing within the E.E.C. has failed to keep up with such growth as overall foreign dealing has attained.

Such assertions are a travesty of fact. There is little doubt that the real truth this table asserts is that international dealing is leaving the floor markets. The actual situation is considered in Sub-section 12.4, against the full balance of payments figures.

The only useful purpose in presenting the above table is that it may offer an explanation for any lack of interest in the European initiative. If the Stock Exchanges are influenced by their own deficient statistics, and thus have in mind a situation as implied in the above table, this would more than explain any reluctance to attribute significance of priority to European linkage.

12.4 Comparison of the Balance of Payments figures of Portfolio Investment in Foreign Corporate Securities with the Stock Exchange Statistics

12.4.1 The use of the data

From the standpoint of international dealing, the foreign equities market can be defined in three dimensions:

(i) Transactions on behalf of nationals in foreign securities, executed abroad and normally involving a foreign exchange transaction.

(ii) Transactions on behalf of foreign clients in domestic securities, executed in the local market and normally involving a foreign exchange transaction.

(iii) Transactions in the local market between nationals in local currency, in which an intermediary active in foreign equities is likely to be involved but which does not involve a foreign exchange transaction.
To establish the full dimension of the European market, as it is presently developing, and therefore the full potential for the linkage system, each of these sides of the market should be considered. All would guarantee network traffic of one type or another. The third category represents the official figures of the Exchanges. The first two categories correspond to the assets and liabilities sides, respectively, of the statement sought by the Community Statistical Office and, insofar as they are available in the national responses, can be used to determine the potential market. The Report, however, limits consideration to the first category - transactions on behalf of nationals and foreign securities. This, unambiguously, is international business and the omission of the second category - transactions on behalf of foreigners and domestic securities - avoids any ambiguities that might arise from the partial inclusion of such business in the existing Bourse figures of domestic business.

The approach taken in the paper is to sum up the purchase and sale transactions by nationals in foreign securities and to divide the result by 2. In the F.I.B.V. statistics, a sale plus purchase is considered to be one transaction. The balance of payments figures are thus rendered comparable with the Exchange statistics to establish the relative size of the local international markets and the domestic markets.

Definition of portfolio investment in corporate securities is provided in Paragraph 425 of the I.M.F. Balance of Payments Manual and is summarised as stocks, shares, participations or other similar documents. Whether the purchase or sale is of equity newly issued or on the secondary market is not distinguished, but it is not considered that this is significant in the equity markets.

Due to the courtesy of the Banque de France, which maintains precise statistics, security by security, in this field which are provided by the computer systems of the authorised banks, the Consultants
were able to examine the source data and the construction of the balance of payments statements. Such study assured them of the relevance of the data to the practical problem of establishing the international market potential. The Consultants were further assured by the Community Statistical Office that it would be reasonable to assume that the responses of other national authorities, where available, would have been constructed on the same basis.

The only real flaw in the balance of payments data is that it is not complete. Full responses were obtained only from Belgium and Luxembourg (the U.E.B.L. figures included a breakdown of capital movements within the E.E.C. which went beyond the data sought), Denmark and Germany. Most countries had difficulty in providing even an overall E.E.C. figure. Only major aggregate figures were provided by the U.K., with portfolio investment in equities given for one year only. The general conclusion might be drawn that the E.E.C. is as inadequately equipped with data to determine its capital market policies, as are the Stock Exchanges to determine their policies towards international business. The Consultants wish to stress that this comment refers to the quality of data generally available at national level and not to the quality of the Commission's services.

Despite the inconsistent cover of these balance of payments figures, the Consultants believe that they are informative, that the impression they convey is valid. They appear to consistently demonstrate that the foreign dealings in all the capital centres are considerably above the volume implied by the Stock Exchange statistics.

12.4.2 Summary comparison of the Balance of Payments Portfolio Investment Figures with the Stock Exchange Statistics of Foreign Dealing

(i) The most significant disparities between the two sets of figures emerge in the statistics for the United Kingdom and Holland.

The comparison emerging from the U.K. 1981 figure of portfolio investment in all foreign securities (the only one the Central Statistical Office was able to supply) and the equivalent Stock Exchange figure is as follows:-
The Government figures suggest that the London market in foreign equities must be some 8 times the size implied by the figures given in the Stock Exchange’s response to the Committee questionnaire. In light of the known facts of the London market and the international dealing arrangements set up by the Stock Exchange, this finding is not surprising. The detailed investigation by the Consultants of the E.E.C. business in the London market, summarised in 12.6 indicated a disparity of the same order between the Exchange statistics and the reality.

Evidence from other sources points in the same direction. The change in the structure of institutional equity portfolios in the United Kingdom over the past 4 years has been a powerful force driving the Stock Exchange firms to internationalise their activities.


<table>
<thead>
<tr>
<th>Year</th>
<th>Total Assets</th>
<th>U.K. Equities</th>
<th>Overseas Equities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>103,665</td>
<td>37,798</td>
<td>6,203</td>
</tr>
<tr>
<td>1980</td>
<td>130,810</td>
<td>48,884</td>
<td>10,868</td>
</tr>
<tr>
<td>1981</td>
<td>151,833</td>
<td>55,262</td>
<td>14,655 (29,720m)</td>
</tr>
<tr>
<td>1982</td>
<td>196,930</td>
<td>70,066</td>
<td>21,928 (38,382m)</td>
</tr>
</tbody>
</table>


Investment in foreign equities is seen to have increased during this period by 3.5 times, as opposed to a 1.85 times increase in U.K. equities. The compound annual growth rate of the U.K. and overseas
equities is respectively 22.7% and 52.3%. The 1981 and 1982 figures indicate the growth of overseas equities may be a continuing phenomenon and not solely related to the removal of Exchange Control restrictions in 1979.

The implication in terms of securities transactions associated with these holdings is even more striking. The activity rates (i.e. turnover of securities within the portfolios) of U.K. and foreign equities markedly differ. The opinion of institutional investors was that, broadly, it was about 30% for U.K. equities, which tend to be institutional core holdings, and 60% for foreign securities, on which, often due to current currency movements, a shorter view tends to be taken. The business implied from U.K. institutions thus comprises, for each year, the activity rate of the existing holdings plus the incremental investment. A crude calculation of the business in this way gives a rate of growth for U.K. equities of 18.2% and a rate of growth for foreign equity of 39.2% in current value terms. It is of interest that the growth rates of foreign equities business of the leading brokers and jobbers which are active in international equities was, in the cases where they were given to the Consultants, of the same order. In U.S. Dollar terms, to permit comparison with the Stock Exchange figure above, institutional foreign transactions, on this basis of calculation, might represent $20-25,000m, or 7 to 8 times the Stock Exchange figure, according to the F.I.B.V. method of count. On present trends, the London equities dealing will be primarily in the international market by the end of the decade.

An inestimable segment of the London market in foreign equities, which may constitute an element of the C.S.O. figure, is the business related to overseas funds (for example, American pension funds), and foreign dealing channelled through foreign intermediaries in London, which involve Sterling foreign exchange transactions. This component of the figure is largely irrelevant to the Stock Exchange.
The purpose of the brief comment above is not to attempt to establish the value of the London foreign equities market but to make the point, which the Consultants consider in general terms irrefutable, that the Stock Exchange figures under-read the real market very considerably, possibly to a factor which may be between five and eight times. Comment from the market in respect of E.E.C. securities, reported in Section 11, confirms the general point.

The 2 sets of figures from the Amsterdam market appeared to display a similar disparity. A problem of interpretation arises in the Dutch statistics. The figures required in response to the Community Statistical Office questionnaire are published, to 1981, in De Nederlandsche Bank n.v. Kwartaal Bericht 1982. The layout is the same as the data for the other countries, i.e. the figures discriminate purchase of foreign shares (by nationals), country by country. The bank cautions however that no conclusion is warranted as to the country of issue of the (foreign) securities and that the country indicates only where the other party was resident for Exchange Control purposes. This is assumed in the main to be the foreign country of the transaction. If this is so, it might further be inferred that normally dealings in foreign shares in a foreign market would imply dealing in shares issued in that market. It might, therefore, be argued that the Dutch statistics can certainly be used to establish overall Dutch purchases of foreign shares, which are entirely clear in the statistics, and that the national figures give an indication of the relative importance of each market to Amsterdam trading. Summary comparison of the Nederlandsche Bank n.v. and AEB figures is as follows:-

Table 12.7: Dutch portfolio investment in foreign equities.

<table>
<thead>
<tr>
<th>1981 US$m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.B. n.v. Total transactions (Foreign shares) x 0.5 = 3,124</td>
</tr>
<tr>
<td>A.E.B. Total foreign equities trading = 325</td>
</tr>
</tbody>
</table>
The level of business is seen to be 10 times that recorded on the AEB. As with London, it appears that the vast majority of Amsterdam foreign equities transactions are off the market. This appears to concur with the high level of activity of the Dutch banks in the international market, and also the tendency of both investors and members of the Exchange to deal direct into foreign markets with which Amsterdam, as a major international centre, has long-standing connections. The high off-market proportion of all foreigns other than U.S. securities, is confirmed by the apparent distribution of types of foreign business on the Bourse and the off-market.

Table 12.8: Percentage distribution of Foreign Securities Transactions in Amsterdam - 1981.

<table>
<thead>
<tr>
<th></th>
<th>N.B. n.v.</th>
<th>AEB</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>45.6%</td>
<td>94.6%</td>
</tr>
<tr>
<td>European</td>
<td>13.6%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Other Foreign</td>
<td>40.6%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

The Nederlandsche Bank figures are seen to give a far more credible pattern of activity in the foreign markets, which is broadly consonant with the portfolio structures and the interests of investors in the major foreign markets. They follow, expectedly, the European pattern as a whole. The AEB figure reflects the efficient ASAS scheme, which has developed Exchange business in U.S. equities. The figures suggest that the Exchange does not see the European or other foreign business which, presumably is placed direct.

The balance of payments figures tend to indicate that London and Amsterdam are the most international of the Community capital markets. In both cases, it appears that the Stock Exchange statistics, which do not identify this characteristic, are misleading and should be disregarded. The invalidity of the figures appears to arise from the reticence of Stock Exchange members. For reasons discussed elsewhere in this Report, the international activities of members have tended to be on the fringe of the official markets. Such activities are
entrepreneurial, and in some respects costly. The members have little enthusiasm to disclose them. As a result, this business is not captured within the Exchange statistics.

(ii) The statistics, expectedly, identified a second well-defined group of Exchanges which carry out no, or very little, dealing in foreign securities, due to Exchange Control restrictions.

The most unambiguous situation is that of Greece, for which both the returns of the Bank of Greece and the response to the Committee questionnaire confirm total absence of any portfolio investment by nationals in foreign corporate securities. While, as pointed out in Section 6, this does not accord with Greek financial realities, it does accord with the realities of the Athens capital market.

The figures of two of the other Exchange Control countries, Italy and (in respect of this historic information) Denmark, reflect a similar situation.

Table 12.9 1982 - $m

<table>
<thead>
<tr>
<th>Bank of Italy</th>
<th>Bourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,022 x 0.5 = 1,011</td>
<td>0</td>
</tr>
</tbody>
</table>

The Bourse figure is expectedly zero, there being no foreign securities quoted on the Italian Stock Exchanges. This situation is unlikely to change as long as the present sanction of the 50% non-interest bearing deposit on the value of foreign equities purchased remains. The balance of payments figures do, however, indicate substantial Italian transactions in foreign equities.

For the year quoted above, their value was equivalent to 30% of that of total local equities dealing on the Italian Exchanges. Over the period 1976-82, these foreign dealings averaged 16.4% of the value of equities dealt on the Exchange. This average is heavily affected by
the exceptional 1981 year and for the other years it was 22.3%.

During the Exchange Control period, Italian transactions in foreign equities have risen substantially. The value of international stock transactions by Italian residents which in 1976 was 930 billion Lira had, by 1982, risen to 2,299 billion.

The Exchange Control measures have not stopped Italian portfolio equity investment abroad. One definite effect which they have had has been to totally exclude the Italian Stock Exchanges from any possible participation in this foreign sector.

These figures underestimate the full extent of lost business. As pointed out earlier in the Report, if the inward investment in Italian securities by foreigners is included in assessing the 'international equities market' in Italy, the proportion of business lost by the Italian brokers rises to some 30% of Bourse equity turnover. Being dis associated with the outward investment, the brokers see little of the reciprocal inward business. Only 28.3% of the outward capital flow quoted for 1982 represents institutional transactions, i.e. credit institutions, finance and assurance companies.

A similar situation applied in Denmark, where the Exchange Controls were more rigorous than in Italy, and involved, at the time of the survey, total prohibition of acquisition of foreign equities by Danish nationals.

<table>
<thead>
<tr>
<th>Table 12.10 : Danish Portfolio Investment in Foreign Equities</th>
<th>1982 - $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danish Statistica' Office</td>
<td>97.8 x 0.5 = 48.9</td>
</tr>
<tr>
<td>Stock Exchange</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Foreign securities, in general, were not quoted on the Copenhagen Stock Exchange apart from three securities with which Danish investors have traditional association. Each were dealt in the appropriate foreign currencies - Bahama Dollars, Malaysian Ringits and South African Rands. Dealings in these securities were not substantial. It was, however,
evident that, in spite of Exchange Control, there was considerable dealing in foreign equity in Copenhagen. This was presumably due to the switching facilities available to Danish holders of foreign equity and growth of foreign assets. Relative to the turnover in the Copenhagen Exchange, foreign dealing is seen to have been considerable and was equivalent to 86% of the $56.8m total trading for that year. It is a much lower proportion of the real Danish domestic equities market, 90% of which at that time lay outside the Exchange.

As in Italy, the growth of this foreign equities trading has been conspicuous, having increased some thirteen times between 1975 and 1982. Expectedly, the purchase of Danish securities by foreigners exceeds Danish purchases of foreign securities, in 1982 to a factor of 3.4.

The figures for the fourth of the Exchange Control countries, Eire, pose a problem of interpretation.

Table 12.11:

<table>
<thead>
<tr>
<th>Eire Central Statistical Office</th>
<th>The Stock Exchange (Irish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>387</td>
</tr>
</tbody>
</table>

The zero return from the Irish Central Statistical Office is presumably due to the fact that the Irish transactions specified by the Exchange are switching operations, the only type of foreign transactions for which Irish investors, other than certain funds, presently have consent. It is further presumed that in this situation the Central Statistical Office has reported the net balance of payments effect, rather than the gross transactions requested. Interpretation of the dealings in Eire are further complicated by the linkage with the Dublin and the London Stock Exchanges. The likelihood is that much of the Dublin foreign equities dealing, insofar as it is permitted, is carried out using the London jobbers. The majority of Irish institutional business in foreign markets is, as is the case in other Community countries, placed directly in the main markets.
Between the two above groups of Exchanges which are highly active, and relatively inactive in the international markets, and in all of which, for different reasons, the bulk of the foreign equities business is off the official markets, there is a third group comprising Belgium and Luxembourg (U.E.B.L. in respect of balance of payments figures), France and Germany, in which there is a much closer relationship between overall foreign equities trading and the Bourse statistics.

Table 12.12 1982 - $m

<table>
<thead>
<tr>
<th>U.E.B.L. Portfolio Investment in Foreign Equities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banque Nationale de Belgique</td>
</tr>
<tr>
<td>2,414 x 0.5 = 1,207</td>
</tr>
</tbody>
</table>

Fifty per cent of Brussels floor trading in equities during the year was in foreign stocks. With the Banque and Bourse figures lying so close, the extent to which the Bourse trading forms part of the balance of payment figures, or does not, becomes important. This is not easy to determine. Much of the Bourse dealing in Belgian Francs might be between Belgian nationals and would not require a foreign exchange transaction. The estimate of the total Brussels market in foreign equities thus lies between $1,207m and $2,024m and in all probability at the higher end of that range. At the lower estimate, 43% of Brussels foreign transactions would be off the market floor at the higher estimate, 58%.

The figures not only confirm the known fact that, of all the Community Exchanges, Brussels has been most successful in establishing a local floor market in foreign equities, but also that this market represents a substantial proportion of the overall transactions in such stocks in Brussels.

The comparison with Amsterdam is of interest. The balance of payments figures suggest that the Amsterdam international equities market is ten times the value of the comparable Bourse business. On the other hand, the Brussels local floor market in foreign equities is almost three times that of Amsterdam. An important distinction emerges between
the local market in foreigns in Brussels and the international market in Amsterdam. The two situations well illustrate that two quite different angles might emerge, from members of the Amsterdam and Brussels Exchanges, on the approach to development of international business and the steps that would be appropriate to improve European linkage. Discussions in these markets confirmed this to be the case.

The French situation is, in principle, similar to that of Belgium, though the much stronger base of French domestic securities diminishes the relative importance of foreign equities trading.

Table 12.13 1982 - $m

<table>
<thead>
<tr>
<th></th>
<th>Banque de France</th>
<th>Bourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>French Portfolio Investment in Foreign Equities</td>
<td>6,382 x 0.5 = 3,191</td>
<td>2,477</td>
</tr>
</tbody>
</table>

A similar range of total foreign equities dealing may be imputed, between $3,191m, assuming that all Bourse transactions involve a backing foreign exchange deal, and a figure towards $5,668m, which would assume that most Bourse transactions in foreigns do not involve net foreign exchange movements. In the Paris case, it was possible to confirm with the Banque de France, which until recently kept statistics on this point, that only a minute fraction of the transactions recorded in their capital movements figures were dealt on the floor of the Bourse. Assuming this to be the case, the figures indicate that some 50%-60% of transactions in foreign securities originating in Paris are off the market. This accords with fragmentary detailed evidence obtained during discussions in the Paris market.

The Deutsche Bundesbank figures show less disparity with those of German Stock Exchanges. An unexpected low level of activity by German investors in foreign equities is revealed. While this is consonant with German investment preferences discussed in Section 7, it is surprising that international equities dealing in Germany is no larger than, for example, that in Holland.
Table 12.14: German Portfolio Investment in Foreign Securities

<table>
<thead>
<tr>
<th>Deutsch Bundesbank</th>
<th>Association of German Exchanges</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,054 x 0.5 = 3,027</td>
<td>1,896.5</td>
</tr>
</tbody>
</table>

The Consultants are obliged to Drs. Wolff and Sentt of the Bundesbank for a memorandum which confirms the basis of the two sets of statistics. In summary, the balance of payments records every purchase and sale of securities between residents and non-residents, regardless of whether banks or non-banks are involved, whether the transactions are effected through German or foreign Stock Exchanges or outside a Stock Exchange, whether payment takes place via an account with a German or foreign bank and whether the security is deposited in Germany or abroad. A well-defined and comprehensive system of reporting exists to assure this.

The Stock Exchange statistics do not reflect the securities transactions with non-residents executed by their banks for their own account. They contain only securities transactions which have been effected by the banks via the German Stock Exchanges. In the Exchange statistics it is not possible to discriminate whether residents or non-residents are involved. The memorandum confirms that it is not possible to determine what proportion of the transactions registered in the Stock Exchange statistics is included in the balance of payments.

On the basis of the above figures the total of German portfolio transactions in foreign equities lies in the range between $3,027m, assuming that the Stock Exchange transactions are totally within the balance of payments, and $4,923m, which assumes that none of them are. Even in the lower case, 60% of the German international equities market appears to be off the Exchanges in the year concerned.

(vi) The following table summarises the two sets of figures:
Table 12.15:

<table>
<thead>
<tr>
<th>Country</th>
<th>Balance of Payments Transaction Figures</th>
<th>The Stock Exchange Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1,207</td>
<td>817</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>49</td>
<td>1</td>
</tr>
<tr>
<td>Eire</td>
<td>387</td>
<td>387</td>
</tr>
<tr>
<td>France</td>
<td>3,191</td>
<td>2,477</td>
</tr>
<tr>
<td>Greece</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>3,027</td>
<td>1,896</td>
</tr>
<tr>
<td>Holland</td>
<td>3,124</td>
<td>325</td>
</tr>
<tr>
<td>Italy</td>
<td>1,011</td>
<td>0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>25,116</td>
<td>3,028</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>37,112</strong></td>
<td><strong>8,972</strong></td>
</tr>
</tbody>
</table>

Interpreting the international market only as transactions in foreign securities of which one side is in a European capital centre, the market would appear to be, using the lowest base of estimate, about four times the level suggested by the Stock Exchange statistics of floor dealing. If the London figure, which may contain Sterling foreign exchange transactions which represent London routing rather than London business, the balance of payments indicate an international market for the remaining capital centres twice that of the floor dealing in foreigns. The Consultants would like to stress that the statistics used are not intended to support a serious quantitative estimation. Their purpose is to demonstrate the general truth that the bulk of international transactions in Europe is carried out off the floor market. They believe that the figures strongly support this case and do broadly indicate the dimension of the problem.

In summary, this review of overall foreign business in the European capital centres makes it evident that the main issue likely to be raised by European linkage is the role to be played by the floors and
to be played by linkage related to the present off-market patterns of business. This point is further developed in later Sections of the Report. Varying situations noted in respect of each Exchange make it similarly clear that they are likely to hold different opinions on whether the focus of any linkage system should be the market floors or whether it should be based on a wider concept of which the market floors form only a part.

12.5 Estimation of Foreign Transactions in E.E.C. Securities

Estimation of the E.E.C. proportion of the real foreign market involves a series of difficulties. The Stock Exchange figures have already been observed to understate the market. The increasing practice of placing orders in the main national market means that much international dealing will be masked in domestic statistics. The only possible method of estimation may be to attempt to establish a likely proportion of all foreign dealing which is in E.E.C. securities and to apply that proportion to the inflated value of the international market available from the capital movement figures. The proportions from the Bourse figures are suspect in the cases of one or two Exchanges, but the general indication thus obtained is confirmed by other approaches which can be taken to this estimation. The proportion of E.E.C. business in the active Exchanges, as stated in the replies to the questionnaire, is as follows:

Table 12.16a

<table>
<thead>
<tr>
<th></th>
<th>Transactions in E.E.C. equities as a proportion of all foreign securities</th>
<th>1982 - $m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign equities</td>
<td>of which E.E.C. equities</td>
</tr>
<tr>
<td>Belgium</td>
<td>950</td>
<td>205</td>
</tr>
<tr>
<td>France</td>
<td>2,476</td>
<td>340</td>
</tr>
<tr>
<td>Germany</td>
<td>1,427</td>
<td>294</td>
</tr>
<tr>
<td>Holland</td>
<td>243</td>
<td>6</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>41</td>
<td>14.8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2,219</td>
<td>395</td>
</tr>
</tbody>
</table>

Source: Stock Exchange/F.I.B.V. data
It appears that the proportions of business recorded in the balance of payments transactions give a more credible breakdown. Regrettably the U.K. Central Statistical Office was unable to supply a figure for E.E.C. transactions.

Table 12.16b 1982 - $m

<table>
<thead>
<tr>
<th>Foreign Equities</th>
<th>of which E.E.C.</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>total</td>
<td>equities</td>
<td></td>
</tr>
<tr>
<td>U.E.B.L.</td>
<td>1,207</td>
<td>437</td>
</tr>
<tr>
<td>Denmark</td>
<td>49</td>
<td>14</td>
</tr>
<tr>
<td>France</td>
<td>3,191</td>
<td>478</td>
</tr>
<tr>
<td>Germany</td>
<td>3,027</td>
<td>393</td>
</tr>
<tr>
<td>Holland ('81)</td>
<td>3,124</td>
<td>426</td>
</tr>
</tbody>
</table>

* based on the first three quarters

Source: E.E.C., C.S.O. data

An order of consistency is apparent in the two results. Proportionately, Belgium and Luxembourg have greater interest in E.E.C. securities. For reasons discussed above, the Amsterdam involvement in E.E.C. trading is understated by the Bourse figures. The weighted average proportion of the two sets of figures gives a very similar result: 17.3% for the Bourse figures and 16.5% for the balance of payment figures. The omission of the U.K. from the second table has, on this basis, very little effect.

The 17% proportion bears a sensible relationship to the portfolio structures of foreign equity investment. In their discussions with institutional investors, the Consultants sought this information. While the data obtained cannot be regarded as systematic, the pattern of foreign equity investment, regardless of country, showed a notable consistency, with the E.E.C. proportion of all foreigns tending to lie at about 10%-15%. Dealing activity based on this portfolio structure would be higher. This portfolio pattern obtained from the interviews is broadly confirmed by the distribution of trading available from the Community Statistical Office figures. For those countries active in
foreign investment, for which figures are available, this result is as follows:

Table 12.17: Geographical Distribution of Foreign Portfolio Equity Investment 1982

<table>
<thead>
<tr>
<th></th>
<th>E.E.C. %</th>
<th>U.S. %</th>
<th>Japan %</th>
<th>Switzerland %</th>
<th>other %</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.E.B.L.</td>
<td>36.2</td>
<td>39.5</td>
<td>10.5</td>
<td>6.3</td>
<td>7.5</td>
</tr>
<tr>
<td>France</td>
<td>15.1</td>
<td>49.9</td>
<td>17.3</td>
<td>0.9</td>
<td>16.8</td>
</tr>
<tr>
<td>Germany</td>
<td>13.0</td>
<td>52.4</td>
<td>18.5</td>
<td>3.8</td>
<td>12.3</td>
</tr>
<tr>
<td>Holland</td>
<td>13.7</td>
<td>44.2</td>
<td>28.1</td>
<td>3.2</td>
<td>10.8</td>
</tr>
<tr>
<td>Weighted average</td>
<td>16.5</td>
<td>47.7</td>
<td>20.3</td>
<td>3.0</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Source: E.E.C., CSO data

Application of this 16.5% to the estimate of total foreign equities dealing in the Community (Table 12.5) would yield a minimum estimate of the E.E.C. international equities market of some $6,000 million in 1982.

These aggregate proportions approximate to the very consistent structure of foreign equity portfolios quoted to the Consultants throughout the study by institutional investors. The table introduces a further important perspective of the small relative importance of foreign E.E.C. equity investment compared with the 2 major foreign markets. The reasons for this are discussed elsewhere in this Report. The strong implication of this pattern of dealings for linkage is that it is important that the linkage arrangements are constructed without compromising business opportunities of Stock Exchange members in the U.S. and Japanese markets.

The table appears to suggest that the inclusion of Switzerland in the European equities linkage system would not be essential, a point endorsed by much market comment. The table may, however, inadequately reflect deals arranged in foreign markets involving Swiss banks and the desirability of including Switzerland in any E.E.C. settlement arrangements is a quite separate question.

The patterns of business observed in 1982 may be ascribed to the indifferent performance of most of the European markets over the
greater part of the previous decade, which had resulted in mutual dis-interest. The principal change which had been occurring over the period 1975 to 1982 in investment structures was the greatly increased flow of funds to the Japanese market. Although in 1982, in quantitative terms, the flow of funds to the U.S. market were far greater than investment in Japan, in proportionate terms the level of investment in the U.S. had not changed since 1975. This is made clear by the compound annual rates of growth, at current value, obtained from three of the four complete returns obtained. Denmark is omitted, as the volume is not consequential and the pattern of business anomalous.

<table>
<thead>
<tr>
<th>Investing Country</th>
<th>Total foreign</th>
<th>E.E.C.</th>
<th>U.S.</th>
<th>Japan</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.S.L.</td>
<td>+ 10.9%</td>
<td>+ 8.7%</td>
<td>+9.9%</td>
<td>+47.1%</td>
<td>+6.0%</td>
</tr>
<tr>
<td>Germany</td>
<td>+ 10.2%</td>
<td>+ 1.2%</td>
<td>+10.3%</td>
<td>+41.8%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Holland</td>
<td>+ 12.1%</td>
<td>- 5.1%</td>
<td>+12.7%</td>
<td>+39.0%</td>
<td>+12.8%</td>
</tr>
</tbody>
</table>

Source: E.E.C., C.S.O. data

The growth rate of French total foreign equities trading, the only figure in the Banque de France response to the Community Statistical Office, appears somewhat higher than other national markets at 15.1%. An ironic result of the analysis of growth of foreign equities trading is that the two highest rates, over this period, were achieved by two countries under Exchange Control restrictions. These were Denmark and Italy with compound annual growth rates of 43.5% and 40.7% respectively.

12.6 The London European Equities Market

The London C.S.O. was unable to provide any data related to U.K. investment in other E.E.C. countries. Evidence from the market, however, suggested the proportion of this E.E.C. business, relative to other foreign investment, was consistent with the pattern indicated above. As has been demonstrated above, and as is well known in the Stock
Exchange, the official market statistics of dealing in foreign equities do not convey the scale of the London international market. Nor, more importantly, do they indicate the extent of members' participation in it. The 1981 London figures supplied in response to the Community questionnaire indicate that, in recorded dealing, foreign equities represented 9.2% of total equities trading in 1981, falling in 1982 to 7.0% and increasing slightly by March 1983 to 8.1%.

Within this general understatement, however, it is possible that the proportionate distribution of this business between the foreign markets is a little closer to reality. The same factors tend to take dealing off the floor in most of the dealing with foreign markets.

Table 12.19 : Geographical distribution of the London Foreign Equities Trading.

<table>
<thead>
<tr>
<th></th>
<th>E.E.C.</th>
<th>other Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>14.8%</td>
<td>85.2%</td>
</tr>
<tr>
<td>1982</td>
<td>17.0%</td>
<td>82.2%</td>
</tr>
</tbody>
</table>

Source: The Stock Exchange

By March 1983, the E.E.C. proportion had risen further to 19.6%.

This statement of the relative importance of the E.E.C. business, although apparently consistent with that of other European exchanges, is biased by two factors. The first is that it includes substantial element of dealing in Irish securities and the definition of this business as 'European', in the sense of the figures considered for other exchanges, is questionable. Without the Irish figure, the E.E.C. proportion for 1982 would be 12.1%. The second, more significant factor, is that the detailed figures for the major continental markets are very low and endorse the direct dealing abroad, and fail to reflect the real London business volume. The best example is that of Germany, which according to these figures attracts only 1% of London European equities business. The figures exclude both orders placed directly in Germany and U.K. jobber transactions which because of their nature fall outside the London bargain recording.
In the London market the Consultants were able to offset the deficiencies of both the market and the Government statistics by information obtained informally and confidentially from several jobbing and broking firms active in European equities. The figures of business obtained are not comprehensive and, for obvious reasons of confidentiality, cannot be presented. It was possible to obtain jobber turnover and estimates of the market shares. It was also possible to confirm, from a range of brokers, the proportion of their European business they placed with U.K. jobbers and the proportion they placed directly on the foreign markets. It was possible to obtain estimates from a range of institutions of the proportion of their orders which they placed with the London brokers, as opposed to directly routing abroad. Approximately assessed on this basis, the London market may be some eight to nine times the figure quoted in the official statistics, or some $3,000m a year in the F.I.B.V. idiom.

Assuming that European equities comprise about 15% of the U.K. institutional foreign equities transactions, a similar estimate of the market is obtained at about $3,000m (Tables 12.6, 12.16a, 12.16b, and 12.17). The order of difference between the Stock Exchange figure of the E.E.C. business and the size of that market estimated from member firm and institutional data is similar to that between the Stock Exchange figure of total foreign equities business and the balance of payments figures of capital transactions. London appears to have half the European equities market.

A point of considerable interest in the London study was the rate of growth of dealing in European securities. Growth of business in European securities had been strong in London even during the main period of the study when many market authorities were alleging a total and general mutual disenchantment in the European equities market. One of the leading brokers in this market had experienced a growth of European equities business of 38.8% per annum between 1977 and 1983. While the major uplift had occurred in 1982 and 1983, business had increased steadily since 1977-78. The European equities
trading of one of the major jobbers had increased at the rate of 84.6% per annum between 1980 and 1983. E.E.C. equities had become a significant element in the total foreign equities dealing of the London jobbers.

12.7 Conclusion

Despite the minor technical provisos related to the balance of payments figures and the fragmentary nature of some of the detail, the Consultants believe that these figures provide the best broad statement at present available of the international equities market. An approximation of the market might be derived from them by applying to the overall estimated total foreign business in Table 12.15 the weighted proportion derived from Table 12.17. If a 15% proportion was accepted, a conservative estimate of the dealing in the Community capital centres in foreign E.E.C. equities might be some $6,000m. Such a market would be four times the size of that implied by the Stock Exchange statistics. Three independent approaches to estimation indicate a London market of some $3,000m in second country E.E.C. equities.

The Consultants wish again to stress that this Section of the Report is not intended to attempt a precise quantitative estimation of the real size of the Community international market in foreign E.E.C. equities. Its intention is solely to demonstrate that this market is bigger, by a most considerable factor, than the Stock Exchange statistics imply. This level of understatement is such that the Stock Exchange statistics are positively misleading.

The current policies of at least some of the Stock Exchanges are incomprehensible in terms of their statistics of foreign business. For example, the London Exchange is about to undergo possibly the most profound revolution in its history with the ostensible aim of orientating the market to international business and competition. This would hardly be likely if its present dealing in foreign stocks represented less than 10% of its domestic equities turnover. In light of the balance of payments figures, which are a far truer expression of the real situation, the present London policy pre-occupations become more explicable.
The Consultants believe that this is a point of importance because the true dimensions of the European international market may be masked to the authorities of the Stock Exchanges who may in consequence be prone to disregard it or accord it little priority. To put this point in perspective, the capital movements data imply that, at minimum estimate, the international European equities market may be about the value of turnover of a substantial European Exchange, for example of Amsterdam. The real volume is likely to lie far above this. If this is so, from some quarter there should be both official recognition of the existence of this market as a significant element in European securities trading and support for it at the level of resources and equipment which trading of this volume would appear to merit.

As a final observation it might be noted that it is curious, at a time when most of the European Exchanges are pre-occupied with their expanding in international business and in face of foreign competition, that so little is known across all the Exchanges, of the volume and value of members' international business. Estimation of the size of the international market will always be a problem and will be controversial. Its overall dimensions would be adequately available if the capital movement statistics were kept in all Community countries with the same efficiency as they are at present kept in some.

The Stock Exchanges could, without undue difficulty, assemble the statistics of the off-market foreign dealings of their own members. The Commission would be in a better position to formulate and monitor the Community's capital market policy. The Stock Exchanges would be in a better position to appreciate the dimensions of the international market, the participation of their members in it and the adequacy of their regulatory function over developing areas of their markets.
13.1 Importance of acknowledgement of the present International Equities Market

From the information presented in earlier Sections on the national Exchanges, it is apparent that they are diverse and that the devices whereby the members adapt their procedures to foreign business vary according to the different regulatory regimes governing their domestic business. As established in Section 12, there is already substantial activity between the Community capital markets. Members' participation in it has, in the main, been achieved by permitted deviations from procedures and rules of their domestic markets. The present international market comprises two elements. First, floor dealing in locally-listed foreigns and second, off-floor international dealing, which now appears to be the bulk of the market and without which the local floor markets in foreigns could not operate.

In presenting the results of the survey to the Commission and the Committee, the Consultants attach importance to the empirical evidence of the manner in which the European international equities market has developed, spontaneously, to date. The designers of a Community equity market linkage do not have a blank sheet of paper on their drawing board. Any practical approach to linkage must take into account the actualities of the present markets.

This done, it is possible that the situation might be steered towards the objectives of the Commission and the Committee, but such directive power is limited. Each national market is a vast organisation, involving directly or indirectly some thousands of participants in the securities industry. The Stock Exchanges may control operating features of the markets but their broad evolution is the result of a complex combination of ceaseless financial developments within the markets and economic and social determinants, which impact on them externally. A notable current acknowledgement of this is the present situation in the United Kingdom, in which the Government had to...
acknowledge that the ponderous and rudderless litigation by which they had intended to contrive changes in the Stock Exchange was less effective than the simple exposure of the City to competitive pressures which, in reality, were bound to be the driving force in re-alignment of the London market. If this general premise is accepted, then to develop any particular market strategy, such as international linkage, within the Community, significance must be attached to current developments in the markets themselves. Discriminate measures can then be taken to encourage or discourage aspects of such developments.

12.2 Schematic illustration of the International Equities Market

Despite the many variances at national level, it is possible to depict a synthesis of the present European international equities market. The essential elements of the situation are schematically illustrated in diagram 13.1. This sketches the relationship of:-

(i) the market of origin in a security (Stock Exchange 'B'), presumed in this general case to be the main market for the security, and;

(ii) another of the Community Stock Exchanges on which the same security is listed and dealt.

The diagram is intended to illustrate the following situation:-

(i) Floor markets are made in the security in both Exchanges. The character of these two markets in the security differ. In Exchange 'B' the security is dealt in a presumably broader market as a domestic stock. In Exchange 'A' an effective floor market is presumed for it as a 'foreign listed' security. This market in Exchange 'A' will tend to be narrow, with dealing in small size and the security possibly dealt as a transformed local instrument (i.e. local bearer or local depository receipt). Due either to the attractiveness to the smaller local investors of quotation in a local form and in local currency or to the lower cost of a small transaction in a foreign equity on the local
SCHEMATIC ILLUSTRATION OF INTERNATIONAL TRADING IN A SECURITY ON MARKET OF ORIGIN ('B'), AND ON ANOTHER COMMUNITY EXCHANGE ('A') ON WHICH THE SECURITY IS LISTED

DIAGRAM 13.1
Exchange, private client and small institutional business in the security will tend to be dealt in the local market. This operation has the advantage of both sides of the transaction being on the one floor, and dealing will be effectively supported by information and settlement services of the national Exchange.

(ii) The institutional and large-size business in the security in Country 'A' will tend to go direct to the market of origin, market 'B', as the broadest and most informed market. There are notable exceptions to this in the genuine 'international' stocks, such as the five or six major Dutch securities, but the general case stands. The strength of this tendency depends on the strength of the broking in the market where the order originates and also on the efficiency of the market of origin.

There appears overwhelming evidence that the preponderence of large business goes direct to the foreign market, normally without a local broker being associated. The diagram illustrates the distinction and the linkage between the floor markets in Country 'A' and Country 'B'.

The international market, on the periphery of both Exchanges, is off the floors, carried on in dealing rooms driven by and operated through telecommunications. Insofar as such locations are within member firms, they may be considered to be carrying out Stock Exchange transactions under loose regulation, though as observed in Section 12 such transactions are not recorded. An unknown proportion of dealing of this type is carried out by banks or foreign brokers who are not members of the Community Exchanges. The diagram omits the variant whereby an institution might deal through the local branch of the foreign intermediary, in this case in market 'A', rather than direct to the foreign centre. This does not normally apply in European securities as, for the reasons discussed in Section 16 below, European brokers do not set up branch offices in other Community markets and, as yet, the European banks have not exploited their potential to use their foreign subsidiaries as international equities dealing networks.
(iii) The broker in market 'A', unless protected by total monopoly of dealing (which would, in any case only apply to the small segment of foreign securities locally listed) is disadvantaged in two ways in respect of orders in the security. If he receives the order, double commission would normally be payable because of duplication of the agency function in the two markets. Secondly, unless he is a large, specialised broker who has invested considerable resources in contacts and research in market 'B', he is less likely to be expert in the security than the brokers in the main market. Nor will he be as sensitive to likely behaviour of the market itself - the other essential dimension of advice to the investor. This situation influences the larger institutional orders to the markets of origin.

(iv) While the above assertions are totally true in respect, for example, of dealing in U.S. securities, their application to the Community Exchanges requires qualification. Due, in the main, to use of collective price systems, the markets in most Community countries tend to be narrow. The floor trading systems are, in general, not capable of direct absorption of foreign institutional orders. This problem tends to be overcome by a perimeter of international-dealer brokers or banks who are ready to deal, on their own account, in the size required in the international market. They then are able to control the other side of the transaction on the local market in such a manner that it does not exceed the capacity of the floor dealing or, alternatively, deal in size off the market. The problems of this situation are discussed below but, in this summary, it should be noted that the floor trading systems in domestic stocks on most of the Exchanges are able to survive due to 'buffer' activities, off the market, carried out by the larger brokers and the banks.

In the case quoted of a security of Exchange 'B' which is traded heavily internationally, the 'centre of gravity' of the market for the stock in Exchange 'B' might thus vary. It might, as would certainly be the case in any U.K. domestic security, be on the Stock Exchange floor. It might, however, be off the floor in the international dealings of the major members. It might in extreme cases be off the
floor in the hands of non-member banks. The diagram does not attempt to illustrate this complex point.

(v) The diagram shows the Stock Exchange member intermediaries of market 'A' dealing with those of market 'B'. Their ability to do this would, however, be governed by the regulations of their own Exchanges. These transactions, with one side in one market and one side in another, are not generally recorded in the official statistics of the Exchanges, and their value and volume are not known. A major consequence of a European trading network would be to capture both sides of inter-Exchange transactions in a single information system. The diagram illustrates that inter-Exchange dealing between members is normally undertaken under special 'international dealing' conventions, which differ from those to which members are restricted in their domestic markets.

(vi) The order-routing links between international-dealer members in the two markets may be arbitrage or direct international dealing. The general market view appears to be that 'classical' arbitrage (i.e. the assumption of a position as a principal in one market to undo it in another, with the effect of equalisation of prices) is no longer possible between European Exchanges. Europe is virtually in a single time zone, its telecommunications are effective and pure arbitrage would be swamped by the large international stock movements that can be undertaken directly by big investors. These factors have combined to reduce arbitrage margins and to increase its risk. The exception to this is the continued need for arbitrage to service local markets which, either due to private investor preferences or to monopoly, have discrete characteristics.

(vii) The diagram suggests that the main price effect, in the general case, would be exerted by the market of origin. It might be assumed, all things being equal, that a price lag will exist between the two markets. As the international market tends to involve one-way trading, this situation normally favours the client ordering in the market of origin.
Assuming the efficiency of the two markets to be equal, a finer spread of price should be obtainable in the larger market 'B'. Recourse directly to market 'B' also avoids the client incurring any indirect cost of moving stock to market 'A'.

The price communication system in the example shown is in the form of a broken loop, with the weakest link between the institutional investor in Country 'A' and his national market 'A'. Given that the institutional investor orders in market 'B', his transaction will affect that market price. In fact, in the American case, information systems are sufficiently sensitive to permit a major European investor to see the effect on price of his own New York transaction, virtually when it occurs. In the following trading session on the floor in Country 'A', the change of price on the main market will be the major determinant of the local price. The local price will not be significant to the institutional client in Country 'A'. He may indeed find it more difficult to obtain and worse specified than the price in the main market.

(viii) The diagram acknowledges distortion of demand for the security (possibly reduction to zero) by artificial obstacles lying across the national frontiers. Statutory, fiscal and exchange control obstacles introduce severe imperfections into the demand for European securities and therefore into local price. Technical factors, such as difficulties of international settlement, which impede international dealing, are facets of the same problem. These are discussed in later Sections.

(ix) In the case illustrated, the pattern of international business relates, as stated above, to a security issued on Exchange 'B', which is presumed to have the largest market in the stock. With regard to a security issued on Exchange 'A' and presumed to have its main market there, the situation would be the exact reciprocal of that discussed above.

(x) It should be noted that depicting only two markets over-simplifies the dealing, in the case exemplified, of members and investing institutions of Exchange 'A' in the security of Exchange 'B'. It is likely that large
orders might be only partly met through Exchange 'B' and would be made up by parts of the order placed in other Exchanges. A network of international contact exists through which this may be done. This adds an important element to the system illustrated, which is confined to the more normal situation of recourse to the main market.

13.3 The main Policy Issues of Linkage

Diagram 13.1 attempts only to schematise the general situation. Illustration of the exact relationships between the individual European capital markets would call for more complicated expression. The diagram does, however, adequately depict the general framework within which proposals for linkage must be considered. Notably, it permits two main issues of linkage policy to emerge.

(i) The first relates to the increasing practice of direct recourse to the market of origin or main market in the stock. This might appear to achieve one of the major aims of linkage - confrontation of all orders in a particular stock - by the tendency of the large orders to concentrate in this market. As discussed elsewhere in the Report, such ideal concentration is not achieved as, in most of the capital centres, a dual market for foreign stocks, part on and part off the floor, exists. There is no doubt that an approach to linkage based on the floors of the markets of origin would be favoured by the Exchanges, whose prime concern remains the protection of their domestic markets. A negative example of this attitude was the European Options Exchange, which was originally conceived as a genuine European Options market but of which development has been impeded by the fears of other Exchanges that underlying markets in their securities might be built up in Amsterdam.

A less favourable aspect of the trend to use markets of origin is that the practice disturbs the relationship between the local brokers and their natural clients, the local institutions. It encourages the development of dealing rooms and supporting research within the investing institutions themselves. This erodes the brokers' financial base for the development of these functions, which should, more appropriately and efficiently, be concentrated within the broking firms.
It is further questionable whether, in the longer run, an approach which concentrated dealing in major European securities in their markets of origin would achieve the prime aim of the Commission - to develop a genuine European capital market broadly based across the Community countries, reflecting the combined strengths of the national economies in its scale of operation.* If Exchanges, under the linkage system, simply consolidate their local hold on major domestic securities, the potential to make markets on a European base would not be exploited. Dealing would tend to be constricted by the narrowness, or other limitations, of each individual market. The system might also be to the disadvantage of some of the smallest markets, which would have difficulty in playing the role of the main market in their major domestic securities. Examples of this exist at present.

In terms of practical policy decision, this question translates into whether the European linkage will be so contrived that it encourages market-making or price formation across the broad base of the markets as a whole or whether, through maintenance of many existing practices and constraints, it does not.

(ii) The second, and possibly more important, issue illustrated by the diagram is whether the linkage between the Stock Exchanges should be based exclusively on the market floors, exclusively on the peripheral international dealing network or on a combination of both. The greater part of this Report is aimed at demonstrating that the first solution, though in many ways ideal, cannot be achieved until the longer term. The second is undesirable in principle. The practical short and medium term action, therefore, lies in the third alternative - the design of a network which encompasses the Stock Exchange element of the entire system illustrated in diagram 13.1, but which is biased to reconcentrate as much business as possible on the Stock Exchange floors, or floor systems.

* An exposition of this concept relevant to the Consultants' study was given by Christopher Tugendhat, Commissioner of the European Communities, in his address in Milan - January 25 1980.
Much of this Report is concerned with advancing information which might assist the Commission and the Committee to resolve this question. The essence of the problem may be summarised as follows.

The Stock Exchanges still consider their physical market floors to be the fundamental base of their organisation and structure. Although the floors originated at a time when concentration of transactions and the interaction required for the dealing could only be attained by a concourse of dealers in close physical proximity, a situation now superseded, the Stock Exchange remains firmly committed to floor trading.

The reasons for this are complex. In part, they arise from interest. The present business of most members of the Exchanges is, in the main, conducted on the floors. In most cases, the floor trading is the exclusive privilege of the broking community, endorsed by law, and the members of the Exchanges would not wish to see this position changed or eroded.

The more serious and valid justifications, however, relate to the regulation and efficiencies of securities trading. The rules of the Stock Exchanges and the underlying legislation, where it exists, are rooted in the belief that a transparent, concentrated and well regulated market can best be secured through dealing on a physical floor of a Stock Exchange. This is strongly endorsed by the conviction of Stock Exchange members that securities trading is a personalised business and that both efficiency and integrity in dealing is best assured by the personal contacts which face to face trading make possible. The lack of success of forms of automated trading both in Europe and outside it endorse this attitude of the Stock Exchanges. A further argument, advanced by the Commission in favour of floor trading, is that it constitutes tangible evidence to the small private investor of a transparent and properly conducted market.

On the other hand, it has been observed that international dealing has, to a considerable degree, 'left the floors'. The obvious relevance of
modern telecommunications to international dealing, and the advanced information and on-line computer facilities supporting it, has tended to move international business from the conventional trading floor to dealing rooms in member firm's offices. These are more easily able to accommodate the equipment, operate through all hours and generally provide a suitable environment for conducting foreign business. These are the facilities which presently provide the essential intermediation between the different market floors of Europe. The extent to which such dealing, if conducted by Stock Exchange members, should be defined as 'off-the-floor' requires careful definition. It cannot be considered off the Exchange, as the members conducting it are subject to Exchange regulation, even though this is looser in this area of business. The status of such dealing varies from Exchange to Exchange. The dealing rooms of the London jobbers are most appropriately considered extensions of the London market floor re-located for operation convenience, on the other hand, those of the German banks or French brokers could not be considered Exchange dealing, otherwise they would fall under the various local legislative requirements and their operations would become compromised and perhaps impossible.

Any central regulation and development of this element of members' business by the Stock Exchanges is difficult for two principal reasons. Firstly, although it is necessary to permit members to operate in the international market, such concessions are invariably at variance with the strict application of the rules of the domestic markets. It is a grey area of Stock Exchange regulation. Secondly, although it is essential that the Exchanges be active in the international market both to remain competitive and to permit foreign access to the domestic market, only the large brokers and banks tend to operate in this expert field. The Stock Exchanges are democratic bodies, in the main comprising small brokers whose activities are centred on the local floor dealing. A problem might, therefore, be anticipated in achieving any positive, officially-supported development of the off-floor international market which might, at least superficially, appear to be in the interest of a minority of members. It naturally arises from the different market situations that the Stock Exchanges themselves will take differing standpoints on the two approaches to linkage.
The essential problem of effectively linking the Community Exchanges is, therefore, to find a solution which will accommodate the Commission and those of the Stock Exchange authorities which are pre-disposed to any solution which will enhance the position of the Stock Exchange floors, yet which will, at the same time, effectively embrace the off-market international operations and consolidate them within the frameworks of the official markets.

Before this question can be developed, it is necessary to review briefly the series of obstacles which stand in the way of linkage of the Community Exchanges. These are considered in Sections 14 to 18.
The obstacles to linkage presented by the impositions and restrictions of national Governments lay outside the Consultants' terms of reference and no detailed study of these was attempted. The adverse effects of such fiscal or legal obstacles are the subject of other Community-level initiatives. However, these obstacles, of which the most draconian is Exchange Control, are so important an impediment to the emergence of an effectively linked equities market in Europe that brief mention of them must be made, to reflect market comment received.

During the period of the study, the economic and financial environment influencing the national Governments in their attitudes towards the capital markets radically changed. The last decade had been characterised, in virtually all member countries, by economic and social influences hostile to the equities market. The economies had moved into recession, with low or zero growth, through which the Governments of the time maintained heavy social expenditures. The priority of Governments had been to finance consequent deficits. Interest rates rose to unprecedented peaks to permit heavy Government funding, reduction of internal liquidity and protection of currencies. In an inflationary situation, with industrial performance depressed, the return to equity capital had been far below that available from secure fixed interest instruments. Government bond issues, on a massive scale and at interest rates against which equity capital could not compete, had crowded the issue of equity out of the capital markets.

During late 1982 and 1983- the latter part of the study- in response to signs that the world economy might be slowly moving out of recession, interest in the Community equities markets sharply revived and strong bull markets were experienced in almost all the Stock Exchanges. Possibly the main force in the regeneration of the markets was, however, the flow of U.S. funds to Europe, notably the E.R.I.S.A.* foreign investment. The encouragement revival in the markets should not obscure the fact that most of the restrictions, which contributed to * U.S. foreign investment now considered within the guidelines of the Employee Retirement Income Security Act - 1974.
the weakness of the European Exchanges during the recession and which presented obstacles to inter-Exchange trading, remain and will tend to arrest the full development of both the individual markets and of an effectively linked market at European scale.

14.2 Capital Market policies

The overall attitude of Governments to the capital markets is undoubtedly improving. Until the end of the 1970's there was little sign amongst the Community national Governments of any consciousness of the need to promote the equity capital markets as a prime instrument of industrial re-structuring and economic growth. Due either to complacency arising from a former but lost industrial primacy, or to undue respect for the sanctity of traditional institutional forms, or to mistaken identification of the capital market with one side of partisan politics, European Governments were slow to develop positive capital market policies. The results of such measures in Far Eastern markets, to which substantial European financial resources were at that time flowing, appeared a matter of indifference to European Governments.

During the later 1970's this situation changed. The sequence of important French commissions culminating in the Pérouse Report, which led the way in Europe in reviewing the role of the Stock Exchanges as an instrument of combined economic and social policy, resulted in the Monory measures and, possibly more significantly, in the programme of Bourse reforms which are now in progress. The French law was followed by the de Clercq measures in Belgium which, aimed both at stimulation of investment and at improvement of industrial performance, were wider in concept than their French model.

While this type of scheme provides no incentive for increased equity investment by the gross funds, which in several countries (e.g. Holland) is required to secure effective portfolio re-structuring, it is, nevertheless, valuable to regenerate public interest in the equities markets.
In Germany, the efficacy of the present capital markets system in securing industrial renewal is being widely questioned and a series of Commissions, with wide financial industrial and Government involvement, are in course of considering changes. The Italian Exchanges and banks are discussing a new and modernised structure for the market. In Holland, a new securities law is emerging. In Denmark, the limited role of the central market is being questioned and the Government has expressed readiness to support concentration of transactions in the Exchange if this can be technically achieved. The Luxembourg Government has, over a long period, demonstrated its readiness to support an evolving and versatile capital market.

The United Kingdom Government has set in train a process which will permit the London market to face the full force of foreign competition.

There is now considerable evidence that, at the level of capital market policy, the Community Governments are, in their individual countries, prepared to take steps to re-activate their equity markets. In fact, the Governments might be considered to have been at least as dynamic as the Exchanges themselves. Following the Pérrouse Report, the complex fiscal proposals of the Monory law were in effect by 1979. The Bourse re-organisation, elements of which had been advocated by Commissions before Pérrouse, is only now in progress, with the more fundamental changes still unresolved.

From the standpoint of European linkage, the most important point related to developments is that they all focus solely on national needs. There is no effort being made to ensure that the re-organisation of the Exchanges at national level should cohere to produce a realistic and progressive equities market policy for the Community as a whole. The European dimension is not only absent from these measures but some, such as discriminate encouragement of national investors, militate against it. The first prerequisite of international investment interest is the
vigour and health of the domestic market and, to that extent, Government policies to develop the national markets will stimulate cross-border transactions. Conversely, as the Pérouse Report pointed out, the effective development of national markets, in the modern context, calls for international involvement, of which foreign dealing by nationals is an essential element. This far-sighted comment remains to be reflected in the capital market policies of member Governments.

14.3 Fiscal inequalities

Notwithstanding any change there might have been in the general attitude of Governments to their capital market, nothing has as yet been done to remove or ameliorate the wide range of fiscal obstacles* which stand in the way of linkage of the European Exchanges into a single market system. Progress in this field is rendered difficult by reluctance to lose revenue, though such loss might well be compensated through increased market activity and effectiveness, and by inertia arising from the complexity and inter-locked effects of fiscal changes.

One of the most basic fiscal obstacles is the differences in systems and levels of corporation tax in the Community. The countries of the Community have not yet achieved standardisation of corporation tax, either in terms of the fiscal system under which it is levied or of the effective level of the tax itself. As a result, the yield on any given security differs in the hands of nationals of the different countries and an element of imperfection is introduced into demand. Belgium, France, Germany, Denmark, Italy, U.K. and Eire operate various forms of imputation systems, while Luxembourg and Holland adhere to the classical procedure of double taxation. The basic rates of corporation tax vary from 54% to 37%. Tax credits on net declared dividends, in the case of the imputation systems, vary with regard to the percentage of dividend and tax.

* A comprehensive statement is available in the O.E.C.D. Council Paper C(80)13 of February 1980 "Review of the experience of member countries with controls on international portfolio operations in shares and bonds".
The withholding tax levels governing the dividend payments to non-nationals are less disparate, ranging from 20%-30%. These must be considered in relation to bilateral tax treaties which set the level of withholding tax allowable in the country of receipt. Different levels of withholding tax may determine the location of deposited stock and, for reasons discussed in Section 20, may prove an obstacle to rationalisation of settlement. The reluctance of Belgian investors to deposit stock in the C.I.K. is a prime example.

The Commission has in hand an initiative to harmonise corporation tax and withholding tax payable and the tax allowable on dividends. An ideal range of corporation tax of 45-55% has been proposed, which would accommodate most countries but which would be too high for Italy. The Netherlands have been reluctant to abandon their classical system but are currently reviewing their stance. The Italian CONSOB has declared support for similar fiscal treatment across Europe. There are, therefore, promising moves. Any attempts to rationalise are, however, complicated by dependencies between corporation tax and other aspects of the fiscal structure, for example the huge field of personal taxation. Standardising corporation and withholding taxes alone would not rectify, and in fact might make worse, other international fiscal equalities affecting share prices. The Commission's proposals for harmonising systems of corporation tax and of withholding taxes on dividends were put forward in 1975 and remain unresolved. The Consultants consider the conclusions of the Commission's 1980 Report to the Council* of highest relevance to linkage of the Stock Exchanges.

Member Governments are further responsible for many fiscal inequalities which directly affect the securities markets. Possibly the most significant is non-deductability of the cost of share capital from taxable profits while loan interest is deductible. Imposition of stamp duty tends to discriminate heavily against equity in favour of bonds. In the U.K. equity transfers are stamped at 1%.

* Report from the Commission to the Council on the scope for convergence of tax systems in the Community; Bulletin of the European Communities; Supplement 1/80.
while Gilts pass free of stamp. In Italy the stamp duty on equities is nearly twice that for bonds. The disparities between the rates might be considered to have some effect on where a bargain is executed—comparing the 1% U.K. level with the German 0.2%, for example. The general practice of levying stamp duty on securities transfers in the Community exposes all the markets to foreign competition. Much loss of London business to North American intermediaries may be attributable to it. With any forthcoming incursion of large U.S. securities houses into the London Stock Exchange the removal of the U.K. stamp duty on securities transfers would become essential.

Indication of the extreme difficulty in progressing even modest fiscal harmonisation is given by the fact that proposals related to indirect securities taxes were presented by the Commission to the Council of the European Communities on April 2 1976 but had not yet been discussed at the time of the Consultants' study.

A further range of fiscal inequalities has impact on investment preferences. Tax concessions related to certain forms of insurance or to investment in building societies favour indirect investment at the expense of individual holding of equity. Such concessions arise from consideration of social factors; their effect on the share markets is rarely considered.

Fiscal impositions with too adverse an effect on industry tend to distort balance sheets and profit and loss accounts. In acute cases, they may lead to distortion of corporate finance, undue retention of profits and inadequate dividend policies. In Germany fiscal charges payable and legislative requirements related to corporate structure have discouraged re-incorporation to public company status. The poor equity ratio of German companies appears largely attributed by German capital market experts to tax considerations. The seriousness of this problem is well indicated by the fact that in the 25 years after 1946 the equity-

* In Belgium, stamp duty to be paid both by the purchaser and seller is as follows:—
  - 0.7% Government Debt.
  - 1.4% Where the loan is classified as "indirect debt".
  - 3.5% Corporate bonds and shares (Cash market).
No stamp duty is levied on public sector issues but 3.5% is applied to private sector issues.
debt ratio of the German companies changed from 46:54 to 21:79. A tax is levied on the issue of capital and public re-incorporation of companies is not encouraged by obligations incurred in respect of company structure.

Fiscal measures exist which impose discrimination between nationals and non-nationals or non-residents. The German reforms of 1977 made higher tax credits available to German than to non-resident holders. Tax concessions in equity investment which are available to residents only, as in the case of the French and Belgium schemes, though constructive in the domestic markets, introduce an element of distortion into the international demand for securities.

An 'offshore' approach to receipt of untaxed profits may distort the natural market location of companies and unduly encourage the development of a foreign market at the expense of the bona-fide capital centre for the stock. A considerable amount of securities dealing in Europe is moved from its natural market for reasons related to taxation. The close link between high taxation, flight of capital and Exchange Control should be noted. The Belgium market is considered to lose substantial bonds business which is routed around Brussels, through London or Zurich, to avoid the payment of withholding tax.

The type of fiscal obstacles reviewed above do not kill the markets. Inter-Exchange dealing has developed in spite of them. They have had, and will continue to have, a depressing effect on the development of international trading in Europe. Overall, the fiscal discrimination against risk capital, which is universal, has had an adverse effect upon the development of the equity markets of Community countries.

14.4 Exchange Control

The ultimate level of interference by Government in international business is the imposition of Exchange Control regulations which prohibit or impede international transactions in securities. Within the Community this cannot be justified by the philosophy that domestic
financial resources should be applied to domestic capital formation. Article 67 of the Treaty of Rome requires free movement of capital between member countries. The only legitimate justification for Exchange Control is allegedly essential protection of a national economy. The force of Article 67 is mitigated by the transitional period permitted on entry and those Articles which enable restrictions to be imposed under certain circumstances, such as balance of payments deficits (Articles 108 and 109), or to rectify disturbances in the national capital market (Article 73). The provisions of the Treaty were reinforced by the publication of two Commission directives, in May 1960 and December 1962, requiring further liberalisation of capital movements. Under Article 169 the Community can take a member country to the European Court if the country defaults in these requirements.

The Exchange Control situation differs across the ten member countries of the Community and, to summarise the situation, they can be divided into three groups:

1. **Group one - The Restricted Countries: Greece, Ireland and Italy**

   Greece still remains in the five-year transitional period of admission into the Community. The Exchange Control laws which existed before entry still continue in force and it is not possible for Greek citizens to buy foreign securities before an assumed date of 1986. E.E.C. citizens are able to invest in Greek securities but require permission from the Central Bank to repatriate the proceeds of sale of any investments. No foreign securities are dealt in Greek Stock Exchanges and no Greek securities are dealt in other E.E.C. Exchanges.

   Apart from depriving the smaller Greek investors of participation in equities of other Community countries, the regulations have the effect of ensuring that the Athens Stock Exchange and its members can play no part in the management of the substantial foreign assets in the hands of the cosmopolitan Greek business community.
In Eire, within a rigorous system of Exchange Control which uniquely discriminates against transactions in securities, Irish residents are not permitted to acquire additional foreign currency securities. Switching is permitted within three months of sale. The discriminatory nature of these restrictions is illustrated by the fact that, illogically, the Irish regulations do not apply to use of foreign exchange for purchase of consumer durables, holidays, shares in race horses, precious metals or property for personal purposes. Within the Irish system there is discrimination also between the private and the institutional investor. Irish institutions have the option of either investing 10% of their net cash flow in foreign currency securities or holding foreign securities up to 10% of net actuarial liabilities.

The Irish Stock Exchange has cogently argued the case against Exchange Control in a submission to the Eire Minister for Finance*. In summary, the paper points out the highly discriminatory nature of the Irish Exchange Controls. It advances evidence that the regulations do not achieve their publicly-stated objectives in that they are irrelevant to achieve their avowed aim of protecting Ireland's external reserves. It refutes the implied allegation that purchase of foreign securities is an efficient form of currency speculation. It makes a case that the existing controls hinder portfolio management and prevent overseas earnings. Finally the extent to which the regulations damage the Irish Stock Exchange is described.

The Irish institutions confirm distortions introduced into portfolio management by the controls. There had always been an understanding with the Department of Industry and Commerce that the Irish insurance companies should not hold more than 20% of their assets overseas (though this did not apply to Pension Funds). The most radical effect of the 1978 measures was the break with Sterling resulting in the redefinition of U.K. as a foreign market and U.K. securities as foreign securities.

* "The Need for Change in Current Exchange Control Regulations; The Stock Exchange, Irish; October 29 1982".
To summarise an extremely complex situation, Exchange Control, apart from the 10% concession, implies that the main source of equity investment for the Irish institutions should be the Dublin Exchange. Yet the market is too narrow to support such demand. In 1982-83, two major banks represented more than one third of market capitalisation and the addition of a single large company took the proportion represented by three securities to 50%. Total market capitalisation was £900m in 1982 yet the institutional cash flow per annum was £400-£500m. Thus no proper asset mix with appropriate equity exposure was possible to the insurance companies. While it is true that the method of valuation, in which income is more important than capital gains, will influence insurance investment into gilts, adequate investment in equities is essential for the growing with-profits policies.

The inadequacy of supply of equities had not resulted in high equity prices because of professional investment disciplines, and large institutional savings had tended to flow into property. With P.S.B.R. at 24% of G.N.P., Irish equities were depressed at the time of the study. The Exchange Control measures had prohibited the private and, to a lesser degree, the institutional investor from acquiring further foreign securities, without, at that time, any stimulus to the local equities market.

In Italy, although Exchange Control has been intermittently imposed since 1917, the present controls date from the crisis of 1973 when Italy invoked the use of the 'escape clauses'. The principal requirement of the present Italian controls is deposit, in a non-interest bearing account in Italy, of 50% of the consideration of any portfolio investment in foreign securities. Since 1976, compulsory financing of foreign exchange deals by the purchaser in foreign currency has been required. Law 159 of 1976 also re-introduced penal sanctions for contravention of the regulations. A significant concession in outward investment exists in respect of assumption of a major participation (i.e. 20%) of a foreign company in a related line of industrial business.
The 1973 and 1976 measures have resulted in the exclusion of foreign equities from the Italian Stock Exchange and deprivation of the private investor of participation in the securities of other Community countries. As indicated in Section 12, the overseas' equities holdings of the Italian investors have increased considerably during the recent period of Exchange Control. Effective management of the insurance institutional portfolios is, however, crippled not only by the 50% deposit rule but also by the fiscal discrimination against foreign investment, requiring payment of 30% withholding tax on the coupons. The regulations further affect availability of foreign stocks or bonds to be used as an alternative to cash guarantee in foreign insurance activities.

Investments abroad can only be switched without re-deposit if the maturity of the proposed investment is not longer than the maturity of the original investment. Thus it is impossible to switch from equity to equity. Nor is it in effect possible to switch between bonds of permitted maturities because the withholding tax would then have to be paid. Although the insurance companies are eligible for fiscal credit, this might take three to five years to recover, over which period the tax costs would have to be financed.

The companies' equity investment is therefore channelled to the 150-160 stocks in the Italian market, of which very few (possibly ten or twelve) are genuinely marketable at an institutional scale of investment. Similarly, their fixed interest investment is confined to the local bond market which is free of tax. As a result, Italian insurance experts assert that many of the portfolios cannot be managed at all. The results within the equities market are a shortage of good stock in the handful of securities which are in prime institutional demand, an illiquid market through the consequential tight holding and a tendency for price-earnings ratios to rise to unacceptably high levels.

Informed opinion amongst capital market professionals in Italy, in the institutions, the banks and the Stock Exchange itself, appears uniformly adverse to the maintenance of the present Exchange Control
restrictions. This view, to some extent, is shared in official quarters, though in that case the intellectual agreement on the adverse effects of the measures is tempered by the priority of assuring the Government's massive financing needs.

Two developments in Italy offer slight promise of relief. Law 159 is at present under review. The operation of the long-awaited investment funds is expected to start in mid-1984. Local opinion is that this new investment pressure on the narrow Italian market will force the authorities to liberalise capital market policy and permit the funds to invest abroad, possibly within the Community.

Under present regulations, all three countries, Eire, Greece and Italy, will effectively be prevented from participating in an improved linkage of the European Exchanges. The arguments for and against Exchange Control are complex. The essential reason for it is the unwillingness of Governments to take the rigorous measures required to strengthen their currencies. The essential reason against it, or against its long term continuation, is that it is an artificial protection which not only does nothing to eradicate the underlying weakness it purports to protect but through its protection renders the weakness endemic. The essential U.K. case for its removal was that the most significant currency movements 'controlled' within such systems are those related to industrial direct investment. In the U.K. case, as indeed is the fact with the three countries presently discussed, the Exchange Control authorities admitted that they never had effective control of this level of capital movement. At the same time, the infliction of petty controls on the private investor and the public at large made the U.K. system immensely unpopular, involved huge bureaucratic costs and was of no consequence or significance as far as the protection of sterling was concerned. The system did not achieve its aim and it proved incapable of preventing a series of recurrent sterling crises. It had many adverse and yet no positive results.
No consideration appears to have been given in the three Exchange Control countries to relief of the restrictions in the specific case of equity investment in other Community countries. This would be a constructive proposal, isolating obligations under the Treaty of Rome from the deeper questions of maintenance of a general Exchange Control regime. The concessions would have only the most minor effect on balance of payments. It has been observed that, at present, inter-country portfolio investment in European equities constitutes only some 15% of dealing in all foreign equities. Portfolio equity investment itself is a minor proportion of all investment, portfolio and direct, bonds and shares. That such a discrimination is practical is evidenced by the relaxation of this type implemented by the U.K. prior to the total abolition of its Exchange Controls.

(ii) **Group two - Partial Exchange Control: France**

The Exchange Control situation in France might be considered to stand midway between the three countries considered above and the remaining countries, which are free from restriction. The original interdiction of November 25 1968 was modified by numerous legal and Banque de France regulations in 1969, December 1971, March 1974, December 1976 and May 1981.

The present position is that French residents may, subject to use of an intermediary authorised by the Banque de France deal in foreign securities which are quoted on the Exchange, are the subject of regular transactions and of which the price is reported, and also in all investment and unit trusts. They are not permitted to deal in securities issued by foreign governments of less than 5 years to redemption. Permitted dealings can be either cash or forward.

Most significant, in view of the current situation, are the regulations of 25 May 1981, which specified that if the security concerned is denominated in foreign currency then the currency must be obtained through the Devise Titre market; if denominated in French francs, the
currency might be acquired at the official rate of Exchange. Similar and reciprocal currency arrangements apply to the subsequent sale transactions.

The French regulations of 1981 are in effect a system of blockage of the flow of French savings into foreign investment, on the principle that, if such movement is discouraged, these funds will flow into French shares. The policy has the double aim of supporting the currency and of discriminating in favour of the domestic capital market.

The Devise-Titre system contains an in-built gearing whereby a weaker franc will increase the premium of Devise-Titre over the official rate and thereby impose greater disincentives to move currency into foreign securities.

The main element of flexibility in the present situation arises from the vast foreign assets in the hands of French investors, which notionally sets the boundary of the Devise-Titre pool, and from the continued freedom from regulation in switching. As a result, the French institutions have considerable latitude to continue to manage the foreign elements of their portfolios. The regulations, however, require that the interests and profits deriving from the 'pool' should not be invested abroad and the details of the regulations have removed local tools for covering against currency risk. Such cover may be possible through subsidiaries held in other Community countries.

Despite the freedom of the French institutional investors to move their foreign assets (as was the case in the U.K. under Exchange Control), any increased flow of funds into foreign securities from France will be arrested by the Devise Titre system. French portfolio investors will be deprived of the opportunity to attain a financially effective proportion of foreign securities. On the other hand, the very substantial foreign assets in French hands, combined with freedom to deal such securities, will continue to constitute a broad base for the Paris international market. This will be further strengthened by the fact that non-residents can freely acquire any French or any foreign security in France.
Similarly, since 1980 direct investment has been between France and the Community countries. The regulations for such investment are, however, elaborate and there are allegations of delay in the official processing of proposed acquisitions, due to the established tendency of French Governments to use the capital market as a tool of international policy. This criticism has now been met by a procedure whereby a simple declaration is made to the Ministry of Finance, after which authorisation is automatic if there has been no response from the Ministry within one month.

(iii) Group three - The Community countries free of Exchange Control

Little comment is required on the remaining countries (i.e. Belgium, Denmark, Luxembourg, Germany, Holland and U.K.) in that they are all in effect free of significant Exchange Controls.

Under L'Union Economique established between Belgium and Luxembourg, of which monetary union is the most important element, the Exchange Control arrangements for the two countries can be considered integral. A double market system is operated, access to which is governed by the nature of the transaction. Payment for goods and services are made at an official exchange rate regulated by the Central Bank; all other operations are carried out at a free market or financial rate, which is determined purely by demand for and supply of Belgian Francs. Within this framework a resident is free to buy and sell any foreign securities and a non-resident is likewise free to operate in Belgium. Incoming direct capital can use either market but any repatriation of the funds must be by the same route. The system is liberal, to the point that it may leave the capital balance unprotected in a heavy deficit situation. The system appears, however, to have operated successfully since the War with the premium moving in both directions, positive and negative. The strains within the system between Belgium and Luxembourg arising from common monetary arrangements without common tax and banking legislation appear to have been withstood.

The position in Denmark changed immediately prior to the submission of this Report and Exchange Controls were relaxed to permit Danish
investors to acquire foreign securities in January 1984. The actual situation in the Copenhagen Stock Exchange will remain, for some time, heavily conditioned by the former restrictions, which had contributed to the narrowness of the Danish equities market and had resulted in at least one Danish company listing and establishing its main markets abroad.

In Holland, Exchange Control is slight to a point of non-existence. The only restrictions relate to issues, by domestic issuers, in Guilders in a foreign market.

Germany is free from Exchange Control. Residents may invest freely in any securities and may hold foreign currency accounts abroad. There is a slight restriction implied by laws related to forms in which German securities may be held, by increasing de-materialisation of German Government securities and, as has been noted, by discriminative withholding tax. Although the German Government has powers related to direct investment under the law on Foreign Economic Relations, no use has been made of them, other than requirement for notification when 20% or more of a company is acquired from abroad.

The U.K., since 1979, has been free of Exchange Control restrictions.

In summary, it can be observed that present Exchange Control restrictions discriminate against the residents of three of the ten Community countries to a point which effectively excludes them from participation in any proposed schemes of linkage of the Exchanges. In all the countries concerned the development of the capital markets, from a domestic as well as an international standpoint, has been damaged rather than assisted by the restrictions. In at least one of the countries, Italy, there appears to be a consensus of professional scepticism on the value of the Exchange Control system. Exchange Control imposed on these countries, with the possible exception of Greece, appears contrary both to general and specific intents of the Treaty of Rome. The restrictions are obstacles to the ultimate achievement of monetary union and common currency. For these reasons,
it appears of greatest importance that pressure, at national and Community level, continues to be applied for their removal.

The impact of the Exchange Control restrictions on the proposals for European linkage is adverse in two ways. In the first case, it self-evidently deprives issuers and investors in the four countries concerned of equitable participation in the benefits of the system, despite their current rights under the Treaty of Rome. Secondly, and of more immediate importance, it deprives the Stock Exchange and the capital market authorities of the three countries concerned of any real role in the formulation of the system. The development of linkage will suffer, as it will be deprived of the moral and technical support of these member countries.

14.5 Summary

The Consultants again wish to stress that study of the fiscal and regulatory obstacles at Government level was not within their brief, nor do they consider this Section to have done more than refer to these questions. Each of the areas mentioned is itself a field of complex study, as reference to any of the documents noted would quickly confirm.

The Section is, however, included for several reasons. Firstly, it acknowledges the awareness of these obstacles amongst the practitioners in the markets. They have to work amidst the practical difficulties they involve and their comments to the Consultants require reflection in the Report.

Secondly, the state of progress in removal of these Government-level obstacles offers an important perspective on the rate at which harmonisation of the Stock Exchange procedures ought to be achieved. The Stock Exchanges are the central intermediaries of each national financial system which they service. As long as the different financial systems impose different requirements on the national Exchanges, the characteristics of the Exchanges will continue to differ. As a European financial system gradually emerges, the Exchanges must respond
and service it through a harmonised capital market. But it would be illusory, and technically unsound, to consider that harmonisation of the Exchanges should, or could, move ahead of the general progress of European financial integration. During the course of the Consultants' study, an important paper on Financial Integration was sent by the Commission to the Council of the European Communities, the conclusions of which relate closely to the obstacles discussed in this Section. There are grounds for hoping for more positive movement on this front.

* Financial Integration; COM(83) 207 of April 20 1983
15.1 Attitude of the investors

The demand in the European capital markets for equity securities of other Community countries is heavily affected by the situation described in the previous Section but it is primarily determined by investor preferences. Institutional portfolio structures in most Community countries are determined not only by investment decisions of the managers but also by Government regulation, and both may constitute a constraint on the development of a vigorous and effectively linked European equities market. Amongst all the investment managers met by the Consultants, there appeared a remarkable consistency of view towards European investment and of attitude towards individual European markets. Nor, on the whole, did the foreign view of a particular market differ from that held by nationals operating in it. This Section attempts to summarise briefly the general attitudes towards inter-European investment met in the market.

The Consultants do not consider it relevant to include in the Report investors' ephemeral views on European investments. These were not consistent throughout the study, reflecting unrelieved gloom in 1982 and unbounded euphoria in 1983. The truth of some of the more general observations, however, persists and these are worthy of comment.

Considering the situation from the standpoint of the professional institutional investor, the small emphasis on second-country European business, in terms of proportion of portfolios and associated trading, arises from two prime causes.

The first, that the liabilities of the institutions tend to be mainly in national currencies. Either as a matter of actuarial prudence or due to Government regulation, the preponderance of institutional equities holdings tends to be in domestic securities. These constitute core investments in which the institutions cannot deal fluidly, due to the size of the holdings and their commitment to them.
The second cause is that European investors have tended to regard
the securities of other Community countries in much the same light
as those of their own economy. The mutual attitude has tended to be
that all the European countries are beset, to a greater or lesser
degree, by the same problems of social and industrial structure and
are within the same economic environment. To offset the higher risk
and cost of foreign investment, the incentive of potential return
markedly higher than that anticipated in the domestic market must
exist. Institutions already heavily invested in their own domestic
securities, therefore, have tended to direct their foreign investment
into non-European countries, in which a different economic situation
might prevail and which offer wider investment alternatives such as
resource or specific technology stocks.

Institutional investment, assuming that there is no Exchange Control,
tends in the first place to be based on world-wide analysis—with
views taken on economic growth, currency factors etc.—which then
dictate the proportions of financial resources flowing to different
markets. For the past ten years, Europe has assumed low priority in
such comparative analysis. Inter-country investment in Europe, a few
genuinely international stocks excepted, has no stable base and has
tended to fluctuate according to investment vogues, linked in the main
to a view on the currency.

This situation may change as revival of the European equity market
progresses. It does, however, explain the build-up of portfolio
structure to this point. The general observation that other European
equities tend to be no more attractive than the domestic securities
may imply a continuing problem in stimulating cross-border investment
at the level which a Euro-equity market will require.

15.2 Inadequacy of research and market information
Interest in cross-border investment in Community equities would be
increased if more adequate research information and promotional
material, developed from it, were available. The statutory require-
ments governing published company information vary, although national
measures and E.E.C. Directives are gradually improving this situation. Professional analysts require more than formal reports and accounts, and provision of data for fundamental analysis is a basic requirement of international institutional business. The German banks, for example, insist on considerable depth of company information. It was broadly accepted that European firms, if approached, are in general extremely co-operative in provision of information beyond basic statutory requirements but such approaches are costly, involving travel and expenses of a skilled analyst. At lower level, foreign private investors do not normally get the companies' reports and accounts. There is no adequate European service of company information to simultaneously report important company events.

The situation is steadily improving as in all the major markets the value of the professional analyst is recognised. More information is available internationally and the difficult problem of languages is being overcome. But all levels of information on the international European markets compare unfavourably with those available in North America. According to one Belgian bank, the promotional activity of the American brokers was so superior that some U.S. securities were better known locally than the important Belgian stocks.

Investors appeared generally satisfied with existing market price information services such as Reuters, Extel, Telekurs, Telerate, Standard and Poors, subject to comment on the quality of price information available from the different markets. It was evident that the screen data from these professional services was, in the case of active investors, strongly supplemented by direct and often immediate information from foreign market counterparties.

Investment analysis across the markets is rendered difficult by absence of standard tools of analysis, such as comparable formula and weighting of indices, or use of adequately-defined standard ratios of company performance. A deeper, related problem was how contrived depression of earnings, due to fiscal factors, should be treated in comparative international analysis.
One result of this situation is a preference of the foreign investor for a limited range of major European companies. In the past, choice of the companies has almost been a matter of indifference once the view on the market had been taken. This has been one factor confining European international equities trading to a narrow range of stocks. There is now evidence of wider and more selective investment. Nevertheless, the cases in which second-line or situation stocks play a role tend to be exceptional.

A further result is that, as the investment is more based on a general view rather than on conventional evaluation of company performance, the large investor tends to withdraw immediately from a falling market rather than 'follow it down' taking appropriate action, as might be the case in the North American market. Large U.K. fund movements are alleged to have increased instability in the Italian market.

A related point is the imbalance of coverage of share information in the national press of the different European countries. This is well exemplified by the share price information published in the London Financial Times. While acknowledging the formidable contribution to market intelligence made by this paper and the progress made in summary publication of the reports and accounts of European companies, there is marked lack of balance in the reporting of European prices and in the volume of market comment. Although some of the Continental markets may be narrow, a situation in which the price of over 2,000 securities quoted on the London Stock Exchange are published daily, while only thirty nine on the French market and forty seven on the German are followed, hardly seems correct across three European economies of comparable size. Moreover, even in the small group of securities for each European country, it is open to question whether all the stocks are those of the most representative and significant companies. The situation in the other national financial journals is similar, or worse.

Although it is not directly in the Consultants' brief, they consider it important to emphasise that, parallel with any technical initiative to
instal linkage of equities dealing, there should be joint effort by the Exchanges to improve the mutual availability of adequate and comprehensible research material and current company information on which cross-border investment decisions might be confidently based. This is essential for the generation of business. It is understood that the Societies of Investment Analysts are making progress in this field. Arrangements for reciprocal exchange of research information between brokers of the different markets might be considered. At the same time, the European brokers might adopt promotional activities, along the lines of those used to good effect by their North American counterparts.

15.3 Mutual view of the Community markets

The views of major investors and brokers, banks and jobbers, obtained in the European markets, were heavily influenced by the previous years during which the performance of all the markets had been indifferent. Attitudes changed in 1983 but the earlier observations may retain an inherent validity. Detailed comments by investors on Stock Exchange operations are incorporated into other Sections of this Report. In summary, the U.K. market was regarded as volatile by Continental standards. The German market was considered as safe, but dull by non-German investors and simply dull by German investors. The Frankfurt index had, until 1982, hardly risen since the 1960's. German institutional investors considered that the market tended to have an undue stability, which deprived them of opportunity of technical dealing of the type available for example to U.S. investors. During the period prior to the study, the A.E.B. had become virtually a bond market, with no new issues of equity for several years. Investor attitudes to the French and Italian markets had tended, up to the time of the study, to be dominated by currency considerations. The Paris market was considered difficult for a foreign investor to use, obscure in various of its procedures related to foreign orders and requiring excessive latitude of order price. Due to Exchange Control and the impossibility of reciprocal business, interest in the Italian market had almost totally faded, an attitude re-inforced by lack of confidence.
in the Lira, and all contacts between it and the other Community markets had been lost.

In more general terms, there was growing acknowledgement that most of the Continental stock markets did not reflect the size or strength of their national industries. This was considered most true in the cases of France, Germany and Italy. Appropriate breadth of investment was not available.

The European markets as a whole, were not suited to respond to the increasing tendency of institutional investors, World-wide, to follow sector performance (i.e. gold or resource stocks, electronics etc.). It is difficult to carry such strategies into European investment. Outside North Sea oil, there are few resource stocks, in comparison with other areas of the World. The identification of companies in growth sectors, such as electronics or chemicals, is often difficult in the Continental markets, particularly in the German, due to high industrial concentration. The assumption until recently was that the innovative growth in the German electronics sector, which was comparable to the current notable developments in the U.S., was taking place within the large German companies and was thus not directly accessible to the investor. Informed German opinion is now questioning whether it was successfully occurring at all and is acknowledging that venture capital in this field has had to be obtained in the United States. Foreign investing institutions have largely had to accept that their investment access to German growth salients must be through securities of the major German companies or financial institutions.

The massive support available across Europe when medium-sized companies of such 'sector' interest, such as Novo, break through, serves to endorse the point.

Most of the criticisms of the European Exchanges made in 1982/83 related to operating factors, which are considered in Sections 16 and 20. Many of the points were currently being met by vigorous initiatives in most of the Stock Exchanges to modernise their trading systems, as described
elsewhere in the Report. It is probably fair to comment, however, that none of them have as yet secured changes sufficiently radical to invalidate the comments made by investors in course of the Consultants discussions.

15.4 Restrictions on institutional investment

The portfolio structures of certain investing institutions in some Community countries are constrained by Government regulations which dictate the types of securities they may hold, the proportions of such securities and other aspects of portfolio balance. Some details of such requirements have been noted in the Sections of the Report covering the individual capital markets.

The requirements for most of the mutual funds, such as the U.K. Unit Trusts or German Investment Funds demand in the main sensible conformity to sound principles of collective investment. They specify the maximum participation in any company by the fund and the maximum proportion of overall investment which may be constituted by the securities of any one company. The regulations for the French SICAV's are more discriminatory. Foreign investments may generally not exceed fifty per cent and the Monory SICAV's are, in effect, confined to French equities. The Fonds Communs are restricted to French securities for five years.

Apart from the French case the mutual funds are neutral on the question of European investment. A constructive possibility, not generally exploited but which would do much to interest the private investor in European securities, would be the general development throughout the Community of mutual funds in European equities, along the lines of the existing London-based European Unit Trusts. Such Trusts might have an element of fiscal support from Governments and might be relieved from Exchange Control restrictions in countries where these exist.

Across most of the markets, the most important regulations constraining the form of institutional investment are those related to the insurance companies. The regulations apply to the technical reserves of the
companies, not the free reserves, but the former represents the great bulk of the companies' assets. The regulations tend to differ, the requirements for the life of the funds being the more rigorous.

In France, for example, Article 332 of the Code d'Assurance specifies the portfolios structures of the technical reserves, of which 33% must be in Government bonds issued in Paris (in effect, French Government bonds), not more than 40% in real estate and the remainder placed in any securities listed in Paris. Thus, while any or all of this residual proportion may be made up of foreign equities, such provision has the prime aim of increasing business in foreign stocks on the Paris Bourse. In Germany, similar regulations limit the German insurance companies' foreign equity investment to securities listed on the German Exchanges, though the Special Investment Funds are used to mitigate the full impact of this constraint. Despite their aim, in neither case are the regulations successful in confining institutional transactions in foreign equities to the national Exchanges. The regulations are, however, effective in distorting, and possibly reducing, return to insurance portfolios.

The investment of the Italian insurance companies is under even tighter regulation. Both maxima and minima are specified for the proportions of bonds and corporate securities in their portfolio and the proportion of real estate is similarly defined. The life funds are subject to the further restriction that only stocks listed for at least five years are eligible. The Exchange Control regulations hampering the companies' operations in foreign securities, which often render foreign portfolio management impossible, have already been noted.

The Belgian insurance companies are freer to operate in foreign shares. The regulations require 50% of investment to be in state bonds and specify maxima of 40% for corporate bonds and 20% for Belgian shares, with a 5% maximum holding in any one company.

The Dutch investing institutions are free of regulations controlling portfolio structures but this has, regrettably, been offset by an almost
total disinterest in equity investment in recent years. At the time of the study, the last real interest in equities had been in 1973. A Dutch pension fund might typically be 80% in bonds and only 5% in equities.

Apart from the U.K., the pension funds do not figure as a major force in any of the European equities markets. In France, there is reliance on the Sécurité Sociale and such pension schemes as exist tend to be based on current receipts financing. Those which hold investments must have 50% of their assets in public bonds or state enterprises. In Germany, private occupational pension schemes tend to be financed within company accounts and the state pension scheme is 90% invested in bonds. In Holland, the largest investor is the state civil servants' pension fund but only 2%-3% of its assets are in shares.

As a general observation, it might be suggested that the greater part of this regulation of institutional investment structure is obsolete and that, in some ways, its effect is contrary to its underlying purpose. If the reasoning behind it is alleged to be assurance of ready liquidity of institutional funds, the situation has long passed the stage at which it can be presumed that this is most readily obtainable in the local market. Until the European markets are broadened and linked, immediate large-scale liquidity of equity investment is more easily available elsewhere. If the justification for the regulation is the belief that Government is better equipped than investment professionals to specify sound portfolio structures, it would appear outmoded. If the regulations are based on a thinly-veiled intent to protect the local capital market, they are contrary to the principles of the Community. Detailed regulation of institutional portfolio structure would appear to have little relevance to the modern circumstances of the securities industry. The effects of the regulations are not great but they may have helped to foster an attitude amongst major European investors which is adverse to risk capital in general, and foreign equity investment in particular. It is also a form of regulation which constitutes a direct obstacle to developing an effectively linked European equities market.
SECTION 16 - OBSTACLES TO LINKAGE ARISING FROM THE OPERATIONAL DIFFERENCES BETWEEN COMMUNITY EXCHANGES

16.1 Introduction

The set of obstacles to which the Stock Exchanges might pay closest attention are those arising from the differences in the dealing rules and procedures of their market floors, as these, to a varying degree, are within their control. If, by historical accident, the Exchanges had evolved common floor procedures and membership rules, any initiative to secure linkage of the floors would present less difficulty. Within the Community there would have been a natural and spontaneous development of cross-border trading through which a market at European scale would be in course of achievement. The situation is far otherwise and virtually all existing forms of Stock Exchange structure and trading procedures are represented within the Community. Given a will within the Exchanges to promote linkage, these disparities will require to be progressively removed or reconciled. Much of the necessary change could be achieved by the Stock Exchanges themselves.

In reviewing the characteristics of the European Exchanges, the Consultants do not intend to infer that any one national system is 'better', in any absolute sense, than any other. The alternatives are simply evaluated in respect of their relevance to the current needs of the international equities markets. The characteristics of each market have developed from local needs, in the main over previous decades or centuries, when domestic securities totally dominated most local markets and when the private client was the principal investor. Expectedly, there is an element of conflict between the form of market operation required to preserve domestic business and that required for the development of international trading. This Section attempts to present a brief analysis of the main variations in operating procedures which stand as obstacles to the development of a vigorous linked Community equities market. Any evaluative comment is limited to that received from market participants interviewed by the Consultants.
16.2 Price formation systems

The most significant of the differences between the dealing procedures of the Community Exchanges is, without question, whether the market is based on collective price formation or on continuous prices involving the intermediation, on the floor, of a market-maker. The superficial interpretation of the division of the Community Exchanges is in this regard somewhat invidious, as it would appear that nine of the existing national stock markets operate on the first principle and only one, the London Stock Exchange, on the second. This apparent overwhelming majority does not, however, readily or automatically resolve the appropriate system for European international linkage for two main reasons:-

(i) firstly, the London Stock Exchange dealing in equities is, in broad terms, equal to the sum of dealings on the other floors—which is not without significance if the relative merits of the two systems are to be compared;

(ii) secondly, this apparent division is far less categorical than it first appears. Virtually all the Continental Exchanges have made concessions acknowledging the need for continuous quotation and the market-making by their members, either on the market floors or in the off-markets.

16.3 Collective price formation; the Theory and the Practice

The floor operations of most of the European Exchanges are deeply and traditionally committed to trading procedures based on collective price formation. In some cases they are constrained to it by law, either explicitly (in the case of Germany), or implicitly (as is the case in France). Though the detail of floor procedures may vary, the collective price systems are, in essence, the same. They all imply the simultaneous confrontation of all buying and selling orders assembled over a specified period (e.g. one day) in a scheduled trading session at an appointed time. Given this, by a mechanistic process an equilibrium price can be established at which the maximum number of orders can be satisfied.
In its full and most rigorous application, the system has unquestioned merits. First and foremost in the minds of Continental proponents of the system, there is no floor intermediary interposed between buyer and seller. The seller therefore receives the buyer's price. Secondly, the system of declaration and confrontation of all orders, at a given time, allows a single equilibrium price to be determined at which all equal or higher bids and all equal or lower offers may be satisfied. The official price is obtained, although the offer or bid may have been unduly favourable.

Given that it is sound to assume that orders can be pre-assembled over a period to form a price in this manner and, secondly, that full confrontation of all orders can in fact be secured, collective price formation clearly has considerable theoretical strength. The price forming process is not normally transparent but the fact that the method of price formation is known gives the public an impression of fairness of the market. The by-product of the single official price is important in certain countries, notably in Germany, to enable the Stock Exchanges to discharge their formal obligations to the general investing public.

A further advantage of collective price systems is that they are well adapted to computer support. The arraying of bids and offers and the determination of price at which transactions can be maximised is an ideal and relatively elementary computer application. The Exchanges have been understandably cautious in pursuing automation of this type, believing that the mechanised approach would be inferior to the present techniques of floor dealing. There is no evidence yet in Europe of the North American and Far East applications to clear small transactions by such computer matching. The Brussels compromise, whereby pre-processed computer listings and an indicative equilibrium price are provided to price officials, both illustrates a valid current usage of computer support and indicates the further potential of computer processing in this type of system.

There are, however, a number of difficulties in applying the theoretical perfection of the collective price system to the actual situations in
the European securities markets. Possibly the most important is that the collective markets can only relate with difficulty to the continuous price operations which prevail abroad. This applies not only to world-wide international trading in securities which are foreign to a particular Exchange, but also to dealing with foreigners in its own domestic securities.

With modern communications providing instantaneous information all over the world, regardless of the time zone, the international equity markets today operate continually over a twenty-four-hour cycle. To participate in them effectively, either in respect of foreign or domestic securities, implies a constant readiness to quote or to respond to continuous prices. Under the formal floor collective price systems this cannot be achieved. In recognition of this, all the European Exchanges active in the international markets have in one way or another adapted their rules or turned 'blind eyes' to permit their members to deal at continuous prices outside official Bourse hours. In some cases (for example, in France, or in Germany in respect of private client transactions), such prices are linked with those of the Exchange. In others, such as in Belgium or Holland, there is more flexibility.

There is now general evidence of an effort to adapt the collective price floors to continuous trading. In dealing in major stocks on all the Exchanges, there have been longstanding precedents for the making of individual prices during the trading session, subsequent to the price fixing. The most notable recent initiative has been in Amsterdam, where the system of continuous quotation on the floor has now been extended to all major securities. An initiative in Italy, the durante market, has a similar purpose but has little current role due to the restrictions on international business. The more normal situation in the internationally active Continental markets is that activity in the continuous market is carried out by the members off the floor, as is the case with the powerful continuous-price off-market operated by the German banks. In Belgium and Luxembourg this function is shared by the larger brokers and the banks. Such markets are interrupted by the formal trading sessions.
This situation immediately highlights the second problem of collective price formation in a modern market, that is that the essential condition of confrontation of all orders is not met. The need to carry out off-market transactions in continuous trading is only one of many reasons for this. Collective price fixing, to be effective, requires a balanced trading situation. The system rests on the supposition that it can be normally expected that for any sold offer of a given quantity at a given price there will tend to be an opposite bid of more or less similar quantity and price. Expectedly, as the system has a mathematical-type logic, this does hold true for the generality of orders. The system accommodates the norm and is extremely effective for handling a mass of average-sized orders. It is self-evidently ill-adapted to orders of above average size. Particularly in situations in which the markets are one way, there is an obvious danger that a large order may destabilize the price. The nature of the price-formation process demands that any order entered into the fixing must seek immediate match. No form of discretion can be interposed in what is a purely mechanical price determination to moderate the impact of such a transaction.

As a result, fluctuation limits have been set up to protect the collective markets. This must, however, be recognised as a negative device which can, and frequently does, lead to suspension of fast-moving markets.

16.4 Collective price system: Transactions in Large Size

The natural result of the situation described above is that the large transactions tend not to be entered into the price fixings and this business is lost to the floors. The extent to which this is likely to occur clearly depends on market activity. It might well be argued, from the evidence of the last few years, that a feedback type model exists, whereby the collective price system in time of recession drives the Continental market floors to lower and lower levels of business, while over periods of recovery the reverse occurs. As business declines, the market will become more and more thin. In consequence brokers and banks will be increasingly reluctant to expose
such business as they have on the floor. The worse the situation gets, the greater that reluctance, and the worse the situation becomes. The extreme example of this might be Denmark prior to the recent revival of the Copenhagen equities market, where, as quoted above, brokers considered their equities market too thin to conduct any significant business, with the result that 90% of the dealing was kept off the floor. The theory would appear further borne out by the exceptional levels of increasing business volume experienced by certain of the Continental Exchanges when business revived.

Evidence appears to suggest that, in general, a collective price market tends to have a low threshold beyond which orders must be considered beyond the capacity of the market. In general, block transactions are carried out off the markets and no formal system of block positioning exists in any of the Continental markets. The actual situation varies from one country to another. In Italy, the trading of blocks is carried out by the banks outside the Exchanges and is totally off the floors. Acquisition of blocks normally involves a premium rather than a discount, due to scarcity of dealable stock. In France, the involvement of an Agent de Change in trading blocks of listed securities is required and the transaction must be linked to one of the current Bourse prices. Foreign investors acknowledge the effective role played by the Agents de Change in the development of this off-market block trading, but the procedure is complex and involves uncertainty of price and execution. The limitation of the Belgian monopoly to transactions up to BFr10m results in a big telephone market in the main forward market stocks in which the large Belgian transactions are not tied to the Bourse price. The leading Belgian brokers play a considerable role in arranging big institutional transactions. In Germany, the large scale transactions are carried out by members, but normally as inter-bank operations. The German fund managers consider the domestic market narrow and lacking in depth. The position in Holland is a variant of that in Germany, but with a formal link of large transactions with the hoekmen. In Luxembourg, due to a longstanding liberal tradition of membership and large-scale admission of foreign banks, off-Exchange trading is at a high level.
It might reasonably be questioned whether the European official markets, which were ideally designed for the service and protection of the private investor, are well adapted to handling large-scale institutional business. This is increasingly dominating the markets and already constitutes the bulk of international trading.

Comment from international investors suggested that their interface with the collective price markets was crude compared, for example, to that with New York. It was suggested that it was impossible to set a fine price limit on an order. Flexibility of 2%-3% of price had to be given to the Continental counterparty. In one major market both foreign and national opinion confirmed that operating limit transactions was virtually impossible. The inability to deal at sensitive price and with assurance of execution is one of the factors inhibiting a higher volume of inter-Exchange dealing in Europe.

The general existence of the off-markets in blocks must pose a question as to the validity of the floor collective price fixings. It is clear that the large and professional transactions should be within floor trading and should influence the official price. The potential danger of the present situation is well evidenced by the generally acknowledged need of a dealer, trading on behalf of a large investor, to occasionally 'move the market'. This implies that he manipulates a price on the floor which will enable him to execute a large transaction off the floor, at a price which is realistic in the local block or the international market.

It is not inferred that the floor prices derived from the smaller bargains are unrealistic. The significance attached by the international market to the Continental price fixings in the local stocks refutes any such suggestion. Nor is it inferred that the collective price systems are manipulated to the disadvantage of the general public. The actual circumstances of the operation of these systems do however, demonstrate that defence of the collective price system on the grounds of its theoretical validity and thereby of its absolute fairness, is naive in context of the way these markets actually
operate. Under modern circumstances, the collective price on the exchanges represents an important signal maintained by expert professionals operating in the market, rather than an absolute equilibrium price determined from all orders. This, however, is not a transparent effect. It cannot be expected to be understood by the non-professional investor and evidence from the Consultant's discussions suggested that it was not understood by the professional foreign dealers. The situation is vulnerable to misconstruction and it is not liked by local professional investors. For example, the Italian banks, who are caught in a situation of this type, would like to replace it with a totally concentrated, transparent market which would handle all transactions.

16.5 Collective price systems; Narrowness of the markets

A factor which compounds the disadvantages of the collective price markets is that they tend to be narrow in respect of the number of securities quoted and the markets in individual securities lack depth. In comparison with the world exchanges at large, none of the Continental markets appropriately relate to the size of the economy they service. The scale of their operations does not relate to economic indicators such as G.N.P..

In the Paris Bourse, 41% of market equity capitalisation is accounted for by twenty five leading stocks (1981) and 51.8% by the first fifty (1982). In 1982, 30.8% of official market equities dealing was in the twenty five most active stocks.

The case of Italy, one of the larger economies, in which this problem is acute, might be taken as an example. In Italy, informed opinion is that there are only some thirty corporate securities effectively available to institutional investors. One company alone, Assicurazioni Generali, represents 12% of market capitalisation and averaged 14% of current transactions in 1982. Although, technically, 20% of the issued securities should be available for trading, in some cases less than 5% is effectively available.
In Holland, leaving aside the five or six major internationals, the greater part of the remaining dealing is in the next thirty major companies, after which there is a considerable gap in magnitude. In Eire, where the Dublin floor is a form of collective price market, six companies represent 70% of market equity capitalisation. In Belgium, 93% of trading volume tends to be concentrated in one hundred securities out of the five hundred listed. Taking German examples, 47% of the share turnover of the Rheinisch-Westfälische Börse in 1981 was concentrated in eight major securities. Fifty eight per cent of the Frankfurter Börse domestic share turnover was in twelve securities and the importance of foreign shares in broadening the German markets is indicated by the lesser concentration of this dealing of which 30% was in the leading twelve stocks. The shares of quoted companies are extensively held by the banks, which contributes to narrowness and illiquidity of the market. This tight holding is reinforced by the general practice of reliance on fixed interest finance and of issuing new equity to shareholders in the form of rights. Regulations awarding fiscal privileges to major participations apply in several markets and, similarly, tend to restrict market liquidity.

The narrowness and lack of depth of the Continental markets cannot be attributed to their price formation and trading procedures alone. The deficiencies of the markets arise from more basic external causes related to corporate finance practices and the attitude of Governments discussed in Section 14. On the other hand, it should be recognised that the collective price system, under which securities are dealt sequentially by the whole market, tends to place a limitation on the number of securities which can, in practical terms, be traded. The system itself tends to focus market dealing on a narrow range of major securities. As the Stock Exchanges have to absorb ever-increasing institutional cash flows, this problem will become more, rather than less, acute in the future.

16.6 Collective Price Systems; Complexity of Floor markets

The differing efficiency of collective price formation at different volumes of business is acknowledged in the existing market floor
systems. According to their activity levels, different securities are assigned to different segments of the market - terme, comptant, corbeille, parquet etc. This is necessary because different variants of the technique are appropriate to active and inactive stocks. This has had the adverse consequence of unduly complicating some Continental market floors. Authorities such as the Perouse Commission and the Italian CONSOB have criticised their markets on these grounds, pointing out that such complexities tend to make the floor operations incomprehensible to the public at large. The segmented market and the complicated, and often multiple, assignment of securities across them results in complex floor operation. A major purpose of the present French market reforms is simplification of the trading system. The German system of the official, the free regulated and the unregulated markets, with their attendant pricing techniques and varying market and off-market procedures, is difficult for the non-professional investor to understand. The same applies to the Italian division into the official, the ristretto, the inter-bank and the intra-bank markets. The regulatory position of these market segments may not only vary but also be anomalous, as is the case in Italy. The complicated division of the markets is reflected in a complexity of member and official roles associated with them. In at least one case, it was considered that, in consequence, ordering techniques had become unduly elaborate.

16.7 Collective Price Systems and European Linkage

It is clear that, in determining the price formation system and thereby the structure of trading for the European linkage, a very considerable problem exists in that the great majority of European Exchanges operate procedures of floor trading which are not well adapted to international dealing.

It is not beyond the bounds of imagination, from a technical standpoint, to conceive an inter-Exchange telecommunications and processing network which would elevate collective price formation to European level. But a moment's thought on the implications of such a system makes clear its impracticability. It would set up a European trading mechanism which
was incompatible with the World's international securities markets. The formation of a European price once a day would be an ineffective punctuation within a World-wide system of twenty-four-hour dealing. While more frequent fixings could be contrived (for example each hour of the trading day), adequate volume of trading would not be attained, due to reluctance of investors and their dealers to commit themselves blindly to the system price or the possibility of non-execution. The factors which have caused larger transactions to become excluded from national price-fixing would apply with even greater force at this remote level. The commitment to trade, which is essential to collective price formation, would not be obtained.

A further objection of market participants would be that such a centralised European price-fixing system would necessarily be totally computerised. The market floors would be uninvolved, their orders being streamlined into a central system. It is submitted that a European collective price system would be undesirable and unacceptable to the Stock Exchanges, and that any proposition of this type does not merit serious consideration.

16.8 The Jobber System

It is similarly questionable whether the London market, the only other alternative in the existing European precedents, would be acceptable as the model for a European linkage. The London system successfully meets many of the criticisms made of the collective price market. Dealing is continuous and may at any time of day be influenced by company announcements or financial and economic developments. The London market floor is better adapted than any of the Continental floors to handle large business. Quotations in the Continental markets, outside a very limited range of major stocks, tend to be in small size, possibly 2,000-3,000 shares. A U.K. jobber would, in the normal course of trading, be ready to make a two-way price in 20,000-30,000 shares of any large company in which he deals. A more significant point is that in executing a transaction of this size, he would, in general, expect the price to move by not more than about 0.24-0.3%.
The prime advantage of the jobbing system, within which the jobber is permitted to maintain a confidential stock position, is its ability to absorb large transactions immediately and without excessive effect on price. This characteristic of the system was acknowledged by London investing institutions in discussions with the Consultants. The view was expressed that, in spite of the smaller scale of the London market, it was frequently easier to execute large orders through London jobbers than large orders in comparable stocks on the American market. The fact that the jobbers cannot, in course of normal market business, accommodate the largest institutional transactions does not invalidate this general point. No floor system exists anywhere in the world that can. The existence of the jobbers facilitates 'put through' procedures, whereby transactions beyond the capacity of the market can be effectively related to market price and operation.

The jobbing system may be subject to criticism on several counts. It is questioned whether the existence of a market-making intermediary on the floor is necessary and whether the 'turn' derived from the jobbing transaction is a necessary charge on the investor. The freedom of the jobber to set the spreads of his buying and selling prices, which is essential to his operation, is viewed with suspicion. There is concern at the alleged reduction in the competition on which efficient jobbing depends, due to the concentration of jobbing firms as ever-increasing capital is required to accommodate large institutional business. The future of market-floor jobbing is seen to be in question.

16.9 Market-making and European Linkage

The Consultants concur with the view, which they found generally held by members of the Exchanges, that continuous dealing requires some form of market-making to assure the constant liquidity of the market. If it is accepted, as argued above, that both logic and present trends suggest that linkage of the Exchanges will be achieved through a continuous market, then design within it of some form of market-making is required, whether this be through contre-parties, jobbers,
specialists or any other form of positioners.

At present, of all the Community Exchanges, only London has full-scale floor market-making. In the other Exchanges, Stock Exchange members are confined to agency functions, modified only by specialist-type market-makers, whose ability to position is strictly limited. The hoekmens position-taking is restricted to ten times the value of a required cash deposit. The kursmakler may only take minor positions required to fully balance the price. Under the proposed "second Marché" system, the principal transactions of the French contra-partiste will be under a "contrat de liquidité" and be strictly limited to assuring the liquidity of the market.

It might be observed, however, that this apparent extreme contrast between London and the Continental markets is more apparent than real when the total structure of the Continental markets is taken into account. The absence of market-making on the Continental floors is compensated by the availability of large broker and bank positions in securities which supply the necessary liquidity for floor trading. The German and Italian inter-bank markets are the most striking examples. The contention that the banks' positioning is no more than anticipation of their clients' buying and selling orders raises only a question of academic definition. It cannot obscure the reality of an actual off-Exchange market-making function by the banks. The view was expressed by one of the German banks that if this was openly acknowledged, the function would become more professionalised and efficient.

The international dealing at net price underlying this European market-making by the banks and the jobbers is large-scale and efficient. In a share in which the opening Exchanges price may be made in, say, 4,000 shares, a transaction of 80,000 to 100,000 shares might be executed through the bank and jobber network. On both the sale and purchase side the transaction would be likely to be complex - a proportion of the seller's own book or on risk to the buying intermediary, a proportion from the main market and a proportion made up from other European
markets. There would be little variance from the opening price but on occasion the main market intermediary may have to enter the floor market and move it, as discussed elsewhere.

Effective floor linkage will not be attained until a standard approach is accepted by all the Community Exchanges to the question of market-making and the related question of the conditions under which participating Stock Exchange members may deal as principal or as agent. As one of the constraints in the design of linkage is that changes should not be required in the operation of the local floors, this would appear to be an intractable problem. A solution aligned to the realities of the present trading would be to link not only the floor operations where possible, but also the off-floor activities of members in the equities secondary market. This would have the general effect that linkage would embrace both the functions of the U.K. jobbers and the off-floor market positioning functions of the Continental banks. It would provide a linkage commonly based on the capital market systems, rather than on the varied components of such systems which have, by tradition, become floor activities in the different countries.

Assuming that participation in the linkage will be limited to Stock Exchange members, even this approach, however, contains complications. It might be effectively applied to the U.K., Holland and possibly to Belgium and Luxembourg. Technically, the German system would be well adapted to it and, for international purposes, it would unite the German floor and bank markets. A legal problem might exist if the German banks were to formalise their off-market activities. An attempt to do so might bring their international markets under the provisions of the German securities law and might constrain the off-market to the official local form, thus destroying the banks international market. The French and Italian situations pose greater difficulty, in that the banks, which in these countries carry out significant off-market positioning functions, are not members of the Exchanges. If participation in the network were to be based on Stock Exchange members
only, the trading functions carried out by the banks would be excluded. Local developments in both of these countries, however, acknowledge this problem and may, in due course, result in formulae which may resolve it.

16.10 The need to accommodate both existing segments of the European International Equities Market

In general, two types of international dealing exist, as has been noted in Section 13. In all the internationally active Exchanges, major European stocks are multiply listed and there is, to a greater or lesser extent, a floor market in these European securities, normally with quotation in local currencies. These are the markets identified in the Stock Exchange statistics of trading in foreign securities. They have been shown to be small, relative to other international business transacted in each of the capital centres. A notable exception to this generalisation is the Brussels local market in foreigns, which, supported by issue of local bearer, has been extremely successful and in two recent years has exceeded the value of dealing in domestic securities on the Bourse. Amsterdam is an exception to the general practice of quotation in local currency and the A.E.B. is at present changing quotation of foreigns to the currency of the market of origin.

Trading in these floor markets, in general, conforms to the local procedures of each floor. The obstacles to linking them are primarily those of price formation system and capacity -floor linkage is discussed more fully in Section 21.

The other main segment of the international securities markets in Europe comprises the off-floor dealings, both of the members of the Exchanges and of other non-member traders. This market has its origins in traditional arbitrage functions which intermediated between the different markets, supplying or taking up securities and undoing the transactions elsewhere, with the effect of equalising the price. This classic arbitrage function, in Europe, now tends to be merged with, and
be largely indistinguishable from international dealing, due to speed of communication, the single time zone and the direct activity of investors in the foreign markets.

As long as the European markets retain different characteristics, different securities instruments and different currencies, the need for some form of arbitrage will remain. Some market theorists appear to have an emotive attitude towards the arbitrageur and towards professional international dealing as a principal, considering this activity redundant and an unnecessary cost imposed on the investor. It is difficult to see how this argument can be sustained. The international dealer takes considerable risks and he has to bridge the differences of the two markets, all of which involve cost. He provides a service in assuring liquidity of transactions in foreign securities. A major Dutch bank considered the present system very efficient, with arbitrage deals struck in two minutes and the prices flattened in ten minutes. Until the European markets are fully harmonised, which appears a distant prospect, intermediation will be required between the trading on the national market floors.

From these arrangements a dealing network has resulted which has the advantage of permitting individual member firms of each exchange virtually unrestricted access to foreign counterparties, but which is extremely complex. Diagram 16.1 schematically illustrates the situation. Due to absence of any market organisation, members operate individually, normally, for reasons discussed below, through carefully identified 'friends' in the markets.

The Consultants advocate that within this market, a European identity is established by the linkage of the international dealing of Exchange members. Otherwise, the international market, which is infinitely more powerful than any of the European Exchanges will continue to erode first their international dealing and subsequently the base of their domestic activities. There is already evidence of such developments.
DIAGRAM 16.1
SCHEMATIC ILLUSTRATION OF MAJOR LINES
OF ORDER ROUTING IN THE EUROPEAN
INTERNATIONAL SECURITIES MARKETS.

Note: Only the main categories are shown, for 3 exchanges
only, and as single contacts only. As a category,
e.g. Agent de Change is extended into the real
number, the other intermediaries and exchanges
added, routing possibilities increase factorially
and become virtually infinite (i.e. impossible
to control, regulate, or constructively develop.)
16.11 The nature of dealing operations in the International Equities Market

Although the reasons for international dealing leaving the Stock Exchange floors are primarily due to the membership concessions which have been made (i.e. who may deal with who), operating factors are an important consideration. In every European Stock Exchange, international business has tended to move off the market floors because they do not, at least at present, provide an appropriate environment for it. The floor trading is essentially face-to-face dealing, often of considerable sophistication, but in a well-understood and fully standardised market. The international securities dealer is in a completely different situation. His potential counterparties are far away; his main knowledge is of his own market. He requires both personal contact in the foreign market, all possible methods of communication ensure this, and as wide a range of supporting market information as possible. He requires telecommunications, video equipment and, possibly, computer-processed information immediately to hand.

These facilities can be better provided off the market floors in dealing rooms in member firms' offices. In this environment, the dealer will not only have the information he requires, but he will be in a better position to liaise with his foreign counterparties. Further, the convention of international dealing differs from the abrupt and formal bid or offer on the market floor. The dealers mutually seek help and are ready to open their position to their counterparties to a far greater degree than in normal floor trading.

To make the point explicit, the exacting nature of international dealing is illustrated by the dealer's task in an international transaction in which he must:

(i) refer to the market price displayed on the screen;
(ii) refer to the currency exchange rate;
(iii) communicate with his potential counterparties;
(iv) carry out the currency conversions to establish the local currency position;
(v) take into account the settlement factors and financing costs;
(vi) possibly communicate within his own dealing room;
(vii) execute the transaction;
(viii) initiate confirmation of the transaction.

At the risk of stressing the obvious, the physical requirements of this procedure are worth noting:

(i) he must constantly watch the screens;
(ii) he requires a hand to control the information display system and, if the most advanced information systems are not used, to display exchange rates;
(iii) he must use his left hand for the telephone;
(iv) he requires his right hand to operate a desk calculator to obtain currency conversions;
(v) he must enter the transaction into the dealing book and in any position record which he may be maintaining, or possibly key this data into a computer;
(vi) he must originate a confirmation slip for the transaction, which would not normally be covered by the Stock Exchange reporting systems.

These operations, which are normally achieved with great skill and speed, are clearly best carried out sitting down at a desk surrounded by the necessary equipment. The more advanced firms are installing devices to assist the international dealer in his complicated task. Computerised dialling facilities are sometimes available, though there is not as yet much evidence of in-house systems in Stock Exchange firms to supply processed supporting information of the type available in banks' bond dealing rooms.

In respect of any transaction executed, the international dealer is involved in a complex chain of post-dealing communication, which is much assisted if the dealers are in the office, rather than on the market floor. An inter-Exchange transaction may typically involve the following communications:

(i) any necessary telephone calls and telexes to set up and execute the transactions and establish, where necessary, the 'charges' element of the net price;
(ii) telex to foreign bank with which the broker dealt to confirm the deal;
(iii) telex to broker's clearing agent bank in the foreign centre informing them of the deal;
(iv) telex to client confirming the deal (plus later, contract note);
(v) pro-forma completed giving broker's international settlement team all the data they require;
(vi) (if local currency) - instructions to client for acceptance of stock and effecting payment to seller;
(vii) instructions to clearing agent to receive shares and effect payment to the seller bank;
(viii) instructions to selling bank to deliver to clearing agent bank;
(ix) notification to clearing agent bank to receive stock and pass to client's local bank, to be held to account of client's bank - sub-account client, etc.

If the settlement is not in the local currency the procedure becomes somewhat more complicated. The procedures in the international equities market are widely recognised as antiquated by the participants, particularly by those familiar with the international bond markets.

A further reason for the international business leaving the floors is the difference in the hours of trading of the World Exchanges. This may arise from shortness of trading sessions, as in the case of the Continental Exchanges or from the need for twenty-four-hour cover of world markets. Round-the-clock trading is now of vital importance. This consideration applies also to London. In spite of the fact that the London market operates broadly through European business hours, the international dealing facilities must, to be fully effective, be available over the twenty-four-hour cycle.

While settlement problems are considered elsewhere in this Report, it should be noted that, due to its North American domination, transactions in this international market tend to be settled on a five day rolling settlement and do not form part of the local settlement. The European international market does not have the advantages of
disciplined procedures or computer support which are available in members' domestic dealings.

A further complication of European linkage is that, except in the very largest firms, European dealing is an integral part of overall dealing in foreign securities. It will be essential that operations involved in European international linkage are as compatible as possible with those of general international dealing and do not impede members' business with the major markets in North America and the Far East.

It will be apparent that as well as a 'vertical' division between the European markets—due to differences in the dealing procedures of the individual Exchanges—there is a 'horizontal' division running across all the Exchanges, distinguishing floor trading in foreigns from the international market.

16.12 Summary

The obstacles to linkage presented by the different dealing operations on the Stock Exchange floors and in the international equities market appear, in the first instance, to summarise to a single major point. This is that no finite progress can be made on the 'architecture' of the linkage system until the Commission, the Committee and the Exchanges resolve the policy with respect to three fundamental aspects of the system design:

(i) should the linkage be based on continuous or collective pricing?
(ii) should the linkage offer facilities for market-making on a European base?
(iii) should the linkage embrace trading in second-country E.E.C. equities on the market floors only, or should it also endeavour to provide facilities for the segment of the European international market which is now handled off the floors by the Stock Exchange members?
In the view of the Consultants, the first premise is essential for effective operation of an international market. It is believed that this view is endorsed by most market participants.

The objectives of the Commission to establish, through linkage, an equities market of European scale will not be possible unless the second condition is, by one device or another, met.

From views expressed by the Stock Exchanges, it is clear that full agreement will not be reached on the third point - the ideal coverage of the network. It is predictable that those Exchanges carrying out a volume of foreign equities business on their floor which is substantial relative to their overall turnover will be predisposed to favour floor linkage, at least until the changes required by floor linkage, and the extent to which this will open local floors to general European competition, are fully considered. This preference is most likely in those Exchanges where a market monopoly of securities trading is based on members' floor activities. The Exchanges in which the bulk of the member's international business is carried out off the floor and which tend to be the more active centres of foreign dealing are more likely to consider that this business may not be well suited to floor operation. These Exchanges may fear that constraining their members to bring their European business back on to the market floor may be both difficult and disadvantageous.

A compromise design will be required, which will allow certain of the Exchanges to install immediate interfaces between the international dealing linkage and their floor dealing in foreigns and others to link with the system primarily through the dealing rooms of their member firms, both possibilities being open to all Exchanges.

Floor linkage should be immediately identified, however, as the ultimate target and the issues involved in this are set out in Section 21.
SECTION 17 - OBSTACLES TO LINKAGE RELATED TO THE MEMBERSHIP RULES OF THE COMMUNITY STOCK EXCHANGES

17.1 Introduction

The most fundamental of all Stock Exchange rules are those governing admission of members, the capacity and the manner in which they may operate and the mutual assurances under which they conduct business. While the problem arising from different membership regimes in the exchanges have been mentioned in the previous Section considering dealing operations to which they have close bearing, they require brief review in their own right. To date, little progress has been made in establishing mutual membership of the European exchanges. Linkage of the floors will eventually require substantial mutual adjustment of membership rules. To review the difficulties associated with such relaxation and the potential it might offer for inter-market linkage, it is necessary to consider first the existing membership structures and second the changes which would be required in the event of linkage of the Exchanges.

17.2 The present localised membership

A number of factors have limited the closer association of Community Stock Exchange firms with second-country markets.

There is little incentive for firms to set up branches and subsidiaries in other European capital centres. Europe is, in effect, within the same time zone. Telecommunications are considered efficient for their purposes by the dealers, at present levels of European business. The international banking network is strong. Setting up a branch office in another country is extremely costly. Under present circumstances, such an office would not, in most cases, be able to participate in the domestic business of the second market. This incentive, which underlies the institution of subsidiaries of London firms in the Far East, does not exist in the European case.

Moreover, due to the ease of communication between European markets, the branch office may play little role in channelling business to its
home market, as is successfully done by U.S. and Japanese European offices. Broker affiliates in Europe tend to be instituted to meet particular needs and are exceptional. Various London firms, have from time to time opened offices in Continental capital centres but, other than those related to Eurobond dealing, these branches have been closed. In general, no moves have been made to facilitate member firms of foreign exchanges operating in second European markets. This appears to be due both to a local policy of protecting members' business and also to the disinclination of the foreign securities houses to apply for membership of the local exchanges.

Most of the exchanges have removed any discrimination against individual membership of nationals of E.E.C. countries. A summary of the status of foreign intermediaries in the Community exchanges has been produced by the Committee of Stock Exchanges. There is no discrimination against nationals of other E.E.C. countries in the U.K., France, Belgium, Luxembourg, Denmark and Eire, subject to conformity to local admission requirements. The A.E.B. will accept application from foreigners, provided they are resident, and from banks when they are established under the law of one of the Community countries. Membership of the German exchanges is totally open, with the proviso that any institution applying for membership must be able to comply with German banking legislation, thereby implying that it must set up or acquire a German bank. In Greece and Italy, only nationals are permitted membership.

This liberalisation of individual membership has little bearing on the more significant question of admission of member firms from other E.E.C. exchanges into a local market. For this, two sets of permissions are required; firstly the agreement of the home Stock Exchange that the member firm may set up an overseas subsidiary organisation and, secondly, the readiness of the host Exchange to admit it.

Footnote: "Restrictions on the activities of financial intermediaries in foreign countries" - R De Baerdemaker - Secretary General, Committee of E.E.C. Stock Exchanges.
In respect of the first of these conditions, the member firms are normally free, on terms laid down by the parent exchange, to set up branches in the other European markets. Clear exceptions are Italy, where no form of corporate association is permitted for brokers, even in the domestic market, and France, where the foreign participation permitted to Agents de Change is automatically limited by the prohibition of commercial functions laid down by the 'Code de Commerce'. The foreign-based activities of the Agents de Change are thus restricted to participation in non-dealing firms. The setting-up of banking subsidiaries, in those countries in which the banks are allowed to operate as brokers, is governed by the banking legislation of the host country. In the Community, it has only moderate effect as the securities business of the banks concentrate in their domestic branches in the markets of origin. The network of European bank subsidiaries has not, as yet, been exploited to Europeanise securities trading in equities.

The more serious obstacle to internationalisation of the broker firms within Europe is likely to be the response of the 'host' exchange. Regardless of the principles of the rules, the Stock Exchange authorities have de facto control over admissions. Cases exist demonstrating the reluctance of European exchanges to countenance membership of foreign firms. The incoming foreign firm would, moreover, only be able to operate in the host market under that market's established conventions. If these, as would mainly be the case, were dissimilar from those of its home market, it would have little incentive to seek membership. To date, the U.S. and Japanese securities houses have exhibited little enthusiasm to become members of the European markets, preferring to operate outside them, remote from their own regulatory authorities and free from the constraints imposed on the trading of local Stock Exchange members.

It is important to note a significant European exception in which membership linkage has achieved integration of previously separate Stock Exchanges. The unification of the U.K. Stock Exchanges, in 1973, was achieved by merging of membership. The same approach secured the
continued association of the Irish Stock Exchange with the United Kingdom Stock Exchanges. This precedent of unification of exchanges within the same country, or, in the case of Ireland, with similar securities and company law, has no real relevance to the current European situation in which total diversity exists. If the trading procedures and other aspects of the securities industry environment were harmonised across Europe, the conditions which permitted the U.K. unification would then exist in Europe. This is, at best, a long term prospect and the immediate moves towards linkage must accommodate the different trading procedures and membership structures.

17.3 The Existing Membership Systems
The different membership systems, as they affect international linkage, might be divided into four groups:

(i) The 'broker' exchanges, in which members' dealings are restricted to commission-orientated agency business and in most of which such functions are supported by statute. France and Italy fall directly into this category, as, with a slight qualification, does Belgium. Though external financial participation is allowed in the Stock Exchange firms, their active management is strictly confined to the Agents de Change, with vigorous exclusion of the banks from any form of association. The local Dublin floor in the Irish market conforms to this category more than to any other.

(ii) The 'bank' exchanges, of which the classical example is the Association of German Stock Exchanges. In Germany, the banks, governed by the Stock Exchange and Custody of Securities Acts and the legislation on Credit Institutions, perform the full range of securities markets functions.

(iii) The exchanges of which the membership structures are a compromise between the two pure stereotypes quoted above, in which both banks and brokers may be members (Holland and Luxembourg) or in which brokers may also be bankers (Denmark).
The Stock Exchange in the United Kingdom where members transact both commission and principal business within the market through the separated capacities of the brokers and the jobbers respectively and which, though limiting participation by non-members; including banks, in member firms to 29.9%, embodies, within the floor of the Exchange, the essential functions both of 'broker' and the 'bank' systems prevalent on the Continent.

From these differences, two intractable membership-type obstacles arise which require resolution if trading on the European exchanges is to be effectively linked. The severity of these problems depends on the form of linkage adopted. The first is the different capacity or capacities in which the members of the different exchanges are permitted to operate on the secondary market. Related to that difference, and accentuating it, are types of membership in individual or corporate terms which are permitted and the types of institutions which are allowed to carry out these roles.

The second obstacle is the difference in the scale of operation and capital resources between the Stock Exchange members in the different countries. A linked system of trading which is going to have any real effect must imply greater exposure of all the members of all the exchanges to mutual competition. Unless account was taken of this in the design of the system and the interests of the smaller Stock Exchange firms were in some appropriate manner protected, linkage would present great hazards to the exchanges comprised of smaller member firms.

17.4 Capacity in which members are permitted to trade

It might be argued that the most fundamental membership obstacle to linkage of the European exchanges is the variation in capacity in which members of the different exchanges are allowed to trade. The different types of Stock Exchange intermediaries tend, under present arrangements, to seek comparable counterparties in the other European markets. The U.K. jobber, for example, tends to deal with the banks which carry out similar functions on the Continent. When this match is close, as between the London jobbers and the Dutch or German banks,
mutual arrangements permitting joint operation across the two markets are possible. The linkage system, however, would require to establish satisfactory order-routing between dissimilar exchanges, notably between broker and bank Stock Exchanges.

The participation of the present Stock Exchange members in a European floor linkage, in their present market-floor capacities, would not be possible and would result in an imbalanced situation. Exemplified in floor linkage in which one side of the transaction might be on one floor with the other side on another, the U.K. jobber would be free to deal with any member of the broker Bourses on their own floors. The German and Dutch banks would be in an even more enviable position, being able both to undertake principal business with any European broker direct and also to carry out broking business across Europe with capital resources massively greater than the agent members of the other exchanges. The broker Bourses would be disadvantaged by their ability to deal only as agents. Although in Brussels, members are authorised to act as principals. The capital centres in which the broker Bourses are situated would be handicapped by the non-inclusion in the system of banks, which at present play important roles in securities trading in those locations.

In floor linkage, the rules governing the capacity in which members may trade would need to be realigned and largely standardised across the exchanges. This might be done by extending the functions of the broker exchanges to include positioning, with a sub-division of the bank exchange functions into agency and principal business. Alternatively, all exchanges would have to be limited to agency business, possibly under a specialist system, with all large positioning outside the exchange floors.

A basic requirement of floor linkage would be rules changes which would enable access to the dealing floor of one exchange by a member of another. Regardless of its form, floor linkage implies that one side of the transaction may originate in one market and be met by a sale or purchase on another. A foreign bank might thus direct a buying order onto the floor of the Bourse, which might be met by a selling
Agent de Change. This type of situation would raise a difficulty of principle for all exchanges, in that, universally, their rules confine trading on the floor to their own members or their authorised associates. Such inter-exchange dealing would raise most acute difficulty in the cases of those exchanges in which the status of the local Stock Exchange members and their privileges in floor trading are defined in law. In the example quoted, the foreign bank would have unambiguously dealt on the Paris Bourse, which by French law it would be prohibited from doing. In the view of the Consultants, floor linkage does imply mutual access by members to each others' markets. The North American Inter-market Trading System offers a clear precedent of what European floor linkage would imply. If, in the example quoted, the German bank were constrained to place its Paris orders through the French broker, then neither floor linkage, nor any great advance on the present situation, would have been achieved.

In terms of any immediate initiative, the Committee and the Commission could not hope to achieve structural membership changes of such scale, Domestic evolution of the exchanges is likely to govern this situation. It should, however, be noted that, both world-wide and in Europe, there is a clearly discernable trend of convergence of form of the official markets. In the United States, the old provisions of the Glass-Steagall Act, imposed to meet the needs of the 1930's and separating banking and investment functions, appear to be giving way to the broader outlook implied by current S.E.C. philosophy emphasising competition in the securities markets. The European exchanges show even more notable convergence. Amongst the dedicated broker Bourses, French informed opinion has for a decade acknowledged a need for the extension of the Bourse into some form of contra-partiste system and active developments are presently in hand in the new second market. In Italy, the banks have proposed securities houses which would be owned by the banks and of which existing brokers might become members, provided that they ceased to be brokers. Belgium already permits brokers to carry out dual capacity operations in international business. In Denmark, new legislation will separate the banking and broking functions of the Stock Exchange member firms.
In the U.K., the abolition of the minimum commission scale is leading to substantial revision of the structure of the market and the member firms. The present single capacity will be replaced by a dual capacity system. The Exchange in London has also considerably liberalised its attitude to outside participation in member firms over recent years. Luxembourg appears to lie at the centre of this convergent picture, with no restrictions on membership of foreigners or of foreign brokers or banks, or on their freedom to act as principals or agents. In the longer term, competitive forces may drive the membership structures of the European Exchanges towards compatibility. In regard to the more immediate proposals for linkage, the incompatibilities of the present membership structures must be accommodated and the linkage system must in some way adjust to them.

17.5 Scale of operation

A closely linked problem is the variance in scale of operation of the Stock Exchange intermediaries in Europe and the inadequacy of the capital resources of the member firms of some of the exchanges. Evidence suggests that in most of the Community countries the member firms are inadequately resourced to operate in international securities business and indeed, in some, to serve the full needs of the domestic market. While this situation must be attributed to many factors, an important cause may be restrictions within the membership rules under which the Stock Exchange intermediaries are constrained to operate.

The exchanges at the greatest disadvantage in this respect are the broker Bourses. In Italy, the Agenti di Cambio, as a public official, is not permitted any rights of corporate association, even with his broker colleagues. Membership is personal and firms must be wound up on the death of a broker. There is thus no incentive for investment to develop the single-agent firms. The situation of the Agents
de Change in France was similar until 1967, when it was radically improved with the introduction of limited partnerships and the infusion of outside capital through the participation in firms of non-active directors. It has, however, been widely questioned in Paris whether both the limited function prescribed for the Agents de Change and the commission levels permitted in his agency business have allowed an appropriate number of adequately resourced modern broking firms to emerge. The limitation on concentration of French brokers imposed by the Chambre Syndicale has achieved its objectives of maintaining competition within the Bourse market but it has prevented the growth of member firms of fully competitive, international size. The formal situation is similar in Belgium but the wider latitude of Belgian regulation, particularly in respect of members rights to act as principals, has resulted in the emergence of several leading broking firms of international scale.

The consequences of the confinement of the Stock Exchange firms to commission-orientated trading are made more acute by the fact that the broker exchanges are supported by various forms of statutory monopoly. As a result of this assured flow of smaller business, a larger number of small brokers exist than would in all probability be the case if the markets were on a more competitive footing. This, again, is probably best exemplified by the extreme case of Italy, where informed opinion is that the number of brokers bears no relation to the market's need. In Milan alone, the number of brokers is half the number of quoted equities. The number of broker units required on the Milan exchange is thought to be one third of the present one hundred and twenty. At present, a broker typically handles 200-300 clients, a number which needs to be extended to 2,000-3,000, if the broker office functions are to be comprehensive and efficient. At present, investment analysis functions are more fully developed in the investing institutions than they are in the brokers' offices, with possibly only ten Milan brokers providing such services at fully professional level. In the past ten years, substantial broker firms have grown up in Italy and the quality of broking services has radically improved, but this development is due to the ingenuity of brokers, who have managed to devise forms of mutual association which are effective but which do not, in their corporate form, contravene the regulatory restrictions.
An important consequence of the fragmentation of a broking community into individuals or small units is that it constrains flexibility of market development. The collective price system, with short training sessions in brief and sequential dealing in each stock, is well adapted to the small broker firm. Time required on the floor is short and most of the day is available for client contact or other work in the brokers' offices. Continuous dealing, under a trading post system, of the type which both increased domestic business and a fully effective European linkage would require, tends to demand floor dealing staff and would impose very considerable strain on the small brokers.

The example of the Italian market is used to illustrate the extreme case but general evidence suggests that firms restricted to commission-orientated business, notwithstanding the success of the foremost, have, in recent years, tended to fall under financial strain in maintaining their full professional functions. The implications of this problem are most serious in those exchanges in which all the members are confined by rule, to an agency role.

The question must arise whether the separation of capacity of principal and agent, which originated in markets of different character, has continuing validity and efficiency in modern securities trading. While this is a question which each market will resolve nationally, in its own way, it has close relevance to international trading and, thereby, to European linkage. The resources required for international trading operations are constantly increasing. This has tended to concentrate this activity. For example, in the Belgian market, due to tighter arbitrage margins, the number of internationally active brokers has markedly fallen in recent years. In discussions with the Consultants, the Paris brokers expressed concern that, due to constraints on the use of their capital, they had difficulty in participating fully in the international market, which calls for instant response in large-sized transactions.
In contrast to the broker Bourses, the scale on which the members of the bank exchanges are able to operate is virtually unlimited. With the advantage of large capital resources is combined an effective freedom to deal as agent or principal. The potential competitive impact of the bank members of the European exchanges in equities dealing is diminished by a number of factors. The exchanges which constitute the domestic equities markets of the banks are weak relative to the size of their economies and the banks' financial resources. The securities functions of the banks are secondary to the credit functions. Comment was made that the main stream of bank promotion lies outside the securities departments and able staff tend not to remain in them for long. It was also suggested, in the German market, that the full development of professional securities functions of the banks has tended to be stifled by an ambiguous approach towards the more commercial aspects of banks' securities activities, which are not readily compatible with their prime role as credit institutions. Foreign counterparties had observed a wide range of attitudes across the German banks towards the more entrepreneurial and risk-taking aspects of securities trading. The potential power of the banking system as an international securities trading network is further reduced by the convention of centring the securities activities of the European banks in their domestic offices. As internationalisation of the equities market progresses, this convention may become strained. There are already examples of the development of equities market business in bank branches established in second E.E.C. capital centres.

The exchanges which insist on single capacity handling of agency business - the broker Bourses and the U.K. - are fully alert to the risks of competitive exposure of their systems to foreign intermediaries, which may operate in dual capacity and which thereby tend to be heavily resourced and to be more able to carry out a full range of securities markets functions. The spur of this competition is, in the main, interpreted as coming from the North American securities houses. The problem exists, however, within the European Exchanges and it will be precipitated by floor linkage. None of the European Exchanges, in the interest of European linkage, would be ready to
restrict the existing operations of their members. The route to some form of compatibility is likely to lie in the extension of the functions and de-restriction of the scale of operation of members of the Exchanges which are at present constrained. An intermediate step which would be of great assistance to any practical linkage scheme would be for the dual capacity markets to agree to clearly define their principal and agency business and permit it to be subject to different rules in the linkage system.

17.6 Membership problems of 'floor' and 'indirect' linkage

It is apparent that the acuteness of the problem of reconciling the different membership structures will be heavily dependent upon the type of linkage implemented. As discussed in Section 13, there are essentially two approaches to linkage. The first, which is the ideal but which may not be possible for some years, is linkage of floors. The second is indirect linkage of the markets through strengthening and broadening the existing channels of order-routing between the members of the different exchanges. It has been submitted that any practical scheme is likely to comprise elements of both these approaches, to accommodate the requirements of the different Exchanges.

The two approaches have a very different level of impact on membership rules. In the design of any practical system of linkage in the shorter term, this may prove to be a very important consideration. Floor linkage in any real sense and, as implied by the objectives of the Commission of confrontation of all orders in major securities at European level, implies trading across the floors of the type exemplified above. It would be immediately apparent that, for such a system to operate without severe imbalance of advantage to the exchanges, radical changes to the membership rules of many exchanges would be required. As the status of members in most exchanges tends to be based in law, legislative change would be required. A further critical requirement would be enhanced capital resources compared to those now available to the members of certain of the exchanges.
While in the longer run these problems, which are already the subject of concern at national level, will require to be resolved at European level to permit the ultimate and inevitable linkage of the Community exchanges, it should be noted that the second approach, indirect linkage through members, poses no problems of membership rules whatever. The existing network of contacts which handles the present cross-border business has been built up pragmatically. Members of each exchange have exploited the concession in foreign dealing made by their authorities or taken advantage of loopholes in legislation never designed to cover international trading. While it may be held that linkage secured in this way is less than ideal, extension of the existing system in a manner which would make it available not only to large professional firms which have pioneered the network but also to all Stock Exchange members, would offer considerable potential for improvement in the volume and quality of inter-market trading.

The present international network between members also avoids the related problems of scale of operation. Through the existing contacts a broker of any size may deal with a major foreign intermediary whose direct incursion into the broker's domestic market might have devastating effect. It is true that the small broker, under the present system, may require the assistance of a domestic bank, but it is considered in the markets that professional help will continue to be required in the international dealing of the smaller brokers as long as the technical differences between the European markets persist.

Difficulty in achieving the changes in membership rules and associated dealing practices which would be required by market floor linkage constitutes a major argument for initially basing the network on existing order routes between the exchanges. During such an initial phase, more inter-market business could be generated on a broader base and the potential of the European market concept could be more extensively appreciated. Concurrently, floor interfaces with this international market could be immediately developed by those Exchanges which considered that some form of floor linkage was immediately essential. The more fundamental problems of full floor linkage could, at the same time, be identified and tackled.
17.7 **Closer association of Community brokers and market-makers**

Regardless of the linkage network, closer association between brokers on the different Exchanges should be encouraged to allow mutual development of agency business. This would permit increased broker participation in the European international market which by-passed the arbitrage system. Informal association would raise no technical membership problems and would have valuable by-products. It would reduce the cost of involvement in the international European market. A capability to advise on, and execute, European transactions is expensive. Foreign economic and market situations have to be appraised. Information additional to that statutorily available has to be sought. Language barriers have to be overcome. Executing and settling transactions in the foreign markets calls for specialist skills. Such activities, to be successful, have to be maintained through bad years as well as good, and the European markets have tended to be notoriously subject to investment vogue. Co-operation between broker firms might permit economical sharing of research information costs and the mutual extension of client business into each of the markets. The essential basis of such association would possibly be commission sharing, as considered in Section 18. The potential for market makers to operate across two or more of the European exchanges has already been noted and the existing precedents in this field are considered significant.

17.8 **Non-Community securities houses and European linkage**

A peripheral problem of linkage of the European exchanges arises from the status, in relation to a new system, of exchanges in non-Community countries and, more relevantly, the status of subsidiary organisations in Europe or non-Community securities houses.

It does not appear that limitation of the linkage to Community countries will present great difficulties. Both from comment in the markets and from figures previously considered, it does not appear that the exclusion of Switzerland, at least from an equities dealing standpoint, is an insuperable obstacle. It might be desirable, on the other hand, for the settlement arrangements to link with S.E.G.A., if this proves possible.
Although concern has been expressed on the point, it does not appear that the establishment of a European market 'entity' would compromise Stock Exchange members' international operations outside Europe. It is assumed that the linkage would leave the same loopholes that members currently exploit to carry out their foreign contacting and dealing. Business with non-European exchanges would be unaffected, other than that market linkage would mutually provide the Community Stock Exchanges with a broader European base of activity. The real complication is the eligibility or otherwise of the European branches of non-Community brokers and banks.

In the present situation, the large non-European securities houses (i.e. the North American and Japanese) are established in Europe to promote the securities of their home markets and to seek orders in these stocks, which are then executed on their home exchange. Provision of corporate finance services is often an important secondary function. In the main, client business, in the domestic securities of the host market, is not sought. With minor exceptions, these European offices have not tended to use either their financial power or their flexibility of function to make markets in local securities of the host Exchange. The London market, which is exceptional, must be exempted from this statement. There, foreign intermediaries have already had an impact on the local international market and some are already active in U.K. securities. While to date this fringe activity is not a serious erosion of the domestic market, it cannot be regarded with complacency. Reports of U.S. houses offering very high salaries to attract London brokers are now common. One major U.S. broker has gone so far as to advertise for London staff expert in trading as principals in non-Dollar equities and declared its intention to deal as principal not only in Dollar, but also in Yen and Sterling equities. Increased foreign participation in London member firms has been noted in Section 11.

On the Continent, other than in the cases where the non-Community intermediaries are members of the European exchanges, a convention of non-involvement in the local domestic market is, at present, generally honoured. In one exchange, Amsterdam, the convention is the subject of
a written 'gentleman's agreement', though it may be of interest that the largest of the U.S. broking firms operating in Amsterdam has not yet signed it.

The presence of the North American and Japanese brokers in Europe is substantial and increasing. There are, for example, five major North American houses in Brussels alone. A point of considerable relevance to the European linkage proposals is that while, as pointed out above, European members tend to operate in Europe from their domestic base only, the large U.S. and Japanese brokers have presence in all the main markets. They invariably have at their disposal up-to-date and powerful telecommunications facilities. Their facilities linking the European markets are superior to those available to Stock Exchange members. While the market capability that this represents has not been used to generate business in European securities, partially for reasons of good local relations and partially due to the possible effect on local orders for their own securities if it were, its existence should provide a considerable stimulus for closer European liaison. The chief executive of one of the major U.S. securities houses in Europe confessed himself mystified that the European exchanges had, as yet, done nothing to install a telecommunications linkage through which they could develop a European base of dealing.

In the present situation, the main significance of the strong presence of the U.S. and Japanese brokers in Europe is to endorse the dominance of their domestic markets in world-wide securities trading. Their success in attracting European investment to their home markets is evident from the data of capital flows, quoted in Section 12. As discussed elsewhere in this Report, this heavy flow of funds from Europe acknowledges the superior breadth, depth and efficiencies of the North American markets. To some extent, the capital outflow must hinder the development of a market in Europe with comparable competitive characteristics. The effectiveness of the promotional activities of U.S. houses was widely acknowledged in comment from the markets.
It is assumed that the foreign securities houses which are not members of any Community exchanges would not be eligible to participate in the linkage system. Assuming, however, eligibility to participate in the system is to be based on Community Stock Exchange membership, there can be no proper grounds for excluding the European subsidiaries of foreign brokers or banks which are already members of the Community Exchanges. In the bank exchanges, there are already many members of this type. It is questionable whether inclusion of these local subsidiaries would, in itself, pose any acute problem. If Stock Exchange membership is held by a locally-incorporated subsidiary under national regulation and under Stock Exchange rules, and if linkage is to be through the market floors, any problem of participation of these foreign members is closely similar to that raised by participation of the European banks. With regard to linkage through the existing member network, the rules of each exchange governing members' permission to deal with foreign securities houses could continue to apply and there would be no change in the existing situation.

17.9 Financial assurance

All participants in fully-linked floor markets would require assurance of the integrity of the market and the solvency and efficiency of their counterparties within it of the same order that is presently available in their domestic operations. The nub of membership rules is the agreement and obligation of all members to trade together. A prime aim of floor linkage will be to replace the present fragmented order-routing in the European international equities dealing, now based on two-way correspondents, agents or 'friends' in the foreign markets, by a system through which any member of any exchange can deal with any member of another. It is essential that mutual confidence should exist in this situation and that investor protection should not be diminished.

This implies that the forms of mutual assurance erected to provide maximum reasonable guarantee both to brokers and clients, are harmonised and made applicable to the linkage dealing. Schemes of monitoring member firm finances by the Stock Exchanges would have to be brought to an agreed standard. Terms of compensation schemes and obligations in
default would have to be aligned. If present levels of investor assurance were not to be downgraded, the existing systems of mutual liability at national level would have, one way or another, to be applied to inter-floor dealing.

Floor linkage will bring a new dimension to investor assurance. Present compensation schemes accord protection to the client by the particular Exchange on which a defaulted transaction is executed. For example, a European client could be discretionarily indemnified against loss through default on The Stock Exchange through the London Compensation Fund. This would remain the situation insofar as linkage was 'indirect' and followed present international dealing channels. A transaction arising from floor linkage, however, cannot be identified against either Exchange. While the location of default can be difficult, adjustment to the assurance schemes operating in the Community Exchanges will be necessary to accommodate the new situation. Complication will arise from the investor assurance being derived in a different manner in the bank and the broker Exchanges.
SECTION 18 - OBSTACLES TO LINKAGE RELATED TO COMMISSIONS AND DEALING CHARGES

18.1 One of the fundamental requisites to ensure the successful growth of an international European Securities Market, the efficient routing and execution of market orders at the fairest prices and thus the concentration of transactions on the official market places (with the consequent major transparency and liquidity of the Euro-equities market) is, undoubtedly, the existence of uniform, relatively inexpensive and competitive dealing charges, particularly with regard to inter-market trading activities.

From the information contained in a loose leaf handbook on commission fees and other charges published by the Fédération Internationale des Bourses de Valeurs and updated at regular intervals, it has been possible to establish the present situation. Table 18.1 depicts respective commission fees in force on the different European Community Bourses and compares them with those applied on the US Exchanges. Table 18.2 illustrates respective extra charges such as stamp duty and value added tax (VAT). Table 18.3 attempts to quantify the consequences of varying charges with regard to three different sized orders - (£2,000; £10,000; and £100,000).

A careful study of the third table clearly shows that the European securities firms/banks operate at varying and considerable handicaps in relation to their American colleagues. Only six of the ten Stock Exchanges referred to in the study have scaled commission fee structures. In the case of the Netherlands, this was considerably modified and improved, as recently as 1982, in an effort to encourage more institutional trading on the official market. At the same time only four of the ten Stock Exchanges have precise arrangements concerning commission sharing with foreign intermediaries.

The existence or not of scaled commission fee tariffs is obviously of considerable importance in the case of large orders. On the smaller order size of £2,000, the most competitive commission fee structure
is offered by France, followed by Italy and Denmark, whereas the heaviest charges are in force in the United Kingdom and Ireland, followed by the Netherlands and Germany. On the other hand, in the case of the largest order size considered (£100,000), the most competitive fees are offered by Denmark, followed by France and Greece. In this case, the position of the U.K. brokers is much improved and is next in line. Conversely, the highest fees are charged by Germany, Luxembourg and Belgium.

Several internationally active market places such as Brussels, the German Stock Exchanges, Luxembourg, the Amsterdam and Paris are only able to offer more competitive rates for the smaller order sizes.

However, bearing in mind the predominance of the institutional investor in the international securities market, the largest order size is probably the most typical example. To judge from the established rates practised, it is, therefore, hardly surprising that third country securities houses are capturing a considerable and increasing slice of total international business in equities. This is clearly discernable in the most aggressive role of the American and Japanese brokers in Europe, especially London. In the short span of time which has elapsed since non-member organisations were permitted to buy up to 29.9% of the capital of London jobbers and brokers (May 1982), several outside securities houses and banks have already taken sizeable stakes in member firms and others are expected to follow.

Transaction costs are not limited to commission fees but often include other charges such as stamp duty and V.A.T.. In the case of the U.K. and Irish Stock Exchanges, these charges are by far the most significant part of aggregate transaction costs, whether it be for the smaller order size (£2,000) or for the largest order size (£100,000). That is principally owing to the stamp duty charged to investors. The British and Irish Stock Exchanges still appear to remain the most expensive market places for investors to operate on.
Any efforts by the European authorities to reduce or abolish such charges which unjustifiably penalise such market places would, undoubtedly, improve the competitive position of their Stock Exchanges.

On the other hand, the relative cost of operating on the German and, even more, the Luxembourg Stock Exchanges, are now much improved, owing to the non-existence or very low level of extra charges.

In due consideration of the enormous sums which are invested abroad, principally in the U.S. and Japan, it is easy to imagine that the greater part of such portfolio investment is being channelled through the international branches of the U.S. and Japanese securities houses, in order to avoid the higher commission fees and other charges in force in European markets. The same is probably true of the growing interest by U.S. institutional investors and pension funds in Euro-equities, partly sparked off by the high flying dollar and the feeling that major foreign economies are likely to follow the U.S. economic up turn. In the fourth quarter of 1982 alone, it was estimated that there was a $1.3 b surplus of purchases over sales of foreign stock by American investors and most of such outward investment was directed towards Europe and the Far East. In the first half of 1983 this trend continued and the surplus was calculated at being equivalent to $2.8 billion.

Nevertheless, the Consultants are uncertain of exactly how much such transaction costs, which are based on official data supplied by the respective European Stock Exchanges, really reflect what actually happens on the international securities markets. That is naturally bearing in mind the problem of having to compete with the U.S. and Japanese broking houses and the need to attenuate, if not totally avoid, charging double commission fees.

In fact it is known that several Exchanges are taking appropriate action - London has already permitted negotiated commission rates for international dealing and full scale international dealing firms have been instituted to carry out international principal business on a net basis. In France and Germany members are permitted flexibility of commission charges for foreign transactions.
One leading U.S. firm has, in fact more, than trebled its staff in the last two years and it is said to have recently recruited, both in New York and London, dealers specialised in the trading of non-dollar equities as principals.

The successful development of a European Securities Market concentrated on the official markets through the member firms and capable of competing with broker houses of non-European Exchanges would seem to hinge on a greater uniformity and competitiveness of transaction costs. This will obviously require the adoption of competitively scaled, if not negotiable, commission fee rates as well as a reduction if not total abolition of other charges such as stamp duty. Reduction in transaction costs is essential to assure that market preference by investors and financial operators will, in future, be based on the efficiency and competitiveness of the respective markets and their member firms.

Similarly, within Europe, the problem of double commission due to agents in two markets needs to be overcome, and replaced by net-to-net inter-market dealing facilities between principals and agents. The seriousness of this obstacle is clearly demonstrated in Section 12, with reference to three leading international market places. It is, in fact, estimated that the total market in international equities is, at the least, respectively eight and ten times the official figures on the London and Amsterdam Exchanges and, possibly twice the official turnover in international equities in the case of the German Stock Exchanges.

Failure to secure reduction of these uncompetitive charges will tend to drive an ever-growing proportion of the developing international securities markets away from the official market member organisations. The operational utilisation and expansion of the envisaged inter-market information trading and settlement network will be minor. Institutions will continue to deal directly into the main domestic market, an increasing proportion of such turnover will therefore be executed outside the control or knowledge of the national Stock Exchanges and even of member firms. Most damaging of all, the true dimension and liquidity of the Euro-equities market will remain unknown.
It would, therefore, appear that international arrangements for a rational, competitive and mutually fair system of commission fees and other charges for inter-Exchange dealing is not an ancillary to the successful development of a European Securities Market but is, on the contrary, a fundamental requirement, whatever be the form of inter-market connection eventually implemented. The importance of this aspect will be even greater should the declared preference for floor linkage be confirmed.
### TABLE 18.1

**COMMISSION FEES CHARGED ON E.E.C. AND NEW YORK STOCK EXCHANGES FOR TRANSACTIONS IN SHARES**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CASH BARGAINS</th>
<th>FORWARD BARGAINS</th>
<th>COMMISSION SHARING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BELGIUM</strong></td>
<td>Basic charge = FrB. 100 plus</td>
<td></td>
<td>Foreign brokers = 15%</td>
</tr>
<tr>
<td></td>
<td>FrB. 0 - 2,000,000 = 1%</td>
<td>FrB. 0 - 5,000,000 = 0.8%</td>
<td>Banks included in the Belgian Bank Commission List 40%</td>
</tr>
<tr>
<td></td>
<td>FrB. 2,000,001 - 5,000,000 = 0.9%</td>
<td>FrB. 5,000,001 - 10,000,000 = 0.6%</td>
<td>Belgian brokers may however halve Belgian fees when foreign bargains are effected abroad. However foreign fees and costs will also be debited to clients.</td>
</tr>
<tr>
<td></td>
<td>FrB. 5,000,001 - 10,000,000 = 0.8%</td>
<td>over FrB. 10,000,000 = 0.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>over FrB. 10,000,000 = 0.6%</td>
<td>plus complementary charge: equivalent to 0.065% of commission fee (0.025% charged to giver of order and 0.04% to executor or order)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* charges up to maximum 10% for low valued shares</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DENMARK</strong></td>
<td>Danish shares listed in market I:</td>
<td></td>
<td>No precise arrangements.</td>
</tr>
<tr>
<td></td>
<td>Dkr. 0 - 100,000 = 0.75%* (maximum fee = Dkr. 500)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>over Dkr. 100,000 = 0.50%* (no maximum fee)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Danish shares listed in markets II &amp; III = 1%*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unlisted Danish shares and foreign shares= 1%* (minimum fee = Dkr. 25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* if market price is below par, the commission is calculated on nominal value</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FRANCE</strong></td>
<td>Fr.F. 0 - 600,000 = 0.65%</td>
<td></td>
<td>No precise arrangements concerning foreign brokers. How ever French brokers may charge different rates for transactions effected abroad. In addition French brokers may grant part of commission fees to authorized individuals and institutions but not to investors.</td>
</tr>
<tr>
<td></td>
<td>Fr.F. 600,001 - 1,100,000 = 0.43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fr.F. 1,100,001 - 2,200,000 = 0.325%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>over Fr.F. 2,200,000 = 0.215% (Maximum fee = Fr.F. 40,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.B.: slightly higher rates are charged on regional Stock Exchanges</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Commission fees charged on E.E.C. and New York Stock Exchanges for transactions in shares (cont. 2)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CASH BARGAINS</th>
<th>FORWARD BARGAINS</th>
<th>COMMISSION SHARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERMANY</td>
<td>0.1% Stock Exchange commission plus 1% bank commission fee.</td>
<td></td>
<td>- No precise arrangements</td>
</tr>
<tr>
<td>GREECE</td>
<td>Dr. 0 - 1,000,000 = 1%</td>
<td></td>
<td>- Rebate equivalent to one-third of commission fee</td>
</tr>
<tr>
<td></td>
<td>Dr. 1,000,001 - 1,000,000 = 0.75%</td>
<td></td>
<td>granted to banks</td>
</tr>
<tr>
<td></td>
<td>over Dr. 3,000,000 = 0.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITALY</td>
<td>0.7%</td>
<td></td>
<td>- Commission fees halved for national banks and commis-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sion dealers. In principle, the same concessions may be</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>made to foreign brokers only.</td>
</tr>
<tr>
<td>LUXEMBOURG</td>
<td>0.8% (Minimum fee + Flux. 100)</td>
<td></td>
<td>- 25% concession to any professional intermediary.</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>f. 0 - 5,000 = 1.5%</td>
<td></td>
<td>- No precise arrangements</td>
</tr>
<tr>
<td></td>
<td>f. 5,001 - 20,000 = 1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. 20,001 - 100,000 = 0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>over f. 100,000 = 0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>plus f. 7.50 per deal and f. 17.50 per ASAS transaction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N.B.: 1) Commission fee charges may be waived for arbitrage transactions in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a limited number of securities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Slightly higher commission fees for shares listed on the parallel market.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Commission fees charged on E.E.C. and New York Stock Exchanges for transactions in shares (cont. 3)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CASH BARGAINS</th>
<th>FORWARD BARGAINS</th>
<th>COMMISSION SHARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED KINGDOM &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRELAND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£. 0* - 7,000</td>
<td>1.65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£. 7,001 - 15,000</td>
<td>0.55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£. 15,001 - 300,000</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£. 300,001 - 900,000</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£. 900,001 - 2,000,000</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on excess</td>
<td>0.125%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.B.: American and Canadian shares are charged slightly lower rates.

* minimum fee charges applicable

IMPORTANT: The above-mentioned scaled rates were in force in June 1983. However the commission fee structure is at present undergoing radical changes and all bargains in foreign securities will be fully negotiable as from April 1984.

THE UNITED STATES

As from 1st May 1975 commission fees became fully negotiable and competitive. The best rates will obviously be offered for large orders for high valued equities.

- Commission splitting with foreign intermediaries is an integral part of competitive fees and is decided independently by member firms.

Source: F.I.B.V. Publication "Commission Fees on F.I.B.V. Member Stock Exchanges"
### TABLE 18.2

**STAMP DUTIES AND TAXES CHARGED ON STOCKBROKING ACTIVITIES**
**ON E.E.C. MEMBER STOCK EXCHANGES AND U.S.A.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Stamp Duty on Market Transactions</th>
<th>Securities Transfer Tax</th>
<th>Added Value Tax</th>
<th>Other Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELGIUM</td>
<td>0.07%</td>
<td>0.14%</td>
<td>0.35%</td>
<td>--</td>
</tr>
<tr>
<td>DENMARK</td>
<td>--</td>
<td>--</td>
<td>(4)</td>
<td>--</td>
</tr>
<tr>
<td>FRANCE</td>
<td>€0.75%</td>
<td>0.5%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>GERMANY</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>GREECE</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>ITALY</td>
<td>(8)</td>
<td>(3)</td>
<td>(8)</td>
<td>(9)</td>
</tr>
<tr>
<td>LUXEMBOURG</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>0.12%</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>U.K. &amp; IRELAND</td>
<td>--</td>
<td>--</td>
<td>(10)</td>
<td>(11)</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

*See notes overleaf*

Source: F.I.B.V. Publication "Commission Fees on F.I.B.V. Member Stock Exchanges"
NOTES

- BELGIUM

1) Including certificates issued by Belgian nominee companies;

2) 0.35% and 0.17% respectively on cash and term transactions;

3) 0.085% or 0.170% are respectively charged if such carry-over deals lapse within or after 20 days.

- DENMARK

4) Calculated on the market value of the equity transaction and divided equally between buyer and seller (0.25% each).

- FRANCE

5) The 18.6% VAT is calculated on the value of the commission fee received by the broker and not on the value of the transaction.

- GERMANY

6) Stockmarket turnover tax which is payable whether or not the trade takes place on the Stock Exchange.

- GREECE

7) A transfer charge of 0.3% is made by brokers on transactions involving registered shares. However only bank, insurance and some investment company shares are of the registered category.

- ITALY

8) All these stamp duty charges refer to every Lire 100,000 (or fraction) of market values of transactions and have been quadrupled as per law no. 953 of 30/9/1982 which is in force since 1/1/83.

   Two rates are given under bonds and shares: they respectively refer to cash and term trades. Only convertible bonds and shares may however be traded term.

   9) The three different rates depend on the three maximum expiry dates: that is within 45, 90 and 135 days.

- U.K. and IRELAND

10) More precisely up to £ 5 consideration = 5p;
    from £ 5 to £ 10 = 10p from £ 10 to £ 20 = 20p
    from £ 20 to £ 30= 30p and so on up to £ 100. From
NOTES (cont.d 2)

- U.K. and IRELAND

£ 100 to £ 300 stamp duty rises in steps of 20p per £ 20 consideration. Charity organisations are exempt.

11) Stamp duty on options and on London traded options is charged only on a call option whenever it is exercised. Charity organisations are exempt.

12) Contract stamp duty payable wherever the value of the stock or marketable security is:

- £ 100 or less ......................... Nil

Exceeds:
- £ 100 and does not exceed £ 500...... 10p
- £ 500 " " £ 1,500...... 30p
- £ 1,500 or plus ....................... 60p

The full Contract Stamp is payable on a purchase and on a sale, and is payable by both residents and non-residents. One half of the Contract Stamp only is payable on option contracts and is calculated on the striking price. The remaining half of the Contract Stamp is however payable if the option is exercised. This also applies to London traded options.

13) VAT (Value Added Tax) is not chargeable to non-residents of the United Kingdom.

14) Council for the Securities Industry levy payable on bargains exceeding £ 5,000 except where

a) nominal value is expressed other than in sterling;

b) the security is an Insurance or Property Bond, an offshore or overseas fund or are units or sub-units of Unit Trusts.

- U.S.A.

15) The New York State transfer tax on New York trad
ed shares was totally waived as from October 1981.

16) Securities and Exchange Commission charge on transactions in equities.
### TABLE 18.3

**TABLE OF COMPARATIVE TRADING COSTS ON E.E.C. MEMBER STOCK EXCHANGES AND ON THE UNITED STATES EXCHANGES**

(Administrative costs concerning dossier management, possible depository charges etc. are however excluded from such calculations.)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>SUM INVESTED IN EQUITIES</th>
<th>COMMISSION FEE</th>
<th>STAMP DUTY</th>
<th>VAT</th>
<th>OTHER CHARGES</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BELGIUM</strong></td>
<td>£ 2,000</td>
<td>£ 17 (1)</td>
<td>£ 3.40</td>
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<td>-</td>
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<tr>
<td></td>
<td>£ 20,000</td>
<td>£ 161 (1)</td>
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<td>-</td>
<td>-</td>
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<td></td>
<td>£ 100,000</td>
<td>£ 739 (1)</td>
<td>£ 170</td>
<td>-</td>
<td>-</td>
<td>£ 909.40</td>
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<tr>
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<td>£ 15</td>
<td>£ 5 (2)</td>
<td>-</td>
<td>-</td>
<td>£ 20.00</td>
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<td></td>
<td>£ 20,000</td>
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<td>£ 1,000</td>
<td>£ 250 (2)</td>
<td>-</td>
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<td>£ 13</td>
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<td>-</td>
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<td>-</td>
<td>£ 5</td>
<td>£ 27.00</td>
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<td>£ 220 (3)</td>
<td>-</td>
<td>-</td>
<td>£ 50</td>
<td>£ 270.00</td>
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<tr>
<td></td>
<td>£ 100,000</td>
<td>£ 1,100 (3)</td>
<td>-</td>
<td>-</td>
<td>£ 250</td>
<td>£ 1,150.00</td>
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<tr>
<td><strong>GREECE</strong></td>
<td>£ 2,000</td>
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<td>-</td>
<td>-</td>
<td>£ 6 (4)</td>
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<tr>
<td></td>
<td>£ 20,000</td>
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<td>£ 556</td>
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<td>-</td>
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</tr>
<tr>
<td>COUNTRY</td>
<td>SUM INVESTED IN EQUITIES</td>
<td>COMMISSION FEE</td>
<td>STAMP DUTY</td>
<td>VAT</td>
<td>OTHER CHARGES</td>
<td>TOTAL COST</td>
</tr>
<tr>
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<td>LUXEMBOURG</td>
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<td>£ 800</td>
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<td>ASAS £ 165</td>
<td>£ 24</td>
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<td>£ 186.50 ASAS £ 189</td>
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<td>£ 100,000</td>
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<td>ASAS £ 725</td>
<td>£ 120</td>
<td>-</td>
<td>£ 842.50 ASAS £ 845</td>
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<td>UNITED KINGDOM</td>
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<td>£ 33</td>
<td>£20</td>
<td>£ 6(5)</td>
<td>-</td>
<td>£ 53</td>
</tr>
<tr>
<td>and IRELAND</td>
<td>£ 20,000</td>
<td>£ 185</td>
<td>£200</td>
<td>£ 60(5)</td>
<td>0.60(6)</td>
<td>£ 385.60(6)</td>
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<td>£ 300(5)</td>
<td>0.60(6)</td>
<td>£ 1585.60(6)</td>
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<tr>
<td>U.S.A.</td>
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<td>£ 32 ($ 48.75)</td>
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<td>£ 0.05 (9c)</td>
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<tr>
<td></td>
<td>$ 150,000  (c.£ 100,000)</td>
<td>£ 585 ($901.38)</td>
<td>-</td>
<td>£3 ($4.5)</td>
<td>-</td>
<td>£ 588</td>
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</table>

See overleaf for notes

N.B.: Figures have been rounded off only in the case of commission fees and calculations have been made by utilizing the exchange rates applied in the II Interim Report referring to official exchange rates in force in Italy on 16/2/1983.
NOTES

1) Calculated on forward transaction commission charges.

2) This calculation has been affected at the rate of 0.25% inasmuch as the 0.5% charge is halved between the buyer and the seller.

3) Both the 1% bank and the 0.1% stock exchange commission fees have been charged. However if the operation is affected outside the stock exchange the latter commission fee will not be charged.

4) Transfer charge made by stockbrokers on registered shares only.

5) VAT (Added Value Tax) is not chargeable to non-resident investors of the United Kingdom.

6) Council for Securities Industry Levy (see table relative to Stamp Duties etc. Note 14).

7) Such calculations, kindly provided by a leading U.S. broker firm, have been made on a low valued stock ($ 50) which benefits less but have been conceded a 35% discount on full fees as would be allowed to institutional investors who are the category of investors to which this study is principally addressed.
<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>SUM INVESTED IN EQUITIES</th>
<th>COMMISSION FEE</th>
<th>STAMP DUTY</th>
<th>VAT</th>
<th>OTHER CHARGES</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITALY</td>
<td>£ 2,000</td>
<td>£ 14</td>
<td>£ 1.50</td>
<td>-</td>
<td>-</td>
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<td></td>
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<td>£ 140</td>
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<td>£ 700</td>
<td>£ 75</td>
<td>-</td>
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<td>£ 775</td>
</tr>
<tr>
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<td>£ 16</td>
<td>-</td>
<td>-</td>
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<td>£ 16</td>
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<td>-</td>
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<td>£ 186.50 ASAS £ 189.50</td>
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<td></td>
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<td>£ 120</td>
<td>-</td>
<td>£ 842.50 ASAS £ 845</td>
</tr>
<tr>
<td>UNITED KINGDOM and IRELAND</td>
<td>£ 2,000</td>
<td>£ 33</td>
<td>£ 20</td>
<td>£ 6(5)</td>
<td>-</td>
<td>£ 53 £ 385.60(6) £ 1585.60(6)</td>
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<td></td>
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<td>£ 185</td>
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<td>£ 53 £ 385.60(6) £ 1585.60(6)</td>
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<td>£ 585</td>
<td>£ 1,000</td>
<td>£ 300(5)</td>
<td>0.60(6)</td>
<td>£ 53 £ 385.60(6) £ 1585.60(6)</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>$ 3,000 (c.£ 2,000)</td>
<td>£ 32 ($ 48.75)</td>
<td>(B)</td>
<td>£ 0.05 (9c)</td>
<td>-</td>
<td>£ 32.05</td>
</tr>
<tr>
<td></td>
<td>$ 30,000 (c.£ 20,000)</td>
<td>£ 197 ($300.20)</td>
<td>(B)</td>
<td>£ 0.60 (90c)</td>
<td>-</td>
<td>£ 197.60</td>
</tr>
<tr>
<td></td>
<td>$ 150,000 (c.£ 100,000)</td>
<td>£ 585 ($901.38)</td>
<td>(B)</td>
<td>£ 3 ($4.5)</td>
<td>-</td>
<td>£ 580</td>
</tr>
</tbody>
</table>

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NOTES

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7) Such calculations, kindly provided by a leading U.S. broker firm, have been made on a low valued stock ($50) which benefits less but have been conceded a 35% discount on full fees as would be allowed to institutional investors who are the category of investors to which this study is principally addressed.
19.1 Growth of Information Technology in the Financial Environment

Regardless of the general policy of linkage which the Commission and the Committee ultimately choose, full exploitation of the available facilities of up-to-date information technology is essential. Whether the floors form the nodal point of European linkage or whether members' activities in the international off-market are also accommodated, the requirements for advance telecommunications and information processing systems linking the European Exchanges is likely to prove a common denominator of either approach.

The significance of information technology may be greater, in that failure to exploit it will leave the official markets vulnerable to competition that is exploiting it. Electronic processing and high speed telecommunication are now rapidly conditioning the technical environment of the financial markets in which the Stock Exchanges operate. In that sense, these developments may be a determinant of what the Community Stock Exchanges must do, if, through European linkage, they are to remain competitive in the international markets.

The general background is known and requires only brief mention in this Report. The total installed base of computer units in Western Europe which stood at 590,000 in 1980 was forecast, during the study, by International Data Corporation, a leading market research organisation specialising in data processing, to rise to 3.5m in 1986. The installed base of application terminals was expected to rise from 470,000 in 1981 to 1.6m in 1987, an annual growth rate of 22.9%.

The impact of such technological development in the financial institutions is becoming apparent. The major World banks have established international networks of dealing rooms, incorporating global communications and information systems immediately accessible to the traders. Dealing stations may be equipped not only with video terminals but also with desk top computers linked to the bank's main
frame computers. Clients may have electronic access for transaction
confirmations and settlement instructions. Through such facilities,
international securities, money market and foreign exchange business
can be conducted with highest efficiency on behalf of the banks'
corporate institutional and personal clients.

The relevance of these developments to the international linkage of
Stock Exchanges is well illustrated by brief quotation from a six page
supplement in a leading financial journal* by a major international
bank, through which it advertised the facilities of its re-equipped
London dealing room.

"The scene is London, but the same professional dealing capability is
evident in each of (our) trading locations throughout the world. One
of the keys to success .... in any business operating in a highly
competitive environment, is to identify properly the needs of your
customers and, in doing so, to differentiate your product from your
competitors".

"Pricing was considered to be an obvious determinant. Many years ago,
determining a competitive price to quote to a customer often simply
meant dialling a few brokers to find the 'market' .... Today's world is
much more complex. Intraday price movements can virtually wipe out
your capital".

"To be able to quote competitively and profitably in such a complex
environment, dealers must possess as much information as possible
relevant to their market .... The 'state of the art' global information

Footnote: "Chase Manhattan Bank: Supplement in the Financial Times,
London - 9 August 1983."
and communications systems built into each dealing position supplies each trader, at the push of a button, with all the information he needs to construct and quote to you, the best possible price for your foreign exchange, money and investment needs).

"Fine pricing alone however is not the only criterion. In an environment where interest rates and foreign exchange rates fluctuate widely from moment to moment... clients also demand quick response time. Indeed in any given trading day, market prices are likely to vary... during a short interval... no customer likes being kept 'on hold' waiting for a quote while the market is rapidly moving away from his desired dealing price".

"Our perception two years ago as we looked ahead at the evolution of the... environment was that price volatility was likely to become a permanent feature of the financial markets, thus requiring the commitment of significant human and capital resources to ensure efficient and speedy response in order to retain and obtain customer business".

"Every aspect of the (dealing) room, - the seating configuration between salespeople and dealers, the integration of the different communication and information processes, the finger-tip access to real-time automated information systems, the curvature and low height of the dealing desks, - were all designed in the finest detail to ensure efficient lines of communication and rapid flow of information between the various... professionals interacting to complete your financial transactions".

"Reliability completes the list... In conjunction with our new dealing room project (we have) significantly upgraded our back office processing capacity and capability".

This quotation fairly typifies the facilities available to the banks' international dealing networks. While such capability within the banks is predominantly orientated to 'treasury dealing' i.e. operations on the primary and secondary bond markets, foreign exchange dealing and currency hedging,
the money market and gold, it might be observed that the application of advanced technology to these areas has coincided with a period when the bond markets were dominant and the equities markets depressed and inactive. With the resurgence of the equities markets worldwide, it might be considered within the bounds of possibility that these ideally-adapted facilities could be turned towards international equities trading. Even if this does not prove to be the case, the efficiency of these bond trading systems should pose a competitive challenge to the Stock Exchanges in several ways.

First, it should be noted that the international organisation of the banks permits a global operation to be established within a single, if complex, corporate framework. This implies that the level of international business of any bank is known. The potential of such business can be estimated and capital expenditure plans implemented accordingly. This does not apply to the Stock Exchanges, which are set up on a national basis, and which conventionally see the international activities of their members as fringe business. As pointed out elsewhere, the Stock Exchanges do not know the extent of their members' international business.

Second, even if the stock exchanges did have adequate knowledge of their members' international operations, any large joint capital project between the Stock Exchanges to support such dealing would present great difficulty. Spending priorities of Stock Exchange members are likely to be firmly linked to their domestic market. The case for provision of facilities to support member's international dealing with appropriate services and technology, on the basis of business in a single national Exchange is difficult to establish. It should be noted, however, that the London Stock Exchange appears to be contemplating this in respect of its new International Dealer firms.

Third, as a result of this situation, technical support by the Exchanges of the international dealing by their members is negligible. There are no dealing links between the European Exchanges as such. Such communication as
the members of the European Exchanges have painstakingly established between themselves is crude compared to the banks' international dealing facilities. If the stock Exchanges do not resolve this problem of the gap between the inadequacy of the support to their members' international dealing, and the sophisticated facilities available to the bank dealer, there must be a risk that as the importance of the international dealing in equities increases, the Stock Exchange members will lose business to off-market competition.

Fourth, a point of interest in the bank supplement quoted above is the obvious attention to the ergonomic aspects of design of international dealing rooms. In Section 16, it was noted that international dealing imposes different physical requirements to those conventionally met on the Stock Exchange floors. The total and integrated re-design of dealing facilities, supported by every current technological aid, may suggest the approach which should be taken in the linkage of dealing in the Stock Exchanges themselves.

The power of the inter-bank network is greatly enhanced by SWIFT. The phenomenal growth of SWIFT itself, now linking 2,000 credit institutions in some 50 countries, is an important factor in the situation. At the request of its participants, SWIFT has co-operated with the International Standards Organisation in the standardisation of security messages, and message-switching functions are currently being extended to this field. The power of the SWIFT services has already resulted in membership problems related to the banking/broking interface. The possibility of the use of SWIFT as the main vehicle of international securities communication between the Exchanges may exist, but any agreement which would make all Stock Exchange members equal beneficiaries of such arrangements might be difficult to attain. At the second phase of SWIFT, to be implemented in the next few years, interactive use of the system by participants will be possible. This will offer the potential to extend the system which in its first phase was confined to message-passing to such applications as international dealing.
A second important technical incursion into the European financial environment has arisen from the strong networks across the Community capital centres established by the North American and Japanese securities houses. A public statement made by Yamaichi*, the longest established of the big four Japanese securities houses, exemplifies the extent to which the communication facilities available to world-scale brokers operating in Europe exceeds that available to the members of the Exchanges, who tend to remain nationally based.

Yamaichi stress their growing emphasis on internationalisation, aiming at 100% increase of their international business. Yamaichi International (Europe), set up in 1973, "is also seeking to strengthen its capability of doing all kinds of European business, even where Japan is not directly involved". To support this initiative, Yamaichi, which engages in investment banking, currency underwriting, stockbroking and dealing, has five offices in Europe, - in London, Amsterdam, Frankfurt, and Switzerland where they are locally incorporated, and a representative office in Paris. The statement stresses the integration of their European operation. "Efficient communications link the YIE office network. The six offices in Europe and the Middle East (London covering the Bahrain office) have hitherto operated more or less in parallel, but are now moving to a more systematised relationship, co-ordinating their work more integrally. Each retains its independent status formally, but in their business relations they are as one." The European coverage of YIE is, through London, linked with the four other world capital centres forming the core of the company's operation. The article affirms that it is not the sole objective of the organisation to link these affiliated organisations to Tokyo, but to operate across all the markets which may be important. The individual branches may be substantial, with that in London employing more than 70 staff.

In a further statement in January 1984, Yamaichi announced on-line operation of its Total Information Service from Tokyo, with computer transmission of the information products of the Yamaichi companies. In the system, London is 'the satellite, feeding TIS to Paris, Bahrain, Amsterdam, Frankfurt, Zurich and Geneva'. The same emphasis on sophistication and efficiency of inter-market communication systems is evident. 'Yamaichi is quoted simply as an example of the strength of operation which a number of major North American and Japanese securities houses have attained in Europe. In the main, as noted elsewhere, a diplomatic convention exists mitigating the competitive impact which these heavily capitalised foreign houses, with their potential for unrestricted operations in any capacity across the European markets, might potentially have in the localised and dis-united capital centres of the Community. In the discussions held by the Consultants with the leading foreign securities houses, which included Yamaichi, it was very evident that the Directors had considerable regard to the proprieties of the local market. Nevertheless, whatever "gentleman's agreements" or other devices there may be at present protecting the European domestic markets, the competitive advantage represented by the close integration of the operations of these foreign brokers across un-linked European markets and by their efficient communications, will inevitably assert itself over the course of time. There are already examples of markets lost by the European Exchanges to overseas' competition.

The Consultants do not wish to infer that the movement of powerful foreign brokers into Europe is an undesirable development. To the contrary, the local activities of large U.S. and Japanese brokers are likely to provide a salutory competitive spur for the Community exchanges to move towards more dynamic and full-scale securities trading. An argument for linkage, however, is that the World's largest brokers, whose individual turnover may exceed that of most of the European
Exchanges*, have resources which permit them to establish effective international bases. Few, if any, of the European Stock Exchange members could compete on even terms with these large non-Community brokers in setting up the offices and the supporting communication facilities which effective international trading requires. At present, many members of the European Exchanges use inter-European communications facilities and international financial services provided by the large foreign securities houses. An opportunity exists in European linkage for joint provision by the Exchanges of a unifying system which would offset the disadvantage of the local operation of European brokers, and also provide, on a common basis, the technical infrastructure of European dealing.

It is stressed that the adverse comparison between the technology available to the European Stock Exchanges and that already applied by their potential competitors is valid only in context of international dealing. The domestic operations of the European Exchanges are, in the main, supported by advanced computer and telecommunication facilities. In the international sphere this is not the case, and linkage will offer the opportunity to extend appropriate technological support into members' international dealing.

19.2 The American Precedents

Two important developments in the American market demonstrate the potential of information technology in dealing operations, the NASDAQ* system and the Inter-market Trading System. Neither can stand

* To put this unfortunate comparison with a little more force, the public listed equity trading volume of a single American broker was in 1982, in broad terms equivalent to the total equities trading in that year of all the Community stock exchanges combined. The customer base of this trading was 4.2 million accounts with a sum invested which was equivalent to 18% of the total market capitalisation, bonds and equities, of all the Community exchanges. In 1982, the sum invested would represent 66% of the total Community equity market capitalisation.

+ The National Association of Securities Dealers Automated Quotations System.
as a design precedent for European linkage. A full scale over-the-counter market of the NASDAQ type has no relevance to the European situation, where this form of off-market is most likely to fulfill a useful function as a nursery prior to Stock Exchange listing. Similarly, until harmonisation of trading procedures is attained on the European Exchanges, a system like the ITS, which forms part of the U.S. National Market System, could not be applied in Europe. In terms of technical precedent, however, both are important in demonstrating the relevance and power of the use of sophisticated information technology in securities trading across dispersed locations.

The use of computers and advanced telecommunications in dealing is still regarded with intense suspicion by the majority of Stock Exchange members. This scepticism is endorsed by the low level of success of certain ventures such as INSTINET in New York, ARIEL in London or EUREX in Luxembourg. The current growth of NASDAQ, which now, in respect of eligible securities, forms an integral part of the National Market System, can hardly be ignored. The NASDAQ market is the second largest and fastest growing stock market in the U.S. Its volume in 1982 was over half that of N.Y.S.E. and more than six times that of A.M.E.X.. The numbers of NASDAQ new issues and issuers were greater than those of N.Y.S.E. and A.M.E.X. combined. Over 1978-82, NASDAQ volume more than tripled, while N.Y.S.E. grew two to three times, and A.M.E.X. one and a half times. During 1975-81, O.T.C. shareholders increased by 97% and N.Y.S.E. shareholders by 50%. Six hundred NASDAQ securities eligible for listing on the N.Y.S.E. remain in the NASDAQ market because the issuers prefer the competitive multiple market system of NASDAQ to the single specialist system of the exchanges.

The striking performance of NASDAQ has been made possible by the effective use of automated communications over a national and world-wide market. In 1981-82 the system was modernised at a cost of $22 m, with a further $5 m invested in 1983. The central computer was replaced by a UNIVAC 1100/82 system, with three times the memory capacity and twice the speed of its predecessor. A new generation of terminals was implemented at two of the three levels of operation of the system. The level one terminals used by the stockbrokers to get
NASDAQ quotes rose to 81,000, while 1,700 level-two and level-three terminals, for interrogation and input of bids and offers respectively, were installed in trading rooms by the end of 1982. Traffic on the system averaged 906,800 calls per day, with a peak of 1,257,400. The reliability of the system was 98%.

The recent dynamic growth of NASDAQ may or may not endorse the assertion of the Chairman of NASD that NASDAQ, integrated into the National Markets System, is 'the prototype of the stock market of the future.' In the context of European linkage however, NASDAQ stands as an eminent example of how a successful automated communications system can be developed to handle multi-location trading.

The pattern of operations of the existing European international equities market is closely similar to that of NASDAQ. There are multiple market-makers from whom quotations are sought by second-country brokers. The NASDAQ system could almost be applied as it stands to this dealing. The development by the European Stock Exchanges of their Community international market, using the techniques of NASDAQ would, however, pose a quandary to the Stock Exchange authorities. From one point of view, it would provide the Exchanges with a joint opportunity of regularising and developing their member's present off-market business on a European base. Against that it might be held that such technical facilities for the member off-market might prove so effective that they would reinforce present trends which are drawing business away from the stock exchange floors. This problem requires serious consideration by the stock exchanges. The Consultants encountered widespread discontent among major investors and intermediaries on the inadequacy of the present international equities network. The view was expressed by several of the leading banks that if the Stock Exchanges failed to provide international equities trading with a market system, it was virtually certain that other agencies would fill the gap.

In the same way that NASDAQ sets a technical stereotype of relevance to linkage of the European international equities market as it exists
at present, the American Inter-market Trading System (ITS) offers guidance on the type of technical facilities which floor linkage would require.

Given that at some future time, trading in similar instruments under similar trading rules could be attained in the Community markets, as in the American case, floor linkage along the lines of the American system would be possible. The ITS, which responds to one of the four requirements laid down by the SEC in 1978 specifying the National Market System, is jointly operated by six of the U.S. Stock exchanges and NASD. Inter-market trading in eleven multiply-quoted securities commenced in April 1978 with linkage of the N.Y.S.E. and the Philadelphia Stock Exchange. The Pacific, Boston and Mid-West Stock Exchanges and A.M.E.X. were linked later that year, and, in response to an SEC order, NASD joined the system in 1982.

To quote from the SEC Report on the operation of the ITS*:

"The ITS is a communications system facilitating trading between competing market centres. The primary function of ITS is to link the participating market centres by routing messages between them so that participants (brokers and market-makers) in one market centre can communicate with participants in other market centres to buy and sell stock. This is accomplished by means of a computerised communications system, which consists of a central processor, high speed transmission lines and input and output devices located on the floors of the participating Exchanges".

The ITS enables brokers and specialists who are physically present in one centre to transmit electronically their own or customers' orders in an ITS stock to another market centre. After exploring prices available in their own market centre, a broker or market-maker can attempt to reach a better bid or offer being displayed within the ITS network. This is done by entry of a 'commitment to trade' into a

A computer located on the floor of the participating market centre. A commitment identifies all the information necessary to execute a transaction, including price, size, and the time period for which the commitment is irrevocable.

The efficiency of the system depends heavily on its computing and communications support. Any commitment to trade delivered by an originating centre into a computer terminal is delivered or queued for delivery to the destination market in a matter of seconds. If the trade is accepted by a broker or specialist at the receiving market centre, a short message is entered in the system reporting an execution back to the originating centre. If the commitment is not accepted within the specified time period, the commitment is automatically cancelled.

The ITS does not disseminate quotations information and the system is dependent on the composite quotation information being already displayed on the market floors.

The original computer system was designed as a pilot, and during 1982-83 Securities Industry Automation Corporation (SIAC) the Facilities Manager of the system, undertook a total redesign of the ITS systems, styled "ITS II". The overall configuration of ITS divides between the participants local computer installation, operated by the exchanges themselves and the central element of the ITS system. The objectives of the re-written system are to increase its throughput, to improve response time under heavy trading conditions, to provide for the various user system interfaces, to make the system more maintainable and to provide flexibility for user needs.

Diagram 19.1 schematically illustrates the structure of the system. The rectangle labelled "ITS II" represents the central processor, comprising a five processor Tandem system. To the right is the New York Stock Exchange's equipment configuration. Their principal interface to ITS is through a separate Tandem system called the Universal

* The Consultants are obliged to Mr G M Tieri, Vice President, SIAC for this information on the ITS re-design.
Floor Device Controller (UFDC). The UFDC and a device controller (DC) complex control traffic to and from multi-purpose terminals on the N.Y.S.E. trading floor. The Bell System terminals - DS 40 CRT's and printers - directly linked to ITS are now used primarily for administrative traffic and supervisory functions, as opposed to commitments to trade and responses to commitments.

The upper left portion of the diagram illustrates the ITS interface for the American, Boston and Cincinnati Stock Exchanges, all of which use terminals exclusively. Below that is the NASD computer-to-computer interface ("CMC" stands for computerised market centre, and is yet another Tandem system - belonging to the NASD - used for message switching).

The Midwest, Philadelphia and Pacific exchanges currently use directly-linked terminals for ITS traffic, but are migrating to computer interfaces as illustrated by the "RCI" box, which stands for regional computer interface. Thus ITS II will support three different computer interfaces (UFDC, CMC and RCI) in addition to directly linked devices. The diagram illustrates the types of terminals used for ITS, but not their number. The participants at present use over 650 terminals for ITS traffic, including those at the N.Y.S.E. which serve other purposes as well.

The estimated development cost of the system re-designed was stated in the proposal for ITS II to be $907,176. Of this $697,176 was shared cost, while $210,000 were direct costs allocated to participants for the construction of the system interfaces. The operating costs of the new system, which presumably includes recovery of capital cost, was estimated at $2,168,412 per annum. These costs are allocated to the participants based on their share of overall consolidated tape system trading volume, rather than on their relative use of ITS. In addition participants pay directly for the cost of their ITS terminals; for example, the American Stock Exchange uses 19 CRT's and 19 printers for
ITS at a monthly rental cost of approximately $12,000, including communications lines and controllers. There are no system fees for ITS transactions, nor do participants charge one another any fees. One exchange charges its own members a small fee for commitments to trade entered into ITS.

Two aspects of the European situation would greatly complicate installation of an ITS type system in the Community in the immediate future. First is the diversity of the Exchanges and their national circumstances. Second, and equally important, the American initiative was mandatory, reflecting stipulations of Congress carried through by the Securities and Exchange Commission, and pursuant to part of Section 11 of the Securities Exchange Act of 1934 and the Securities Acts Amendments of 1975 which enumerated certain characteristics required of the National Market System.

The objectives of the ITS derived from concepts of a fair market rather than from the development of business or potential cost-benefit considerations. In consequence, the reports on the ITS to SEC concentrate on the efficiencies of the new market. No studies appear to have been carried out on the cost-effectiveness of the system with regard, for example, to comparative transaction costs. The proportion of business conducted on the ITS by participants is small relative to their overall trading volume, at some 8% of trades and 5% of volume of shares traded. These trading volume figures cannot be related to Europe. For national reasons, a greater proportion of European orders might be expected to be channelled through a linkage system towards the markets of origin of the securities. For European linkage to attain financial performance comparable to that of the ITS, the proportion of system trades would have to be far higher than that of the American system. The present level of floor business in second-country E.E.C. equities would certainly not be adequate to support the implementation of a Community ITS.

On the other hand, it must be recognised that even given the necessary harmonisation of trading procedures, full floor linkage will
inevitably require a central facilities structure along the lines of that designed for the ITS system. Minor variants may be required, but the logic of inter-floor connection to provide for confrontation of orders is identical whether the application is the U.S. Exchanges or the European ones. With regard to the technology of floor linkage, the U.S. precedent may be considered not only indicative, but in its essentials, definitive.

A further U.S. precedent of interest to the European Exchanges are the formalities through which the SEC's four requirements - for the consolidated quotation system, the market linkage, the order routing system and the central limit order file - have been progressed. Formal plans* were drawn up which detailed in full both the objectives and facilities of the system and the administrative arrangements for development and implementation. These agreements were formally signed by each participating Stock Exchange. In so contentious a field as market reorganisation, these plans must have provided an agreed framework which held the American initiative together. In the American context such detailed plans were in any case essential, as submission of them to the SEC, as the regulatory authority, constituted the necessary response of the Stock Exchanges to Congressional wishes.

In establishing European linkage, no authority has comparable responsibility to that held by the SEC in the U.S. The programme of linkage must emerge from and be carried through by mutual agreement of the Stock Exchanges. In the view of the Consultants, the European exchanges would be well advised not to embark upon even the initial developments of linkage until the Exchanges have subscribed to a series of agreed plan documents, similar to those to which defined

* "Plans submitted to SEC for the purpose of implementing Rule 11Ac 1-1 under the Securities Exchange Act of 1934 (1978); 'Restatement and amendment of plan submitted to SEC pursuant to Rule 17a-15 under the Securities Exchange Act of 1934 (March 1980); etc."
the American initiatives. To date, policy has been left to emerge as the consequence of pragmatic actions. Initially this approach may have been essential to overcome inertia. It is likely to prove inadequate, especially in the case of floor linkage, for which the exchanges would incur substantial central and local capital costs.

The proposal (which has been mooted by at least one European capital market expert) to elevate the collective price-fixing of the national Exchanges to European level, implying processing and execution of transactions by a central European computer installation is reflected in a similar demand in the U.S. for centralised computer processing of all orders. An exposition of this view was advanced in the Peake - Mendelson - Williams proposal for an electronically assisted auction market. The proposals advocate an electronic exchange, directly linking all market-makers and brokers through a computer controlled communications system. The system would allow for the entry of firm bids and offers which could be executed automatically when they matched in price and other conditions. While acknowledging that such a system would involve the most sweeping re-ordering of the markets, its advocates argue that best execution can only be obtained through such a central system. They assert that using current technology such a central market could be constructed. They claim that the proposal aligns with the language of Congress, that 'new data processing and communications technology create the opportunity for more efficient and effective market operations'.

The SEC rejected the concept of centralised confrontation of all orders in a computer-based system, on the grounds that it 'would have an impact on existing market institutions that could properly be viewed as a fundamental change in the manner in which securities trading is now conducted, and that it would be difficult to foresee, and provide against, the problems and difficulties that might arise'. Thus, although the American ITS is far in advance of European linkage, it is in no sense revolutionary. The form in which it was implemented met the criteria required by the European Stock Exchanges that the present form of the markets and their methods of trading should be respected.
Positive progress towards electronic linkage of the Community markets is at present limited to the approval by the Committee of Stock Exchanges of the initial stages of the Inter-Bourse Data Information System (IDIS). The basis of the present work is the Project Definition presented to the Committee of Stock Exchanges in early 1983, which assessed and confirmed the feasibility of information linkage between the E.E.C. Exchanges based on publicly-administered communications facilities. In the Report a group of experts recommended the investigation of the use of packet-switching, i.e. PTT systems of computer-assisted data routing, of a type currently operated by Belgium, France, Germany, Netherlands, Spain and the U.K.. The proposal drew a distinction between 'building a system', which is not intended, and developing a capability to use a new and standardised communication technique. The latter is to be the IDIS approach. It is anticipated that the prices of up to 400 securities will be exchanged. The Report proposes that the time and data charges involved in operating the system should be appropriately apportioned to the participating exchanges. It indicates that the required packet-switching facilities would be available by the end of 1983. The proposal acknowledges that the development of the inter-communication capability leaves important elements of the system dependent on the extent and efficiency of the local computer installations of the exchanges themselves, and that the success of the central aspects of the project depend upon the willingness of the exchanges to communicate data to each other.

The Consultants have, throughout their project, attached great importance to the general support given by the majority of the Committee to the IDIS project and, in their first Interim Report proposed that the IDIS system should be developed to provide a dealing network. IDIS represents the first positive commitment to European linkage. Early in the detailed design of the informational phase of IDIS, most of the basic problems of dealing linkage will begin to emerge. To enable IDIS to function effectively, even as a price information service, a start will have to be made in resolving the general problems of European linkage which are the broad concern of this Report.
It is not intended as a criticism of IDIS to point out that the technical Project Definition makes little attempt to identify, much less to resolve, these market problems. This was beyond the brief given to the technical experts. Moreover full ventilation of such basic problems at the preliminary stages of the IDIS proposal might have increased the difficulties of the Committee's decision and extinguished a valuable practical initiative.

The Consultants do not consider it in their brief to make a critique of the IDIS proposals, or to present any full evaluation of the market difficulties which are to be surmounted if the hopes for the system are fulfilled. Brief reference to some of these complications does, however, endorse the view that IDIS will prove to be a very real first step towards the European linkage.

The Definition states that IDIS will be a 'system... which will permit the current prices of stocks to be available simultaneously on each exchange'. It acknowledges the problem arising from different trading hours and price formation systems, suggesting that the collective price fixings would become single transmissions among the continuous trading prices of other Exchanges. It is doubtful whether this will prove adequate, or indeed whether it will represent any enhancement of facilities already available. The collective prices are, at present, important 'punctuations' in the continuous inter-Exchange trading of the 400 or so securities which the system would cover, but after the market had adjusted to them they have only historic relevance. The members of Exchanges trading continuously over the day require the full range of current quotations both from the floor trading sessions and the bank markets. The problem of reconciling methods of trading arises at the price reporting stage.

The nature of the prices to be disseminated requires precise definition. The price record proposed contains fields for bid, offer and mid-prices. Given that it will be essential to disseminate bid, offer and mid-prices in some manner which would allow positive response, it is clear that substantial analysis and negotiation will be required before comparable
price indicators' can be obtained from the different markets. The bid and offer derived from the closing prices of a collective price Exchange have very different meaning to the bid and offer prices quoted, for example, by a London jobber, or by a Continental bank in the off-market. The collective spread, once determined carries no subsequent commitment to trade, the jobber's quotation does. Leaving aside the purely technical matter of standardising prices in currency, settlement etc. terms, (which the Report acknowledges) it is clear that the fundamental market problems are involved in establishing prices across Europe in bid and offer terms. If such prices are to be of practical use it is essential that these problems should be resolved.

The IDIS proposal states that the project will 'not concern itself with the subject of dissemination by the Exchanges of information received over the system. This is deemed to be a local situation with regard to which each Exchange has complete freedom of choice as to the method most appropriate for its own situation'. It is questionable whether this policy will prove acceptable to the Exchanges at the initial information stage, and it certainly will not be valid or acceptable when the information disseminated is later enhanced to be used for inter-Exchange dealing. In general terms, the transmitting, not the receiving Exchange has the greatest interest in the detailed pattern of receipt of the information on its prices. It is likely to be found, as argued in previous Sections, that the uneven profile of European Stock Exchange membership will not prove a satisfactory common base of participation in the IDIS dealing network. On one hand, any extension of participation at a receiving capital centre might, or might not, be acceptable to the Exchange originating the information. Conversely, an originating Exchange might consider a membership base of distribution in the receiving Exchange too narrow for the operations of its own members. It might exert pressure for a full range of its own counterparties in the receiving capital centre to be included. Problems of disparate Exchange membership will arise immediately, though their impact might be softened by definition of eligibility for different levels of service of the system.
A further problem in principle relates to the off-floor market in which European international transactions increasingly tend to be executed, and which must remain in existence until European floor trading in major equities is harmonised. While the proportion of this trading executed on the floor of one or other of the markets would be picked up by IDIS, it has been argued in Section 12, that the majority of this business is not reported to the stock exchanges. The inclusion of these transactions in IDIS would raise many of the problems considered in this Report. In the case of the German banks, for example, formal reporting under a Stock Exchange system of international business might well bring statutory complications. In the new arrangements for International Dealing firms in London* member firms doing business with an I.O. are required to report on such transactions, stating security, price, size and whether purchase or sale. The Council states that it does not currently intend to publish this information.

The above example suggests that at the first stage of its detailed design the IDIS project will encounter problems in principle related to different price formation and trading structures, different membership patterns, and to the relative position of the floor and the off markets. IDIS is likely to prove an instrument for the evolution of a joint policy by the stock exchanges on essential questions of linkage. It will be proved mistaken to consider that IDIS can avoid these problems, or that it is possible to progress European linkage simply as a technical problem of electronic communications.

This situation endorses the constructive aspect of the IDIS project. It might be argued that IDIS cannot be justified if its sole purpose is to be limited to dissemination of price information available from trading on the Exchanges. This function is already carried out by several specialist communication systems, supported by a broader data base than will be available to IDIS and with sophisticated programmes to

* Stock Exchange Council Notice 105/83 December 23 1983; Dealings in Overseas' Securities.
inter-relate types of data. These external services are already built into the in-house systems of many major participants in the markets. If this line of argument is developed, it becomes clear that the ultimate and more significant purpose of the IDIS network must be to provide the exchanges with efficient facilities for transacting their international business and to pre-empt any initiatives from outside the official markets to exploit the potential of electronically-assisted dealing between the European centres.

This further application is envisaged in the IDIS project definition. It states that the objectives of exchanging prices is to achieve 'a more perfect market which can be judged by reduced opportunities for arbitrage trading between centres'.

The exchange of information alone will not achieve this. The price of a foreign security in any exchange is already influenced by known overseas prices, both official and off-market. The local price is also influenced by the availability of deliverable stock in any given centre. As long as the balance of time, currency, and the form of the security and other international obstacles continue to exist, the need for arbitrage dealing will not be eliminated by dissemination of more local price information.

The IDIS proposal, therefore, carries the implication that linked dealing between the exchanges is envisaged. This is further endorsed by the nature of the prices, i.e. bid and offer, which it is proposed that IDIS will transmit. The system's aim of diminishing the need to arbitrage stock onto the individual floors would become achieved when, through the electronic linkage, members are able to respond to offers and bids made in the other markets.

It might on the other hand be noted that the transmission of prices in local currency which IDIS proposes is not compatible with the use of bid and offer prices. To permit bids and offers to be arrayed on the system all conditions of the proposed transactions, including currency, would require to be standardised. For example no computer can process
the relative price of offers of, say, AKZO, quoted in one case in Belgian bearer in Belgian francs for fifteen plus day delivery, and in another case quoted by a London jobber in U.S. dollars in the actual stock for five day cash settlement delivery in Amsterdam. Terminal array requires all offers to be capable of evaluation against each other.

A further important consideration is that it will prove vital for IDIS to transmit real (committed) bids and offers. If not, the risk is that it may transmit information contrived to mislead, as has been the case in certain other electronic trading systems.

The Consultants endorse the belief of the Committee of Stock Exchanges that the IDIS system contains the germ of European linkage. If its development is dynamically progressed it will create a situation in which the Exchanges, either willingly or unwillingly, will have to address the problems of harmonising European trading. The more directly the question of ultimate use of the system is addressed at the early stages, the more cost-effective will be the approach to its development and design.

The steps in the technical development of the system in support of international European dealing should be assessed and anticipated. System re-design and equipment changes might be avoided. The initial technical proposal to use PTT packet-switching systems should be considered in relation to increased traffic which may arise if the system is used for passing settlement instructions, as proposed in Section 20, or for further envisaged applications. Notably, the stage of development at which an interactive system, with central processing capacity will be required should be established.
SECTION 20 - A STRATEGY TOWARDS A EUROPEAN SETTLEMENT SYSTEM FOR CORPORATE SECURITIES BASED ON THE EXISTING NATIONAL DEPOSITORY INSTITUTIONS

20.1 Introduction

The Consultants found an almost universal demand in the markets for improvement in the settlement facilities for equities transactions involving two or more European capital centres. In the first place, all the market participants interviewed stressed the need for greater efficiency, and the replacement of the present labour-intensive and error-prone operations by a full co-ordinated system of European clearing and settlement based on immobilised certificates and delivery between centres by stock account credits and debits. Secondly, it was widely considered that the Stock Exchange themselves should take this initiative. They were recognised as the appropriate authorities to provide such a system. It was felt that, as is the case in the domestic markets, the settlement machinery would provide a cohesive structure for the European international market.

The two approaches to linkage generally considered in this Report, - 'indirect' linkage of members through existing channels of international business on the one hand, and linkage of market floors on the other, have different settlement implications. The first approach calls for settlement machinery which will regulate and provide services for international dealing in the present convention, i.e. a 'rolling' cash settlement with delivery and payment five business days after dealing. Alternatives exist for the dealing and settlement period chosen for floor linkage. Floor linkage would however carry the categorical requirement that, like the dealing, the settlement of the stocks in the system was standardised across the participating market floors.

The settlement problems related to linkage will, therefore, have to be resolved at two levels, first providing most settlement services to the present European international equities market (to which most market comment received by the Consultants referred), and second, planning an ultimate and ideal system supporting standardised trading procedures on the linked floors.
Prior to reviewing these problems, the following sub-section briefly sets out the existing agencies through which the settlement linkage must be achieved. A point of importance is that in floor linkage not only the depositaries, which have tended to be the vehicles of international co-operation to date) but also the underlying Stock Exchange clearing and payment systems are involved.

Table 20.1 sets out summary volume data compiled for the Second International Symposium of Security Administrators held in Zurich in 1982. With the help of the depositaries, the volumes and values have been divided to distinguish between bonds and shares. The comparative scales of operation of the national European depositaries, the independent depositaries and the Depositary Trust Company are indicated. There are no apposite figures for TALISMAN, which is a clearing rather than a depositary organisation.

20.1.1 Belgium

The Caisse Inter-professionnelle de Depots et de Virements de Titres (C.I.K.) is responsible for the deposit and transfer of securities. It was set up in March 1968, as a result of a Royal Decree of November 1967, as a monopoly company by statute and changes to its rules require an official amendment. Its capital as a Société anonyme is subscribed by the Commission de la Bourse. The members are physical and corporate persons authorised to receive orders to buy or sell shares in Belgium, Belgian private savings banks, related Stock Exchange institutions such as the Caisse de Compensation and the Co-operative de Liquidation du Terme, and their foreign homologues. The law of 1967 permitted fungibility of deposited stock. The legal status of depositors is that of co-owners, and they are responsible, proportionate to their holding of the issue concerned, for any loss of securities of the same nature deposited with C.I.K.
<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>FULL NAME</th>
<th>YEAR OF ESTABLISHMENT</th>
<th>NUMBER OF DEPOSITORIES</th>
<th>NUMBER OF SECURITIES DEPOSITED</th>
<th>NUMBER OF ISSUES DEPOSITED</th>
<th>MARKET VALUE OF SECURITIES DEPOSITED IN MILLIONS OF US$</th>
<th>BIBS DEPOSITS IN MILLIONS OF US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRIA</td>
<td>Austrian National Bank (Austro-Bank)</td>
<td>1915</td>
<td>18</td>
<td>1,187 bonds 1,759 shares</td>
<td>107 shares 378 shares</td>
<td>17.2 (10)</td>
<td>10.5 (a)</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>National Bank of Belgium (N.B.B.)</td>
<td>1916</td>
<td>20</td>
<td>307 bonds 391 shares</td>
<td>107 shares 378 shares</td>
<td>17.2 (10)</td>
<td>10.5 (a)</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>National Bank of the Netherlands (N.B.N.)</td>
<td>1916</td>
<td>20</td>
<td>307 bonds 391 shares</td>
<td>107 shares 378 shares</td>
<td>17.2 (10)</td>
<td>10.5 (a)</td>
</tr>
<tr>
<td>THIRD</td>
<td>U.S. National Bank (U.S.N.B.)</td>
<td>1916</td>
<td>20</td>
<td>307 bonds 391 shares</td>
<td>107 shares 378 shares</td>
<td>17.2 (10)</td>
<td>10.5 (a)</td>
</tr>
<tr>
<td>THIRD</td>
<td>U.S. National Bank (U.S.N.B.)</td>
<td>1916</td>
<td>20</td>
<td>307 bonds 391 shares</td>
<td>107 shares 378 shares</td>
<td>17.2 (10)</td>
<td>10.5 (a)</td>
</tr>
</tbody>
</table>

(1) As at nominal value
(2) Only one pilot issue deposited
(3) Operational start in 1983
(4) Excluding securities deposited in special accounts valued at approximately US$ 17.9
(5) There are also 6 other regional depositaries
(6) Including 27 members in Johannesburg
(7) Market is essentially a clearing system and not a depository that is except for a limited extent on behalf of jobbers and banks
(8) Only become operational in November 1981
(9) Including 453 part-time staff and consultants
(10) Plus 2,026 indirect members

IMPORTANT: In comparing the development of the different securities depositaries from 1981 to 1982, it is necessary to bear in mind the depreciation of most national currencies in respect of the US$.

SOURCE: Proceedings of Second ISSA Symposium Switzerland 1982 and depositaries directly from all 1983 figures.
Two exchange settlement systems underly the depositary functions. The Caisse de Compensation du Comptant, of which all Agents de Change are members provides next day cash settlement. Delivery is made of all stock, either physical or C.I.K. transfer and net payment is carried out automatically through members' accounts with the National Bank. Debit positions are not allowed and must be covered the next day.

The terme market settles through the Co-operative de Liquidation du Terme, instituted by Royal Decree, which has a restricted membership. The dealing period is fifteen days, set according to calendar. A 'couverture' of not less than one quarter of the value of the operation is paid not later than the third trading day following the deal. At the end of the dealing period members receive from the Centre Informatique statements of all deals concluded in the market, net stock and money positions and their receive and deliver instructions. Physical or book entry delivery of stock is on the fifth day of the settlement period, preceded by the payment of the debit balances of clients and members on the third and fourth settlement days respectively.

On the Bourse market, registered (U.S. and U.K.) stock transactions are settled exclusively by C.I.K., delivery being acknowledged by C.I.K. credit. In fact, C.I.K. chooses a depositary organisation in the country of origin the shares are registered, in the name of the depositary and are kept there in the name of C.I.K. which in turn recognizes each of its members. Links have been established between C.I.K. and several other Community depositaries. That between SICOVAM and NECIGEF are noted below. C.I.K. has two important German links. Since 1974 settlement arrangements with the
Dusseldorf Kassenverein have existed for Belgian and German stock jointly quoted. The accounts however must be in credit, supported by C.I.K. or German credits to C.I.K. members. The arrangement is in one direction, i.e. the C.I.K. account with the Kassenverein (K.V.) as German law forbids the latter to be a member of C.I.K., nor can C.I.K. hold German shares in its vaults. A second link exists, through the Auslandskassenverein, with the Frankfurt Kassenverein.

C.I.K. has no direct links with CEDEL or EUROCLEAR, though the view was expressed by Belgian brokers that this was desirable. At present, the effective links with these agencies are through the brokers and the banks themselves.

20.1.2 Denmark

The Danish depositary, the Vaerdipapircentralen, (VPC) although, in terms of technology and dematerialisation aims, possibly the most advanced in Europe, may be treated briefly here as the VPC is, at this initial stage, solely concerned with bonds. Due to the strength of the Danish bond market VPC is a large scale operation, and in terms of value of securities deposited it was, in 1981, one of the largest in Europe. It was established in 1980 under Act 179 of May 14 - the Danish Securities Centre Act, and its functions are based on an uncompromising policy of dematerialisation, the abolition of certificates and the substitution of computer book-entry transfer and clearance. The depositor, under the VPC system, retains his right of ownership, and VPC bears any loss, and is able to proceed against the member responsible for that loss.

There is no forward dealing on the Copenhagen Exchange. Settlement is at three days after dealing, when it is estimated that 80% of the stock is delivered. VPC does not handle payment, this is made through the National Bank, with which all brokers must be in account. There being no dealing period, delivery and payment are as dealt.
20.1.3 France

The French depository SICOVAM (Société Interprofessionelle pour la Compensation des Valeurs Mobilières) is a commercial private law company of which the capital is held by the Compagnie des Agents de Change and the French banks. Its services are restricted to member financial intermediaries, brokers and banks. There were 217 members in 1981.

SICOVAM opens and operates current accounts in securities for its members, which it operates by book entry transfer. It receives in deposit French bearer securities subject to French legislation. It further accepts registration into its name of foreign nominative stock, and carries out trustee functions for the beneficial owners. SICOVAM may accept the affiliation of similar foreign depositaries.

Admission of securities may be determined by SICOVAM, and French bearer or foreign-quoted bearer shares, French bearer and convertible bonds, which do not involve drawings, and other non-quoted securities subject to the approval of the Ministry of Finance may be accepted. In 1981 the number of securities deposited was 3,566. Of these 188 were foreign shares, mainly either U.S. or U.K. registered, or Dutch, German or Belgian bearer.

Having received foreign stock into its own name for its members, SICOVAM controls (though does not make) all benefit payments and rights. The system facilitates arbitrage operations between Paris and the other world capital markets.

The securities of certain foreign countries, which still include Canada, U.S., Italy and Norway can only be entered into SICOVAM in the name of French residents. These restrictions, which are due to requirements of the issuing countries, are progressively being removed. SICOVAM treats its holdings as fungible, and, concurrent with the study, plans for total dematerialisation were proceeding. Securities held in SICOVAM may not be pledged.
The SICOVAM operations arising from the Paris market are underlaid by the clearing system of the Chambre Syndicale. The clearing divides into termé and cash market settlements. For the former, in which a 40% cover is required for equities dealing, there is a Liquidation Mensuelle on an appointed day at the beginning of the third week of the month. This is followed by a seven day settlement period with delivery of nominative, delivery of bearer, and money settlement on the third, sixth and seventh days respectively. In the cash market the settlement period is two weeks in respect of SICOVAM transfers, and one week in respect of others.

The Chambre Syndicale clearing system builds up the record, against submitted punch cards, of the market dealing of the brokers, and at the time of liquidation it makes necessary debits and credits through the brokers accounts at the Banque de France. Cash settlement is made outside SICOVAM, the depositary being responsible for the stock transfer. Stock deliveries outside SICOVAM are made direct.

SICOVAM has been highly active in establishing international links. The closest and most effective is that with C.I.K., both depositaries holding membership of each other. The arrangement covers Paris-listed Belgian and Belgian-listed French stocks. To explain the arrangement for the sale of a Belgium stock in Paris SICOVAM debits the French member's stock account credits C.I.K.'s SICOVAM account, at the same time telexing this information to C.I.K. C.I.K. then debits its SICOVAM account and credits the C.I.K. account of the buying C.I.K. member. The arrangement has the advantage that special accounts can be opened mutually for rights, and dividend coupons can be detached the same day to avoid cum or ex anomalies on delivery. Under the scheme debit balances are allowed. Cash payment forms no part of the linkage. A difficulty arises from the insistence of the Belgian investors on receiving physical stock. This factor, which does not apply in Paris, means that a higher proportion of stock deposited tends to be with SICOVAM.

Negotiations between SICOVAM and the Kassenvereins, now of some six years duration, have yet to yield results. Although, subject to amendment...
of the Depotgesetz, all the technical solutions have been worked out, their implementation is delayed by a series of problems. The K.V.'s cannot maintain securities accounts with similar institutions abroad and only authorised German banks can act as collective depositary institutions. Dividend arrangements present difficulty in that Germany still insists on the clipping of coupons when this is appropriate. Germany has not yet ratified the European convention on stopped securities; no stop (arrêt) of a security in SICOVAM is possible. SICOVAM may not hold German stocks in Paris.

In December 1982 a new scheme linking SICOVAM and NECIGEF was implemented, superseding the previous Depot-Echange arrangements. Under this scheme, all Dutch certificates relevant to SICOVAM operations were deposited with NECIGEF. To achieve delivery from Paris to Amsterdam, the selling member submits an International Delivery Order to SICOVAM. SICOVAM then telexes the transfer information to NECIGEF, which credits the account of its buying member (or delivers CF or K certificates as required), which SICOVAM confirms to the issuer of the Order. The process can be achieved in 48 hours. The arrangement is one-way, but this is simply due to the de-listing of the French nationalised stocks in Amsterdam. It related only, therefore, to Dutch stocks listed in Paris. At the request of SICOVAM and in the interest of simplifying dividend payments and benefit administration, the arrangement requires credit balances in Amsterdam.

SICOVAM has also negotiated arrangements in London whereby TALISMAN is now designated as the depositary's sole agent in London for withdrawal of stock from, and delivery to SICOVAM. This represents a modest step towards linkage of TALISMAN and SICOVAM, but it is understood that the possibility of SICOVAM holding an account in TALISMAN is being investigated.

There is no direct link between SICOVAM and CEDEL or EUROCLEAR. Links exist indirectly through the Paris banks. One major bank, carrying out substantial settlement functions in the Paris market was, when interviewed, transferring all its German stock settlement functions to CEDEL.
Through Article 94-11 of the Lei de Finance of May 2nd 1983, it was required that within the eighteen months of publication of that law all shares should be held and transferred by book-entry. Amongst the provisions, SICOVAM was empowered to open accounts for foreign intermediaries, to create representative certificates solely for circulation abroad, and to arrange nominative inscription in foreign depositaries in the name of the foreign depositary.

20.1.4 Federal Republic of Germany

a) The German (regional) 'Kassenvereine' (security-clearing associations)

The Federal German Securities Deposit Law (Depotgesetz) of 1937 forms the legal basis for the custody of securities in the Federal Republic. Said law distinguishes between separate custody (defined by the law and practice as 'separate safe custody' or 'jacket-custody') and collective custody (also called 'giro-transferable collective custody').

In the case of separate custody, the securities held in custody by the depositary banks for their customers (depositors) are provided with a jacket marked with the depositor's name and/or security deposit account number. The depositary bank notifies to the depositor the security numbers. The depositor is owner of such securities.

In the case of collective custody, the deposited securities are held together with the deposits of one and the same kind of security of other depositors.

The function of collective custody is exercised by the Kassenvereine which are defined by the Securities Deposit Law as 'Wertpapiersammel-banken'/collective security-deposit banks. The depositors authorize their depositary banks to place the customer securities deposited with them in collective custody with the regionally responsible Kassenverein. Fungible securities only are eligible for collective custody.

There are seven Kassenvereine in the Federal Republic, i.e. in all
cities having Stock Exchanges (Bremen excepted): in Berlin, Dusseldorf, Frankfurt, Hamburg, Hannover, Munich and Stuttgart. The functions of the Kassenverein for the Bremen Stock Exchange are taken care of by the Hamburg Kassenverein. The Kassenvereine are legally independent bodies having the legal form of Aktiengesellschaft (joint stock companies under German law), linked by mutually held accounts. Under Federal German Banking Law, the Kassenvereine hold bank status. Shareholders of the Kassenvereine are the bigger banks resident in the respective stock exchange centres and which are also engaged in securities business. In order to guarantee the necessary neutrality and independence of the Kassenvereine their shares are issued in the form of registered shares which may only be transferred with the consent of the individual Kassenverein. With a few exceptions, no one interest held exceeds ten per cent. Only credit institutions which are subject to German bank supervision by the Federal Banking Supervisory Office in Berlin can be participants in the Kassenvereine. These institutions also include branch offices and subsidiaries of foreign banks which undertake banking and securities business (by virtue of law, they then are subject to State bank supervision). Brokers cannot be participants in the Kassenvereine as they are not considered to be credit institutions. Each shareholder is also a participant, but not all participants are shareholders.

In Germany, the idea of collective custody dates back to the last century. The 'Bank des Berliner Kassenvereins' was the first bank to introduce collective custody in 1882: at that time the Bank des Berliner Kassenvereins was the central (note-issuing) bank of the city of Berlin. For reasons of tradition, most of the collective security-deposit banks set up in the other German stock Exchanges integrated the designation 'Kassenverein' in their firms' names.

The custody and administration of securities as well as securities giro transfer are among the most important duties of the Kassenvereine.
The collective custody of securities is effected in such a manner that the securities deposited by the participants in the Kassenverein are held together with deposits of securities of one and the same kind made by other participants. The sum of securities of one and the same kind held in the giro-transferable collective security deposit at the Kassenvereine is called collective custody. At the time of lodgment of securities by a participant in the collective custody at a Kassenverin, the previous individual ownership of the participant or his depositor specified by the itemised list ceases to exist and simultaneously converts into proportionate co-ownership of economically the same value in the collective deposit increased by the lodgment.

The Kassenvereine are not able to establish whether the securities deposited with them are the property of the participants or of the latter's depositors (beneficial owners). Likewise, the names and amounts of securities holdings of the individual beneficial owners are not known to the Kassenvereine; they work on the principle that all securities deposited with them are the property of the participants' depositors. This is the reason why the Kassenvereine have no right of ownership on securities deposited with them, unless they have pecuniary claims against their participants originating from purchase or deposit fees.

Eligible for giro-transferable collective custody in the Federal Republic are:

German shares, mutual funds and bonds: the latter, however, only if they are not redeemable by drawings according to numbers. An official quotation at the German stock Exchanges is not required;

Foreign shares, mutual funds and bonds, if they are fungible. Foreign shares and bonds are required to be officially quoted on German stock exchanges or eligible for regulated unofficial dealing. Foreign mutual funds are eligible for giro-transferable collective custody only in such cases where their sale in the Federal Republic has been approved by the Federal Banking Super-
visory Office. Foreign registered shares must be converted into bearer instruments through corresponding certification (see under b) Der Deutsche Auslandskassenverein AG). Eurobonds denominated in Deutschmarks are eligible, almost without exception, for giro-transferable collective custody; Eurobonds denominated in other currencies are only eligible in cases where the lead-managing issuing house is a German bank and has applied for the bonds to be made eligible.

It is estimated that 75 to 80 per cent of all German securities are concentrated in the Kassenvereine.

According to the Securities Deposit Law, the Kassenvereine must undertake the safekeeping of securities exclusively in their own vaults or in the vaults at other banks. The Kassenvereine are not permitted to place the securities in (third-party) custody, be it with other banks or foreign depository banks. It can be expected that as from 1985, at the latest, the Securities Deposit Law will be amended and the Kassenvereine will be allowed to put securities in (third-party) custody with foreign depository banks, subject to their having the same functional standard (for example, SICOVAM, CIK, NECIGEF). The Kassenvereine will then be in a position to effect international security giro transfers.

The administrative acts regularly performed by the Kassenvereine for its participants in particular include, but are not limited to, the collection and distribution of repayments due, dividends and interest, the setting up of subscription and fraction rights accounts in cases of capital increases, the procurement of new sheets in cases of coupon sheet renewals, as well as the exchange of securities in cases of corporate changes, mergers, conversions and similar operations.

However, the essential practical effect of giro-transferable collective custody lies in the security giro transfer system, allowing
a purely accounting transfer of co-ownership shares in collective custody from one beneficiary to the other without necessitating the physical movement of a single document. Pursuant to the Securities Deposit Law, the buyer of securities has to accept delivery by means of giro security transfer as performance of the stock exchange transaction.

Due to the fact that all German Kassenvereine are directly connected with each other through mutually held accounts, a transfer of securities without their physical movement can also be effected by way of giro transfer in all such cases where seller and buyer banks are located at different stock exchange centres and thus are participants in different Kassenvereine.

The facilities of the Kassenvereine are also available to the participants for money payments, settling stock exchange transactions by way of money clearing.

The handling of all stock exchange transactions is done fully automatically. The process runs as follows: a broker having determined a price feeds all orders executed at this price via an input unit, after visual checking on a screen, into the EDP system. On account of a most variable input method the system performs an extensive logical input check and, in the event of input errors having been made, will not accept or process the data but return it on the terminal screen to the broker for correction.

The system then matches the contracting parties, i.e. allocations are done and records of sales stored. Contract notes (confirmation of transaction) are then written. The stored broker input data is also used for book-entries at the Kassenverein. Every trading day, after input of all transactions by the brokers, the EDP system works out for each stock exchange firm a so-called delivery list containing details of all orders executed. The seller banks can establish from such lists which of the transactions have to be serviced two days later,
as is customary in the trade. All those transactions which a seller
bank cannot perform on the performance date by way of security giro
transfer via the Kassenverein, because the securities are not in the
giro-transferable collective security deposit, or because no cover on
the giro-transferable collective security deposit account is available
that day for the securities concerned due to delay in the performance
of a back-to-back transaction, are marked correspondingly by the bank
committed to delivery; the list will then be returned to the Kassen-
verein. The Kassenverein will make book-entries only of such trans-
actions which are released for delivery. The transactions not re-
leased in the delivery list will continue to appear in the subsequent
lists until the obstacles to their release have ceased to exist and
book-entries in the collective security deposit accounts can be ef-
fected.

Simultaneously with the delivery of sales by way of security giro
transfer, the Kassenvereine effect money clearing on payment against
delivery basis; this is done via the money accounts of the parti-
cipants held with the respective Land Central Banks (the Kassen-
vereine have been authorised by their participants to operate such
money accounts). The drawing up of invoices by the seller banks is
no longer necessary as the add-up countervalue is stored at the
Kassenverein.

b) Der Deutsche Auslandskassenverein AG

Whereas trading in domestic securities has operated smoothly for
decades due to giro-transferable collective custody as laid down in
the Securities Deposit Law and the security transfer system connected
therewith, considerable difficulties have existed in the past concern-
ing the servicing of transactions in foreign securities which had been
kept in custody abroad and were not eligible for official German stock
exchange trading. These difficulties were primarily due to very dif-
ferent securities regulations and administrative practices. The
Kassenvereine were unable to contribute to the improvement of this
situation as their business activity, pursuant to the provisions set forth in the Securities Deposit Law, extends exclusively to domestic securities, which are held in custody by the Kassenvereine themselves. Therefore the Kassenvereine founded the Deutsche Auslandskassenverein Aktiengesellschaft (AKV) in 1970, with its head office in Frankfurt/Main. The objectives of the AKV are (1) to operate a security-rights giro transfer system in foreign securities deposited with foreign banks, in addition (2) to cooperate as trustee in connection with the introduction of foreign registered shares to official listing on the German stock exchanges, and, finally, (3) to help foreign depository banks and international clearing institutions to find affiliation with the German Kassenverein system. The AKV is not a collective security-deposit bank.

All categories of foreign securities from 18 countries deposited with German credit institutions by their customers are eligible for the AKV's security-rights giro transfer system. For practical reasons, such securities are not brought to the Federal Republic; they remain in the safe custody of foreign banks. The AKV holds those deposits for its participants uniformly under its name in a foreign country, i.e. per country in one single depositary. The AKV serves its participating credit institutions as central booking and clearing agency both with respect to the securities as such and the payment of settlements of related trading transactions. The participants will receive from the AKV an advice of credit to a securities account in the form of a fungible deposited-security account and will pass on such advice of credit to their customers. This helps to avoid time and cost-consuming security movements, deposit transfers and new share registering abroad in dealings among the AKV's participants. In cases where transactions in foreign securities are concerned which are eligible for over-the-counter trading in Germany, settlement and delivery are effected fully automatically as for official trading within the scope of the central stock exchange business clearing.
Under a) it was explained that with giro-transferable collective custody at the German Kassenvereine the receivers of giro-transferable collective security deposit credits obtain proportionate co-ownership in the collective deposit of the Kassenvereine; thus said receivers are fully covered in a case of bankruptcy of their depositary bank or their Kassenverein. When receiving a credit advice for securities from the AKV in the form of a fungible deposited-security account the depositors do not obtain co-ownership, but only a (contractual) right to claim delivery of their securities deposited abroad. (Depositors receive deposit credits in the form of a 'fungible deposited-security account' also in such cases where their foreign securities are not held in custody via the AKV but via their depositary banks with foreign banks.)

In addition to the task of operating a security-rights giro transfer system for foreign securities deposited with banks abroad, the AKV also acts as trustee in connection with the introduction of foreign registered securities to official listing at the German stock exchanges. Registered shares of foreign companies cannot be admitted to official dealings at German stock exchanges in their original form, both for legal and factual reasons. British registered shares, for example, lack the qualification as securities required under the provisions of the German Stock Exchange Law; Japanese registered shares, indeed, possess the security character required under German law but are drawn up in a script and language not generally understood in Germany; US-American registered shares must, on account of differing laws and securities regulations, be adapted to German conditions.

The AKV assists in the introduction of foreign registered shares to official German stock exchange dealings by issuing bearer collective certificates for the foreign registered shares which are the subject of the stock exchange listing.
The cover funds of original shares forming the basis of the bearer collective certificate are held in trust by the AKV under its name in the country of the home stock exchange. The AKV deposits the bearer collective certificate in a giro-transferable collective security deposit with a German Kassenverein and in this manner creates giro-transferable collective security deposit fractions negotiable on the stock exchange which, like domestic bearer instruments, can be transferred through the security giro transfer system.

As regards the AKV's participation in an international security giro transfer system, it cooperated in the foundation of the 'Centrale de Livraison de Valeurs Mobilières S.A.' (CEDEL) in Luxembourg on September 28, 1970. CEDEL's objective is the performance of an international giro system in Eurobond issues. Acting for German credit businesses, the AKV has acquired an interest in CEDEL and set up an accounting connection with it. This allows German banks participating in the AKV to settle transacted dealings in Eurobonds on the basis of 'payment against delivery' via this clearing linkage both among each other and also with foreign participants in CEDEL. In this case, too, the AKV provides its participants no co-ownership, but only the contractual right to claim redelivery of like securities of equal amount. Book-entries are effected in 'fungible deposited-security account' and not, as with the Kassenvereine, in 'giro-transferable collective custody'. Moreover, the AKV acts through the German Kassenverein system as depositary bank for CEDEL and EUROCLEAR in respect of Deutschmark denominated Eurobonds which are eligible for the German giro-transferable collective custody system. Furthermore, the AKV keeps in custody for CEDEL and EUROCLEAR any German shares and domestic bonds which may be eligible for the systems of the above-mentioned clearing organisations.
20.1.5 United Kingdom

Although the central pivot of the design of the London settlement system which serves the Stock Exchange and the Stock Exchange (Irish) is the recognition of the role of the jobbers in the market, and although the domestic functions of the system will necessarily continue to relate to registered stock, the functions of the TALISMAN system are, in principle, the same as those of the Continental depositaries. The obstacles to effective linkage of TALISMAN with its Community counterparts are those of law or protocol, and are not related to its technical functions.

The TALISMAN system is based on the operation of a nominee company (SEPON Ltd.) in which each issuing company listed on the Stock Exchange has an account. Shares of selling clients are transferred into SEPON, held in the nominee in trust on behalf of the beneficial owner, and, on settlement, are transferred out into the buyers name. Within SEPON separate accounts are maintained for each jobber. The central computer system sets up the transaction records (the jobber always being the intermediary between the broker sold and bought bargains in London trading) and processes the various steps of settlement. In effect, as no certificates are issued for a SEPON holding, SEPON is a jobbers' depositary. Jobbers' stock, and movement of stock in the market is thus dematerialised. Individual items of stock in the jobbers' accounts become fungible, and constitute a pool from which stock can be
apportioned by computer against a queue of buying orders. With TALISMAN, a simple 'settle-as-dealt' system became possible, replacing the previous complex clearing which had been constrained by the need to optimise delivery according to available physical shapes. Central stock payment functions are integrated into TALISMAN, and stock moves against money within the system.

TALISMAN does not itself handle the nominative share registers, which continue to be maintained by the issuing companies' registrars. The system has however, through machine-readable interfaces with the large service registrars, facilitated and speeded the registration process. An important by-product of the system, self-evidently available from the computer records of transactions and of change of ownership, are efficient systems for payment of dividends, rights, and other benefits. TALISMAN does not handle gilts (government bonds), which are settled on another separate system.

The settlement system is supported by a large computer installation, comprising two computers of four and three megabyte memories, linked to which are twenty four disk drives with capacity of five billion bytes. In active trading the system may handle over 30,000 transactions a day.

Under present plans put forward by the Powell Committee* and approved by the Council of The Stock Exchange, it is intended to proceed further with dematerialisation. It is not intended to set up a central registry, as the system is already linked effectively to some 1,000 registrars who carry out their functions efficiently, and absorb much detailed work which might not benefit from central concentration. The banks are satisfied with present arrangements, and the companies have not expressed any interest in the centralisation of share registers. A compromise scheme to exploit the benefits of book-entry transfer under the existing structure is therefore proposed. It is intended to develop a facility of uncertificated holdings available to investors through a Central Settlement Office. Shareholders, under a voluntary scheme, will be able to maintain uncertificated accounts with transfers of ownership taking place without the movement of documents. The main benefit

* Securities Industry Consultative Committee; "Report on Equity Settlement" - April 1982
of the proposal is considered to be the achievement of all the benefits of book-entry transfer through a central nominee while leaving the company in close contact with its shareholders.

Plans were announced in December 1983 which envisage the start of the new system in 1987. As well as the features mentioned above, they are expected to include agent nominee facilities for small investors, the extension of the net payment system presently available to brokers and jobbers to major investors and agents, and the use of the clearing house automated payments system (CHAPS) for electronic transfer of funds between the participants.

Responding to demand in the London market, the priorities in the extension of the TALISMAN system relate to the foreign centres with which London principally deals, and, amongst them, those which present most difficulties of settlement. An office was first opened in South Africa for such reasons. During the study, current plans were to open administrative offices in New York, Melbourne and Toronto, with further moves eventually into Hong Kong, Singapore and Kuala Lumpur. The function of the TALISMAN offices will vary according to the interface necessary with each local depositary. TALISMAN considers that the system of administrative local offices is more effective than the use of settlement agents, which tend to be slow and costly.

Although the nature of London settlement, due to its concentration on registered stock, is somewhat different from that of the Continental depositaries, TALISMAN could play a full role in any European depositary linkage, given that legal and institutional obstacles to it doing so were removed. The fact that there is no bearer in TALISMAN is not a problem. Under European linkage, stock transfer would be achieved in the countries of origin of the securities. Continental bearer, as is almost universally the case now, would be held abroad. Present practice for example, is for a U.K. institution to hold German bearer in the stock account of a German bank, sub-account the institution's U.K. bank, reference the institution. Any necessary accounts related to settlement in the U.K. market could be within TALISMAN, without that
system ever handling the bearer securities. Conversely, the TALISMAN functions would be found to be responsive to the requirements of the Continental markets in respect of London-listed registered stock.

Due to prime attention having been paid to foreign markets which have tended to be more volatile in volume than the Continental Exchanges, only the first tenuous steps have been so far taken by TALISMAN to develop this European relationship. In 1982, a Settlement Services investigation into European problems was discontinued in the face of higher priorities related to the Australian market. The report on this work was of interest to the Consultants. Ostensibly the investigation related to 'checking' (i.e. the dual input of the transaction records to the central computer system). The perceptive conclusion was that the difficulties arose not from any technical problems of checking, but from the absence of any well-formulated London procedures for settlement of European transactions. The problems were considered to be equally caused 'by the jobbers evolving separate systems and the brokers' confusion in dealing in these markets'. The report gave documentary endorsement to general comments made to the Consultants in all the markets.

Positive results in European linkage are, as yet, limited to the 1983 agreement with SICOVAM. Under this initial step to establish liaison, TALISMAN took over the agency functions previously carried out by eleven London banks on behalf of SICOVAM. TALISMAN deals with instructions to London correspondents for stock held in the name of SICOVAM. TALISMAN receives from Paris the relevant certificate, and raises a TALISMAN sold transfer against it, after which the transaction can be processed through the London system. The arrangements cover 60 stocks listed on the Paris Bourse, 20 of which are U.K. securities, and 40 South African with a U.K. listing. The advantages are the centralisation to a single agent, the use of telex to anticipate stock movement, and the ability of TALISMAN to operate stock balances held to the order of SICOVAM. On the deposit side, speedier London payment can be facilitated by SICOVAM's acceptance of telex notification of stock delivered to TALISMAN. While the scheme falls far short of the mutual holding of stock accounts, it is seen by both parties as a first constructive step towards fuller linkage.
20.1.6 Italy

The immediate relevance of the Italian depositary, Monte Titoli s.p.a., to European linkage is severely limited by the Exchange Control regime which has isolated the Italian markets from international dealing. The emergence of this powerful depositary system which is well-aligned in all respects to link with its Community counterparts does, hopefully, have significance for the future.

Monte Titoli was established in 1978 in Milan under Law 1966 of November 23 1939 as a trustee company with the conventional objectives of limiting physical movement of stock, lowering stock transfer costs, averting theft and fraud, and increasing the speed of settlement. The stockholders of Monte Titoli are the Bank of Italy, (the largest Italian bank), the Bank Associations representing the minor banks, the Associazione Bancaria Italiana, and the brokers association. The participants are the institutions linked to Monte Titoli by mandate, which may be banks, brokers (through a joint nominee) trustees, clearing houses, and financial institutions whose activity is compatible with that of the depositary. An irony of the Italian Exchange Control situation is that, of all the Continental depositaries, Monte Titoli is the most free in respect of establishing relations with depositaries abroad, a facility which is a dead letter in present circumstances. In 1980 Monte Titoli was explicitly authorised by the Ministry of Finance to admit foreign securities, whether shares or bonds. Article 10 of the depositaries statutes foresees the need for Monte Titoli to become a member of foreign depositaries.

The basic operations of Monte Titoli are deposit, block-transfer free of payment, and withdrawal and settlement of shares bought and sold during the month. Within the system securities are fungible. Special operations carried out are acting as pledgee, underwriting new issues, operating a proxy service, managing rights accounts for capital increases, and collecting dividends and interest.

The implementation of the depositary system was made difficult by a lack of legal support or compulsory sanction. On the other hand, this freedom
from external regulation confers on the depositary great flexibility. Adherence to the system has been encouraged, in recent years, by the Bank of Italy and the CONSOB.

The depositary admits both shares (which in Italy with the exception of certain savings shares (Azioni di Risparmio), must be registered) into its own name, and bonds (which in Italy must be bearer).

In securities settlement in Italy, delivery of securities is tightly linked with cash payment, but this is achieved through the clearing system of the Bank of Italy. Monte Titoli itself has no payment function, and is notified of the net transfers of securities resulting from the Bank's stock and payment clearing. Cash transactions are for three day settlement, while the account dealing, which runs mid-month to mid-month, is settled at the end of the second month. Monte Titoli is connected to the six clearing houses of the Bank of Italy, of which the principal is Milan. The other five clearing houses have securities deposited in Monte Titoli in Milan, and their clearing is co-ordinated through the Milan clearing. Brokers in the four Stock Exchanges without clearing facilities may either settle direct in their centre, or carry out their bargains on an Exchange with bank clearing. The system has thus the advantage of highly centralised bank clearing in a national system. The depositary is driven by a magnetic tape on which the Bank of Italy gives the necessary transaction information. Government bonds which are now largely dematerialised, are settled by the Bank of Italy without involvement of Monte Titoli.

Monte Titoli's target at the start of its operation in November 1981 was to achieve immobilisation of securities and to consolidate certificates into large denomination, leading to the use of global certificates and ultimately to dematerialisation.

The policy in Italy is to attract into the depositary a proportion of issues to cover active trading. The depositary does not aim to secure deposit of the major block holdings which are not normally traded. At the beginning of 1984, seventy seven shares of all types, out of some 250 listed
were admitted, representing some 20% of the issues concerned, or 300 million shares. Ninety corporate bonds of private industrial companies or state-owned corporations were also handled.

20.1.7 Luxembourg

As an international centre of great importance in the Eurobond markets, Luxembourg's settlement systems are almost entirely related to the field of Eurobonds. The more sophisticated aspects of the Stock Exchange systems, linking bond markets 'A' and 'B' through key-to-disk equipment to a central processor which then produces output for the clearing system, handle variable-income, fixed-income and convertible Eurobonds. The Stock Exchange runs the Chambre de Liquidation for delivery and payment and includes the Clearing House of the Luxembourg-established banking and financial institutions, organising the daily settlement of all claims between its members. In 1982 balances of Fl 80,113m were settled against gross claims of Fl 236,091m.

While, in a study restricted to the equities market, these Luxembourg bond operations have no formal relevance, the contrast between the efficiencies of international bond and international equities settlement is marked and is widely recognised by market participants. The comparison is developed in certain respects later in this section. Luxembourg is the location of CEDEL, the international bond clearing agency, and its operations require brief note. CEDEL is incorporated, and has its head office in Luxembourg, with a representative office in London. Its shareholders are 95 banks and institutions. CEDEL operates a securities and precious metals clearing system. No shareholder can hold more than 5% of the company, which is a co-operative operation for the benefit of 1,200 participants in fifty five countries. Through participants' accounts, transactions in some 5,000 fixed interest securities can be settled in any of twenty five countries. Participants' securities are held by CEDEL on deposit with approved depositary banks, of which there are twenty four and which, in principle, are also shareholders of the company. Participants' deposited cash balances are maintained in their original currencies, CEDEL being required to maintain cash and deposits at least equal to the funds
entrusted to it in each currency, subject to the granting of overdraft facilities to participants.

Participants holding CEDEL stock and cash accounts, having executed a transaction, transmit instructions to CEDEL. Through the computerised book-entry system, the securities are transferred from seller to buyer and simultaneously cash is transferred from buyer to seller, with the transaction being cleared the same day. CEDEL's system can handle securities on a fungible or non-fungible basis. For the transmission of transaction instructions and of reports the CEDEL communication system uses Chemlink, General Electric Time-sharing network, Investdata (Telekurs) S.W.I.F.T., or computer-computer link.

Securities are kept in segregated vaults in the depositary banks with a record of certificate numbers, and are isolated from the accounts of the depositary bank. The system rejects stopped bonds. The depositary banks must insure securities held, to which is added CEDEL insurance to cover possible deficiencies. CEDEL operates financing and bond-lending services, with forty eight hour overdrafts at the discretion of the Executive Committee and longer term finance available through participating banks. Stock borrowed before 11.00 hours can be used to settle transactions that day. CEDEL administers collateral free of charge. Custodian fees are charged according to the volume of securities deposited. Transaction fees are charged, subject to a volume discount. Interest on overdrafts is credited to participants after appropriate deduction.

Between 1972 and 1982 the number of CEDEL participants grew from 300 to 1,200; issues admitted to the system from 500 to 6,000; and securities deposits from zero to $45 billion.

The other bond market clearing system EUROCLEAR, though operating from Brussels and not Luxembourg, is best considered in this context. EUROCLEAR is larger than CEDEL, with, in 1982, 1,300 participants, 8,000 securities admitted and securities deposited in excess of $105 billion. The system processes more than 12,000 instructions daily, and its
annual turnover exceeds $500 billion. The system has evolved from a settlement service begun in 1968 by the Brussels office of the Morgan Guaranty Trust Company. It is now owned by Euro-clear Clearance System p.l.c. whose shareholders are 120 banks, brokers and investment institutions located all over the world and active in the international securities market. The company, in which each participant has a small percentage of shares, determines policy, the securities to be accepted and fees to be charged. The Euro-clear system is now operated under contract by Morgan Guaranty in Brussels where a distinct organisation, the Euro-clear Operations Centre has been set up, employing 300 staff.

The functions of the system are book-entry clearing with simultaneous transfer of stock and payment, the latter in twenty currencies, custody through a world-wide network of depositary banks, and securities lending and cash clearing. Enhancing the system, links have been established with CEDEL and, through the A.K.V., with the German Effectengiro permitting EUROCLEAR members book-entry settlement of transactions with members of those agencies.

In the interest of efficient communication, participants may use the EUCLID programmes within the G.E. Mark III time-sharing network to send instructions or receive reports, and this system is now used for eighty per cent of securities instructions received by EUROCLEAR. Participants may choose their own form of communication, and messages may be sent by SWIFT twenty-four hours a day. While almost the entirety of EUROCLEAR deposits are Eurobonds, foreign bonds, domestic bonds and certificates of deposit, equity shares are accepted into the system.

A securities lending and borrowing service is offered to participants and EUROCLEAR's system, introduced in 1976 was the first of its kind for internationally traded securities.

Like CEDEL, a feature of the EUROCLEAR system is the efficient and instantaneous reporting of securities and money positions to participants. A distinction between CEDEL and Euroclear is that the
latter only handles securities in fungible form.

In the context of these independent international clearing agencies, the success and growth of SWIFT (the Society for World-wide Interbank Financial Telecommunication) must be noted. SWIFT, set up in May 1973, is an international transaction processing and transmission system which by 1983 had expanded to cover 1,000 member banks in over fifty countries. SWIFT is a non-profit making co-operative society, owned and controlled by the member banks who use the service. The principal function of the network is international processing of transactions, i.e. bank transfers, foreign exchange confirmations, statements, documentary credits etc., and interbank securities trading. An important facility is that of message-text standards for universal computer-readability.

The original system, SWIFT I, now approaching the end of its service life, was a centralised network based on a 'store and forward' approach to processing. SWIFT II, to be implemented in 1985-87, is to be a modular system based on 'transaction processing'. It will be more flexible, permitting user banks to incorporate a variety of processing or application functions for regional or national services, and it will permit inter-active systems between participants. Terminal interfaces with SWIFT, subject to meeting the specifications necessary for the system, are member-owned and may be of any manufacture, but SWIFT also offers a range of interface packages from branch to bank main-frame scales of operation.

SWIFT is increasingly being drawn into securities business by demand of its members, and in 1983 a Securities Working Group was designing standards for securities messages. At the time of the Consultants' discussions, consideration was being given to the participation in SWIFT of leading world broking houses. It was suggested that the banking Community would be in two opinions on this question. In the interests of banking (and securities industry) efficiency, it was felt desirable that the large-scale securities houses should participate. On the other hand, there were functions within the member banks which might lead banks to interpret such a move as admission of competitors.
Amsterdam settlement procedures originate in the Effectenclearing b.v., a collective settlement system, the principle of which is that the system acts as a common counterparty. Bargain records are based on the input of punch cards from the market floor and transaction lists are produced for members overnight, to be available at 0900 hours the next day. The lists give the cumulative stock and money balances.

The Effectenclearing adjusts the liabilities for stock bargains to the market price of the current day, to maintain protection against price movement, and nets this difference out on delivery of stock. Settlement is formally ten days after dealing (or earlier), but up to twenty one days is allowed, and twelve to fourteen is considered the norm. A disadvantage of the present clearing computer system is that it cannot monitor delivery date against transaction date. A new system is being developed which will permit enforcement of higher discipline of delivery, but it is anticipated that it will not be implemented until 1986. For Stock Exchange transactions both the cash and stock movement is driven by the Effectenclearing, which sends the instructions for stock transfer to the Dutch depositary NECIGEF.

NECIGEF (Nederlands Centraal Instituut voor Giraal Effectenverkeer b.v.) was established in July 1977, under the Securities Giro Act. All its shares are owned by the A.E.B. Its objective, under a voluntary system, is to replace individual ownership of specific shares by joint ownership of deposited blocks, so permitting giro transfer. The depositary is forbidden to incur any commercial risks. The functions of NECIGEF are the safekeeping and management of the securities in the central deposit, the related accounting work, carrying out the computerised book-entry transfers, and controlling interest payments and dividends, allotment of drawing groups and settlement of drawn debentures and conversions. Transfers in NECIGEF holdings may arise from instruction of Stock Exchange members, through the Effectenclearing, to deliver giro stock, from non-member banks' instructions to Effectenclearing in regard to a Stock Exchange transaction, or from delivery between members on the basis of direct instructions to NECIGEF from the banks. Giro delivery is normally four to five days after dealing.
Membership of NECIGEF is available to institutions operating in safekeeping, management and administration of securities, i.e. banks or brokers, provided they are registered under the Credit Supervision Act. The Nederlandsche Bank n.v. and the Effectenclearing are members by virtue of their clearing roles. Foreign depositaries are also eligible for membership.

The NECIGEF giro deposits are required to be at sufficient level to support members' transactions and are supplemented by a pre-depot system. Securities are entrusted to the depositary under a principle of co-ownership, to which importance is attached by the Dutch authorities in respect of relations with other depositaries. The client can demand physical securities equivalent to his holding, and his securities are not liable to be attached in the event of failure of a member or of NECIGEF. When a member bank alters a client's securities account, the client must be informed. If at fault, the depositary is liable for loss, otherwise members have collective responsibility if the loss is not covered by insurance.

NECIGEF is more than usually restricted in the corporate securities it may admit. Only bearer securities are admitted; registered stock and non-fungible bonds are not, on the basis that these securities are not fully interchangeable. The depositary, is therefore, able to admit most of the Amsterdam-listed equities, and the parallel market stocks which are not registered. At present, no foreign securities are admitted to NECIGEF, but it is anticipated that this restriction will be removed. While the foreign stock, under a system of linkage, would be left abroad, NECIGEF accounts in such stock would be essential. The depositary may also accept A.D.R. 's and C.D.R. 's for U.S. securities.

While the Dutch investor has a legal right to hold bearer securities in their classical (K) form, administration of these securities has been modernised by the institution of the Centrum Voor Fondsenadministratie b.v. (CF). The function of CF, in essence, is the control of a system of exchange agents who transform K securities into CF form, or vice-versa, maintain an appropriate system of records and
control of CF securities issued. The CF certificates, which are small and two-part, affirm both the holding itself and the standing entitlement of the holder to all benefit of the stock, so averting the need for physical detachment of coupons. The CF certificate itself may, in practice, only be kept by securities institutions. NECIGEF is a participant in the CF, like the member banks and stockbrokers. Under the system, payment of dividends is streamlined. The companies remit the dividends to the CF, which then transfers the total net amount of dividends to NECIGEF and the bank depositaries, who are then responsible for appropriate credits to the stock account holders. Subscription rights and other benefits may be handled in the same manner. For conversions or drawn debentures NECIGEF sends the securities to the exchange or payment agents.

NECIGEF accepts both K and CF form securities, but not in respect of a single stock. If both CF and K are in circulation, then NECIGEF will only accept CF. If the company has not, through the CF, issued CF form, then NECIGEF will accept K form.

20.2 The requirement for a long-term strategy in the development of European Settlement

It appears reasonable to suggest that the approach to the development of a European settlement system should reflect the philosophy and, possibly, the technical approach which the Stock Exchanges appear likely to adopt in the development of a linked trading system. The vital need to respect the domestic role of the national institutions as European linkage is progressed applies equally in both cases.

As regards settlement, this implies a strategy whereby the development of European settlement will be firmly based on linkage of the existing depositaries, rather than on any centralised institution. It further implies that development towards a fully linked system will be progressive. In the first instance, given the implementation of an enhanced and interactive IDIS, as proposed in Section 19, the network would be used as an instrument of more efficient communication in the passing of standardised settlement messages, and progress could be developed from this modest threshold.
Acceptance of the ultimate target of a European system and of the proposal for an effective communications network implies a fundamental difference of approach from the bi-lateral associations through which progress is presently being attained. Even the first moves to establish effective communication on an inter-European basis will raise difficulties in standardising the underlying meaning of the data transmitted. As these information difficulties were identified and overcome, the need for further standardisation of procedures would become progressively apparent and would need to be confronted. Some might be resolvable within the field of settlement. Some, such as standardisation of dealing and settlement periods might require to be resolved in conjunction with the development of market linkage. At the level of European linkage, a different orientation of depositary policy, aimed more at business development and less based on investor protection might be required.

A European settlement system might thus emerge progressively, starting with a network of inter-depositary communication which eventually developed, in the longer term, into a jointly owned organisation of depositary linkage which provided the markets and the national depositaries with the services required for settlement of international transactions. The European settlement would be a linking and clearing function, rather than a central depositary as such.

The Consultants do not believe that at this point the progression towards increased standardisation of European settlement can be predicted. Nor do they believe that it is their task to attempt to predict it. It would be identified from expert Working Groups first tackling the elementary aspects of international communication, and the obstacles would emerge logically as further standardisation was seen to be required. It is apparent, assuming the IDIS scheme rapidly progresses to the point at which it can record, within a single information system, all sides of an international transaction between two or more European Stock Exchanges, that an entirely new potential could emerge for settlement linkage. The possibility of a jointly owned central service
to manage the link between the depositaries in such transactions is immediately evident.

An important consequence of the adoption of such a scheme of linkage by the depositaries, concurrent with the development of the dealing linkage, is that it would call for a combined effort by all the depositaries. It is submitted that this might prove more constructive in the long run than reliance, as at present, on bi-lateral negotiations. In advancing such an argument, no derogation is intended of the formidable work which has, in spite of the difficulty and complexity of the field, resulted in constructive arrangements between individual countries. It is, however, questioned whether this approach can be trusted to yield results in the time-scale likely to be required in the European international market and whether it is likely to produce in the longer term the facilities which the efficient operation of the linked market will require. This question is discussed more fully in Section 20.12 below.

20.3 The need for improvement of European International settlement

From the discussions between the Consultants and all types of market participants, it is evident that there is considerable pressure for improvement of international settlement within the Community. The situation is that market operators have been largely left to evolve their own systems of dealing and procedures for inter-exchange settlement. Dissatisfaction with the latter was universal, subject to expression of appreciation of effective bi-lateral agreements in the small number of cases where these exist. In general, European international settlement is unregulated, confused and costly. A typical statement from a large broker, successfully active in European dealing, was that complex back office procedures were '50% of the business'. Office costs of transactions are high, estimated by one efficient internationally active broker as approximately $60 a bargain. Expectedly European international settlement is labour-intensive compared with other fields.
Business is inhibited by the fact that any advantage gained from competent dealing at a fine price can easily be offset by undue costs of settlement, which are much at hazard, particularly with regard to timings of delivery and payment. Issuing companies want better procedures for the international movement of stock. Increased U.S. involvement in the European markets is introducing an important pressure group who will seek the same efficiency of inter-exchange settlement that is available in the U.S., and who will take steps to provide it if they do not find it locally. In this situation it may be appropriate that the national depositaries should review the significance of the emergence of the independent settlement agencies, such as CEDEL and EUROCLEAR and of the high interest which is being shown by both intermediaries and major investors in the type of facilities which these two international agencies are able to offer. Many brokers, banks and international market-makers are beginning to use the services of these commercial agencies to bridge the gap between the depositaries. While the management of CEDEL and EUROCLEAR have at present no positive desire or apparent plans to attract international equities business, this situation could change if their participants were to demand it.

If this were to occur it could raise serious issues for the international business of the depositaries. The view expressed by one major European bank, itself highly active in the international capital market, was that any tendency of international settlement to move from national Stock Exchange-based depositaries to independent commercial agencies would constitute a threat to the cohesion of the individual Exchanges, in a much more real way than, for example, the loss of market information services to outside specialist firms. If the emergence of this competition implies that the national depositaries must move to maintain their own position in face of it, then they have to set up an organisation to provide the central communication and processing which would be required to achieve effective linkage.

The remainder of this Section reviews the main problem areas in establishing such a concept. These are considered to be membership of the system, type of securities admitted, facilities for delivery
against payment, provision of commercial and foreign exchange facilities, coupon payments dividends and benefits, and technical considerations. In this broad context, it is argued that bi-lateral negotiation is likely to fail to produce an effective European settlement system in a competitive time-scale, and a preliminary indication of the type of scheme on which the depositaries could embark is attempted.

20.4 Membership of the depositaries

In theory, bi-lateral agreements between depositaries should, ultimately, produce a network linking the membership of each depositary, through which an account holder in any could take or deliver stock through book-entry transfer from or to any other account holder in any other depositary. The ultimate scheme is best illustrated by the present CIK-SICOVAM arrangement, and the lists of participants in the procedural documents for this linkage make clear the very wide range of transfer-routing which may be established in this way. Similarly, the more limited arrangements between CIK and the Dusseldörf Kassenverein and Auslandskasseverenin mean that CIK participants have the facility to take into, or deliver from their credit balances at those depositaries in settlement of transactions involving all the German Kassenverein members.

As linkage proceeds a problem will arise, however, over the disparity in qualification for membership (i.e. depositary stock account holders), as this varies from country to country. Liberality of membership criteria differs, in some cases being essentially defined by legislation governing credit institutions, in others permitting broader participation. In London, at present, only the brokers and jobbers participate in the settlement system. In December 1983, The Stock Exchange Council, within proposals to implement electronic book-entry transfer for equities settlement, expressed the intention to extend the net payment system to major investors and agents. While from an industry standpoint this proposal is most constructive, it may imply broader depositary membership than is permissible in most other Community countries.
Depositary membership is, therefore, not consistent across the markets. Where intermediaries do not have local arrangements with the agencies with which they settle their business, they tend to join non-Exchange systems. A thorough review by the national (Exchange-based) settlement organisations of such external affiliations of their own Stock Exchange members would give an indication of the nature of the international linkage and the facilities which their local settlement really requires. The likelihood is that such a study would point to the need for international initiative taken by the depositaries themselves. Market participants commented favourably on the fact that CEDEL and EUROCLEAR could accept virtually 'all agencies', and that this was a great simplifying factor in conducting settlement through them. Linkage through membership of each national depositary would be both less comprehensive and less uniform, and the situation, as bi-lateral linkage gradually proceeded, would be patchy and complex.

A view of some interest met in the markets is that international settlement of equities should be based on the settlement machineries of the Stock Exchanges. Both the regulatory function of the official markets and the necessary expertise in local equities were considered important in this respect. It is likely that any move by the Stock Exchanges and the depositaries to set up effective international linkage would receive strong support from institutional investors.

In any scheme to link the depositary systems without any international framework, it appears likely that one major inefficiency of the present international settlement - the widespread use of settlement agents - would remain. The use of these agents arises from the need of an operator in market 'A' to have an 'agent' within the depositary system in market 'B'. The operator in market 'A' appears to require this contact in the other market to effect all necessary settlement instructions within the foreign settlement system (of which 'A' is, of course, not a member), and also partially for market reasons, such as preservation of the confidentiality of certain aspects of dealing. It is presumed that if a central arrangement were made between the depositaries which, in effect, made the operators in markets 'A' and 'B'
members of the same settlement network, the need for settlement agents and the substantial cost of such extra intermediaries would disappear.

The more fundamental problem - the mutual membership of the depositaries themselves with each other - has been the prime concern of the bi-lateral negotiations to date. It appears that during 1984 some of the long standing obstacles between certain of the markets may be removed. The problem remains to be resolved in respect of those countries which are not yet involved in negotiations. The deep roots of each national depositary in local law and in legislation drafted primarily with the local market and the protection of the local investor in mind may continue to impede mutual international membership. Complicating this problem is the fact that the depositaries are organised with different constitutions, different corporate forms, different administering authorities in regard to quite deep technical detail, and with different relationships to their national Stock Exchanges.

Local law may restrict not only depositary membership but also the clients for whom the members act as nominees. For example, restrictions on the nationality of beneficial owners prevent SICOVAM from accepting immatriculation (via the bank member) in favour of clients of certain nationalities in certain stocks. While these restrictions have been eased in 1983 with regard to two important markets, a number still remain, complicating the use of the depositary by participants and foreign clients.

The introduction of a linkage organisation at European level might bring more flexibility to the situation. A common criterion, broader than that of national depositary membership might be accepted, which would widen participation across the securities industry, while the depositaries at national level would continue to operate their present 'protective' roles. Secondly, present problems of mutual membership of depositaries might be eased if the relationship was secured through an intermediary organisation at European level, run by the depositaries themselves.
Type of securities admitted to the linked depositary system

An inherent problem of a 'bi-lateral solution' is the restriction of types of securities which the depositaries are permitted to admit. The extreme cases possibly are NECTIGEF, which is only permitted to hold bearer securities and is thus forbidden from holding foreign registered stocks, and London, where the settlement systems do not handle bearer at all. The Kassenverein restrictions are more complex, and, against criteria derived from German securities law, they admit certain foreign securities but not others.

A further limitation which appears to have entered all bi-lateral negotiations is the tendency to confine agreement not only to listed securities, but, more restrictively, to securities mutually listed on both exchanges. This constraint appears to apply to the whole network of agreements between NECTIGEF, CIK, the Kassenvereins and SICOVAM. In imposing this requirement for multiple listing, they severely limit the scope of securities covered. The radical effect of such restriction is best illustrated by the recent French nationalisations, which, at a stroke, made a dead letter of the French element in the SICOVAM/NECTIGEF agreement of 1982, and, likewise, caused all the Kassenverein holdings of French securities to be returned to France.

It is unclear why this requirement has crept into the bi-lateral negotiations as, in their domestic function, all the depositaries have latitude to deal in any securities wherever they are listed and indeed in some cases, they may deal in securities which are not officially quoted at all. This broader definition is far more relevant to the idiom in which the international market operates.

It is further alleged by market practitioners that in the agreements reached so far there has tended to be discrimination by depositary authorities in favour of bonds and against shares. The Kassenvereins are, for example, alleged to have been more flexible in setting up effective external links between their depositaries and the Eurobond market than they have for shares. In principle it would appear
illogical to discriminate in favour of a bond issued by a company, and
against the shares of the company which underlie any assurance
represented by the bond itself.

There appears to be widespread demand in the markets that any internationally
traded European share should be held 'in one place'. The precedent of
the Depositary Trust Company is quoted, which facilitates transfer
between U.S. Exchanges and now holds some 95% of U.S. stock. As
pointed out below, it is considered that such an arrangement would
meet the money and stock control requirements of the market operators.

Interpreting the U.S. situation into the European context, the ultimate
logic is for each national settlement institution to be the depositary
for the securities issued on its own market, and to be in account with
all other European depositaries in respect of those securities. Under
such an arrangement, restrictions confining national depositaries to
local securities form would cease to be an obstacle. While this is a
professed aim of the bi-lateral relationships which are now being set
up, such a system, if the full necessary interactions are to be
obtained, would require central reporting and message transmission
procedures supported by technical equipment capable of handling the
traffic involved. It is, therefore, argued that full development of the
bi-lateral relationships will inevitably in due course take up the need
for central European clearing, and that the problem may as well be faced
at an early stage. Such European-level negotiations would also provide
an appropriate workshop to identify and resolve technical problems
related to types of securities across a gradually broadening range, which
will be required if a genuine inter-linked European market is to be developed.

A further complication is the apparent need for a physical instrument
which would constitute good delivery in all of the Community markets.
Until various fiscal inequalities inflicted on investors of different
countries are removed, it appears likely that physical delivery of
stock will continue to be required for tax reasons. This apart, it will
be some time before the preference of some national investors for
physical stock will disappear. The likelihood is that, at least in most
countries, the right of the investor to demand it will remain protected in law. Expert opinion is that in most of the Community countries dematerialisation cannot be compulsorily achieved.

A further powerful factor inhibiting total dematerialisation is the insistence of important foreign intermediaries, notably the Swiss banks, on holding physical stock. The Dutch and German markets are particularly concerned to accommodate this need, and the French dematerialisation scheme permits STOPLAN to issue certificates in favour of foreign holders.

Bearer securities are already deliverable in all the European markets. Under any linkage system, complications would only arise from the exclusion of all or certain bearer securities from a depositary's accounts or from certain transformations to which the securities may be locally subject. The problem of creating certificates deliverable in all the European markets essentially relates to registered securities which cannot, for reasons of either law or convenience, be dealt in local markets.

No originality of thought is required to reach the solution to this problem, which has been resolved at local level in several of the European markets. The reconstruction at European level of national systems of issue of local certificates, (such as that in Belgium), to produce a system of European Depositary Receipts, would appear to continue to meet the local needs while at the same time broadening the markets which the local certificates at present serve. The power of the U.S. ADR system is now apparent. The Consultants investigated this U.S. market in the course of their study, and consider that it could offer an important precedent for Europe. The success of the present U.S. ADR market is more significant than the failed past attempts to launch an EDR market, which were under-resourced. The ADR market is capable of moving the main market in European securities to New York. A French international bank asserted that the vast majority of transactions in Paris in South African gold shares are now in ADR form.
The feasibility of, and the case for, a system of EDR's cannot be fully reviewed in this Report, but brief figures express the dimension of the problem. ADR's were established in 1928, but the real growth of the system has come in the last ten years, initially in South African gold shares, later stimulated by American investment in Japan and Europe. Four hundred foreign securities are now issued in ADR form by Morgan Guaranty Trust, of which some eighty are European equities. In the five months following March 1983 nearly half the new ADR's issued by Morgan Guaranty were in European shares. In 1970 ADR's represented approximately 100 million underlying shares; by mid-1983 this had increased to over 750 million shares, of which some 35% were European. The strength of these markets might be exemplified by the turnover in 1982 of 10,371,000 Glaxo one-for-one ADR's, or of 9,623,200 Novo Industries ADR's in the same year which represented some $664 million trading. If the need for such a system in Europe were established, the prime requirement would be an organisation, presumably based on depositaries and operated by their member banks, who, at European level, would issue these instruments. The system would serve the double purpose of facilitating delivery of European stocks between the Community exchanges and offering potential to create Community markets in non-European stocks.

The main drive of international settlement would be towards effective book-entry transfer of securities, but this will not be totally achieved in international trading. The continuing need for instruments of physical form which could be dealt across the markets might be met by an EDR system.

20.6 Facilities for delivery against payment

One of the most important arguments in favour of a linking organisation relates to the money and stock management functions of the major investors and intermediaries. A major transaction may involve four, five or six European centres. Even in two-centre transactions, complications of movement of stock and money are inevitable from disparate settlement scheduling and procedures. An international dealer has a constant problem of 'where is the stock, where is the
money? In inter-European settlement this is acute. One major market-maker commented that his trading was only possible through the latitude of European banks who, knowing the situation, were helpful and flexible. If the normal standards of domestic banking disciplines were imposed, he believed the market would not be viable. In the European international market there tends to be far too much 'free payment' with the movement of stock and money inadequately linked.

Many market operators appear to believe that the answer to this problem lies in some form of Europe-wide settlement in which the stock and money movements are firmly locked together. The international investor or dealer does not want a complex statement of stock and money in different currencies from different centres. He requires a single control for effective cash management, and the more complex the sources are, the more difficult is his task of drawing up the daily statements from which he can manage his money balances.

This implies settlement through agencies which handle not only securities but also money within the same system. In this way payment is neither at risk nor is it subject to costly delay. The main risk to which international operators are at present exposed is not the total default of a counterparty, which is most unlikely and which can be avoided by normal market expertise and prudence. The real risk is incompetent settlement, which could cost them more than the margin or the commission on the transaction. European international settlement should be supported by inter-depository lines of communication, and this system should be linked with the banks, presumably through National Bank Clearing and SWIFT.

In principle, this requirement is unlikely to be disputed by the national depositaries. Although only two of the systems, the German Kassenvereins and the London settlement have fully integrated domestic systems of stock against payment, all the depositaries are in effect supported by their domestic clearing systems in which payment against delivery is instantaneous and guaranteed. Examples are the Effectenclearing system via the KASS Associatie Bank in Amsterdam, the Caisse de Compensation du Comptant and the Co-operative de Liquidation.
du Terme using the Banque Nationale de Belgique in Brussels, the clearing system of the Chambre Syndicale using the Banque de France in Paris. The assurance of payment from these systems is however only available to members of the specific clearing organisations, and the procedures do not cover transactions with a second country counterparty. To underpin an inter-linked European market and to facilitate more dealing, either linkage of the clearing organisations or development of parallel procedures is required at European level.

It seemed generally acknowledged that the plethora of settlement contacts presently involved in international European transactions should be replaced by contact with as few agencies as possible. This requirement, so well perceived and carried through in the bond market in the plans for CEDEL and EUROCLEAR, is discussed elsewhere in this Section.

20.7 Provision of financial facilities

An important aspect of the facilities provided by CEDEL and EUROCLEAR are the money and stock management functions and related financial services. These appear to have great appeal to market participants. They simplify the work and control functions of the large professional dealing houses while, at the same time, they offer effective help to smaller participants who do not have specific contacts in foreign centres.

A single system for stock, money, stock borrowing and the use of stock for collateral is seen as essential to the development of a European market by many market practitioners. The independent commercial depositaries are able to offer comprehensive services of money management, placing overnight and short-term money on behalf of participants, and facilities for stock borrowing are smooth and well-organised.

The international markets' requirements for such facilities pose a quandary in considering the appropriate European-wide role of the national depositaries. The guiding principle of the legislation underpinning
the national depositaries was less the provision of market services than the assurance of absolute integrity of a depositary system meeting the needs of local investors. Accordingly, the depositaries are virtually all precluded from any commercial functions apart from those precisely related to custody and administration of securities. The legal technicalities of the forms of joint holding available to the real owners tend to be the definitive aspect of the arrangement. It is asserted, as a result, that it would be improper for a depositary, in which beneficial holders enjoy a right of joint ownership in deposits, to link with a 'commercial' depositary, in which, it is alleged, the beneficiaries' stock rights are merely those of the creditor. It further appears that even establishing which of these cases might apply is a matter of considerable controversy.

It is clear that the national depositaries may encounter considerable legal difficulties in any collaboration between them to set up a European system which incorporated commercial facilities of the type already available in the bond markets. There may however be some room to manoeuvre in that such a European organisation could be an adjunct to, rather than an integral part of, the local institutions.

The provision of commercial and financial facilities has a very direct relevance to the effective linkage of European equities settlement. Apart from positioning in the international market, discussed below, the bought and sold sides of inter-market transactions are dealt in different dealing periods for different settlement dates. It can be anticipated that the forward dealing and settlement periods will not be harmonised for some years. Meanwhile, a constructive proposition might be that one of the functions of the linkage organisation would be to absorb the inefficiencies of the present situation by offering central facilities related to the various bridging operations which at present are handled by the dealing firms.

20.8 Foreign exchange facilities

A similar observation would apply to the provision of foreign exchange facilities. At present, in the settlement system of each centre, the
currency of settlement tends to be restricted to local currency or the U.S. dollar. In Amsterdam, for example, international settlement may be either in guilders or dollars.

The independent international depositaries do not suffer from this restriction and both EUROCLEAR and CEDEL transactions may be settled by the buyer in virtually any currency. This facility has the potential of permitting the international dealers to bring all their money to a single currency position, which, for control purposes they clearly require to do.

It would be highly desirable for any system linking the depositaries to offer a similar facility. This could not be achieved through bi-lateral linkage, and implies the existence of some common clearing structure. As most of the depositaries do not handle the money side of the transactions, it also implies that the Stock Exchange payment institutions should, where necessary, be associated with the system. For example, in Amsterdam not only NECIGEF but also KASS Associatie would be involved in the network.

20.9 Coupon payments; dividends and benefits

The tasks associated with the administration and distribution of interest, dividends and other stock benefits, and the accounting entries connected with them, are greatly eased when the deposited physical stock is concentrated in one place. This appears to be an aim of the present bi-lateral negotiations. An ultimate ideal situation would be to have all securities issued onto each exchange held in the depositary of that country, with the members of that Exchange as the sole paying agents. At the same time, the other Community depositaries would be in account with the depositary in the country of issue, and the necessary credits could be transferred through the system.

While this structure is achievable by bi-lateral negotiation, it appears likely that the traffic resulting from the benefit payments would be so heavy as to require some form of centralised communication framework, which bi-lateral negotiation could not achieve.
Agreement to participate in the linking of European depositaries might ease some of the problems in this field which appear intractable at national level. For example, difficulties at present arise due to the insistence of Belgian banks for Dutch certificates in classical form for payment of coupons. The banks, not unreasonably, are not concerned with the difficulties incurred by CIK and NECIGEF in the transformation of CF form to K. If, however, the Belgian banks as participants in CIK also held membership of a European linking arrangement of which CIK was a component, they would be involved in the general efficiency of that linkage, and the present attitude would possibly not be sustained. The argument applies to many nationally-based problems which might gradually be resolved by commitment to a European-level linking arrangement.

20.10 Technical considerations

While the extent of application of computer technology to the dealing and market functions of Stock Exchanges remains a controversial and undetermined matter, its relevance to back office procedures and settlement is firmly established. The trend towards total automation of securities settlement is clear, and it will proceed further as de-materialisation of transfers and securities gradually becomes the norm.

The Community countries have overall made great progress in the implementation of modern depositary systems, and, normally under the aegis of the Exchange, highly sophisticated systems have been implemented at national level. As more business tends to move into international dealing, two questions might be posed.

(i) The first relates to the optimal scale of operation. The depositaries draw their revenues from custodian charges and fees charged on accounting entries. Economies of scale apply, and it is clear that the smaller depositaries, or depositaries which have difficulty in securing adequate lodged stock for one reason or another, have more difficulty in generating adequate revenue than their larger counterparts. In consequence their charges have to be high, and they may
have difficulty in maintaining a fully competitive rate of development of their international services. Disparate charges and disparate rates of technical development might detract from a system based on bi-lateral agreements. Cost factors might begin to indicate that nationally-based operation in all the ten countries was not the most efficient scale. Participation in an effective scheme of linkage would do much to shield the smaller depositaries from the effects of such concentration, and assist in the protection of their domestic functions.

(ii) Second, it appears questionable whether the scope of the present agreements between depositaries adequately anticipates the future demands of the markets. For example the NECIGEF/SICOVAM links are based on telex messages between the depositaries. Yet both market opinion and recent developments such as the 'electronic bridge' between CEDEL and EUROCLEAR indicate that computer linkage is likely to be the pattern in the future. This cannot be achieved bi-laterally between ten depositaries.

The effectiveness of the communication between the client, the depositary member, the first country depositary, the second country depositary, the second country depositary member and his client needs to be carefully reviewed in comparison with the facilities available to the international bond dealer through CEDEL or EUROCLEAR. From such an investigation it would emerge that while movement of paper - international transfer orders, etc., and telex messages - prevail where the depositaries are concerned, they are, in the case of CEDEL and EUROCLEAR largely replaced by on-line computer communication.

20.11 Bi-lateral negotiation is not adequate

While the progress made in recent years in setting up the existing links between the depositaries must be fully and generously acknowledged, it appears questionable whether this general approach will be able to achieve effective European international settlement in the time-scale required. In face of the rapid progress being achieved by outside agencies, the Stock Exchanges need to extend the coherence of the official markets which is obtained through their settlement machineries to a European level, and to do so as an urgent task.
The concept of a European settlement was proposed at least as early as 1958, then by M. DeWaal of the Brussels Bourse. Yet still the ideal of full international association remains a distant target.

The tally of two-way agreements to date is small, amounting to:

- SICOVAM - CIK
- SICOVAM - NECIGEF (one way, credit balance)
- CIK - NECIGEF (one way, credit balance)
- CIK - Dusseldorf Kassenverein and Frankfurt Auslandkassenverein (one way, credit balance)
- SICOVAM - TALISMAN (agent function only; no depositary connection)

In 1984 more progress may be achieved by the amendment to the Depotgesetz which would permit further linkages to the Kassenvereins. Even so, when the required scope of the bi-lateral approach is considered, the extent of the remaining problem is striking.

Theoretically, arrangements between ten countries will be required. This results in a total of forty five negotiations between those countries. Regrettably this number doubles, since each country is in fact involved in two sets of negotiations, one with regard to setting up its own accounts for foreign securities in the second country, and one with regard to setting up the local accounts of its own securities for the foreign depositary. These are two quite distinct problems and subject to different constraints.

Apart from the fact that this number of negotiations is monumental, and would consume time out of all relation to the availability of qualified staff to carry it through, the approach has other flaws. First, the negotiations will tend to be private between the countries concerned. They will focus on the resolution of individual national differences, and no opportunity for the emergence of general principles and common resolution of common problems will occur.

Second, the ultimate problem of technical compatibility and capacity of the linkage system will not be faced. Assumptions of traffic etc.,
relevant to negotiations between individual member countries may be invalid in relation to the total situation which will result from the sum of the agreements.

Third, it has been noted that there are certain problems impeding effective inter-European settlement which might best be dealt with at European level. The most obvious of these might be the distortions and dis-incentives imposed by the different and complex procedures associated with withholding tax and tax credits. The common ventilation of these questions at European level might offer the best opportunity of amelioration. At that level also there might be potential for relaxation of constraints which are appropriate at national level on depositary functions, but which might be relieved in respect of their participation in an agreed, depositary-based linkage.

Fourth, there is already an evident and understandable tendency to disregard the more awkward aspects of bi-lateral negotiation. For example, in spite of the close business association between the AEB and the London Stock Exchange, NECIGEF has not yet considered any linkage with the London settlement system. This is on the reasonable grounds that existing negotiations with depositaries of similar structure is already exhausting the resources they have for such negotiations. The more difficult, but possibly more significant, relationships may therefore be ignored.

The Consultants wish to stress their awareness of the achievements made in the complex field of depositary linkage through bi-lateral negotiation, and of the importance of continuing work on this basis. They believe, however, that concurrent with it and derived from it, a major initiative should be mounted to plan the steps by which the general linkage system proposed in this Report could be achieved. Such work would require detailed systems analysis of the type conventional in designing the settlement systems of the individual exchanges.
Lest it has not been made clear, they would further stress that their proposal does not imply the creation of a further level of settlement, with the diseconomies which that would involve. The proposal no more implies creation of another level of settlement than a banker's clearing house implies another level of banking. This comparison effectively illustrates the rationale of the proposals.

20.12 Future progress

The purpose of this Section has been to review the present status of negotiations between the depositaries, and to suggest that there may be a danger of their international functions gradually being eroded by outside organisations which presently appear in a position to play a fuller role and, in some respects, offer wider services. Compensating this is the acknowledged specialist knowledge of the national depositaries of the complexities of equities settlement, which places them in a strong position to extend their role into the international market.

While the Consultants do not attempt to present any definition of the form and scope of the linkage ideally required between the European depositaries to meet such a challenge, the essential characteristics and the pattern of activities towards them are clear. Moreover, assuming the Commission and the Committee of Stock Exchanges proceed to implement dealing linkage, the time is appropriate for a similar initiative in international European settlement.

The dealing context of the settlement planning is not easy to predict. The international market in equities has a dual structure. The majority of the transactions are carried out off the market floors by intermediaries who may or may not be members of the official markets. The nature of such transactions are, to a declining extent, arbitrage operations and, to an increasing extent, direct international deals. The deals may have one side as an exchange transaction, but they may be off market altogether. The other type of dealing in foreign securities is that carried out on the Stock Exchange floors, normally to provide a local market for private investors. The settlement implications of these two types of foreign markets vary.
As regards the 'international market' and the local professional dealing in foreigns frequently associated with it, the installation of an inter-Exchange information linkage system offers revolutionary possibilities. Hitherto, as U.S. securities dominate this market, it has tended, in the absence of any formal European arrangements, to fall into a five day rolling settlement. It will possibly be correct to rationalise this market on that basis. The enhanced IDIS will mean that both sides of these transactions will, for the first time, be recorded in a single settlement information system. The potential for the introduction of settlement disciplines in transactions between European international dealers will exist. The transactions themselves will be brought into inter-Exchange settlement and the compilation of statistical records of the European business transacted by Stock Exchange members will be possible.

In the case of transactions in which one side is on an Exchange floor, the 'streamlined' international settlement will not be relevant, as the dates of settlement of the two sides will differ. Until harmonisation of dealing markets occurs, the linked settlement system would have to accommodate the variances between the present markets.

Opinion divides within the Committee of Stock Exchanges as to whether the linked dealing system should primarily support the international market as it is tending to develop, or whether it should be based on floor linkage, in the belief that this will bring international transactions back onto the floors. The Committee is at present pre-disposed to the latter course. The Report has earlier discussed the problems related to both of these approaches. The ultimate evolution of the long drawn out process of linking the exchanges rests on the decisions of the Commission and the Stock Exchanges. On the other hand it is clear that the application of IDIS to European settlement will present the settlement experts with three challenges, in the following sequence:-

(i) The rationalisation of the existing European international market, at present operating loosely on alleged five day settlement, and, by universal voice of the participants in the market, in dire need of regulated settlement:
(ii) The implementation of intermediary network functions which will do something to minimise the inefficiencies in international transactions involving the market floors arising from different dealing and settlement practices;

(iii) The gradual evolution of proposals for a fully linked European settlement arrangement, based on the depositaries, which could support the harmonised trading system which fully effective floor-linkage implies.

The pattern of objectives implied by the above synopsis might be divided into short-term, medium-term and long-term. The sequence might be summarised as follows:-

Short-term

(i) Exploitation of the communication and inter-active message switching system of the enhanced IDIS to carry settlement instructions; agreement of standardised settlement communications; definition of the message switching systems;

(ii) Linkage of the IDIS system with bank clearing at national level and with SWIFT at international level;

(iii) Determination of the corporate form and/or the formal agreements under which the linkage system would operate; definition of the range of participants, possibly of different levels of service; definition of the distinction between dealing and settlement participation in the IDIS system;

(iv) Control by the system of delivery against payment, supported by appropriate banking agreements;

(v) In respect of international transactions with one side on a market floor - absorption by the linkage system of all possible settlement incompatibilities arising from different Exchange procedures, settlement periods etc.;
(vi) In respect of the 'international' off floor market created by members of the exchanges - definition of a full system of five day rolling international settlement, payment against delivery, of which the basis would be book-entry transfer of stock and inter-bank money movements;

(vii) Concentration of all stock in the depositary of the country of issue;

(viii) Transmission of dividends and benefits through the system;

(ix) Institution of a system of European Depositary Receipts which would be good delivery in all Community markets.

The short-term objectives might therefore relate to the development of inter-depositary communication channels, which would effectively anticipate future traffic needs. These would connect with depositaries, their members and possibly the big investing institutions, the settlement stock payment agents and the banks. Transactions reports and settlement instructions would be routed through the network. The system would 'drive' the book-entries related to international transactions in the depositaries and trigger payments through the banks, thus automating many present paper procedures. The system would rationalise the present international market between members, bringing their transactions back into the exchange machinery. It would absorb some of the present inefficiency of floor based international transactions in major securities.

Medium-term

As the linkage developed and confidence in the system increased, consideration might be given to providing the types of services at present available from the central settlement organisations of the bond market. These might comprise such functions as:-

(i) Overnight money management of participants credit positions;

(ii) Overnight borrowing facilities with deposited stock as collateral;
(iii) Associated financial control and reporting functions for participants;

(iv) Foreign exchange services, and foreign exchange management of participants' cash positions;

(v) Management of both sides of stock borrowing facilities for participants.

As an alternative to the linkage organisation carrying out such functions, a European Securities Finance Corporation might be set up, along the lines of the Japanese system. This might be similar in principle to the Japan Securities Finance Company, and operate with similar official sanction. The function of the European Corporation would differ from the role of the Japanese counterpart, but the authorisation of it would be similar, empowering it to operate commercial functions under supervision.

Long-term
In the short and medium-term it is presumed that the form of the European markets serviced by the settlement linkage will not have materially changed. The European international market off the Exchanges will continue to develop, possibly strongly, along its present lines. The present mixed function of 'arbitrage' and direct international dealing will continue to provide the necessary intermediation between the national markets, and, through appropriate financial adjustment, bridge their different characteristics. If floor linkage is established during this period without fundamental change to the trading procedures of each Exchange, floor linkage must be achieved through the same form of intermediation carried onto the market floors.

However, the aim of the Commission and the objective of the Committee of Stock Exchanges is to achieve the European dealing linkage through the floors of the Stock Exchanges. This implies total harmonisation of trading procedures in the major European securities, and also, to ensure the balance of the system, alignment of the capacity and scale of members of all the Exchanges. In the view of the Consultants, these,
and similar conditions related to the equilibrium of the system, are categorical requirements of full floor linkage.

Viewing the situation realistically, it is likely that such standardisation of all significant market characteristics will only be achieved in the long-term. On the other hand, as the development of linked settlement proceeds, the longer-term objectives of harmonised markets should be held in view, with fully linked European settlement as the target. It might then be possible for the intermediate improvements in international European settlement to be related to the long-term ideal.

Note: The comparison made in this Section between the bond market central depositaries and international equities settlement has been considered the most apposite to demonstrate the comparative facilities. From the standpoint of competitive challenge however, it should be borne in mind that the major non-European securities houses already provide international financial and settlement services, and members of European Stock Exchanges take advantage of them.
21.1 Introduction

The ideal linkage of the Community Exchanges would be achieved through full interaction of the market floors. The floors still constitute the focal points of the Exchanges. Most of the Exchanges are keenly concerned to re-concentrate the off-market business in European securities in their official markets. In most cases this is interpreted to imply the re-concentration of such business on to the physical market floor. This aim links with the objective of best execution for any Community investor in any Community security. This implies direct inter-Exchange dealing, which could, as the markets are at present constituted, only be secured through floor linkage. The aim is further supported by the close relation between floor dealing and the privileges of members of certain of the Exchanges.

This Section of the Report therefore considers the requirements of such ideal linkage between the Exchanges. The Consultants consider that they would be doing less than the task assigned to them if they failed to discuss what, in real terms, effective linkage of the Community Stock Exchanges would imply. They are fully aware that to do so exposes them to the criticism that they are proposing an unattainable ideal, no matter how long the time-scale in which it is considered may be.

There are three principal reasons why the Report must address the question of full and direct linkage of the market floors. The first is to clear away the idea, which has been expressed by certain Exchanges during the project, that floor linkage represents an easy option whereby linkage of the markets might be secured while, at the same time, the present national characteristics of the Exchanges could be preserved undisturbed and the present interests of members could be left unaffected. The fact is that floor linkage can only be attained through the adoption of an integrated market system across the Exchanges. If the national markets were to remain the fulcrum of the system, intermediation or arbitrage between the different markets would remain necessary, and no fundamental improvement of the present international trading system in Europe would have been attained. Uniformity of market procedures is therefore implied.
Second, most unfortunately, there is no easy progressive route to effective linkage of the markets. The transition from separate to effectively linked markets is a categorical step which, at some point, however distant, will require a series of categorical decisions by the involved parties. As discussed in this Report, the present international market is largely off the floors. Within the limitations of a system based on arbitrage between separate markets, it is increasing in efficiency and volume. In some quarters it is considered that there is a danger that the preliminary, progressive moves to develop the European market may consolidate the imperfections of the present market. Section 22 is devoted to consideration of this question.

Third, the view that a genuine European capital market, even as a long-term target, is unrealistic and idealistic needs to be reviewed in light of the pace of capital market developments outside, rather than inside the European Stock Exchanges. The Report has attempted to demonstrate the speed at which the securities market environment is changing with the growing internationalisation of the markets and the emergence of world-scale multi-purpose securities houses with their strong incursion into Europe. It has described the large-scale technological initiatives now implemented by banking, foreign broking and commercial information houses which are now generating international facilities far superior to those available to members of the Community Stock Exchanges in the mutual transaction of their European business. The principal determinants of such changes in the capital markets are economic and financial forces. These forces will fill any gaps in the international financial system left by the inaction of any Exchange authorities. It may, therefore, be not unreal to assume that, at some point, the European Exchanges will recognise that a European capital market with its own identity is needed and would be to their advantage, and that, if such an identity is not to be totally overlaid and diffused within the world international market, some positive and radical action is required. At such a point, the steps needed for effective linkage might be taken.

As matters stand, it must be admitted that, with one or possibly two exceptions, the pace of development of the E.E.C. Exchanges bears no relation to the pace of restructuring and technological development of the financial environments in which they operate. If this continues to
be the case, the individual Exchanges stand at risk of continuing to lose international business to member and non-member off-Exchange markets. Under such a trend, European international business will become no more than a diffuse segment of the international market at large. The opportunity to create a discrete European capital market, serving Community interests, will be lost. Time is not on the side of the Stock Exchanges.

For these reasons, the Consultants believe that they are being starkly realistic, and not idealistic, in stating in this Section what effective linkage of the European Exchanges would imply. Such consideration is essential to this Report. The objective of floor linkage, in the sense of full linkage of the official markets, though at odds with the traditional and inert aspects of the Community Exchanges, is fully in harmony with the progressive and dynamic trends which are clearly evident in almost all the Community markets, trends which, during the Consultants' survey, brought so many expressions of impatience from major market participants at the slow rate of modernisation of the European official market systems.

The Consultants attempt to argue in this Section that if effective linkage of the E.E.C. Exchanges is to be secured, and if, in line with the Treaty of Rome and general Community economic interests, a viable European capital market is to emerge, the national Exchanges are inescapably faced with a task of harmonising their procedures. To do so implies no more than that they respond to the pressure, the challenge and the potential of European-scale activity in the same way that large-scale industry has had to do.

In the course of the study, the view was expressed by authorities of certain of the Stock Exchanges that effective floor linkage could be obtained without harmonisation of procedures, and, indeed, without any modification of the present local priorities of the Exchanges. Such views were not articulated into any practical schemes which might vindicate such a belief, but the Consultants were sufficiently disturbed by the possibility that they had failed to appreciate the feasibility of any such scheme that opportunity was taken to discuss the question with New York specialists with practical experience of inter-market floor linkage.
Their categorical view was in support of the Consultants' belief that floor linkage, to permit inter-market dealing, would be totally impossible in Exchanges operating different trading procedures and quoting securities for different deliveries in different currencies.

This Section does not purport to set out a detailed design of the optimal floor linkage system, which was beyond the permitted or practical scope of the Consultants' work, and which cannot proceed in any case until the Exchanges themselves at national level, are firmly committed to the concept. The general form of market floor linkage is, however self-defining. This Section sets this out in broad terms, and indicates possible ways of resolving some of the major problems of floor linkage. Detailed technical definition of the system in each of the specialist fields indicated below will only be achieved by joint projects set up by the Stock Exchanges themselves, involving expert Members and specialist administrative staff.

21.2 The basic premises of the proposal to link the Community Stock Exchanges

The Consultants' work has been at the level of technicalities of investment and market procedures. The initiative to link the Exchanges is, however, an integral and significant component of the economic development of the Community. The commitment of the Exchanges to these wider perspectives needs to be clear before linkage proposals can reach the stage of useful technical design. Indeed, if it is not, technical argument will be premature and possibly spurious.

The concept of linkage is set with a progressive series of narrowing premises. They are taken for granted in the Consultant's terms of reference, but they merit consideration.

(i) The first premise, - the broadest perspective, - is acknowledgement of the objectives of the Community itself. The Report assumes recognition by the Community capital market authorities of the obligations they have, in their significant roles, in respect of countries committed to the European ideal. Even at this level, the priority accorded to European considerations is, in reality, likely to be tempered by national interest at this stage of the Community's development.
(ii) Tightening the focus, the second premise is the acknowledgement of the need for European financial integration, with the ultimate target of replacing the dollar satellite status of the Community economies with the independence which could come from an effective European financial system. While, at this more specific level, there are notable achievements such as the E.M.S., Community agreements on banking and insurance standards, and the successful launch of the E.C.U. at a level of government, there has been a reluctance to face and resolve the many fiscal and legal obstacles standing in the way of harmonising the financial infra-structure. The removal of such obstacles is essential for the effective linkage of the national capital markets. The European financial system, a concept clearly seen from the early stages of the Community, and implicit in the Treaty of Rome, is still far from achieved. A tendency to consider its problems more appropriate to future generations is endemic, both amongst national administrators and, more justifiably, amongst market practitioners who have no power to change the present situation.

(iii) Tightening the focus further to the precise field of this study, the final premise is that a key component of that financial system should be a common capital market. For the users, the issuers and the investors, such a market would provide facilities for the allocation of financial resources for capital developments and investment opportunities on European scale. For the members of the Exchanges, it would provide the broad base on which they would develop market firms able to face the full onslaught of world competition.

21.3 The Policy Context

It is worthwhile briefly examining the degree to which these premises are accepted by the two groups with which the linkage project is concerned; the investors and issuers, and the Stock Exchanges.

(i) It is fair to say that the general concept of a European market is broadly supported by the large investors and the issuing companies. In virtually all the countries visited, the Consultants met general comment by major investors deploring the fact that the European capital centres appeared incapable of developing markets in their own securities of the
depth and liquidity needed for their operations. As regards foreign 
securities, the investors know the vast volume of North American stocks 
held in Europe and the high value of associated transactions. They 
know the potential which exists for a European market in such stocks. 
They are pre-disposed to deal locally, because of national sentiment 
and for material reasons. But sheer business realities constrain them to 
deal in North America.

The phenomenon cannot complacently be disregarded as no more than recourse 
to markets of origin. Not only have the North American markets a virtual 
monopoly of business in their own securities but they are moving a sub-
stantial volume of business in European securities to North America at a rate 
which must be considered alarming. Nor is this question limited to the 
attracting of dealing to the major U.S. markets. American market 
technology now has an international dimension, with over 8,000 NASDAQ 
level 1 terminals located in 33 countries outside the United States. 
The scale of the problem has been considered in Section 19.'

(ii) The stance of the Stock Exchanges towards the concept of a Community 
capital market, on the other hand, is less clear. This ambiguity 
towards linkage arises in the main from the inevitable obligation of the 
authorities of each Exchange to protect the national functions of their 
oficial market, and, on a lower plane, protect the existing interests of 
the generality of their members. In the shorter term, it is likely 
that any positive move to establish linkage will appear to have an adverse 
impact on both these sets of interests. It may appear to create 
a disturbance in sensitive national developments, during a period in 
which the roles of the Stock Exchanges in virtually every European 
capital market are under review.

The priority accorded to European linkage by the Exchanges is likely 
to be based on business considerations. To date business between the 
European markets has tended not to be considered very important. This 
attitude requires to be revised for two reasons. First the official 
figures of the Exchanges, in virtually all cases, understated the true 
volume of this market. Second, it is questionable whether present 
business levels should be the governing criteria of the Stock Exchanges'
decision. Such argument would imply that if 45% of foreign transactions are in U.S. securities and 20% in European, then European linkage has no particular priority. This is clearly a fallacious and invalid attitude. The corollary of it is that each of the European Exchanges should simply link with Wall Street. The decision should not be based on the present business situation, which may require to be reconstructed in the interest of the European markets, but on whether the European Exchanges could link so as to construct a market entity capable of developing appropriate competition to the stronger North American Exchanges, - to the ultimate benefit of both the European and the American capital markets.

Nevertheless, a critically important working assumption which has governed the Consultants’ approach to the problem of linkage is that it would be rash to assume, at this moment, any full commitment on the part of the Stock Exchanges to the concept of a European capital market. In this situation, interpretation of the Stock Exchanges’ apparent preference for direct floor linkage (as opposed to ‘indirect’ linkage as discussed in Section 13) poses a problem. The preference of the majority of the Committee for direct floor linkage may stem more from a justified motive of protection of the position of the official market floors than from a studied appreciation of the changes which floor linkage will involve. This misgiving is endorsed by an inconsistency in the positions of several Exchanges which opted for floor linkage, but at the same time insisted on the immutability of their national systems. A further point of concern is that the Exchanges which had doubts on the practicability of direct floor linkage were those on which the bulk of international equities business in the Community is at present conducted.

The Consultants nevertheless consider that the objective of floor linkage is far-sighted and correct, and that it should be established and agreed as the ultimate target, with immediate steps taken towards its long term achievement. The facts considered above should, however, induce caution, not only in implementation but also in the development work to achieve it.
21.4 The General Requirements of Floor Linkage

Two clear objectives should be attained through market linkage. The first is the provision of a capital market on a Community-wide base, as noted above. The second is that the system should offer the opportunity of 'best execution' to any national of the Community dealing in E.E.C. equities. These two objectives demand the same condition that, in the internationally dealt European stocks, there should be a single market in the technical sense, whether contrived through the market floors or otherwise. For all investors of any E.E.C. country to have equal opportunity to obtain the same price and conditions of a transaction, the operation of 'a market' to which all investors, issuers and Stock Exchange intermediaries have access, must be presumed.

The solution that such a market might be achieved by the super-imposition of a Euro-Bourse has long since been discarded by all parties. It is not necessary to enumerate the many reasons related to the national functions of the Exchanges which render this solution inappropriate. Nor is it necessary to do more than note that the solution of a central international price-fixing is impracticable. This would involve remote pre-submission of orders from members of the various Exchanges and electronically-automated execution. It would supersede local price fixing mechanisms with which such a system could not work in parallel, and it would be unacceptable to the Exchanges.

The only other route to an effectively linked market is through a homogeneous system interconnecting the Stock Exchange floors. This solution, if successfully applied, would have several notable advantages. It would reinforce the position of the national Stock Exchanges, a consideration which is of paramount importance with regard to both their economic and their regulatory roles. It would offer the possibility of a single harmonised system of trading and settlement for the major European equities, while leaving undisturbed the national primary and secondary markets in smaller local stocks. It would meet the criteria of a Europe-based capital market and of best execution. It would totally remove the need for arbitrage between the Community Exchanges of the securities included in the linkage system. It would, to a large degree, preserve existing patterns of revenue of
Stock Exchange members. It would assuage the fears of the Stock Exchanges that linkage might further erode floor business, a factor of great relevance in those cases where the members' monopoly privileges are based on their status as floor traders. In principle, there can be little question that linkage of the market floors is the ultimate approach to integrating the European equity markets.

It must be recognised, however, that the only available solutions to the problems of floor linkage tend to be of an absolute nature. Local floor operation in the securities included in the system would continue, but it would be within a homogeneous market system. To have the bought side of a transaction on one floor and the sold on another must imply identical market procedures. Floor linkage poses the uncompromising requirement that the selling and buying brokers on the participating floors must be dealing the same product (i.e. a securities instrument which is equally deliverable to and good for delivery in all centres), under the same set of bargain conditions, in the same currency and for the same settlement. If any of these conditions is not met, the markets have different characteristics and must be recognised as separate markets. There would be price sensitivities reflecting these market differences, and some type of arbitrage function would remain necessary to absorb them.

Similar, though less categorical, preconditions are that the systems of price formation should be common, and that, to assure fair competition, the capacities in which members are permitted and able to operate should likewise be common.

The stark truth is that if linkage is to be based on the floors then the Exchanges must develop a homogeneous trading system in the major European stocks. This fundamental requirement cannot be circumvented by any ingenuity of design. The only compromise possible is to set up market-floor interfaces with the international market. This possibility is considered in the following Section to assure involvement of the floors at an early stage. It is stressed, however, that such interfaces would not represent 'floor linkage' in the proper sense of that term.
The arrangement would retain the imperfections of the present European international market. The Consultants do not believe that in the present European situation an interface of this type could be successfully automated to take account of market differences by electronic processing.

In any effective scheme of interconnection, the term 'floor linkage' will require to be defined broadly. The inherent concept of floor linkage is a single concentrated official market in each centre, unifying the present floor and off-floor markets, linked with the other Exchanges. The definition of floor trading in this context should hinge on effective concentration of dealing in the Stock Exchange market rather than on dealing on the physical market floor. In some cases, concentration of all dealing on the actual floor may be possible and desirable. In others a broader definition of 'floor trading' would be needed. The London jobbers, for example, and possibly the German banks may require to retain their off-floor dealing rooms. So long as the operations of these rooms were within Stock Exchange business and thereby linked to the system, their physical remoteness from the market floors would not matter.

The following sub-Sections consider the main areas in which harmonisation of Stock Exchange procedures must be achieved to make linkage of the market floors possible. The Report makes no recommendations in respect of such changes, and limits comment to an assessment of their relationship to current developments in the market.

21.5 Harmonisation of price formation systems

To secure genuine confrontation of orders, under the open competition required for 'best execution', the securities in the European linkage system would have to be dealt on each Exchange under similar procedures of price formation and trading. The Report has earlier submitted that the collective price system will not lend itself to international trading, either within the Community or in linking the European Exchanges with the world. External pressure may conduce movement towards world practice. The total turnover of equities in European Exchanges, as recorded by the F.I.B.V., represents less than 10%
of world volume. Of the remainder virtually all is transacted under continuous price systems. Within the 10% represented by Europe, some half of the market floor business is continuous trading, as is all the off-floor dealing. It might not be unreasonable to deduce that, in due course, European price formation will align with world practice.

Acceleration of this process, to permit a harmonised European system at an early stage of linkage is desirable but will involve great difficulty. At least one of the Exchanges, Brussels, is deeply committed to the view that its present price-fixing system is ideally adapted to local needs. Any movement of the German Exchanges towards continuous prices poses legal difficulties, as would any attempt to move the continuous international markets of the German banks onto the floors or into the official market. There appears however to be growing acknowledgement of the need for continuous quotation in most of the Exchanges. The London market has always operated by continuous quotation. All major securities are quoted continuously on the Amsterdam floor. The making of continuous prices is under discussion in Paris. The 'Durante' market in Italy now more active, is a move in the same direction. The stock market boom and the growth of the off-floor market to an unacceptably high level has resulted in proposals for a continuous market in Copenhagen.

The assumption is made in this Report that the need for continuous markets in major stocks is increasingly being accepted in Europe, and that the floors will progressively move to this system of trading. As they do so, the Stock Exchanges will need to resolve the problem of their members' off-market dealing, which has been tacitly permitted to grow due to the traditional short trading hours of the floors.

21.6 Harmonisation of market floor trading systems

While the gradual movement of the European Exchanges to continuous price systems can be foreseen, and can be anticipated as a development which will assist floor linkage, the type of trading procedures within which continuous prices will be made is far less clear.
Continuous trading requires a two-way price, giving continuous indication of the spread between the lowest price at which stock is offered, and the highest price bid for its purchase. In order to assure the liquidity of such trading, some form of market-making or 'positioning' is necessary. For European linkage to constitute an effective market system, it is desirable that at least a substantial element of the market-making function is designed into floor operations. There are two principal ways in which this might be achieved.

The first is the creation of a specialist function of North American type, supervising and participating, to an appropriate degree, in the trading of designated stocks, with an obligation to maintain a position, whether long or short in the security to ensure liquidity of the market. At the side of the market maintained by floor specialist function there would be automated matching of small transactions at a price derived from the specialists' market, and a system of block positioning which would permit transactions exceeding the capacity of the floor market to be 'put through' in some agreed transparent fashion, appropriately linked to market trading.

It might be argued that the trading procedures of most of the Community Exchanges are poised to move in this direction once the problems of establishing continuous floor markets are fully confronted. Such a move would be a significant change from the present situation, in which the price officials are essentially functionaries, and in which their intervention in the dealing is usually limited to that required to achieve the final balance at a collective price. The essence of their function is also to determine a single price, though, as noted earlier, offer and bid prices emerge during the short periods of individual price trading which are permitted on the Continental floors. In certain Exchanges movement to a specialist system would be a radical change. In France, broker positioning is prohibited by law, though a contra-partiste function has begun to emerge in the Second Market, and a continuous market is widely accepted in Paris to imply a market-making function. The extreme case is Italy where brokers must report stock taken up to the Ministry of the Treasury, after which they are committed to hold it for not less than six months. Nevertheless, the likely evolution of the Exchanges is towards the specialist floor trading system, as occurred on the
New York Stock Exchange, one hundred years ago, when its call-over system became inadequate. This would avoid the problems of capital intensity associated with full-scale floor market-making. It would also involve fewer concessions of principle in those Exchanges committed to the belief that price-fixing and not price-making is the correct function of the market floor. It is also possible that arrangements could be contrived in these Exchanges whereby a specialist type operation could meet the legislative requirements for 'official prices', possibly based on specialists' opening prices. The arrangements in this regard for example, guaranteeing German private clients an 'official price', are already somewhat artificial in present market circumstances.

Under such a system, devised for European needs, the role of the price officials might be developed to make them specialists, who would be empowered to see all member firm transactions. There would be a formal requirement that members carry out all deals with each other either on their floor or, through the linkage system, on another European floor. The off-market business at present carried out by larger members would be re-concentrated into official market dealing. This single significant change would automatically require the transformation of the Continental market officials' present price fixing role into supervision and servicing of concentrated markets. It is of interest that the discussions on the future structure of the Amsterdam Stock Exchange focus on the role of the hoekman, which may be strengthened. The hoekman's role is the nearest in Europe to a specialist function. The Dutch development may anticipate a similar trend in other Community Exchanges.

A second form of market-making, for which precedent also exists in the Community is the system whereby members' markets are made on the floor of the Stock Exchange, through a stock jobbing system. The two essential requirement of this system are separation of capacity of principal and agent between different member firms of the Stock Exchange, and the existence of sufficient jobbers to assure competition of prices.
Although the U.K. jobbing system, which is unique not only in Europe but in the world, might have appeared at first consideration an obstacle to European floor linkage, it is debatable whether this is so. Certainly, if no changes were anticipated in the Continental market floor procedures, none of the other Exchanges could afford to link with London because of the market-making strength of the London floor jobbing system. Given, however, that the Continental Exchanges are pre-occupied with the re-concentration of securities trading on their market floors under continuous quotation, and given that this may well lead in due course to specialist-type functions on their floors, there will be far greater equivalence of strength of floor markets in Europe. A floor specialist system, well contrived for European linkage, with floor market-making backed by a block positioning convention which permitted a second level of large-scale market-making by the larger members through the floor, would be equal match for the London system.

Moreover, the system in London is to change. It has been agreed in London that, with the removal of the minimum commission scale, the single capacity system cannot survive. It is thought that the 29.9% limitation of outside participation (by anyone, including banks and foreign brokers), will be eased. The spate of outside participation now arranged seems to have been motivated by this belief. The underlying intent of building up or admitting multi-purpose securities houses similar to those of North America together with competition following the abolition of minimum commissions, would put the jobbing obligations under strain. New floor procedures are being designed, modelled on the multiple market-maker system of the American O.T.C. network. The need to respond to the competition from large U.S. and Japanese securities houses is being recognised, as is the incompatibility of opening the market to international competition and attempting to preserve market structure orientated to domestic business.
The setting up of International Dealer firms, which as noted earlier may only act as principals, but in which brokers and jobbers may operate jointly acknowledged that single capacity operation was not adapted to the international market. The international dealer firms are of great significance in light of the possibility advanced earlier in this Report that, by the end of the decade, the London equities market could be primarily international, and only secondarily domestic. It has been acknowledged that the floor procedures themselves will require to change in response to the new structure of firms which will emerge following the abolition of minimum commissions.

There appears at least a probability that the floor procedures of the Continental Stock Exchanges and those of London may progressively converge towards a similar form, from different directions but in response to similar competition. If this were to prove so, and the Consultants believe it to be supported by present observations of the markets, encouragement of the trend could provide a major stimulus to European linkage.

21.6 Dealing features

While it would be premature to consider detailed dealing facilities and procedures of floor linkage, one major question merits notice. Floor linkage would impose a necessity to standardise the present diverse periods and conventions of account (terme) dealing, and similarly, standardise the cash (comptant) markets.

The present situation is complex. There are no forward markets in the A.E.B. or in the Copenhagen Exchange. In Germany, forward dealing or margin trading is forbidden by law. On the other hand, Belgium, France and U.K. operate forward markets based on scheduled dealing periods. In the first two countries 'terme' dealing is the most important segment of the equities market, while in the U.K. it constitutes its near-totality.
Linkage would, in fact, present an opportunity to transpose the valuable and well-established market facility of account dealing onto a European base. If this were not done, the individual national account markets would in due course come under increasing pressure to align with an ever-growing international market, which tends to deal day by day for five days cash settlement, influenced by the procedures of its largest participant. It would be incorrect for the European account markets to be abandoned with the aim of moving the Community markets to a standard pattern closer to North American procedures. Forward dealing of European type makes an important contribution to the liquidity and technical operation of the markets. Such operations may have an underlying fiscal significance, - a point of importance in the context of general fiscal discrimination against risk capital.

Any proposals for a homogeneous dealing system at a European level which deprived the Exchanges of the range of dealing facilities presently available within the national Exchanges would be totally unacceptable to Stock Exchange members. Floor linkage would offer the possibility of devising standardised procedures of dealing for use in the inter-connected floors. Such procedures would retain the principal features of present floor dealing, and re-assemble them into some mutually agreed standardised form.

The fact that all countries may not, by virtue of their legislation, be able to participate in all the available features of linked floor dealing, does not preclude its standardisation. Presumably the cash market facilities would be biased towards the requirements of those countries required to deal in it.

The dealing periods (and settlement dates) of the present forward markets would require to be aligned. The present disparities, - London with ten days and Paris with a month for example, - arise from historical chance, and their alignment raises only technical problems. Similarly the facilities associated with account dealing, such as contangos or early bargains in London, or primes in Paris differ in technical detail, but serve the same purpose and could be standardised. The principles governing transactions closed within the account would need to be agreed.
The main difficulties in instituting a European forward market would relate to financial assurance. At present, for example, membership of the Belgian Compensation du Terme is not extended to all Stock Exchange members, in London they participate in account dealing. In Paris and Brussels margin-type payments are required on dealing; in London all payment for account transactions is deferred until account day.

The inability of the German Stock Exchanges to deal in the forward market would be a notable imperfection of the market, but the Consultants were given to understand that the German authorities were, during the period of the study, reviewing the question of forward trading.

Movement towards standardised procedures and facilities as linkage proceeds would offer opportunities to develop common conventions and bargain conditions. Not only would this offer speed and efficiency of dealing similar to that presently attained in the individual markets, but, in the European context, it would make a great contribution to overcoming the barriers of language. The most conspicuous present difficulty in this respect is less the different languages themselves, than the fact that, in the Stock Exchanges’ jargon, words literally translated often do not mean the same thing. Under standard systems and conventions, the connotation of terms in different languages could be firmly established.

21.7 The impact of floor linkage on Stock Exchange membership regulations

The membership problems of European floor linkage are a re-expression of those of the dealing system in the idiom of membership rules and regulations. The essence of the problem is, firstly, the extent to which the members of the Stock Exchanges, in their present floor functions, cover the full range of secondary market activities which would be required by linkage based on continuous two-way quotation. Secondly, there is the problem of whether the existing members or member firms of the Exchanges are capable of handling, servicing and assuring the liquidity of markets re-concentrated, in each capital centre, on the local Exchange floors. The first of these issues relates to the capacities in which they are permitted to act, and whether both these functions are comprised within the Exchange membership structure. The second relates to the scale of operation of the Stock Exchange intermediaries.
In respect of the range of capacity required by the floor linkage, the Stock Exchanges can be divided readily into those which are well adapted and those which are not:

In the former category would be the A.E.B., or the U.K. Stock Exchange. In the Netherlands the present membership structure of the A.E.B. appears to accord readily with that required by the linkage system, as might be expected in a market heavily involved in international dealing. Through bank, non-bank brokers and hoekman members both the market-making and dealing functions of the local capital markets are effectively in the hands of Stock Exchange members. There is no technical reason, under existing Rules, why the hoekmen should not be developed to support effective inter-floor dealing in a European system.

In the London floor market, the Member Firms cover both the market-making and the agency dealing functions of the secondary market.

The Stock Exchanges less adapted to linkage are those in the capital markets in which significant secondary market functions are carried out by non-member banks, - notably France and Italy. If participation in the linkage were limited to the Stock Exchange members, as must necessarily be the case for floor linkage, only the agents de change and the agenti di cambio would be eligible from these countries. This would not be satisfactory as in those Exchanges the linkage would be limited on their side to commission-orientated business. In France for example, the banks play important roles in the international trading. This was acknowledged by London designated dealer rules in which concessions, limited in other cases to members of Stock Exchanges, are extended to the French banks. A similar and more acute problem would exist in Italy if the linkage were to be limited to floor business.
In the other Exchanges the adaptability of the membership structures to floor linkage is more ambiguous. The Belgian membership structure provides a somewhat more effective basis for participation in linkage. The Belgian brokers are allowed to take positions on their own account and there is already minor specialist activity on the floor. As has been noted, there is a group of large brokers in Brussels already highly active in the international equities market. As in France, however, the Belgian banks play a significant role in international order-routing, and in the dealing of large transactions.

In Denmark, the brokers are permitted to take positions but do not normally do so in equities. The exclusion of the large Danish banks from the system would result in very partial representation of the Danish international market in any scheme of floor linkage.

The position of the German Stock Exchanges in floor linkage cannot be easily hypothesized. From the point of view of membership it is evident that the German bank members represent potentially the most powerful participants in the international securities market in Europe. They have great capital resources and at present have the ability to operate in dual capacity across the total range of international securities functions. On the other hand, floor linkage would pose considerable problems for the German banks, as it would require them to bring all their dealing in system stocks onto the market floors. It would then, by law, become constrained to the pattern of dealing in local securities. The ability of the German Stock Exchange members to adapt to floor linkage thus rests entirely on whether the floors of the German Association of Stock Exchanges move to continuous quotation, with the development of the Kursmärker into a modern specialist role. If this were to occur, the present German membership regime would be the best adapted in Europe to international equities trading. If, however, German floor trading remains in its present form, then the German banks will consider it impossible to transfer their present international business in European securities on to the German floors and to participate in floor linkage.
The problem of scale of operation of the European Stock Exchange members relates closely to the capacity in which they are permitted to operate. In those Exchanges in which members are confined to agency business, the capitalisation of member firms tends to be low, and the emergence of large positioning firms to facilitate linked floor trading would present difficulty. The creation of strong liquid floor markets will be further complicated, even in those Exchanges with bank members, by the fact that in the international market professional positioning is carried out by member banks off the floors, as is the case in Holland and Germany.

The more general development of strongly capitalised securities houses in Europe, able to hold their own against the large American or Japanese brokers, which are of vast dimension compared to any of their European counterparts, is a basic need, regardless of plans for European floor linkage. A European response to this challenge, if allied, as possibly may be the case, with policies of re-concentration of member transactions in the official market, should produce general results which will assist linkage.

The Consultants submit that the most profound problems of floor linkage will arise from standardisation of trading and of capacity in which members are permitted to deal. It is again stressed that in considering these issues the Consultants merely hypothesize what may happen, rather than make recommendations on what should. The current response to competitive challenges in the Community markets suggests that many differences which at present appear intractable obstacles to floor linkage may be far less acute in a few years time. This is a more credible presumption than expectation that the Stock Exchanges will remain precisely as they are. It is a fact that through force of economic, political and social circumstances many of the Community Exchanges have, until now, adhered traditional forms essentially defined more than a century ago. Immutability is not normally a characteristic of a commercial survivor. During a period of intense change in the capital and financial markets, when the larger world Exchanges have been subject to organisational ferment, it would be totally illogical to assume that, in some privileged way, the European Exchanges can remain in a cocoon of past
tradition. Indeed, if they were to do so, they would become, under present trends, rapidly overlaid by the far more powerful international market. The evidence is that the Exchanges are responding to the competitive challenge. The results of this at national level, are likely to render the proposal for floor linkage, through which the competitive response could be established on a European base, fully credible in a few years time.

For reasons put forward in the introduction to this Report, the Consultants have preferred to imply, rather than make explicit, the actions incumbent on national market authorities if an effectively linked European market is to be achieved. From the evidence presented, however, it will be apparent that all progress in any of the detailed areas reviewed, such as trading procedures or membership, depends on the resolution of one single major question. The key to the entire problem is an agreed definition of the role of the commercial banks in the equities markets. There may be national sensitivity on this question, but it would be neither revolutionary nor inappropriate to attempt to establish the principles of this fundamental structural question at the European level.

The conventions by which bank participation in the equities markets might most effectively be achieved in respect of such matters as the degree of corporate separation required to achieve an appropriate balance between the credit and securities functions, or the degree of separation of capacities needed to minimise conflict of interest might thus be established. Such conventions would be to the advantage of both the banks and the markets.

If, as the prime element within the policy initiatives proposed above, a standard approach to the role of the commercial banks in the equities markets could be achieved, adapted to the different national situations, virtually all the technical problems discussed on this paper would be readily resolvable.
21.8 **Technical facilities of Floor Linkage**

As has been illustrated in Section 19, the linkage of the floors of the Community Stock Exchanges will be a natural application for an electronically-assisted dealing system using high-speed telecommunications. The general technology of such an application is well established through existing precedents, which make the basic requirements clear. These would comprise:

(i) a high-speed telecommunications network linking the Exchanges, diffusing, via real-time systems, historic price information;

(ii) a central processor interfaced with each national terminal network through appropriate traffic control devices, permitting the transmission and processing of pre-dealing information (i.e. bids and offers, 'commitments' to trade and 'responses', together with all information required to permit a transaction to be executed on the intervention of the dealer);

(iii) systems to permit the transmission and receipt of commitments to trade, the transmission and receipt of responses to commitments, to output confirmation of transactions, and to create transaction record files and generate reports;

(iv) systems to permit transmission and processing of pre-settlement instructions;

(v) establishment of electronic interfaces between the dealing and the national clearing/depository systems and any European central clearing system that may be appointed or instituted by the Exchanges, which would also link the European settlement system with the banks' clearing systems for money settlement.

The video displays on the floor would provide the dealer with bids and offers currently available in the other Community Exchanges, arrayed according to lowest offer or highest bid. The scene it is necessary to visualise is a group of electronic trading posts, implanted in a
floor environment in which continuous face-to-face floor trading is taking place. The electronic trading posts would comprise clearly visible terminal screens on which dealing information was displayed on the basis of fully standardised bids and offers. The screens would provide the dealer with offers and bids from other Community markets presenting alternatives to those available on his own floor.

Data entry facilities would be available on the floor to allow input by traders of commitments to trade or responses, according to the dealing system ultimately determined. Associated printers would be required for hard copy confirmation of transactions and of the necessary print-outs. It is stressed that the system envisaged would provide electronic assistance to dealing and not automatic execution of transactions. Comment from market participants strongly supported computer-assisted processing and transmission of pre-dealing information and post-dealing instructions, but insistence on personal intervention for execution of transactions was universal.

The operating efficiency of the system would be of paramount importance. To be of any practical use, an electronic trading post would have to operate at the level of efficiency of the market which it served. It would have to permit execution of transactions with the brokers (or market-makers) on other floors at the same speed as that on the local Exchange. The efficiency of the U.S. system is measured in seconds and the pre-occupation of the monitoring reports with execution time makes clear how important speed of processing and transmission is to the viability and competitiveness of a floor linkage system.

It is assumed that, like the existing networks, the system would operate at least three levels of service. The first would meet the requirements of the specialists, the second those of the brokers, and the third would be an information level, which itself might require to be divided into dealing information and price information. At floor linkage, the network would be complex. Its primary purpose would be to permit inter-floor trading, to which, using a broad definition of 'floor' it is assumed that members dealing in system securities would be confined. The informational elements of the
system would require more extensive diffusion, presumably with dealing
information and settlement input facilities to member offices, and
price information to a wide range of investors and outside services. The
way in which the linkage system would interface with members' private systems
for dealing (in system securities) with non-European centres would
require to be carefully considered. Eligibility to participate in the
system at the different levels would hinge on membership problems already
discussed, the main quandary being the eligibility of non-member banks in
certain countries.

While not under-rating the technical challenge of installing such a
system across ten different countries, the technological precedents to
determine its form already exist. If desired, a 'turn-key' operation
would be possible. The major challenge posed by the technical installation
relates to the readiness of the Exchanges to plan, finance and develop a large system as a joint enterprise, the scale of which
is approximately indicated by the $2m per annum costs of the American
ITS II.

An important premise of the proposals is the belief that the business
base to support a Community network already exists. The Consultants
consider that the data analysed in Section 12, though incomplete,
adequately indicates that the Stock Exchange figures are a considerable
under-expression of the real volumes of transactions in second-country
E.E.C. equities. This inter-market business appears, at the minimum
estimate, to be somewhere around the average value of turnover of the
European Exchanges. On a Community basis, there appears a case for
supporting and providing the resources for this market accordingly. When
it is taken into account that this estimate of business is likely to be
very low, and that it reflects a value of business achieved under ad hoc
procedures and without technical support in the most complex securities
market in the world, it is clear that the network, when installed, should
attain a much higher level of traffic, and that given proper organisation
and support, the size of the market should increase.
21.9  

**Multiple Listing of Securities handled by the Floor Linkage system**

As the Consultants' brief was confined to the secondary equities market, the problems of standardisation of listing requirements is not fully considered in this Report. This is a major question in its own right. The standardisation of listing requirements, with a generally accepted level of new issue documentation and procedures of continuing disclosure, raises problems for the primary, rather than the secondary market.

At present, local listing is not essential for international dealing by Stock Exchange members in European securities. Trading through inter-member channels is normally possible in any security listed on any Exchange. This situation would radically change with floor linkage, and multiple listing, by all participating Exchanges, of securities included in the system would become necessary. The flexibility permitted to members in their present off-floor dealing would not be available in a floor linkage system. Dealing on a floor network in securities which were not locally listed in some manner or another, would compromise the whole principle of Stock Exchange listing.

Nor would the concessions from the full rigour of listing disciplines, as for example in the London Unlisted Securities Market or the French Second Marché, be of relevance to this problem. The companies whose securities would be included in the European network would be major corporations for which any form of rudimentary listing would be totally inappropriate.

Floor interconnection would therefore properly require standardised listing and the implementation of the three Directives already adopted which cover this subject. The Directives themselves pose considerable problems of rigidity in a field in which flexibility is desired by the Exchanges. The scale of difficulties is exemplified by the fact that in spite of the acknowledged quality of the security concerned, it took several years for a major German bank to obtain a London listing, due to differing national principles of consolidation of accounts. The revision of German legislation which would have averted the delay is taking place some years after the
listing was achieved. For floor linkage, a compromise might be reached whereby the Stock Exchanges generally accepted a common denominator of listing requirements, or whereby a security might be accepted into the linkage system if it already had a certain level of multiple listing on the European Exchanges.

It is assumed that in the first instance only the larger European equities would be included in the system. Criteria could be readily established, based on market capitalisation, local share turnover and present volume of international trading, - factors which tend to correlate, - to determine the securities eligible for inclusion.

The assumed situation is that designated securities would be transferred in successive blocks to the linkage system. The national Exchanges would by mutual agreement release their major domestic securities onto the linkage system in an agreed proportion so that reciprocal effects in the local markets equated. This proportion might be determined as a percentage of all overall equity market capitalisation of each Exchange, or as a percentage of market capitalisation of securities in the linkage.

As anticipated in the initial IDIS proposals, it will be essential that not only European, but also non-European securities which are actively traded in the Community, should be included in the linkage system. The possibility would then exist for a Europe-wide base for dealing in these securities and their inclusion would also facilitate members' dealing with foreign centres.

Given that it would be necessary for all securities dealt on the network to be listed on each of the participating Exchanges, a common convention of listing fees would be required. It would be inequitable and unrealistic to charge listed companies the standard fees now charged by each Exchange. It is assumed that issuers would probably be charged the listing fee of the market of issue, plus a fee covering quotation in all the Exchanges participating in the network.
It is desirable to make an estimate, at an early stage, of the number of European securities which should be included in linkage dealing with the system in full operation. It is assumed that linkage would be developed first through the securities in which there is already substantial inter-market activity. Larger numbers of securities would be handled in the system as market inter-penetration increased.

It is of importance that linkage should provide a possibility for real involvement of second-country investors and thereby market intermediaries, in all the Community markets. This implies a sufficient range of securities to meet selective investment criteria, the needs of technical dealing, and the re-disposition of investments within a European market in response to financial and economic trends. Although the situation is improving, the present investment criteria in European equities have tended to be crude, based on currency views, with total withdrawal from the market on any change of climate. The selection of stocks has often been a secondary matter. The European market should progressively offer to the second-country investor similar scope to that which is available to him in his domestic market. The present internationally-active stocks are an under-expression of the range of securities which would be required to establish effective market linkage. The selection of securities should thus take into account the proportion of total trading on each market represented by the securities in the system. It is unlikely that real participation in a second-country market would be obtained if the securities in the system constituted less than about 40% of the local dealing.

In this regard the present proposal to launch the IDIS system with 300-400 stocks, including the non-European securities, represents only a first move. Admittedly in some Exchanges, the problem is of another order, and far more than 40% of trading is concentrated in fewer stocks than the system will admit. Overall, however, the proposed number will, in due course, require to be considerably extended.
21.10 Commission and transaction charges

Floor linkage would inevitably remove the present 'double commission' convention which has hampered collaboration of brokers across Community markets, and which, as pointed out in Section 18, has caused European brokers' charges in inter-market transactions to be less competitive than those of non-European securities houses. In general, the present situation is that under the rules of the Exchanges a client contracting a bargain in a foreign country security with a broker in one market for execution in another, must be charged a commission in both the markets. According to different Exchange rules, this 'extra' charge may or may not be made apparent to the client, but it is, of course, well appreciated by the institutional investors. It is unclear how much business is actually lost to the Exchanges from this cause, as the larger investors avoid paying double commission by direct recourse to the markets of origin. The link between the broker and his natural local clients is weakened by this practice.

A further distorting factor is the inequality in commission rates and structures between the different Exchanges. This may make dealing on one Exchange more attractive than on another, or may take business off the Exchanges altogether.

In principle, both these problems would be solved under floor linkage. In a system in which the local broker himself had recourse to the second-country market floor, his bought bargain would be the subject of his buying client's commission payment, while the selling client in the foreign market would simply pay the seller's commission. No double commission could be involved.

Standardisation of commission rates and other dealing charges would present more problems. These would require to be balanced across the system if the market were not to be distorted and the Stock Exchanges were to have equal opportunity of participation. Concessions in commission scales would have to be sought. The most difficult problem posed by floor linkage in this field would be the accommodation of competitive commissions which the largest market, the U.K., is to
institute before the end of 1986. The London Exchange will be unable and unwilling to relinquish this principle, while the various authorities responsible for commission levels on the other Exchanges may be unable to accept it. It would certainly be strongly opposed by several of the broker communities on the Continent.

Floor linkage would provide a salutary stimulus for the removal of other dealing charges such as stamp duty or other present forms of transaction tax. Equality of dealing costs is not a prescriptive requirement of floor linkage, and the lack of competitiveness in this respect of an Exchange might be offset by other factors. Unequal charges would however represent a major imperfection in the linked market.

21.11 Settlement Services

As submitted in Section 20, to permit the inter-connected floors to function effectively, the installation of Community-wide settlement linkage would be essential. The harmonisation of trading procedures, associated dealing facilities and bargain conditions will permit standardisation of settlement.

The settlement system supporting floor linkage would not be in the conventions of the international market, but would service mutually agreed trading procedures of linkage which would transmute the dealing facilities presently available to Stock Exchange members into a European system. The European settlement would presumably be based on de-materialised holding or immobilised certificates, with transfer achieved by computerised credit and debit of stock accounts. With the support of such a system, liquidity of dealing could be greatly increased. Costs associated with transfer would be both minimal and standard across the markets. Present costs associated with stock movements and insurance would be avoided. The present operations supporting European international dealing, which are labour intensive and which may take some twenty times the man hours required by domestic settlement, would be brought into line with the efficiencies of the local markets.
It has been argued in Section 20 that the necessary central clearing agency should be attained by linkage of the existing national clearing systems and depositaries. It is suggested that the present approach of bi-lateral agreements between the depositaries, though valuable groundwork, will not in the longer run achieve the degree of harmonisation and provide the settlement facilities required for floor linkage. A more general initiative is required to co-ordinate these bi-lateral negotiations into a general European approach. It is further submitted that this international linkage, run by the Exchanges and based on the depositaries, should take account of the financial services related to equity settlement which are already offered by independent settlement agencies, which might, in the future, be in competition for this business.

21.12 Preliminary negotiations for floor linkage

There is no doubt of the desirability of linkage of the floors of the Community Exchanges to permit a common market in major equities. It meets the expressed preference of the majority of the Exchanges to preserve their physical floors as the nodal point of their structures. It would consolidate the future of the floor markets, so assisting the regulatory role of the official Exchanges, and assure transparency of the market to the public.

It will be noted however, that this preference infringes at least one of the stipulations of the terms of reference. The Consultants consider it totally illusory to believe that floor linkage can be attained without changes in the present market floors. Attention has been drawn in this Report to the considerable range of difficulties involved in implementing linkage of the floors. Floor linkage cannot be secured by half-measures. Negotiation towards it, and transfer of securities to it could be progressive, but the implementation of the system would be an abrupt rather than a gradual change. It implies a willingness of the Exchanges to make adjustments to their rules and procedures in the interest of creating a common capital market.
It is no coincidence that pressure from the Community and investors for a European market is concurrent with fundamental reconsideration at national level of the structures of almost every Exchange represented on the Committee. The national need to modernise the Exchanges in order to ensure that their economic and social functions are properly discharged, relates to the European priorities. Movement towards a market base at European level ought to be an essential element of any of the re-organisation schemes being pursued at national level. The credibility of such an idea is endorsed by the similarity of the problems each Exchange faces in its own environment. Mutual collaboration between the Community Exchanges in facing these problems of strengthening the official markets and the scale of operations of their members, might permit a convergence of approach to the general benefit of linkage.

As things stand it may be questioned whether European considerations figure at all in the intense national debates on local changes. There is a yawning gap between the linkage initiative aimed at a Europe-wide capital market, and the wrangling on domestic issues at national level. This might suggest that a positive role for the Committee would be to infuse into these national debates appropriate consideration of the Community objectives.

The Exchanges may be influenced by the consideration that the future of the Stock Exchange floors cannot be assured by a negative defence of existing practice. At present the European financial environment serviced by the Exchanges and the competition within it from outside the Community has moved far faster than the Stock Exchanges in the exploitation of technology in the international markets. If the Stock Exchange floors are to retain their central significance in the securities industry they must modernise international equities dealing. They cannot afford to ignore technology of which their competitors are already making effective use. An advanced system of linking the floors might be one means through which such progress could be achieved. The European Stock Exchanges could collaborate to provide, on behalf of their smaller members, a technical infrastructure of international communication to off-set their disadvantage when faced with non-European organisations which are sufficiently large to provide such facilities in-house.
It is clear that floor linkage cannot appropriately be considered an immediate target. Solutions to the problems associated with it will require detailed analysis and complex negotiation, and are likely to be achieved only over time. Five years would be an optimistic schedule for its implementation.

It is accepted that this proposal is radical. For its effective implementation it would require the attachment of some representative of the Committee to the Groups which, at the level of each national Exchange, are considering their modernisation programme. It would imply mutual influencing of Stock Exchanges at national level. The first step might be modest, and limited to the building up of continued intelligence of current and proposed changes. The Secretariat of the Committee could act as the repository of any forward planning information that the Exchanges were prepared to release.

A clear problem will arise in influencing the situation within the necessary time-scale. The London market is likely to evolve its new structure and procedures in the next two years. Practical results on a European plane might, for example, emerge from effective liaison between London and other groups charged with reviews of Community Stock Exchange dealing systems.

It is difficult to see how the obstacles to floor linkage could be overcome without extensive and continuing collaboration between the policy planners of the individual Stock Exchanges. A practical method of initiating such a dialogue would be to submit to each Stock Exchange an initial outline design of a harmonised trading system which might form the basis of floor linkage. Comments would be sought on the design, and the Exchanges would be offered the opportunity to propose alternative schemes. The extent of commitment to the concept of linkage would be established. The 'dummy' design initially presented to the Stock Exchanges would have significance only as a discussion document.
It would however offer the opportunity for the Exchanges to express, in sufficient detail to verify their market logic, the types of linkage which would be acceptable to them, and the proposed nature of the participation of their members in it. From such responses the real dimensions of the problem of linkage would emerge and the practical issues which the Exchanges would have to resolve between themselves would be established.
22.1 The need for a Phased Approach within an agreed overall policy

The problem facing the European Exchanges in taking the preliminary steps towards linkage may be summarised in the following manner. The membership structures, market procedures and priorities of the Exchanges are at present totally orientated to national considerations. Although one or two local official markets in second country E.E.C. securities exist, the bulk of such business, as is generally the case in the international markets, is dealt in the market of origin. The mechanisms to achieve this have tended to develop in the off-markets, outside the official Exchanges. This has occurred for good reasons, to do with the inadaptability of the floor market procedures to this type of business, due in the main to long-standing legislative orientation of the market floors to domestic needs and, to some degree, to the nature of the privileges of their members.

In this situation, the development of the European international market raises a quandary. The provision of improved facilities may re-inforce the present flight of the international securities markets from the official Exchanges, and further erode their standing in the international environment. On the other hand, the diversity of the present Exchanges, which has generated the present form of the European international securities market, will not be easily changed to secure the harmonisation necessary to present the Exchanges as a credible alternative to the present channels of international dealing. Some progressive route is thereby required which would support and stimulate the European securities market, and which would, at the same time, consolidate the position of the official markets and secure movement towards the harmonisation which is ultimately required.

Such a progressive route might best be achieved by accepting a phased approach to linkage, during which the incompatibilities inherent in the objectives expressed above might be resolved as improved inter-Exchange dealing facilities were installed and as more inter-European business developed. The approach should be within the context of an agreed overall strategy. It is well understood that national sensitivities
appear to prevent discussion, let alone resolution of the key issues related to linkage. It should equally well be understood however that unless the Exchanges are able jointly to agree on a long-term strategy of effective linkage, events are certain to overtake them. The opportunity to establish, by their joint action, a European identity in the international securities markets would otherwise be lost.

It is submitted that the three phases on which general agreement should be sought might be:

(i) Phase I: Policy Determination and Information Service
IDIS would be implemented, as had already been agreed, as an inter-Exchange information system. For reasons expressed below it is likely to be found that long-term policy formation is needed, even at this stage.

(ii) Phase II: Enhancement of IDIS to an inter-Exchange dealing system
At this phase, the harmonisation of Exchange procedures is not presumed. Improved facilities for members' inter-European dealing would be implemented, based on and rationalising the idiom of the present international market. The nature of the interfaces between the network and each Exchange would, subject to general agreement of arrangements, be defined by each Exchange according to local needs.

(iii) Phase III: Linkage of the official markets
At this point, the major European securities would progressively be moved into a harmonised system of trading, linking the official markets, as described in Section 21.

Phases I and II would thus constitute the transitional phases towards linkage of the official markets. During this period the opportunity would exist to tackle and resolve the obstacles to full linkage. The stimulus to the European markets given by the facilities provided in Phases I and II would provide the incentive to face these problems.
22.2 Phase I : The implementation of IDIS and the formulation of linkage policy

The implementation of IDIS as an inter-Exchange information system has already been agreed by the Committee of Stock Exchanges, and requires only limited mention in these proposals.

A valuable consequence of this initiative will be that, even at the first informational stage of the system, consideration of some of the key issues of linkage will be provoked. The obvious desirability of standardised information will be recognised when it becomes apparent that the IDIS prices are in quite different forms. The prices will be of different type; some formed collectively and some formed in continuous dealing. The prices may relate to local instruments rather than the underlying stocks. The timing of prices, - a crucial factor in international price communication, - will differ. The absence of the continuous prices of the major off-markets, (for example, of the European international bank markets) will prejudice the usefulness of the system. It will become apparent that for IDIS prices to be of practical use, harmonisation of the trading systems originating them would be required.

The problem of eligibility to transmit prices through the system will arise, if these deficiencies are to be overcome. Likewise the destination of price information will raise questions of principle. The European prices will, in the main, have relevance to the activities of members' dealing rooms rather than the floors.

It might further be argued that IDIS, as presently conceived in its initial stage, will not produce information superior to that already available to the active international dealers from commercial systems. Indeed it might be inferior in that such systems at present, at least in the bond market, have facilities for contributor pages on which bid and offer prices may be made, continuously, by participants. Such facilities could be rapidly extended to equities as the demand became manifest.

If IDIS is to be effective and to receive market support, there is likely to be pressure for it to be rapidly enhanced into a system which will provide full pre-dealing information, and which will have
the capacity to record and process post-dealing transaction instructions. This development appears to be anticipated in the initial project specification approved by the Committee of Stock Exchanges.

The implementation of the IDIS network, and its extension to the transmission of bid, offer and other pre-dealing information before any harmonisation of floor dealing procedures has been attained, will cause the demand for the system to come from existing international dealing channels. Although, as noted below, crude floor interfaces might be constructed by Exchanges which considered a link with their floor dealing an immediate imperative, true inter-floor dealing will not be possible prior to harmonisation of trading procedures. The system will therefore tend to be most used by the international dealers. This does not mean that its use will be confined to professionals. The present international network includes professional positioners, such as the London jobbers or the Dutch or German banks, but it is, in the main made up of the brokers who deal with them. The activity of commission-orientated intermediaries in the international market will greatly increase once an efficient and well-regulated European network is available. The extension of IDIS to cover existing dealing channels, to which it will immediately be drawn, would do much to broaden the international market to the general advantage of the European investors. It will be noted, however, that it will re-inforce the existing international dealing channels, a trend which the Consultants consider quite inevitable at the stage before floor linkage is achieved.

Opinion amongst the Stock Exchanges is divided on this question. The majority support floor linkage in principle. A minority acknowledge that it might be difficult to attract to the floors international business which has already left them, and that the floors may not be the best place for development of international business. Interpretation of this division of view is complicated. The minority group of Exchanges transact the bulk of the international equities business, and it is possible that some significance should be attached to their opinion. The situation is further complicated by the fact that no market participant interviewed by the Consultants believed that floor linkage was possible in the prevailing circumstances of the markets.
The Consultants believe that the solution to this quandary is for the Committee to ensure that the first technical developments to implement even the first stages of IDIS should be within the framework of a broad policy agreed and affirmed by the Committee and the Commission. From the expressed views of the Committee, it is interpreted that such a strategy should be expressed as a statement of long-term intent to create a Euro-equities market:

(i) to link the official markets of the Stock Exchanges for major European equities and non-European equities actively dealt in the Community capital centres;

(ii) to achieve this linkage with the appropriate assistance of electronic processing and high-speed telecommunications;

(iii) to reconcentrate all the European equities business of Stock Exchange members onto the official markets, based on transparent and fully-serviced operations on the Stock Exchange floors, accepting that the definition of 'floor' will be essentially determined by the inclusion of dealing within the system and under the regulation of the official markets, rather than by narrow physical definition;

(iv) progressively to achieve such harmonisation of the regulations governing trading, membership, commissions and settlement as may be required to achieve effective floor linkage.

On the basis of such an agreed statement of intent, a formal Plan to which the Stock Exchanges might subscribe could be drawn up, as proposed in Section 19. The Plan would indicate the technical requirements of floor linkage. To develop it, high level policy groups would be required to resolve the problems discussed in this Report in the fields of Dealing, Membership matters, Commissions, and Settlement, in light of developments occurring on the national Exchanges. Such Policy Groups would assist the Commission and the Committee in their direction of each phase of the network project. The policy groups should be required to submit their proposals not later than twelve months after approval of the Statement of Intent.
The Consultants believe that unless such Policy Groups are formed, and the major questions of linkage addressed and resolved, the success of the technical work, both in the initial IDIS informational stage and in its later development into a Euro-equities market system, will be seriously compromised.

First, as argued above, if the information system is developed out of the context of its later dealing applications, it is very likely that in response to demand, the trend of its initial development will reinforce the present trading channels, which are not those ideally required by the longer term aims of the Committee. The most obvious example of this is the danger of promoting the price information service before the levels of the future system have been defined. There is a danger in admitting any participants into IDIS before the eligibility of the various intermediaries to participate at the different and future levels has been decided. These basic decisions should be taken before participation in the system is offered to anyone, at any level.

Second, in defining the route to linkage, no discrimination into 'short-term problems' and 'long-term problems' is possible. In the light of an agreed strategy, short-term and long-term developments and implementation can be determined, but the fundamental problems must be addressed and the long-term targets set before the first stages are embarked on, if the evolution of the system is to be controlled. Summary consideration of the issues which will confront the first stage of IDIS, all of which have been considered at more length earlier in this Report, will make it quite clear that the initial development stage, intermediate to floor linkage, will be confronted by questions on which positive policy guidance will be required.

The Consultants' experience on the project leads them to refute totally the belief that, in some imprecise way, the strategy of linkage of European Exchanges will spontaneously emerge from ad hoc consideration of problems of the IDIS project as they arise.
Phase II: Enhancement of IDIS into an inter-Exchange dealing system

In principle, the need for a computer-assisted network permitting dealing between the European Stock Exchanges will be readily seen as an essential aspect of linkage and technical considerations related to such an initiative have been discussed in Section 19. At minimum the facilities would comprise enhancement of IDIS to or supercession of IDIS by, an interactive system with a central processor which would be capable of receiving and transmitting pre-dealing information and of handling post-dealing settlement instructions. As regards dealing, the system would permit formally arrayed bids and offers upon terminal screens, security by security, giving the price at which the commitment to trade was made, identifying the participants, and indicating the size in which the commitment was made.

A strong preference was expressed in the markets that the response to commitments should be through traditional channels, i.e. mainly telephone or telex. It would however be essential for participants to be able to confirm trades, and for the system to process transaction data and generate an appropriate range of dealing reports. From the outset it would be essential that the system should report the state of trading and maintain channels through which any company announcements likely to have bearing on share price could simultaneously be transmitted to all market centres.

The critical question immediately arises; given that such an intermediate system cannot be linked directly to floor dealing, how should it interface with the Exchanges? Prior to harmonisation of procedures, it would clearly be impossible to create transactions with one side entered remotely via the network, and one side on a market floor. The only credible formula to keep such a dealing network appropriately under the aegis of the Stock Exchanges would appear to be to limit participation in it to members of the Exchanges. Reservations have been expressed that basing an intermediate network on this principle would not be in the interests of the Exchanges. The Consultants cannot concur with this view, and consider this proposal to be the most constructive route the Committee can follow, for the following summarised reasons, all of which have been dealt with at length earlier in this Report.
It would appear realistic, in plans to develop a European capital market, to acknowledge the realities of the present market. Market practitioners have devised existing channels with skill and expertise, and this has made the present and growing levels of trading possible. Present practices give positive evidence of how, despite the constraints imposed by domestic Stock Exchange rules and national obstacles, international securities transactions can be achieved in Europe. Until rules are changed and national-level obstacles removed the need for these channels will remain. The logic of market development is to support them. In practical terms, it might reasonably be asked how the European market is to be developed, if the present practitioners and the skilled business they operate are not somehow streamed into the new system? The Consultants believe that any progressive strategy to link the European markets must, by definition, start from the European International Securities Market as it exists now. Any other point of departure would, by definition, be revolutionary in nature, would dangerously ignore the realities of the international market, and would fail to attract support from any of the present interested and expert practitioners.

As long as the national markets retain their different characteristics, and thus continue to constitute separate markets, arbitrage will be necessary between them. There is a tendency in some quarters to regard arbitrage as a redundant and parasitic function. This is far from the case. It is a highly skilled and highly competitive task, facilitating international transactions and playing a vital role in international price equalisation. Improvement of the efficiency of this function between the different European Exchanges would benefit both the markets and the investors.

The intermediate dealing system would not only, as has been implied, strengthen the arbitrage network. Given the agreement of the Exchanges, all members would be eligible to participate. Brokers would be able to match client transactions across the markets without any necessary intermediation of a market principal. Effective positioning across the markets would continue to be required, but it is most questionable whether this would constitute the greater part of the trading volume.
(iv) It is misguided to believe that setting up an international European network, in the hands of the members of the Stock Exchanges, would fragment, or otherwise adversely affect the official markets. To the contrary, the proposed intermediate network would permit business which is at present carried out by Stock Exchange members all over Europe, but falls outside official regulation and is unknown to the parent Stock Exchanges, to be brought into conjoint official Stock Exchange business. Network dealing would enter official Stock Exchange statistics and be subject to proper regulation. If no effort is made by the Stock Exchanges to encompass members' European business using the facilities which such a network would provide, and if the Exchanges continue to allow their members to participate in the international markets outside Exchange rules, then the Exchanges will continue to lose their business and their position, as international dealing increases.

(v) While floor linkage, i.e. full linkage of the official markets must remain a distant target, intermediate linkage through the members could be readily achieved. The existing concessions through which members of the different Exchanges deal with each other would continue to apply.

(vi) A similar observation applies in respect of the securities in which network participants would be permitted to deal. The freedom now generally available to members in their international securities dealing would continue to apply using the network.

(vii) The proposal for an inter-Exchange network may bear a significant relation to possible future development of the forms of the Stock Exchanges at national level. It appears that several of the Exchanges may be considering the local use of computer-driven dealing networks to retain local business in the domestic market. Such a device would clearly be a formula for the Exchanges to recover business at present kept in the off-market because it is not suited to the techniques of local floor dealing. It seems clear that a computer driven dealing network will form an important part of developments in London. It is understood that the Amsterdam authorities are also considering the possibility of a network to re-concentrate local dealing.
There is thus a possibility that the European official markets of the future may need to be considered as a more broad concept than official market floors. An inter-Exchange network would be well adapted to such development. The existence of any local network with an established relation to a local floor would resolve all problems of the appropriate point of access to the international system.

(viii) It requires to be recognised that the European Stock Exchanges are already losing place, in international business, to large international banks or brokers, and to commercial networks, whose coverage of the European markets and whose supporting technology and dealing facilities are superior to those available between Stock Exchange members. In view of the demand for increased efficiency in international dealing and settlement, it will be inevitable that such agencies fill the gap in Europe, if the Stock Exchanges fail to do so.

(ix) An intermediate network, installed in this way prior to full linkage of the official markets does not preclude the setting up of such floor interfaces with the system as might appear required by a particular Exchange. Such decisions would be a matter for each Exchange. In London, Amsterdam and Germany, for example, access to the international markets, would presumably continue to be through the dealing rooms of members, to which the linkage system would be well adapted. In other Exchanges, there may be a wish to create floor interfaces with the system. There would, in such cases, be a requirement to carry out such intermediation as was required on the floor itself.

On the above grounds, the Consultants believe that the early implementation of a dealing linkage between the Exchanges, based on the extension of the present dealing channels and projected, where considered necessary, on to the Stock Exchange floors, represents the most constructive and progressive action that the Stock Exchanges might take, prior to full linkage of the official markets. The following sub-Sections consider the principal issues which must be resolved to implement such a network.
Intermediate action required in respect of Dealing and Communication

Once the Committee had accepted that the feasibility of the development of IDIS as an international system to transmit offers and bids should be considered, direction on the following questions will be required.

(i) the type of market to be serviced. The apparent general opinion that linkage should be based on continuous trading, and that liquidity should be assured within it by some type of market dealers, should be confirmed. The extent of business which should go through the market-makers, as opposed to that which might be matched directly with other agency orders should be defined. The conventions by which principal and agents business are distinguished, their treatment, and the nature of any priority to be given to public orders should be established;

(ii) service levels of the system. Once a decision on the type of market had been made the required levels of operation of the system should be specified. It is assumed that three will be required, - the first for participants entitled to originate or change bids and offers, the second for participants able to receive and respond to offers and bids, and the third for participants entitled to use the service for information purposes only;

(iii) trading hours. It is assumed that at first the service will not operate twenty four hours a day, but that it will cover approximate European business hours. A system of agreed exchange of information related to the dealing positions of principals should be developed to permit them to determine their opening prices;

(iv) standardisation of price information, currency of quotation and dealing, and bargain conditions. It is presumed that in the first instance the general procedures of the network will respond to the requirements of the present international equities market, i.e. dealing in agreed currency for cash settlement five business days after the deal. While net dealing between principals will be accommodated within such a system, it is likely that in the intermediate
period before floor harmonisation the system may have to accept offers and bids for different settlement periods. The extent of possible tolerance to departure from strict conformity to standard bargain conditions should be investigated, in the interest of permitting broker-broker bargains across the Exchanges prior to floor linkage;

(v) the extent to which dealing in the system in the selected stocks is to be mandatory. While objections might be raised to dealing in the local market or if in other European markets through the system being mandatory, this is likely to be essential both to ensure traffic within the system and to prevent abuse of the system either as a 'smoke screen' or a market of last resort. Making use of the system mandatory in inter-market transactions by members in the selected stocks implies no more than appropriate extension to the European system of constraint similar to that now imposed at domestic level;

(vi) standardisation of dealing conventions. The degree of commitment to trade once an offer or bid has been made should be determined. It is assumed that all offers and bids will be firm. The period during which an offer or bid is valid, and the conditions under which it might be withdrawn, should be agreed. Obligations with respect to lot sizes (if any), indication of the size in which the quotation is made, and how limit orders should be handled in the system, should be clarified. The possibility of clearing small orders at the opening, or some other price, should be investigated;

(vii) interfacing the system with certain Stock Exchange floors. On the assumption that the dealing network will be installed before floor linkage can be achieved, proposals should be sought from the Exchanges which consider it immediately essential to link the international network with their existing floor operation, on the methods and procedures they propose to use. Over this period, an arbitrage function on the floors appears the only means by which the dissimilar orders could be linked. Even this could only be done where continuous trading with transactions at two-way individual prices was permitted.
on the floors. It is assumed that such intermediate arrangements for bringing certain floors in the system will be guided by the development of plans for full floor linkage, as discussed in Section 21. Various features of trading procedures, such as dealing periods for account (terms) settlement might be standardised long before full harmonisation of trading procedures.

22.5 Intermediate action required in respect of Membership regulation

Treating the term 'membership' in its broadest sense, a range of problems in this field requires solution before any dealing system can be launched with the confidence that it will evolve in an equitable and effective way.

(i) definition of the status of the linked trading system. To permit the responsibilities of the linked trading to be properly defined and held, and its development and operations to be effectively managed, the creation of some form of corporate body, jointly held by the Stock Exchanges, may be necessary. The relation of this corporation to the participating Stock Exchanges requires to be established. It is assumed that the present IDIS project will form the nucleus of the facilities management organisation, and it might be advisable to incorporate this as a separate body, in light of the ultimate financial accountability that will be required. As discussed in Section 19, the Consultants consider the U.S. precedents in this respect valuable as an effective example of inter-Exchange project collaboration;

(ii) definition of responsibility for regulation of the information and trading network. A major justification for the type of network proposed, and in particular for its confinement to Stock Exchange members, is the extension to international equities markets of the regulatory regimes of the official markets with regard to company information disclosure and fair trading. While under any linkage system, regulatory functions with respect to issue disciplines and transactions related to their floors will still be covered by the national Exchanges, certain aspects of the inter-Exchange dealing system will require explicit regulations and codes of conduct. The source of origination, promulgation and enforcement of such ancillary rules requires to be established;
(iii) definition of the operating rules of the network. While this is a lesser problem than market regulation of the system, formal rules to ensure participants' adherence to the operating standards of the linkage system will be needed;

(iv) definition of the capacity in which participants might deal, and the dealing contacts available to different categories of participants. This question will be determined by the decisions taken on the type of trading system to be utilised. Assuming that positioning and net dealing between principals is permitted, the types of member in each Exchange allowed to undertake such functions should be agreed. In the period intermediate to floor linkage, establishing appropriate inter-market dealing contacts between members will raise few problems, as existing dispensations in the local rules of the Exchanges already permit the necessary operations. It needs to be considered, however, whether, in those capital centres in which non-member banks carry out indispensable market functions, such banks should be eligible for participation. Precedent for this type of concession already exists in the dealing rules of one of the Exchanges. It is likely to prove that common agreement between all the Exchanges on these questions will be required to ensure that common principles prevail, and that the allocation of roles in a particular location is generally acceptable. This should not be difficult, as the present situation in international dealing is tacitly accepted by the Exchanges. The definition of participants at the information level of service is a similar, though simpler problem which will require general agreement;

(v) definition of financial assurance between participants. The relation of the present national schemes of guarantee and compensation to the types of transactions possible within the system should be defined. It should be considered whether any financial criteria will be required for all dealing participants. The relevance of discriminatory membership rules now existing at national level (e.g. terms members and non-terms members) requires to be considered. It is assumed that there would be minimum capital requirements for market-makers. The need for conformity of participants to solvency ratios should be considered, and the relevance and compatibility of existing national schemes reviewed;
standardisation of approach to the creation of international dealing houses by Stock Exchange members. Linkage of the Exchanges might be facilitated if a common approach to the rules governing the development of international business were adopted while, at the same time, defending the position of the local floor in domestic stocks;

definition of the position of non-European securities houses. It is assumed that foreign brokers would be eligible to participate in the system through any of their subsidiaries which might be members of a European Exchange. A problem of assuring that the conditions under which they are admitted to local membership are satisfactory to all the Exchanges might need to be resolved;

inter-Exchange concessions permitting joint association and mutual corporate participation by members of the Community Exchanges. Regardless of the linkage network, the potential for joint mutual participation in member firms across the European markets should be explored, to permit the development of an international client base and Europe-wide markets. The obstacles to market-making should be confronted and such arrangements as joint stock accounts covering several markets facilitated.

Intermediate action required in respect of transaction costs

The principles for the tariff charges for the dealing system should be established. It is assumed that the system will be exploited to reduce inter-market settlement costs. The weighting of the scale charges for small and large-size transactions should be considered, as should general liaison with users on cost matters. The present double commission anomaly in transactions involving two markets should be largely averted by the linked dealing, but where it is still applicable should be substituted by commission sharing arrangements. In respect of linkage, commission should be a neutral factor, to avoid bias to particular markets. The opportunity presented by linkage should be taken to ensure that European broking commissions are no higher than the level prevailing in the competitive markets of North America. The approach to this problem will be complicated by the emergence of competitive commissions within the Community markets.
22.6 Intermediate action required in respect of company listing and disclosure

In the intermediate period before floor linkage, multiple listing, and thereby fully agreed standards of listing, will not be essential. Members will continue to exploit concessions currently available to them to deal in the international market in securities listed on any Exchange. The drawing up of criteria for the progressive selection of stocks for the system will not present any great problem. Two complications may emerge immediately. First those Exchanges which limit the dealing of members in the system to a floor interface would immediately need to list locally all the active system securities. Second, while the intermediate stage of linkage does not in general pose problems of universal listing, it does imply rapid attention to the associated disciplines of continuing company disclosure. The success of the network in disseminating pre-dealing information and in providing an electronically-assisted substitute for the present narrow personal network will be greatly enhanced if it is supported by efficient transmission of company announcements across Europe;

22.7 Intermediate action required in respect of Settlement Services

The short-term development of IDIS network in the settlement field has been discussed in Section 20, and may be summarised as follows:

1. exploitation of the inter-active message-switching system to carry settlement instructions, which will involve standardisation of message fields and format, an activity which will immediately indicate the obvious areas for any rationalisation possible within existing procedures;

2. use of the system to permit stock against payment in inter-European settlement, through linkage of the system with the national bank clearings and SWIFT;
identification of a fourth (settlement) level of service of the network with a definition of the intermediaries and institutions to which it will be available. The settlement service might be available to participants who were not eligible for levels 1 and 2, for example, large investing institutions. On the other hand it is possible that some participants in these levels might not be eligible to participate in the settlement arrangements in their own right. The complex and discriminatory arrangements for membership of the settlement systems in certain of the Exchanges will have to be taken into account.

examination of the potential for absorption, within the linkage system, of current settlement inefficiencies arising from market differences, such as different dealing and settlement periods;

standardisation of procedures and institution of a settlement system for the existing 'five day cash settlement' of the international equities market in Europe, and the provision of appropriate services for this market;

progressive arrangements for the concentration of all stock to the depositaries of the countries of issue, together with appropriate concentrated payment-agency functions for dividends and benefits;

creation of a system of European Depositary Receipts to assist in the development of a European market, by provision of an instrument constituting good physical delivery in all the Community markets;

examination of the extent to which the network could progressively provide financial facilities associated with international stock transfer, to achieve economy of effort in major firms and offer technical settlement assistance to the smaller.

22. 7 Phase III: Full linkage of the official markets
The linkage of the official floor markets, seen as an ultimate long term target has been discussed in Section 21. It is considered that, in the same way that the informational stage of IDIS will automatically provoke consideration of the dealing facilities proposed as Phase II and
resolution of the issues associated with it, Phase II will stimulate recognition of the need for full linkage of the official markets in the system stocks.

The Consultants therefore attach particular importance to the formation of the Policy Groups proposed in Section 21. Assuming that the IDIS initiative is maintained, it will be subject to inevitable technical progression as it responds to market needs. It needs to be assured that such enhancement of the system is firmly in line with the intermediate and ultimate targets of linkage.

Neither the progressive strategy which appears to be the aim of the Committee, nor the technical initiative arising from it will be successful unless the present constructive development of high-level policy is sustained. The Consultants believe that progress will most effectively be secured from appropriate interaction between the Policy Groups proposed and the facilities development role of the technical project.
ACKNOWLEDGMENTS

The authors wish to express their most sincere appreciation for all the help and assistance given in the course of meetings and discussions by the following institutions and persons during their informative visits of the stockmarkets between March 1982 and September 1983. In addition our thanks are also extended to all the other people whom we met at luncheons, cocktails and dinners which were kindly organized in our honour.

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<td>Mr. Bent MEBUS</td>
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<td>Syndikus</td>
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<td>Herr Gunther Hoops</td>
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<td>Herr Dr. Jur. Thomas Stephan</td>
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<td>Herr G. Eberstadt</td>
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FRANCE

CHAMBRE SYNDICALE BOURSE DE VALEURS DE PARIS

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- M. François BACOT  Adjoint au Syndic
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- M. Hervé LEMEE  Chef Service des Études
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- M. Jacques PINAT  Directeur des Services Juridiques
- M. Michel PIGNEUL  Chef Service de Bourse
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<td>Assocé Gérant</td>
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<td>BANQUE LOUIS DREYFUS</td>
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<td>BANQUE DE L'INDOCHINE ET DE SUEZ</td>
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<td>SOCIETE GENERALE</td>
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<td>L. MEESCHAERT &amp; R. ROUSSELLE</td>
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<td>M.me Hélène THEWES Assistant Eurobond Manager, M. Fernand WEISS Foncé de Pouvoir, M. Eugène LINCKELS Section Bourse</td>
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Bankers as Brokers.
Interbourse Data Information System: Project Definition etc..
Schedule of Undertaking Listed on Member Stock Exchanges.
STATISTICAL APPENDIX

THE EUROPEAN COMMUNITY STOCK EXCHANGES

DIMENSIONAL ASPECTS

1978 - 1983

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(2) Excluding the franc zone for 1978, 79, 80, 81, 82, 83
TABLE II

STOCK EXCHANGE CAPITALIZATION OF LISTED DOMESTIC SHARES IN MILLIONS OF $ U.S.A. AND OF NATIONAL CURRENCY UNITS

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<td>58,931</td>
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<td>401,878</td>
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<td>10,560</td>
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<td>1,535</td>
<td>1,383</td>
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<td>- Flux.</td>
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<td>46,084</td>
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<td>54,906</td>
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(1) Excluding the market value of listed investment funds (see Table I)
### Table III

**Listed Fixed Interest Stock: Total Par Value in Millions of $ U.S.A.**

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<td>n.a.</td>
<td>n.a.</td>
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<td>1,056</td>
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<td><strong>- The U.K. &amp; Irish S.E.s.</strong></td>
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<td>Total</td>
<td>294,534</td>
<td>341,730</td>
<td>333,085</td>
<td>319,940</td>
<td>324,252</td>
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<td>89,222</td>
<td>97,190</td>
<td>120,657</td>
<td>134,754</td>
<td>174,562</td>
<td>263,243</td>
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<tr>
<td>Domestic private</td>
<td>242,061</td>
<td>304,540</td>
<td>304,407</td>
<td>350,536</td>
<td>349,686</td>
<td>343,481</td>
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<tr>
<td>Foreign</td>
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</tr>
</tbody>
</table>

(1) Foreign fixed interest securities are listed, but their amount is unknown and therefore excluded from totals except for 1983.

(2) The notable variation in this table with regard to previous year figures is due to the inclusion of bank stock under the public sector and the innumerable short term loans issued by the three major state owned credit institutes in 1983.

(3) Since 1979 the securities of Ireland are classified as foreign securities.
<table>
<thead>
<tr>
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<td></td>
<td></td>
<td></td>
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<td>total</td>
<td>62,201</td>
<td>69,790</td>
<td>78,990</td>
<td>91,460</td>
<td>110,371</td>
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<td>33,991</td>
<td>36,138</td>
<td>41,365</td>
<td>50,992</td>
<td>66,364</td>
<td>86,972</td>
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<td>n.a.</td>
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<tr>
<td>total</td>
<td>34,498</td>
<td>34,577</td>
<td>40,671</td>
<td>55,800</td>
<td>54,611</td>
<td>129,479</td>
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<td>25,655</td>
<td>22,112</td>
<td>21,297</td>
<td>26,600</td>
<td>24,547</td>
<td>129,244</td>
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<td>8,843</td>
<td>12,465</td>
<td>19,374</td>
<td>29,200</td>
<td>30,064</td>
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<td>total</td>
<td>1,357,355</td>
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<td>1,625,793</td>
<td>1,675,834</td>
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<td>1,439,327</td>
<td>1,531,918</td>
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<td>50,015</td>
<td>45,311</td>
<td>50,121</td>
<td>44,936</td>
<td>48,024</td>
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<td>total</td>
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<td>571,768</td>
<td>620,336</td>
<td>686,012</td>
<td>765,251</td>
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<td>94,397</td>
<td>126,158</td>
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<td>479,671</td>
<td>557,031</td>
<td>578,291</td>
<td>587,746</td>
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<tr>
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<td>1,324,622</td>
<td>1,524,113</td>
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<td>243,850</td>
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<td>total</td>
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<td>1,250,739</td>
<td>1,332,729</td>
<td>2,235,679</td>
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<td>8,990,021</td>
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<td>foreign</td>
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<td>47,462</td>
<td>52,585</td>
<td>82,268</td>
<td>183,740</td>
<td>2,187,596</td>
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<td><strong>MILAN S.E.</strong></td>
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<td>total</td>
<td>77,399,886</td>
<td>86,601,813</td>
<td>98,781,605</td>
<td>106,896,854</td>
<td>109,477,458</td>
<td>172,580,021</td>
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<td>85,140,050</td>
<td>96,500,027</td>
<td>103,587,116</td>
<td>105,432,263</td>
<td>168,463,920</td>
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<td>2,276,125</td>
<td>3,306,138</td>
<td>4,012,191</td>
<td>4,114,995</td>
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<tr>
<td><strong>PARIS S.E.</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>345,694</td>
<td>394,689</td>
<td>488,948</td>
<td>558,601</td>
<td>705,738</td>
<td>858,051</td>
</tr>
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<td>domestic public</td>
<td>253,212</td>
<td>296,472</td>
<td>380,805</td>
<td>441,420</td>
<td>571,264</td>
<td>696,514</td>
</tr>
<tr>
<td>foreign</td>
<td>92,482</td>
<td>98,217</td>
<td>108,143</td>
<td>116,581</td>
<td>134,474</td>
<td>161,537</td>
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<td><strong>THE U.K. &amp; IRISH S.Es.</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>79,408</td>
<td>91,172</td>
<td>105,442</td>
<td>121,558</td>
<td>145,590</td>
<td>162,049</td>
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<tr>
<td>domestic public</td>
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<td>77,617</td>
<td>84,630</td>
<td>91,570</td>
<td>98,745</td>
<td>106,845</td>
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<tr>
<td>foreign</td>
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<td>13,555</td>
<td>20,912</td>
<td>29,983</td>
<td>46,304</td>
<td>55,204</td>
</tr>
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</table>

*See notes on table III*
## SHARE TURNOVER IN MILLIONS OF U.S.A.

<table>
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<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>total</td>
<td>domestic</td>
<td>foreign</td>
<td>total</td>
<td>domestic</td>
<td>foreign</td>
</tr>
<tr>
<td><strong>AMSTERDAM S.E.</strong></td>
<td>10,416</td>
<td>9,486</td>
<td>10,935</td>
<td>10,042</td>
<td>8,649</td>
<td>9,654</td>
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<tr>
<td><strong>ATHENS S.E.</strong></td>
<td>152</td>
<td>152</td>
<td>96</td>
<td>78</td>
<td>50</td>
<td>35</td>
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<td><strong>BRUSSELS S.E.</strong></td>
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<td>1,327</td>
<td>723</td>
<td>826</td>
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<td>n.a.</td>
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<tr>
<td><strong>COPENHAGEN S.E.</strong></td>
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<td>63</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
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<tr>
<td><strong>THE GERMAN S.E.s.</strong></td>
<td>21,222</td>
<td>21,222</td>
<td>17,448</td>
<td>17,448</td>
<td>16,773</td>
<td>16,773</td>
</tr>
<tr>
<td><strong>LUXEMBOURG S.E.</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>MILAN S.E.</strong></td>
<td>1,968</td>
<td>1,968</td>
<td>1,484</td>
<td>1,484</td>
<td>1,218</td>
<td>1,218</td>
</tr>
<tr>
<td><strong>PARIS S.E.</strong></td>
<td>10,861</td>
<td>10,861</td>
<td>11,440</td>
<td>11,440</td>
<td>12,578</td>
<td>12,578</td>
</tr>
<tr>
<td><strong>THE U.K. &amp; IRELAND S.E.s.</strong></td>
<td>19,633</td>
<td>19,633</td>
<td>26,770</td>
<td>26,770</td>
<td>36,778</td>
<td>36,778</td>
</tr>
</tbody>
</table>

**Notes:**

1. At par value.
2. Less than 1 million of U.S.A.
3. Including fringe zone securities.
4. Excluding Luxembourg up to 1982.
<table>
<thead>
<tr>
<th>TABLE IVB</th>
<th>SHARE TURNOVER IN MILLIONS OF NATIONAL CURRENCY UNITS</th>
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</thead>
<tbody>
<tr>
<td>AMSTERDAM S.E.</td>
<td></td>
</tr>
<tr>
<td>- total</td>
<td>20,480</td>
</tr>
<tr>
<td>- domestic</td>
<td>19,589</td>
</tr>
<tr>
<td>- foreign</td>
<td>891</td>
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<tr>
<td>ATHENS S.E.</td>
<td></td>
</tr>
<tr>
<td>- total</td>
<td>5,531</td>
</tr>
<tr>
<td>- domestic</td>
<td>5,531</td>
</tr>
<tr>
<td>- foreign</td>
<td>0</td>
</tr>
<tr>
<td>BRUSSELS S.E.</td>
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</tr>
<tr>
<td>- total</td>
<td>39,046</td>
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<tr>
<td>- domestic</td>
<td>21,146</td>
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<tr>
<td>- foreign</td>
<td>17,900</td>
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<tr>
<td>COPENHAGEN S.E.</td>
<td>300</td>
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<tr>
<td>- total</td>
<td>300</td>
</tr>
<tr>
<td>- domestic</td>
<td>300</td>
</tr>
<tr>
<td>- foreign</td>
<td>0</td>
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<td>THE GERMAN S.Es.</td>
<td>38,516</td>
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<tr>
<td>- total</td>
<td>34,127</td>
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<tr>
<td>- foreign</td>
<td>4,389</td>
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<tr>
<td>LUXEMBOURG S.E.</td>
<td>n.a.</td>
</tr>
<tr>
<td>- total</td>
<td>n.a.</td>
</tr>
<tr>
<td>- domestic</td>
<td>n.a.</td>
</tr>
<tr>
<td>- foreign</td>
<td>n.a.</td>
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<tr>
<td>MILAN S.E.</td>
<td>1,635,061</td>
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<td>- total</td>
<td>1,635,040</td>
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<tr>
<td>- domestic</td>
<td>21</td>
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<tr>
<td>- foreign</td>
<td>21</td>
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<td>PARIS S.E.</td>
<td>45,149</td>
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<td>- total</td>
<td>39,842</td>
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<tr>
<td>- domestic</td>
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<tr>
<td>- foreign</td>
<td>9,608</td>
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<tr>
<td>THE U.K. and IRISH S.Es.</td>
<td>29,836</td>
</tr>
<tr>
<td>- total</td>
<td>n.a.</td>
</tr>
<tr>
<td>- domestic</td>
<td>n.a.</td>
</tr>
<tr>
<td>- foreign</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

(1) At par value;
(2) Including turnover in national investment funds (Flux. 524.6 million) and foreign investment funds (Flux. 723.0 million)
(3) Including some some securities.
<table>
<thead>
<tr>
<th>Table V</th>
<th>Fixed Interest Stock Turnover in Millions of $ U.S.A. and Of Local Currency Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam S.E. (2)</td>
<td>U.S. $</td>
</tr>
<tr>
<td>-</td>
<td>F.</td>
</tr>
<tr>
<td>Athens S.E. (1)</td>
<td>U.S. $</td>
</tr>
<tr>
<td>-</td>
<td>Dr.</td>
</tr>
<tr>
<td>Brussels S.E. (1)</td>
<td>U.S. $</td>
</tr>
<tr>
<td>-</td>
<td>Fr.</td>
</tr>
<tr>
<td>Copenhagen S.E. (1)</td>
<td>U.S. $</td>
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<tr>
<td>-</td>
<td>Dkr.</td>
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<td>The German S. Es. (2)</td>
<td>U.S. $</td>
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<tr>
<td>-</td>
<td>DM.</td>
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<tr>
<td>Luxembourg S.E. (2)</td>
<td>U.S. $</td>
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<tr>
<td>-</td>
<td>Fr.</td>
</tr>
<tr>
<td>Milan S.E. (1)</td>
<td>U.S. $</td>
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<td>-</td>
<td>L.</td>
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<tr>
<td>Paris S.E. (2)</td>
<td>U.S. $</td>
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<tr>
<td>-</td>
<td>F.</td>
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<tr>
<td>The U.K. &amp; Irish S. Es.</td>
<td>U.S. $</td>
</tr>
<tr>
<td>-</td>
<td>L.</td>
</tr>
<tr>
<td>E.E.C. Total (3)</td>
<td>U.S. $</td>
</tr>
</tbody>
</table>

(1) At par value
(2) At market value
(3) Excluding Luxembourg up to 1983
| TABLE VI |
|---|---|---|---|---|---|---|---|
| **- AMSTERDAM S.E.** | ANP/CBS index | 77.0 | 89.0 | 84.9 | 85.4 | 84.8 | 100.6 | 154.2 |
| | base 1970 = 100 | 1.000 | 115.6 | 110.3 | 110.0 | 110.1 | 130.9 | 200.3 |
| **- ATHENS S.E.** | Index base 1964 = 100 | 1,339.98 | 1,431.64 | 1,189.67 | 1,171.47 | 1,063.99 | 1,076.92 | 747.85 |
| | | 100.0 | 107.2 | 89.1 | 87.8 | 79.7 | 80.7 | 56.0 |
| **- BRUSSELS S.E.** | Cash trading index | 88.81 | 90.01 | 102.82 | 84.19 | 87.24 | 102.88 | 136.16 |
| | base 30/12/63 = 100 | 100.0 | 110.4 | 115.8 | 94.8 | 98.2 | 115.8 | 153.3 |
| **- COPENHAGEN S.E.** | base 1973 = 100 | 75.64 | 88.65 | 87.37 | 95.61 | 118.77 | 127.98 | 274.2 |
| **- THE GERMAN S.Es. (Frankfurt)** | base 31/12/68 = 100 | 77.94 | 106.41 | 96.04 | 96.78 | 96.65 | 112.55 | 153.14 |
| | base 28/12/67 = 100 | 199.45 | 378.89 | 583.39 | 521.27 | 384.69 | 428.58 | 492.46 |
| **- MILAN S.E.** | M.I.B. General Index | 1,000 | 868 | 1,097 | 2,436 | 2,935 | 2,521 | 2,852 |
| | base 2/1/75 = 1000 | 100.0 | 86.8 | 109.7 | 243.6 | 293.5 | 252.1 | 285.2 |
| **- PARIS S.E.** | C.A.C. General Index | 59.1 | 87.8 | 102.7 | 112.0 | 92.3 | 100.2 | 163.4 |
| | base 29/12/61 = 100 | 100.0 | 148.6 | 173.8 | 189.5 | 156.2 | 169.5 | 276.5 |
| **- THE U.K. & IRISH S.Es.** | F.T. Industrial Index | 161.4 | 470.9 | 414.2 | 474.5 | 530.4 | 596.7 | 775.7 |
| | base 1/7/35 = 100 | 100.0 | 291.8 | 256.6 | 294.0 | 328.6 | 369.7 | 480.6 |
Performance of the share indices of the EEC Stock Exchanges from 1975 to 1983; end of quarter figures have been calculated on a common base of 2/1/75 = 100
<table>
<thead>
<tr>
<th>TABLE I</th>
<th>END OF YEAR EXCHANGE RATES ADOPTED IN THE CONVERSION OF FIGURES FROM NATIONAL CURRENCIES INTO $ U.S.A.</th>
</tr>
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<tbody>
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<td>AMSTERDAM S.E.</td>
<td>$ U.S./1 f.</td>
</tr>
<tr>
<td></td>
<td>f./1 $ U.S.</td>
</tr>
<tr>
<td>ATHENS S.E.</td>
<td>$ U.S./1 dr.</td>
</tr>
<tr>
<td></td>
<td>dr./1 $ U.S.</td>
</tr>
<tr>
<td>BRUSSELS S.E. (1)</td>
<td>$ U.S./1 FB</td>
</tr>
<tr>
<td></td>
<td>FB/1 $ U.S.</td>
</tr>
<tr>
<td>COPENHAGEN S.E.</td>
<td>$ U.S./1 Dkr.</td>
</tr>
<tr>
<td></td>
<td>Dkr./1 $ U.S.</td>
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<tr>
<td>THE GERMAN S.E.</td>
<td>$ U.S./1 DM</td>
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<tr>
<td></td>
<td>DM/1 $ U.S.</td>
</tr>
<tr>
<td>LUXEMBOURG S.E. (1)</td>
<td>$ U.S./1 Flux.</td>
</tr>
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<td></td>
<td>Flux./1 $ U.S.</td>
</tr>
<tr>
<td>MILAN S.E.</td>
<td>$ U.S./1 Lit.</td>
</tr>
<tr>
<td></td>
<td>Lit./1 $ U.S.</td>
</tr>
<tr>
<td>PARIS S.E.</td>
<td>$ U.S./1 F</td>
</tr>
<tr>
<td></td>
<td>F/1 $ U.S.</td>
</tr>
<tr>
<td>U.K. &amp; IRISH S.E.</td>
<td>$ U.S./1 L.</td>
</tr>
<tr>
<td></td>
<td>L./1 $ U.S.</td>
</tr>
</tbody>
</table>

(1) Financial exchange rate.