EUROPEAN PARLIAMENT
Secretariat
Directorate General for
Research

RESEARCH AND DOCUMENTATION PAPERS

"EC-JAPAN ECONOMIC RELATIONS"

Economic Series no.

12

10 - 1987

PE-I-00355EN01/09-87

EC-Japan Economic Relations

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Preface

This study is a complement to a previous study on a parallel subject: "US-EC Monetary Relations". Since the former study was published, some progress has been achieved in economic cooperation, in particular after the Venice Summit, although cooperation remains of an ad hoc nature. Much has still to be done in this field, as is illustrated in this study. It is hoped that the present study may make a useful contribution.

The study examines as far as possible all aspects of EC-Japanese economic relations, monetary, trade, capital movements, investment and economic policy issues, and the advantages of increased cooperation for all parties concerned. It also examines the problems and frictions that exist.

Opinions and recommendations contained in this paper are those of the authors and are not necessarily those of this Directorate General, or the European Parliament, or any of its organs or Members.

This study has been requested by the Chairman of the German Members of the Socialist Group of the European Parliament, Mr Gerd Walter.

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Introduction

The importance of Japan to the world economy is well known. Japanese exports accounted for 17% of total US imports, 19% of imports of other developed nations and 20% of the imports of the developing nations. On the other hand, there is no denying that the yen is still underutilized in the international arena. A case in point is yen-denominated trade financing. Only 34% of Japan's exports and around 10% of its imports are financed in yen, and this is partly due to the yen's recent appreciation. In general, the international position of the yen as a settlement currency is still extremely low.

The same more or less applies also to the yen's position as a reserve currency. In 1985, only 7,6% of global foreign reserves were held in yen, considerably less than those in DM, which accounted for 15,5%. According to the Bank for International Settlements (BIS), among external liabilities, those denominated in yen accounted for only 2,3% of the total in September 1985, far below the 72,4% and 11% recorded for dollar- and DM denominated debts.

It is true that the Japanese yen has become progressively more internationalised in the 1980s. For example the BIS reports that banking sector lending in yen as a percentage of total lending flows rose from minimal 7,4% in 1983 to 12,6% in 1986. The corresponding figure for the dollar saw a reduction from 79,6% to 70,2%. Furthermore, among issues of international bonds with fixed interest rates, yen issues now (June 1987) account for 14,9% of the total as against 43,8% for the dollar. In international and external bond markets, the shares held by new financial instruments such as floating rate notes (FRN) and note issuance facilities (NIF) are growing fast, reflecting the progress of financial innovations in the international capital market. In 1986, for example, FRN's accounted for 22,9% of total international and external bond issues. But, more than 90% of all FRN's are dollar denominated. As a result, yen-denominated bond issues account for only about 8% of total international and external issues.

The gap between Japan's economic power and the role of the yen in the world economic system is in part attributable to the slowness of its financial liberalisation, as against the rapid implementation of trade liberalisation in the 1950s and 1960s. It is also partly due to the concern of the Central Bank of Japan (as of other central banks) about the eroding effectiveness of monetary controls.

During recent years, contacts between the Community and Japan have intensified and are expected to continue so in the future. These contacts were concentrated in the area of trade relations. Since 1973 bi-annual EC-Japan meetings concerning economic and industrial questions have been taking place. (1)

Japan was the Community's second biggest supplier in 1986, accounting for 10% of its imports and its fifth largest export market, taking 3% of its total exports. Trade between the two sides comprises mainly industrial products, although the Community exports large quantities of meat and alcoholic beverages to Japan. The EC exports mainly organic chemicals, pharmaceuticals, textiles, manufactured mineral products, non-ferrous metals, machinery, road vehicles and clothing. Japan exports mainly office machinery, electronic consumer goods and telecommunications equipment, electrical goods, road vehicles and photographic equipment but it also exports significant quantities of chemicals, manufactured rubber products, paper, textiles, manufactured mineral goods, steel products, machinery and precision instruments.

Over the last 15 years, trade between the EC and Japan has increased spectacularly, but largely in Japan's favour. The Community's trade deficit with Japan rose from US$ 500 mn in 1970 to US$ 7 bn in 1978 and US$ 21,5 bn in 1986 for the EC-12. Characteristically, the value of the goods imported in 1986 compared with 1985 increased by 117% in the case of compact discs, 41% in that of cars and 27% in that of machining centres. This increase is due to a marked rise in Japan's exports to the EC, while Japan's exports to the US increased to a much lesser degree during the same period (by 23,2% for the US as against 47,5% for the EC). (2)

Seen as a whole, economic relations between Japan and the EC can be characterised as underdeveloped, since there has been up until recently a lack of serious cooperation in the fields of economic policy in general and of monetary matters in particular. The main issue was trade, which was discussed in isolation and not in relation to questions such as economic (fiscal and monetary) policies and related aspects (such as for example different capital and labour market situations). The EC Member States negotiated as a rule individually with Japan on a bilateral basis. This led sometimes to different approaches adopted by individual Member States towards Japan and gave rise to the possibility of conflicts, a situation that has sometimes been exploited by Japan (K.R. Korte 1984).

There were two main reasons for this lack of a tighter EC-Japan cooperation in economic affairs: The lack of the will for a coordinated EC policy towards Japan (the same lack of will characterises also EC-US relations in the monetary field) due to different situations of EC Member States in regard to Japan (concerning competition of Japanese imports on their domestic markets and related employment problems) and the lack of an authorized institutionalised body that would represent the EC as a whole. The Commission has assumed this task concerning trade relations with Japan, but it has not been empowered to do the same concerning economic and monetary policy (H. Maull 1984).

Monetary relations have also been relatively weak in the past. Both the EC and Japan concentrated their attention on the exchange rate of their respective currencies in respect of the dollar. Japanese-EC monetary relations were, if they existed at all, a residual of EC-US and Japan-US monetary relations. In the G-5 meeting of September 1985 for example, negotiations concerned only the dollar's exchange rates.

The yen's exchange rates increased sharply towards the dollar after 1985, while they fluctuated less with the ECU.

Table 1

Exchange rates of the yen

	1980	1981	1982	1983	1984	1985	1986	Feb 1987
ECU	315	245	243	211	187	180	160	173
Dollar	226	220	248	237	237	238	168	153

Source: Eurostat General Statistics, B Series, 3, 1987

Table 2

Index of effective exchange rates, 1980 = 100

	1980	1983	1984	1985	1986(I)	1986(IV)
Japan	100	117	124	127	148	165
USA	100	133	144	150	129	118
BRD	100	99	96	96	103	110
France	100	74	70	70	76	75

Source: Eurostat, Economy and Finance, Serie B, Short term trends, 3/4-1986

After the G-5 meeting in September 1985, the yen did not show any trend reversal towards the ECU, while the dollar was devalued strongly against the ECU but even more so against the yen.

During recent years, interdependence of the US, the EC and Japan has increased. Thus, relations between the EC and Japan must also be seen in the framework of EC-US and Japan-US relations. Due to domestic unemployment problems, the current account deficits have increasingly become political issues and no longer only economic ones. The US blamed the huge American deficit not (or not in the main) on its domestic economic policies (for example the high budget deficit) but on the undervalued exchange rates of some of their principal trading partners, first among them Japan. A solution of the US current account deficits was thus seen to pass through a devaluation of the US dollar and a parallel appreciation of the yen and the DM. Higher yen exchange rates would eliminate in part the US deficit and reduce Japan's surplus, thus bringing about a better equilibrium in international trade and capital flows.

Figure 1

Index of exchange rates in ECU

1980=100

	1978	1979	1980	1981	1982	1983	1984	1985	1986 I	1986 IV
JAPAN	118	104,9	100	128,4	129,4	149,1	168,4	175	182	189
USA	109,3	104,6	100	124,7	142,1	156,4	176,4	184	151	134

Source: Eurostat: Europe, United States, Japan, 1970-86, Theme 2, Series D
Eurostat: Money and Finance, Theme 2, Series B, 3/4, 1986

Chapter 1. Causes of the yen's appreciation

1.1 Japan's balance of payments

One of the main causes of the yen's appreciation against the dollar after 1985 and against the ECU almost continuously since 1980 is the persistent Japanese trade surplus.

Table 3

Current amount balance of Japan

in mio US$

1978	1979	1980	1981	1982	1983	1984	1985	1986
16 534	-8 754	-10 746	4 770	6 850	20 799	35 003	49 169	85 966

Source: IMF Financial Statistics, January 1987

Table 4

Trade balance

in mio US$

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Imports	79 343	110 672	140 528	143 290	131 931	126 393	136 503	129 531	126 408
Exports	97 543	103 032	129 807	152 030	138 831	146 927	170 114	175 638	209 151
Balance	18 200	-7 640	-10 721	8 740	6 900	20 534	33 611	46 099	82 743

Source: Japan Tariff Association: The Summary Reports, Trade of Japan

During recent years the view that the yen has been undervalued prevailed, as became clear in the American position on G-5 of 1985. This view maintains that since Japan shows continuous (and often increasing) trade surpluses, it must follow that the yen is persistently undervalued. A "more correct", i.e. higher, exchange rate of the yen would diminish trade surpluses and bring about a more equilibrated trade balance. Underlying this view is the "classical" assumption that trade balances respond fairly rapidly and certainly in the expected direction to changes of the exchange rate (i.e. appreciation leads to diminishing surpluses of the trade balance and vice versa). This assumes of course further that imports and exports react fairly elastically to changes of relative prices induced by changes in the exchange rate.

The situation is actually more complex. Trade balances do not react fast and not always in the presumed direction to changes in the exchange rate, and imports and exports are not always very elastic to changes in relative prices. Furthermore, structural effects like growth rates, productivity, the behaviour of the labour force or of enterprises, (i.e. elements that influence competitiveness) are on the whole and in the long-run more important for the development of the trade balance and the current account than just exchange rates.

The following points emerge from the observation of recent developments:

1. The broad swings in the exchange rate are consistent with general economic theories of the relationship between domestic and global economic developments and exchange rate movements. For example, periods of higher inflation tend to correspond to episodes of yen weakness.

2. The steep appreciation of the yen that occured after 1985 has parallels in historical experience, as for example the period 1977 Quarter III to 1978 Quarter IV when the yen appreciated against the dollar by 30%. Such sharp exchange movements over relatively short periods do impose considerable burdens of adjustment on Japanese industry.

3. Movements in interest rate differentials began to correlate more closely with exchange rate swings starting in the '80s after significant financial liberalisation had occured in Japan. This correlation is expected to continue after the newest and continuing liberalisation measures of Japan. Thereafter, short-run movements in the yen's foreign exchange value are probably best viewed from the standpoint of asset market models of exchange rate determination.(3)

4. During longer periods there appears to have been a positive correlation between Japanese current account surpluses and yen appreciation.(4) Japan has run current account surpluses almost continuously since 1965, except during the years immediately following the two oil shocks of 1973 and 1979. Periods of strong yen appreciation have tended to correlate closely with periods of growing current account surplus, although the appreciation eventually (after a lag of time) induces a reduction in the surplus, as shifts in demand occur in response to the associated relative price changes. This has in fact just happened, beginning in the second half of 1987. This is an important consideration when examining policy options, because it must not be expected that appreciation of the yen would immediately reduce Japan's trade surpluses.

A. The structure of Japan's trade

Japanese surpluses are mainly due to high export growth rates, while imports have more or less stagnated. The composition of exports and imports is different. Due to Japan's lack of raw materials, a lot of internal demand for these is covered by imports, among which energy imports are particularly important. The share of energy imports in Japan's total imports was 42% in 1985, and that of raw materials 14%, compared to the EC's 20% and 7%.

Fluctuations of oil prices have thus had a great impact, due also to the fact that demand for oil is fairly inelastic in the shortrun. The share of oil imports in total imports was 44,3% in 1975, 49,8% in 1980, 43,1% in 1985 and 30,7% in 1986.(5) Falling oil prices reduced the overall

value of oil imports and thus influenced negatively the expected rise of overall imports due to the yen's appreciation. Since the price elasticity of oil imports is small, falling oil prices did not lead to increases in oil imports. A similar situation applies also more or less to other raw material imports.

In parallel to the import side, the export side of Japan's trade account shows a strong concentration on some goods. The share of machines, television sets and other electronic goods and cars reached 74% of total exports by 1986, being 50% in 1968, 55% in 1973 and 67% in 1983. The share of car exports in particular increased from 10% in 1973 to 25% in 1986. Demand for some of these products is elastic (cars, electronic consumption goods) and is thus influenced by the yen's exchange rate. On the other hand demand is fairly inelastic for a range of other products (microelectronics for industrial goods) where Japan enjoys an almost monopolistic position on world markets.

B. Japan's production structure

Next, the structural factors that influence the yen's exchange rate are examined:

1. Productivity growth: Productivity is one of the primary factors influencing competitiveness and, through competitiveness, trade. Japanese productivity growth has outpaced that of its major trading partners. It was particularly fast up until the '60s and has slowed considerably since then. Thus, in this respect, Japan's experience was similar to that of most European countries. The remarkably rapid growth in Japanese productivity in the 1950s and 1960s and the following slowdown can be explained by the catch-up hypothesis. The fast growth phase reflected the fast pace of technological innovation deriving from a backlog of exploitable foreign (mainly US) technologies. The slowdown phase reflects in part the elimination of ready opportunities to adopt foreign technologies and in part structural changes in the composition of investment (Marston 1986, Johnson and Loopesko, 1986).

As Japan became a more mature industrial economy in the 1970s, a greater share of investment was geared towards the service sector, social welfare, anti-pollution and other activities, where productivity was lower. However, Japan's social structure still lags behind that of comparable European states.

Still, Japan has maintained faster productivity growth in manufacturing than her major trading partners.

Table 5

Productivity growth rates: 1975 - 1984

	Japan	USA	Germany	France	UK	Canada	Nether-lands
Total manufacturing	6,0	2,2	2,4	2,4	3,5	1,5	5,5
Electrical machinery	13,2	4,5	3,5	3,5	3,9	4,9	7,9

Source: OECD Economic Survey of Japan 1985

Table 6

Changes in Productivity Growth

in manufacturing relative to 11 trading partners

(relative annual percentage changes in output per hour)

Period	Japan	USA	Germany
1960 - 73	5,9	-3,9	-0,3
1973 - 84	3,0	-1,7	-0,5

Source: Edwin Dean, Harry Boisevain, James Thomas "Productivity and Labor Cost Trends in Manufacturing, 12 Countries" Monthly Labour Review, March 1986

Japan has had the fastest productivity growth in both the fixed (prior to 1972) and floating exchange rate periods among the 12 industrialised countries considered in a study of the Bureau of Labour Statistics (Dean et al. 1986).

2. Regional pattern and composition of trade: An important impetus to Japan's productivity gains in manufacturing has been the need to develop a surplus in manufacturing trade to offset a persistent deficit on energy and raw materials. Japan is dependent on imported raw materials, being poor in natural resources, with the result that it has typically run trade deficits vis-à-vis countries classified as developed primary producers (like Australia, New Zealand, South Africa and Canada and vis-à-vis oil exporting nations like Saudi-Arabia, Iran and Indonesia). Japan's longer-run tendency towards trade surplus with the EC and the US is in part the counterpart of her deficit on raw materials. Still, Japan's gains in competitiveness appear to have surpassed those required just to achieve balance between its deficit on primary commodities and its surplus on manufactures. Japanese industry and government consciously concentrated on an export strategy promoting a few sectors. This so called "laser-beam approach" (Lehmann 1984) explains in part continuous above-average productivity growth in these sectors of the Japanese industry. Selection of these sectors was done according to the development and the forecasts of future development of demand in the domestic market. It was therefore assumed that domestic market developments mirror fairly accurately development of demand in the other industrialised nations.

3. Real wage growth: Real wage growth in Japan, although keeping pace with European developments, has tended to lag behind labour productivity gains in most recent years, except those following the first oil shock. On the other hand, real wages and associated costs like social security in most European countries were outstripping productivity gains until the beginning of the '80s, when this trend was reversed in the European countries. Combined with faster productivity growth in Japan than in Europe and the USA, this has resulted in improved cost competitiveness of Japanese exports (Jones 1985)

Table 7

Real wages, productivity and the terms of trade

Annual growth rates

	Productivity	Terms of trade gain(+)/loss(-)	Warranted real wages [=(a)+(b)]	Actual real wages	Change in real wage gap
	(a)	(b)	(c)	(d)	[=(d)-(c)]
Japan					
1975-79	3.8	-0.3	3.6	2.2	-1.4
1979-83	2.4	-0.8	1.6	0.7	-0.9
1983-86	3.3	1.1	4.4	1.9	-2.4
1975-86	3.2	-0.1	3.1	1.6	-1.5
USA					
1975-79	0.9	-0.1	0.7	1.0	0.3
1979-83	0.2	0.3	0.5	0.4	-0.1
1983-86	1.4	0.2	1.6	1.2	-0.5
1975-86	0.7	0.1	0.9	0.8	-0.1
4 Major European Countries					
1975-79	3.1	0.1	3.3	2.3	-1.0
1979-83	1.3	-0.1	1.2	1.1	-0.1
1983-86	1.8	0.6	2.5	1.5	-1.0
1975-86	2.1	0.2	2.3	1.6	-0.7

Source: OECD Secretariat.
Definitions of variables:
Productivity = real GDP/Total employment
Terms of trade gain = terms of trade as per cent of GDP at previous year's prices.
Real wages = compensation per employee/private consumption deflator.

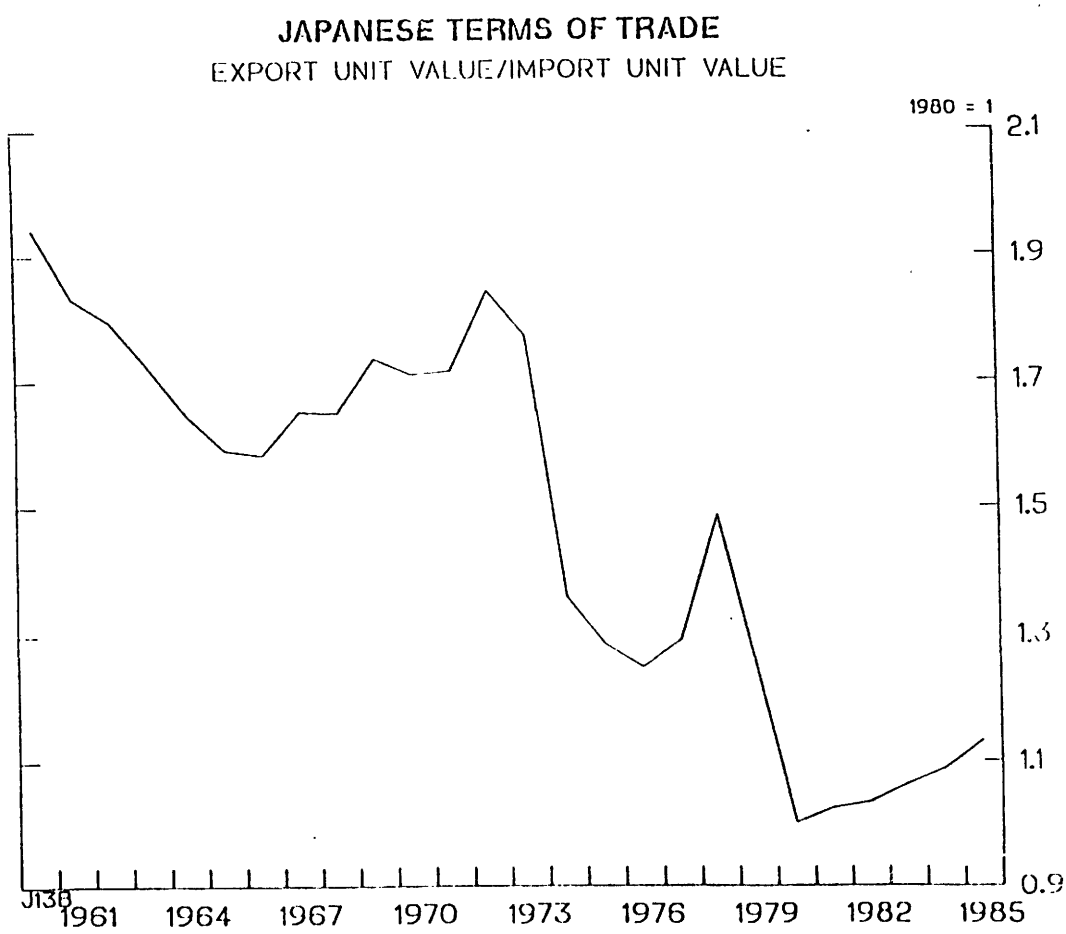
The relatively slow growth of real wages is related to the characteristics of the Japanese labour market and to the system of industrial relations that prevails in the large Japanese firms. Particularities of this system are lifetime employment in most of the large firms, seniority wage setting, bonuses linked to profits and company-based unions. This system strengthens employees' commitment to the company and its long-run vitality, leading to wage settlements that are compatible with company interests. During the annual spring wage negotiations - the so called "Shunto" initiated in 1955 - company performance is a primary consideration recognized by both management and labour. Japanese labour's willingness to accept moderate wage increases after the 1973 and 1979 oil shocks (despite rising inflation) helped prevent the unleashing of a prolonged wage-price spiral, something that did occur to a greater or lesser extent in all European economies. Further, collective decision making and,

indirectly related to this, the high level of quality controls in Japanese enterprises contribute to productivity and competitiveness (Uchiyama 1986).

For exporters to the Japanese market, the slow growth of wages has a negative effect since it limits the growth of domestic demand and thus of imports.

4. Terms of Trade: Japan's terms of trade have declined substantially since the 1960s (6) (see figure 2)*.

Figure 2



This decline is composed of a relatively slow increase in export unit values and a faster rise in import unit values, especially during the periods in the 1970s in which prices of raw materials rose sharply. Some of the movement in the terms of trade reflects exchange rate changes, but price developments also influence it.

The pricing strategy of Japanese exporters has also tended to enhance Japan's competitiveness. Japanese wholesale prices often increased more rapidly in the 1950s and 1960s than export prices, suggesting that export profitability was squeezed over much of the period, while Japanese exporters expanded their world market share. In more recent years the gap narrowed, but still Japanese exporters have tended to accept lower profit margins rather than to resort to sharp increases in export prices during periods of fast yen appreciation. This pricing behaviour has helped improve Japan's competitive position and preserve or increase the global market share of Japanese exports.

C. The capital balance, savings and foreign investment

Capital balance: In a period of low international mobility of capital (such as that prior to 1979), so called "flow" models of exchange rate determination would predict that trade flows may have an impact on the exchange rate. This would be so, since capital controls and low capital mobility in general prevent a capital account surplus from emerging to finance a current account deficit, so that the exchange rate will have to depreciate in order to bring about a reduction of the current account imbalance. That link becomes less transparent when increased capital mobility (due for example to financial liberalisation) permits a high degree of capital inflows (or outflows in the opposite case).

With capital mobility, current account developments can still influence the exchange rate through a variety of channels, the most important of which are:

a) Unanticipated current account developments which may affect the exchange rate by revealing new information about changes in long-run competitive positions among countries.

b) Current account movements which may also influence the exchange rate through a portfolio balance channel, because current account disequilibria result in a redistribution of wealth among countries and because investors in different countries may have different preferences with respect to the currency denomination of their investments. Due to this imperfect substitutability between assets denominated in different currencies, exchange rates will move to re-equilibrate asset markets.

c) Intertemporal considerations; exchange rates will have to adjust at some time so as to prevent current account imbalances from becoming unsustainably large;

d) Underlying economic developments of real variables (like growth and productivity) which influence both the exchange rates and current accounts and may cause them to move together.

Japan's capital balance is the counterpole of its trade balance, showing persistent and increasing capital exports. Japan has become the world's biggest capital exporter. Some economists (Feldstein 1987) argue that the persistent Japanese trade surpluses do not pose any problems as long as capital exports can guarantee an efficient recycling of these surpluses. The crucial point is the use made of these capital exports, that are increased due to the high Japanese saving rates (Kanamori 1987).

A recent paper by the World Institute for Development Economics Research (WIDER) suggests that since Japan will be unable to absorb fully its domestic saving, it will need to continue to rely on current account surpluses in order to continue channelling excess savings abroad. WIDER proposes that to counteract the global contractionary impact of any reduction in the US fiscal and trade deficits, Japan should redirect the

surplus towards financing productive capital formation in the developing countries. Thus, Japan's savings represents a large potential source of investment in developing countries (WIDER 1986).

Savings: Secular development in Japanese savings and investment have contributed to the tendency towards persistent current account surpluses (7). The Japanese savings rate has been remarkably high since the mid-1950s by comparison with most other countries, while private investment did not keep up. After 1970 the share of private investment in GNP fell back to about 15% of GNP and has remained stable at around that level in recent years. The private savings ratio, however, did not fall in the '70s and even increased temporarily in the aftermath of the 1973 oil price hike as the heightened uncertainty and rising inflation led households to save more in order to rebuild the real value of their financial assets. The personal savings ratio in Japan for 1985 (as a percentage of personal disposable income) was 22%, compared to 13% for Germany, 12% for Canada, 12% for the UK and 5% for the USA (Johnson and Loopesko 1986, Yamaguchi 1987).

Public sector spending in Japan generally increased over the 1970s. By 1979, the general government deficit as a share of GNP had reached 4,8%, thereby absorbing some of the private sector savings, but since 1979 Japanese fiscal policy has been oriented towards reducing the level of the fiscal deficit, largely by reducing government spending, with the goal of eliminating bond financing of the central government deficit by 1990.

Some factors may lead to a decline in savings over time, but the prospect that the gap between savings and domestic investment will be completely eliminated in the near future is small. The most important factor influencing savings is the age structure of the population. With the rapid ageing in the Japanese population (the share of the population over 65 is projected to rise to 16% by 2000 and to 20% by 2020), those currently in an earlier stage of the life cycle are saving for retirement. With a larger population over 65 in the future, a decline in the savings rate is expected. Other factors influencing the high Japanese savings ratio like precautionary motives, housing (the average Japanese

home costs nearly 8 times average annual income and mortgage interest is not tax deductible), children's education and marriage and tax-free interest on small savings accounts, may change less over time, so that the Japanese savings ratio will remain relatively high also in the future.

Government policy can influence the savings ratio mainly through the following:

a) Housing investment
b) Tax treatment of savings.

The Maekawa Report (of April 1986) on possibilities for medium-term structural change aimed at reducing the Japanese external imbalance recommended abolition of the tax exemption on small savings accounts and urged a sweeping reform of Japanese housing policy (through tax deductions for housing, stabilization of land prices and easing of regulations hampering real estate development).

The structural features of the Japanese economy suggest that Japan will tend to be a net exporter of capital also in the future. In view of this, one should not be concerned with a reduction of the Japanese saving ratio, but rather with encouraging the most efficient and equitable global redistribution of Japanese savings. A reduction of Japanese savings and Japanese capital export would tend to reduce Japanese net foreign investment and thus raise the level of interest rates abroad, a result that would inhibit economic recovery and growth.

The degree of influence of the saving rate on capital exports depends on the stance of Japanese fiscal and monetary policy. Since the beginning of the '80s, growth of the public budget has been reduced which has led to a decrease in the issues of new state bonds. Combined with the high real interest rate of US$ denominated bonds, this led to increased capital exports (Mission of Japan 1985).

Table 8

Interest rates for state bonds

	1980	1981	1982	1983	1984	1985	1986
Yen	9,21	8,66	8,05	7,42	6,81	6,34	5,14
Dollar	11,39	13,72	12,92	11,34	12,48	10,97	7,81

Source: Bank of Japan, Economic Statistics Monthly

Table 9

Long-term capital movements

US$ million

	1983	1984	1985
Foreign capital*	14 759	7 124	17 273
Direct investments	416	-10	642
Portfolio investments*	8 485	-156	3 851
Import credits	8	3	29
Loans	-37	-77	-75
Bonds	5 663	7 350	12 890
Others	224	14	-64
Japanese capital	-32 459	-56 775	-81 815
Direct investments	-3 612	-5 965	-6 452
Portfolio investments	-16 024	-30 795	-59 773
Export credits	-2 589	-4 937	-2 817
Loans	-8 425	-11 922	-10 427
Others	-1 809	-3 156	-2 346
Net*	-17 700	-49 651	-64 542
Current balance	20 799	35 003	49 169
Memorandum:			
Net banking flows	3 570	-17 560	-10 848

(minus sign indicates capital outflow)

* Excluding foreign investors' "Gensaki" transactions (bond transactions with agreements to repurchase usually within three months). Since the liberalisation in 1979 up to the end of 1981, although short-term in nature, those transactions had been classified as long-term capital movements.

Note: Data for years 1976 - 82 are given in Table 9 of OECD Economic Survey of Japan (1985)
Source: Bank of Japan, Balance of Payments Monthly. OECD Secretariat

Foreign Investment: Looking at the composition of capital outflows, an increasing tendency towards portfolio investments can be remarked. Direct investment has increased, but still remains a small percentage of overall capital outflow. The greatest part of capital outflow was directed mainly to US bonds. In analogy to the recycling of OPEC capital flows after the two oil shocks, capital went first into short-term assets and then into longer-term bonds, while only during the most recent years has investment in shares and other real assets increased, again mainly in the USA (Wayne 1987). Japan's regional distribution of direct investment is as follows: North America 26,97%, Middle East 2,97%, Europe 11,0%, Africa 3,37%, Oceania 4,24%, Latin America 15,64%, Asia 19,46%, for a total of US$ 83,65 billion during the period 1951-1985.

Table 10

Japan's cumulative Investment in Europe

Industry	Cases	Amount $m
Manufacturing		
Food	39	73
Textiles	121	193
Lumber & pulp	2	0
Chemicals	96	216
Ferrous & non-ferrous metals	309	261
Machinery	158	214
Electrical machinery	138	400
Transport machinery	33	419
Others	144	312
Subtotal	1,040	2,088
Non-manufacturing		
Agriculture & forestry	3	1
Fishery & Marine Industries	5	2
Mining	11	863
Construction	18	44
Commerce	1,768	2,486
Banking & Insurance	288	3,695
Services	154	252
Transport	28	29
Real estate	12	57
Others	233	1,027
Subtotal	2,520	8,455
Branch establishment & expansion	180	421
Real estate	180	38
Total	3,920	11,002

Source: Miti

Source: Financial Times, 13 November 1986

Table 11

Japan's direct Investment in Europe ($m)

	Fiscal year 1984			Fiscal year 1985			Cumulative FY 1951-1985		
	Cases	Amount	Share	Cases	Amount	Share	Cases	Amount	Share
United Kingdom	68	318	3.1	85	375	3.1	1,048	3,141	3.8
Netherlands	30	452	4.5	38	613	5.0	294	1,687	2.0
West Germany	48	245	2.4	48	172	1.4	758	1,343	1.6
Luxembourg	7	315	3.1	12	300	2.5	83	1,216	1.5
France	50	117	1.2	60	67	0.5	690	819	1.0
Belgium	11	71	0.7	10	84	0.7	242	743	0.9
Switzerland	22	229	2.3	15	60	0.5	213	663	0.8
Spain	11	140	1.4	8	91	0.7	148	514	0.6
Ireland	1	1	0.0	5	81	0.7	58	260	0.3
USSR	—	—	—	—	—	—	6	193	0.2
Italy	6	22	0.2	11	32	0.3	138	189	0.2
Others	15	27	0.3	21	55	0.5	242	243	0.3
Europe total	269	1,937	19.1	313	1,930	15.8	3,920	11,002	18.2

Source Miti

Source: Financial Times, 13 November 1986

At present there are about 250 partly or wholly-owned Japanese production sites in 13 countries, making a broad-range of products from cars and consumer electronic equipment, lighters, zip fasteners, ball bearings, construction equipment and machine tools. The biggest investments are in the U.K. (12 400 persons employed) and West Germany (9 100 employed persons) with France (10 000), Spain (11 600) and the Netherlands catching up. Total direct investment in Europe is relatively small, amounting to $US 11 billion by the beginning of 1986, i.e. less than half of Japan's stake in the US and smaller than that in both Asia and South America. Growth of Japanese investment during 1985 was almost stagnant. Europe's relative share is unlikely to rise and according to Japan's Ministry of Trade and Industry (MITI) forecasts it will even decline in the future, since Japanese foreign investment is expected to continue to be focused on the large and homogeneous North American market and on the fast-growing countries of Australasia.

At present, Japanese companies manufacture little more than 2% of their output overseas, but MITI forecasts that about a fifth of the country's big manufacturers will be producing 20% of their output overseas within 10 years. In Europe this investment might be directed towards areas where the Japanese have so far been weak like the service industries. In financial services the Japanese have quickly become a dominant global influence.

Many uniform operating characteristics are displayed by the Japanese across Europe, together with some country-by-country differences. A quarter of all Japanese business ventures are in electronics. The highest rate of fully-owned subsidiaries are to be found in the UK, West Germany and the Netherlands, while in Spain, France and Ireland the Japanese have sought or have been required to accept more joint ventures.

The average size of Japanese plant is small. According to surveys, about a third showed sales of less than US$ 5 million per year, and only a sixth attained sales of between US$ 20 and 100 million.

The Japanese tend to bring to Europe many of their indigenous production practices though they show considerable flexibility in fitting in with local operating cultures. The Japanese are more apt to modify their own company ethos than many US firms. They tend only to keep a firm grip in engineering, with senior engineering and quality management posts normally retained in their own hands.

Japanese direct investment overseas is made for a variety of reasons and not just for profitability, at least not in the short run. Trade friction, anti-dumping duties, export quotas and intense political pressure are pushing the Japanese into significantly more investment than would have been made for good business reasons alone. The Japanese exports which have attracted price controls, or anti-dumping duties from the Commission, are those that the Japanese make or plan to make in Europe. These include videocassette recorders, electronic typewriters, photocopiers and construction equipment. Thus, it can be said, that if the Community wants to attract more investment from Japan, it should keep up the pressure.

Among the reasons for Japanese preference for investment in the USA and Australasia as against Europe are the big integrated US market, the low cost situation (especially labour costs) in Asia, less regulation into USA and Australasia and the cultural environment, where Europe, with its various cultures and languages presents more of a challenge than the US. Also, Japanese companies located in Europe complain that local suppliers do not often meet their standards in terms of quality and delivery times.

A number of factors have contributed recently to make France an attractive environment for Japanese investment. These include simplifications in administrative procedure and red tape, the new liberal and free-market oriented policies, the programme to privatise the main French nationalised industrial and financial groups, as well as a generally productive workforce and an encouraging labour relations record in recent years. Japanese interest in France has become such that France is now the leading European country for Japanese investment in terms of the number of plants in operation or planned. By the end of 1986 there were 50 Japanese factories in service.

By the end of 1986 there were 40 wholly owned Japanese firms operating in the UK (19 of which in electronics). Japanese total direct investment is estimated at about US$ 3,14 billion, Japanese investment remains low compared to US and German investment. In 1985 Japanese companies made 13 investment decisions in the UK as against 158 by US and 46 by German companies. But Japanese firms are very important in the financial services, accounting for about 25 000 persons employed (as against 12 400 in manufacturing). There are more than 270 Japanese companies which have some form of operation in the UK ranging from very small sales outlets to the big securities houses. 23 Japanese mainstream banks have offices in the centre of London, together with 20 offices of regional banks, 15 wholly-owned merchant banks, more than 20 securities houses and 10 portfolio investment life insurance companies.

Direct investment from Japan in Germany up to the end of 1985 totalled US$ 1,34 billion, to the Netherlands US$ 1,69 billion. Investment concerned mainly consumer electronics with some recent ones in dyes, scientific instruments, computer peripherals and advertising.

Japanese direct investment in Spain amounted by 1986 to US$ 420 million. Financial liberalisation in Spain may attract more Japanese firms in this sector, where 4 Japanese banks already have full branches (8).

Japanese direct investment in Europe especially in the form of joint ventures is seen by many European academics and businessmen with mistrust. Some academics (9) argue that the flood of international joint ventures merely represents a new phase in the competition between Far East and West, in which the Japanese are building ever more managerial and technological competence, while western companies surrender ever more control over their competitiveness. According to this view, the ultimate aim of most Japanese companies in their partnerships with the West is not to co-exist but to extract their partner's core of skills and then either disarm him in an ever-growing spiral of dependence, or break loose and compete with him directly. The Japanese usually try to annexe the other partner's skills and to gain control over its technology, in order to relegate the other partner to mere product distribution and the provision of less than critical contributions. Yet another but less obvious source of advantage to most Japanese companies in partnership with the West is the greater ability of their organisations to learn from their partners. This results in part from Japan's long tradition of selective absorption and adaptation of foreign ideas and technology, and also from the quality of vertical and horizontal communication in Japanese companies. By contrast the greater specialisation of tasks and responsibilities of western companies makes the assimilation and use of complex know-how more difficult.

In general, the Community is concerned at the type of Japanese investment in Europe, as only one-fifth of it is in the industrial sector and in many cases it seems intended to promote Japan's export infrastructures. Certain of its investments, as mentioned above, have involved products in respect of which the Community has taken action against Japan on the grounds of unfair trading. However, Japanese investment in the Community is currently ten times greater than Community investment in Japan. This is not due to any lack of interest by European firms, but to difficulties they have encountered in establishing themselves in Japan, due to both legal and cultural reasons. European banks established in Japan still encounter great difficulties in spite of the Japanese authorities' liberalisation programme. They are unable to be competitive because of the excessive cost of the funds with which they have to operate, due to Japanese regulations. The Commission is continuing talks with the

Japanese authorities with a view to a speeding up of the liberalisation of the financial and monetary markets. In December 1986 the Community and Japan agreed to set up and finance an industrial cooperation centre with the aim of helping European firms gain access to the Japanese market, for example through appropriate training and the provision of useful information on that mandate. The centre will run for a trial period of two years and was opened in Tokyo on 2 June 1987.

The Euroyen market: In contrast to the relatively weak Japanese direct investment in Europe, the Euroyen market has blossomed. This has been due to the traditionally high Japanese savings rate, related to the insufficiency of Japanese bonds profitability and the liberalisation of the national financial regulations, which have facilitated capital export. Lastly, the Japanese financial companies have showed unequalled dynamism and aggressiveness on the international financial markets.

According to BIS statistics, Japanese banks were holding by the end of September 1986 32% of international activities, of reporting banks, as against 23% only two years ago, thus taking the first place in international operations which belonged before to American banks.

Euroyen emissions increased three times between 1985 to 1986, mainly due to Japanese investors demand for bonds that satisfied their needs (immediate higher return and possibility of fiscal deduction, for example.)

Table 12

International bonds market (billion dollars)

	1981	1982	1983	1984	1985	1986
Dollar out of which	32,7	48,2	43,9	69,6	101,2	123,3
: Euromarket	25,8	42,2	39,2	65,3	96,5	117,2
: national market	6,9	6,0	4,7	4,3	4,7	6,1
DM	1,4	3,3	4,0	7,7	11,2	16,9
Yen: out of which	3,1	3,9	4,1	6,1	12,9	23,5
Euromarket	0,4	0,6	0,2	1,2	6,5	18,7
National market	2,7	3,3	3,9	4,9	6,4	4,8
Swiss Franc	8,1	11,3	13,5	13,1	14,9	23,4
Sterling	1,4	2,0	3,0	5,6	6,7	10,8
ECU	0,2	0,8	2,2	2,9	7,0	7,0
Canadian Doollar	0,7	1,2	1,1	2,2	2,8	5,4
French Franc	0,6	0,2	0,2	-	1,5	3,9
Others	4,6	4,6	5,1	4,3	9,6	12,2
Total, gross	52,8	75,5	77,1	111,5	167,8	226,4
Minus reimbursements:						
normal			17,1	16,3	16,7	23,3
anticipated			1,5	3,2	18,6	41,1
Total, net			58,5	92,0	132,5	162,0

Source: Jean Marie Kertudo 1987

The share of Euroyen increased to about 10% of the international bond market by 1986, reaching the second place of importance after the dollar and in equality with the Swiss franc (Kertudo 1987).

Financial liberalisation in Japan: A particular characteristic of Japan is the debt financing of enterprises, with borrowed funds exceeding more than six times owners' equities, although there is a falling tendency in this trend. Low interest rates made borrowing cheap. Also, the strong relationship between financial institutions and their corporate clients, big commercial banks being often part of a large corporate group, contributed to this trend. Since the late 1970s however, Japanese companies have made major changes in the way they finance their businesses, an important one being the increased use of capital markets. While corporate bond issues accounted for only 5,9% of funds raised in the early 1970s, this percentage had risen to 20% by 1983.

The Japanese government has taken, and has plans to take, various measures that will further develop the capital market: 1) Privatisation of public enterprises will increase the size of the securities market; 2) The 20% tax on profits made on savings accounts, which is likely to be introduced soon, will reorient part of the savings to the capital market, thus increasing its liquidity; 3) Investment funds and pension funds are being boosted (investment funds represented 35 000 billion yen in March 1987, an increase of 60% on the year before); 4) The liberalisation and deregulation measures are contributing to a great extent to the development of the capital market.

The following are the most important measures of liberalisation (Speich 1987):

1) In the domestic financial system interest rate ceilings on large denominated time deposits ($\geq$1 billion yen) and ceilings on banks money market certificates have been removed. The EC Commission still has two main requests to Japan's Ministry of Finance: the total liberalisation of interest rates and the opening of the money markets.

An important feature of the capital markets in Japan is the separation between banking and securities business. These barriers are about to be lifted. The Japanese banks, hit by sluggish domestic loan demand challenge the traditional turf of the securities sector, which is the most profitable in the field of banking activities at the moment. At present (since April 1985), banks are authorised to issue money market certificates and trade in government bonds on the over-the-counter market.

2) Access for foreign banks and borrowers to Japanese markets has been relaxed. The number of foreign corporations listed in Tokyo will be 75 by the end of 1987, as opposed to 50 in New York. Also, the freeing of restrictions on the use of different sources is also taking place, and generally less collateral is required for issuers. The list of public and private borrowers is expanding and the guidance measures are more liberal.

3) The liberalisation of the Euro-yen market is accelerating: Japanese corporations can easily float a yen-loan on the Euromarket, and Japanese banks can grant long and medium-term credits in yen to foreigners. Bonds with warrants (10) are usually issued off-shore, while convertible bonds are primarily issued domestically. Nearly all foreign groups wishing to raise yen funds now use Euro-markets. This growth of the volume of funds raised through this unregulated market is encouraging to a revival of the domestic market which has to remain competitive. The offshore market reached US$ 93,7 billion by the end of 1986.

Some major drawbacks still remain: 1) Short-term money markets are relatively under-developed; 2) The upper limit on smaller deposit interest rates is still present; 3) The regulatory measures are still greater than in other financial centres; 4) The off-shore market is not yet very efficient. The accounts will be subject to 64% taxes, which is quite high and may influence negatively the willingness of some operators to invest there.

1.2 Economic policy and the structure of the Japanese economy

Fiscal policy in Japan influences the structure of demand and thus of the trade and capital balance and the yen's exchange rate.

Consumption behaviour and long working hours indicate a living standard that is in reality lower than what could be expected according to real GDP per head. The Maekawa (11) report of April 1986 points out the important weaknesses in infrastructure and consumption possibilities. As an example of this, Japanese rice prices are 11,5 times higher than US domestic prices!

During the last decades, Japan has been partly westernised in its consumption and in general in its material outlook, but important differences in consumption mentalities still exist. Japanese consumers are more willing to forgo consumption in certain cases, while on the other side they have high quality requirements. Also, general living conditions and the social structure of the population limit extensive

consumption (Kanamori 1987). Living conditions in the overcrowded main cities limit drastically consumption of furniture (which traditionally is also much simpler than in the West) and some sorts of household equipment. Domestic demand for cars is also less than could be expected due to the fact that a person has to show that he has a permanent parking space in order to receive a traffic permit for a car. Prices for foodstuffs are very high, as are also rents for apartments. Prices for housing and land are also extremely high compared to European standards. Taking this into account and in addition to the high saving rates that Japanese households have, available income for consumption of other goods is limited. Japanese households thus forgo the consumption of goods that all European households consume to an important extent (for example, wine and other alcoholic beverages, or some kinds of clothes). This of course limits imports, combined with the fact that some imports like wines and alcoholic beverages are hit by prohibitive import duties.

The weakly-developed social security system contributes also to increased saving rates, since employees purchase additional security contracts out of their income. Savings in order to buy own apartments or houses also increase the saving rate, although the future substitution of own living space instead for the payment of rent is a consumption expense.

Monetary policy in Japan has contributed to the yen's strength. Japanese monetary policy was on the whole restrictive after 1979.

In 1985 it became even more so, bringing about an increase of interest rates, partly in order to reduce capital inflow into dollar-denominated assets (Feldstein 1987). The policy stance of the Japanese central bank was reversed in 1986 with a lowering of interest rates. This was continued in 1987 with five consecutive cuts of the discount rate up to the end of February that brought it to a record low of 2,5%. According to the Bank of Japan's governor Satoshi Sumita, this was designed to help stabilise the yen and promote steady expansion of domestic demand. This represents a change of orientation of monetary policy, at least in part, because till then it was externally oriented. Western analysts have cast doubts on the effectiveness of monetary policy measures to increase

Japanese consumption and thus increase Japanese import absorption. Japan is already awash with funds so that interest-rate changes are unlikely to modify consumers behaviour.

Fiscal policy also influences the yen's exchange rate. Domestic demand by the state diminished after 1979 due to restrictive measures related originally to the second oil shock. Private demand did not replace state demand. The reduction of the fiscal deficits reduced partly imports and thus could have a positive influence on the yen's exchange rate (Institut der deutschen Wirtschaft 1987). On the other hand, the reduction of the budget deficit brings interest rates down, thus increasing over the long run private demand (an inverse crowding-out effect) and capital outflow; both of these have a negative influence on the yen. In the short term at least, if it is accepted that asset markets and the capital balance (and not the trade balance) influence the exchange rate, these tendencies may predominate. This may have actually been the situation in 1984-1985 and a reversal of the tendency may have started in 1986. The Japanese experience has its parallel in the USA, where during the period 1981-1985 increasing budget deficits and interest rates led to increased capital inflow and trade deficits and rising dollar exchange rates (Kyriazis and Chryssanthou 1986).

Under US and EC pressure, the Japanese government promised to implement some fiscal expansion measures in 1987. Still, the reflationary influence of these measures remains doubtful. The budget for fiscal 1987 (April 1987 to April 1988) proposes increasing government spending by just 0,02%, the smallest increase in 30 years. If the taxout side of the budget is implemented on schedule in 1988, with the introduction of the proposed sales tax delayed for another year, the economy would get a once-for-all fiscal boost of about 0,3% of GNP. This reflation is clearly insufficient to have serious effects on Japan's trade balance and absorption of imports.

Lastly it must be remarked that a valuation of the "correct" exchange rate of the yen is difficult due to the strong regulatory measures of Japanese financial markets still in force, that limit foreign inflow to yen-denominated assets inside the Japanese market. The above-mentioned

opening of a Japanese offshore market in relation to the fast growing Euroyen market and the capital liberalisation measures adopted recently will change this situation so that the yen's exchange rates in future will reflect more correctly fundamental economic conditions.

1.3 External relations with the EC and the USA

Trade between the EC and Japan increased steadily after the 1950s. In the rating of importance as a trading partner of the EC, Japan occupied the 27th position in 1960, the 10th in 1967 and has stabilised itself around 8-12th position since then. Concerning imports, Japan increased its rating from the 26th (1960) to the 2nd position in 1986.

Table 13

EC trade with Japan (million US dollar)

	1974	1976	1978	1980	1982	1984	1985	1986
Imports	5968	7234	11105	16650	17064	19405	20016	30675
Exports	3982	3623	6072	7842	7560	9334	8893	13989
EC-deficit	-1986	-3611	-5033	-8808	-9504	-10071	-11123	-16686

Source: Japan Tariff Association Summary Report, Trade of Japan

The main reasons for the EC deficits are the cultural characteristics of the Japanese domestic market, Japanese import limitations and lack of competitiveness of European products. Japanese companies follow a selling strategy of high quality combined with low acquisitorial expense and competitive pricing. European enterprises have often encountered difficulties to adapt to this situation, which, combined with relatively low consumption of some sorts of goods and high import barriers, keeps European import penetration low. On the other hand it should not be forgotten that Japanese enterprises encountered similar difficulties when exporting to European markets, which they were able to overcome by showing a high capacity of adaptation that seems to be missing in many

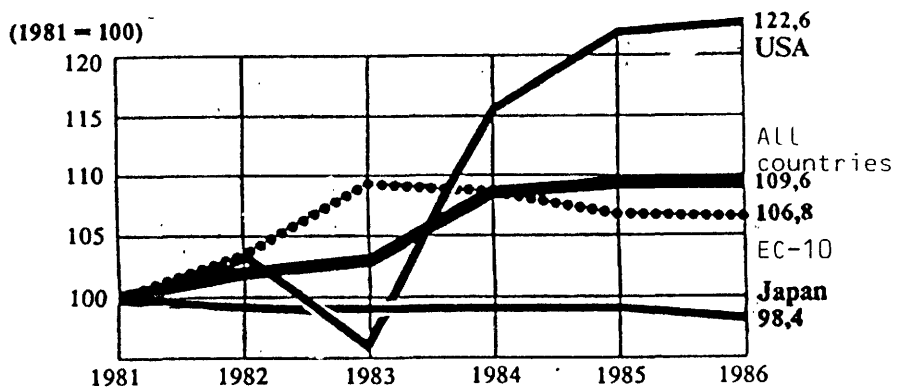
European companies (Korte 1986, Okita 1984). Also, with respect to import barriers, some Japanese imports do face import barriers when coming to the EC. In France for example, about 67% of all imports face some kind of import restriction, as against only 12% for French imports to Japan (Huggler 197). Japan does of course also apply non-tariff barriers to trade, as for example a parking prohibition in some areas for foreign private cars, higher insurance payments for cars of non Japanese manufacture, to mention only two cases (Gandow 1987).

Due to the existence of a multitude of non-tariff barriers to trade in all countries, it is extremely difficult to make international comparisons in order to find out if Japan is or is not more protectionist than its EC trading partners.

Even the protectionism index cannot be taken as an absolute value, since it refers only to relative changes but does not give any information about the original (base year) level of protectionism.

Figure 3

Development of protectionist safeguards



Source: UNCTAD

Assuming that this level was higher in Japan than in the EC in 1981, even its falling tendency manifest since then does not say much about the actual situation.

Japan's exports to the USA followed a parallel tendency to those of the EC, with exports increasing at a faster rate during the period of the high dollar exchange rate. Increasing US trade deficits forced the US administration to put its main trading partners under increased political pressure.

Already by October 1986 the US Secretary for Finance, Baker, demanded an increase of the dollar-yen exchange rate from 180 to 160, in order to facilitate the reduction of the US trade deficit with Japan. Japan (and Germany) were repeatedly asked to follow more expansionary fiscal and monetary policies (Shimano 1987).

After 1985 the yen appreciated to a large extent towards the dollar without bringing about, at least until mid-1987, any appreciable reduction in the US trade deficit, the reason being "perverse" short-term capital movements, long time lags in changes of exports and imports and in part the structural nature of both American deficits and Japanese surpluses (Wellenstein 1986).

Exchange rate moves without appropriate changes in economic policy both in the USA and in Japan are not sufficient to solve the problem of huge US deficits. Japan's trade surplus totalled US$ 51,5 bn in 1986.

Chapter 2. Problems of a strong yen

2.1 Japan's adaptation and growth

Exchange rate variations do have an influence on trade flows, but only with a time-lag. Japanese exports diminished by 1.2% in volume in 1986 (as against an increase of 4.4% in 1985) while imports increased by 12.5% (as against 0.4% in 1985). Profits of important Japanese companies were reduced, while the number of firms closing-down also increased rapidly, reaching 60 per month for the last months of 1986. Wages have increased, reaching a level above that of France and the UK and comparable to that of the USA. Unemployment also increased, reaching 3.2% in May 1987 as against 2% for the entire period 1950-1970, 2.6% in 1985 and 2.8% in 1986. Unemployment is more serious than these numbers indicate if the Japanese method of statistical calculation and loathing of big Japanese companies to make employees redundant are taken into account. Unemployment reached 5.6% for the 15-24 years age group (4.3% in 1986). Exporting industries were obliged to reduce employment, losing 190.000 working places in the textile sector, 170.000 in transport equipment (cars and shipbuilding) 80.000 in the chemical industry and 30.000 in the metals sector. For the first time, external demand had a negative influence in total GDP growth in 1986 and 1987.

Table 14

GDP changes in %

	1980	1981	1982	1983	1984	1985	1986	1987
GDP Total	4.3	3.7	3.1	3.2	5.1	4.3	3.0	3.5
Domestic demand	0.9	2.2	2.8	1.7	3.7	3.6	4.2	4.0
External trade	3.4	1.5	0.3	1.5	1.3	0.7	-1.3	-0.5

Source: "Europe", 30 April 1987

This conclusion is borne out also by the calculation of the Marshall-Lerner condition in the case of Japan (12).

Japanese businessmen have recently joined the calls for changes in government policies as their exports have diminished.

The strength of the yen which reduced import prices did not always stimulate consumption, while it benefited some exporting sectors.

In the strongly export-oriented machine-building sector for example, input prices decreased sharply due to the yen's appreciation combined with falling energy prices during 1985/86, so that output prices in yen could be also reduced, keeping the equivalent in foreign currencies stable for all the yen appreciation (Tanaka 1987). Import price reduction on the other hand seems not to have benefited consumers for a variety of reasons, as for example the strong regulation of food and beverages (Toyoda 1986).

Persistent US deficits with Japan, even after the yen's exchange rate appreciation in 1986, resulted in new US protectionist measures in some sectors like cars and high technology products.

Yen appreciation leads to structural change in the Japanese economy, from the industrial to the services sector. Also, within the industrial sector, a specialisation in light-high technology industry is being progressively developed, while traditional heavy industry (like shipbuilding and steel) is beginning to lose ground. Japan seems to be following the experience of European and US producers in these sectors (Tanaka 1987). Effects of structural change are also the increased expenditures for research and development, increased diversification and direct investment all over the world. Japan follows a strategy of diversification of direct investment on the following grounds: In the cheap-labour countries of Asia (like Korea, Taiwan etc) in order to remain competitive in some industrial sectors where labour-costs are an

important part of total cost; in other industrialised countries, like the US and EC, in order to take advantage of their big markets and avoid import restrictions that face the same goods when imported from Japan; and lastly in developing countries, in order to safeguard vital raw materials for the Japanese industry and in order to be present when these countries develop their full economic potential in the future (Nakamura 1987).

A continuously strong yen over a long period will result in further structural changes, where industry will orient itself increasingly to supply a growing domestic demand for consumer goods and where exports will gradually lose some of their present importance.

2.2 Monetary and trade problems of the EC

In the strongly interdependent world of today, EC-Japanese relations cannot be separated from US-Japanese and US-EC relations. In the monetary field three cases can be distinguished:

1. US dollar and yen appreciate at the same time. This is the most favourable case for the European Monetary System, since capital outflows from European currencies to the dollar and the yen keep the DM (main substitution currency inside the EMS for dollar and yen, Kyriazis and Chryssanthou 1986) weak, so that no external tensions materialize inside the EMS and no realignments are necessary. This was the situation during 1984-1985 and no realignments inside the EMS took place. Further a strong dollar and a strong yen would enhance in part European export competitiveness, although protectionist measures in the US might increase (as happened in reality during 1984-85).

2. Dollar devalues, yen appreciates. This is the period 1986 till now, and is less favourable for the EMS. Dollar devaluation results in capital outflows from dollar denominated assets to the yen and mainly among the EMS currencies, the DM. This results in tensions building

up inside the EMS that make realignments necessary. This actually happened after 1985, with two major realignments following a two and a half year period of no realignment. Depreciating dollar lowers EC competitiveness on the US markets, while appreciating yen tends to ameliorate the EC's current account situation with Japan.

3. Devaluing dollar and yen. This situation, which has not yet arisen, would be the worst from a European standpoint, resulting in increased capital inflows into mainly the DM both from dollar and yen denominated assets, bringing high tensions inside the EMS and reducing EC competitiveness.

Japanese exports to the USA increased during 1985/86 by 23.2% while exports to the EC increased by 47.5%, with the yen appreciating by 95% towards the dollar and only by 9% towards the ECU.

The difference in the increase of exports to the EC as against the USA is probably due not only to the different degree of the yen's appreciation but also to political pressure and specific agreements and regulations of trade. Japanese exporters seem to have tried to replace US export losses due to the yen's appreciation and increased protectionist measures by export gains on the EC market. Bilateral US-Japan agreements on specific subjects are sometimes also to the EC's disadvantage, as for example the agreement on semiconductors that resulted in a 100% increase of world market prices, which was a disadvantage for European enterprises that are highly import dependent (Ratjen 1987).

Japan did not introduce new protectionist measures during this period and even eased some of the existing ones, but EC companies still encounter great difficulties when trying to export to Japan. Japanese custom duties and quantitative restrictions are more or less at EC level, with the exception of some categories of goods like alcoholic beverages, some machine industry goods and agricultural goods (Moorhouse 1986), but non-tariff barriers are much more important and very difficult to overcome. Such barriers are the domestic Japanese distribution system, norms, standards, examination

procedures for imported goods, necessary certificates etc. In particular high technology imports find it very difficult to penetrate into the Japanese market (Christelow 1986).

But it must also not be forgotten that some EC goods are lacking in international competitiveness, which make them unable to compete in the Japanese markets, where the quality standards, especially for high quality goods are high. Increased competitiveness of EC goods would also enhance their chances of penetrating the Japanese market (Huggler 1987).

Chapter 3. Possibilities of solution

3.1 Japanese Economic Policy measures

In almost all international meetings and conferences appeals have been made to Japan to abolish import barriers and stimulate internal demand. But even in Japan itself, influential persons like the Finance Minister Kiichi Miyazawa and former Governor of the Bank of Japan, Harno Meakawa, took position for taking measures to correct Japan's current account disequilibrium. Both criticized the too low domestic consumption and saw this as the main element for the persistence of the disequilibria. Strong support and intervention measures for Japan's agriculture, especially for rice production, have led to 1/3 of available incomes expenditure going for food. A deregulation of agricultural markets would ameliorate the situation considerably, freeing available income for other types of consumption and presumably also for imported goods. The deregulation of agricultural trade of the USA, the EC and Japan is one of the subjects of the Uruguay GATT round. Mutual concessions may lead to progress in this area.

It is more difficult to change the nationalist outlook of Japanese consumers (EC Commission 1987). Foreign exporters must try to convince the Japanese consumers of the quality of their goods. This seems to be easier for younger people in Japan who are less tradition bound and more open in their outlook, so that in the medium-term a change of attitude of the Japanese consumer can be expected.

According to the Venice Summit final declaration, "Surplus countries will design their policies to strengthen domestic demand and reduce external surpluses while maintaining price stability" and "Those summit countries which have made significant progress in fiscal consolidation and have large external surpluses, remain committed to following fiscal and monetary policies designed to strengthen domestic growth within a framework of medium-term fiscal objectives. Monetary policy should also support non-inflationary growth and foster stability of exchange rates. In view of the outlook of low inflation in many countries, a further market-led decline of interest rates would be helpful" (13).

This seems to designate mainly Japan and in the second place Germany. Japan has thus accepted the obligation to implement a more expansionary fiscal and monetary policy. Up till now, Japan has been reluctant to do so and the fiscal stimulus coming from the 197 will be minimal, as mentioned above.

A moderately expansionary fiscal policy in Japan, for example through the issue of additional government debt papers that would absorb part of the savings, (Kanamori 1987) is necessary in order to reduce the structural part of the Japanese current account surplus.

The Japan Federation of Economic Organisation (Keidanren) (14) supported the implementation of an expansionary fiscal policy as a means of avoiding recession.

Liberalization and deregulation of the internal Japanese market will facilitate foreign exports and thus diminish Japan's current account disequilibria. Criticism of Japan's non-tariff barriers by the USA (15), the EC and other countries has made the Japanese authorities implement a three year programme concerning certificates, tariffs and standards, agreed on 30.7.85 between the EC and Japan and which will facilitate imports.

If on the other hand the yen continues to appreciate, it can be expected that Japanese enterprises will concentrate more on the internal market, where competition will increase, making import penetration more difficult. In the face of an eventual deterioration of the current accounts situation, Japan may become once again more reluctant to open its internal market.

To further reduce disequilibria, Japan must continue on the road of financial liberalisation initiated a short while ago, as mentioned above. Although there has been progress in providing instruments that carry market-determined rates for very large investors, there has been very little progress for the average citizen and there is very little that is specific in sight. In Japan, unless an investor can invest an amount in excess of US$ 75.000, and often an amount very much larger, he will receive an artificially low-interest rate. This lack of fair return to small savers hurts domestic consumption and domestic growth and in fact subsidizes the banking sector, being one of the reasons of its high international competitiveness.

Japanese financial markets remain segmented and heavily regulated and are still subject to guidance from the Ministry of Finance and the Bank of Japan. Limitations on maturities and denominations, stamp taxes and other rigidities, still exist throughout the system and especially hamper the development of an efficient money market based on market rates (Mulford, 1987).

The EC attitude towards Japan, as reconfirmed by the meeting of the Council of Ministers in March 1987, is based on the following points:

1. Overall pressure on Japan to reform its structures, to become better integrated in the fabric of rights and obligations constituting the international economic system and to import more from its trade partners.

2. Discussions with Japan on all specific barriers to imports. The Commission has already presented its arguments concerning wine and spirits to Japan and it will present dossiers on three other areas of complaint: dairy products, cosmetics and counterfeit goods.

3. Cooperation with Japan in all possible spheres, especially those relating to industry and research.

4. Further efforts within the Community to make European industry more competitive and to promote European products on the Japanese market.

3.2 Coordination and Cooperation

Economic policy coordination and cooperation have been recongnized and reaffirmed as aims by the Venice Summit, but problems remain as to their implementation. Countries that can do so (mainly Japan and Germany) should undertake fiscal expansion, but in view of the lack of any formal and binding international cooperation agreement appear reluctant to do so.

Concerning monetary policy the Venice Summit (16) made a commitment to cooperate closely to foster stability of exchange rates and to strengthen the surveillance of their economies using economic indicators including exchange rates, in particular by: 1) the commitment by each country to develop medium

term objectives and projections that are mutually consistent, both individually and collectively, and 2) the use of performance indicators to review and assess current economic trends and to determine whether there are significant deviations from an intended course that require consideration of remedial actions.

In the area of monetary policy, the Venice Summit has achieved slight progress, continuing on the road of previous Summits and giving more detail to some points raised at the Tokyo Summit. Still, progress is insufficient. In the declaration the G-7 Ministers define additional appropriate measures if necessary. There is absolute silence as to their application, i.e. about the actual stage of economic and monetary policy coordination. The text of the declaration is thus ambiguous and has important omissions. There is no formal obligation in the framework of the surveillance mechanism to intervene, but only an obligation for consultations on the possibility and the need (or not) to intervene. Furthermore, there is no indication as to the type and number of surveillance consultations, although semi-officially it is known that the G-7 will meet three times per year, the national forecasts being established at the beginning of the year and the technical follow-up being taken by the IMF.

Interventions in the exchange market to bring about more orderly conditions thus remain ad hoc. This represents some progress compared to some years ago (showing the willingness of the USA to undertake such interventions with the support of other countries in order to realize certain exchange rate targets for the dollar, a willingness that was totally lacking during the first years of the Reagan administration), but it is not sufficient to bring about more stability on a durable basis. The credibility of any ad hoc agreement is very limited, so that large speculative capital movements that lead to huge exchange rate fluctuations will continue in the future.

A positive element of the Venice Summit is that the degree of political engagement to the aim of closer international cooperation is such as to make it more difficult than before for participating countries not to accept a certain discipline in their economic policy, giving also due regard to the international repercussions of such a policy. This again is quite a long way

from the stance of the USA during the first period of the Reagan administration, when the US followed domestic economic policies without any regard to their international effects.

Still, it is necessary to go much further in the field of monetary cooperation in order to achieve more stability in exchange rates on a long-term basis and thus avoid the costs of persistent misalignments. From the Community side, one way to contribute to such a development would be to complete the EMS by introducing a common external policy for the ECU (and all EMS currencies), so as to avoid tensions arising inside the EMS exchange rate mechanism due to external reasons. An external Community monetary policy through the completion of the external side of the EMS would strengthen the EC's bargaining position in the international monetary field, since it would be present as one entity and not as many countries like now. This could induce the other two major countries, the USA and Japan, to more willingness to international cooperation in the monetary field (Kyriazis and Chryssanthou).

A better solution to bring about more equilibrated relations of the EC with Japan and the US in the economic and monetary field would be the implementation of a formal tri-polar international monetary order (17). Such an improved international monetary system would enhance predictability by allowing the policy makers in each country to have a better understanding of likely policy reactions in other countries. Predictability would again have a dampening influence on speculative shocks due to shifts of portfolio holdings.

Through the introduction of a system of objective indicators, the system should be able to establish clear rules for "good citizenship" in monetary and fiscal management and thus reduce the attempts at "beggar thy neighbour" behaviours. A system of relatively equal countries (or group of countries for the EC) in economic monetary strength would be more liable to be a system where the rules are observed than one in which there is a hegemonic case (like actually more or less with the US, at least during the period up to 1985) which can to a greater or lesser extent ignore the reactions of the "dependent" countries. Equality has a built-in incentive for better international behaviour.

Cooperation leading to a system of managed exchange rates would result in a reduction of the costs arising out of the high actual variability of the exchange rates. Situations of disequilibria such as exist today with high US current account deficits - Japanese surpluses could be more easily avoided in future. Also cooperation on more formal lines induces more prudent domestic economic policies, but also makes any necessary adjustment easier, since the burden of adjustment can be shared to a certain extent between the cooperating countries. Cooperation, by lowering misalignment cost and exercising positive influence on growth and employment would increase welfare (Williamson 1983 b) (18). Lastly, cooperation leading to the establishment of a tripolar currency area, with the ECU and the yen developing into reserve currencies complementing the dollar, could bring about greater international stability.

A tripolar system of managed exchange rates could include the following elements:

1) A target zone for the ECU, the dollar and the yen, consisting of fixed central rates (ECU-dollar, ECU-yen, dollar-yen) and margins of fluctuations around them.

2) Interventions by the European Monetary Authority (when such an Authority is established) or the European Fund for Monetary Cooperation (EFMC), the Federal Reserve System and the Bank of Japan in order to keep fluctuations inside the margins.

3) A swap agreement to facilitate the interventions of the authorities.

4) A credit mechanism could eventually be established to facilitate adjustment when long-run disequilibria appear. This mechanism would facilitate adjustments and also promote the willingness to adjust but is not fundamental for the implementation of the system.

5) A system of indicators, separated in monetary and real. Monetary indicators would give advance warning and the presumption to act (i.e. intervene in the exchange market) in situations of purely monetary disturbances, like wages of speculation, disorderly conditions etc. Real

indicators on the other hand would indicate when there are disequilibria in real parameter which necessitate realignments of the central rates and an adjustment of economic policy.

ANNEX(*)

(*) The Annex is taken from "US-EC Monetary Relations", by Nicholas KYRIAZIS, Nicholas CHRYSSANTHOU, Economic Series Paper No 8, of the Directorate General of the European Parliament.

A proposal for a Tripolar Exchange Rate Agreement among the EC, US and Japan

We propose an exchange rate agreement for the EC, US and Japan, according to which, exchange rates will be managed in relation to reference rates (central rates) that crawl on the basis of the relative performance of countries (areas) in terms of their effective wholesale price indexes and persistent deviation of their balances from specified targets. Our proposal should be seen as an example and a first approach towards solving the problem of coordination of intervention and not as a definite solution in itself.

In addition, this Annex deals with the construction of a divergence indicator between the ECU, the US dollar and the Yen, which can show daily deviations from the average of the above currencies. In the absence of real disturbances (in this proposal persistent disequilibria in the basic balances and/or changes in competitiveness and trade), certain signals of the divergence indicator will be considered as a warning and a signal to intervene in the exchange market in order to keep fluctuations inside the margins.

Our proposal for a Tripolar Exchange Rate Agreement between the EC, US and Japan can also be modified as a bipolar Exchange Rate Agreement between the US and the EC. It can also include other homogenous countries or areas. The above proposal for exchange rate realignments and intervention may be completed by a swap agreement and a credit mechanism which can increase the credibility, and consequently the viability, of the whole Exchange Rate Agreement, but this is not covered by this Annex. The purpose of this Annex is to outline in more details the proposal for an exchange rate agreement between the EC, US and Japan. The role of intervention would be to smooth out disorderly conditions due to speculation or other short term monetary disturbances. If, on the other hand, disturbances are due to long term variables, such as differences in competitiveness, inflation, growth rates etc then the central rates should be realigned, preferably after consultation between the countries (or areas) concerned.

The EC, US and Japan will define a reference rate for the ECU, the US Dollar and the Yen in terms of an effective exchange rate which will be expressed in a common unit of account for the purpose of standard measurement.

This common unit of account, which may be called "International Unit of Account" (IUA), will be defined in terms of the following fixed quantities of US Dollars, ECU and Yen. See Table 18.

Table 18

Participating currencies	Currencies Amounts	Currencies weights of an IUA. 16 July 1984	Value of an IUA in each currency Central Rates. 16 July 1984
US Dollar	0.362	0.35	1.02661
ECU	0.687	0.53	1.30612
Yen	30.238	0.12	249.07708

The method which has been used to estimate currency amounts in an IUA, the currency weights and the value of an IUA in each currency on 16 July 1984 is described in the Technical Annex. The date 16 July 1984 has been chosen arbitrarily.

The FED, the EMA and the Bank of Japan are to set margins around the above reference rates (Central Rates). Initially this margin should be relatively wide, +10% and -10%, in order to safeguard the flexibility of the system. As already mentioned in the text, if the system works well, the margins will be reduced accordingly. Table 19 shows the IUA-related central rates and the intervention limits -a band of 20%- as well as the bilateral rates and the 20% intervention limites among the bilateral central rates.

Table 19

Related and Bilateral Central Rates and Intervention Limits of a Tripolar Exchange Rate System.

Related central Rates and Intervention Limits				
CURRENCY		US DOLLAR	ECU	YEN
	+ 10%	1.12927	1.43673	273.9[illegible]
1 IUA	Related Central			
	Rates	1.02661	1.30612	249.07708
	- 10%	0.92394	1.17551	224.16900

Bilateral Central Rates and Intervention Limits				
CURRENCY		US DOLLAR	ECU	YEN
	+ 10%	-	139.950	26683.300
100 US	Bilateral Central			
dollars	Rates	100	127.227	24262.093
	- 10%	-	114.504	21835.900
	+ 10 %	864.600	-	20977.000
100 ECU	Bilateral Central			
	Rates	758.999	100	19069.999
	- 10%	707.404	-	17163.000
	+10%	0.453382	0.57681	-
100 Yen	Bilateral Central			
	Rates	0.412165	0.52438	100
	- 10%	0.370949	0.47194	-

A divergence indicator (D I) between the US dollar, the ECU and the Yen will make it possible to trace the movements in the exchange rates of the above currencies against the average movement and thereby to identify any currency deviating from the average. Exactly as happens in the EMS, the monetary authority of a diverging currency which crosses its divergence threshold should take action.

For the calculation of such a divergence indicator which can measure the degree of movement of a specific currency - in this proposal the US dollar, the ECU and the Yen against a maximum divergence spread (MDS), we need first to calculate the premium (P) or the Discount (D) shown by the market rate of the IUA in terms of each one of the above currencies against their IUA related central rates, and second, to compare this result with the corresponding MDS for each currency.

The MDS is the maximum percentage by which the market rate of the IUA in terms of a specific currency in this basket can appreciate or depreciate against the IUA related central rates of that currency, where the latter has reached its margins of fluctuations of $\pm$ 10% against all the other currencies in the IUA basket.

For the estimation of the MDS of each currency, the following formula has been used:

$$MDS_{\$} = \pm 10\% \times (1-W_{\$})$$
$$MDS_{ECU} = \pm 10\% \times (1-W_{ECU})$$
$$MDS_{Yen} = \pm 10\% \times (1-W_{Yen})$$

Where W shows the weights of US dollar, ECU and the Yen. See Table Annex 1.

Table 20 below shows the MDS of the component currencies of an IUA:

Table 20

Currency	MDS
US dollar	$\pm$ 6.50%
ECU	$\pm$ 4.70%
Yen	$\pm$ 8.80%

The MDS of each currency will be expressed in an index of 100. By assuming a divergence threshold of 50%, a currency will reach its divergence threshold when the DI gives a figure of 50.

We chose a threshold of 50% in order to ensure that a currency would always reach its devergence threshold before one of its bilateral limits. (In the EMS the threshold indicator is 75%. This has resulted in the divergence indicator of the EMS not always full-filling its task, i.e. the bilateral limits of two currencies can be reached without the divergence indicator giving the appropriate warning) [19]. Calculation of the above DI for each currency participating in the IUA, is as follows:

$$P_{\$} \text{ or } D_{\$} = \frac{IUA^{\$} \text{ market rate} - IUA^{\$} \text{ central rate}}{IUA^{\$} \text{ central rate}} \times 100$$

$$P_{ECU} \text{ or } D_{ECU} = \frac{IUA^{ECU} \text{ market rate} - IUA^{ECU} \text{ central rate}}{IUA^{ECU} \text{ central rate}} \times 100$$

$$P_{Yen} \text{ or } D_{Yen} = \frac{IUA^{Yen} \text{ market rate} - IUA^{Yen} \text{ central rate}}{IUA^{Yen} \text{ central rate}} \times 100$$

$$DI_{\$} = \frac{P_{\$} \text{ or } D_{\$}}{MDS_{\$}} \times 100$$

$$DI_{ECU} = \frac{P_{ECU} \text{ or } D_{ECU}}{MDS_{ECU}} \times 100$$

$$DI_{Yen} = \frac{P_{Yen} \text{ or } D_{Yen}}{MDS_{Yen}} \times 100$$

Whenever one of the above currencies - $, ECU, Yen - crosses its threshold limit - 50% of the MDS - the monetary authorities of the issuing country will be consulted to undertake diversified interventions in order to keep fluctuations inside the margins. These interventions will be based on the daily observations of the DI.

However, if the currency continues to deviate from its average, and it is accompanied by warning signals from a system of real indicators, the diversified intervention would not be sufficient and a realignment of the central rates and /or an adjustment of economic policy would be more appropriate to restore equilibrium in real economic parameters.

The use of objective indicators as a guide to changes in exchange rates has been a familiar subject among professional and academic economists, since the negotiations for the creation of the Bretton Woods system. As Trevor Underwood [20] has said, the various proposals for such an objective indicator have been distinguished by a) how mandatory, presumptive or permissive the

response is to be b)the size of the changes advocated in the exchange rates and c) whether or not interference is advocated in the existing right to make changes in exchange rates.

Two types of indicators have been involved: price indicators relating to levels or changes in spot, or forward or effective exchange rates, and quantity indicators which depend on the level or change in various measures of international reserves or the balance of payments.

In this proposal we will connect realignment of the central rates with price indicators assuming that in the medium-term, a suitable price index may be a significant variable in forecasting the balance of trade and competitiveness.

The above "price indicator" will be reinforced by an other indicator showing whether or not a target on the basic balance of each country or area has been exceeded. In particular, whenever a deficit or surplus in the basic balance of a country or area, vis-a-vis the other countries in the system exceeds the 0,5% of its GDP, the monetary authorities of that country or area, should change the central rate of its currency, in order to avoid future opposing flow imbalances.

Therefore, when the basic balance, which includes the current account, the longterm capital account and certain government capital transactions deviates persistently from its target, the monetary authorities will be asked to change the central rate in proportion to an effective PPP index, calculated for each participating currency, by dividing the issuing country's wholesale price index by a weighted average of the wholesale price indices of the other issuing countries in the system, the weights being the same as these entering into the formula of each country or area participating in the IUA. The decision to introduce a weighted PPP rule in our crawling system, relies on conclusions derived from the OPTICA Report (1976) [21], according to which wholesale price indices are the most appropriate price indices for measuring relative inflation and that conformity of exchange rate changes to inflation differential is closer with a multilaterally measured PPP, that is by means of a double-weighted index of inflation trends in other countries and of

effective exchange rates, rather than with a bilaterally-measured PPP. Calculation of the effective PPP index, P_i^t for the country or area, i , in time t, is based on the following formula:

$$\tilde{P}_i^t = \frac{P_i^t}{\sum_{n-i} W_{n-i} \cdot P_{n-i} \Big/ \sum_{n-i} W_{n-i}} \times 100$$

where P_i^t is the wholesale price index of the country i, at time t, and W are the weights which are given in table 16.

We will allow country's i related central rate to change at the end of each quarter in proportion to the change of a moving average of country's i effective PPP index, the calculation of which is given below:

$$\dot{\tilde{P}}_i^t = 0,4\dot{\tilde{P}}_i^t + 0,3\dot{\tilde{P}}_i^{t-1} + 0,2\dot{\tilde{P}}_i^{t-2} + 0,1\dot{\tilde{P}}_i^{t-3}$$

where (·) means % changes from the previous quarter.

Thus, country's i related central rate ($r_{i,IUA}$) changes, will follow the formula below:

$$\dot{r}_{i,IUA}^t = \dot{\tilde{P}}_i^t \quad \text{or}$$

$$\dot{r}_{i,IUA}^t = \dot{\tilde{P}}_i^t - \sum_{n-i} W_{n-i} \dot{\tilde{P}}_{n-i}^t$$

In a world with \$, ECU and Yen, the related central rates will follow the following crawling central rate system:

$$\dot{r}_{\$,IUA}^t = \dot{\tilde{P}}_\$^t - \left[0,53\dot{\tilde{P}}_{ECU}^t + 0,12\dot{\tilde{P}}_{Yen}^t\right]$$

$$\dot{r}_{ECU,IUA}^t = \dot{\tilde{P}}_{ECU}^t - \left[0,35\dot{\tilde{P}}_\$^t + 0,12\dot{\tilde{P}}_{Yen}^t\right]$$

$$\dot{r}_{Yen,IUA}^t = \dot{\tilde{P}}_{Yen}^t - \left[0,53\dot{\tilde{P}}_{ECU}^t + 0,35\dot{\tilde{P}}_\$^t\right]$$

Also, the bilateral central rates will change as follows:

$$\dot{r}^{t}_{ECU,\$} = \dot{\tilde{P}}^{t}_{ECU} - \dot{\tilde{P}}^{t}_{\$} - \left[0,35\dot{\tilde{P}}^{t}_{\$} - 0,53\dot{\tilde{P}}^{t}_{ECU}\right]$$

$$\dot{r}^{t}_{ECU,Yen} = \dot{\tilde{P}}^{t}_{ECU} - \dot{\tilde{P}}^{t}_{Yen} - \left[0,12\dot{\tilde{P}}^{t}_{Yen} - 0,53\dot{\tilde{P}}^{t}_{ECU}\right]$$

$$\dot{r}^{t}_{\$,Yen} = \dot{\tilde{P}}^{t}_{\$} - \dot{\tilde{P}}^{t}_{Yen} - \left[0,12\dot{\tilde{P}}^{t}_{Yen} - 0,35\dot{\tilde{P}}^{t}_{\$}\right]$$

Technical Annex

Estimation of Economic Weights based on the average of 1979-1983

Currency	Issuing country's export of goods and services In bill. SDR	Official holding of currency	Total	Econ.Weights
$	177,710	167,41	345,12	33,92%
ECU[10]	506,296	42,97	549,24	53,99%
yen	114,156	8,89	123,05	12,09%
			1.017,41	

We assume that in December 1983, 1 IUA = 1 SDR

Since in December 1983, 1 SDR = 1,29904 ECU and since during the IV quarter of 1983, the average value of 1 unit of ECU is:

1 ECU = 0,840 $
0,802 SDR
196,300 yen

then, the average exchange rates of ECU per unit of currency is:

1 $ = 1,1905 ECU
1 yen = 0,00509 ECU
1 SDR = 1,2469 ECU

Estimation of the currency amounts in the IUA

1	2	3	4	5	6	7	8
$	33,92	1,1905	0,37013	1,2438	0,460367	0,362728	0.362
ECU	53,99	1	0,70135	1	0,701350	0,687324	0.687
Yen	12,09	0,00509	30,85539	0,00531	0,163842	30,238305	30.238
					Σ1.325559		

1 : Currency
2 : Economic Weights in %
3 : Average Rates of ECU, per unit of currency (IV quarter 1983)
4 : Preliminary Currency Amounts (Column 2 X 1,29904)/Column 3
5 : Exchange Rates in January 1984. ECU per unit of currency
6 : Preliminary Currency Amounts (Column 4 X Column 5)
7 : Precise Currency Amounts Column 4 X $\frac{1,29904}{1,32559}$
8 : Rounded Currency Amounts

The estimation of the currency weights of an IUA and its value in each participating currency - 16 July 1984 -

1	2	3	4	5	6
$	0,362	0,786	0,46056	0,35	1,02661
ECU	0,687	1	0,68700	0,53	1,30612
Yen	30,238	190,7	0,15856	0,12	249,07708
			Σ1.30612 ECU		

1 : Currency
2 : Amounts
3 : 16 July 1984, ECU exchange rates
4 : ECU value of Currency Amounts (Column 2/Column 3)
5 : Currency weights (Column 4/1.30612)
6 : 16 July 1984 : Value of IUA in each currency (Column 3 X 1.306112)

Sources: 1) European Economy, Supplement A
2) H. Joly Dixon; (1977), The European Unit of Account Journal of Common Market Studies

Notes

1. EC Commission, "General Report for 1986", p. 326-7 and Europe Documents No 1401/1402 of 18 April 1986.

2. EC Commission, "Community-Japan Relations", Press Release, June 1987.

3. In these models, short-run exchange rate fluctuations result from the fast equilibration of supply and demand in the foreign exchange markets. Because current exchange rates determined in an efficient financial market already summarise all known relevant information, it is primarily anticipated developments in a wide spectrum of macro-economic and financial variables that influence exchange rates in these models. Trade and current account disequilibria influence the exchange rate only in the long-run and usually are not taken account in these short run models. See for example Jacob A. Frenkel, Michael C. Mussa, "Asset Markets, Exchange Rates and the Balance of Payments" in R. W. Jones and P.B Kenen (eds.) Handbook of International Economics, Vol. 2, North Holland, Amsterdam 1985.

4. This is the so-known J-curve effect that postulates a "perverse" relationship between the current account and the exchange rate. Here, an appreciation of the exchange rate leads to surpluses in the current account and a depreciation to deficits. This is due to the current account being composed by the capital and the trade account. Capital flows react fast to changes in the exchange rate, trade flows much slower. An appreciation (and the expectation of an appreciation) leads thus to capital inflow and this of course brings about a surplus in the capital account. On the other hand, the same appreciation influences the trade balance slowly, so that for one or two periods the trade balance does not change substantially. The combined effect of the two accounts on the current account is thus positive (surplus) in the case of an exchange rate appreciation and negative (deficit) for the same reasons in the case of an exchange rate depreciation.

5. Eurostat, "Statistical basic data of the EC", 24 edition, p. 273 and OECD Economic Survey, Japan 1986/87, Table 17.

6. The terms of trade show how many units of foreign goods a unit of the domestic product can buy. Falling terms of trade imply thus that a unit of domestic product buys less foreign goods, i.e. the relative value of the foreign goods have increased vis-à-vis the domestic good.

7. From the national income accounting identity, we have:

$$S^P + S^{NG} - I^{DP} = I^{NF} = CA$$

i.e. total of private savings plus government net savings less domestic private investment equals net foreign investment, equals the current account balance (abstracting from official intervention). The identity does not indicate a direct casualty between the various elements, but it serves to underline the fact that a country that saves more than it invests domestically must have ex post a net capital outflow and a corresponding current account surplus.

8. Information included in the preceding sections comes from various articles in the Financial Times Survey, "Japanese investment in Europe", 13 November 1986.

9. Yves Doz (Insead), Gary Hamel (Loudox Business School), C.K. Prahalad (University of Michigan), as reported in the Financial Times of 17 October 1986.

10. Part of a bond issue which entitles the bearer to subscribe to new shares or bonds at special conditions.

11. Maekawa is a former Governor of the Bank of Japan.

12. According to the Marshall-Lerner condition, an appreciation of a currency has a negative effect on the current account if (assuming equality of imports and exports before the appreciation) the sum of the price elasticities of imports and imports (in absolute numbers) is greater than one, i.e.

$$/ E / + / N / > 1$$

Since, in the case of Japan exports are 1.5 time imports, the M-L condition becomes

$$1.5 / E / + 1.0 / N / > 1$$

According to estimates of the Bank of Japan (1986) the export elasticity is 0.8 and the import elasticity 0.3 so that:

$$1.5 \cdot 0.8 + 1 \cdot 0.3 = 1.5 > 1$$

This means that an appreciation of the yen's exchange rate will reduce the current account (Williamson, 1983).

13. Point 5 and 7 of the Venice Summit final declaration.

14. During an opinion poll in September 1986, in KKC letter No 37.

15. Characteristic for such criticisms is the following statement by the US Assistant Secretary of the Treasury for International Affairs, David Mulford: "Deregulation also entails the ability of foreign firms to introduce innovative products and services in which they have a competitive advantage into the Japanese market. The time is past when we can accept protection of Japan's financial firms from the winds of competitive innovations by foreign firms. If a new product or service is designed outside of Japan by a US firm, the firm should be able to offer it promptly to its Japanese clients without the long delays and refusals which characterise the present situation". Reprinted in US Mission to the EC, USA-Text, Mo 15 of 29.5.87.

16. Points 10 and 11 of the declaration.

17. For a more complete presentation of such a proposal see Kyriazis-Chryssanthou (1986) and the Annex.

18. Policy making has game aspects since in an interdependent world, policy makers in one country must condition their actions according to the policies pursued in other countries if their policy making is rational. It is a well-known result of such policy games that in the absence of direct cooperation or side-payments the outcome of such games are socially inefficient. There exist alternative policies that would, if implemented, benefit all parties. The reason why such outcomes are not automatically forthcoming is that policy makers generaly have an incentive to cheat in these Pareto optimal outcomes, and politically sovereign policy makers seem to have difficulty achieving them. But this means that if coordination is achieved and if a way to control this is found, e.g. through a system of objective indicators, so as to avoid cheating, then the outcome of coordination is better than the outcome of non-coordination in the sense of increasing welfare for all parties concerned.

19. Roland Vaubel, "Logische Implikationen und Anreizwirkungen des EWS" in Zeitschrit für Wirtschafts und Sozialisissenschaften 1981/1.

20. Trevor Underwood, "Analysis of Proposals for Using Objective Indicators as a Guide to Exchange Rate Changes", IMF Staff Papers 1973.

21. OPTICA Report 1976: Inflation and Exchange Rates: Evidence and Policy Guidelines for the European Community. Commission of the European Communities, Brussels, 10 February 1977.

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