

The Single Market Review

IMPACT ON COMPETITION AND SCALE EFFECTS

INTANGIBLE INVESTMENTS

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Results of the business survey

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SUBSERIES V: VOLUME 2

OFFICE FOR OFFICIAL PUBLICATIONS OF THE EUROPEAN COMMUNITIES

KOGAN PAGE . EARTHSCAN

CEE: XIV/16

This report is part of a series of 39 studies commissioned from independent consultants in the context of a major review of the Single Market. The 1996 Single Market Review responds to a 1992 Council of Ministers Resolution calling on the European Commission to present an overall analysis of the effectiveness of measures taken in creating the Single Market. This review, which assesses the progress made in implementing the Single Market Programme, was coordinated by the Directorate-General 'Internal Market and Financial Services' (DG XV) and the Directorate-General 'Economic and Financial Affairs' (DG II) of the European Commission.

This document was prepared for the European Commission

by

RCS Conseil (Research and Consulting Services on Competitive Strategies)

It does not, however, express the Commission's official views. Whilst every reasonable effort has been made to provide accurate information in regard to the subject matter covered, the Consultants are not responsible for any remaining errors. All recommendations are made by the Consultants for the purpose of discussion. Neither the Commission nor the Consultants accept liability for the consequences of actions taken on the basis of the information contained herein.

The European Commission would like to express thanks to the external experts and representatives of firms and industry bodies for their contribution to the 1996 Single Market Review, and to this report in particular.

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Office for Official Publications of the European Communities

2 rue Mercier, L-2985 Luxembourg
ISBN 92-827-8802-4

Catalogue number: C1-71-96-002-EN-C

Kogan Page . Earthscan 120 Pentonville Road, London N1 9JN ISBN 0 7494 2335 8

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List of abbreviations

AIMS Association Internationale de Management Stratégique

ATM Asynchronous Transfer Mode

B Belgium bn billion

BPR Business Process Re-engineering

CBS Centraal Bureau voor de Statistiek (Central Statistical Office of the Netherlands)
CEN Comité européen de normalisation / European Committee for Standardization

CENB Comité européen de normalisation bancaire / European Committee for Banking Standardization

CEREO Centre d'études et de recherche sur les qualifications

CERP Confédération européenne des relations publiques / European Confederation of Public Relations

CNET Centre National d'Etudes des Télécommunications

Comett Community action programme in education and training for technology

CREST Comité de la recherche scientifique et technique / Scientific and Technical Research Committee

D Germany

DABLE Database on Large Enterprises

DG Directorate-General

E Spain

EAAA European Association of Advertising Agencies

EACRO European Association of Contract Research Organisations

EBF European Banking Federation
EDI Electronic Data Interchange

EDMA European Direct Marketing Association

EDP Electronic Data Processing EEA European Economic Area

EECA European Electronic Components Manufacturers' Association EFCA European Federation of Engineering Consulting Associations

EIC European Insurance Committee

EIRMA European Industry Research Management Association
EITO European Information Technology Observatory

EMU Economic and Monetary Union

ESOMAR European Society for Opinion and Market Research
ETSI European Telecommunications Standard Institute

EU European Union

Eurostat Statistical Office of the European Communities

F France

FDI Foreign Direct Investment

FEACO Fédération européenne des associations de conseil en organisation (European Management Consultants'

Federation)

FRF French francs

GDP Gross Domestic Product

I Italy

IFSAM International Federation of Scholarly Management

INSEE Institut national de la statistique et des études économiques (French National Statistical Office)

IRL Ireland

ISDN Integrated Services Digital Network ISO International Standards Organization

IT Information Technologies

NACE Nomenclature générale des activités économiques dans les Communautés européennes (General industrial

classification of economic activities within the European Communities)

NL Netherlands

OECD Organization for Economic Cooperation and Development

OJ Official Journal of the European Communities

OPOCE Office des publications officielles des Communautés européennes / Office for Official Publications of the

European Communities

P Portugal

RACE Research and Development in Advanced Communications Technologies for Europe

R&D Research and Development

SEPSU Science and Engineering Policy Studies Unit

SMEs Small and medium-sized enterprises

UK United Kingdom

UNESCO United Nations Educational, Scientific and Cultural Organization

Acknowledgements

This study has been carried out under the direction of Dr. A. Bounfour, chief researcher and scientific director of RSC Conseil. The Consultants wish to warmly thank the relevant companies, external experts, professional associates and members of the academic panel for their contributions and comments on this study's approach and results.

1. Summary

This is the final report of the study on intangible investments, drawn up by RCS Conseil on behalf of the European Commission (Directorate-General for the Internal Market and Financial Services (DG XV)).

This document is structured in five parts. The first introductory part (Chapter 2) serves to define the scope of the study and its methodological context. The second part (Chapter 3) contains the macroeconomic analysis of the principal components of intangible investment. This is then followed by the third part (Chapter 4), which analyses the impact of the single market on the intangible investments of three demand sectors: banking, insurance and the food industries. The fourth part (Chapter 5) analyses the impact of the single market dynamics on externalized intangible activities. Finally, the fifth part (Chapters 6 and 7) draws together the main points of the study.

1.1. Introduction, methodological approach

After reviewing the various approaches to intangible investment (analytical approach, strategic approach), this part proposes a methodological framework for both the theoretical and practical analyses of the impact of the single market on intangible investments by economic operators in Europe. The suggested approach is therefore functional in nature, aiming to show the dynamics of resource allocation within enterprises, in parallel to proposing hypotheses relating to the impact of the single market programme on this allocation. In this context, the 'externalization' of intangible activities (with particular reference to the transaction cost theory) and their 'industrialization' are examined, as two basic trends potentially influenced by this programme.

1.2. Aggregate analysis

This part sets forth quantitative data relating to the trend in intangible investments (R&D, education costs, advertising, etc.) for Europe, in comparison with the USA and Japan. Microeconomic data are also presented for industry.

Even though the trend in the level of intangible investment in the EU, compared to the situation in the USA and Japan, seems generally satisfactory (although the R&D/GDP and software/GDP ratios are lower than those in the USA and Japan over the period considered as a whole), the question of the exploitation of these investments, or in other words their 'valorization', also has to be considered.

At this level, a two-fold problem arises: firstly, the possible existence of a 'missing link' between the upstream investments of the value chain (in particular in research and technology) and the organizational and systemic dimension of intangible investment, and secondly the 'zero option' or in other words what would have happened to the intangible capacity of economic operators without the advent of the single market.

This study throws indirect light on this question. Indeed, the assessment carried out among European economic operators of the demand and supply sectors suggests that single market integration has, on the whole, had a real impact on both the level and exploitation of their intangible investments. This impact is essentially of an indirect nature.

1.3. Impact of the single market on three demand sectors

This part presents the economic and strategic stakes, as well as the overall influence of the single market programme on the strategic behaviour of economic operators, for three economic sectors: banking, insurance and the food industries. Taking account of this overall effect, this part contains analytical aspects and conclusions relating to the impact of the programme on intangible investments. This impact appears to be real but essentially indirect, and is to be found at the level of certain functions both upstream (product R&D) and downstream (distribution networks and channels). It also concerns the information systems (especially as regards the single currency). The transfunctional services (legal advice, management consultancy, etc.) are also concerned by these trends.

Analysis of the data relating to trade and direct cross-border investment allows a considerable amount of light to be thrown on the subject matter analysed here. Indeed, on account of their development, these movements require substantial intangible investments both 'upstream' and 'downstream' with a view to maximizing the benefit from the creation of a larger market.

1.4. Impact of the single market on externalized services

Considering each externalized intangible item (R&D, technical engineering, computer services, market research, advertising, on-line information, etc.), the study presents the economic stakes associated with each, as well as the single market measures with an actual or potential impact on their development.

Through their strong growth over the past ten years, and on account of the strategic moves in their customer sectors in connection with the single market programme, externalized services activities have also been influenced directly and indirectly by single market integration.

1.5. Overall assessment

In this section, the report presents a summary assessment of the impact of the single market on the level and exploitation of intangible investments by economic operators in the EU, seeking firstly to identify the channels through which it exercises its influence and secondly to consider the validity of the hypotheses put forward in Chapter 2.

1.5.1. Identification of the channels of influence

The identification of channels naturally presupposes that the single market programme does in fact influence the level and exploitation of intangible investments. The impact is essentially indirect. On account of the interdependence of the influences relating to the single market programme (and even within these influences) and the influences deriving from the general development of markets and industries (consolidation of industries), the concept of 'channel' must be considered here as a set of interdependent chains, rather than as a linear relationship of influence between one or more decisions under the single market programme and the level of investment of economic operators.

The measures relating to the single market programme naturally form the starting point of the influence process considered here. The information available also shows that the strategic movements of the actors are at the heart of the influence process of the single market; they form its hub. The development of direct investment between EU countries illustrates the

central nature of the strategic movements of the players. The third dimension for consideration is the redeployment of resources by the economic operators, under the influence of the changes in their external environment, in particular through the implementation of the single market programme. Various studies conducted in the context of the assessment of this programme show that the single market has had a real effect on the redeployment of resources by operators, especially through a better reallocation of resources attributable to the price mechanisms, lower transaction costs and the development of economies of scale or scope. From a different angle, the adoption of European standards and the opening up of public procurement contribute to the process of redeployment of resources at macroeconomic level.

This redeployment is necessarily accompanied by a reorganization of the value-added chain. The survey conducted among the main economic operators confirmed that it is at functional level that the resource reallocation processes are organized, especially in reaction to the dynamics generated from creating the single market.

1.5.2. Impact of the single market programme on the level of exploitation of intangible investments

This is considered here at three levels: the aggregate level of intangible investments, the sectors of demand analysed and externalized services. From a macroeconomic viewpoint, analysis of the trend in intangible expenses (R&D, education, software, technology payments and advertising) shows that, on the whole, and compared to the USA and Japan, the consolidated level of intangible investments in Europe is relatively satisfactory. The microeconomic data available from the DABLE database confirm this trend.

The available data reveal that the single market programme exerts a certain influence on the level of intangible investment of European economic operators on the basis of three types of analysis: the trend in macroeconomic data available, the data gathered for three demand sectors and, finally, the statistics available on externalized intangible activities. The prospective single currency is expected to have a substantial impact on the level of intangible investments, especially in the banking sector (notably in information systems).

Comparison of the dynamics of the impact of the single market programme on the level of intangible investment in the three sectors considered shows significant differences:

- (a) the trends in banking and insurance seem broadly similar, with a predominance of investments in product development, information logistics, distribution and human resources:
- (b) in terms of dynamics, banks in particular are likely to be concerned by the need for intangible investments, especially in information systems (rewriting and migration of software, in particular), necessitated by the introduction of the single currency;
- (c) the food industries seem to be far more concentrated and as a result more sensitive to the arguments of oligopolistic competition. At this level, the investments made under the single market programme relate in particular to image-building and advertising. Compared to other industrial sectors, R&D seems to be a function which is very closely linked to marketing and product development;
- (d) in total, the three economic sectors have found that their level of intangible investment is affected by the single market programme. This influence is essentially indirect and linked to the overall dynamics of the single market, far more than to specific measures;

Intangible investments

(e) the dynamics of the growth of externalized services (apart from technical engineering) show that, on the whole, the single market programme has contributed to the growth in the European supply. Naturally, the development of this supply remains closely linked to the general economic climate and the users' policy, especially in relation to the externalization of their intangible activities.

1.5.3. Impact of the single market programme on the exploitation of intangible resources

This second dimension naturally complements the first. It aims to show the extent to which the single market programme has encouraged European economic operators to exploit intangible investments more effectively and therefore to improve their intangible capacity.

The concept of exploitation comprises three components here: the value placed on intangible investments by economic operator-users; the externalization of intangible activities by these same operators; and the organization of intangible activities around the concept of their industrialization by economic operator-suppliers (especially of externalized services).

The question of the value placed on intangible investments by economic operators boils down to considering whether these operators have derived the maximum benefit from the investments made. In other words, whether European enterprises have improved their intangible capacity, in particular by adopting the best practices tried and tested on the market, or even developed new managerial practices on the basis of the intangible investments as a direct or indirect effect of the single market. This is a complex question which goes beyond the ambit of this study.

The available data tend to indicate that here too, the single market programme has had an essentially indirect impact on the behaviour of European economic operators as far as the exploitation of intangible investments is concerned. This learning effect is naturally not exclusively attributable to the dynamics of the single market. However, the deployment of operators' strategies, especially in their 'external' dimension (mergers and acquisitions, for example) has contributed to boosting the 'intangible capacity' of enterprises. At an internal level, to a lesser extent, the stepping up of competitive pressure has contributed to the implementation of efficient managerial practices (for example, the 'lean production' in the food industries).

The question of externalization is of interest in so far as it is an important trend in the dynamics of the use by economic operators of intangible activities, which could be influenced by the dynamics of the single market programme. The question of the extent to which the single market programme has contributed to greater externalization of these intangible activities by traders elicits replies at three levels: the degree of externalization of the users' demand sectors (here banking and insurance), the growth in externalized activities, and the development of internal trade in services.

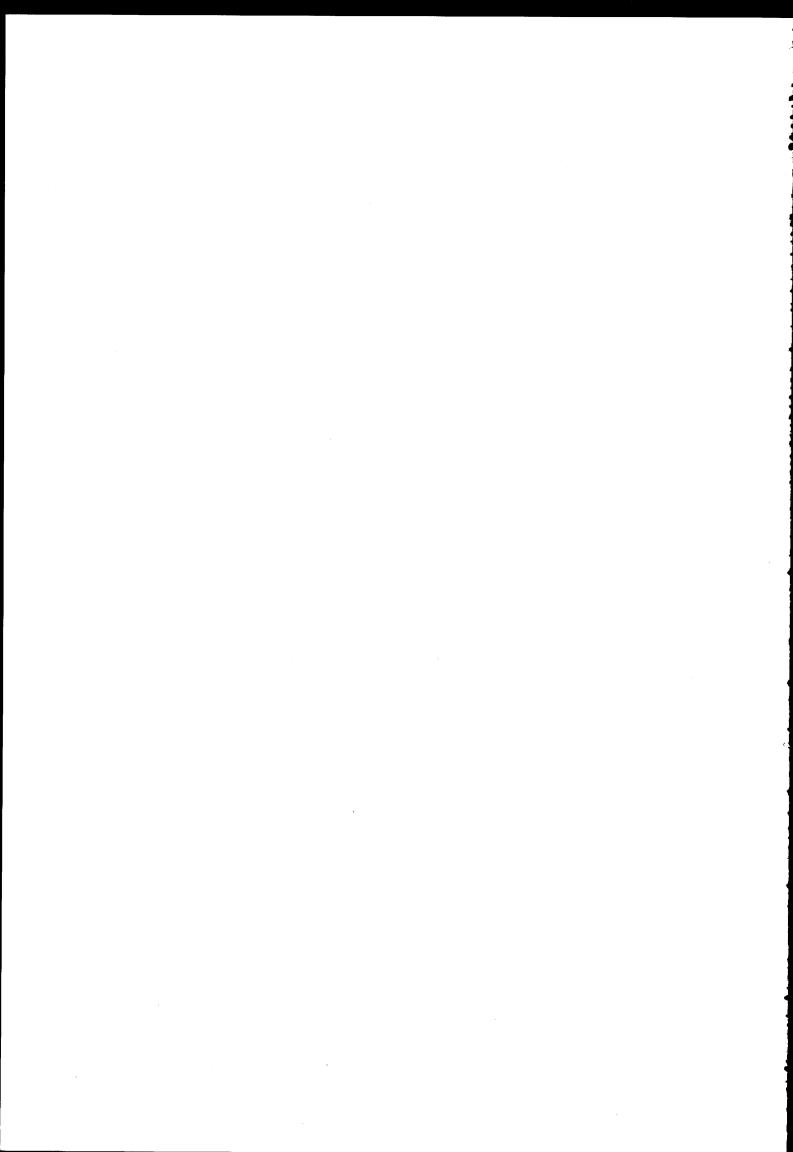
The influence of the single market programme on the dynamics of externalization of intangible activities is not obvious. It can only be of an indirect nature. Decisions to externalize activities are firstly linked to the competitive pressures on the market and, to a certain extent, to the managerial methods of the time. Chapter 5 shows the overall trends in the components of externalized services, the majority of which have recorded significant growth rates well above those of European GDP. There are therefore dynamics of externalization of services activities, partly linked to the specific dynamics of the single market.

Furthermore, Eurostat's consolidated data clearly indicate that throughout the period from 1983 to 1993, there was steady growth in the EU's external and internal trade in business services, with internal trade gathering pace particularly from 1988. Such a trend may be linked directly to the specific dynamics of the single market programme.

Finally, the stepping up of competitive pressure within customer sectors and the accumulation of their services experiences have a strong impact on their requirements level in terms of characteristics of the services supplied. In this context, services activities are tending to 'become industrialized', or in other words to be organized functionally as industry has been for a long time, with standard products, R&D functions, production, quality, and commercialization and communication. In this respect, the data available, in particular from the Eurostat 'Business Survey', show that the single market has had a real impact.

1.6. Conclusion

The study concludes that the single market programme has an essentially indirect impact on the level and exploitation of intangible investments in Europe. In accordance with the terms of reference, it also suggests areas of intangible investment which could be examined in greater depth. This refers particularly to questions relating to the measurement of intangible items, the existence of a 'missing link', the obstacles to intangible investment and the probable impact of Economic and Monetary Union.



2. Introduction, approach of the study

Substantial growth has been recorded in intangible investments over the past ten years. They can now be considered as a major lever for the creation of value – and therefore growth – in several economic sectors, at both macroeconomic and microeconomic levels. It is in this context, and within the framework of the overall analysis of the impact and effectiveness of the single market required by Council Resolution 1218/92, that the European Commission decided to have an analysis carried out of the impact of the single market programme on the level and exploitation of intangible investments by economic operators in Europe.

The analysis therefore consists in checking whether the policy measures 'designed to facilitate free circulation, trade and competition have encouraged operators to invest more heavily in the development or exploitation of technology and/or knowledge-based activities'.

This exercise is consistent with the principal options of the 'Strategic Programme' adopted by the European Community for the single market, on account of the fact that no fewer than 95% of the planned legislative measures have been adopted and, moreover, the majority of operators have already integrated the single market dynamics into their strategies.

2.1. Purpose of this report

The purpose of this report is to provide the European Commission services with the final report of the intangible investments study. Account is taken of the comments and suggestions made during previous meetings and presentations to the Steering Committee and to the academic panel more specifically in charge of monitoring the study.

2.2. Objectives of the study

The terms of reference specified three objectives for this study:

- (a) to identify the channels through which single market integration has a direct or indirect impact on the level and form of intangible investment;
- (b) to analyse the impact of single market integration on the level of intangible investment;
- (c) to analyse the impact of single market integration on the exploitation of intangible investment by European economic operators.

The assessment below seeks to propose criteria for information and analysis, enabling these three objectives to be met.

2.3. Definitions and typology

2.3.1. Definitions

Researchers and statistical analysts have not reached unanimous agreement on the definition of 'intangible investment' and its components. Approaches vary according to the work considered. Several of them have in fact taken an interest in defining and measuring intangible

Terms of reference for the study, p. 1.

investments: OECD,² INSEE,³ CBS in the Netherlands,⁴ Statistics Finland,⁵ the Swedish Central Statistical Bureau and the Ministry of Industry in France, among others. An analytical approach is generally adopted, defining intangible investment through its components, which vary in content (R&D, software, business expenses, etc.).

For instance, according to the OECD,⁶ intangible investment covers all long-term expenses, apart from purchases of fixed assets, incurred by firms for the purpose of improving their results. This includes a wide-ranging list of items: investments in technology (expenditure on R&D and the acquisition of technology), training, the organization of production, labour relations, managerial structures, the development of technological and business relations with other enterprises, suppliers and customers, and marketing and software expenses.

The field considered is therefore broad and the OECD suggests that the concept of investment should be defined as integrating tangible and intangible investment in a dynamic perspective.

Adopting this approach, the components of intangible investment may be grouped under five categories:

- (a) Investment in technology. This is intended to develop the base of knowledge of the enterprise; its objective is the introduction of new products and processes on the market. This group includes the following components: R&D, including R&D software, the acquisition of technologies via licences and patents, engineering and the observation and exploration of activities with a view to strengthening the enterprise's competitive position in relation to its rivals;
- (b) **Enabling investments.** This group includes investments in human resources, organization and structuring of information. Its components are essential to the exploitation and value placed on fixed assets;
- (c) Investment in market information resources. These are important investments in that it is at this level that market signals are identified and anticipated. These investments allow final users to be better informed of the characteristics of the enterprise's supply of goods and services;
- (d) **Software**. Adopting a restrictive approach, the OECD nevertheless considers that this can be classified as a separate fixed asset;
- (e) **Information systems**. This group includes the information systems developed by enterprises for their internal use. They may be considered as separate intangible assets from software and more as investments in organization.

Table 2.1 presents the list of items of intangible investments according to the OECD. This presentation is illustrative of the analytical approach to intangible investment, defined

OECD (1987) L'investissement immatériel: essai de comparaison internationale; OECD (1992) Technology and the economy. The key relationships. TEP – The technology-economy programme.

³ INSEE (1995) L'investissement immatériel: évaluation entre 1970 et 1992.

⁴ CBS (1995) Immateriele investeringen in Nederland: een internationale positiebepaling.

⁵ Statistics Finland (1987) The intangible investment of industry.

⁶ OECD (1992) Technology and the economy. The key relationships. TEP – The technology-economy programme.

principally through its components. This broad approach was also suggested by the terms of reference of the study. In this perspective, intangible investments relate in particular (but not exclusively) to expenditure on R&D, technology transfer, innovation (products, processes and organization), training and human capital, knowledge and skills, organizational methods, management systems and quality.

2.3.2. Interdependence of intangible investments and capital expenditure

At both macro- and microeconomic levels, the extension of the concept of investment to cover intangible investment raises two important questions: that of the contribution of each of its components to economic growth and that of the interdependence which may exist between these same components.

Concerning the first aspect, the analyses carried out by the OECD⁷ suggest that the problem inherently contains a dual dimension: on the one hand, intangible investments (technical or scientific information) allow better adaptation of the systems of production and better information of consumers about the state of the supply, and, on the other hand, the new growth theories themselves consider that growth depends on the accumulation of the stock of knowledge which in turn is the result of previous intangible investments.

Table 2.1. Items of intangible investments and their related functions, according to the OECD

Group of intangible investments	Items to be included	Main related functions	
Investments in technology	R&D	R&D and innovation	
-	Licences	R&D and innovation	
	Patents	R&D and innovation	
	Engineering	R&D and innovation	
	Observation and exploration activities	R&D and innovation	
Enabling investments	Human resources	Human resources	
Q	Organization and structuring of information	Other functions	
Market exploitation and organization	Identification, evaluation and anticipation of market signals	Commercialization	
	Value placed on companies' supply		
Software	Investments in software	Information logistics	
Information systems	Investments in information systems	Information logistics	

Source: Based on OECD typology. See OECD (1992) Technology and the economy. The key relationships. TEP – The technology-economy programme.

As regards the complementarity which may exist between the components of intangible investment, training expenses are used here to show possible correlations.

OECD (1992) Technology and the economy. The key relationships. TEP – The technology-economy programme.

On the basis of the available data on training expenditure by sector for three countries (France, Japan and the Netherlands), the OECD experts concluded that the following correlations exist:

- (a) there is a strong correlation between training expenses and capital expenditure:
- (b) sectoral training expenses are correlated more strongly with R&D than with capital expenditure;
- (c) the relationship between R&D expenditure and capital expenditure is far from obvious:
- (d) the relationship between previous growth and training is clear in the case of one country (the Netherlands) and less obvious in the other two (France and Japan).

Naturally, these differences must be differentiated by economic sector and at enterprise level.

2.3.3. The strategic approach

In parallel to these macroeconomic studies, recent work has concentrated on developing a strategic approach to intangible investments. The resource-based view, as well as competence-based approaches, may also be considered as contributing to establishing a strategic approach to intangible investments. These approaches, starting from the empirical finding that the differences in performance within an industry are greater than the intersectoral differences, suggest that these differences should be attributed more to the types of combinations of mainly intangible resources (patents, trade marks, etc.) used by enterprises, than to market structures. Under this approach, the (intangible) resources form the basis of the competitive advantage.

Resources, skills and competitive advantage

A large number of authors deal with resources and their link with strategy. However, unanimous agreement has not been reached on which resources are to be considered or on their hierarchy. Wenerfelt, among others, selects several types of resources, including: the trade mark, technological knowledge, skilled staff, commercial contacts, efficient procedures, capital, etc. Barney, for his part, only takes three types of resources: physical resources, human resources and organizational resources. Finally, Grant adopts the following resources: financial resources, physical resources, human resources, technological resources, reputation and organizational resources.

Bounfour, A. (1995) 'Immatériel et stratégies compétitives, éléments de problématique', 4th AIMS Congress, Paris.

Barney, J. (1991) 'Firms' resources and sustained competitive advantage', *Journal of management*; Wenerfelt, B. (1984) 'A resource-based view of the firm', *Strategic management journal*, Vol. 5, pp. 171–180; Wenerfelt, B. (1989) 'From critical resources to corporate strategy', *Journal of general management*, Vol. 14.

Hamel and Prahalad (1990).

Wenerfelt, B. (1984, 1989).

¹² Barney, J. (1991).

Grant, R.M. (1991) 'The resource-based theory of competitive advantage: implications for strategy formulation', *California management review*, Winter.

The resources are considered as specific to the firm and therefore not eligible for transfer or trading on the market. Corporate strategy is constrained by its stock of resources at a given point in its history.

The differentiation between resources and organizational capabilities — or skills — was emphasized in particular by Grant, for whom resources are inputs in the production process and constitute the basic elements of the analysis, whereas skills refer to the capability of a combination of resources to carry out certain tasks or activities. Resources therefore appear as the basic components of the skills, whereas the skills are the main sources of the firm's competitive advantage. In a way, skills appear as an 'organizational routine', according to Nelson and Winter. These routines are usually of a tacit nature.

From an operational point of view, this approach suggests in particular that the concept of skills may be defined in a functional perspective (R&D, production, distribution, finance, etc.). Most important at this level is the firm's ability to integrate individual skills. For instance, although McDonald's has distinctive skills in product development, marketing research and human resources management, for example, its success world-wide is attributable to its ability to integrate these separate skills effectively.

Despite its patchwork nature, the resource theory conveys a relatively simple message for strategic analysis: the enterprise must be approached as a portfolio of tangible and intangible resources, with the latter allowing the development of the skills needed to establish the firm's competitive advantage and hence its profitability.

As regards strategy, Porter stressed that resources are only of value because they allow enterprises to carry on activities, which are the true sources of competitive advantage. 16

The scale of resources is attributable in particular to two important trends: firstly the development of services activities (which contribute some 65–70% of the value added of the majority of advanced economies) and secondly the dematerialization of the industrial activities themselves. Quinn placed particular emphasis on the importance of these trends at world level. Like Hamel and Prahalad, he suggests the development of an approach based on 'core services competences'. The case of Honda Motor was suggested here as illustrative of the success of such an approach.

These recent developments in strategic thought therefore emphasize the importance of the internal resources and skills of the enterprise as a lever for competitive advantage. Under these approaches, enterprises are invited to concentrate on these internal levers, rather than focusing their strategy on industry structures and the competitive positioning of products.

Nelson, R.R. and Winter, S.G. (1992) An evolutionary theory of economic change, Belknap Press and Harvard University Press, Cambridge MA.

¹⁵ Grant, R.M. (1991).

Porter, M.E. (1994) 'Towards a dynamic theory of strategy', in Rumlet et al. (eds), Fundamental issues in strategy, Harvard Business School Press.

Quinn, J.B. (1992) Intelligent Enterprise, translated into French as L'entreprise intelligente (Dunod, 1994).

In other words, the placing of a value on resources and skills is the most suitable approach to assert a competitive advantage. These therefore constitute 'hidden values' which are still insufficiently valued by company balance sheets and accounting practices.

In a broader perspective, the European Commission White Paper on *Growth, competitiveness* and employment¹⁸ laid particular emphasis on the importance of intangible resources for the economic and social development of the European Union.

Table 2.2. Definition of intangible investment according to strategic management literature

- Knowledge about economic and social developments, demand articulation
- 'Hard' technological knowledge
- Strategic choices about core competences (contracting out, co-development)
- Strategic positioning of products and concepts
- Product design, user friendliness, integrated electronic software
- Integrated values: convenience, quality of life, self-affirmation, fun
- Brand names, advertising and image-building
- Making combinations: team and network building, process design, learning organization, 'soul'
- · Reputation in networks
- External logistics
- After-sales service and customer feedback

Source: TNO Policy Research (1995) Immaterial investments as an innovative factor, Study for the European Commission DG III, December, p. 86.

2.3.4. Proposed approach

The approach proposed here comes under a strategic perspective. It is based on the resource allocation process and its dynamics of change: level of investment and redeployment of resources within industries and enterprises and decisive factors (in particular the change in market structures). For example, this allocation process may take the form of the development of externalization of intangible activities at demand level or their 'industrialization' at supply level.

Intangible investment, like any investment, necessarily implies an allocation of resources at both micro and macroeconomic levels. This resource allocation is undertaken from the point of view of creation of value on the market, which is why it is worth considering the components of intangible investment at the level of the key stages and functions in the value-added chain, i.e. from a functional point of view.

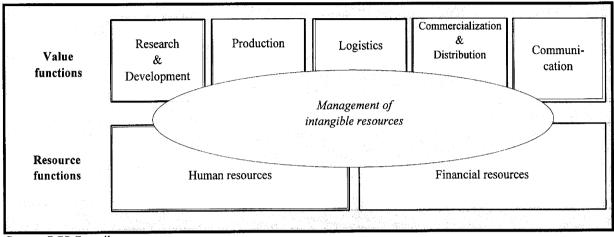
Functional approach

The functional approach is suggested here, since it is at function level that the resource allocation process is organized. At this level, two types of functions must be considered: value

European Commission (1994) Growth, competitiveness and employment: the challenges and ways forward into the 21st century, White Paper.

functions and resource functions; each of these is more directly concerned by one or more items of intangible investment (see Figure 2.1).

Figure 2.1. The value-added chain of the company: Value functions versus Resource functions



Source: RCS Conseil

More precisely, the value functions include the following:

- (a) research & development,
- (b) production,
- (c) logistics in the broad sense, including information logistics (processing, storage and transmission of information),
- (d) commercialization and distribution (networks, distribution channels and external logistics),
- (e) communications, the object of which is external corporate image-building.

The resource functions concern two types of resources: human resources and financial resources. Only the former are considered in the context of this analysis.

As will be seen below, with the exception of R&D activities, the majority of the intangible activities relating to these functions are externalized or at least are subject to a combination of production and procurement (both internalized and externalized).

The approach proposed here, therefore, consists of considering the components of intangible investments either in relation to a function (case of computer services for information logistics) or transfunctionally, where they 'cross' all functions or at the very least cannot be allocated to one specific function (case of legal advice, accounting services or management consultancy).

The actual representation of the value-added chain obviously requires differentiation according to demand sector (financial services versus food industries, for example).

Table 2.3. The main items of intangible investments and their related functions of the value-added chain

Research & Development

- Research & Development
- Patents, licences
- Designs and trade marks
- Quality of R&D and innovation processes and tools (databases, anticipation of market needs, etc.)

Production

- Increasing capacity of production systems
- Improving quality of production systems
- Search for competitive outsourcing capabilities

Logistics

- Improving procurement systems and capabilities
- Increasing capacity of information systems and telecommunications networks
- Improving quality and productivity of information systems and telecommunications networks

Commercialization, distribution and communication

- Market research
- Advertising
- Direct marketing
- Corporate communication (for image-building)
- · Distribution systems and channels
- Improving quality and productivity of commercial and communication systems and tools (customer scoring, customer database, etc.)

Human resources, organization, competencies and capabilities

- Human resources training and development
- Organizational restructuring and development
- Development of specific competencies and capabilities

Transfunctional support services

Transfunctional support services (mergers and acquisitions, legal services, consultancy services, accounting services, etc.)

Source: RCS Conseil.

2.4. Impact of single market integration on the level and exploitation of intangible investments by economic operators

Having defined the components of intangible investment, a methodological approach now has to be proposed to assess the impact of the single market on the level and exploitation of intangible investments by enterprises in Europe.

In principle, single market integration does in fact have a favourable impact on the allocation of operators' resources and especially on their intangible resources. At the macroeconomic level, econometric analyses have shown that the single market has made a contribution of

some 0.4% to economic growth over the period from 1986 to 1992 as a whole. 19 Such growth was probably conducive to intangible investments.

2.4.1. Difficulties of the analysis

As suggested above, it can be considered right away that the real stakes of resource allocation are at the level of the functions of the value-added chain and that it is therefore at this level that methodological hypotheses can be drawn up regarding the impact of the single market programme.

From an operational point of view, this research must provide an analysis of the quantitative and qualitative trends in intangible investments. It must also show how these have been or may still be influenced by the single market programme.

For example, environmental technical standards probably influenced industries' intangible investments in the fields of R&D and production. This can be considered as a first effect of the single market.

In another field (commercial function), on account of substantial development of the market structures and power of the economic operators, single market integration has probably led to more investments in information tools and systems relating to marketing and monitoring the technological environment (technological watch) and commercial environment and more generally in tools designed to identify 'weak signals' of the environment.

A certain number of methodological difficulties must be emphasized with regard to the assessment of this impact:

- (a) difficulties relating to the definition and measurement of intangible investment: research on the subject is still in its infancy and operators are not yet used to reasoning in terms of intangible investment;
- (b) difficulties relating to the measurement of intangible investment: accounting practices are still conservative on the subject and vary from country to country;
- difficulties in identifying the specific effect of the single market, since, for example, the resource allocation process at operator level may, for some operators, be classified under the dynamics of consolidation of markets and industries. Moreover, this same process may be influenced by other Community measures and programmes (for example, the Framework Programme for R&D). The single market programme is not implemented in a political void, but interacts with other Community measures, such as those relating to employment, competitiveness, consumer protection, and more generally in the dynamics of market and technological change at international level.

In order to get round these difficulties, and in view of the complexity of the subject and its emergent nature, it is necessary to define an *ad hoc* methodological framework. This framework should enable a response to be built up gradually to the following questions:

European Commission (1994) Growth, competitiveness and employment: the challenges and ways forward into the 21st century, White Paper, p. 88.

- (a) What is the overall trend in intangible investments in Europe, compared to those of the other major players of the triad (USA, Japan)?
- (b) How do economic operators view intangible investments, as a whole and by economic sector (financial services versus industry)?
- (c) Which measures under the single market programme have influenced or are likely to influence operators' intangible resource allocation processes more specifically?
- (d) Is it possible to differentiate between the 'anticipatory effect' of the single market (before 1993) and the 'implementation effect' (after 1993)?

2.4.2. Effect of the single market on intangible investments primarily linked – at first glance – to an overall effect of redeployment of resources

In operational terms, the starting point of the analysis consists in considering the anticipated impact of the single market programme on the redeployment of resources at Community level, as stressed in earlier work on 'the cost of non-Europe'. The expected effects of the single market programme include:²⁰

- (a) a better reallocation of resources through price mechanisms (via lower prices and reallocation of production units to the most competitive regions);
- (b) a reduction in transaction costs through the simplification or elimination of administrative procedures;
- (c) economies of scale and scope at both production and commercialization levels;
- (d) greater technical efficiency, which should result from boosting competition;
- (e) a change in scale of the markets on account of specific measures, such as those relating to public procurement or to the development of European standards.

At microeconomic level, it can be considered that keener competition is likely to lead to an improvement in business management practices, especially by encouraging firms to adopt more targeted strategies allowing the valorization of their 'distinctive skills'. In this respect, the development of cooperation agreements between and within sectors, as an effect of the single market, is likely to improve such practices.

2.4.3. Working hypotheses

Turning more specifically to the impact of the single market programme on intangible investment, the working hypotheses considered in the study concern four complementary dimensions:

- (a) the fact of considering that the bulk of the impact must be measured at the level of the value-added chain, on the basis of the critical 'issues' of the company (Figure 2.3);
- (b) the need to consider the horizontal measures as illustrative of possible channels through which the single market has an impact on the level and exploitation of intangible investment by European economic operators;

See for example Winters, L.A. 'Les effets du Grand Marché de 1992', Economie prospective internationale, No 40, article quoted in Urban, S. and Vendemini, S. (1992) Alliances stratégiques coopératives européennes, DeBoeck Université, p. 23.

- (c) the need to differentiate between economic sectors in respect of the level of importance of intangible investments and their sensitivity to the single market measures,
- (d) finally, the fact of considering that the single market has been able to contribute to the improvement in operators' practices in relation to the exploitation of intangible investments.

Figure 2.2. The dynamic impact of single market intergration on resources redeployment at corporate level

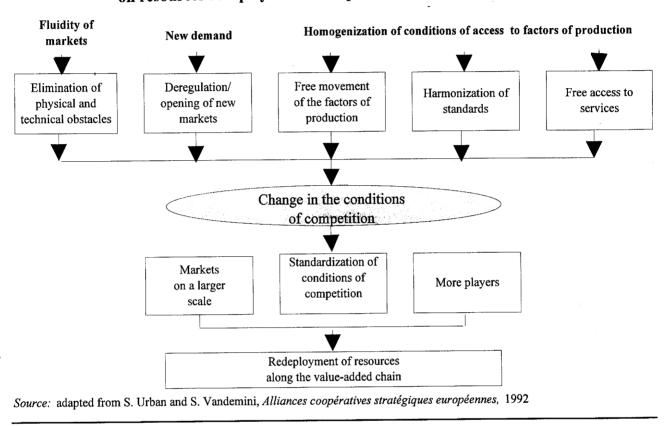
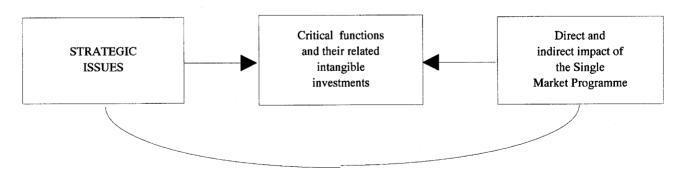


Figure 2.3. Demand sectors: the main stages in the analysis



Effects of the single market to be considered at the functional level

Taking account of the overall effect of the resource allocation, it is possible to define expected effects of single market integration on intangible investments. This approach may be applied generically or specifically to a given economic sector, or in relation to a particular policy measure.

An example of possible application of this last aspect concerns the impact of the dismantling of non-tariff barriers on the value-added chain of industry, drawing a distinction between two possible types of impact: a general impact and a specific impact on intangible investment (Table 2.4).

Table 2.4. Impact of dismantling non-tariff barriers on the value-added chain

Components of the value-added chain	Possible general impact	Possible impact on intangible investment
1. Research & Development	Growth in number of joint projects More homogeneous environment at European level	Outsourcing of R&D
		More investment in R&D
		More efficient investment in R&D
2. Procurement	Wider range of suppliers	Reallocation of resources
	Lower prices	Investment in marketing for procurement
3. Production	Increased production at each plant Reduction in the number of production plants	More investment in marketing and distribution services
4. Logistics	Lower transport costs Relocation of storage facilities (better adapted to an integrated market)	More resources available for intangible investments
5. Marketing and distribution	Centralization of product management Community-wide marketing campaigns	Investments in European brand names at European level, investment in training for international marketing

Source: European Commission (1990) The impact of the Internal Market by industry sector: the challenge for the Member States, European Economy/Social Europe Special Edition, p. 52, for the general effect. RCS Conseil for the impact on intangible investment.

It is therefore possible to formulate hypotheses regarding the expected impacts of the single market programme for each function.

Value functions

Research & Development

At this level, previous work carried out on behalf of the European Commission formulated specific expectations relating to the impact of the single market programme on Community technology policies.²¹ The following main hypotheses were drawn up:

- (a) the tightening up of standards and technical regulations was expected to have a significant impact on the technical regulation bodies, especially at national level, and, at the same time, on the competitive advantage of firms working mainly in a national context;
- (b) the R&D public procurement policy was expected to be influenced by single market integration;
- (c) the policy of public aid to enterprises (especially for innovation) would also be affected;

Science and Engineering Policy Studies Unit (SEPSU) (1992) A preliminary assessment of the impact of the White Paper programme on science and technology policies in the European Community; CREST, 1990.

- (d) the development of mergers and acquisitions was expected to have an impact on the redeployment of R&D efforts at Community level;
- (e) the mobility of researchers would also be a component to be taken into account; and
- (f) even more importantly, the single market was expected to have a substantial impact on the general environment of R&D and innovation at European level, on account of the changes expected to take place in market structures.

In fact, for the R&D function, the development of cooperation agreements, the definition of European standards and the mutual recognition of diplomas are important ingredients for the creation of an innovative, homogeneous environment.

Compared to other dimensions of the single market, such as the growth in the size of production units or product standardization, the development of technological cooperation between firms and improved valorization of their resources were strong expectations for the European industrial enterprises questioned, in the context of earlier work on the single market (Table 2.5).

Table 2.5. Influence of the completion of the single market on the strategies of industrial firms in Europe (net balance between positive and negative impacts) (%)

	В	D	E	F	IRL	I	NL	P	UK	Europe
Research & Development										
Greater cooperation	26	30	39	44	63	47	20	18	66	42
Greater use of the firm's resources	27	46	15	43	59	43	27	16	66	44
Production of plant										
Increase in size of production units	13	130	8	17	37	38		22	17	24
Increase in number of production units	2	14	0	-2	-4	17		10	1	7
Products										
More standardized products	19	21	9	29	34	33	16	14	28	24
More specialized products	39	36	38	40	64	49	31	14	32	38

Source: European Commission (1990) 'The impact of the Internal Market by industrial sector: the challenge for the Member States', in European Economy/Social Europe, special edition.

Production

Investments in production systems may be influenced by the necessary optimization of the existing capacities and their redeployment to the most competitive areas. The search for competitive areas for location or externalization, investments in the optimization of existing sources and capacities, investment in modern managerial methods (BPR, etc.)²² are all intangible items, the development of which may have been influenced by the single market.

See in this respect Business-related services and the reorganization of production: identification of relevant issues, a study by Hill and Knowlton on behalf of the European Commission, DG V, interim report, December 1995.

Logistics

As regards the logistics function, price reductions resulting from single market integration, as well as reductions in transport costs should have contributed to growth in intra-Community trade, as well as to the enlargement of the product range on offer. As regards intangible investment, the single market programme should have contributed to the development of enterprises' procurement capacities, especially in the field of 'marketing for procurement'.

As regards information logistics (telecommunications and information technology), the rising tide of deregulation, coupled with growing European standardization, should have contributed to better use of available capacities by European operators.

Commercialization and distribution

These two functions are probably those where the greatest change was recorded deriving from single market integration. In general, it is at this level that the main levers for competitiveness are currently to be found for both industrial and services enterprises (case of banking and insurance). The main components of intangible investments to be considered in this respect relate more specifically to the following items:

- (a) definition and design of efficient distribution networks,
- (b) access to customer databases, particularly on-line,
- (c) marketing surveys,
- (d) design and implementation of management methods,
- (e) training of network personnel.

Communication

The trade mark is an intangible asset which is essential to competitiveness. Hence, in a context where market structures are being redefined, investments to enhance the corporate image and identity may be of considerable importance, especially to establish cross-border activities.

Resource functions

In the single market context, the development of specific skills, and more generally better staff training, may appear to be an essential requirement for competitiveness. For this reason, the training of executives in inter-cultural management in a European context is a major concern for certain insurance undertakings which have recently extended their business beyond their national market.

Transfunctional services

This refers to externalized transfunctional services (legal advice, accounting advice, management consultancy). These services have benefited considerably from single market integration, especially during the period of the 'anticipatory effect' (1985–92).

Policy measures to be differentiated according to the nature and intensity of their effects

A distinction is to be drawn between three types of measures, each of which refer to a type of impact:

Direct measures

These are horizontal measures having an impact on one or more items of intangible investment (especially on externalized activities).

The measures to be considered include:

- (a) the measures for personal data protection,
- (b) the measures for the standardization of the data exchange format for telecommunications,
- (c) the standardization measures,
- (d) the measures relating to intellectual property,
- (e) the measures relating to public procurement,
- (f) the measures relating to the mobility of researchers.

Indirect measures

These are measures specific to a sector (the Second Banking Directive) or a product (life assurance).

Overall effect

This is the impact resulting from the overall dynamics of the single market and is not attributable to any specific measure.

There are therefore hypotheses to be considered as regards externalized intangible activities.²³ The single market is considered to have an impact on the development of intangible activities through two separate means:

- (a) by opening up access to previously regulated markets and through horizontal measures such as recognition, the standardization of activities such as software, or the deregulation of telecommunications services; or
- (b) by facilitating the development of networks for the production and commercialization of services, through horizontal measures concerning company legislation, freedom of establishment and the openness of communications systems.

At this level, specific barriers are to be considered which the single market measures aim to lift. These barriers include the following, in particular:

- (a) difficulty of access to specific activities (a barrier which the Directive on the mutual recognition of diplomas, for example, aims to lift);
- (b) obstacles relating to access to specific markets, particularly on account of the existence of public monopolies and differences in technical standards;
- (c) policies relating to public procurement;
- (d) differences in levels of taxation.

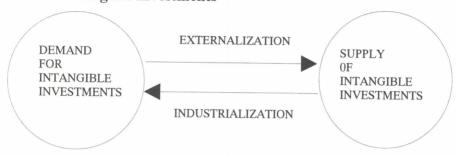
European Commission DG III (1990) Business services in the European Community: situation and role, the main components of this study being incorporated in the chapter on Business Services, in European Commission (1993) Market services and European integration: the challenge for the 1990s.

The single market assumed to have an impact on the dynamics of the development of intangible activities themselves: case of externalized activities

The single market dynamics are to be considered here at three levels:

- (a) the externalization of intangible activities (Figure 2.4),
- (b) the internalization of intangible activities,
- (c) the organization of intangible activities, especially around the concept of their 'industrialization'.

Figure 2.4. Dynamics of supply and demand for intangible investments



Externalization of intangible activities and the dynamics of the single market: theoretical $approach^{24}$

From a theoretical point of view, the question of the externalization/internalization of intangible activities is related to that of the firm's frontiers, i.e. the reconcilement of 'market' with 'hierarchy'. This matter was raised by R. Coase, 25 and taken up and developed in particular by O. Williamson 26 around the concept of transaction cost.

From a practical point of view, the main criterion used by decision-makers is that of the 'return' of the firm to its basic trade. Applied to intangible activities, such a principle soon reaches its limits, precisely because it is a delicate matter to determine what comes under the basic trade and should be internalized, and what does not and therefore should be externalized.

It is all the more important to emphasize this point because the externalization of activities is a practice which is spreading to all functions of the firm. It concerns design as much as implementation, and especially processing, storage and transmission of information.

This section takes up points made in the speech by Bounfour, A. (1996) 'L'externalisation des activités immatérielles: propositions pour un cadre d'analyse', *4th IFSAM Congress*.

Coase, R.H. (1937) 'The nature of the firm', *Economica*, included in *Readings in price theory*, Volume VI, Chapter 16, selected by G.J. Stigler, K.E. Boulding and Richard D. Irwin (1952).

Williamson, O.E. (1975) Markets and hierarchies, The Free Press.

Like all vertical integration or disintegration processes, the externalization of intangible activities may therefore be approached with reference to the transaction cost theory, on the basis of analysis of the factors determining their dynamics and therefore the question of the frontiers of the organization.²⁷

The transactional approach and the question of the frontiers of the firm

The transaction cost theory poses the question of economic organization in contractual terms. ²⁸ Economic activity may be organized in various alternative ways involving specific costs: the transaction costs. A transaction generally describes a transfer of goods or services between two technically separate entities.

Two types of cost are singled out: *ex ante* transaction costs, i.e. those associated with negotiating, drawing up and guaranteeing the contract, which naturally include costs relating to the search for information on partners, existing technologies and products and their specific performances, and *ex post* transaction costs, which may cover several aspects: the costs of poor adaptation attributable to the contract being thrown out of adjustment, the costs of bargaining after the contract has been drawn up, the costs associated with the control structure (conflict management) and finally the costs of establishing secure commitments.

The transaction cost theory contains hypotheses regarding the behaviour of the actors (limited rationality as defined by Simon, and opportunist behaviour), as well as specifications concerning the decisive variables (specific nature of assets, uncertainty and frequency of transactions).

Taking the attributes of the transaction, it is possible to determine a typology of efficient organizational forms (control methods). This is determined in particular on the basis of two dimensions: the specific nature of the investment (from the supplier's point of view) and the frequency of transactions (from the buyer's point of view).

Williamson, O.E. (1975) Markets and hierarchies: the antitrust law and economic process, The Free Press, and Williamson, O.E. (1994) The economic institutions of capitalism, The Free Press. For a presentation of the transaction cost theory from the point of view of the question of the internalization (and therefore the externalization) of activities, see Gaffard, J.L. (1990) Economie industrielle et de l'innovation, Dalloz, pp. 301–329. For a general review of the empirical work on the transaction cost theory, see, inter alia. Coeurdroy, R. and Quelin, B. (1994) L'économie des coûts de transaction, un bilan des études empiriques, HEC, Les cahiers de recherche, CR 513/1994.

Williamson, O.E. (1994) The economic institutions of capitalism, The Free Press, p. 39.

Overall effect

Measures with indirect effect

Measures with direct effect

Intangible investments by function

measures with direct, indirect and overall effect on intangible investments The single market programme-Table 2.6.

٤	Volue functions			
>	alue luncuons			
	• Research & Development	Public Procurement Directives (92/50, etc.)	Dynamics of investor sectors, Standardization, Certification, Cooperation programmes	Dynamics of R&D outsourcing in the single market context
	• Production engineering	Public Procurement Directives (92/50, etc.)	Dynamics of investor sectors,	Levelling of the conditions of competition
	• Information logistics			
	Services, software and networks	Standardization	Standardization, Certification, Esprit programme	Development of inter-firm alliances, multinational type activities etc.
	Telecoms services and networks	Deregulation of telecoms, Standardization	Standardization, Certification, Esprit programme	Development of inter-firm alliances, multinational type activities, etc.
	• Marketing & distribution			
	Market research	Personal Data Protection Directive Part-time Work Directive	Certification procedures, Levelling of competition for demand sectors	Dynamics of the outsourcing of activities, Development of internal trade
	On-line data	Public Procurement Directives Directive on legal protection of databases, Personal Data Protection Directive, draft Directive on distance selling	Standardization, Convergence of remote data processing infrastructures, Conditions of competition of demand sectors (financial	Formation of a European electronic information market, Development of internal trade
	Advertising and direct marketing	Broadcasting Directive, Personal Data Protection Directive, Misleading Advertising Directive, Public Procurement Directives, etc.	Dynamics of competition in demand sectors (food industries)	Dynamics of growth and competition in Europe, Creation of an advertising market in Europe
	• Communication			
	Public relations	No specific measures	Dynamics of competition	Single market dynamics
Res	Resource functions • Human reconness			
	Ongoing training	Council Directive on the recognition of diplomas	Ad hoc European programmes	Development of skills as strategic lever
Tra	Transfunctional services			
	• Legal services, accounting services	Ad hoc Directives	Increase in demand of user markets	Single market dynamics
	• Management consultancy	No specific measures	Development of demand from customer sectors	Single market dynamics

Four methods of organization appear to be particularly suitable:

- (a) market control methods, for transactions without specific assets, whatever their frequency;
- (b) bilateral control for frequently recurring transactions involving mixed investments (including a tailor-made component);
- (c) unified control (integration) for frequently recurring transactions involving an individualized investment;
- (d) finally, trilateral control for activities involving specific resources or fairly specific and occurring occasionally. The control is said to be trilateral in so far as provision may be made in the contract for arbitration procedures.

These are therefore the methods for organizing the activities recommended under the transaction cost theory. However, another criterion must be considered in relation, more specifically, to intangible activities: that of whether the results can be appropriated and transferred. Teece's analysis,²⁹ which analyses the content of the transfer of know-how and recommends the most suitable methods of organization, comes under this perspective.

An approach in terms of 'functional resources'

Following on from an analysis of the enterprise in terms of resources and skills (see Section 2.3.3 above), an analysis of the dynamics of the externalization of intangible activities in terms of functions is of interest, especially in that it enables the true stakes of the dynamics of externalization, from both the analytical and operational viewpoints, to be shown.

Although studies on the transaction cost theory from the point of view of vertical integration are relatively numerous, ³⁰ those dealing specifically with intangible activities from the point of view of horizontal (or functional) integration or disintegration, are relatively few in number. They mainly relate to R&D and technological development.

The externalization of intangible activities is not carried out in a uniform manner. There is in fact a hierarchy of activities, notably in relation to their criticality from the functional point of view. Data from a survey conducted on behalf of the European Commission³¹ show the existence of such hierarchies in terms of activities, reasons for recourse to external resources and differences in national practices. This survey was conducted among 100 European enterprises belonging to different economic sectors, some demanding services, some supplying them.

Considered as an aggregate, the methods of production and consumption of intangible activities (in this case business services) are the following:

- (a) pure externalization (41%),
- (b) pure internalization (30%),

Teece, D. (1980) 'Economies of scope and the scope of the enterprise', *Journal of economic behavior & organization*, 1, pp. 223-247.

See Coeurdroy, B. and Quelin, B. (1994).

European Commission (1988) The cost of non-Europe for business services.

- (c) a combined approach (26%),
- (d) recourse to subsidiaries (3%).

Externalization therefore appears to be the main means by which companies procure services. Nevertheless, this overall structure must be differentiated by type of service.

In fact, among the activities considered, public relations and Research & Development appear to be the least externalized (11% and 12% of their production respectively), while on the other hand, operational services (security, travel, etc.) and advertising are highly externalized (58% and 49% of their production respectively). For their part, computer services are at a relatively low level in terms of pure externalization (22%), the dominant option being a combination (55%).

A second level of differentiation concerns the level of externalization by country. In this respect, the data of the study go against certain preconceived ideas. France and Italy in fact emerge as the countries having adopted the highest rate of pure externalization (56% and 47% respectively), whilst the Netherlands, Germany and above all the United Kingdom have rates of externalization below the European average (39%, 32% and 34%, respectively). The United Kingdom in particular has preferred a combined approach.

Finally, the third dimension: the factors determining externalization, considered as a whole and by type of intangible activity. On the whole, the factors considered as very important are quality (72% of replies), availability (39%) and cost (31%). In addition, these last two criteria are considered as important by 28% and 49% of respondents, respectively.

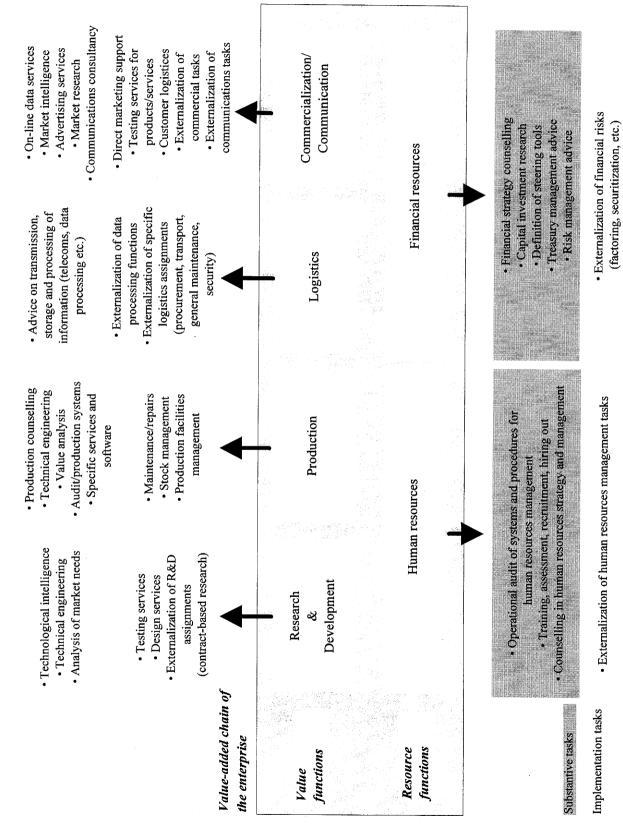
Analysis of the procurement criteria by type of activity shows considerable differentiation in the replies. Among the factors indicated, the cost factor concerns information technologies, operational services and marketing in particular. Non-availability of internal expertise is mentioned specifically for information technologies, R&D and marketing. The endeavour to cut jobs and fixed costs is indicated for information technologies and operational services.

Among externalized activities, two merit special attention on account of their critical nature in the competitiveness of undertakings and the differentiation – at first glance – of the factors concerning them: Research & Development and activities relating to the retrieval, transmission, processing and appraisal of information (telecommunications and information technology). R&D is at first glance little externalized. The dominant factor in its externalization is the insufficiency or non-availability of skills within the firm. The cost is not mentioned as the prime factor. Information processing services, on the other hand, are highly externalized, with cost factors predominating, and especially those relating to the wish to cut fixed costs.

Source: RCS Conseil

The dynamics of externalization of intangible activities by the enterprise

Figure 2.5.



Typologies of tasks eligible for externalization and related functions

Figure 2.5 presents a typology of activities eligible for externalization at the level of the main functions of the value-added chain of the enterprise. These tasks have been classified in two groups: substantive activities, i.e. the consultancy and design activities (products, systems, etc.), the outputs from which are intended to improve the performances of one or more stages in the value-added chain, and implementation activities, which are usually part of the value-added chain prior to their externalization.

Each of the functions of the value-added chain is involved in this dual level of externalization. Figure 2.6 presents the dominant methods of production and procurement of intangible activities.

Figure 2.6. Dominant status of intangible investments – insourcing versus outsourcing

Intangible investments by function	Internalization	Combination	Externalization
Value functions			
Research & Development			
• Production			
Information logistics			
Information technology services			
Telecommunications network services			
Commercialization and distribution			
Market research, on-line data			
Advertising			
Communication			
Public relations			
Resource functions			
Human resources			
Ongoing training			
Transfunctional support services			
Legal and accounting services			
Management consultancy, etc.			

Internationalization of externalized intangible activities

The internationalization (Europeanization) of demand sector activities has an impact on the conditions of production of the externalized services supply sector. At this level, several options may be considered, including the development of the external growth of services companies, as a result (even in anticipation) of merger and acquisition phenomena at the level of their customer sectors (see Chapter 4).

Industrialization of intangible activities

The growth in competitive pressures within customer sectors and the accumulation of their services experience have a strong impact on their requirements level in terms of characteristics of the services supplied. As stressed in the case of consultancy activities,³² services activities are tending to become 'industrialized' or in other words to be organized functionally as industry has been for a long time, with standard products, R&D functions, production, quality and commercialization and communication. In this respect, some of the information available from the Eurostat 'Business Survey' shows that the single market has had a certain impact at this level.

Impact of the single market programme to be differentiated by economic sector

In parallel to a functional differentiation, the impact of single market dynamics on intangible investments is also to be differentiated by economic sector, in terms of their sensitivity to the single market programme.

Industry

The report by the European Commission (1990) had proposed a differentiation between industrial sectors as regards their level of sensitivity to the single market programme. ³³ Three main criteria were used: the height of the non-tariff barriers, the spread of prices for identical products between Member States, and the import penetration rate.

Of the 120 sectors initially considered, 40 were identified as being particularly sensitive to the single market programme, representing about 50% of the value added of the Community. These sectors were classified into four groups:

Group 1 comprises high technology markets with substantial public procurement (telecommunications equipment, computer equipment, medical equipment). This group is characterized by a low price level, and a high level of intra-Community trade, mainly attributable to the presence of multinational firms. From the point of view of intangible investments, these sectors are in particular characterized by a high rate of investment in R&D.

Groups 2 and 3 comprise traditional procurement and regulated markets. Group 2 includes sectors such as railway stock, with low levels of intra-Community trade and a substantial price spread. Group 3 includes sectors such as shipbuilding and electrical engineering, for which the level of intra-Community trade is low, but, unlike the previous group, the intra-Community price spread is small.

Group 4 includes sectors with moderate non-tariff barriers. It contributes about a third of the value added of manufacturing industry. Among the sectors included in this group are mass-produced consumer goods (television, textiles, etc.), capital equipment and intermediate products.

Bounfour, A. (1987) 'Vers l'industrialisation du conseil', Revue française de gestion, Numéro spécial conseil, November-December, and Chers consultants, enjeux et règles des relations entreprises-consultants, Dunod (1992).

European Commission (1990) The impact of the Internal Market by industry sector: the challenge for the Member States, European Economy/Social Europe.

Naturally, the method of resource allocation will differ substantially depending on the group of sectors considered (group 1 includes entire industries, whereas group 2 includes mainly national leaders).

Services³⁴

The services sectors naturally have a direct link with questions relating to intangible investment since they are its main component. These sectors represent major economic and social stakes at Community level: 49% and 42% of GNP and employment respectively (but only 20% of trade).

Until recently, the majority of services were supplied exclusively or almost exclusively on a national basis and were not the subject of strong competitive pressure (at Community level, the mobility of services is generally considered to be low).

Of the almost 300 measures of the Single Market White Paper,³⁵ 50 related specifically to these activities, and particularly to financial services, telecommunications and business services.

Compared to industry, the services sectors appear to be little internationalized, closely bound by the intervention of the public authorities (regulation) and recording lower productivity. Nevertheless, on the basis of these criteria, there are substantial differences between sectors. As regards internationalization, distribution and road transport have a low level, whereas air transport is highly internationalized. As regards regulation, financial services (banking and insurance) are highly regulated, whereas business services are little regulated. Finally, as regards the economy of these sectors, the existence of substantial potential for economies of scale and scope, as well as externalization dynamics by the customer sectors, should be stressed.

2.4.4. Impact of the single market on the exploitation of intangible investments in Europe

The question of the exploitation of intangible investments by economic operators in Europe is complex. As specified in the terms of reference, 'the main issue here is to examine the extent to which single market measures have improved the capability of the industry and economy in Europe to better exploit and profit from intangible investment'.

This raises two important questions:

- (a) the question of the emergence of new managerial practices, on the basis of intangible investments, as a direct or indirect effect of the single market;
- (b) the more general question of the capability of the industry and economy to make better use of intangible investments.

The reply to these questions may be given in two ways:

European Commission (1993) *Market services and European integration: the challenges for the 1990s*, European Economy/Social Europe: Reports and Studies No 3/1993.

European Commission (1985) Completing the internal market, White Paper.

- (a) by observing the trend in the level of intangible investments in Europe, if possible over a long period, in particular in a comparative perspective (with the USA and Japan);
- (b) by considering with some economic operators the question of improving their capacity to make use of intangible investments (for example, has the development of cooperation agreements or mergers and acquisitions allowed an improvement in the specific skills of European operators?).

2.5. Operational approach of the study

The approach developed by the study aims to assess the actual impact of the single market programme on intangible investments by European economic operators. The proposed reference period extends from 1985 (year of the White Paper) to 1995.

In this perspective, assessments are proposed at three main levels (Figure 2.7):

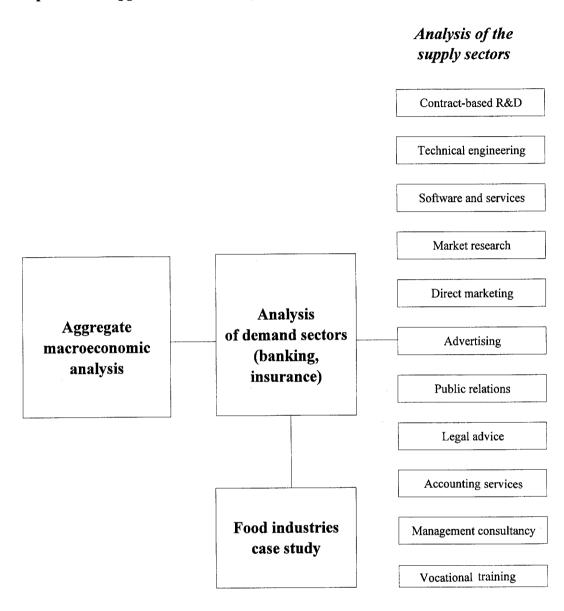
- (a) an analysis of aggregate data (the imperfections of which have been emphasized above);
- (b) an analysis of the impact of the single market programme on intangible investments in three sectors of demand, comprising:
 - (i) an analysis of financial services (banking and insurance) as a sector which on the one hand invests heavily in intangible assets and on the other is sensitive or potentially sensitive to the single market measures;
 - (ii) an enhanced case study of the food industries, with the aim of providing a view of the situation of intangible investments in an industrial sector;
- (c) a horizontal analysis of each of the main supply sectors; intangible activities with the exception of R&D being for the most part of an externalized nature or at the very least combined.

From a more operational point of view, specific questionnaires were drawn up and approved by the Steering Committee. These were used in contacts with economic operators or their representative trade associations.

Hence, three types of questionnaire were drawn up:

- (a) a questionnaire for banks (with networks), used with some ten European operators,
- (b) a questionnaire for insurance undertakings, used with some ten European groups,
- (c) a questionnaire for services companies, used with European operators and/or their representative trade associations.

Figure 2.7. Operational approach of the study



3. Aggregate macroeconomic analysis

The aggregate data presented below are mainly intended to show the overall trend in certain components of intangible investment, with a view to providing an overall macroeconomic framework for the study as a whole. These data are of two types:

- (a) macroeconomic data published by official sources (OECD, UNESCO, etc.) or trade organizations;
- (b) microeconomic data extracted from the DABLE database of the European Commission (DG III).

3.1. Macroeconomic data

The components of intangible investments considered at this level are fairly heterogeneous in terms of scope and information source.

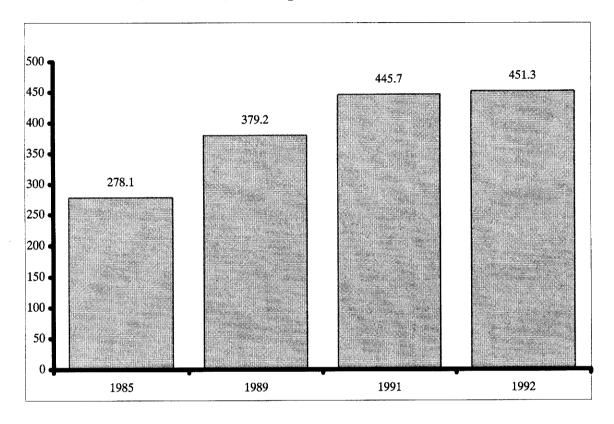
Five types of data are considered here as components of intangible investment:

- (a) Research & Development expenditure,
- (b) technology payment expenditure,
- (c) advertising expenditure,
- (d) public education expenditure,
- (e) software expenditure.

The available data, displayed in Figures 3.1 to 3.5, show interesting trends in intangible investment thus defined in Europe, both at aggregate level and in each item:

- (a) In terms of absolute value, expenditure on intangible investment has increased considerably throughout the period from 1985 to 1992.
- (b) In terms of relative value (compared to GDP or gross fixed asset formation), the EU shows a relatively stable rate of investment over the period as a whole (as a share of GDP, the ratio was 8.32% in 1992, compared to 8.30% in 1985).
- (c) Compared to the USA and Japan, the EU is at an intermediate level between these two powers of the triad as regards the aggregate level of intangible investment. Furthermore, the 'intangible investment/GDP' and 'intangible investment/gross fixed asset formation' ratios of the EU are below those of the USA.
- (d) In terms of level of investment, the EU ratios are below those of the USA and Japan for R&D and software (as a share of GDP) over the reference period as a whole. For R&D, this share was 1.97% for the EU in 1992, as opposed to 2.81% for the USA and 2.96% for Japan. This shows a lower commitment at this level.
- (e) Over a long period (1972–91), the French data show a steady rise in intangible investment, both in aggregate terms and in each of its components (research, training and software), although there is a downwards tendency in the growth rate (Figure 3.6).

Figure 3.1. Intangible investments in the European Union (12 Member States), 1985, 1989, 1991, 1992 (ECU billion, current prices)



Sources: CBS, Immateriele investeringen in Nederland: een internationale positiebepaling, 1995; EAAA Information Services; Eurostat, National Account Statistics; OECD, Basic Science & Technology Statistics 1991, 1993; OECD, Education Statistics, 1985-1992; OECD, Information Technology Outlook 1992, 1994; OECD, Main Science & Technology Indicators, 1995/1, 1994/1; UNESCO, Statistical Annual 1994 Analysis: RCS Conseil

Figure 3.2a. GDP, gross fixed asset formation and intangible investments in the EU (12) - 1985 = 100

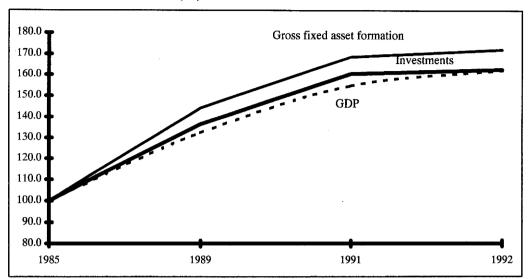


Figure 3.2b. Intangible investments: gross fixed asset formation ratio

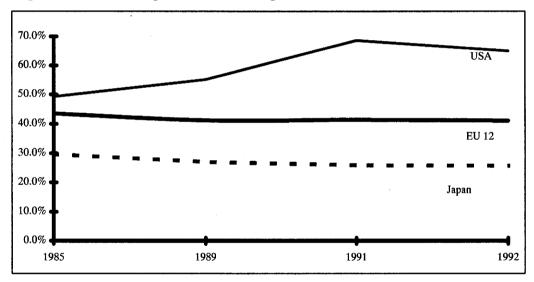
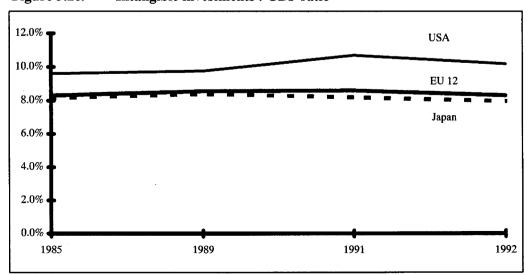


Figure 3.2c. Intangible investments: GDP ratio



Sources and analysis: as for Figure 3.1.

Figure 3.3. Comparison of trends in intangible investments between 1985 and 1993: EU (12), USA and Japan - Base 1985 = 100

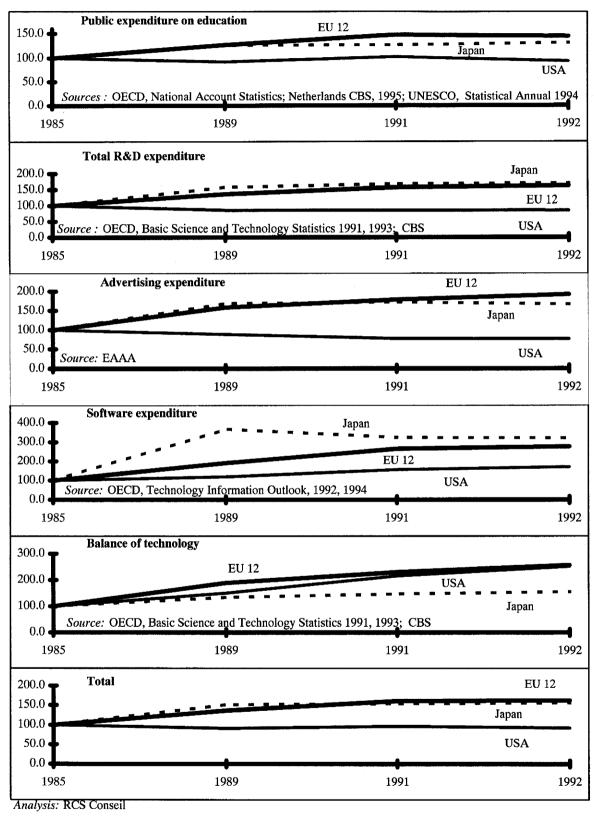
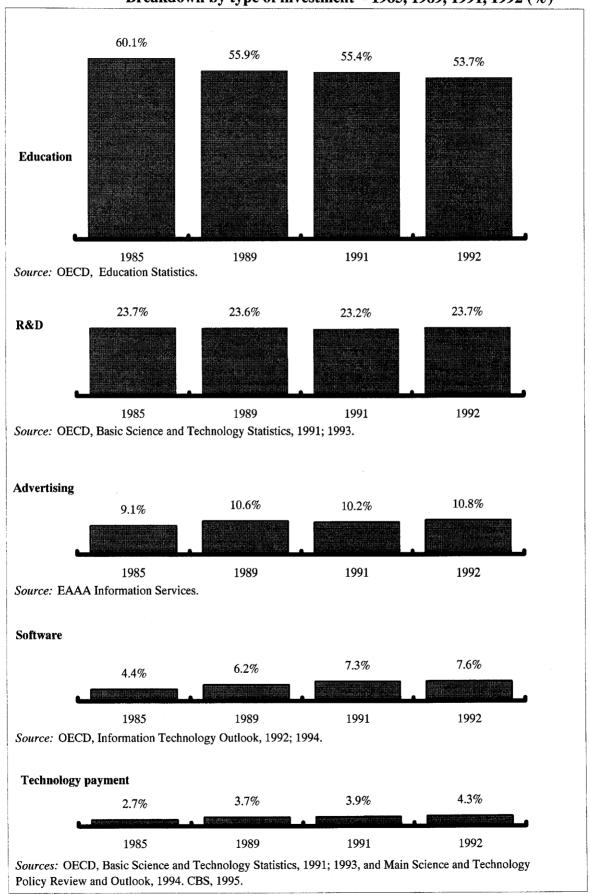


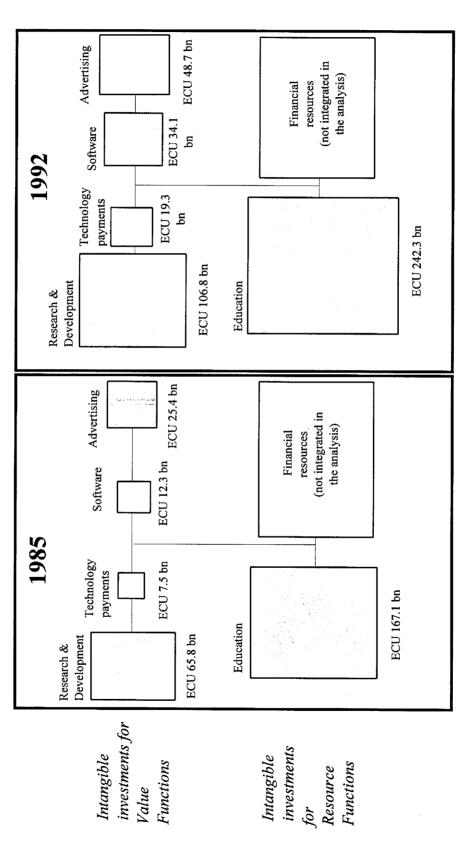
Figure 3.4. Intangible investments in the EU (12) Breakdown by type of investment - 1985, 1989, 1991, 1992 (%)



Analysis: RCS Conseil

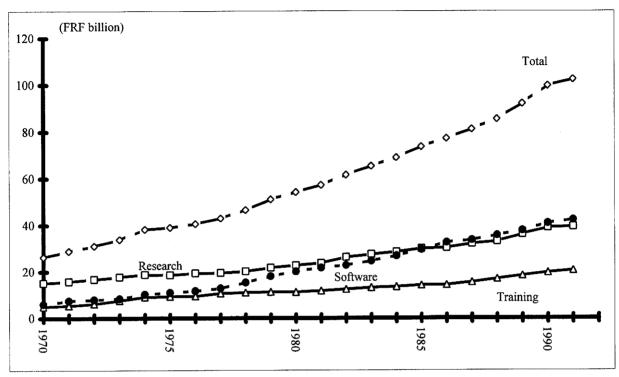
Intangible investments of the value-added chain of the EU (12) - 1985 and 1992 (ECU billion, current prices)

Figure 3.5.



Analysis: RCS Conseil

Figure 3.6. Trend in intangible investments by type of component in France, 1970-91: software, research and training (billions of French francs, at 1980 prices)



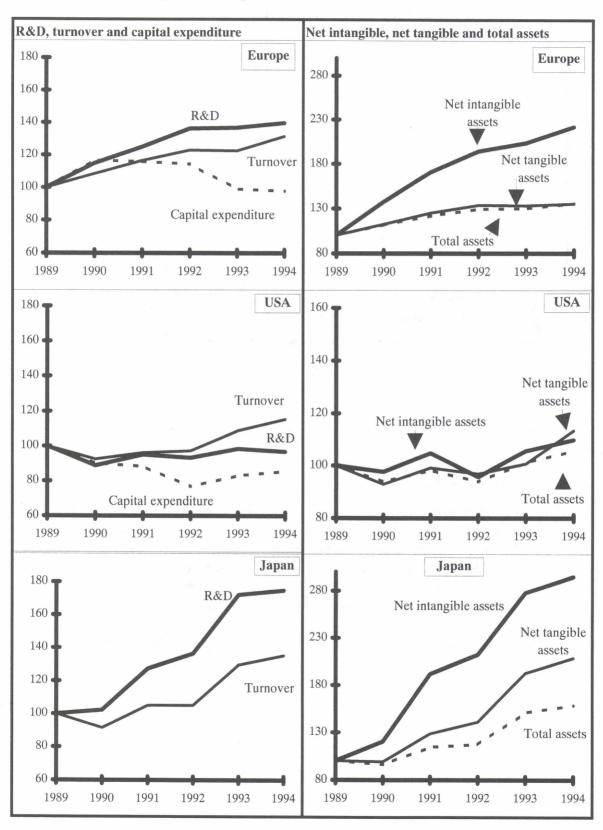
Source: INSEE

3.2. Microeconomic data

Examining the data of large enterprises (DABLE database, European Commission DG III A3), a hefty increase can be seen in R&D and intangible assets in Europe, which is far greater than in the USA, but nevertheless smaller than in Japan (Figures 3.7 to 3.9). There has been an increase in intangible assets in relation to tangible and total assets in all three areas. However, these data must be considered with caution, on account of the imbalance in the samples covered and the differing accounting practices in the field of intangible investments.

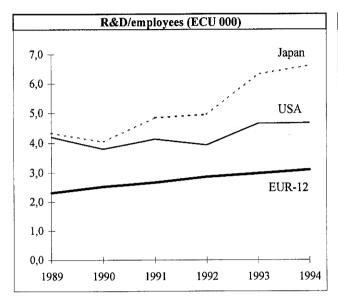
In fact, these data mainly relate to industrial activities with the following number of enterprises for each of the powers of the triad: Europe (789), USA (213) and Japan (208).

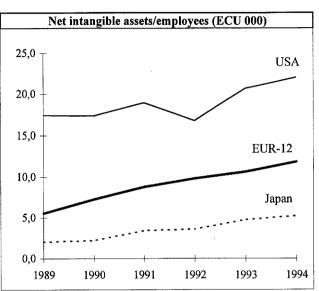
Figure 3.7. Indicators of intangible investments for large industrial companies: Europe, USA, Japan - Base 1989 = 100

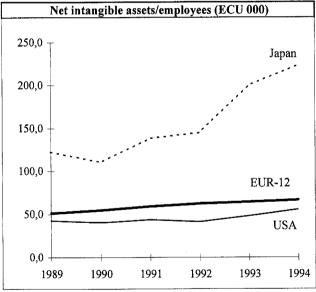


Source: DABLE, European Commission DG III A3

Figure 3.8. Indicators of productivity of intangible investments for large industrial companies, Europe, USA and Japan: R&D, employees and assets (tangible and intangible)

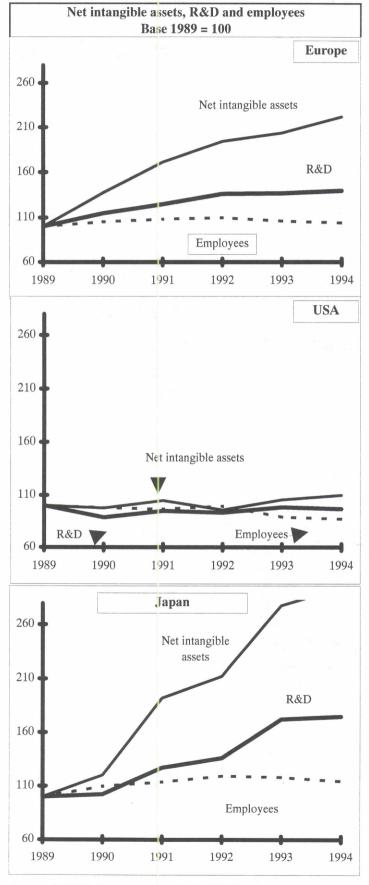






Source: DABLE, European Commission DG III A3

Figure 3.9. Intangible investment indicators for large industrial companies, Europe, USA and Japan, 1989–94

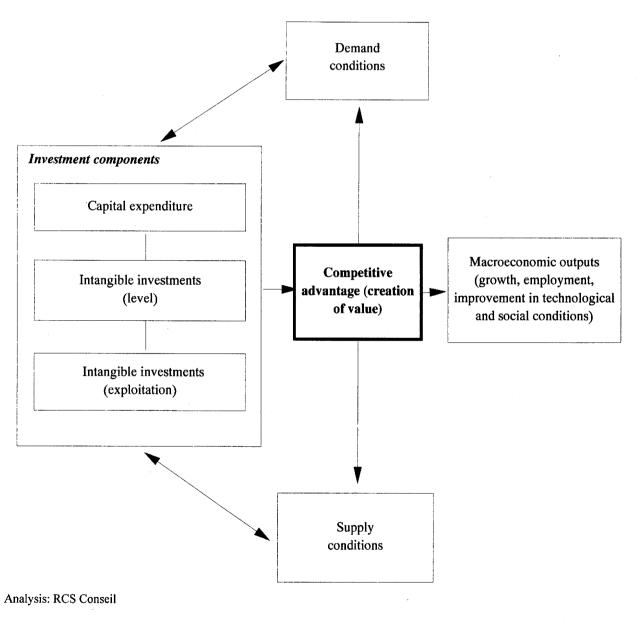


Source: DABLE, European Commission DG III A3

3.3. A framework to interpret the aggregate data

The aggregate data displayed in Figures 3.7 to 3.9 show a generally satisfactory situation in the European Union from the point of view of the levels of intangible investment made. However, although essential, it is not necessarily sufficient. In other words, the question still remaining is that of the worth placed on these investments on the market, through the creation of a competitive advantage, and consequently, though a contribution to improving the macroeconomic indicators of the European Union.

Figure 3.10. A framework for the analysis of macroeconomic data



It is at this level that a differentiation should be made between several interrelationships (Figure 3.10):

- (a) competitive advantage is characterized (among other things) by the existence of causal relationships between demand conditions, supply conditions and the components of the investment (with the single market influencing these three dimensions);
- (b) moreover, there is a strong interaction between capital expenditure and intangible investment;
- (c) intangible investment itself must be analysed in two dimensions: its level and the way it is exploited (organization, systems, exploitation methods).

The level of intangible investment, as can be observed through these data, seems at first glance to be relatively satisfactory. On the other hand, the exploitation of these investments would seem to be insufficient in some respects.

Taking scientific research, for example, the available data from recent work by the Commission (DG XII) show that during the period from 1981 to 1993 as a whole, even though the EU's share in the number of scientific publications world-wide has increased considerably (to approach 30% at the end of the period), its share in the total number of patents granted in the USA has fallen substantially.

Considering another indicator – income from patents – the balance of payments outside the EU is in deficit and the gap between credit and debit has widened over the period as a whole. These simple data would seem to show the existence of insufficient processing of its upstream investments by the European economy.

This raises an essential point, which strictly speaking does not come within the ambit of this study: the existence of a 'missing link' in the European value-added chain; this problem – which is not new – has been taken up and developed in recent analyses. These analyses placed particular emphasis on the fact that Europe is lagging behind not only in the field of innovation (number of patents in the USA), but also in the adoption of efficient organizational models, and consequently in the 'systems and skills' component of intangible investments. (It should nevertheless be stressed here that these factors only concern manufacturing sectors.)

If this hypothesis is considered to be valid, the question we are addressing partly overlaps this problem. In fact, it is a matter of knowing the extent to which the single market Programme has contributed to improving the level of exploitation of intangible investments by economic operators, or in other words their level of organizational and systemic performance.

Analysis of three demand sectors in particular shows that the single market programme has had an essentially indirect impact not only on the level, but also on the exploitation of intangible investments by European operators, without, for all that, being able to describe the situation of the 'zero option' (what the situation would be regarding intangible investments in these sectors without the single market).

Andreasen, L.E. (1995) Europe's next step: organisation, innovation, competition and employment, Frank Press.

Figure 3.11. Country/region share in total number of scientific publications, 1981–93 (%)

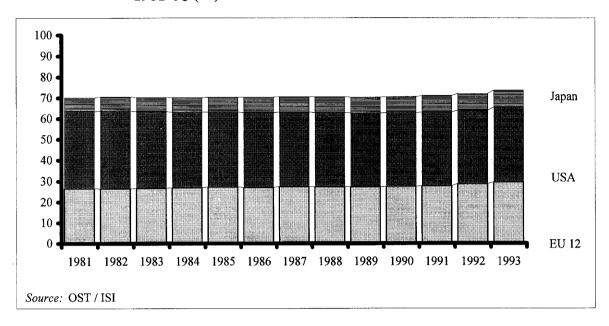


Figure 3.12. Country/region share in patents granted in the United States, 1981–93 (%)

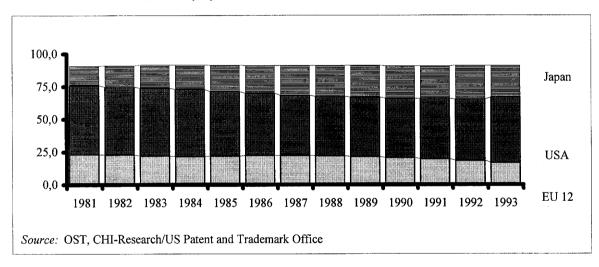
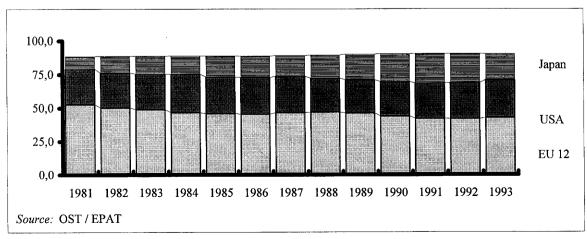


Figure 3.13. Country/region share in patents granted in the EU, 1981–93 (%)



Analysis: RCS Conseil

Figure 3.14. EU 12: External trade for income from patents, 1984–93 (ECU million)

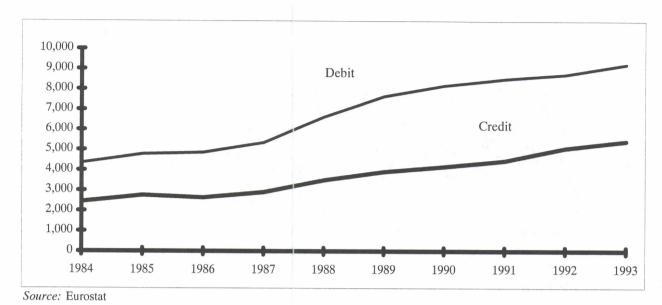
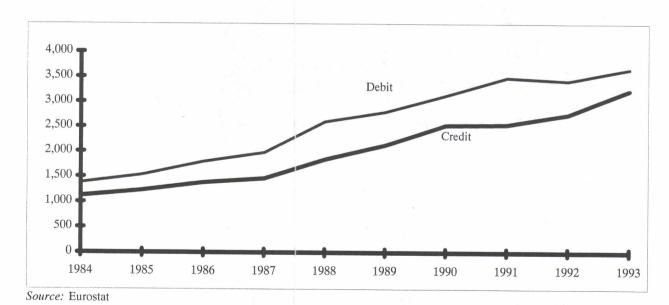


Figure 3.15. EU 12: Internal trade for income from patents, 1984–93 (ECU million)



4. Impact of the single market on the level and exploitation of intangible investments by economic operators: case study of three demand sectors

The aim of this chapter is to present the stakes relating to intangible investments for three demand sectors (banking, insurance and food), as well as data to analyse the impact of the single market programme on these same investments. Banking and insurance are sectors which are sufficiently close for the hypotheses made and the data for analysis revealed for each of the two sectors to be similar, as regards both content and implications.

4.1. Banks with networks

The study will focus on the impact of the single market on banks with networks.

4.1.1. Economic and strategic stakes

Several factors are to be considered as decisive in the strategic behaviour of banks with networks in Europe, as well as at international level:

- (a) deregulation,
- (b) the liberalization of capital movements,
- (c) disintermediation in banking,
- (d) the reduction in margins concurrently with the growth in risks,
- (e) the development of merger and acquisition processes,
- (f) the development of the 'bancassurance' concept,
- (g) the need to manage integration between global strategies and local strategies (micromarketing).

The work of the OECD in particular emphasized the importance of these new challenges for banking and financial services.³⁷ On this point, the main problem can be considered to lie in management of the growth – risk (and therefore profitability) – productivity triangle. The prospects of recourse to intangible investments must be considered in relation to these three levels.

Confronted by these constraints, banks are seeking new sources of income. At the same time, they are stepping up their cost-cutting efforts and developing economies of scale and scope. In this context, size in the broad sense (including the cooperation networks) may be a major strategic lever, especially in the European context.

At functional level, the downstream functions (distribution) are now a critical lever for competitiveness to acquire, maintain and develop an advantage, in particular by exploring new distribution methods. At this level, direct banking represents an interesting means both to cut costs and to control customer bases. In the USA, 47% of banking transactions were carried out by means of electronic data transmission (automated teller machines, telephone, PC, TV, etc.)

OECD (1992) Nouveaux défis pour les banques; OECD (1992) Risk management in financial services; OECD (1992) Insurance and other financial services. Structural trends.

in 1994. This share is expected to rise to 69% in the year 2000,³⁸ whilst in Europe, only 1.5% of transactions are organized by these means, despite the development of projects in this field (First Direct, Cortal, etc.).

Table 4.1. The main items of intangible investment in banking

Development of products and services

Development of new products and services

Fund movements

- Increasing the capacity of fund movement systems
- Improving the quality and productivity of fund movement systems

Risk and credit management

- Increasing risk management systems and capabilities
- Improving the quality and productivity of risk management systems and capabilities

Information logistics (Information technology and telecommunications networks and related services)

- Increasing the capacity of information technologies (including software) and telecommunications networks
- Improving quality and productivity of information technologies (including software) and telecommunications networks
- Improving the quality of information and management systems

Commercialization, distribution and communication

- Market research
- Advertising
- Corporate communication (for image-building and enhancement)
- Access to external electronic information (on-line data, etc.)
- Distribution systems and channels
- Improving quality and productivity of distribution and communication systems and tools (customer scoring, databases, etc.)

Human resources, organization, competencies and capabilities

- Human resources training and development
- Organizational restructuring and development
- Development of specific competencies and capabilities

Transfunctional support services

• Transfunctional support services (mergers and acquisitions, legal services, consultancy services, accounting services, etc.)

Source: RCS Conseil.

EITO (1996), European information technology observatory.

4.1.2. European trade and development of direct investment

The development of foreign trade and direct investments in the banking sector in and outside Europe has direct implications for the level and exploitation of intangible investments by the sector in Europe.

On the whole, foreign trade and intra-Community trade have developed at the same rate, especially at the end of the period (Figures 4.1 and 4.2). The impact of the single market at this level is not clear.

16,000 14,000 12,000 10,000 Credit 8,000 6,000 Debit 4,000 2,000 1992 1993 1985 1986 1987 1988 1989 1990 1991 1984

Figure 4.1. Foreign trade of the EU (12) banking sector, 1984–93 (ECU million)

Source: Eurostat

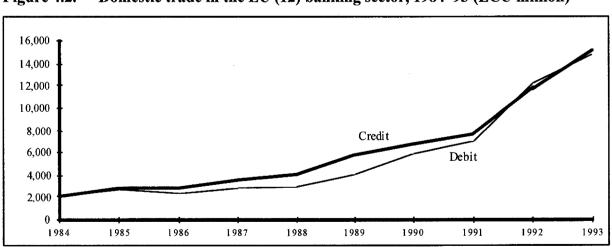


Figure 4.2. Domestic trade in the EU (12) banking sector, 1984–93 (ECU million)

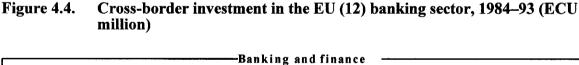
Source: Eurostat

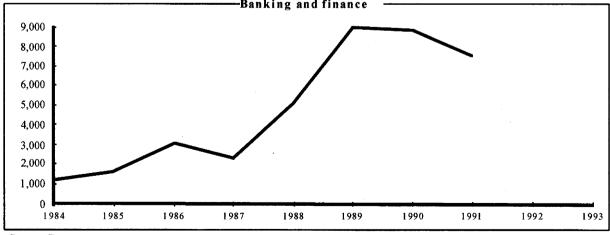
On the other hand, as regards the development of foreign direct investment (FDI), the Eurostat data show a certain link between the creation of the single market and the development of foreign and cross-border investments within the European banking sector. The development of foreign investments gathered pace throughout the period from 1985 to 1990; the same is true, on the whole, of European cross-border investments. This would appear to express a certain attractiveness of the European banking area throughout the period from 1986 to 1991, at a time when European investments abroad were below the level of foreign investments in Europe. This would show a priority redeployment of investments towards domestic markets.

Banking and finance 12,000 10,000 FDI in the EU 8,000 6,000 4,000 FDI by the EU 2,000 1986 1988 1989 1990 1991 1992 1993 1985 1987 -2000

Figure 4.3. FDI in the EU (12) banking sector, 1984–93 (ECU million)

Source: Eurostat





Source: Eurostat

4.1.3. Measures under the single market programme to be considered

Measures with direct impact

The main measures to be considered are the following:

- (a) The First Banking Directive (1977),³⁹ which asserts the right for any bank of a Community Member State to establish itself in another Member State, although on condition that the applicant bank complies with the host country legislation and respects the obligations deriving from it.
- (b) The White Paper on Completing the Single Market (1985),⁴⁰ in which the idea of full, prior harmonization of national legislation is abandoned in favour of the principle of mutual recognition.
- (c) The Single European Act (1986),⁴¹ which sets out several general principles (consumer protection, investor security, etc.) which meet national concerns, especially those of mutual recognition of authorization with, as a counterpart, minimum harmonization of the regulations governing the establishment of banking institutions and the pursuit of their activities.
- (d) The Second Directive on the coordination of banking legislation (1989),⁴² which came into force on 1 January 1993. This instrument totally revises the concept of freedom of establishment, with the single Community licence, and innovates by introducing the freedom to provide services in the banking sector.

The other measures relate mainly to the security of banking transactions (prudential supervision, deposit protection).

- (a) The Directive on supervision (1989) concerning the conditions governing accounting information and monitoring by the supervisory authorities.⁴³
- (b) The Directive on the annual accounts and consolidated accounts of banks and financial institutions (1986).⁴⁴ It harmonizes the accounting rules for banks and other financial institutions.
- (c) The Directive on the accounting requirements for foreign branches (1989).⁴⁵
- (d) The Directive on monitoring the solvency of banks and the definition of own funds (1989). 46 The underlying idea is to reduce the differences in the definition of own funds

^{77/780/}EEC: First Council Directive of 12 December 1977 on the coordination of the laws ... relating to ... the business of credit institutions, OJ L 322, 17.12.1977, p. 30.

⁴⁰ European Commission (1985) Completing the internal market, White Paper.

⁴¹ OJ L 169, 29.6.1987, p. 1.

^{42 89/646/}EEC: Second Council Directive of 15 December 1989 on the coordination of laws ... relating to ... the business of credit institutions ..., OJ L 386, 30.12.1989, p. 403.

^{89/299/}EEC: Council Directive of 17 April 1989 on the own funds of credit institutions, OJ L 124, 5.5.1989, p. 16.

^{86/635/}EEC: Council Directive of 8 December 1986 on the annual accounts of banks and other financial institutions, OJ L 371, 31.12.1986, p. 1.

^{89/117/}EEC: Council Directive of 13 February 1989 on the obligations of branches established in a Member State of credit and financial institutions having their head offices outside that Member State regarding the publication of annual accounting documents, OJ L 44, 16.2.1989, p. 40.

and thereby to improve the comparison of the prudential ratios of banks in the EEC. These technical Directives determine the elements which may be considered to form part of the own funds of a bank (Cooke ratio).

- (e) The Solvency Ratio Directive (1989), which increases the security of banks in relation to credit risks.⁴⁷
- (f) The Directive to ensure the protection of the customers of credit institutions.⁴⁸
- (g) The Consumer Credit Directive (1986).⁴⁹
- (h) The Recommendation on deposit protection (1990).⁵⁰
- (i) Finally, the Directive on cross-border payments (1995), ⁵¹ which is designed to increase the transparency of cross-border payments by requiring banks to provide their customers with specific information on the conditions for the execution of payment orders.

All these measures (and particularly the Second Directive) have had an impact on banks' strategic behaviour and the allocation process particularly of intangible resources, either directly, or indirectly via mergers and acquisitions and alliance networks.

Ahead lies the effective advent of Economic and Monetary Union (with the single currency), which will have a significant impact on the level of intangible investments (especially in information technology, telecommunications and the commercial function) of European banks.

Measures with indirect impact

These measures relate to specific components of intangible investment, especially in its externalized dimension (they will be dealt with in the section on externalized services): information logistics services, market research, on-line data, advertising, legal services, etc.

Overall impact of the single market

This is the effect resulting from the overall dynamics of the single market.

^{46 89/299/}EEC: Council Directive of 17 April 1989 on the own funds of credit institutions, OJ L 124, 5.5.1989, p. 16.

 ^{89/647/}EEC: Council Directive of 18 December 1989 on a solvency ratio for credit institutions, OJ L 386, 30.12.1989,
 p. 14.

^{48 92/121/}EEC: Council Directive of 21 December 1992 on the monitoring and control of large exposures of credit institutions, OJ L 29 5.2.1993, p. 1.

^{49 87/102/}EEC: Council Directive of 22 December 1986 for the approximation of the laws ... concerning consumer credit, OJ L 42, 12.2.1987, p. 48.

^{90/31/}EEC: Commission Recommendation of 14 February 1990 on the transparency of banking conditions relating to cross-border financial transactions, OJ L 67, 15.3.1990, p. 39.

^{97/5/}EC: Directive of the European Parliament and of the Council of 27 January 1997 on cross-border credit transfers, OJ L 43,14.2.1997, p. 25.

4.1.4. Overall impact of the single market on the banking sector

Banking study

At this level, the interim report by Economic Research Europe Ltd on the banking study (Report version 3) ⁵² included the following information for evaluation:

- (a) The single market programme, by reducing the obstacles to competition, has improved the conditions of competition between enterprises and has therefore assisted in establishing a level playing field.
- (b) The development of intra-Community trade cannot be attributed directly (or at least not unequivocally) to the single market programme, since the same trend can be observed in trade with non-Community countries (see above).
- (c) The development of foreign investments is attributable to the single market programme. The same is true of strategic alliances and mergers and acquisitions.
- (d) The results seem to be mitigated as regards economies of scale and scope.
- (e) At productivity and cost level, the study shows an improvement in the first indicator, especially for large banks, and a reduction in costs over the entire reference period for the majority of participants.
- (f) The strategic responses by enterprises appear, at first glance, to be linked as closely to developments in the world competitive environment of banks as to the single market programme. These responses may also be specific to each of the participants.

The degree of importance of this impact is naturally expressed in the level of allocation of resources to intangible investments.

Some of these points may be supplemented by the surveys conducted both among trade associations (DRI surveys) and financial institutions themselves (Eurostat Business Survey).

Survey of trade associations

The survey of trade associations (the European Banking Federation in particular) brings out the following main points:

- (a) Freedom of establishment and the freedom to provide services are essential attainments of the single market.
- (b) The measures relating to cross-border payments have an impact on the banking sector through an increase in costs, and especially administrative costs.
- (c) The increase in competition, stemming from the single market (the Second Banking Directive, the Own Funds Directive and the Solvency Directive), is part of a general movement towards liberalization of financial services.
- (d) Product development has gathered pace, with the resultant reduction in the product development cycle.
- (e) The single currency is considered as a number one priority by the banking sector.

For the final report see Economic Research Europe (1997) SMR II.3 *Credit institutions and banking*, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

Views of 171 European banks

The views of 171 European banks were gathered for the Eurostat Business Survey.⁵³ The information supplied essentially indicates:

- (a) The identification of a lack of positive impact at the level of harmonization of licensing authorization requirements, cross-border operations and capital movements.
- (b) Weakness of the impact on intra-Community trade (4% of replies positive).
- (c) A certain impact although weak on supply conditions is stressed for the standardization and development of products and services. The establishment of activities in other countries and cooperation with other banks are not considered to be decisive factors.
- (d) The mounting competitive pressure (both domestic and from other EU countries) is stressed, but by a minority, regarding both prices and quality of products.
- (e) All in all, and in comparison with other factors relating to the overall impact on their activities, the banks questioned recognize that the single market programme has met its objectives for the enterprises considered and their sectors (over 20%), in the elimination of the obstacles to Community banking trade (23% agreed, 63% expressed no opinion). These positive opinions are mostly counterbalanced by negative opinions, which do not identify a specific impact.

4.1.5. Impact of the single market on the level and exploitation of intangible investments by banks with networks

In a context of generalized competition, intangible investment appears an essential lever for competitiveness, at each key stage in the value-added chain (distribution, information logistics, credit, processing and transfer of funds, information, management and control systems), as well as in a transfunctional manner, especially through:

- (a) innovations in the organizational structures;
- (b) major investments in information processing and transmission services;
- (c) the development of new skills (especially as a result of merger and acquisition processes);
- (d) the development of new forms of distribution, including through direct marketing and direct banking;
- (e) investment in databanks and databases, especially on-line (financial services are the prime market for electronic information services);
- (f) substantial investments in advertising and communications with a view to enhancing the corporate image.

Critical investments

As suggested in Chapter 2 (Figure 2.3), the starting point of the analysis is consideration of the 'critical' level of importance of intangible investments for the sectors examined, before considering the possible impact of the single market programme on these investments.

See Appendix A for extracts. For a complete report see Eurostat (1997) SMR: Results of the business survey, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

Information available on the banking sector and the data acquired during the detailed survey show a differentiation in the levels of crucial importance for the functions of the value-added chain and the items of intangible investment.

In general, the data available show relative unanimity on the part of economic operators concerning the extremely critical nature (Figure 4.5), for establishment of a competitive advantage, of the following items (considered from upstream to downstream of the value chain):

- (a) the development of products and services;
- (b) improving the quality and productivity of fund movement systems and their operating tools;
- (c) improving the quality and productivity of risk management systems and their operating tools:
- (d) increasing the capacity and improving the quality of information logistics (networks, processing systems and services, transmission, storage of information);
- (e) distribution networks and channels;
- (f) human resources and the development of specific skills.

The other components of intangible investment, i.e. marketing research, communication, access to on-line data, consultancy services (strategy and management consultancy, legal advice, accounting advice) are also important.

This hierarchy must be examined in greater detail, especially considering the level of investment made (in so far as the available data allow this) and the impact of the single market programme on the main components of intangible investments identified as being critical.

Externalization factors and geographical basis of the sources of supply

The dynamics of externalization of intangible activities are considered in this study as being closely associated with the creation of the single market. These dynamics may be analysed at two levels: that of the scope of the sources of supply for the externalized activities (Figure 4.5) and that of the main criteria involved in the decision to procure externalized services (Figure 4.6).

Regarding the **sources of supply**, national, European and world supply bases co-exist. Information logistics services are procured internationally (at least for the banks which responded). The same is true, in part, of management consultancy services. On the other hand, as regards the intangible components of the commercialization, distribution and communication functions (marketing, communication, access to on-line data), specialized services are mainly supplied on a national basis. The same applies for legal and accounting services. In other words, these few components show the co-existence of both international and local approaches by the banks questioned to their methods of consumption of intangible investments.

Regarding the main criteria for the decision to purchase externalized activities, the quality of services, the differentiation of supply, and pricing appear among the main criteria mentioned, with the first two of these predominant. The other criteria suggested – standardization of supply, certification, establishment of suppliers on a European scale – are

criteria of secondary importance, although they are nevertheless important. The competence and capacity to offer services just in time are also criteria put forward by certain operators.

For the subject in hand, the fact that the price and quality of service are decisive criteria indicates the interest in forming a single market in intangible activities as an important contribution to the development of demand for intangible items in Europe.

Figure 4.5. The main items of intangible investment in the banking sector, their level of crucial importance and the basis of procurement of services for the banks interviewed

	Key functions and related fields of the value-added chain of banks		Level of crucial importance per field low < high					Main procurement basis for intangible items of the banks interviewed		
		1	2	3	4	5	Nat- ional	Euro- pean	World	
Produ	uct development						<u> </u>	1		
•	Development of products and services				•	••••				
Fund	movements									
•	Increasing the capacity of fund movement systems and tools			••		•••				
•	Improving the quality and productivity of fund movement systems and tools					••				
Risk :	and credit management									
•	Increasing the capacity of risk and credit management systems and tools			•	•	•••				
•	Improving the quality and productivity of risk and credit management systems and tools					••••				
Infor	mation logistics									
•	Increasing the capacity of information systems (software) and communication networks		•		••	••	•		•••	
•	Improving the quality and productivity of information systems and communication networks				••	•••			•••	
	nercialization, distribution and nunication				•					
•	Market research			•	•••	•	••••		•	
•	Distribution channels and networks		•	•		•••	••		•	
•	Advertising		•	•••	••	•	•••	••	•	
•	Corporate communication		•	••	••		••••			
•	Access to external electronic information (on-line data, etc.)		•		•••	•	••	•	•	
Huma	an resources, organization and skills									
•	Human resources training				•••	•	•••			
•	Organizational restructuring and development				••	••				
•	Development of specific skills			•	•	••				
Trans	sfunctional support services									
•	Management consultancy services			•••	••		••		•••	
•	Legal services (including mergers and acquisitions)			••	••	•	•••	•		
	Accounting services		•	•	•	•	•••	F .	1	

Figure 4.6. Factors for the externalization of intangible activities in banks, according to the institutions questioned

		Level of importance of the item low <						
			low <		> high			
		1	2	3	4	5		
,	Price			••••	••	•		
,	Differentiation of services	••			•••	•		
•	Quality of supply				•••	••••		
1	Standardization of supply		••	•	•			
,	Quality certification		••	••				
,	Implementation of suppliers' distribution networks	•	•	•	•			
•	Supply of services on a European scale			••	••			
Oth	er (suggested by the banks interviewed)							
•	To achieve required skills					•		
•	Delivery time	•						
	Financial capacity of supplier			•				

Impact of the single market programme on the level of intangible investment by economic operators

Level of investment

The interviews of some ten European bank managers (managing directors, strategy managers, functional managers) allow qualitative information to be supplied on the trend in the intangible investment made by these economic operators during the period after 1992 (1992–94). As emphasized above, the lack of availability of consolidated data on intangible investments (without excessive searches by the enterprises approached) must be stressed: of the ten banks taking part in the study, only one supplied data on the level of some of its investments and only five of them were able to give an indication of the level of development of their intangible investments over the reference period as a whole.

Figure 4.7. Level of growth in intangible investments of the banks interviewed

	Items of intangible investment	Expenditure		Level of growth for the main items over the period 1992–94			
			significant increase	stable	significant decrease		
Deve	elopment of products and services						
•	Development of products and services		•••	•			
	inical functions lit and risk management, fund movements)				.,,		
•	Increasing the capacity of technical functions systems and operating tools		•••	•			
•	Improving quality and productivity of technical functions systems and operating tools		••••				
Info	rmation logistics						
•	Information technology (software) systems and networks		•••	•			
•	Telecommunications networks		••	••			
Com	mercialization, distribution and communication						
•	Market research		•	•••			
•	Advertising		•	••	•		
•	Distribution systems and channels		••	•	•		
•	Corporate communication		•	•••			
•	Access to external electronic information (on-line data)		••	•	•		
Hun	nan resources, organization and skills						
•	Human resources training and development		•	•	•		
	Organizational restructuring and development		•••				
•	Development of specific competencies and capabilities		•••				
Trai	nsfunctional support services						
•	Management consultancy services		••	••			
•	Legal services (including for mergers and acquisitions)		•	•••			
•	Accounting services		•	•	•		
•	Other						
•	TOTAL ne reply per enterprise						

 $[\]bullet$ = one reply per enterprise

Source: RCS Conseil survey.

Figure 4.7 provides information on the efforts made by undertakings during the recent period. It clearly shows the fields in which banks stepped up their investments, i.e.

- (a) the development of products and services,
- (b) the strengthening of the technical functions (fund movements) especially to improve the quality of the systems,
- (c) information logistics,
- (d) organizational restructuring (BPR, etc.),
- (e) the development of specific skills.

As far as the other intangible investment items are concerned (distribution networks, communication, consultancy), some operators increased their investment while others essentially maintained a steady level. Of the enterprises replying, only one reduced its investment and only in a single item (advertising) but this expenditure nevertheless remains at a very high level, close to that for information systems.

European banks have therefore apparently made a considerable effort in the field of intangible investments, with the question remaining as to whether this level and the methods of exploiting these investments were influenced by the single market programme.

Assessing the impact – direct or indirect – of the single market programme on the level and exploitation of intangible investments by European banks is closely linked to that of the overall impact defined above (Chapter 2). The impact on intangible investments is assessed here with the operators questioned, firstly in relation to the overall level of investment made and then in relation to the specific intangible items, listed by function of the value-added chain.

Impact of the single market programme on the overall level of intangible investments

Some operators questioned stress that the single market has not had an impact on their level of intangible investment, or at least not directly. Two types of arguments are put forward here: either the commercial investments in Europe were made prior to the establishment of the single market programme, or their activities are not greatly affected by the Directives under this programme (wholesale banking activities as opposed to retail banking activities). However, this is a minority point of view among the ten groups questioned. The majority of them recognize that the single market has had a mainly indirect effect on their level of intangible investment which derives from the overall effort to redeploy resources. The single market programme is felt here as an accelerator of a general investment trend, especially in a European perspective.

In general, the focal point of the decision to undertake an intangible investment in a bank consists in a two-fold constraint being met: satisfying the needs of an increasingly volatile clientele and, in correlation, taking account of the 'conjectural interdependence', consubstantial to any market, especially if this is oligopolistic in structure. The point of view of a European cooperative bank illustrates the importance of this two-fold dimension:

...Our bank's intangible investments focus on our primary function as a central financial institution of the cooperative bank system. These activities centre on the provision of services and products to local cooperative banks. The custom of the local cooperative banks has a direct impact on our company's value-added chain. Hence, the intangible investments for all related functions of our

value-added chain further the improvement of service and support to local banks in order to strengthen their competitive position. Accordingly, the concept of all intangible investments for the development of products and services, technical functions, information logistics, etc. is based on the sustainment of the profitability of the bank's business activities as well as supplying top-quality services to our customers. Being the central credit institute of our domestic cooperative organisation, our primary guideline for action is to meet ever-changing and different needs and requirements of our most important clients, the cooperative banks.

In general, the operators questioned recognize that the single market programme has had a certain impact on the overall level of their intangible investments; moreover, they indicate some of the measures considered to be the most significant (Box 4.1).

Box 4.1.			ndirect impact on the overall level of ropean banking sector, according to the
Policy me	asures with a direct or indirect impact		Nature of the impact recorded
• Free mo	vement of capital	<u> </u>	increased foreign currency services
		_	improvement of risk management
		_	increase in financial risks and its impact on our risk management systems
		-	'the development of synergy between the different group units grows in significance'
			'easier access to foreign markets makes it more necessary to accelerate investments in alternative distribution channels (direct bank, call centres)'
• 'Bankin	g Directives	_	wider scope of financial services available for customers'
• 'Second	Banking Directive	_	keener competition'
• 'Deposi	t insurance	_	product development'
• 'EMU s	tage III (introduction of the Euro)	_	new payment services
		-	change in accounting and book-keeping'
• 'Single	currency	-	the introduction of the single currency will have a major impact on nearly all aspects of banking treasury management; products, adaptation of software, communication to customers, etc.'
• 'EU sub	sidies	-	change in payment flows, consultation with customers'
• 'Rules f	or issuing currency	-	improvement of security'
• 'The im	pact of all the Banking Directives is mostly	indir	ect. Difficult to assess.'
universa the sing	al bank. We want to have the possibility of le market. A large part of our acquisitions v ited to the acceleration of our European str	opera vere n	en a positive impact (Second Banking Directive). We are a ting around Europe. Our activities have developed outside hade before 1986. However, the single market approach has What is notably missing is harmonization of taxation and
C BCC C	onseil survey.		

For instance, the most marked impacts include:

(a) the development of synergies between operating units,

- (b) the improvement of risk management,
- (c) acceleration of investments in innovative distribution networks and channels,
- (d) improvement of banking security, etc.

The measures of the single market programme with a direct or indirect impact on the overall level of their intangible investments include: the Banking Directives, the free movement of capital and the prospective Economic and Monetary Union.

Impact of intangible investments on the functions of the value-added chain

Beyond the overall impact on the level of intangible investments, it is important to know whether the single market programme has had any impact – direct or indirect – on the level of intangible investments for the functions of the value-added chain and in particular for those which have been the subject of investments which are particularly critical to developing or maintaining a competitive advantage on the market. In this context, it is extremely difficult to link an individualized measure (a directive) to a specific intangible investment.

Product development

The surveys among banking institutions and their aforementioned trade associations in particular stressed the importance of the development of products – and the shortening of their life cycle – as one of the indirect effects of the single market programme. The detailed survey supplements the information already available by bringing out the importance of this competitive lever (Box 4.2). Among the impacts of an indirect nature stressed, particular mention is made of the contribution to the development of:

- (a) remote banking services,
- (b) insurance products,
- (c) new functions of credit cards,
- (d) cross-border payments.

Box 4.2. Types of impact – direct or indirect – of the single market programme on intangible investments for the products and services development function in the European banking sector

- 'telephone banking'
- 'investment funds'
- 'insurance'
- 'foreign currency credits'
- 'new domestic credit facilities'
- 'new functions of credit cards'
- 'cross-border payments (standardization of tariff rates)'
- 'cross-border line (computer program)'
- 'direct impact on asset management activities for the improvement of productivity'

Source: RCS Conseil survey.

Technical functions

At this level, one of the possible impacts concerns the externalization of technical assignments. In fact, in the financial services sector (banks with networks, insurance

undertakings), the technical functions and certain specific administrative tasks (processing of cheques) can be externalized, especially in the form of an operating management contract. More specifically, the following impacts were stressed:

- (a) the externalization of ATM networks;
- (b) the prospective significant impact of EMU.

Box 4.3. Types of impact – direct or indirect – of the single market programme on intangible investments for the technical functions in the European banking sector

Direct impact:

- 'with regard to credit and risk management, several procedures (e.g. RAPM) have been developed recently, but this is a world-wide phenomenon, independent of European integration'
- 'cross-border payments, cross-border line'
- 'direct influence on target system development for EMU funds movement. Indirect influence on risk management systems'

Indirect impact:

- 'regarding credit facilities, we were confronted with some changes in our domestic legislation, in order to meet the European requirements'
- 'extended coverage of risk management'
- · 'more precise risk management'
- 'outsourcing the ATM'
- 'automated payment machines'

Source: RCS Conseil survey.

Information logistics

Expenditure on information technology and telecommunications is a dominant component of intangible investments in financial services. Innovative capacity at this level is often associated with competencies and capabilities previously accumulated by enterprises.⁵⁴ Systems design and information networks are now a vital component of the competitive advantage.⁵⁵

At the operational level, there have been fundamental developments in all financial services as regards their use of information systems and networks, under the weight of competitive pressure, especially in a European context.

In fact, although the 1970s and 1980s were characterized by the predominance of proprietary solutions, specific developments and the scarcity of key technologies, as well as by the growth in budgets, the 1990s are characterized by the burden of budgetary constraints (the strong growth in software packages illustrates this point of view, see Figure 4.10), the emergence of standards and a vast range of applications software solutions. It is in this context that the

An hypothesis of Nelson, R.R. and Winter, S.G. (1992) An evolutionary theory of economic change, Belknap Press and Harvard University Press, tested by Pennings, J.M. and Harianto, F. (1992) 'The diffusion of technological innovation in the commercial banking industry', Strategic management journal, No 13, pp. 29–46.

Rowe, F. (1994) Des banques et des réseaux, productivité et avantages concurrentiels, ENSPTT/Economica.

standards and a vast range of applications software solutions. It is in this context that the European banks are entering a phase of restructuring and internal reorganization for which information technologies constitute an essential lever for competitiveness.

Developments at this level cannot be dissociated from the major strategic trends in banking, i.e. a strategy of focusing on customers, commercial activities and credit management, the rationalization of internal processes, and the restructuring of payment systems.⁵⁶

The banking sector: a vital component of the computer services market in Europe

The EITO figures indicate that the banking sector represents a vital component of the European information technology market, although the relative importance differs from country to country: 24% in Spain and less than 14% in Germany. The relatively small share in the latter market is attributable to the existence of a large manufacturing sector.

In terms of growth, demand for information technologies has risen more rapidly in the banking sector than in the information technologies markets as a whole, with a predominance of services over hardware.

In terms of technological development, 'networking' and telecommunications traditionally play a major role in banking systems, such as payment systems, inter-bank transactions (money market) and the capital markets. The organizational changes (BAR) and innovations at distribution level (direct banking) mean that the existence of efficient networks is a critical factor (especially local networks, client server architectures and ISDN). Compared to the USA, Europe is considered to be lagging behind in terms of ATM technology.⁵⁷

As regards methods of exploiting intangible investments, the externalization of data-processing activities is developing (see below: computer services). As Quinn stressed, following Steiner and Teixeira, the externalization of data-processing activities is a phenomenon which first developed in the USA and is in the process of becoming general practice in Europe. This concerns fund movement activities (debit and credit) in particular, which account for nearly 50% of the costs of banking services (Figure 4.11).

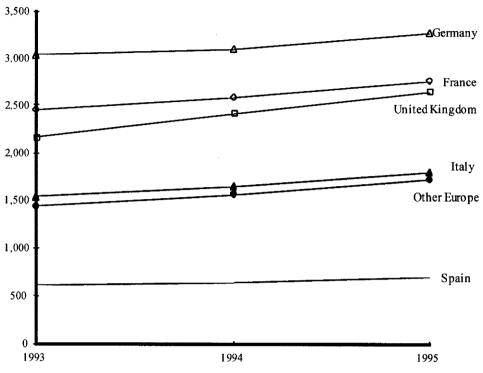
EITO (1996), European information technology observatory.

EITO (1996), European information technology observatory.

Quinn, J.B. (1992) Intelligent enterprise.

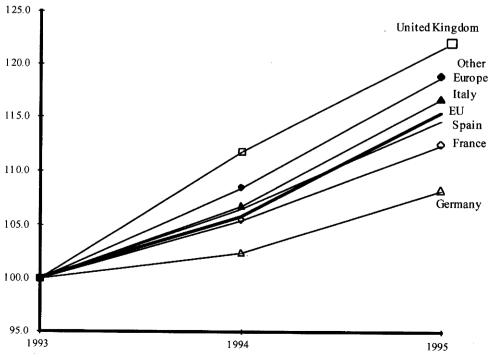
⁵⁹ Steiner, T. and Teixeira, D. (1990), Technology in Banking.

Figure 4.8. The main information technology markets in the EU banking sector, 1993–95 (ECU million)



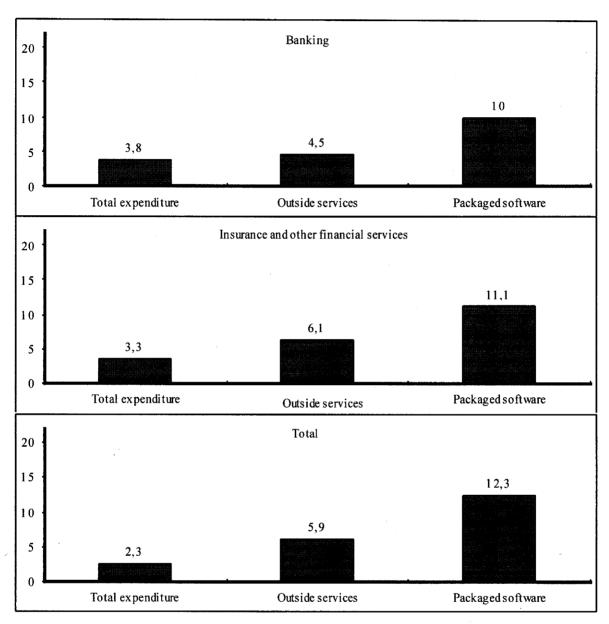
Source: EITO, European information technology observatory, 1996

Figure 4.9. The main information technology markets in the EU banking sector: growth, 1993-95 (Base 1993 = 100)



Source: EITO, European information technology observatory, 1996

Figure 4.10. Software and computing services: growth in European expenditure by market, 1992–93



Source: EITO.

An influence – direct or indirect – of the single market on intangible investments is generally recognized, especially with the prospect of Economic and Monetary Union

To what extent has the single market programme been able to influence banks' choice in the field of investments in information systems? Two types of influences to be considered in this are:

1. Indirect influences. Information systems constitute a vital component of banks' production tools. As a result, they are used for the strategy of these organizations, and especially its commercial dimension. This is a first level of influence of an indirect nature. For example, reorganization of distribution networks and product innovations are necessarily accompanied by a revision of information systems and networks both internally (internal networks) and externally (on-line services for customers).

A second influence to be emphasized, also of an indirect nature (since it is not specific to banking) concerns activities to standardize the information and telecommunications systems and networks at European level (ETSI, etc.).

A third dimension concerns the development of externalization phenomena in the context of the search for all banking activities to control the cost/performance ratio of their information systems.

Finally, European cooperation in the field of the openness of payment systems and, more specifically, the interviews of economic operators enabled the following indirect influences to be brought out:

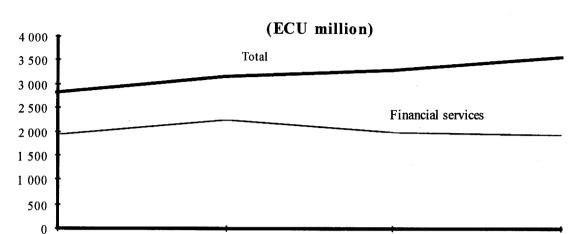
- (a) the need to coordinate the information systems of the parent companies with the subsidiaries and branches;
- (b) the development of integrated systems and procedures for processing information, especially in a cross-border perspective (case of the TIPANET system);
- (c) the implementation of information logistics dedicated to telephone banking services;
- (d) the implementation of inter-institution and inter-subsidiary data transfer systems.

Figure 4.11. Distribution of non-interest expenses in the value chain of the bank

Stages in the value chain	Marketing and distribution	Credit approval	Fund movement (debits and credits)	Customer service	Collections	Investments and trading	Information systems manage- ment
Percentage of non- interest expenses	19%	5%	49%	13%	8%	3%	3%

Source: Quinn, J.B. (1992) Intelligent enterprise.

1992

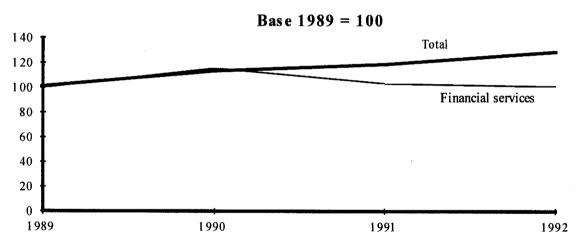


1990

Figure 4.12. The European electronic information market: financial services and total, 1989-92



1991



Source: Information Market Observatory

1989

- 2. **Direct influences**. At this level, the single market programme has influenced several areas directly:
- (a) Action relating to European banking standardization, especially in the CENB context (cards, automated payments, etc.), but also in that of the European Board for EDI or CEN (work on cards and safes);
- (b) The Directive on Cross-border Payments⁶⁰ has led to investments in information systems;
- (c) Finally, the prospect of the single currency implies substantial investments in rewriting software, redeployment of trading rooms and more generally redesign and migration of information and telecommunications systems and networks. These investments are

^{97/5/}EC: Directive of the European Parliament and of the Council of 27 January 1997 on cross-border credit transfers, OJ L 43, 14.2.1997, p 25.

Intangible investments

sizeable and the majority of banks have set up working groups dealing specifically with this question.

An illustration of this type of impact is indicated below (Box 4.4).

Box 4.4. Types of impact – direct or indirect – of the single market programme on intangible investments for the information logistics function, according to the banks interviewed

Direct impact

- 'We are with new realities in the EDP environment: mergers of software houses, national telecommunications monopolies are gradually disappearing'
- Renewal of public sector reporting is postponed or restricted to a minimum in anticipation of uniform European guidelines?

Indirect impact:

- 'We have to pay attention to the fact that the applications of the parent company must be able to communicate with those in our affiliates'
- 'The long-term planning of developments becomes more difficult and more risky'
- 'More integrated information processing
 - · telephone services
 - data transfer
 - possible indirect influence of EMU on banking procedures'
- · 'Our information logistics are mainly influenced by three factors:
 - our presence in the domestic market
 - our international implantation
 - · our clients' needs'
- 'With the...system, the cooperative banking system is keeping pace with the increasing volume of cross-border transactions. The electronic payments system links cooperative banks with international banking partners in eleven countries. It has made cross-border payments more straightforward, cheaper and quicker. The competitive advantage has allowed local banks to improve their market shares in the cross-border payments business.'
- 'The impact of the single market on our organization is mostly indirect, since our European presence was previous to the single market.'
- 'There are partnerships between European banks, notably for cross-border payments. The same partnerships do exist for communication networks (e.g. IBOS system).'

Source: RCS Conseil survey.

Commercialization, distribution and communication

It is at the level of these functions that the impact of the single market programme appears to be the most obvious (effect of the Second Banking Directive⁶¹ in particular). It is also at the level of this function that the main competitive battle between firms is waged (new production

^{89/646/}EEC: Second Council Directive of 15 December 1989 on the coordination of laws ... relating to ... the business of credit institutions ..., OJ L 386, 30.12.1989, p. 403.

methods, direct marketing, recourse to on-line information, marketing studies, advertising, etc.).

In the banking and insurance sectors, reorganization of these functions has gathered pace and occurs at various levels:

- (a) That of investments in new distribution methods (new distribution channels: direct marketing, telephone networks, etc.). The case of ABN Amro is mentioned here as an example of the changes in progress: this bank is to establish a central telephone sales centre to market relatively standard financial products (savings products, small-scale loans), especially to private individuals and SMEs. These same practices are in progress in the insurance sector (direct writing practices). In the United Kingdom, the Abbey National granted 4,000 property loans by telephone in 1993. In France, the savings bank set up a 'hot line' service in 1994 to secure customer loyalty. The development of new interfaces with customers, especially through access to new on-line services and to new means of payment, is a well-worn pathway towards change.
- (b) That of investments in advertising and marketing: marketing and advertising expenses now form an essential lever for detailed knowledge of customers and the enhancement of the corporate image and product quality.

Interviews conducted among European operators showed, for the majority of them, that the conditions of competition in the single market have contributed to accentuating these organizational technical innovations at the downstream functions level.

In parallel, at the technical level, the Solvency Ratio⁶³ and Own Funds⁶⁴ Directives, while forming part of the world dynamics of the search by financial institutions to control risks, contributed to banks paying greater attention to the quality of their customer portfolios, and at the same time exerted an indirect influence on investments in marketing, customer databases and 'scoring' of the existing portfolio.

As regards the communication function, image-building can be undertaken in a variety of ways in the context of the single market:

- (a) by purchasing existing institutions or networks in order to acquire a national identity among local customers. This is the strategy adopted by banks which have made acquisitions abroad, but retain the trade name of the absorbed bank;
- (b) by developing partnership networks the 'Europartenaire' network (Crédit Lyonnais/Commerzbank) to give the bank a European image in its home country;
- (c) by seeking a 'European' reputation on the part of the UK, German or French all-purpose or universal banks and the choice of more limited positioning in preferred market segments or niches (real estate, mergers and acquisitions, leasing, wealth management).

TNO Policy Research (1995) *Immaterial investments as an innovative factor*, Study for the European Commission, DG III, December.

 ^{89/647/}EEC: Council Directive of 18 December 1989 on a solvency ratio for credit institutions, OJ L 386, 30.12.1989,
 p. 14.

^{89/299/}EEC: Council Directive of 17 April 1989 on the own funds of credit institutions, OJ L 124, 5.5.1989, p. 16.

More specifically, for the European banks which stressed that the single market has had a direct or indirect impact on their intangible investments, this impact has been expressed in a certain number of developments (Box 4.5), including:

- (a) the search for more targeted marketing,
- (b) consolidation of the marketing strategy at group level,
- (c) innovations in distribution, especially through the development of direct banking.

Box 4.5. Types of impact – direct or indirect – of the single market programme on intangible investments for commercialization, distribution and communication functions in the European banking sector, according to the banks interviewed

- 'more precise market research'
- 'less spending on advertisements'
- 'centralization of market research on a group basis'
- 'use of our internal know-how for our affiliates'
- 'development of the "direct banking" concept by some players'

Source: RCS Conseil survey.

Training and development of specific skills

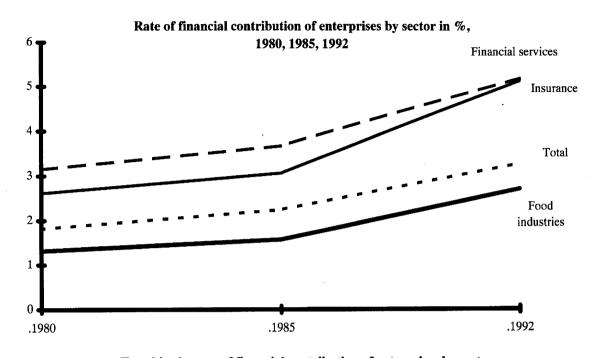
The development of human capabilities is an important factor for competitiveness, especially in services activities. Companies with the highest rates of profitability and customer loyalty are also those which pay the greatest attention to the recruitment and training of their personnel. Banks are no exception to this rule and invest heavily in training, especially as they have had to undergo major transformations in their structures and management methods.

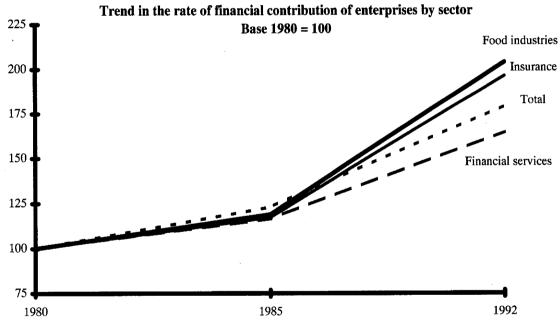
In terms of quantities, data available on the banking sector in three European countries (Germany, France and the Netherlands) show that this sector ranks first among the sectors investing in training. In France especially, the banking sector's rate of financial expenditure rose sharply throughout the period from 1985 to 1992 (Figures 4.13 to 4.15).

As stressed above, the development of specific skills is an essential lever for competitiveness of banking institutions in Europe and at international level. These institutions have made substantial investments in this over the past five years.

The dominant aspects of training are linked to the need for a fundamental change in internal mindsets with a view to increasing the attention paid to customers. Moreover, the considerable changes in information technologies are necessarily accompanied by investments in *ad hoc* training. Finally, the phenomenon of externalization of intangible activities, and, more generally, the reduced need for resources of the back-office type, call for an effort to redeploy 'surplus' human resources (and therefore for specific training) especially in commercial functions.

Figure 4.13. Trends in expenditure on training in France, 1980–92

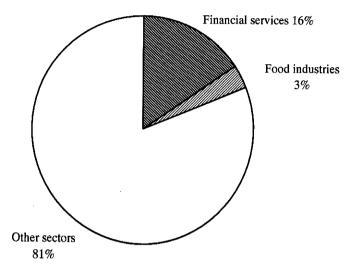




Source: Céreq

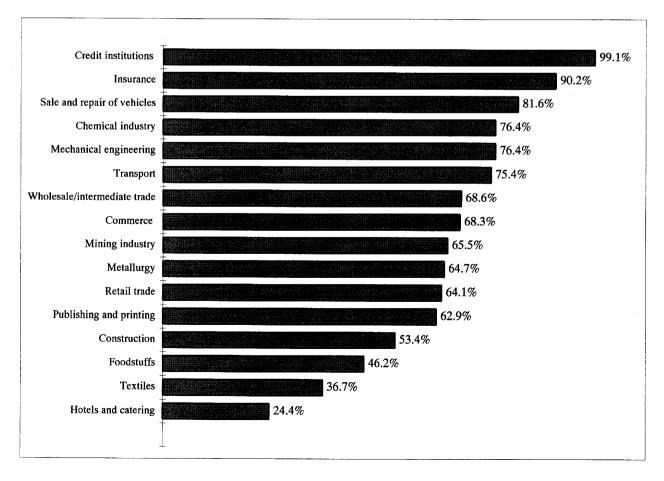
Figure 4.14 Expenditure on ongoing training in the Netherlands in 1993: principal user sectors

Total expenditure on ongoing training: HFL 3,515 million



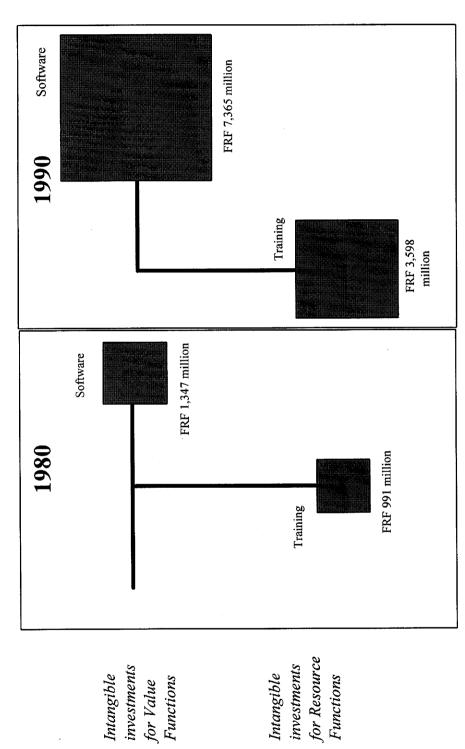
Source: Statistics Netherlands

Figure 4.15. The rate of offer of training courses by economic sector in Germany in 1994



Source: Statistisches Bundesamt, Wiesbaden

Intangible investments in the value added chain of banks in France, 1989 and 1990 (FRF million, current prices) **Figure 4.16.**



Source: INSEE
Analysis: RCS Conseil

At organizational level, all banking institutions apply the managerial practices considered to be the most efficient, at present. More specifically, under the pressure of the new organizational and management methods (BPR, ABC), flat structures are being introduced and there is a move towards activities-based organization.

The survey conducted among economic operators provides certain information on the extent to which the single market has influenced these structural trends.

In general, the dynamics of creating a single market for financial services contributed to strengthening the managerial skills of banks with networks, and especially those operating in multiple fields. Exchanges of skills between subsidiaries and more generally between partner banks are now current practice. In parallel, European *ad hoc* training programmes must also have had an impact, to an extent to be determined, on the investment made by European banks (however, such an impact did not emerge clearly from the survey).

More specifically, the majority of banks questioned showed a certain number of trends in their skills which have been directly or indirectly influenced by the single market programme (Box 4.6). These trends are expressed in particular by:

- (a) development of specific human resources training (which the available statistics confirm),
- (b) innovation in organizational structures,
- (c) the exchange of resources with partners.

Box 4.6. Types of impact – direct or indirect – of the single market programme on intangible investments for the function of human resources, training, organization, and development of specific skills, according to the banks interviewed

- 'more training in special skills'
- 'less training on overall knowledge'
- 'development of organizational structure'
- 'exchange of resources with some of our subsidiaries in Italy and Spain'
- 'exchange of executives with our partners in Germany'

Source: RCS Conseil survey.

Transfunctional services

Development of the transfunctional services considered here (legal services, accounting services and management consultancy) was influenced by the dynamics of creating a single market in banking, probably more by the 'anticipatory effect' (1985–92) than by the 'implementation effect' (after 1992). There are no detailed statistics on investments by economic sector over the period as a whole, but it is known that financial services in particular made a large contribution to the growth in demand for these services (1985–92): definition of a European strategy, preparation of merger and acquisition operations, conduct of post-merger operations, etc.

The survey carried out among operators confirms this point and shows the significance of these investments in the context of keener competition and higher risks (Box 4.7).

Box 4.7. Types of impact – direct or indirect – of the single market programme on intangible investments for the transfunctional support services within the banking sector, according to the banks interviewed

- · 'more consulting: avoiding risks, discovering new possibilities'
- 'legal services: changing practices in the EU'
- · 'accounting: new consolidation principles, changes in organization'
- · 'possible indirect influence on the legal services due to EMU implementation'

Source: RCS Conseil survey.

Box 4.8. Types of impact of the Europeanization of the banking sector's market strategies on intangible investments, according to the banks interviewed

- 'Cross-fertilization. For example, when developing new software, we must bear in mind that it may be used by our affiliates'
- 'Focus on capital allocation in the process of strategic planning'
- Definitely yes. There has been a reinforcement of our investment. Most of the effect is of an indirect nature.
- · 'Single currency: the conversion of software will cost us at least ECU 55 million'
- 'Preparation for the single currency will have an impact on:
 - · computer programming
 - accounting rules
 - · legal framework: continuation of agreements'
- 'New payment systems'
- 'Small impact. Not very large. Again, subsidiaries are organized autonomously. However, we believe in the Single Market philosophy. Without the single market, there would not be an expansion of mergers and acquisitions in the banking sector'
- · 'Certainly, but difficult to assess'
- Western Europe is the hub of the bank's international commercial operations. Our bank's international operations
 aim at the supply of a comprehensive range of services to its core customer base by focusing on commercial banking,
 by concentrating overseas operations on the major financial centres and by transferring most international securities
 trading to our head office...

Responding to the Europeanization of banking sector market strategies, our bank has established a Europe-wide network of representative offices. At the present time, the bank has...offices in Western European countries. The purpose of these representative offices is to support our domestic customers and to acquire further business. In addition, our institution has signed co-operation agreements in European finance and capital markets. These cooperation agreements make the external banking network available to our customers. When engaged in cross-border business, they may draw on this network.'

- In the period under review, our bank greatly improved its international operations in commercial business, treasury
 operations, securities trading, etc.
- · 'The impact is limited'
- 'No impact'
- 'No impact'

Source: RCS Conseil survey.

Impact of the single market programme on the exploitation of intangible investments in the banking sector

Although the single market programme may be considered to have had an impact of an essentially indirect nature on the level of intangible investments in the banking sector, without, for all that it being possible to quantify the level of this impact. The question which subsequently arises is whether the dynamics of the single market have had an influence on the exploitation of the intangible investments by sector. This is the second question asked in the terms of reference.

To reply to it, and on the basis of the questionnaire concerning the demand sectors (banking, insurance and food industries) two additional questions were examined with the economic operators questioned:

- (a) What is the impact on the firm's intangible investments in relation to the Europeanization of the banking sector's market strategies?
- (b) Has the implementation of the single market programme led to better use of intangible investments by the European banking sector (for instance, via better use of commercial information available from external sources or the development of specific competencies)?

The Europeanization of banks' strategies and the intangible investments of the operators

At this level, a differentiation is again to be found between banks asserting the existence of a real impact on their intangible investments and those considering that this impact was slight or non-existent.

Box 4.9. Has the implementation of the single market programme led to better use of intangible investments by the European banking sector? The point of view of the banks interviewed

- 'Yes'
- 'Yes: more use of European information (EACB)'
- Basically the liberalization of the trade in goods and services in Europe has made access easier to external sources of
 intangible investments. However, through the bank's offices in various financial centres, our bank has direct access
 for the procurement of intangible items.

On the other hand, through the Single Market, competition in the European banking sector has intensified. This competition has made the implementation of intangible investments a matter of urgency'

- 'Yes. However, we think that the same investment would have been made without the single market, but probably not
 with the same schedule'
- 'We do have a European perspective. We have a European distribution network. This is not directly connected to the single market. The situation will change substantially with the single currency'
- 'Not really'
- · 'Not at present'
- · 'Not for the moment'

Source: RCS Conseil survey.

The positive impacts felt include, in particular:

- (a) the development of cross-fertilization between units of a group (for example, for software development);
- (b) focus on capital (own funds) allocation in the strategic planning process; and
- (c) in terms of dynamics, the restructuring of information systems as a probable result of the introduction of the single currency.

Impact of the single market programme on the exploitation of intangible investments by economic operators

In reply to this question, the banks interviewed recognized that the single market programme has had an impact on the exploitation of intangible investments by European banks. Some of them stressed the fact that this impact related above all to the speed at which these investments are implemented. Others, as for the previous questions, stressed how slight this impact has been, and even that it did not exist.

The prospect of EMU and intangible investments in the banking sector

Economic operators interviewed were unanimous about the importance of the impact of EMU on their intangible investments and in particular on its 'information systems' component. This impact is anticipated as follows:

- (a) the development of new services in a homogeneous monetary framework,
- (b) the migration of data-processing systems (reprogramming of software, etc.),
- (c) the review of payment systems and mechanisms,
- (d) the training of human resources in what is at stake and the details of the new context,
- (e) the possibility of real implementation of the freedom to provide services.

Box 4.10. Types of impact expected from introducing the single currency on the European banking sector, according to banks interviewed

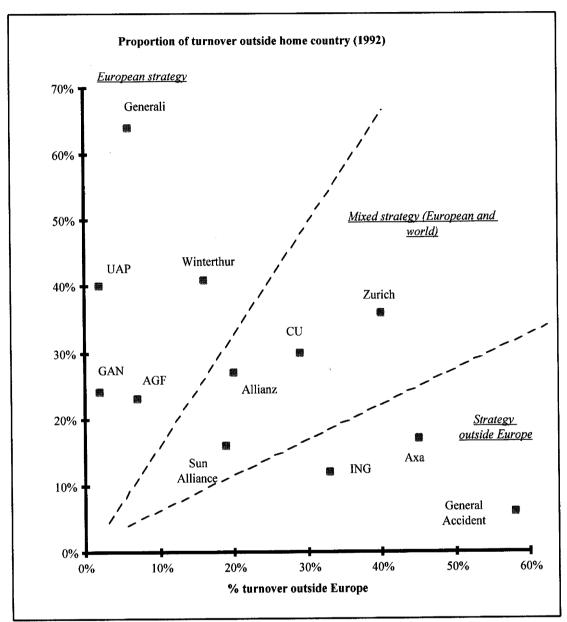
- 'More investment in computer programming:
 - accounting and supervision
 - payment system
 - new services for customers operating Europe-wide'
- 'Training related to changeover'
- 'The prevailing impact of the single market in the period from 1996 to 2000 will be the preparation for Economic and Monetary Union. The single currency concerns all business areas. At present, our bank is preparing the ground by providing its customers with up-to-date information about currency conversion scenarios. The development of new financial products, the restructuring of organizational competences and capabilities, staff training, adjustment of the structures all generate expenditures which restrict the bank's possibilities of making investments, including in the field of intangible investments (the cost of implementing the single currency for our bank will amount to roughly ECU 80 million).

Beyond the single currency item, (our institution) is continuously checking the needs (services and products) of its clientele for cross-border business and developing and enhancing the respective competences. The bank is also expanding its co-operation network with institutions in Europe.'

- 'About 50% of present estimates (in terms of cost and manpower) will be spent on software system adequacy, the remaining part on external communication and training'
- 'Software change, training of staff and communications to customers'
- 'The introduction of the Euro will definitely have an impact regarding resource allocation (review of technical organization). However, most of the investment will in any case have to be made (around ECU 85 million for adaptation of EDP systems)'
- 'Four factors must be underlined:
 - · establishing new ways of developing banking services (e.g. remote banking services for new customers)
 - the Europeanization of the bank will be intensive
 - an interesting step: facilitating the selling of banking services (penetration of other banking markets will be important)
 - information: the back-office can be simplified as it will be easier to organize payments (improvement in information systems)'
- 'Our company is preparing an assessment of the impact of the Euro on our "systems". The cost should be between ECU 180 million and ECU 380 million, of which ECU 45 million will be dedicated to software'
- 'Implementation of the single currency will facilitate the implementation of the freedom to provide services'

Source: RCS Conseil survey.

Figure 4.17. The international strategies of the major European insurance undertakings



Source: McCarron, 'L'assurance: caractéristiques du secteur, défis, réponses stratégiques possibles', Revue de l'AFPLANE, No 13, April 1994

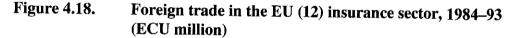
4.2. Insurance

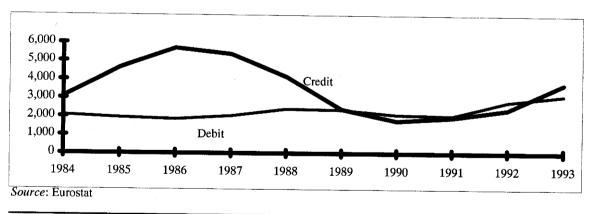
The information which has just been presented for banking may be reproduced, more or less, for the insurance sector.

4.2.1. Economic and strategic stakes

- (a) The insurance sector is facing the same constraints as the banking sector, particularly those relating to lower margins coupled with higher risks.
- (b) The development of the mergers and acquisitions process.
- (c) The development of the 'bancassurance' concept.
- (d) The need to manage the integration of global strategies and local strategies (micromarketing).
- (e) The problem of the choice of profitable markets.
- (f) The existence of substitutes with the policyholders themselves (self-insurance).
- (g) Strong negotiating power of major customers.
- (h) The need to bring out real synergies in mergers and acquisitions.
- (i) The need to define and implement an efficient inter-cultural management (especially in the European context).

Naturally, some of these constraints need to be differentiated by type of enterprise and especially according to their level of diversification and internationalization (Figure 4.17). Generali or Prudential have long been internationalized, whilst at the same time there are a large number of domestic companies. In this context, the geographical strategy is closely linked to the history of the company, its size and its fields of competence.





4.2.2. Development of trade and investments within the EU

European external trade is characterized by a steep decline in the 'credit' item from 1986 until 1990, a year in which an upturn emerges (Figure 4.18). Internal trade, on the other hand, is characterized by a certain regularity, the reason for the differences between debit and credit lying in the reporting disparities between countries (Figure 4.19).

As regards foreign and cross-border investments, the available data indicate a relative similarity between the two investment flows between countries. There was strong growth in both types of investment between 1986 and 1989 and even in 1990 for domestic investment (Figures 4.20 and 4.21).

Figure 4.19. Internal trade in the EU (12) insurance sector, 1984–93 (ECU million)

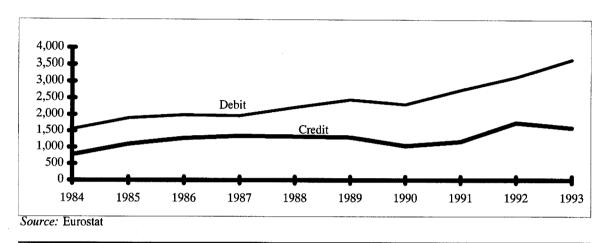
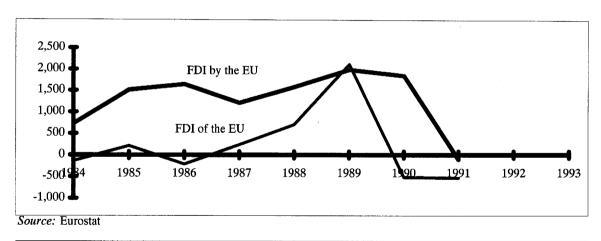


Figure 4.20. FDI in the EU (12) insurance sector, 1984–93 (ECU million)



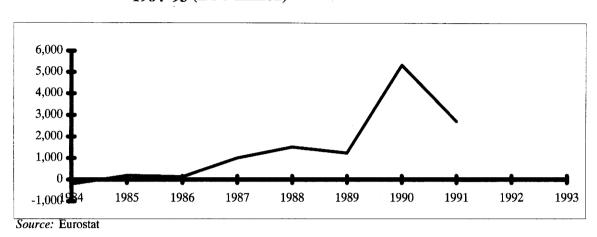


Figure 4.21. Cross-border investment in the EU (12) insurance sector, 1984–93 (ECU million)

4.2.3. Impact of the single market on the level and exploitation of intangible investments by insurance undertakings

Overall impact of the single market on the insurance sector

From the limited information available, the salient features are the development of cooperation agreements, especially in distribution, as probable effects of the single market programme. In parallel, the representative trade associations (EIC) and the Eurostat Business Survey provide interesting data regarding the overall impact of the single market programme on the sector.

According to the EIC, quoted in the DRI survey, the structure of the insurance market in Europe was greatly influenced by the single market on account of the freedom of establishment and the free movement of capital authorized from that time on. Since 1986, as in the banking sector, there were substantial concentration movements in the insurance sector. Insurers in fact integrated the single market dynamics into their strategy.

At sectoral level, European measures on the environment and the car industry (intellectual property for the second mounting of parts) potentially have a strong impact on the sector.

157 insurance undertakings were questioned for the Eurostat Business Survey⁶⁵ to obtain their points of view. The nature and structure of the replies given are fairly close to those of the banking sector, especially as regards the recognition and harmonization of licences, the liberalization of capital movements and the conditions of production. Particular emphasis should be placed on the low impact, at first glance, on the productivity of firms (only 9% of the firms questioned identify a positive impact in this respect).

See Appendix A for extracts. For a complete report see Eurostat (1997) SMR: Results of the business survey, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

Some replies throw indirect light on the question of intangible investments and the single market. This is particularly the case for the questions on the impact of the single market on the development of products or services, marketing and distribution, sourcing, especially the purchase of business services, and investment, acquisition or cooperation with other insurance undertakings.

The following results should be noted in particular regarding the **products and services** dimension:

- (a) 20% of the undertakings questioned consider the impact of the single market programme to be quite important or very important on the standardization of their products; 22% of them consider that this impact was important to very important for better specialization in their services;
- (b) this proportion is in the order of 30% for the development of new products or services.

As regards the **marketing and distribution** dimension, the impact recorded appears to be less in terms of the cross-border provision of services, the establishment of distribution networks outside the home country and cross-border advertising (only 10% of the undertakings questioned declare the impact to be important).

The third dimension to consider is **sourcing of business services**. The impact of the single market programme on the level of purchase of services from other EU countries is considered to be low (11% of the firms replying consider it to be quite important to very important). This tends to confirm the essentially domestic nature of business services markets in Europe (already stressed) for the banking sector, a trend which will crop up again regarding certain items of intangible investment in the insurance sector.

Finally, the fourth dimension to be considered: **cooperation, participation and direct investment**. Here too, the 'insurance' data of the Eurostat survey are similar to those for banking, with relatively low rates of impact.

Competitive pressure is essentially European, with two components: firstly domestic, secondly from other European countries. The latter is greater for the 'number of competitors' criterion than for the 'price' or 'quality and choice of services' criterion.

The interim report of the sectoral study conducted by CEGOS in the context of the assessment of the single market programme also indicates the development of inter-firm cooperation for insurance products, especially on the basis of the analysis of case studies of five undertakings (UAP, Victoria, MAPFRE, FORTIS and CECAR).⁶⁶

For the final report see CEGOS (1998) SMR II.1 Insurance, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

Table 4.2. The main items of intangible investment in the insurance sector

Development of products and services

Development of new products and services

Production

- Increasing the capacity of production systems and tools
- Improving the quality and productivity of production systems and tools

Claims management

- Increasing the capacity of claims management systems and tools
- Improving the quality and productivity of claims management systems and tools

Collection of premiums

- Increasing the capacity of collection systems and tools
- Improving the quality and productivity of collection systems and tools

Information logistics (Information technology and telecommunications networks and related services)

- Increasing the capacity of information systems (software) and communication networks
- Improving the quality and productivity of software and communication networks

Commercialization, distribution and communication

- Market research
- Advertising
- Corporate communication (for image-building)
- Access to electronic information (on-line data, etc.)
- Distribution systems and channels
- Improving quality and productivity of commercialization, distribution and communication channels and systems (customer scoring, databases, etc.)

Human resources, organization, competencies and capabilities

- Human resources training and development
- Organizational restructuring and development
- Development of specific competencies and capabilities

Transfunctional support services

- Consultancy services
- Legal services
- Accounting services

Source: RCS Conseil.

The measures to be considered

The measures with direct impact

These measures relate to specific components of intangible investment, especially regarding its externalized dimension (they will be dealt with in the section on externalized services): information logistics services, market research, on-line information, advertising, legal services, etc.

The measures with indirect impact

- (a) The First Directives on the right of establishment. They comprise the 1973 Directive on non-life insurance 67 and the 1979 Directive on life assurance. 68 These Directives make access to insurance business, for all undertakings belonging to the Community, subject to official authorization issued according to a standardized procedure.
- (b) The Second Directives on the two-speed freedom to provide services. These are the Directive of 1988 on non-life insurance (motor insurance) for large risks and small risks⁶⁹ and the Life Assurance Directive of 1990.⁷⁰ These Directives introduce the freedom to provide services, i.e. the option for an insurance undertaking to operate directly and using any means (brokers, correspondence, etc.) in all Community Member States. However, this freedom to provide services is achieved in full only as regards the cover of large risks in the non-life insurance sector and business on the initiative of the policyholder in the life assurance sector. For small risks (non-life) and business on the undertaking's initiative (life), it remains subject to obtaining authorization from the State where the risk lies.
- (c) The Third Directives: the European passport. These are Directives adopted in 1992 on non-life insurance⁷¹ and life assurance.⁷² These Directives introduce complete freedom to provide services for the Community Member States, on the understanding, moreover, that non-EEC countries of the EEA are covered by the arrangements introduced by the Second Directives. Above all, they introduce freedom of establishment: the establishment of a branch in another EEC country, for a Community insurance undertaking, now only requires the *ad hoc* authorization of its home country.
- (d) In the future: the single currency.

^{67 73/239/}EEC: First Council Directive of 24 July 1973 on the coordination of laws ... relating to ... the business of direct insurance other than life assurance, OJ L 228, 16.8.1973, p. 3.

^{68 79/267/}EEC: First Council Directive of 5 March 1979 on the coordination of laws ... relating to ... the business of direct life assurance, OJ L 63, 13.3.1979, p. 1.

^{88/357/}EEC: Second Council Directive of 22 June 1988 on the coordination of laws ... relating to ... the business of direct insurance other than life assurance and laying down provisions to facilitate the effective exercise of freedom to provide services ..., OJ L 172, 4.7.1988, p. 1.

^{90/619/}EEC: Council Directive of 8 November 1988 on the coordination of laws ... relating to direct life assurance, laying down provisions to facilitate the effective exercise of freedom to provide services ..., OJ L 330, 29.11.1990, p. 50.

Council Directive 92/49/EEC of 18 June 1992 on the coordination of laws ... relating to ... direct insurance other than life assurance ... (Third Non-life Insurance Directive), OJ L 228, 11.8.1992, p. 1.

Council Directive 92/96/EEC of 10 November 1992 on the coordination of laws ... relating to ... direct life assurance ... (Third Life Assurance Directive), OJ L 360, 9.12.1992, p. 1.

The measures with overall impact: the single market dynamics

At the time of opening up the single market, many insurance undertakings in Europe had not adopted a real European strategy. Since the entry into force of the Community provisions introducing the freedom to provide services by insurance undertakings from their home market, these companies came to redeploy their strategic capacities, in terms of specialization, internationalization, alliances, etc.

Whatever the strategy adopted, it requires substantial investments in intangible resources, both for the conquest of market shares and to maintain the positions held. The enlargement of the scope of competition allows the development of new skills and the strengthening of the reactive capacity of the undertakings.

As the data available for France show, the intangible investments of insurance undertakings have risen significantly in the past ten years in information systems, access to databases and increasing the skills of human resources.

Intangible investments as a lever for competitiveness

Like banks with networks, the insurance sector invests heavily in intangible resources (software, on-line data, for example). The aim of these investments is to solve the main problems arising in general and at the level of each of the key functions of the value-added chain. This refers in particular to the need:

- (a) to develop time-based management,
- (b) to choose quality risks,
- (c) to dispose of efficient distribution networks.

The critical functions to be considered are naturally those linked to the importance of the stakes. Particular note will be taken of the importance of developing skills and know-how in reinsurance techniques, financial management, information technology (for example, electronic document management) and distribution networks. But here too, the major trends are extremely similar to those observed in the banking sector. The intangible investment items naturally have to be adapted to the present sector (especially as regards the technical production functions) (Figure 4.22).

The level of crucial importance of intangible investments in the insurance sector

The level of crucial importance of intangible investments, as it emerges from the interviews conducted at European level for the insurance sector, is similar on the whole to that of the banking sector. The approach developed here focuses on the value-added chain and its main functions.

Figure 4.22. The level of crucial importance of intangible investments in the insurance sector and their procurement basis in Europe, according to the undertakings interviewed

	Key functions and related fields of intangible investments		el of cı	ucial in field	portanc	e per	Main p	rocureme of banks	
		low <> high					interviewed for intangib items		
		1	2	3	4	5	Nat- ional	Euro- pean	Worl
Prod	uct development							<u> </u>	L
•	Development of products and services					•••			
Prod	uction								
•	Increasing the capacity of production systems and tools	•			•••	•			
•	Improving the quality of production systems and tools				•	•••			
Clair	ns management								***********
•	Increasing the capacity of claims management systems	•		•	•	••			
•	Improving the quality and productivity of claims management systems			•	•	•	-		
Colle	ection of premiums								
•	Increasing the capacity of premiums collection systems and tools	•			••	•••			
•	Increasing the quality and productivity of premiums collection systems				•	••			
Info	mation logistics								
•	Increasing the capacity of information systems (software) and communication networks				••	••	•	•	•••
•	Improving the quality and productivity of information systems and communication networks					•••			•••
Com	mercialization, distribution and communication								
•	Market research				•••	••	•••	•	•
•	Distribution channels and networks					•	•••	•	•
•	Advertising			٠	••••	•	••	••	•
•	Corporate communication (for image-building)			••	•	•••	••	•	•
•	Access to electronic information sources (on-line data, etc.)			•	•••	••	••	•	••
Hum	an resources, organization and skills								
•	Human resources training				•	•••	•••	•	•
•	Organizational restructuring and development					••••	_		
•	Development of specific skills					••••			
Frat	sfunctional support services								
•	Management consultancy services				••••		••	•	••
•	Legal services (including mergers and acquisitions)				•••	••	•	•••	•
•	Accounting services		•		•••••		•	••	••

For instance, investments relating to the following appear – unanimously – to be clearly critical for the competitiveness of insurance undertakings:

- (a) the development of products and services,
- (b) improving the quality and productivity of the systems and tools of the technical functions (production, claims management, collection of premiums),
- (c) improving the quality of information logistics tools and systems,
- (d) distribution networks and channels,
- (e) training human resources, developing specific skills and organizational restructuring.

The other investments are also important in the eyes of the firms interviewed, but there is less unanimity. This refers in particular to investments in increasing capacity (for the technical functions and information logistics), advertising, access to databases and consultancy (for example, accounting advice).

Briefly, it can be said that this first – relative – hierarchy of intangible investments refers back to the main strategic problems of the sector. It is therefore important to know whether the single market has had or may have a direct or indirect impact on these investments.

Externalization criteria and geographical basis of the sources of supply

As for the banking sector, the dynamics of externalization of intangible activities are analysed at two levels: that of the geographical basis of supply and that of the criteria for the procurement of externalized activities.

Figure 4.23. The main criteria for outsourcing intangible investments in the insurance sector according to the undertakings interviewed

		low	Level	high		
		1	2	3	4	5
•	Price			••••	•	•
•	Differentiation of services			••	•••	
•	Quality of supply				••	•••
•	Standardization of supply			•••		•
•	Quality certification			•••		•
•	Implementation of suppliers' distribution networks	•			••	•
•	Supply of services on a European scale		•	•	••	
Oth	er (suggested by the undertakings interviewed)					•
•	Measurable or demonstrable positive impact					•
•	Specialist competence (best in the class)					•

Regarding the first aspect, as in the case of the banks, national, European and world sources of supply co-exist for the purchases considered, although the last two are more in evidence. This would appear to show greater internationalization of the services markets for the insurance undertakings considered, compared to their banking counterparts questioned. Moreover, it appears clearly that, as in the banking sector, the information logistics function benefits from an acquisition process which is highly internationalized. The scale of the investments in question – which account for the lion's share of intangible investments in the sector – and the identity of the undertakings considered (internationalized firms for the most part) explain this differentiation.

As regards the **decision-making criteria**, the hierarchy emerging from the survey shows, once again, the predominance of factors of quality and differentiation of services, above the price criterion. Standardization and quality certification appear to be criteria of secondary importance (Figure 4.23).

Finally, the existence of a European network for suppliers of services is seen in different ways by the economic operators interviewed: some consider it to be important, whereas for others it is a minor factor. This should be compared with the domestic nature of the activities of the undertakings themselves and the specific requirements of the various markets in terms of services (apart from computer services and telecommunications).

Impact of the single market on the level and exploitation of intangible investments

Level of investment

As in the banking sector, the interviews conducted among some ten European insurance undertakings provide information on the trend in intangible investments in the sector over the period from 1992 to 1994. Figure 4.24 shows the views of managers concerning growth in their investments over the period in qualitative terms. Of the ten undertakings covered by the survey, only four were able to provide an overall view of the trend in their investment over the period considered. None of them has easily accessible figures for the purposes of the study, notwithstanding data confidentiality considerations.

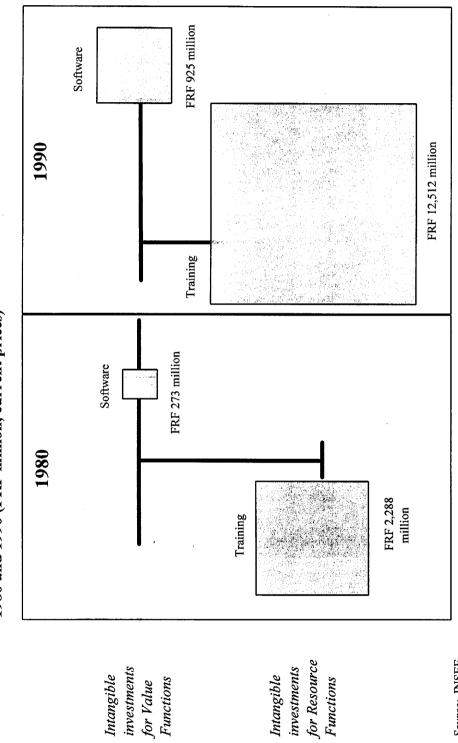
It emerges from this information that a distinction must be drawn between items of intangible investment where significant growth has been recorded and those for which the undertakings have sustained their level of investment. It should be noted straight away that there was no reduction in investment in any item.

Figure 4.24. Level of growth of intangible investments according to the insurance undertakings interviewed

	Items of intangible investment	Expenses		wth for the main items er the period 1992–94		
			significant increase	stable	significant decrease	
Dev	elopment of products and services					
•	Development of products and services		•••			
	nnical functions duction, claims management, collection of premiums)					
•	Increasing the capacity of technical functions systems		••	•		
•	Improving quality and productivity of technical functions		•	••		
Info	rmation logistics					
•	Information (software) systems and communication networks		••	•		
•	Telecommunications networks expenditures		•••			
Con	nmercialization, distribution and communication					
•	Market research		•	••		
•	Advertising		•	••		
•	Corporate communication (for image-building)		•	••		
•	Access to electronic information (databases, etc.)		•	••		
Hun	nan resources, organization and skills					
•	Human resources training and development			•••		
•	Organizational restructuring and development		•	•		
•	Development of specific skills		• .	••		
Tra	nsfunctional support services					
•	Management consultancy services			•••		
•	Legal services (including for mergers and acquisitions)		•	••		
•	Accounting services			•••		
•	TOTAL					

Source: RCS Conseil survey.

Intangible investments in the value-added chain of the insurance sector in France 1980 and 1990 (FRF million, current prices) **Figure 4.25.**



Source: INSEE
Analysis: RCS Conseil

The fields with the strongest growth rate are the following:

- (a) product development,
- (b) the increase in capacity and improvement in quality of information logistics,
- (c) the improvement in quality of the technical functions.

Among the fields where investment was sustained, the following should be emphasized:

- (a) intangible investment items relating to the commercial and distribution functions (marketing, advertising, etc.),
- (b) the training and development of human resources,
- (c) management consultancy,
- (d) accounting services.

Impact of the single market programme on the overall level of intangible investments in the insurance sector

Responses given by the company managers interviewed concerning the assessment of the impact – direct or indirect – of the single market programme on the overall level of their intangible investments are interesting. Firstly, they show that, on the whole, a real impact is felt, even though the frontier between direct and indirect impact is not obvious. Secondly, the managers interviewed immediately locate the type of impact not only at the level of overall strategy, but even more importantly at the level of the functions of the value-added chain and its intangible components. Hence the replies given here sometimes duplicate those concerning the functional impact. At this level, and in general, for the undertakings taking part in the study, all the Directives on insurance are considered as having had an impact on the level of intangible investment. This impact is essentially of an indirect nature.

As regards the types of impact, among the **measures with direct effect**, mention should be made of all the insurance Directives and more specifically of the Directive on the liberalization of motor insurance,⁷³ the regulations on the transparency of conditions and the free movement of labour.

Among the direct impacts, the following should be stressed:

- (a) acceleration of the trend towards mergers and acquisitions and therefore in the related intangible investments (pre-assessment, post-assessment, integration of partner firms, etc.);
- (b) development of new products and the commitment of associated intangible investments (creation of databases, search for information on risks, review of rating systems, etc.);
- (c) shortening of the product life cycle;
- (d) diversification of distribution channels;

^{88/357/}EEC: Second Council Directive of 22 June 1988 on the coordination of laws ... relating to ... the business of direct insurance other than life assurance and laying down provisions to facilitate the effective exercise of freedom to provide services ..., OJ L 172, 4.7.1988, p. 1.

Box 4.11.		pact of the single market programme on the overall level of nvestments in the insurance sector, according to the gs interviewed				
Policy me	asures with a direct impact	Nature of the impact				
• 'All the insura	ance Directives	Mergers and acquisitions have been influenced by single market dynamics. Those companies lagging behind had to accelerate their rate of change. Enormous impact on our software systems. We are still expecting harmonization of the legal framework regarding insurance distribution in all EU countries (solvency, reporting). Development of products with a shorter life cycle, development of European call centres. The freedom to provide services is used for developing life assurance from Luxembourg' • 'makes it easier to expand' • 'a new framework for insurers (although) tax systems are still blocking the development				
• 'Liberalization 88/357/EEC')	n of Motor Insurance (Directive	business' Development of new products: collection of additional information on risks creation of technical databases				
		 implementation of analysis procedures review of ratings review of contract conditions diversification of sales channels (Group)* 				
 'Unfair claus 93/13/EEC) 	ses in insurance contracts (Directive	Review of contract conditions'				
• 'Transparency	y regulations	Improvement in the sale of services: • human resources training and awareness campaign • improvement in information support for sales'				
'Free movem Palicy mass	ent of labour sures with an indirect impact	increase in mobility at a low per capita cost*				
		Growth in the networking operations and virtual corporation approaches'				
	jurisdiction rights	'mindset of customers cross-border business'				
• 'Liberalizatio 88/357/EEC)	n of Motor Insurance (Directive	Improvement in the quality and productivity of technical and administrative systems review of computer system procedures reorganization of internal and external procedures for risk assessment, claims settlement accounting human resources training'				
	sures provide services	Growth into one single market allows further expansion (and competition) will in the long term influence the level and allocation of investments. This will depen the progress in realizing a single market'				
	ent of services on the single market, especially those	Presence in most countries'				
• the free	dom to provide services 1 of establishment	 Setting up of an international division Creation of a network of insurance advisers in different countries to detect investing opportunities Creation with European mutual insurers of a network for technical and commercial exchange and cooperation Conducting market research outside our domestic market 				

Search and evaluation of investment / acquisition opportunities'

to and implementation of the single currency'

Setting up a working group to examine financial investment opportunities during the run-up

Source: RCS Conseil survey.

'Creation of the single currency

- (e) the increase in human resources training, especially in the field of customer services;
- (f) the impact on the computer system.

The measures considered as having an **indirect effect** include some of the single market measures, especially those relating to the freedom to provide services and the prospective introduction of the single currency.

The indirect impacts stressed include:

- (a) the formation of company networks (mutual sector),
- (b) the creation of international divisions,
- (c) conducting market research outside national markets,
- (d) the appraisal of acquisition opportunities,
- (e) the revision of information systems,
- (f) the trend towards the use of virtual corporations (thanks in particular to information technologies).

Impact on the functions of the value-added chain

The responses made by the managers of the undertakings interviewed to the question of whether the single market programme has had an impact on the level of intangible investment in the insurance sector have already shown some of the aspects relating to the content of this impact on the value-added chain in this sector. Some of these impacts identified are therefore examined in more detail.

Development of products and services

It should first be noted that the development of products and services is an extremely critical intangible investment for the insurance sector, which, like the banking sector, is strongly innovative in products, under the pressure of competition, especially in life assurance. In correlation, the sector is also developing new distribution networks (especially in telemarketing). These are two major functional levels affected by the impact of the single market.

More specifically, the interviews conducted among the managers of insurance undertakings enabled the following types of impact of the single market programme to be identified:

- (a) investment with a view to offering products with a shorter and shorter life cycle on the market,
- (b) a start in developing products with a view to a broader market,
- (c) an impact on product renewal.

Box 4.12. Types of impact of the single market programme on the development of products and services in the insurance sector, according to the undertakings interviewed

- 'The single market programme has accelerated the reduction of product life cycles. Insurance products are more and
 more standardized in a cross-border perspective. However, we should notice the persistence of important differences
 in terms of conditions and taxation among EU Member States'
- 'European scope for competition between products'
- 'A start has been made to develop products for cross-border distribution'
- 'Renewal and development of products and services, market leadership'

Source: RCS Conseil survey.

Technical functions

On account of the disruption in the conditions of competition in the sector, technical functions (production, insurance, collection of premiums) have also undergone an important transition in terms of structures, systems and management methods implemented. Even functions of the back office type are seen by the managers interviewed as having been influenced by the single market programme as well, especially by the following developments:

- (a) adaptation of the information technologies implemented;
- (b) organizational and functional restructuring;
- (c) the search for cooperation and technical links with partners;
- (d) the search for technical assistance for customers from partner European firms for claims management;
- (e) investments in productivity and improving the quality of the administrative functions, especially with a view to responding to the new conditions of competition.

One undertaking interviewed nevertheless considered that the single market programme had not had any impact on its technical functions.

Box 4.13. Types of impact of the single market programme on the technical functions of the insurance sector in Europe, according to the insurance undertakings interviewed

- 'Adaptation of computer technology and software'
- 'Functional and organizational restructuring'
- · 'Training for relevant personnel in the areas of sales, claims settlement and administration'
- 'Search to meet market expectations at right quality level'
- 'Reinforcing internal and external (distribution) group interconnections'
- Technical cooperation with a European partner in the mutual insurance network created:
 - providing assistance and claims settlement for the other partners' customers in the various countries
 - studying the possibility of cross-border co-insurance of particularly difficult risks for which our company has specific technical know-how'
- 'Improvement in the quality and productivity of technical and administrative systems (procedures for risk assumption, claims settlement)'
- 'No impact'

Source: RCS Conseil survey.

Information logistics

As stressed above, investments in information technology and telecommunications are a vital component of intangible investments in the financial services sector; they are therefore the source of competitive advantages being formed (and therefore of entry barriers). The work of EITO at European level, referred to above, showed the scale of these investments in the sector. At the same time, the survey conducted among managers of insurance undertakings confirmed the critical nature of this function. It is therefore important to know whether the single market programme influenced the relevant intangible investments in any way.

The replies given by the undertakings stress the existence of such an impact, which took the form in particular of investments:

- (a) to develop information technologies,
- (b) to revise information technology procedures, especially for specific risks (motor risks),
- (c) to generalize a more professional approach to information logistics.

A few undertakings questioned nevertheless consider this impact to be weak or non-existent.

Box 4.14. Types of impact of the single market programme on the information logistics of the European insurance sector, according to the insurance undertakings interviewed

- Development of computer technology (hardware and software)
- 'Adaptation of computer technology (hardware and software)'
- 'Enormous impact on our software systems'
- 'Review of computer system procedures (for motor risks)'
- 'Development of local networks'
- 'Automation of agency services (use of new technology and communication systems)'
- 'Training for relevant personnel'
- Generalization of a professional approach to our information logistics. Explosion of electronic traffic and interconnection to distribution networks'
- 'Critical to information logistics and the work flow. Extremely important between class and platform for the virtual corporation development'
- 'Negligible to zero'
- 'No impact'

Source: RCS Conseil survey.

Commercialization, distribution and communication

At this level too, a certain number of effects were stressed by European operators. They took the form in particular of investments relating to the reorganization of distribution networks, advertising and the building of a European image for certain insurance undertakings (Box 4.15).

Box 4.15. Types of impact of the single market programme on the commercialization, distribution and communication functions of the European insurance sector, according to the undertakings interviewed

- 'Diversification of distribution channels (at group level)'
- 'Advertising (communication of new products, sales channels, consultancy services, etc.)'
- 'Image-building (including through sponsorship of sporting and cultural events)'
- 'Support for the business development'
- 'We are seeking to build a European image within the single market'
- 'Search to monitor the distribution network around Europe'
- 'Attempt to set up our own distribution network with a partner in Spain'
- Investment in internal research and external advisor to acquire other European insurers'
- 'Direct impact for advertising services: same campaign'
- 'Automation of agency services (investment in hardware)'
- 'Training and motivation of sales staff'
- 'Sales training'
- 'Training for relevant personnel in the areas of sales, claims settlement and administration'
- 'No impact'

Source: RCS Conseil survey.

Among the problems raised, that of the harmonization of the qualifications of intermediaries (see Commission Recommendation⁷⁴) and, more generally, that of the recognition of diplomas (brokers, agents), remain. Finally, the question arises of whether the Directives on personal data protection have an impact on commercialization and distribution activities.

Human resources, organization, competencies and capabilities

At human resources level (training), the data available for France and other European countries (Germany, the Netherlands) show that insurance is the sector with the highest rate of financial contribution (cost of training to total wage bill ratio), which shows the importance attributed to training in the sector.

The impact of the single market programme at this level was stressed for not only the commercial functions, but also the technical functions and, more generally, the international management (including learning foreign languages, the recruitment of European executives from other countries and the exchange of human resources between subsidiaries).

In parallel, and among the indirect effects of the single market programme, mention must be made of the implementation of the reorganization and restructuring process, as well as the development of specific skills, enabling a competitive advantage to be gained, maintained or increased on the market.

 ^{92/48/}EEC: Commission Recommendation of 18 December 1991 on insurance intermediaries, OJ L 19, 28.1.1992,
 p. 32.

Box 4.16. Types of impact of the single market programme on human resources, organization and development of skills in the European insurance sector, according to the undertakings interviewed

- · 'Functional and organizational restructuring'
- 'Training for relevant personnel in the areas of sales, claims settlement and claims management'
- 'Greater mobility of human resources. We are trying to develop the necessary competences in countries where we are present'
- 'Restructuring and development of internal and external organization'
- 'Development and encouragement of specific skills'
- · 'Development of a mindset open to innovation and to an ever increasing internationalization'
- 'Language training'
- · 'Direct impact for exchange of human resources between subsidiaries'
- · 'Platform for competitive edge'
- 'Recruitment of 4/5 European non-domestic nationals to conduct market and acquisition research and to manage relations with our European partners and acquisitions'
- 'Sales training'
- 'No impact'

Source: RCS Conseil survey.

Transfunctional services

In the opinion of the operators questioned, there is a correlation between the development of the consumption of transfunctional services by insurance undertakings and the establishment of the single market programme, especially in respect of services linked to the preparation and implementation of mergers and acquisitions, as well as those in relation to the introduction of structures and organizational processes adapted to the new competitive environment.

Box 4.17. Types of impact of the single market programme on transfunctional support services in the European insurance sector, according to the undertakings interviewed

- 'The scale of our acquisitions (around ECU 1 billion in 1992) necessitates heavy consumption of consultancy, accounting and legal services in Europe'
- · 'Legal consultancy services (especially for mergers and acquisitions)'
- 'Consultancy services for computer system procedures'
- 'Just support services mainly, except for legal services which may become compulsory'
- 'Recourse to advisors and investment banks identify and appraise possible acquisitions opportunities'
- · 'Adequacy of accounting procedures'
- 'No impact'

Source: RCS Conseil survey.

Impact of the single market programme on the exploitation of intangible investments by European insurance undertakings

As in the case of banks, analysis of the exploitation of intangible investments by European insurance undertakings will be tackled from two angles: the impact of the Europeanization of the market strategies of the undertakings on the intangible investments and the point of view of the undertakings interviewed on the question of whether the single market programme has

enabled them, on the whole, to make more effective use of the intangible resources available on the market.

The Europeanization of the strategies of the insurance undertakings and intangible investments

The Europeanization of the strategies of insurance undertakings, itself linked to the overall impact of the single market programme, is recognized as influencing operators' intangible investments. At this level, the effects in functional terms are noted here (product development, technical functions, information logistics, etc.), as well as the need to build an image in a European context. Some operators nevertheless stressed the fact that the Europeanization of firms' strategy did not have a strong impact on the development of their intangible investments. But these are either firms whose activities are essentially domestic, or firms operating world-wide, which have implemented their international strategies some time ago.

Box 4.18. The impact of the Europeanization of insurance undertakings' strategies on their intangible investments, according to the undertakings interviewed

- 'The fact that insurers adopted cross-border investment policies helped to confirm our group in its conviction to widen its operations to other European countries'
- 'The perspective of the single market has pushed our group to "Europeanize" via acquisitions. Between now and the
 year 2000, we shall consolidate some European units (especially in Belgium and Spain), via the exchange of
 knowledge (for example, by developing direct marketing experience in ...)'
- 'Apart from mergers and acquisitions, we have as yet observed little development of European-wide marketing strategies. Only in the relatively small segment of insurance of major business risks have such developments started to be noticed (creation, for example, of units to co-ordinate underwriting across Europe)'
- 'Impact in terms of "brand names". It is necessary to construct an image'
- 'Strong impact, but still slow to lead to direct business results due to mindsets of people and political decision-makers (sovereign protectors)'
- · 'Improvement in the quality and productivity of technical functions'
- 'Development of new products
 - · Reorganization of internal and external functions
 - · Human resources training'
- · 'Exchange of competences among units and persons with the same responsibilities within our group'
- 'Not significant'

Source: RCS Conseil survey.

Impact of the single market programme on the exploitation of intangible investments by economic operators

On the whole, the operators questioned recognize that the single market programme has made a certain contribution to better use of intangible investments by European insurance undertakings. However, some of them emphasize that this impact is mainly of an indirect nature. Others stress that a larger investment in intangible resources does not necessarily mean a better investment.

Box 4.19. Has the implementation of the single market programme led to a better use of intangible investments by the European insurance sector? The point of view of the insurance undertakings interviewed

- 'Yes, it has led to better use of intangible investments'
- 'Yes'
- 'To some extent, but there is much more to come when the mindsets of people are truly cross-border in practice, as well as more harmonization of tax and legal aspects by policy decision-makers'
- 'The implementation of the single market programme has encouraged European insurers to make intangible investments (search and appraisal of cross-border acquisitions in Europe and outside). This has not necessarily implied a better use of intangible investments:
 - · many major and costly errors were made
 - · the investment projects may be economically justifiable only in the very long term'
- 'Yes, but we could not say that this is only related to the single market programme. This has probably accelerated the
 movement.'
- 'No'

Source: RCS Conseil survey.

The prospect of EMU and intangible investments in the insurance sector

Compared to banks, insurance undertakings, on the whole, have made less progress in their discussions on the anticipated impact of the introduction of the single currency on their intangible investments. The replies given (Box 4.20) show this fact.

Box 4.20. Types of impact expected from the introduction of the single currency on intangible investments of the European insurance sector, according to the insurance undertakings interviewed

- 'The single currency will speed up the present process of economic integration between European countries; the price of
 products and services will therefore be comparable and the flow of goods and services will intensify in the single market'
- With a more competitive market to face in the near future, our company has already adopted some market-oriented strategies which focus on internal economies of scale, savings in distribution, higher client satisfaction and better sales figures and profitability. More investments are going to be needed in areas such as the development of new products, technological innovation, acquisition and processing of data concerning clients, reorganizing the company's procedures, training of human resources for a greater aptitude to change, a focus on team work and on international trade'
- 'Change of market mindset to more cross-border business interest'
- 'Our cross-border acquisitions and technical cooperation and, more generally, our intangible investment, due to the single market, will remain moderate during the period. The objective here is:
 - · to make sure that acquisitions already made are economically profitable
 - to promote exchange of know-how, experience and competence between our subsidiaries and the parent company
 - to reinforce technical cooperation with our technical partners
 - · to continue to search for and assess opportunities for high quality and economically justifiable acquisitions
 - to build a network of companies (subsidiaries or partners) capable of handling satisfactorily our customers' insurance needs outside our domestic market
 - to develop the international culture of our group management and personnel (exchange of experience, exchange of personnel)'
- 'The positive acquisition aspects of this policy (that may only become significant in the year 2000) may be helped by the single currency (limiting the risk of exchange losses following cross-border investments)'
- 'The single currency is one aspect of the Single Market. The effects of the single currency need more research, but as we
 now see it, the impact on these investments will not be dramatic'
- 'We think it is a good thing. But like many insurers, we are waiting to see what will happen'

Source: RCS Conseil survey.

Box 4.21. Skandia, intellectual capital, competitiveness and the single market programme

At Skandia, intellectual capital is considered as at least as important as financial capital. An effort has been made in recent years to optimize the practical use of these assets. In fact, in 1991, a function was introduced within an AFS unit to develop a method for understanding Skandia's intellectual capital.

Now, the information is extended to cover additional Skandia units. This general approach is implemented under the name of SKANDIA Navigator.

For Skandia, intellectual capital includes three types of intangible resources: human capital, which represents 'the knowledge, skill and capability of the individual employees to provide solutions to the customers'; structural capital, which represents 'everything that remains when the employees go home: databases, customer files, software, manuals, trade marks, organizational structures', in other words, organizational capability; and finally customer capital, i.e. 'the relationships with customers', which constitute a significant part of the structural capital.

Skandia's intellectual capital and the single market programme

For Skandia, in the context of the single market programme, the most critical investments are in process development through information technology, product innovation, market development, i.e. growth of alliances. At this level, the most important policy measures to be considered are those related to the taxation system, the rules of establishment and professional jurisdiction rights. The impact on the overall level of intangible investment concerns specifically growth in networking and virtual corporation approaches, and cross-border business.

With regard to the functions of the value-added chain, direct and indirect impacts were stressed. For the development of products and services, the single market programme is considered to contribute to renewal and development, i.e. to market leadership. Regarding the technical functions, the impact relates especially to meeting market expectations at right quality level. With regard to information logistics, what is important is to be 'the best in the class'. Investments at this level are viewed as 'a platform for corporation development'. Concerning commercialization, distribution and communication, the single market programme is considered a support for business development. Human resources and the development of skills are 'a platform for competitive edge'. Finally, transfunctional support services are considered as secondary, except for legal services that 'might be compulsory'.

The impact of the Europeanization of the insurance sector's market strategies is considered to be potentially very high, but still slow to lead to direct business results. On the other hand, according to Skandia managers, the single market programme has led, to some extent, to better use of intangible investments by the European insurance sector. However, much more is expected to arrive 'when the mindsets of people are cross-border in practice, as well as more harmonization of legal and tax aspects'.

Source: RCS Conseil survey.

Table 4.3. Critical issues, intangible investments and the impact of the single market programme for the insurance sector in Europe

Functions	Critical issues for intangible investment	Policy measures with direct or indirect effect	Examples of direct or indirect effects or the single market programme
Development of products	Development of competitive	Insurance Directives, freedom to provide	Development of products with short life cycle
and services	products with short life cycle	services	start of development of products in a Europe perspective
Production	Cost-effectiveness	Insurance Directives, Directive on freedom to provide services	Adaptation of technologies, organizational restructuring, search for technical link-ups will European partners
Claims management	Time management, efficiency	Insurance Directives, Directive on freedom to provide services	Adaptation of technologies, organizational restructuring, search for technical link-ups will European partners
Collection of premiums	Cost and quality of premiums collected, time-based management	Insurance Directives, Directive on freedom to provide services	Adaptation of technologies, organizational restructuring, search for technical link-ups wi European partners
nformation logistics			
Information technologies, telecom. networks, services and systems	Competitiveness of the technology, quality of systems, externalization	Standardization, dynamics of externalization and industrialization of services in the context of the single market programme, Europeanization of supply	Development of information technologies, review of information technology procedures, generalization of a professional approach
Commercialization and distribution	Penetration of new markets, customer management, 'market intelligence', quality of systems, quality of risks, efficiency of distribution networks	Harmonization of national legislation	Investments in redeployment of networks, development of partnership, innovation of distribution
Communication	Establishment and strengthening of brand names and corporate image	Development of cross-border activities	Investments in advertising with a view to establishing a European image
Human resources	Quality, effectiveness, mobility and flexibility	Free movement of persons, ad hoc programmes, harmonization of diplomas and qualifications	Restructuring, development of specific skills, strengthening of international management
Financial resources	Stable and attractive investment opportunities, international risk management, financial engineering	Insurance Directives, freedom to provide services, development of mergers and acquisitions in the context of the single market programme, standardization of the financial markets, tax rules, European company statute	Function not covered by the study
Strategy and management	Choice of profitable opportunities, consistent resource allocation, cross-cultural management, achievement of real synergy	Global dynamics of the single market	Redeployment of corporate strategies in a broader framework
Systems and processes	Quality, adaptation to long-term company objectives and to its core competencies	Global dynamics of the single market	Indirect contribution to improving the systems
Competencies and apabilities	Adaptation, speed of reaction, assurance of a competitive advantage	Availability of a wide range of intangible resources	Development of specific skills, especially in product development, mergers and acquisitions and distribution

4.3. Food industries

The objective of this section is not to present a detailed analysis of the food sector, but simply to shed light from the point of view of this industry on the information presented for financial services.

The food sector (food products, beverages and tobacco) is vitally important to the economy. The activities in question are varied and correspond to NACE groups 411 to 429. The sector was characterized by a great deal of restructuring (large number of mergers and acquisitions), which naturally affect intangible investments.

At regulatory level, the single market programme has introduced substantial harmonization in the conditions of production and sale of food products in Europe. A large number of regulations were issued, with dismantling technical and physical obstacles to trade, public health and consumer protection and finally technological development as their main aims.

4.3.1. Overall impact of the single market on intangible investments

The Sema Metra Conseil study, carried out under the FAST project,⁷⁵ portrays the situation in the European food industry in 1985/86. Towards the mid-1980s, the main characteristics of the consumption of externalized services by European food industries were:

- (a) The major food groups were heavy consumers of externalized services, especially for commercial and distribution functions (marketing, advertising) and communication functions (public relations, sponsoring) and upstream, in trading. At R&D level, investments were made in the search and acquisition of small, specialized biotechnology firms. In parallel, heavy expenditure was devoted to transfunctional services (accounting advice, legal counselling, management consultancy), especially as regards mergers and acquisitions. Engineering services tended to be internalized.
- (b) SMEs, on the other hand, concentrated their efforts on engineering services, with a view to acquiring technological experience, and public relations.

What have been the trends in these industries since then and to what extent were they affected by the integration of the single market?

The point of view of trade associations (DRI survey)

Deep frozen products

The industry structure is characterized by the presence of multinationals. In recent years, strategic alliances have developed in the sector, as well as competitive pressure. Consequently, expenditure on marketing and communication is tending to grow, with the necessary adaptation to the various domestic markets on account of cultural differences. In contrast, the distribution networks are tending to be defined and implemented at European level.

Sema Metra Counseil (1986) Services to the manfucturing sector: a long term investigation.

Industrial baking

In terms of market structure, there is a trend towards greater concentration, with a new wave of mergers and acquisitions. Competition in the sector is keen, both from established European firms and external players. At marketing and distribution level, the standardization of labels and packaging was stressed.

Compound feed

This sector too has seen the development of alliances and mergers and acquisitions. Competition is keen, but nevertheless remains domestic. The overall impact of the single market is positive, but limited.

Case of processed foodstuffs

The information given below is based on the interim report of the study on Processed Foodstuffs conducted by BER.⁷⁶ After having stressed that the single market programme is the first effort at harmonization at European level for the sector (with 100 measures planned), the study assesses the impact of the programme on the activities of the sector.

Its main interim conclusions are:

- (a) Intra-Community trade developed after 1986 and the single market programme contributed to this.
- (b) There are substantial differentiations between sectors as regards the development of intra-Community sales. Nevertheless, the majority of enterprises in all the sectors confirmed an increase in their cross-border sales.
- (c) There is no obvious link between the single market programme and the effects of scale or scope, in particular as regards the rationalization of production units (even though half the enterprises questioned stressed the implementation of such plans).
- (d) There is an increase in the concentration of activities of the sector (the share of the top three firms rising from 23% in 1988 to 36% in 1991), which is partially attributable to the single market programme.
- (e) A certain number of hypotheses were tested regarding productivity, especially those relating to the fact that harmonization of the regulations on trade names should lead to stimulating investment in technology and the development of new products. This is an important dimension of intangible investment.

In respect of this last question, substantial changes occurred in investments by operators. The single market programme did in fact accelerate the phenomenon of the Europeanization of activities. The results of the survey among operators showed that more than half of them (39) recently changed their product and R&D strategies. Nine enterprises stressed that these changes are directly attributable to the single market programme. This concerns SMEs more than large groups.

For the final report see BER (1997) SMR I.7 *Processed foodstuffs*, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

Mergers and acquisitions in the sector

In this context, the development of mergers and acquisitions in the food industries is an important trend, which influences the level of intangible investments in the sector. Statistical work conducted within the 'Structural Change in the European Food Industries' group allows this point to be illustrated (Tables 4.4 to 4.6).

The data available for the entire period from 1987/89 to 1992/93 call for the following comments:

- (a) mergers in the food industries represented a substantial proportion of the mergers in manufacturing industry (nearly 16% over the period as a whole);
- (b) these mergers are primarily domestic (44% on average) and secondly Community (about 38% on average); international mergers only account for an average of 18% over the period as a whole;
- (c) among the motives for these operations, the strengthening of position seems to be the prime factor, having progressed substantially over the period as a whole (especially in comparison with the motivations of the manufacturing sector).

Table 4.4. Mergers in European manufacturing and food industries 1987/88 – 1991/92 (number and percentage)

Year	Manufacturing industries (A)	Food industries (B)	B/A in %	
1987/88	383	51	13.3	
1988/89	492	76	15.4	
1989/90	622	102	16.4	
1990/91	455	71	15.6	
1991/92	347	61	17.6	
Total	2,299	361	15.7	

Source: Oustapassidis, K. et al. (1995) A review of some preliminary data relating to structural change within the European food industries and factors affecting it, Discussion Paper No 9, December, Structural Change in the European Food Industries, EU AAIR programme.

Table 4.5. National, international and Community mergers in European food industries 1987/88 – 1991/92 (number and percentage)

Year	National mergers		National mergers International mergers		Community mergers		Total	
1987/88	25	49.0%	8	15.7%	18	35.3%	51	100%
1988/89	35	46.0%	14	18.4%	27	35.6%	76	100%
1989/90	41	40.2%	17	16.7%	44	43.1%	102	100%
1990/91	29	41.0%	16	22.5%	26	36.5%	71	100%
1991/92	32	52.0%	6	10.0%	23	38.0%	61	100%
Total	162	44.9%	61	16.9%	138	38.2%	361	100%

Source: as for Table 4.4.

Table 4.6. Main motives for mergers in the European manufacturing industries (MI) and food industries (FI) (percentage of the total number of mergers)

Year	1986/87		1987/88		1988/89		1989/90		1990/91		1991/92	
motive/sector	MI	FI										
Strengthening of position	9	8	18	20	32	39	34	39	34	42	29	34
Synergy	13	4	17	26	8	11	12	11	11	4	8	11
Diversification	23	31	22	28	29	39	25	24	23	33	25	26
Other	29	26	15	10	6	1	4	2	7	1	4	2
Unspecified	26	31	28	16	25	10	25	24	25	20	34	27
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

Source: as for Table 4.4.

Single market programme and dynamics of competitiveness in the food industries

The BER study stressed that the integration of the single market for food industries was accompanied, for certain enterprises, by an increase in R&D. This trend must be placed in a more general context: that of the importance of non-price competition (trade name, advertising, product development) as a lever of competitiveness in the context of a homogeneous market in the making.

As emphasized by B. Traill,⁷⁷ on the basis in particular of the work of Sutton,⁷⁸ the market structure cannot be considered as an exogenous factor, but as a strategic lever for enterprises, or in other words as endogenous to the competitive interplay between firms. In particular, the development of the size of firms – via mergers and acquisitions, for example – is an endogenous characteristic to the European food industries. The development of non-price competition (product development, advertising) becomes a method of reinforcing entry barriers to the industry.

In this context, intangible investments may be considered as irreversible costs (sunk costs) which are important to the dynamics of competition and which raise the minimum threshold for effectiveness on the market.

Research & Development

The data in Table 4.7 provide an indication of R&D expenditure in Europe, the USA and Japan by the top 500 firms. It emerges from this that the food industries invested little in research & development (between 0.7% and 1.2% of their turnover, depending on the area

Traill, B. (1994) 'Price and non-price competition and market structure in the Single European Market', *Discussion Paper No 2, Structural Change in the European Food Industries*, EU AAIR Programme, September.

⁷⁸ Sutton (1991) Sunk Costs and Market Structure, MIT Press.

considered) whereas the European pharmaceuticals industry, for example, invests over 11.8% of its turnover in R&D.

Table 4.7. R&D/turnover ratios by sector, 1992 for top 500 companies – Europe, USA and Japan (%)

	EU and EFTA	USA	Japan
Pharmaceuticals	11.8	10.5	10.9
Electrical engineering	9.0	4.6	5.9
Computer and office equipment		8.4	7.9
Instrument engineering	5.6	5.1	5.9
Chemicals (except pharmaceuticals)	5.5	3.8	4.6
Motor vehicles and parts	4.5	4.1	5.4
Mechanical engineering	3.1	2.5	3.7
Rubber and plastics	2.8	2.2	
Aerospace	2.8	3.9	
Stone, clay and glass	1.4	1.9	
Metals	1.2	1.1	
Metal articles	1.2	1.6	
Petroleum refining	1.1	0.6	
Textiles			3.4
Food and drink	0.8	0.7	1.2
Construction			0.9
Paper	0.6	2.2	

Source: DABLE, European Commission DG III A3.

The relatively modest level of this expenditure raises the question of the true nature of product investment. At this level, Traill⁷⁹ stresses that the food industries' investments in R&D have more in common with marketing: the main thrust is in product development. In this context, R&D, advertising and marketing follow the same process: that of the search for strong product differentiation.

Advertising

Although the food industries are characterized by relatively modest investment in R&D, the investment in advertising, by contrast, is very large: these industries form the largest market for advertising in Europe. The intensity of the advertising expenditure is greater than that in R&D (Table 4.8).

Table 4.8.	Advertising intensity (expenditure as a percentage of sales) in selected
	European food industries

	1987	1990	1992
France			5.40
United Kingdom	2.48		2.00
Greece			1.52
Portugal		1.69	2.84

Source: as for Table 4.4.

In 1994, the sector's expenditure on advertising reached over ECU 5 billion, i.e. 10% of the entire European expenditure. This effort is partly connected to the single market programme. The development of mergers and acquisitions, and, more generally, the development of European-wide strategies by enterprises (for which asserting a differentiated image for products is an essential requirement for competitiveness), have forced them to boost their investments in advertising.

Training

The data in Figures 4.13 and 4.14 showed the relative importance of the food industries in the field of training, compared to other economic sectors, especially financial services, in France and the Netherlands in particular. In France, the CEREQ data show that over a long period (1975–92), the food industries almost doubled the rate of access to training of their staff. Moreover, taking the 1980s alone, these industries showed a greater increase than financial services in the rate of their financial contribution.

In more qualitative terms, the characteristics of the trends in ongoing training in Europe can be derived from the work conducted at European level (especially under the FORCE programme).⁸⁰

The IRE study showed, on the basis of case studies, that innovative practices existed in the management of ongoing training. It showed the fact that these practices are to be incorporated in the context of the overall strategy of the enterprises considered. Processes promoting entrepreneurship and quality in particular are implemented.

These same trends are also observed in the case of the assessment of ongoing training practices conducted by Burns.⁸¹ This places particular emphasis on the existence of strong demand for total quality and the development of a preoccupation with 'human resources' within the sectors observed going beyond their diversity.

IRE, Group ESC Lyon (1995) Etude de cas européenne concernant la formation continue dans les industries agroalimentaires, May; Burns, J. et al. (1993) Etude sectorielle sur les pratiques de formation continue dans les industries agro-alimentaires, Final report of the FORCE Programme, June.

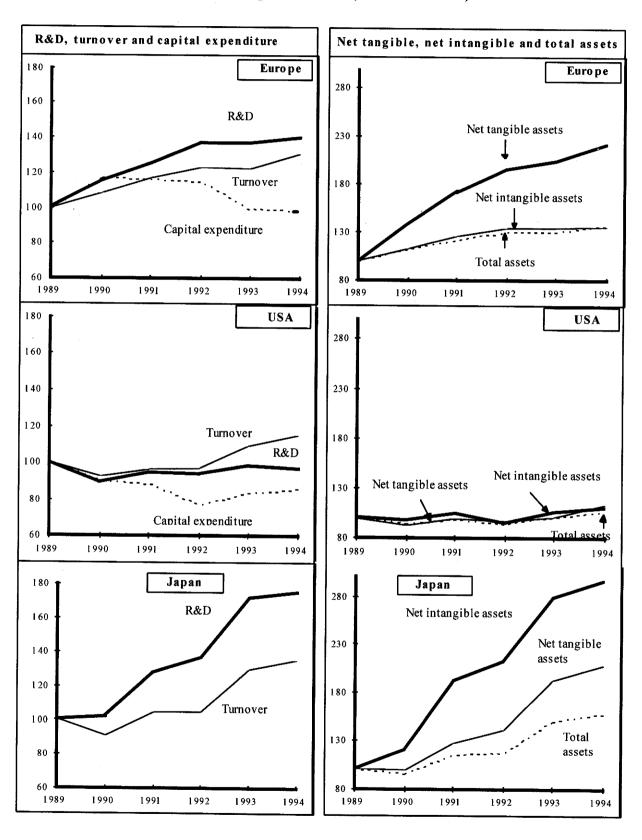
⁸¹ Burns, J. et al. (1993).

Trends in aggregate investments of the sector (DABLE data)

Over the period from 1989 to 1994 as a whole, the data of the DABLE database indicate the following trends (Figures 4.26 to 4.28):

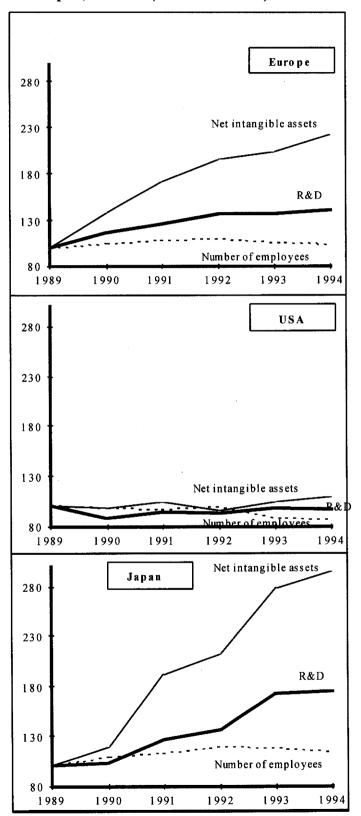
- (a) the R&D/turnover ratio rose slightly in Europe and Japan, but decreased in the USA at the same time;
- (b) a rise in the R&D/capital expenditure ratio in Europe and the USA, as well as in the net intangible assets/total assets ratios (these ratios are higher in the USA than in Europe on account of different accounting rules);
- (c) expressed in terms of base 100, the indicators considered have developed as follows:
 - (i) greater rise in net intangible assets than in R&D,
 - (ii) R&D has been progressing faster than capital expenditure,
 - (iii) in Europe and Japan, intangible assets have risen further than tangible assets.

Figure 4.26. R&D, turnover, capital expenditure and assets for the food industries, Europe, USA and Japan, 1989–94 (Base 1989 = 100)



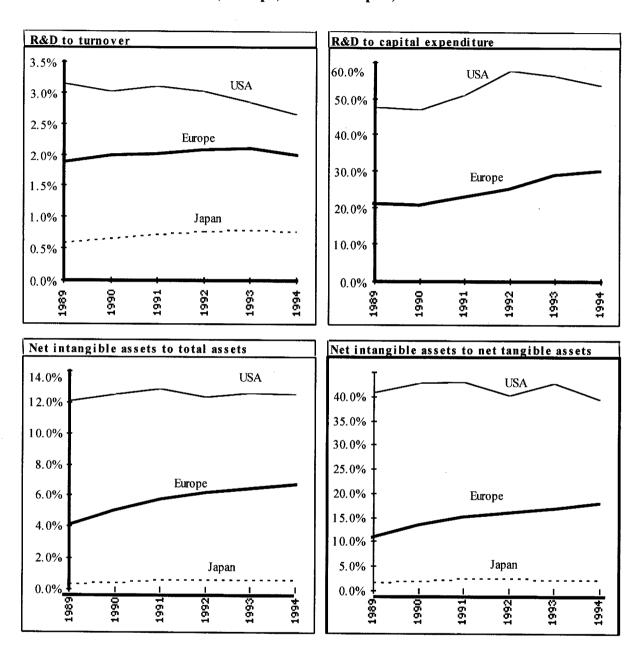
Source: DABLE, European Commission DG III A3

Figure 4.27. Net intangible assets, R&D and employees for the food industries, Europe, USA and Japan, 1989–94 (Base 1989 = 100)



Source: DABLE, European Commission, DG III A3

Figure 4.28. Ratios of R&D to turnover, R&D to capital expenditure, Net intangible assets to total assets and Net intangible assets to net tangible assets for the food industries, Europe, USA and Japan, 1989–94



Source: DABLE, European Commission, DG III A3

Results of the Eurostat Business Survey

The Eurostat survey provides interesting information on the impact of the single market programme on the food industries (NACE 15), including certain aspects relating to intangible investments.⁸²

The greatest emphasis was given to the following overall positive impacts:

- (a) the elimination of delays at frontiers (60%),
- (b) the elimination of customer documentation (59% positive replies),
- (c) the harmonization of technical regulations and standards (35% positive replies),
- (d) the change in VAT procedures for intra-EU sales (32%),
- (e) the development of sales to other EU countries (28%).

A certain number of opinions were given regarding the industrial organization of activities – a dimension which is inextricably linked to the intangible investments field (see Table 4.9).

- (a) For the aspects relating to Research & Development of products, the impact is judged to be quite important to very important in:
 - (i) 34% of the opinions expressed on the Research & Development of new products,
 - (ii) nearly 35% of the opinions expressed on more standardized products,
 - (iii) of the opinions expressed on more specialized products.
- (b) As regards the production function, the impact is recognized as being quite important to very important in:
 - (i) of the opinions expressed on the purchase of raw materials,
 - (ii) over 28% of the opinions expressed on the adoption of lean production methods,
 - (iii) of the opinions expressed on the purchase of components and equipment,
 - (iv) only 8% of the opinions expressed on the purchase of business services from other EU countries.
- (c) As regards the commercialization and distribution functions, the impact is considered to be quite important to very important in:
 - (i) over 38% of the opinions expressed on the penetration of markets in other EU countries.
 - (ii) 38% of the opinions expressed on the adoption of pan-European labelling and packaging policies,
 - (iii) over 23% of the opinions expressed on the establishment of distribution networks in other EU countries,
 - (iv) 22% of the opinions expressed on advertising in other EU countries.
- (d) Finally, as regards the policy of cooperation, participation and financial control of other enterprises, only 8% to 13% of the opinions expressed consider this impact to be quite important to very important.

See Appendix A for extracts. For a complete report see Eurostat (1997) SMR: Results of the business survey, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

Table 4.9. The single market's importance to development of strategy in the food industries (%)

Products and services	Very important	Quite important	Not important	Don't know
Products standardization	14	18	41	27
Products specialization	14	21	37	28
Pricing	12	23	41	23
Research and development of new products	9	25	39	27
Capacity of existing national production	11	22	38	30
Number of existing production plants	5	10	41	44
Establishment of plants in other EU states	2	10	42	46
Lean production methods	7	21	35	38
Marketing & distribution	Very important	Quite important	Not important	Don't know
Penetration of markets in other EU states	13	25	35	27
Advertising in other EU states	4	13	51	32
Distribution networks in other EU markets	6	16	46	32
Pan-European labelling	11	26	37	27
Sourcing	Very important	Quite important	Not important	Don't know
Purchase of raw materials from other EU markets	12	24	40	23
Purchase of components from other EU markets	6	15	46	32
Purchase of business services from other EU markets	2	6	57	35
Purchase of financial services from other EU markets	2	8	53	38
Acquisition, cooperation, ownership	Very important	Quite important	Not important	Don'i know
(Direct) Investment in other companies	1	6	44	48
(Direct) Investment from other companies	2	6	45	46
Cooperation agreements with other companies	3	10	38	49

Source: Eurostat Business Survey.

The information which has just been stressed indicates that the single market has had a real impact on some of the key functions in industry (case of R&D through the BER study⁸³). This impact is necessarily expressed at the level of the other functions, especially those relating to distribution and commercialization and the development of specific skills, notably human resources.

BER (1997) SMR I.7 Processed foodstuffs, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

It should be recalled at this level that the food industries are the main market for advertising expenditure and that the standardization of the conditions of competition at European level probably had an indirect impact on this type of investment (see below, advertising services). The development of the concentration of the industry increases recourse to this strategic lever.

Moreover, it should be stressed that certain pilot studies conducted by the Banque de France showed that, compared to other industrial sectors (transport equipment, etc.), the food industries have the highest intangible investment rate (intangible/tangible ratio) (Figure 4.29).

4.3.2. A case study: the Alpha group

The Alpha group is medium-sized with a turnover in the order of ECU 1 billion (of which about 50% is outside the EU). It made a large number of acquisitions both inside and outside the EU.

The most critical intangible investments relate mainly to the production, commercialization, distribution and communication functions, with items relating to R&D and the other components of intangible investment coming in second place.

More specifically, the following items are considered as being explicitly critical (priority No 5):

- (a) increasing the capacity of production and the related operating tools,
- (b) improving the quality of the procurement function,
- (c) improving the quality of the production systems,
- (d) improving the distribution networks and channels,
- (e) marketing expenses,
- (f) advertising expenses,
- (g) human resources training,
- (h) organizational restructuring,
- (i) the development of specific skills.

Product development and information logistics are also considered important and are classified as priority No 4. On the other hand, the acquisition of technology is not a top-ranking priority.

Within the group, the growth in intangible investments over the period from 1992 to 1994 on the whole followed this hierarchy.

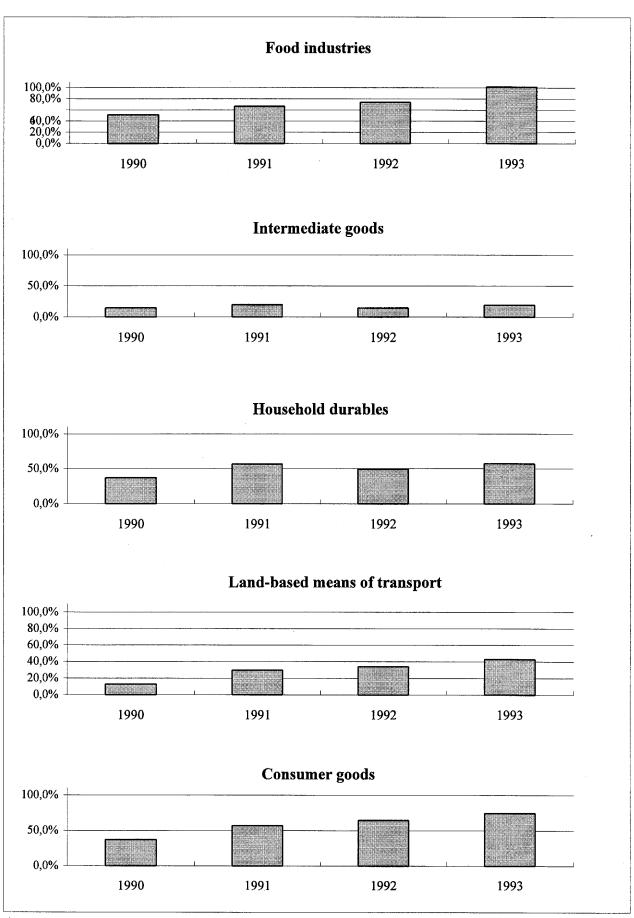
Influence of the single market programme

Overall, the Alpha group recognizes that the single market programme has had a direct and indirect influence on the level of its intangible investments.

The policy measures considered include:

- (a) opening up the borders,
- (b) the harmonization of the legislative framework.

Figure 4.29. Intangible to tangible ratio in France by sector, 1990–93 (%)



Source: Banque de France Analysis: RCS Conseil

The direct effects on the total level of intangible investment include:

- (a) a reduction in capital expenditure and better use of capacity (and at the same time a possibility to redeploy resources in intangible investments);
- (b) simplification and standardization in trade names, labels and advertising.

At **functional** level, the main direct or indirect effects relate to the critical functions indicated above:

- (a) the production function through better use of capacity;
- (b) the commercialization, distribution and communication function, through investment in enhancing a trade name at international level;
- (c) the transfunctional services, through concentration of these services at a 'know-how centre'.

In general, the Alpha group considers that the establishment of the single market programme led to better use of the intangible investments by the food industries sector in Europe. This impact is naturally to be differentiated by sector (weak as regards, for example, the mobility of human resources, greater for R&D, on account of better concentration of efforts). In terms of dynamics, the Alpha group considers that the single market programme offers opportunities, especially through better integration of logistics – and notably information logistics – as well as production capacities.

5. Development of externalized intangible activities

5.1. Activities considered

The main items to be considered are the following:

- (a) contract-based R&D,
- (b) technical engineering,
- (c) software and data processing,
- (d) market research,
- (e) direct marketing,
- (f) advertising,
- (g) communications (public relations),
- (h) human resources (ongoing training),
- (i) transfunctional support services (consultancy, legal services, mergers and acquisitions, accounting services).

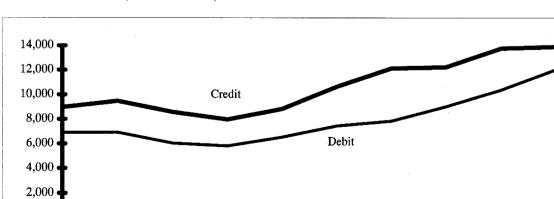
These activities are essentially externalized in nature.

5.2. Analysis of Community trade and foreign direct investment (FDI)

The data published by Eurostat enable more precise definition of the stakes concerning certain externalized intangible activities in terms of trade and direct investments, in the context of the integration of the single market.

5.2.1. Foreign and intra-Community trade

The data on foreign trade are available for two sectors: business services (apart from advertising and financial services) and advertising (including market research).



1988

1989

1990

1991

1992

1993

Figure 5.1. EU (12) foreign trade in business services, 1984–93 (ECU million)

Source: Eurostat

1984

1985

1986

1987

Figure 5.2. EU (12) internal trade in business services, 1984–93 (ECU million)

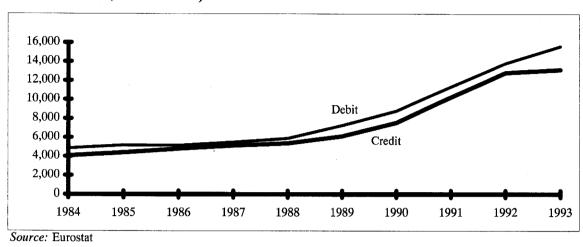


Figure 5.3. EU (12) foreign trade in advertising, 1984–93 (ECU million)

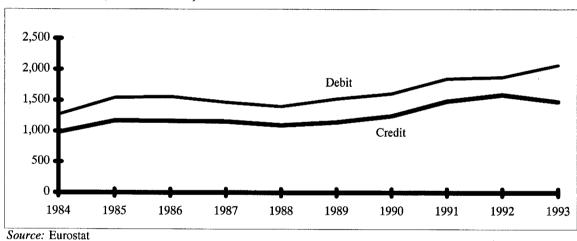
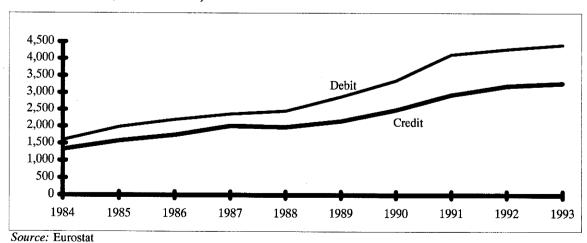


Figure 5.4. EU (12) internal trade in advertising, 1984–93 (ECU million)



The trends over the period from 1983 to 1993 as a whole call for the following comments:

- (a) while there was steady growth in trade in business services outside the EU, intra-Community trade picked up from 1988 (Figures 5.1 and 5.2);
- (b) the same comments apply to advertising, with growth in cross-border trade being more sustained from 1988 (Figures 5.3 and 5.4);
- (c) business services supplied to EU enterprises show a surplus, whereas advertising is in deficit.

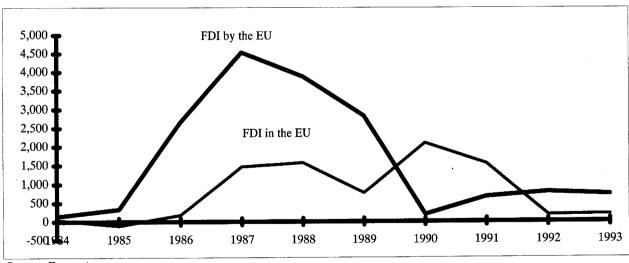
These trends show that the single market has influenced growth in these activities.

5.2.2. Direct investments

As regards foreign direct investments (FDI), the available Eurostat data on business services (classified under the heading 'other services') allow the following comments to be made:

- (a) European investments outside the EU increased between 1985 and 1987 and have decreased since then;
- (b) foreign direct investments in the EU show a certain irregularity; they remained well below European investments over the period from 1985 to 1989;
- (c) cross-border investments, for their part, have increased considerably between 1986 and 1991, which shows that the single market has had an impact.

Figure 5.5. EU (12) FDI for business services, 1984–93 (ECU million)



Source: Eurostat

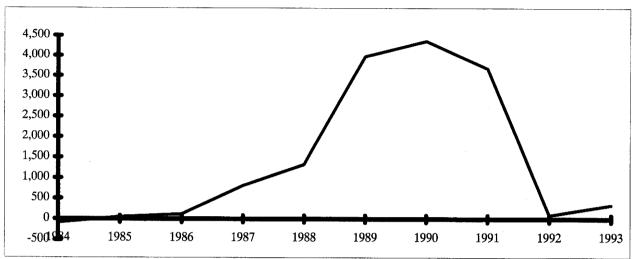


Figure 5.6. Cross-border investment in the EU (12) for business services, 1984–93 (ECU million)

Source: Eurostat

5.3. Overall impact of the single market: the point of view of the services sector

The data available on 441 European enterprises providing externalized services (NACE 74),⁸⁴ not therefore including R&D services or computer services (see below), allow a certain number of conclusions to be drawn regarding the impact of the single market programme.

In this respect, particular attention should be drawn to the following points:

- (a) the low impact on intra-Community trade, which would mean that the bulk of production is undertaken at national level or that the existence of any flows is associated with factors other than those relating to the measures under the single market programme (the factor sales to other EU countries nevertheless shows the highest rate of positive replies: 17%, whereas the rate of positive replies for the other items lies between 7% and 10%);
- (b) in the field of the conditions of production, the single market programme has had a certain impact on the components of the industrialization of the supply of services: standardization of products or services, more specialized supply, development of new products and cooperation with other enterprises;
- (c) an increase in competitive pressure is stressed, firstly from national firms, but also from other European firms.

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5.4. Analysis by type of activity

5.4.1. Externalized research & development

Activities covered

Mainly contract-based R&D.

The theoretical framework

In view of the scale of budgetary constraints in particular, an increasing number of enterprises have taken the decision to make some of their activities into a self-sufficient, specific branch, generating external contracts and therefore leading to R&D contracts for others. It is true that R&D companies working on a contract basis have long existed on the market (Battele Institute, Bertin). However, alongside these specialized suppliers, R&D activities subject to a greater or lesser degree of cross-externalization are emerging between several industrial enterprises, as a result in particular of the development of cooperation agreements and more generally of enterprises operating within a network.

From the theoretical point of view, the majority of the work dealing with the externalization of R&D activities has been conducted on the basis of certain hypotheses and recommendations of the transaction cost theory and sometimes of the agency theory. Tapon⁸⁵ analysed the trend towards vertical disintegration of R&D in the American pharmaceuticals industry. In so doing, he identified organizational failures which led him to stress the interest of the externalization of research activities, especially by entering into long-term contracts with universities.

For his part, G.F. Pisano⁸⁶ looked into the impact of two sources of transaction cost – the small number and appropriability problems – on the decision of whether or not to externalize a R&D activity in the context of 92 biotechnology projects. The results of his assessment led him to consider the small number of actors to be the main motivating factor in the internalization decision. S. Ulset⁸⁷ conducted a study on the externalization of R&D activities in information technologies in Norway, on the basis of the transaction cost theory. The results of his study suggest that substantial irreversible costs, associated with transaction risks, imply a tendency to internalize R&D. Moreover, the increase in the technical innovation of the projects, associated with considerable anticipated surpluses, reduce the property rights of customers over their suppliers.

There is therefore a need to define contractual regulatory mechanisms to cope with these uncertainties. As stressed by L. Benzoni, 88 in the telecommunications equipment sector,

Tapon, F. 'A transaction cost analysis of innovation in the organization of pharmaceuticals R&D', *Journal of economic behavior organization*, 12, pp. 197–213.

Pisano, G.F. (1990) 'The R&D boundaries of the firm: an empirical analysis', Administrative science quarterly, 35, pp. 153-176.

Wlset, S. (1993) R&D outsourcing and contractual safeguarding, CCC Working paper, University of California, Center for Research in Management, Consortium on Competitiveness and Cooperation, April, pp. 45.

Benzoni, L. 'La multiplicité des formes d'organisation des relations verticales: introduction à certains développements récents de la théorie de la firme', article to be published.

mechanisms for regulating the terms of vertical relations between a supplier of equipment and an operator are conceivable to reduce the uncertainty associated with the results of the research: creation of joint ventures, cross-participations, holding companies, etc.

At operating level, the EIRMA draws a distinction between two types of externalization of activities linked to R&D: (1) 'soft externalization', which covers database consultation and training activities, mainly on a non-exclusive basis (these are therefore activities relating to non-specific assets); (2) 'hard externalization', which includes the development of products and technologies, mainly on an exclusive basis. Product technology and development consultancy is at an intermediate level and is used for 'gate keeping' purposes.

The level of externalization depends on several factors, including the type of industry, the local technological environment and the business strategy. Generally, enterprises externalize 5 to 10% of their R&D budgets.

There are many reasons for externalization, including:

- (a) the existence of strong external R&D potential;
- (b) the increase in development costs which has an impact on the research budgets, hence the importance of taking advantage of external opportunities;
- (c) the need to reduce fixed costs:
- (d) the development of alliances and acquisition processes;
- (e) the need to develop contacts with the environment and in particular with local decision-makers (this is an argument used by American or Japanese firms when setting up in Europe).

More or less the same arguments are put forward by suppliers of contract-based R&D services.⁸⁹

Galant, S. (1995) 'Externaliser des projets de R&D: un atout pour la compétitivité des entreprises', Les journées de la recherche et de l'innovation industrielle, MGI, October.

Box 5.1. OST: constraints and opportunities for an SME within the single market

Established in 1980, OST is an SME specialized in the design and manufacture of telecommunications equipment and the supply of ad hoc solutions. The enterprise has experienced rapid growth and has secured a leading position on the telecommunications equipment market (X 25 network equipment, in particular) through its innovative qualities and technological know-how.

With a turnover of FRF 308 million in 1994 and a workforce of 405, OST is established in Europe (United Kingdom and Spain), the United States (OST Washington Inc.), and Asia (Singapore). The enterprise also has distributors in some 40 countries. OST has acquired references from operators and large enterprises (ref.: France Telecom, Alcatel, IBM, EDF, Crédit Mutuel, Crédit Lyonnais, CNAM, ENEL, etc.); 80% of turnover comes from domestic customers, 12% within the European Union and 8% outside Europe.

OST and intangible investments

Intangible investments form an essential lever for competitiveness for the enterprise R&D in particular is considered as a priority (20% of turnover is allocated to it), which is substantially higher than the rates observed in the majority of economic sectors, including telecommunications. The other intangible items are also considered to be important, especially improving the quality and productivity of the systems of production, marketing research, communication, improving the quality and productivity of commercial and communication systems (especially in Europe) and training of human resources (recruitment of European managers and staff of different nationalities, training in the internationalization of the enterprise).

The investments are made here in particular with a view to building up the company's image and identity. The levers used consist in particular in stepping up the relations with larger firms (for example in the context of European cooperative programmes like RACE), as well as with telecommunications operators. These levers also integrate the development of relations with research institutes (Centre d'imagerie médicale des hôpitaux de Rennes, in the field of medical imagery, for example) and telecommunications research centres, such as CCETT and CNET.

The ultimate objective is to build a corporate image, possibly associated with an emerging technology (OST: innovative company; OST: new technologies; OST: ATM).

Constraints and opportunities of the single market

In the context of the implementation of the single market programme, two dimensions are considered to be important to building up the corporate image and to the development of its activities: the deregulation of telecommunications services and standardization.

Deregulation is considered to be an important factor on account of the prospects it offers for an enterprise like OST: increase in the number of operators, development of trade, reduction in the price of telecommunications, migration towards high-speed lines (ATM).

In the field of standardization, the activities conducted within ETSI have played an important role. Implementation difficulties must nevertheless be noted: much hope was placed in the standardization of testing procedures. However, each operator asks for tests to be carried out on their national networks. In parallel, 'Forums' have emerged created by manufacturers (e.g.: ATM Forum, Frame Relay Forum), in which OST plays a very active role. Despite its efforts, OST suffers from the 'competitive disadvantage' common to all SMEs, as regards its European assertion strategy: 'large enterprises always manage to make their views heard more effectively in Brussels'.

Source: RCS Conseil survey.

Market size

There are no official statistics available. Estimates are few and far between and heterogeneous, which precludes any rigorous monitoring of the trend in these activities. The estimates currently available are the following:

- (a) ECU 15 billion for 1986 (European Commission (1988) Business services for R&D),
- (b) ECU 0.9 billion for 1988 (European Commission, 1992),
- (c) ECU 1.5 billion for 1995 (EACRO and various sources).

Measuring the size of the contract-based R&D market is therefore an important task for the assessment of the economic stakes relating to this activity.

ECU 1.5 billion

ECU 0.9 billion

1988

1994

Figure 5.7. The EU (12) market in contract-based R&D

Sources: European Commission and EACRO

The externalization of R&D activities and the single market

In comparison with other dimensions of the single market, such as the increase in size of production units or the standardization of products, the development of technological cooperation between firms and better valorization of their resources, were strong expectations for the European industrial enterprises questioned in the context of earlier work on the single market.

Single market measures

Several points concerning the impact of the single market programme are to be considered:

(a) The impact of European cooperation programmes on the development of intangible competencies of the participating European firms (expectations at this level being strong, compared to the production or product functions, as stressed above).

- (b) The present and prospective impact of the Public Procurement Directives (particularly Directive 92/50/EEC, the Services Directive, on services contracts⁹⁰) in terms of:
 - (i) growth in demand,
 - (ii) price levels,
 - (iii) development of intra-Community trade,
 - (iv) identification of barriers to the development of trade,
 - (v) indirect measures of the standardization and certification type.

More specifically, the topics to be integrated into the analysis include:

- (a) the factors for the externalization of research & development activities in Europe;
- (b) the present and prospective impact of the public procurement Directives (especially the Services Directive), and more generally of the conditions of competition of the single market, in terms of growth of demand, price levels and development of intra-Community trade.

5.4.2. Technical engineering

The engineering activities, technical studies and technical control activities include three types of services:

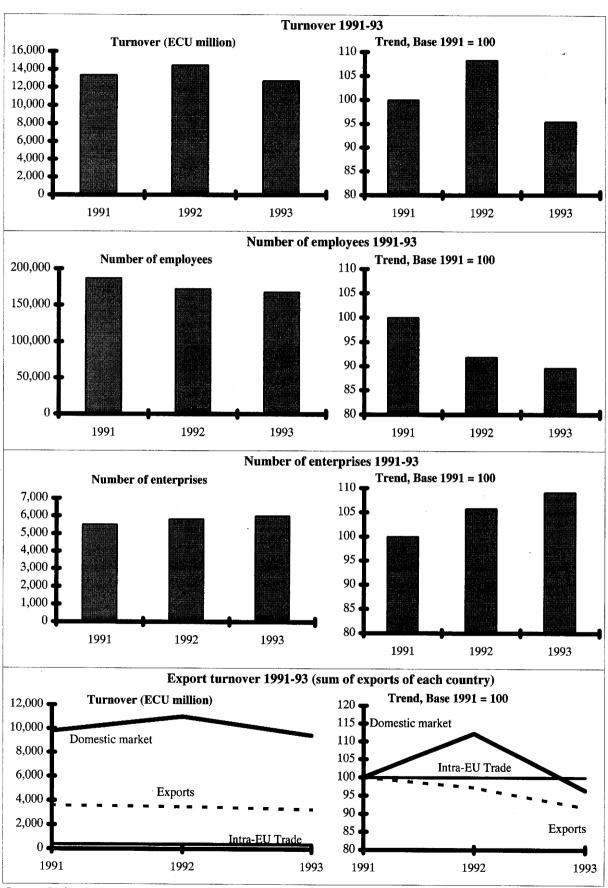
- (a) pre-investment studies,
- (b) design and implementation studies, including project management,
- (c) implementation assistance.

These services are supplied by enterprises as their main activity (professional engineering) and by internal departments of public enterprises or industrial enterprises as a secondary activity (integrated engineering).

The activity is not regulated: the title of engineer/consultant is not protected by official Community regulations.

Ocuncil Directive 92/50/EEC of 18 June 1992 relating to the coordination of procedures for the award of public service contracts, OJ L 209, 24.7.1992, p. 1.

Figure 5.8. Technical engineering: main indicators



Source: EFCA, Engineering consultancy services: main indicators, 1993

Analysis: RCS Conseil

Stakes

The value of the technical engineering market fluctuates between ECU 12 billion and ECU 14 billion in Europe. Its growth has slowed down considerably in recent years on account of the saturation of domestic demand.

Trend

In 1985,⁹¹ there were between 100,000 and 150,000 jobs in technical engineering, with a turnover of FRF 50–75 billion. The developing countries accounted for between 35 and 50% of turnover. European technical engineering was second in size and first in terms of exports at world level. In terms of business, the 1980s were characterized by industrial restructuring and the emergence of new competitors (Brazil, India, etc.).

For the 1990s, there were strong expectations concerning the implementation of the single market programme and a redeployment of business to Asia was anticipated. There were prospects of the restructuring of European supply, as well as of reorientation of the market towards industrial modernization (production function). Finally, the SME market generated a certain amount of interest and a reduction in the share of 'process' industries was expected.

Since the mid-1980s, with the decline in the markets of the developing countries, the market of the European Community Member States has assumed considerable significance for the engineering sector.

Decisive factors

The factors for the externalization of technical engineering are mainly:

- (a) the level of general economic growth in Europe and at international level,
- (b) the level of public and private investment (especially in the infrastructure networks),
- (c) technological development,
- (d) the availability of financial resources for projects,
- (e) users' expectations regarding integrated supply.

At international level, market power tends to lie with the integrated groups, to the detriment of specialized firms.

Single market

Measures with direct impact

Council Directive 92/50/EEC on the coordination of procedures for the award of public service contracts (the Services Directive)⁹² and Directive 92/57/EEC of 24 June 1992 on the

Source: European Commission, DG XII (1986) Services to the manufacturing sector, a long-term investigation, Appendices, Report FAST 2, June.

⁹² OJ L 209, 24.7.1992, p. 1.

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implementation of minimum safety and health requirements at temporary or mobile construction sites. 93

The Services Directive requires contracting public authorities of the European Union to publish invitations to tender where the unit value exceeds ECU 200,000. This Directive has not been adopted in all Member States,⁹⁴ but has been translated into national legislation in Denmark, Ireland, the United Kingdom and the Netherlands, in particular.

It is considered the most important measure from the point of view of the engineering specialists. The tendering procedure relating to studies of a value in excess of ECU 200,000 must be organized at European level. High expectations are expressed by European operators regarding its effective implementation.

Measures with indirect impact

These are horizontal measures of the standardization or certification of the supply of services type.

Measures with overall impact

The creation of a single market in technical engineering as part of strengthening the European supply on the domestic market and, at the same time, on the international market.

Actual impact

According to the trade associations, it is difficult to create a true single market in technical engineering on account of the regulatory obstacles (need to register to penetrate the various markets) remaining in a large number of countries. The level of intra-Community trade remains marginal: in the order of 3 to 4% of the total market. Such weakness is attributable to the persistence of regulatory obstacles, but also to the saturation of internal demand.

The market structure is very competitive. Alliances have developed between groups, as well as between specialized firms and multi-service groups.

5.4.3. Software and data processing services

These activities include all the support activities to information flows within firms. They include, in particular, the functions of the processing, storage and transmission of information.

The 'information logistics' tasks, both at design and implementation levels, are those for which externalization has been the most developed: software and related services, information management, telecommunications services (EDI, value-added services, virtual networks, transactional services).

⁹³ OJ L 245, 26.8.1992, p. 6.

For a presentation of the stakes relating to the sector in the European context, see the White Paper issued by the trade association EFCA: L'ingénierie intégrée du secteur public en Europe.

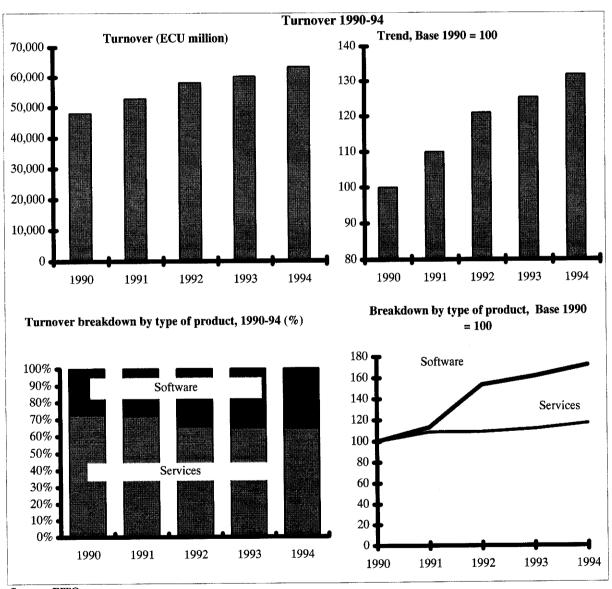
Fields for consideration

The main fields to be considered are:

- (a) software,
- (b) business services,
- (c) processing and network services,
- (d) maintenance of equipment and network services.

The sector is not regulated at European level.

Figure 5.9. Software and software services: main indicators



Source: EITO

Analysis: RCS Conseil

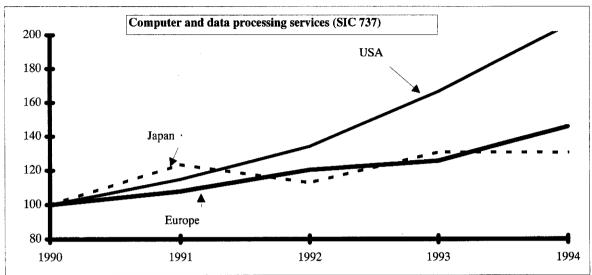


Figure 5.10. Trend in turnover of a sample of computer services undertakings, USA, Europe and Japan (Base 1990 = 100)

Source: DABLE, European Commission DG III A3

Analysis: RCS Conseil

Stakes

A market of the order of ECU 65 billion in 1994, i.e. the leading market in externalized intangible activities in Europe. Growth was relatively strong in the sector over the entire reference period. Services in the strict sense of the term represent about 60% of all the software and computer services activities. Compared to the USA and Japan, the data on large enterprises (Figure 5.10) show that European growth is similar to that in Japan and is below that recorded in the USA.

Trend since 1985

The Sema Metra Conseil study, conducted under the FAST II project,⁹⁵ depicts the sector in 1985. It was characterized in particular by strong growth of the market in Europe, mainly shown by:

- (a) the development of software packages and the emergence of products such as EDI;
- (b) strong differentiation of products and services, in parallel to specialization of companies;
- (c) deregulation of telecommunications leading to the opening of new markets and the development of local business networks;
- (d) industrialization of software, via standard methods (such as MERISE);
- (e) the existence of R&D programmes, such as Esprit, which contribute to this industrialization process;
- (f) the entry of aerospace enterprises, which develop methodological leadership.

Sema Metra Counseil (1986) Services to the manfacturing sector: a long term investigation.

Since 1985, the sector has experienced strong growth in demand. Considering the period from 1990 to 1994 more specifically, growth recorded was nearly 30 points in Europe, according to the EITO data.

Externalization of data processing activities: the analytical framework

The development of the externalization of data processing activities is a major trend in software and computer services activities. Contracts awarded to specialized companies represent considerable amounts. It is therefore of interest, from this point of view, to know the position of European suppliers, taking account of the dynamics of the single market.

The factors justifying externalization include:96

- (a) the fact, firstly, that the suppliers benefit from economies of scale and economies of skills:
- (b) the need to concentrate on the basic trade;
- (c) the advisability of freeing up management time;
- (d) the possibility of reducing investments in dedicated physical assets and staff;
- (e) the possibility of transferring activities for which there is strong resistance to change;
- (f) the need to facilitate access to more efficient technology;
- (g) the need to facilitate the introduction of new applications;
- (h) the possibility of converting fixed costs into variable costs;
- (i) the expediency of changing how the costs eligible for externalization are perceived: real costs and no longer only cost allocations.

Information management, in particular, of which EDS (a subsidiary of General Motors) is world leader, today represents the most complete form of externalization of information processing, storage and transmission. The volume of transactions involving it has already reached a substantial amount (FRF 10 billion for facilities management for the French market alone, i.e. about the size of the contract-based R&D market in Europe).

But despite the economic stakes involved, the theory of the externalization of processing, transmission, storage and exploitation of information has not been the subject of major studies (including from the transaction cost point of view).

In fact, the development of information management makes it necessary to define a suitable analytical framework. In this perspective, P. Chalos⁹⁷ raises the question in particular of the mutually profitable nature of the development of the externalization of activities and especially of information services, for suppliers of services and their customers. The author stresses straight away that the empirical observations suggest that enterprises do not often make the profits they were expecting, quite simply because they have underestimated the transaction and coordination costs. Moreover, in externalization decisions, the marginal

See for example the surveys by PA Consulting Group (*IT outsourcing 1994*), by Sofres-Sligos on information management, especially in banking, and by Chalos (Chalos, P. (1995) 'Costing, control and strategic analysis in outsourcing decisions', *Journal of cost management*, Winter, pp. 31–37).

Ochalos, P. (1995) 'Costing, control and strategic analysis in outsourcing decisions', Journal of cost management, Winter, pp. 31–37.

production costs can be detrimental to the internal activities when the integration of costs of activities do not generate value added.

Table 5.1. Examples of contracts for the externalization of computer services

Customer firm	Object of the contract	Supplier(s)	Duration	Amount
Kodak	data processing	various	5 to 10 years	USD 500 m
General Dynamics	information services		10 years	USD 3000 m
Continental Bank	network operation		10 years	USD 700 m
Texas Air	data processing	EDS	10 years	USD 4 000 m
GE	office automation		5 years	USD 500 m
Bethlehem Steel	systems storage		in progress	_
First Bank Systems	internal audit		in progress	_
Rank Xerox	world network	EDS	10 years	FRF 10 bn
Home Office	facilities management	Sema Group	unspecified	unspecified
Société Générale	information processing	EDS	unspecified	FRF 1 bn
Printemps	information processing	GSI	unspecified	unspecified
Conseil Général du			•	
Vaucluse	information processing	SG2	unspecified	FRF 100 m

Source: Chalos, P. (1995), p. 32; EIE, secteurs 700.

In fact, studies quoted by Chalos clearly indicate that the transaction costs (ex ante) and coordination costs (ex post transaction costs) are often underestimated and that in any case the long-term contracts signed must necessarily be subject to revision. This is particularly critical for sectors such as financial services (banking and insurance) for which information technology and communications are key cost and value components, especially for medium-sized organizations. According to a survey carried out by Sofres⁹⁸ among 65 managers of medium-sized financial institutions in France, the growth in the information management market is 15% per year and at least two-thirds of them are considering this option.

As in the case of R&D, opening up of internal skills to competition and better regulation of external contracts, especially through the general use of audit procedures, are among the options to be considered to cope with these risks and uncertainties.

Main user sectors

The available data on the French market show that the main user sectors of software and computer services are financial services (banking and insurance), other commercial services, trade, industrial sectors, such as gas and water, and mechanical engineering. The data available at European level confirm the importance of financial services (see above).

Main measures under the single market programme

Software services activities are not the subject of specific directives and, apart from the Public Procurement Directives, the main impact of the single market would appear to be indirect.

Measures with indirect impact

The main measures with indirect impact relate to:

- (a) the levelling of the conditions of competition in heavy user sectors such as financial services (see the Directives on banking and insurance), and the opening up of public procurement, in particular by Directive 92/50/EEC, the Services Directive, ⁹⁹ for present suppliers and potential entrants;
- (b) the prospect of the single currency, which should have a strong impact on the development of software activities on account of the resultant migrations of systems;
- (c) the development of horizontal measures of the certification or standardization type (ETSI, ISO, etc.). The European Commission in fact supports the certification and standardization measures of the ISO 9000 type, as an important lever for competitiveness;
- (d) the deregulation of telecommunications services.

Measures with overall impact

The creation of a single market in computer services as part of strengthening the European supply on the domestic market and, at the same time, on the international market.

Impact recorded

The survey conducted among 66 European services companies as part of the Eurostat Business Survey provides information to assess the impact of the single market programme on the sector, especially in relation to the issues considered here: the industrialization of services activities. ¹⁰⁰

It therefore appears that the single market programme has had little impact on the 'macroeconomic' environment of the activities, in particular with regard to:

- (a) the opening up of public procurement (in practice, very few contracts are open to companies of other Member States),
- (b) the development of intra-Community trade.

On the other hand, there was a very substantial impact on the conditions of production of European supplies, especially as regards product standardization, specialization, the development of new products and services and the development of cooperation agreements

Council Directive 92/50/EEC of 18 June 1992 relating to the coordination of procedures for the award of public service contracts, OJ L 209, 24.7.1992, p. 1.

See Appendix A for extracts. For a complete report see Eurostat (1997) SMR: Results of the business survey, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

between firms. On the whole, the views expressed by the enterprises questioned are positive as regards the impact of the single market programme on their activities.

It can therefore be argued that the main Community measures under the single market programme indicated have a certain direct and indirect impact on the development of the computer services sector in Europe, especially in terms of externalization, growth and industrialization of activities.

5.4.4. Commercialization and distribution

The object of this function is to ensure proper reception of market signals by the enterprise and to 'valorize' the goods and services supplied by the enterprise on this same market. This function is understood here in a broad sense, i.e. integrating marketing and distribution tasks in particular.

Market research

The fields covered include all market research, in the broad sense. This is a vital component of intangible investment, since it is at this level that the needs of the market are detected and anticipated.

The European market is of the order of ECU 3 billion per year. In 1988, the market research sector had a turnover in the order of ECU 1.7 billion. It rose to nearly ECU 3 billion in 1994, i.e. an annual growth rate of some 12% per year. Total employment has risen from 23,200 jobs in 1988 to 37,500 permanent jobs during the same period. Over the past 7 years, market research services have recorded steady growth in terms of turnover, employment and number of enterprises.

Intra-Community trade

The ESOMAR data do not permit intra-Community trade in the strict sense of the term to be assessed. They nevertheless allow the level of internationalization of demand and supply to be monitored. The demand for market research is essentially national (82% in 1994), with a certain significant decrease over the period from 1990 to 1994 as a whole. As regards supply, subcontracting abroad is on a less significant scale (7% in 1994).

Main user sectors

Fast-moving consumer goods are the main user sector (20%), followed by cars (10%), the public sector (9%), the media (9%) and financial services (8%).

Main measures under the single market programme

The main measures to be considered, with direct or indirect effect on the level of exploitation of market research by European operators, are the following:

- (a) Measures with direct impact:
 - (i) draft Directive on the protection of personal data in the context of integrated services digital networks (ISDN), 101
 - (ii) Directive on part-time work, in particular regarding the employment of independent researchers,
 - (iii) Directive 92/50/EEC, the Services Directive, on the coordination of procedures for the award of public service contracts. ¹⁰²
- (b) Measures with indirect impact:
 - (i) the levelling of the conditions of competition of heavy user sectors (consumer durables, cars, services, the public sector) or potentially heavy users (financial services and telecommunications),
 - (ii) the ISO 9000 type certification procedures, even if the trade has its own regulatory standards.
- (c) Measures with overall impact. The creation of a single market in market research as part of strengthening the European supply on the domestic market and, at the same time, on the international market.
- (d) Actual impact. The information available from trade associations shows that the market structure is characterized by an increase in the number of enterprises and the development of mergers and acquisitions. The single market programme has contributed in particular to the development of market research with European coverage, which has probably brought about a certain Europeanization of the supply.

Electronic information services

Four types of activities are considered here:

- (a) on-line database services,
- (b) videotex services,
- (c) publications on optical disk,
- (d) audiotex information services.

The study concentrates mainly on on-line data.

The market for electronic information services amounted to over ECU 4 billion in 1994 (entire European Economic Area), with three dominant markets: the United Kingdom (29%), France (16.6%) and Germany (14.7%).

¹⁰¹ COM (94) 128 final.

¹⁰² OJ L 209, 24.7.1992, p. 1.

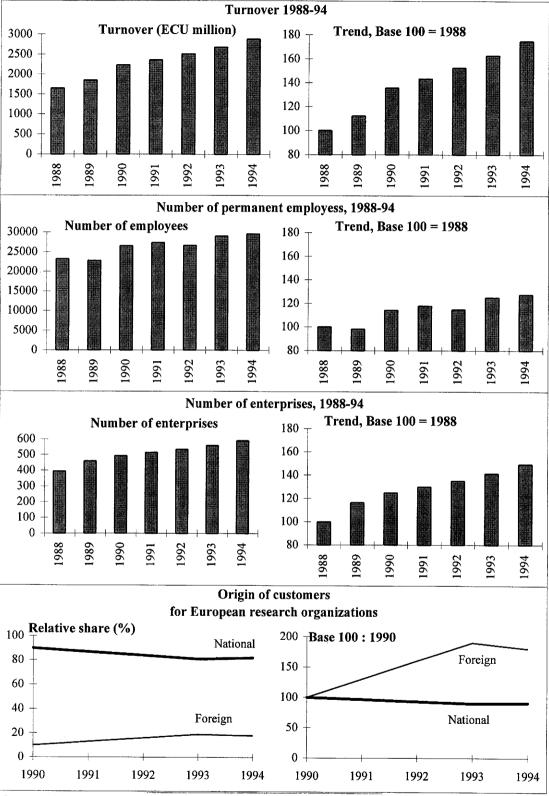
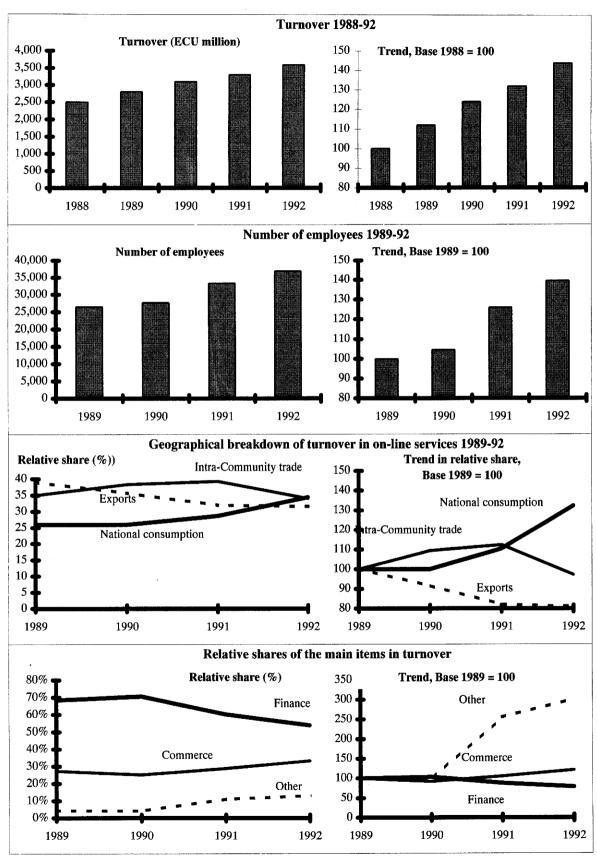


Figure 5.11. Market research: main indicators

Source: ESOMAR Annual Market Study, 1988 to 1994

Analysis: RCS Conseil

Figure 5.12. Electronic information: main indicators



Sources: Information Market Observatory and EIIA/European Commission survey

Analysis: RCS Conseil

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Electronic information is an essential lever for competitiveness for European operators and covers various types of requirements and sectors, such as financial data, market research, international regulations and scientific and technical research.

The stakes in this sector go beyond the scale it has currently reached.

Trend

There was strong growth in the electronic information market (over 40%) between 1988 and 1992. At the same time, the number of jobs grew in the same proportions.

Financial services are by far the largest electronic information user sector (42% in 1994), although their relative share has declined considerably compared to 1989 (in which year they accounted for 68.5% of the total market). The other sectors are respectively: industry and other services (38.4%), the public sector (10.2%), research and higher education (3.2%), and training.

Intra-Community trade

Intra-Community trade has developed more in electronic information than in any other externalized intangible activity. Intra-Community trade in fact accounts for about one-third of the total activity of the sector, a proportion which exceeded the national share in 1990 and 1991 (the latter having fluctuated between 33 and 39% over the period from 1989 to 1992 as a whole).

Main measures under the single market programme

The impact of the single market is already visible in the level of intra-Community trade. The levelling of the conditions of competition in major sectors such as financial services, and the developments in technology and standards were to contribute to boosting the growth in electronic information activities.

Indirectly, the sector is sensitive to all the measures intended to facilitate access to information at European level. In particular, the deregulation of the telecommunications sectors is likely to reduce the cost of data transmission. The same is true of the other Community programmes (Framework Programme, Esprit, Race, Impact, aid to SMEs, etc.).

More specifically, particular consideration must be given to the following measures:

Measures with direct impact

Directive on the protection of personal data. 103

^{95/46/}EC: Directive of the European Parliament and the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ L 281, 23.11.1995, p. 31.

Recent and prospective texts must also be considered:

- (a) Directive on the legal protection of databases, ¹⁰⁴
- (b) draft Directive on distance selling, 105
- (c) draft Communication on commercial communications (advertising, sponsoring, public relations).

Measures with indirect impact

- (a) The levelling of the conditions of competition of heavy user sectors (particularly financial services).
- (b) The certification and standardization procedures (ETSI, ISO, etc.).
- (c) Convergence of European data-transmission infrastructures (videotex and audiotex networks).

Measures with overall impact

The creation of a single market in market research as part of strengthening the European supply on the domestic market and, at the same time, on the international market.

Advertising

All advertising expenditure of the user sectors with the objective of building the image of a product or service on the market is considered here. The level of investment in advertising of the European economic operators is high (ECU 50 billion in 1994 for the members of the EAAA alone), i.e. it is one of the very largest sectors of intangible investment.

This is all the more noteworthy as, compared to the USA and Japan, the European Community has increased the share of advertising in its GDP over the entire period from 1985 to 1992, although it still remains below the American level (in 1992, this ratio was 0.91%, 1.24% and 0.80% for the European Community, the USA and Japan respectively, as opposed to 0.77%, 1.45% and 0.78% in 1985 for the three economic centres).

^{96/9/}EC: Directive of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ L 77, 27.3.1996, p. 20.

¹⁰⁵ COM (92) 11 final.

Figure 5.13. Advertising turnover, 1990-93

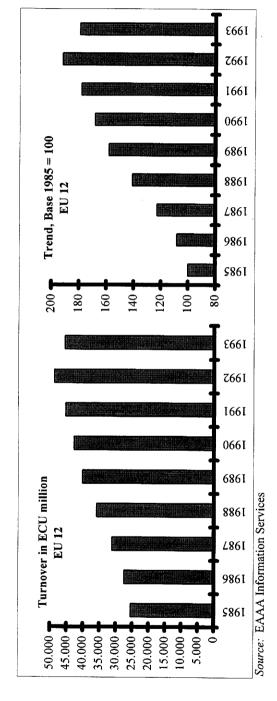


Figure 5.14. Investments in advertising by sector in Europe

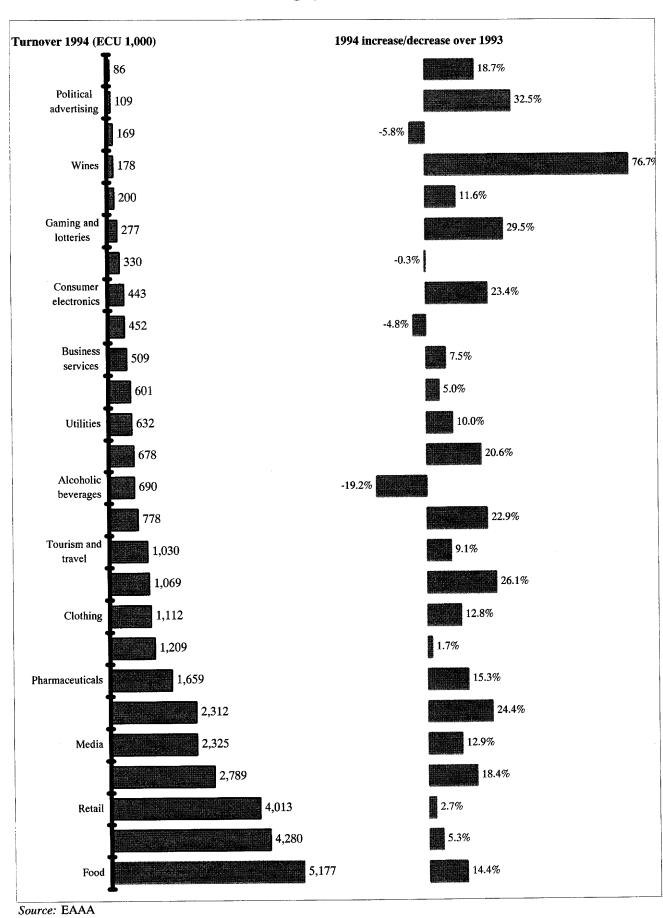
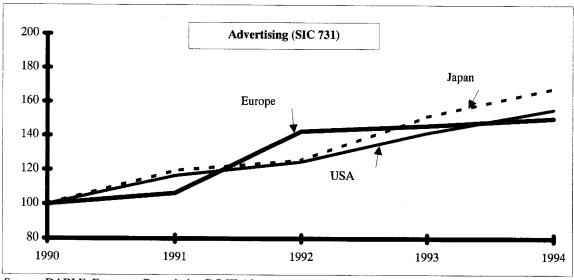


Figure 5.15. Trend in turnover of a sample of advertising firms between 1990 and 1994, USA, Europe, Japan Base 1990 = 100



Source: DABLE, European Commission DG III A3

The data relating to large enterprises confirm these trends (Figure 5.15).

Growth

Growth in advertising was steady throughout the period from 1985 to 1992, levelling off from 1991 on account of the economic crisis; there was even a decrease in 1993.

The main user sectors in 1994 were the food industries (10%), cars (8.5%), distribution (8%), cosmetics (5%), the media (5%) and financial services (5%).

Impact of the single market programme to be considered

As regards the impact of the single market programme, particular consideration is given to the following measures and effects:

Measures with direct impact

These are texts already published and translated into national legislation, recently published or in preparation:

(a) Existing texts: Directive on broadcasting; 106 Directive on the protection of personal

^{89/552/}EEC: Council Directive of 3 October 1989 on the coordination of certain provisions laid down ... in Member States concerning the pursuit of television broadcasting activities, OJ L 298, 17.10.1989, p. 23.

- data;¹⁰⁷ Directive on misleading advertising;¹⁰⁸ Directive on pharmaceutical products;¹⁰⁹ Directive coordinating procedures for the award of public service contracts (the Services Directive);¹¹⁰ Directives on life assurance.
- (b) Recent measures or measures in preparation: Directive on the legal protection of databases; ¹¹¹ Draft Communication on commercial communications (advertising, sponsoring, public relations); Draft Directive on distance selling. ¹¹²

Measures with indirect impact

This refers to the levelling of the conditions of competition of heavy user sectors (for example, the food industries).

Measures with overall impact

The creation of a single market in advertising as part of strengthening European supply on the domestic market and, at the same time, on the international market.

The interim report of the study on advertising, conducted by the University of Bocconi on behalf of the European Commission, in the context of the assessment of the single market programme, provides a certain amount of information to assess the real impact of the programme on the advertising sector.¹¹³

The study considers that the main impact of the single market programme on advertising is indirect, or in other words is at the level of the communication strategies of the customer sectors. The measures to be considered at this level are of two types:

- (a) the measures allowing the scope of operators' commercial strategy to be extended by eliminating physical, technical and tax obstacles to the free movement of goods and services;
- (b) the measures exercising a direct influence on the reduction of costs of trans-European campaigns. These are the measures linked more specifically to the sector (see above).

^{95/46/}EC: Directive of the European Parliament and the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ L 281, 23.11.1995, p. 31.

^{84/450/}EEC: Council Directive of 10 September 1984 relating to the approximation of the laws ... of the Member States concerning misleading advertising, OJ L 250, 19.9.1984, p. 17.

^{92/28/}EEC: Council Directive of 31 March 1992 on the advertising of medicinal products for human use, OJ L 113, 30.4.1992, p. 13.

^{92/50/}EEC: Council Directive of 18 June 1992 relating to the coordination of procedures for the award of public service contracts, OJ L 209, 24.7.1992, p. 1.

^{96/9/}EC: Directive of the European Parliament and the Council of 11 March 1996 on the legal protection of databases, OJ L 77, 27.3.1996, p. 20.

COM (92) 11 final.

For the final report, see Bocconi University (1997) SMR II.7 Advertising, Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

The impact of the single market programme on the sector is expressed in developments at various levels, in particular in relation to the following points:

- (a) The extension (Europeanization) of the commercial strategies of advertisers led to a considerable growth in investments in transnational campaigns, which thereby led to advertising agencies taking steps to operate internationally, notably by setting up networks.
- (b) There was an increase in economies of scale and scope in the sector, from which the European agencies benefited, thereby strengthening their competitive advantage in relation to their American competitors.
- (c) The real importance of these effects depends on that of other environmental factors, such as technology (satellite and cable television) and the development of the way it is regulated and the degree of convergence in the habits and behaviour of consumers at European level (from this point of view, particular emphasis must be placed on the existence of linguistic and cultural barriers).

Direct marketing

The fields covered are the following:

- (a) mailing (52% of activity),
- (b) advertising with direct response in the written press,
- (c) radio and television broadcasts,
- (d) teleshopping systems.

Direct marketing is closely linked to operators' advertising activities. Total expenditure on direct marketing in Europe was estimated at about ECU 26 billion in 1992, as opposed to ECU 12 billion in 1988, i.e. business more than doubled in four years.

The available data (EAAA, EDMA) are aggregated with those for advertising, which does not allow the trend to be monitored precisely.

Cross-border direct marketing activities are little developed and only account for 3% of the total activity of the sector.

Main measures of the single market programme

Particular consideration will be given to the following measures and effects:

Measures with direct impact

Directive on the protection of personal data.¹¹⁴

Texts in preparation:

(a) Directive on the legal protection of databases;¹¹⁵

^{95/46/}EC: Directive of the European Parliament and the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ L 281, 23.11.1995, p. 31.

^{96/9/}EC: Directive of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ L 77, 27.3.1996, p. 20.

- (b) draft Communication on commercial communications (advertising, sponsoring, public relations);
- (c) draft Directive on packaging waste. 116

Measures with indirect impact

These are measures which have a potentially strong impact for direct marketing activities, in particular:

- (a) the levelling of the conditions of competition of heavy user sectors (in particular, financial services, SMEs). As stressed above, the direct marketing methods constitute an essential lever for competitiveness for financial services;
- (b) the standardization of all the media relating to direct marketing: postal regulations, telecommunications, press and broadcasting;
- (c) protection of copyright in databases;
- (d) the certification and standardization procedures (ETSI, ISO, etc.);
- (e) the convergence of the European data-transmission infrastructures (videotex and audiotex networks).

Measures with overall impact

These refer to the creation of a single market in direct marketing as part of strengthening the European supply on the domestic market and, at the same time, on the international market.

The impact of the single market programme so far on direct marketing activities is considered to be marginal on account of the continued existence of significant barriers to their development, notably in the post and taxation fields.

5.4.5. Communication

The object of this function is to build, then to enhance, an essential asset of the enterprise: its name and image. This is one of the enterprise's essential intangible assets since it contributes to forging its identity. Communication tasks have long been the subject of externalization, both at consultancy and implementation levels (advertising agencies, communication companies).

Public relations

The activity considered here refers to the projection of the enterprise to the public or to specific bodies (notably the public institutions).

This activity is carried out by three types of players:

- (a) public relations agencies,
- (b) enterprises,
- (c) independent consultants.

¹¹⁶ COM (92) 278 final.

Stakes

An activity which accounts for some ECU 500 million for the European Community as a whole.

Growth

Over the three years 1991 to 1993 business declined between 1991 and 1992, then picked up again at the end of the period. No statistics are available concerning the main user sectors.

Measures under the single market programme

Public relations activities are not regulated (although codes of conduct exist at trade association level), so the impact of the single market is to be considered to be of an indirect, overall nature. It is linked to the Europeanization of corporate strategies, which are necessarily reflected at public relations function level.

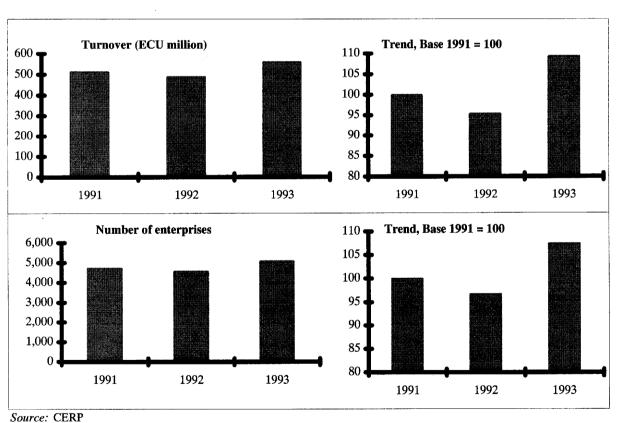


Figure 5.16. Public relations: turnover and number of enterprises, 1991–93

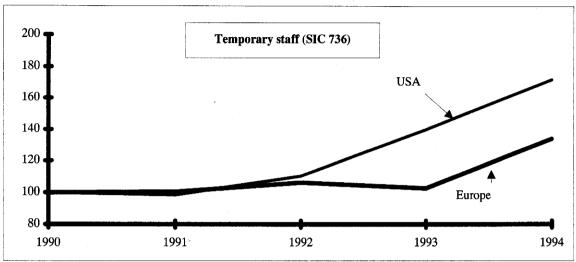
Source: CERF

Analysis: RCS Conseil

5.4.6. Human resources

The services activities considered here are those relating to ongoing training and the hiring out of staff. Training is an essential lever for competitiveness of enterprises, since it is at this level that specific skills are developed. It is often integrated into the major transformations which are taking place in all the sectors of demand at European level. The hiring out of staff is a service used in the context of flexible strategies adopted for human resources management.

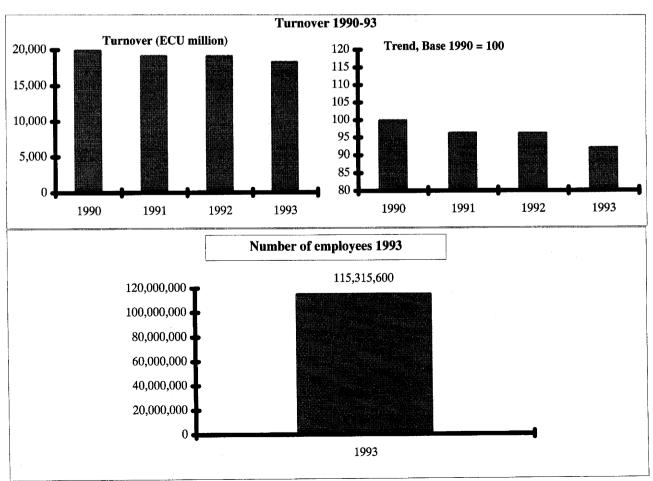
Figure 5.17. Trend in turnover of a sample of enterprises providing temporary labour, 1990–94
Base 1990 = 100



Source: DABLE, European Commission DG III A3

Analysis: RCS Conseil

Figure 5.18. Turnover and number of employees, personnel services (temporary labour) in Europe



Source: European Commission, Panorama of EU Industry

Growth

Ongoing training

We do not have any data relating to ongoing training at European level (the market was estimated by the Commission services at ECU 50 billion in 1988 with 1,150,000 jobs).

In France, for legislative reasons, data from CEREQ are available over a long period. These indicate steady growth, both absolute and relative, in vocational training expenses in France over the entire period from 1972 to 1992 (although with a slowdown at the end of the period).

Temporary staff

The temporary labour services market accounted for ECU 18.4 billion in 1993 (compared to ECU 22 billion in the USA), as against nearly ECU 20 billion in 1990. For the years 1990 to 1993, the European market remained higher than that of the USA in absolute terms. In terms of growth rate, the DABLE data (Figures 5.11 and 5.12) indicate strong growth in European activities at the end of the period, although remaining below the American level.

Main user sectors

Vocational training

Among the user sectors, and on the basis of the French data, it will be seen that banks and credit institutions greatly increased the rate of access to training of their staff, which reached 80.5% for financial institutions and 54% for insurance undertakings in 1992.

Measures under the single market programme

The markets for training and the hiring out of staff are essentially national and therefore, at first glance, little influenced by the single market programme. However, the development of corporate strategies for the valorization of human resources and the *ad hoc* European programmes have had an indirect influence on the methods and levels of recourse to ongoing training.

For example, the development of mergers and acquisitions in a large number of economic sectors (case of financial services and the food industries) probably had the effect of boosting the training activities of enterprises, especially as, for some of them, redeployment of production units was recorded. In another field, technological innovation, including its information systems and distribution networks dimension, and the development of new products, were necessarily accompanied by training at demand sector level.

Account should be taken more specifically of the following texts and programmes:

(a) the Council Decision (1985) concerning the equivalence of vocational training; 117

^{85/368/}EEC: Council Decision of 16 July 1985 on the comparability of vocational training qualifications between the Member States of the European Community, OJ L 199, 31.7.1985, p. 56.

- (b) the Council Directive (1988) on a general system for the recognition of higher education diplomas for vocational training lasting a minimum of three years;¹¹⁸
- (c) the *ad hoc* programmes of the European Communities to facilitate adaptation to industrial changes, in particular through vocational training and retraining, and to improve initial and ongoing vocational training (Comett, etc.).

As regards temporary employment, the existence of Community regulations in the field of working conditions, distortions of competition and health and safety should be emphasized.

5.4.7. Transfunctional support services

The activities considered at this level are of three types:

- (a) legal services,
- (b) accounting services,
- (c) management consultancy services.

Economic stakes

Exhaustive data on these activities are difficult to gather. As regards management consultancy, there has been an apparent increase in the activities of all the members of FEACO, although the DABLE data indicate a lesser growth by European firms compared to their American or Japanese counterparts (Figure 5.20).

Measures under the single market programme

Legal services

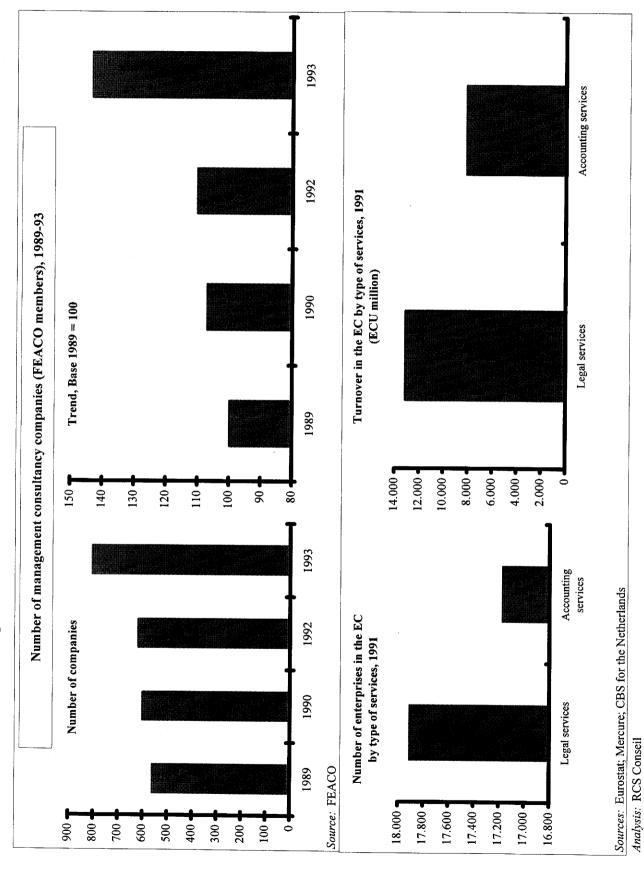
On account of its essentially national character, the direct influence of the single market programme on the legal advice sector is considered to be marginal. The bulk of the impact is indirect, i.e. results from the development of customer sector strategies.

Measures with direct impact

These services are strictly regulated at national level, with considerable differences in terms of organization and fields covered by the 'professions'. The sector is mainly organized by domestic market and it is difficult, because of the protection of the title of 'lawyer', to engage in cross-border activities.

^{89/48/}EEC: Council Directive of 21 December 1988 on a general system for the recognition of higher-education diplomas awarded on completion of professional education and training of at least three years' duration, OJ L 19, 24.1.1989, p. 16.

Figure 5.19. Management consultancy services, legal services and accounting services: a few indicators



At Community level, the following important texts should be emphasized:

- (a) Council Directive 77/249/EEC to facilitate the effective exercise by lawyers of the freedom to provide services, 119 although this Directive does not integrate the aspects relating to the right of establishment and the mutual recognition of qualifications;
- (b) the 1994 proposal for a Commission Directive to facilitate the practice of the legal profession at European level;¹²⁰
- (c) European training programmes (Erasmus, Leonardo) are considered to facilitate the emergence of a European legal profession, in the long term;
- (d) Directive 89/48/EEC on a general system for the mutual recognition of qualifications. 121

Measures with indirect impact

The levelling of the conditions of competition of the demand sectors and the overall impact of the dynamics of the single market have had a certain impact on legal services (in particular with the development of mergers and acquisitions).

Accounting services

Like legal services, accounting activities are strictly regulated at Member State level. Important questions remain pending, in particular regarding the freedom to provide services, the mutual recognition of rules (especially accounting standards), tax regulations and finally consumer protection.

At Community level, a certain number of Directives relate directly to accounting services:

- (a) the 8th Company Law Directive (1984), 122
- (b) the 7th Company Law Directive (1983), 123
- (c) the 4th Company Law Directive (1978), 124
- (d) the specific Directives on the annual accounts of banks and insurance undertakings.

The market is structured between international networks and small and medium-sized enterprises, with accountants also pursuing their activities as a professional occupation. Although there is no single market in accounting services yet, it should nevertheless be stressed that the single market programme has probably had an impact on the development of accounting activities at European level, especially with the development of merger and acquisitions operations.

OJ L 78, 26.3.1977, p. 17.

COM (94) 572 final.

OJ L 19, 24.1.1989, p. 16.

^{84/253/}EEC: Eighth Council Directive of 10 April 1984 based on Art. 54(3)(g) of the Treaty on the approval of persons responsible for carrying out the statutory audits of accounting documents, OJ L 126, 12.5.1984, p. 20.

^{83/349/}EEC: Seventh Council Directive of 13 June 1983 based on Art. 54(3)(g) of the Treaty on consolidated accounts, OJ L 193, 18.7.1983, p. 1.

^{78/660/}EEC: Fourth Council Directive of 25 July 1978 based on Art. 54(3)(g) of the Treaty on the annual accounts of certain types of companies, OJ L 222, 14.8.1978, p. 11.

Management consultancy

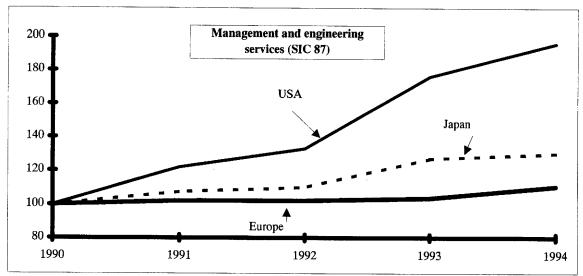
Management consultancy is not a regulated profession and strictly speaking there are no barriers to engaging in the profession. The effects of the single market programme are indirect and originate from:

- (a) the development of externalization of consultancy activities by the customer sectors;
- (b) the development of demand linked to the strategic and organizational movements associated with the single market (search for partners, mergers and acquisitions, redeployment of activities, BPR);
- (c) a tightening up of the requirements of enterprises (which in turn results from an increase in competitive pressure), which promotes the transition of the profession from a professional occupation to a veritable 'industry';
- (d) a resultant demand for the development of methodologies and approaches oriented towards maximization of value for customers;
- (e) the potential opening up of public procurement (Public Procurement Directives);
- (f) standardization of the supply of services, by the coordination of standards and certification procedures at European level (ISO standards, specific European standards).

The markets are characterized by the coexistence of several types of players: the strategic specialized firms, the traditional strategists, the auditors (the 'big six'), the sectoral or functional experts, the regional or national general practitioners, the professional occupations. The single market has had a strong impact on the sector, especially during the period of the 'anticipatory effect' (1985–92). At supply level, European networks have been formed, subsequently or in parallel to the completion of the single market.

In terms of growth, there are no real consolidated, reliable data at European level. The DABLE data provide an indication of the trend in management consultancy and engineering activities over the entire period from 1990 to 1994. This is characterized by relative stability between 1990 and 1994, whereas growth appears stronger in the USA and less strong in Japan. These data are to be considered with caution, on account of the significant differences in the size of samples considered: 34 enterprises in Europe, 33 in Japan and only 5 in the USA.

Figure 5.20. Trend in the turnover of a sample of enterprises, 1990–94: management and engineering services, Europe, USA, Japan



Source: DABLE, European Commission DG III A3

Analysis: RCS Conseil

6. Overall assessment of the impact of the single market programme on the level and exploitation of intangible investments

The object of this final part is to present a summary assessment of the impact of the single market on the level and exploitation of intangible investments by European operators in the EU. More specifically, it is a matter of providing a concise reply to the three objectives of the study, as defined in the terms of reference, i.e.:

- (a) to identify all channels through which single market integration influences, directly or indirectly, the level and form of intangible investment;
- (b) to analyse the impact of the single market on the level of intangible investment;
- (c) to analyse the impact of the single market integration on the exploitation of intangible investment by European operators.

The appraisals below seek to meet these three objectives, taking as a basis in particular the information emerging from the three parts of the study, i.e. the quantitative trend in the level of investment, the information deriving from the analysis of the demand sectors, and the analysis of externalized services. They are also based on the survey conducted among European operators on the basis of the questionnaires reproduced in Annex 2.

6.1. The channels through which the single market programme influences intangible investments

Identification of the channels naturally presupposes that the single market programme does in fact have an impact on the level and exploitation of intangible investments. As emphasized in the preceding chapters, this impact, although real, is essentially of an indirect nature.

The identification of the various channels through which the single market programme has an impact on the level and exploitation of intangible investments by the operators was undertaken on the basis of all the information available:

- (a) the information contained in this study,
- (b) the Eurostat Business Survey conducted among industrial and services enterprises, 125
- (c) the specific sectoral studies (banking, insurance, food industries), 126
- (d) the surveys conducted among trade associations.

On account of the interdependence of the influences relating to the single market programme (and even within these influences), and those deriving from the general development of markets and industries (consolidation of industries), the concept of 'channel' must be considered here as a set of interdependent chains rather than as a linear relationship of

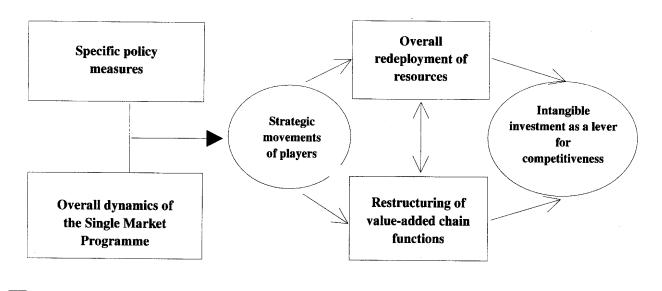
See Appendix A for extracts. For a complete report see Eurostat (1997) SMR: Results of the business survey, Office for Official Publications of the European Communities, Luxembourg and Kogan Page, London.

See Economic Research Europe Ltd (1997) SMR II.3 Credit institutions and banking; CEGOS (1998) SMR II.1 Insurance; and BER (1997) SMR I.7 Processed foodstuffs, all Office for Official Publications of the EC, Luxembourg and Kogan Page, London.

influence between one or more decisions under the single market programme and the level of investment by the operators.

In this perspective, we suggested differentiating between various levels of impact which all form levers of influence of the single market. Figure 6.1 provides an overview of the various channels through which the single market programme influences the level and exploitation of intangible investments by operators in Europe.

Figure 6.1. Dynamics of the influence of the Single Market Programme on intangible investments: the main channels



6.1.1. Specific policy measures

The measures relating to the single market programme naturally form the starting point for the process of influence considered here (Figure 6.1). The single market programme defined a series of legal measures dealing directly or indirectly with one or more intangible investment items.

The direct measures are horizontal and include:

- (a) the measures intended for the protection of personal data,
- (b) the measures to standardize the format for the exchange of data in the telecommunications field,
- (c) the measures relating to standardization,
- (d) the measures relating to intellectual property,
- (e) the measures relating to public procurement,
- (f) the measures relating to the mobility of researchers,
- (g) in preparation, the measures relating to the telecommunications networks.

The **indirect measures**: these are measures which are specific to a sector (the Second Banking Directive), a product (life assurance or the packaging of foodstuffs) or more generally to the freedom to provide services.

6.1.2. Overall dynamics of the single market

The interviews conducted among certain European operators clearly show that beyond specific policy measures, it is the overall dynamics of the creation of an integrated single market which influence the behaviour of the operators, including the field of intangible investments. This concerns externalized intangible activities (services) in particular.

At this level, a two-fold assessment can be made:

From the point of view of the operators using intangible assets, of which the level and exploitation by the single market were in fact influenced by the single market programme, this influence mainly occurred through the dynamics of creating a homogeneous market.

From the point of view of suppliers of externalized services, the dynamics of creating the single market appears overall to form an influential link at two levels: the potential opening up of hitherto regulated markets, on the one hand, and the creation of marketing and production networks, and more generally of pan-European strategies, after or concurrently with the Europeanization of the strategies of customer sectors, on the other hand.

6.1.3. Strategic moves of the players

The information set out above shows that the strategic moves of the players are at the heart of the process of influence of the single market; they therefore constitute its central link. The development of cross-border direct investment illustrates the central nature of the strategic moves of the players.

In the case of banking, for example, the Eurostat data showed a certain link between establishment of the single market and development of cross-border direct investments, and foreign investments. These are significant strategic moves which naturally involve the development of considerable intangible investments in Europe. The development of alliances and mergers and acquisitions is also evidence of strategic moves of decisive influence.

In the case of insurance, similar movements to those observed in banking must be reported. Cross-border investments grew strongly between 1986 and 1990. The food industries, too, show the development of mergers and acquisitions, with influence on intangible investments generally both before and after such operations.

More generally, it can be considered that the strategic moves of operators, in terms of both their external manifestations (alliances, mergers and acquisitions, cross-border investments) and their internal implementation (organization and development of skills), constitute the main lever of influence of the single market programme on the level and exploitation of intangible investments by operators. The difficulty at this level is to define the moves which are specific to the single market and those which come more generally within the framework of consolidation of activities.

6.1.4. Overall redeployment of economic operators' resources

This level of influence is closely linked to the previous one. Its aim is to illustrate the fact that operators redeploy their tangible and intangible resources, under the influence of changes in their external environment, especially through the implementation of the single market programme. Various studies conducted in the context of the current assessment of the single market programme show that the single market has had a real effect on the redeployment of operators' resources, especially through a better reallocation of resources attributable to the price mechanisms, lower transaction costs and the development of economies of scale and scope. At another level, the adoption of European standards and the opening up of public procurement contribute to the process of redeployment of resources at macroeconomic level.

As regards the operators, keener competition necessarily contributes to a redeployment of resources and, as a result, to the adoption of convergence strategies.

6.1.5. Reorganization of the value-added chain

The redeployment of resources is necessarily accompanied by a reorganization of the value-added chain. The approach suggested by the study, with its focus on strategy, is based on the European economic operators' resource allocation process and the dynamics of its change. The survey of the main operators (Chapter 4) confirmed that it is at functional level that the resource reallocation processes are organized, especially in reaction to the dynamics of the creation of the single market.

At the level of the research & development function, processes for the reallocation of resources – both tangible and intangible – and for the reorganization of structures are organized in reaction to the signals of the single market programme. In the case of the food industries, many enterprises have stepped up their R&D efforts in connection with the creation of the single market. In the case of financial services, there was a reorganization of the product development function by some operators. Finally, progressive externalization of R&D activities and cross-fertilization are emerging in connection with the single market and other Community programmes (the framework programme).

The various surveys conducted, especially those by Eurostat, show that the organization of the production function was substantially influenced by the dynamics of the single market. The main levers at this level concern the search for areas for competitive location or externalization, investments in optimization of existing sources and capacities, investment in modern managerial methods (BPR, etc.).

As regards the logistics function, lower prices resulting from single market integration and reductions in transport costs were stressed as contributing to the growth in intra-Community trade and to the extension of the range of the supply. At this level, the search for competitive procurement sources is an essential component of the dynamics of the single market programme. As regards information logistics (telecommunications and information technology), the strengthening of deregulation, coupled with the strengthening of competitive pressures in the user sectors, are liable to lead to the latter making more effective use of the available capacities.

The commercialization and distribution functions are directly affected by the dynamics of the single market and the development prospects associated with it. At this level, the main levers

for competitiveness are the reorganization of distribution networks, the development of direct marketing, strengthening the market intelligence of operators (especially through access to online databases) and staff training.

The communication function is also affected by the players' strategic moves and resultant redeployment of resources. The objective here is to strengthen the image of the enterprise and its products, especially in its European dimension. The increase in investments in advertising and communication illustrates this trend. The trade name is an essential intangible asset for competitiveness.

There has been a change in the way enterprises approach human resources. In the single market context, the training of executives in inter-cultural management in a European context is a major concern for operators, and especially for those who have recently established themselves outside their domestic market.

To sum up, operators have revised the method of combining their functions and related activities, both individually and in an integrated manner.

6.1.6. Intangible investment as a lever for competitiveness

The previous sequences show the multifarious influences of the single market programme on the level and exploitation of intangible investments by operators in Europe. These are all influential and triggering factors. It should be stressed at this level that, like any investment, intangible investments are made only if they seem to be vital levers for competitiveness.

6.2. The impact of the single market programme on the level of intangible investment

The impact of the single market programme will be presented here at three levels: the overall level of intangible investments, that of the demand sectors analysed and finally that of the externalized services.

6.2.1. A favourable overall trend in the levels of investment promoted by the single market programme

From a macroeconomic point of view, five types of expenditure were considered in the study:

- (a) research & development expenditure,
- (b) technology payment expenditure,
- (c) advertising expenditure,
- (d) expenditure on education,
- (e) software expenditure.

Analysis of their trend shows that, overall, and compared to the USA and Japan, the aggregate level of intangible investments in Europe seems to be relatively satisfactory. Nevertheless, the share in GDP of certain key indicators (R&D and software in particular) has remained below the level reached in the USA and Japan.

The microeconomic data available from the DABLE database indicate steady progress in the level of investment of large enterprises. The question which then arises is the extent to which

the single market programme has influenced this trend or, in other words, what the situation would be in the case of the 'zero option'.

Although the reply is not obvious at macroeconomic level, it can nevertheless be argued that the single market programme has influenced these results to a certain extent.

6.2.2. An essentially indirect impact on banking, insurance and the food industries

The non-availability of data on the components of intangible investment by economic sector makes it difficult to monitor them over a long period. A few data available on certain items and the information supplied by the operators of the three demand sectors studied provide a few elements regarding the impact of the single market programme on the level of intangible investment.

Banks with networks

Two indicators may be monitored in particular for this sector: the data on training and those relating to software expenditure. For each of these components, strong growth in investments appears throughout the period considered.

The operators interviewed supplied information regarding the impact of the single market programme on the level of investment. In general, the single market is recognized as having accelerated operators' investment plans; the influence here is mainly indirect. The operators emphasize in particular that the investments made are directed primarily at meeting the requirements of customers and the new conditions of competition. Naturally, the single market is an essential component of these conditions.

The measures indicated as having specifically influenced the level of investment in the banking sector include the following: the Banking Directives, free movement of capital and the prospective Monetary Union.

The fields most concerned by the increased investment by European banks include: the development of products and services, the strengthening of the technical functions (fund movements), information logistics, organizational restructuring (BPR, etc.) and the development of specific skills.

Insurance

The insurance sector is not substantially different from the banking sector. The data available for France, in particular, show a strong rise in the sector's investments, especially in training. As regards the impact of the single market programme, the interviews conducted among operators show, for the majority of them, a certain direct or indirect influence on their level of intangible investment. All the Insurance Directives are considered as being a source of this influence.

According to the information available, the fields most concerned by boosting the level of investment are those relating to product development, the increase in information logistics and the improvement of the quality of the technical functions (production, claims management, premium collection).

Food industries

The DABLE data available on the sector provide indications of the trend in the corresponding intangible investments. They show a slight rise in the R&D/turnover ratio in Europe, to be compared with the strong growth found in the USA over the same period. At the same time, intangible assets grew more than tangible assets. But the sector is characterized above all by its advertising expenditure which, at over ECU 5 billion in 1994, made it the main user sector in Europe. In general, and in this respect endorsing some of the conclusions of recent work on the European food industries, it is found that the strategic moves of the European food groups, in the context of the single market, took the form of an increase in advertising expenditure. This expenditure clearly emerges as an essential lever for competitiveness and hence as an integral part of the market structure. The same progress is recorded in training, as shown by the CEREQ data for France.

6.2.3. Externalized intangible activities

The externalized intangible activities form an important part of intangible investments and it is easier for operators to monitor them than the 'internalized' investments, for lack of ad hoc indicators. In general, the relatively strong growth in the business services market throughout the period from 1988 to 1992 can be emphasized. In parallel, and as clearly shown by the Eurostat data, the development of European cross-border trade in business services and advertising from 1988 should be pointed out. More or less the same observations can be made regarding direct investments. Such trends are naturally linked in part to the dynamics of the single market and to the fact that the strategic moves of the suppliers of services largely paralleled those of the users. From the point of view of the single market programme, it is the overall dynamics of the market which counted, beyond specific measures.

Contract-based R&D

Analysis of this activity comes up against an intrinsic difficulty owing to the unavailability of reliable, exhaustive data at European level. Nevertheless, information was provided by some of the suppliers interviewed. They indicate clearly that the dynamics of the single market had an impact on the volume of their activities and their organizational methods, for example in the form of greater competition – and therefore cooperation – on the R&D markets (notably on account of the Public Procurement Directives), promoted a certain mobility of researchers, mainly attributable to European cooperation programmes, and more generally influenced the conditions of supply (innovation, production, marketing, communication, alliances and 'industrialization'). In terms of dynamics, the European infrastructure and telecommunications programmes are recognized as necessarily having an impact on the level of investment in contract-based R&D.

Technical engineering

After picking up slightly in 1992, the turnover of the sector fell in 1993. The trend of the sector is closely linked to general macroeconomic trends and to the development of third markets. The impact of the single market appears to be marginal, as shown in particular by the limited development of cross-border activities (3 to 4% of activities, as opposed to 30% exported outside the Union Member States). At legislative level, the sector may be influenced by effective application of the Public Procurement Directives.

Software and data processing

These activities (accounting for more than ECU 60 billion in 1994) form the leading market in externalized services in Europe. They have recorded strong growth throughout the period from 1990 to 1994, with an average annual growth rate of over 7%. Development was influenced indirectly by the single market programme on account of competitive pressure introduced in the demand sectors and especially in the sectors in which computer services form a key lever for competitiveness (banking and insurance). Other influences, such as the deregulation of telecommunications, the Public Procurement Directives and the prospective single currency must be emphasized.

Market research

The market research sector experienced strong growth throughout the period from 1988 to 1994, with an average annual growth rate of about 12%. The size of the market is in the order of ECU 3 billion. As for all services, the single market had a considerable influence on the development of market research activities, including in a cross-border perspective. Beyond the specific measures indicated above, the dynamics of creating the single market contributed to the growth in demand for these activities and to a certain standardization in the conditions of production and a fall in prices, as shown in the comments made by certain players and their representative associations.

Electronic information

This activity recorded a strong growth rate: over 40% between 1988 and 1992. In parallel, there was strong development of intra-Community trade, which fluctuates between 33 and 39% of the total volume of activities over the period as a whole. This growth comes under the single market. A certain number of technical Directives relate more particularly to the development of these activities: the Directive on the legal protection of databases, the draft Directive on distance selling, etc. In parallel, the development and standardization of the European networks and infrastructures are likely to contribute to an expansion in demand.

Advertising and direct marketing

Advertising is the second largest market for intangible investment in terms of volume (after computer services). Over the entire period from 1985 to 1992, there was steady growth in this activity within the EU. There was a notable stepping up of European efforts in this field, in both absolute and relative terms, as shown by the increase in the share of advertising in Europe, compared to the USA or Japan over the period as a whole, with a decrease in the relative level in the USA (in 1992, this ratio was 0.91% and 1.24% respectively for the European Community and the USA, as against 0.77% and 1.45% in 1985). This trend shows the indirect influence of the single market on the level of investments in advertising of the European Union. The 'advertising' study also stressed the indirect nature of this impact, which derives in particular from the Europeanization of firms' strategy (case of food firms) and the technical measures intended to reduce the cost of trans-European campaigns.

Expenditure on direct marketing more than doubled between 1988 and 1992, rising from ECU 12 billion to ECU 26 billion at the end of the period. Cross-border activity is minimal, accounting for only 3% of the activity of the sector. Intrinsically, the development of direct marketing activities is potentially significant in the context of the single market. Obstacles

nevertheless remain, especially in the postal and tax fields, which impede the development of cross-border direct marketing.

Public relations

This activity represents a fairly modest stake – in the order of ECU 560 million (CERP data) – but is tending to develop on account of the importance of corporate image-building as a lever for competitiveness. The single market is considered to have had a positive impact on the activities of public relations enterprises, to the detriment of advertising, considered to be less targeted.

Training

Although there are not yet any consolidated data on expenditure on training at European level, the information available for certain countries (France) or from surveys conducted among operators show that the latter have increased their level of investment in this field, notably on account of the single market. The objective at this level is in particular to develop the specific skills required by the new conditions of competitiveness.

Transfunctional support services

These are various activities of a transfunctional nature: legal services, accounting services and organizational consultancy services. Despite the unavailability of statistics on the development of legal services, it can be argued that these services were heavily in demand from operators, especially for mergers and acquisitions and cross-border investments more generally. This is a first effect of the single market programme on the level of investments by European operators. A second, technical level relates to the supply of services itself. It is expressed in the attempt to harmonize the practice of the profession, its conditions of access and the development of cross-border partnerships.

More or less the same assessment can be made regarding accounting services. Organizational consultancy services, for their part, are not regulated. Over the past ten years, these services have benefited considerably from the dynamics of the single market, especially for the preparation, then the implementation of mergers and acquisitions operations and the redeployment of activities at European level.

6.2.4. Summing up

The assessments above have demonstrated that the single market programme really has influenced the level of intangible investment of European operators on the basis of three types of analyses: the trend in the available 'macroeconomic' data, the information gathered on three demand sectors and, finally, the statistics available on externalized intangible activities. In the future, the single currency should have a substantial impact on the level of intangible investments, especially in the banking sector (notably at information systems level).

Comparison of the dynamics of impact of the single market programme on the level of intangible investment in the three sectors considered shows significant differences:

- (a) The trends in banking and insurance appear to be broadly similar, with a predominance of investments devoted to product development, information logistics, distribution and human resources.
- (b) In terms of dynamics, banks are likely to be particularly concerned by the needs for intangible investments, especially in information systems (re-writing and migration of software, in particular), necessitated by the introduction of the single currency.
- (c) The food industries appear to be far more concentrated and as a result more sensitive to the arguments of oligopolistic competition. At this level, the investments affected by the single market programme concern image-building and advertising in particular. Compared to other industrial sectors, R&D appears to be a function very closely related to marketing and product development.
- (d) In total, the three economic sectors have seen their level of intangible investments influenced by the single market programme. This influence is essentially indirect and associated far more closely with the overall dynamics of the single market than with specific measures.
- (e) The dynamics of the growth of externalized services (apart from technical engineering) show that on the whole, the single market programme contributed to the growth in the European supply. Naturally, the development of the latter remains fundamentally linked to the general economic climate and to the policy of the users, especially in respect of the externalization of their intangible activities.

6.3. Impact of the single market programme on the exploitation of intangible investments

This second part naturally supplements the previous part. It aims to show the extent to which the single market programme has led to European operators exploiting their intangible investments more effectively and therefore improving their intangible capacity.

As defined above, the concept of exploitation covers several components here:

- (a) the valorization of intangible investments by the economic operator-users;
- (b) the externalization of intangible activities by the economic operator-users;
- (c) the organization of intangible activities around the concept of their industrialization by the economic operator-suppliers (in particular of externalized services).

6.3.1. Valorization of intangible investments by the economic operator-users

The question of the valorization of intangible investments by operators boils down to considering whether these operators have derived the maximum benefit from the investments made or, in other words, whether European enterprises improved their intangible capacity, especially by adopting the best practices tried and tested on the market, or even developed new managerial practices on the basis of the intangible investments, as a direct or indirect effect of the single market. This is a complex question which goes beyond the ambit of this study.

The information gathered from three customer sectors nevertheless allows some light to be thrown on this question.

Banking

The majority of the replies given by the operators questioned conclude that the single market programme has had an impact – direct or indirect – on the exploitation of the intangible investments, both overall and for each of the key stages in the value-added chain.

At aggregate level, the question was considered through two complementary dimensions: the impact of the Europeanization of the operators' strategies on their intangible capacity, and the level of maximization of the value derived from the investments made. The Europeanization of firms' strategies in particular contributed to the cross-fertilization between units of groups, as well as to better use of skills, networks and information systems. The exploitation of investments, for its part, was to a certain extent accelerated by the implementation of the single market programme. At this level, it should be noted that the development of direct investment was necessarily accompanied by an apprenticeship in inter-firm cooperation and therefore redeployment of strategies within the context of a broader market.

As regards the impact on the value-added chain, an indirect effect is stressed by the majority of operators overall and for the main functions considered, i.e. for:

- (a) the development of products or services, with the contribution to the development of remote banking, insurance products, payment products;
- (b) the technical functions, the externalization of ATM networks;
- (c) information logistics, the development of integrated information processes and the reinforcement of the need for coordination of activities with parent companies, as well as the implementation of on-line information logistics and inter-bank cooperation networks;
- (d) the commercialization, communication and distribution functions, innovations in new distribution methods, investments in advertising and marketing and the search to project an image in a European context;
- (e) training and the development of specific skills, the search to improve managerial skills and network expertise and a redeployment of back office resources to the front office;
- (f) transfunctional services through a gradual extension of the range on offer.

Insurance

Overall, the majority of the operators interviewed stressed the impact of the Europeanization of corporate strategies in the form of better exploitation of their intangible investments. The impact is generally expressed in functional terms. This impact is shown in particular in the areas of:

- (a) the development of products and services, through a shortening of their life cycle;
- (b) the technical functions, through the adaptation of the technologies implemented or the search for cooperation or links with partners;
- (c) information logistics, through generalization of a professional approach;
- (d) commercialization, distribution and communication functions, through the reorganization of networks, recourse to advertising and the search for a European image;
- (e) training of human resources, through the development of specific skills, especially for the commercial and international management functions;
- (f) the transfunctional services used, especially to conduct mergers and acquisitions or organizational processes adapted to the international context.

Food industries

For this sector, the start of cross-border movements and mergers and acquisitions was necessarily accompanied by a revision of the intangible capacity of the operators. At this level, and as certain recent work has stressed, it is probable that the dynamics of the single market have been accompanied for operators by a search for greater efficiency of their productive capacity and an assertion of their European image, in line with the growth in the level of concentration of the sector (case of processed foodstuffs). As regards human resources, research has been undertaken into better use of the potential available, as shown by the increase in training, indicated above. Finally, as shown by the results of the Eurostat survey, a substantial number of European enterprises questioned (28.5% of the opinions expressed) indicate that the single market programme had a fairly important to very important impact on the adoption of 'lean production' type methods. Of these, 36% expressed the same point of view concerning research & development for new products.

Summary

The information above tends to indicate that here, too, the single market programme has had an essentially indirect influence on the conduct of European operators as regards the exploitation of intangible investments. This learning effect is naturally not exclusively attributable to the dynamics of the single market. But the deployment of the operators' strategies, especially in their 'external' dimension (mergers and acquisitions, for example) contributed to boosting the 'intangible capacity' of enterprises. At internal level, to a lesser extent, the increase in competitive pressure contributed to the implementation of efficient managerial practices (cf. 'lean production' in the food industries).

6.3.2. Externalization of intangible activities by the user sectors

The question of externalization is of interest in so far as this is a major trend of the dynamics of use of intangible activities by operators, potentially influenced by the dynamics of the single market programme.

The response to the question of the extent to which the single market programme has contributed to greater externalization of these intangible activities by operators is at three levels: the degree of externalization of the user demand sectors (here the banking and insurance sectors), the growth in externalized activities, and the development of cross-border trade in services.

Degree of externalization of the intangible activities by user sectors (banking and insurance)

The surveys conducted among European banks and insurance undertakings give indications of the geographical basis and the criteria for externalization of their intangible activities.

As regards the first factor, national, European and world bases coexist in the banking sector. Acquisitions of externalized information logistics services are made in a world perspective (at least for the operators questioned). On the other hand, for the services relating to the other functions (marketing, on-line data, legal advice services), the procurement basis is mainly national. For the insurance undertakings questioned, more services are procured on a European, and even a world basis. The information logistics function also benefits here from a world procurement basis; this shows its critical nature for financial services. Naturally, these

replies must take account of the nature of the respondents: they are large, generally internationalized organizations.

As regards externalization criteria, the quality of the services and the differentiation of the supply and the price level are the factors most often mentioned. The other criteria suggested, especially those relating to standardization and certification or the establishment of the suppliers on a European basis, seem to be of secondary importance, in both banking and insurance.

This information clearly indicates that information logistics is the main function concerned by the externalization of intangible activities in an international perspective. It is in fact this sector which is the subject of the largest facilities management and outsourcing contracts.

The influence of the single market programme on the dynamics of externalization of intangible activities is not obvious. It can only be indirect in nature. The decisions to externalize activities are firstly linked to the competitive pressures on the market and, to a certain extent, to the managerial methods of the time.

Growth in externalized activities

Chapter 5 enabled the overall trends in the components of externalized services to be indicated. The majority of them showed substantial growth rates well above that of European GDP. There are therefore dynamics of externalization of services activities, partly linked to the specific dynamics of the single market.

Development of the EU's internal trade

Eurostat's consolidated data clearly indicate that, throughout the period from 1983 to 1993, there was steady growth in the EU's external and cross-border trade in business services, with cross-border trade gathering pace in particular from 1988. Such a trend can be linked directly to the specific dynamics of the single market programme.

6.3.3. Industrialization of intangible activities by economic operator-suppliers

The stepping up of competitive pressure within customer sectors and the accumulation of their services experiences have a strong impact on their requirements level in terms of characteristics of the services supplied. In this context, the services activities are tending to become 'industrialized', or, in other words, to be organized functionally as industry has been for a long time, with standard products, R&D functions, production, quality and commercialization and communication. In this respect, the information available, in particular from the Eurostat Business Survey, shows that the single market has had a real impact.

This is the case in particular for computer services, for which the survey conducted by Eurostat among 66 companies indicates that the single market programme has had an important impact on the conditions of production and in particular regarding the standardization of products and services and the development of innovative processes. In parallel, this trend has been accompanied by the development of cooperation agreements between firms.

The same lessons can be drawn from reading the survey conducted among 441 business services companies.

In total, the single market programme may be considered to have contributed to better organization of the European supply of business services and at the same time to better exploitation by the users of the intangible investments considered.

7. Conclusion

The European Commission set three objectives for this study:

- (a) to identify the channels through which single market integration influences, directly or indirectly, the level and form of intangible investment;
- (b) to analyse the impact of single market integration on the level of intangible investment;
- (c) to analyse the impact of single market integration on the exploitation of intangible investment by operators.

To reply to these questions, an *ad hoc* methodological framework was developed, integrating three dimensions:

- (a) analysis of the dynamics of the components of intangible investment (research & development, information systems, advertising, marketing, training, development of specific skills, etc.) considered in a macroeconomic and a strategic perspective;
- (b) the assessment of the impact of the single market programme on three demand sectors (banking, insurance and food industries);
- (c) analysis of the dynamics of growth of all externalized services, in connection with the single market programme.

The main conclusions are drawn for each of the three objectives considered.

7.1. There are several channels through which the single market programme influences the level and form of intangible investment

The information gathered for the purposes of this study, summarized in Chapter 6, has enabled the existence to be shown of various chains constituting the dynamics of influence of the single market programme. Six elements in particular were considered as integral parts of these chains:

- (a) the specific policy measures,
- (b) the overall dynamics of the single market programme,
- (c) the strategic moves of the players,
- (d) the overall redeployment of resources by the operators,
- (e) the restructuring of the functions of the value chain of the operators,
- (f) finally, intangible investment as a lever for competitiveness.

The information assessed in this study, together with the results of previous or parallel work on the single market programme, shows that the concept of a 'channel' must be considered as a set of interdependent chains, far more than as a causal, linear relationship between one or more decisions under the single market programme and the operators' investment decisions.

At this level, particular consideration must be given to three conclusions:

(a) The impact of the single market programme is attributable above all to its overall dynamics. It is these dynamics which influence the behaviour of the players as investors in intangible assets and as suppliers of externalized services.

- (b) The strategic moves of the players are at the heart of the process of influence of the single market and constitute its hub. The development of direct cross-border investment illustrates the central nature of these dynamics.
- (c) Intangible investment by operators appears to be influenced indirectly by a number of causal chains. The assessment does not, however, allow it to be asserted that these are triggering factors.

7.2. The impact of the single market programme on the level of intangible investment of the operators considered is essentially indirect

Analysis of the impact of the single market programme on the level of exploitation of the intangible investments was conducted on the basis of three complementary assessments: the macroeconomic trend in intangible investments (R&D expenditure, technology payments, advertising expenditure, expenditure on education and software expenditure); the impact on the level of investment of the three demand sectors considered; and the overall trend in the level of activity of the externalized services.

In total, the assessment conducted showed that the single market programme has had an essentially indirect influence on the level of intangible investments.

Analysis of the macroeconomic data at first glance shows a satisfactory trend in the overall level of investment of the EU compared to the USA and Japan over the period from 1985 to 1992 as a whole (which masks a lesser effort on aggregates such as R&D). The real impact of the single market programme on this trend can be considered as indirect, although it is not possible to measure it precisely.

The analysis conducted shows significant differences between the three demand sectors considered. The developments in banking and insurance appear to be broadly similar, with a predominance of investments in product development, information logistics, distribution and human resources. This must be stressed all the more as these investments are considered to be critical by the operators. In terms of dynamics, banking is likely to be particularly concerned by the advent of the single currency. The food industries seem concerned more by the investments relating to image-building and advertising, in the context of a more concentrated market.

Externalized services experienced strong growth on the whole, partly linked to the dynamics of the single market.

7.3. The single market programme indirectly boosted the exploitation of intangible investments by the operators considered

The impact of the single market programme on the exploitation of intangible investments by operators was analysed at three levels: the **valorization** of these investments by the banking, insurance and food industry operators, **externalization** of these activities by these same operators and the **industrialization** of externalized services activities.

As regards valorization, the information available indicates that the dynamics of the single market have contributed to reinforcing the intangible capacity of enterprises, here, too, indirectly. This learning effect is naturally not exclusively attributable to the single market, but the latter made a contribution through its influence on the deployment of the players'

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strategies, especially in their 'external' dimension (mergers and acquisitions, cross-border investments).

As regards the **externalization** of intangible activities, the information available shows a differentiation of the activities in terms of growth, level of externalization and geographical basis of procurement. At this level, the development of cross-border trade illustrates the influence of the single market programme on a certain externalization of these activities.

Finally, concerning the **industrialization** of these activities, the available information (especially the Eurostat survey) provides evidence of the existence of a real impact of the single market programme on the supply of externalized services, in terms of development of standard products, organization of production and development of cooperation between firms.

7.4. Subjects to be examined in greater depth

Although the study was able to throw light on the question of the impact of the single market programme on the level and exploitation of intangible investments, a series of points emerged while it was being conducted which are worth looking at in more detail. This is especially true as intangible investment is an essential lever for European competitiveness. As stipulated in its terms of reference, the study 'should present in its conclusions any remaining issues which could be addressed in the future and which could be identified from the above analysis'. The following issues are therefore suggested for more detailed examination.

7.4.1. Definitions

The review of the literature and recent work on intangible investments shows a wide variety of approaches (accounting, macroeconomic, strategic, etc.). A detailed stripping down of these approaches is desirable with a view to proposing a typology, depending on the context and objectives of decisions (strategic, operational, etc.).

7.4.2. Measurement of intangible items

The lack of data on intangible items is a major methodological obstacle, especially for this study. For this reason, we recommend that greater consideration be given to the question of measuring intangible items, for example by conducting pilot studies on specific industrial or services sectors.

7.4.3. The question of the missing link

The quantitative data used for this study show the situation to be relatively satisfactory in the European Union, compared to the USA and Japan. However, the question remains unanswered of whether there is in fact a missing link between intangible investments considered as a whole and industrial competitiveness.

7.4.4. Training, learning and human capital

The question of human resources is at the heart of the question of intangible investments. One of the difficulties at this level is the measurement of the training expenses at European level and, more generally, of the return on the investment resulting from the development of specific skills. We consider it helpful to examine this issue in greater depth.

7.4.5. Externalized services

The development of competitive externalized services is an essential component of the competitiveness of the European economy. A detailed analysis of this question seems necessary to us at two levels: the externalization of intangible activities and their 'industrialization'.

7.4.6. Standardization

This question complements the previous one. It is a matter of assessing the impact of European standardization in the field of externalized services on the development of these services.

7.4.7. The obstacles to intangible investment

The majority of the components of intangible investment are considered as current 'expenses' under the present accounting practices. The treatment of the impact of these practices on boosting intangible investments, and more generally the more detailed examination of the question of obstacles to intangible investment in the context of the single market, are useful, in our opinion.

7.4.8. The impact of Economic and Monetary Union

The information assessed in this study has shown that the prospect of Economic and Monetary Union is not neutral for operators, especially in the banking and insurance sectors, from the point of view of the level and exploitation of intangible investments. However, there are no quantitative and qualitative data available at present capable of contributing to an assessment of this impact. We recommend examining this question in more detail, especially through consolidation at European level of the quantitative data and an assessment of the probable impact of the single currency on the 'intangible capacity' of enterprises.

APPENDIX A

Extracts from the Eurostat Business Survey

A. NACE 15: Food products and beverages 127

Table A.1. The single market's impact on your firm (%)

	Positive impact	No impact	Negative impact	Don't know
Harmonization of technical regulations and/or standards	35	44	9	12
Mutual recognition of technical regulations and/or standards	30	48	8	15
Conformity assessment procedures	24	52	6	19
Simplified patenting procedures	12	66	1	21
The opening-up of public procurement	10	72	2	16
The elimination of customs documentation	59	29	4	7
Deregulation of freight transport	42	45	2	10
The elimination of delays at frontiers	60	31	3	7
The change in VAT procedures for intra-EU sales	32	44	13	11
The liberalization of capital movements	20	64	4	13
Double taxation agreements	15	59	3	23

Source: Eurostat.

Table A.2. The single market's impact on your company's operations (%)

	Positive impact	No impact	Negative impact	Don't know
Sales to the domestic market	14	63	19	4
Sales to other EU countries	28	61	5	6
Sales to non-EU countries	10	76	4	10
Productivity	13	73	8	7
Profitability	13	63	19	6
Employment	6	77	12	5

Table A.3. The single market's importance to development of strategy (%)

Products and services	Very important	Quite important	Not important	Don't know
Products standardization	14	18	41	27
Products specialization	14	21	37	28
Pricing	12	23	41	23
Research and development of new products	9	25	39	27
Capacity of existing national production	11	22	38	30
Number of existing production plants	5	10	41	44
Establishment of plants in other EU states	2	10	42	46
Lean production methods	7	21	35	38
Marketing and distribution	Very important	Quite important	Not important	Don't know
Penetration of markets in other EU states	13	25	35	27
Advertising in other EU states	4	13	52	32
Distribution networks in other EU markets	6	16	46	32
Pan-European labelling	11	26	37	27
Sourcing	Very important	Quite important	Not important	Don't know
Purchase of raw materials from other EU markets	12	24	40	23
Purchase of components from other EU markets	6	15	46	32
Purchase of business services from other EU markets	2	6	57	35
Purchase of financial services from other EU markets	2	8	53	38
Acquisition, cooperation, ownership	Very important	Quite important	Not important	Don't know
(Direct) Investment in other companies	1	6	44	48
(Direct) Investment from other companies	2	6	45	46
Cooperation agreements with other companies	3	10	38	49

Any change in competition levels in the domestic market (%) Table A.4.

Increase	No change	Decrease
24	61	15
46	51	3
18	79	3
Increase	No change	Decrease
54	41	5
45	50	5
20	75	5
Increase	No change	Decrease
34	59	7
29	67	4
14	83	3
	24 46 18 Increase 54 45 20 Increase 34 29	24 61 46 51 18 79 Increase No change 54 41 45 50 20 75 Increase No change 34 59 29 67

Importance in changing unit costs (%)

	Very important	Quite important	Not important	Don't know
Production process costs	9	14	35	42
Testing and certification	8	10	40	42
Distribution costs (including transport)	6	18	35	41
Marketing costs	4	15	39	41
Costs of raw materials	14	15	30	42
Banking costs	3	9	47	41
Insurance costs	2	8	49	41
Other cost sources	4	2	24	71
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Source: Eurostat.

Table A.5.

Table A.6. Single market legislation as it affects your own firm or sector (%)

	Agree	No opinion	Disagree
The single market programme has been a success for your firm	34	38	28
The single market programme has been a success for your sector in your country	24	39	36
The single market programme has been a success for your sector in the EU	30	51	19
The single market programme has been successful in eliminating obstacles to EU trade in your sector	46	36	18
The single market programme has been successful in creating a genuine single market in your sector	12	60	28
Additional measures are needed to eliminate obstacles to EU trade	31	29	10
Additional measures are needed in this sector to create a genuine single market	31	61	9
Source: Eurostat.			

B. NACE 72: Computer and related services 128

Table B.1. The single market's impact on your firm (%)

	Positive impact	No impact	Negative impact	Don't know
Harmonization of licensing/authorization requirements in EU	8	86	3	4
Recognition of licences/authorizations in other EU states	8	88	1	. 3
Measures to facilitate cross-border operations into other EU states	18	77	2	2
Measures to facilitate physical establishment in other EU states	8	90	0	2
The opening-up of public procurement	7	79	5	10
The liberalization of capital movements	9	89	0	2
Double taxation agreements	9	88	0	3

Source: Eurostat.

Table B.2. The single market's impact on your company's operations (%)

	Positive impact	No impact	Negative impact	Don't know
Sales to the domestic market	16	69	4	11
Sales to other EU countries	17	80	0	3
Sales to non-EU countries	1	93	0	6
Productivity	7	88	3	2
Profitability	14	81	3	3
Employment	11	84	3	2

Table B.3. The single market's importance to development of strategy (%)

Products and services	Very important	Quite important	Not important	Don't know
More standardized products/services	19	18	33	30
More specialized products/services	18	18	37	26
Pricing	12	18	40	31
Development of new products/services	22	21	. 30	27
Efficiency in the provision of new products/services	14	16	37	33
Marketing and distribution	Very important	Quite important	Not important	Don't know
Increase of cross-border provision of services to other EU states	9	12	41	37
Establishment of operations in other EU states	14	11	34	40
Distribution networks in other EU markets	9	14	34	43
Advertising in other EU states	4	11	41	43
Sourcing	Very important	Quite important	Not important	Don't know
Purchase of business services from other EU markets	9	17	34	39
Purchase of financial services from other EU markets	4	7	42	46
Acquisition, cooperation, ownership	Very important	Quite important	Not important	Don't know
(Direct) Investment in other companies	9	6	38	48
(Direct) Investment from other companies	9	6	33	52
Cooperation agreements with other companies	12	11	35	42

Table B.4. Any change in competition levels in the domestic market (%)

Number of competitors	Increase	No change	Decrease
Domestically owned firms	32	55	13
Other EU firms	37	63	0
Non-EU firms	10	89	0
Price competition	Increase	No change	Decrease
Domestically owned firms	38	55	6
Other EU firms	24	74	2
Non-EU firms	11	87	2
Quality competition	Increase	No change	Decrease
Domestically owned firms	25	62	13
Other EU firms	24	72	5
Non-EU firms	13	87	0
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Table B.5. Single market legislation as it affects your own firm or sector (%)

	Agree	No opinion	Disagree
The single market programme has been a success for your firm	17	66	17
The single market programme has been a success for your sector in your country	15	72	13
The single market programme has been a success for your sector in the EU	17	75	7
The single market programme has been successful in eliminating obstacles to EU trade in your sector	31	59	11
The single market programme has been successful in creating a genuine single market in your sector	9	58	33
Additional measures are needed to eliminate obstacles to EU trade	22	68	10
Additional measures are needed in this sector to create a genuine single market	22	65	13

C. NACE 74: Other business services 129

Table C.1. The single market's impact on your firm (%)

	Positive impact	No impact	Negative impact	Don't know
Harmonization of licensing/authorization requirements in EU	7	77	5	11
Recognition of licences/authorizations in other EU states	8	79	4	9
Measures to facilitate cross-border operations into other EU states	17	75	1	6
Measures to facilitate physical establishment in other EU states	9	81	1	10
The opening-up of public procurement	7	79	6	9
The liberalization of capital movements	10	81	2	8
Double taxation agreements	8	79	2	11

Source: Eurostat.

Table C.2. The single market's impact on your company's operations (%)

	Positive impact	No impact	Negative impact	Don't know
Sales to the domestic market	5	83	6	7
Sales to other EU countries	11	80	2	8
Sales to non-EU countries	3	89	1	7
Productivity	4	85	5	6
Profitability	4	79	11	6
Employment	7	79	8	6

Number of enterprises in sample: 441. EU 12 less Germany: results weighted by the number of firms.

Table C.3. The single market's importance to development of strategy (%)

Products and services	Very important	Quite important	Not important	Don't know
More standardized products/services	3	18	39	40
More specialized products/services	3	15	43	39
Pricing	3	13	46	38
Development of new products/services	5	17	43	35
Efficiency in the provision of new products/services	6	13	46	35
Marketing and distribution	Very important	Quite important	Not important	Don't know
Increase of cross-border provision of services to other EU states	3	10	42	45
Establishment of operations in other EU states	2	9	39	49
Distribution networks in other EU markets	2	9	41	48
Advertising in other EU states	2	7	45	46
Sourcing	Very important	Quite important	Not important	Don't know
Purchase of business services from other EU markets	3	7	43	47
Purchase of financial services from other EU markets	3	6	42	49
Acquisition, cooperation, ownership	Very important	Quite important	Not important	Don't know
(Direct) Investment in other companies	2	7	36	55
(Direct) Investment from other companies	2	8	34	57
Cooperation agreements with other companies	3	8	32	56

Table C.4. Any change in competition levels in the domestic market (%)

Number of competitors	Increase	No change	Decrease
Domestically owned firms	36	61	3
Other EU firms	19	79	2
Non-EU firms	10	87	3
Price competition	Increase	No change	Decrease
Domestically owned firms	46	53	1
Other EU firms	18	80	2
Non-EU firms	11	85	4
Quality competition	Increase	No change	Decrease
Domestically owned firms	27	66	6
Other EU firms	13	82	5

Table C.5. Single market legislation as it affects your own firm or sector (%)

	Agree	No opinion	Disagree
The single market programme has been a success for your firm	9	64	27
The single market programme has been a success for your sector in your country	8	63	29
The single market programme has been a success for your sector in the EU	10	71	19
The single market programme has been successful in eliminating obstacles to EU trade in your sector	16	66	18
The single market programme has been successful in creating a genuine single market in your sector	4	60	36
Additional measures are needed to eliminate obstacles to EU trade	17	79	5
Additional measures are needed in this sector to create a genuine single market	14	80	6
Course: Eurostat			\Box

D. NACE 65: Financial intermediation 130

Table D.1. The single market's impact on your firm (%)

	Positive impact	No impact	Negative impact	Don't know
Harmonization of licensing/authorization requirements in EU	13	79	1	7
Recognition of licences/authorizations in other EU states	17	79	1	4
Measures to facilitate cross-border operations into other EU states	32	66	0	2
Measures to facilitate physical establishment in other EU states	9	78	1	12
The opening-up of public procurement	6	76	0	17
The liberalization of capital movements	26	59	0	14
Double taxation agreements	8	79	2	11

Source: Eurostat.

Table D.2. The single market's impact on your company's operations (%)

	Positive impact	No impact	Negative impact	Don't know
Sales to the domestic market	11	80	7	2
Sales to other EU countries	4	89	1	6
Sales to non-EU countries	1	89	0	10
Productivity	7	88	3	. 2
Profitability	7	87	5	1
Employment	4	92	3	1

Number of enterprises in sample: 171. EU 12 less Germany: results weighted by the number of firms.

Table D.3. The single market's importance to development of strategy (%)

Products and services	Very important	Quite important	Not important	Don't know
More standardized products/services	12	8	47	33
More specialized products/services	3	20	49	29
Pricing	10	10	53	27
Development of new products/services	5	20	51	24
Efficiency in the provision of new products/services	5	19	45	31
Marketing and distribution	Very important	Quite important	Not important	Don't know
Increase of cross-border provision of services to other EU states	2	7	45	45
Establishment of operations in other EU states	0	7	53	40
Distribution networks in other EU markets	2	6	44	48
Advertising in other EU states	3	7	42	48
Sourcing	Very important	Quite important	Not important	Don't know
Purchase of business services from other EU markets	2	5	44	49
Purchase of financial services from other EU markets	2	6	42	50
Acquisition, cooperation, ownership	Very important	Quite important	Not important	Don't know
(Direct) Investment in other companies	0	7	41	51
(Direct) Investment from other companies	2	7	40	51
Cooperation agreements with other companies	1	10	39	50

Table D.4. Any change in competition levels in the domestic market (%)

Increase	No change	Decrease
16	68	16
31	66	3
4	93	3
Increase	No change	Decrease
20	78	2
15	83	2
4	95	2
Increase	No change	Decrease
20	78	2
11	88	2
7	91	2
	16 31 4 Increase 20 15 4 Increase	16 68 31 66 4 93 Increase No change 20 78 15 83 4 95 Increase No change 20 78 11 88

Table D.5. Single market legislation as it affects your own firm or sector (%)

	Agree	No opinion	Disagree
The single market programme has been a success for your firm	21	54	24
The single market programme has been a success for your sector in your country	22	63	16
The single market programme has been a success for your sector in the EU	26	60	14
The single market programme has been successful in eliminating obstacles to EU trade in your sector	23	63	13
The single market programme has been successful in creating a genuine single market in your sector	5	69	26
Additional measures are needed to eliminate obstacles to EU trade	17	78	5
Additional measures are needed in this sector to create a genuine single market	12	80	8

E. NACE 66 and 67: Insurance¹³¹

Table E.1. The single market's impact on your firm (%)

	Positive impact	No impact	Negative impact	Don't know
Harmonization of licensing/authorization requirements in EU	21	60	4	15
Recognition of licences/authorizations in other EU states	20	65	1	14
Measures to facilitate cross-border operations into other EU states	16	66	2	15
Measures to facilitate physical establishment in other EU states	7	77	1	16
The opening-up of public procurement	6	72	4	18
The liberalization of capital movements	23	61	3	13
Double taxation agreements	14	66	0	20

Source: Eurostat.

Table E.2. The single market's impact on your company's operations (%)

	Positive impact	No impact	Negative impact	Don't know
Sales to the domestic market	16	61	8	15
Sales to other EU countries	9	73	1	17
Sales to non-EU countries	2	80	0	18
Productivity	9	76	2	13
Profitability	11	69	7	13
Employment	3	79	4	13

Number of enterprises in sample: 157. EU 12 less Germany: results weighted by the number of firms.

Table E.3. The single market's importance to development of strategy (%)

Products and services	Very important	Quite important	Not important	Don't know
More standardized products/services	4	16	54	26
More specialized products/services	12	10	55	23
Pricing	4	18	55	23
Development of new products/services	10	19	48	23
Efficiency in the provision of new products/services	10	15	47	27
Marketing and distribution	Very important	Quite important	Not important	Don't know
Increase of cross-border provision of services to other EU states	4	8	55	32
Establishment of operations in other EU states	1	12	53	34
Distribution networks in other EU markets	2	12	53	33
Advertising in other EU states	0	10	57	34
Sourcing	Very important	Quite important	Not important	Don't know
Purchase of business services from other EU markets	1	10	56	33
Purchase of financial services from other EU markets	7	6	52	34
Acquisition, cooperation, ownership	Very important	Quite important	Not important	Don't know
(Direct) Investment in other companies	1	11	53	35
(Direct) Investment from other companies	3	12	50	34
Cooperation agreements with other companies	3	12	49	35

Table E.4. Any change in competition levels in the domestic market (%)

Number of competitors	Increase	No change	Decrease
Domestically owned firms	48	43	9
Other EU firms	42	54	4
Non-EU firms	9	86	5
Price competition	Increase	No change	Decrease
Domestically owned firms	52	46	2
Other EU firms	41	57	2
Non-EU firms	14	84	2
Quality competition	Increase	No change	Decrease
Domestically owned firms	51	48	1
Other EU firms	38	61	1
Non-EU firms	11	86	3
C		1	

Table E.5. Single market legislation as it affects your own firm or sector (%)

	Agree	No opinion	Disagree
The single market programme has been a success for your firm	17	67	16
The single market programme has been a success for your sector in your country	24	52	25
The single market programme has been a success for your sector in the EU	28	53	20
The single market programme has been successful in eliminating obstacles to EU trade in your sector	35	41	24
The single market programme has been successful in creating a genuine single market in your sector	10	49	40
Additional measures are needed to eliminate obstacles to EU trade	23	69	8
Additional measures are needed in this sector to create a genuine single market	26	66	8

APPENDIX B

Questionnaires used

- B.1.
- Insurance questionnaire Agro-food industry questionnaire Services questionnaire B.2.
- B.3.

European Commission

Directorate-General XV

Internal Market and Financial Services

Study on

'The consequences of Internal Market integration

for the level and exploitation

of intangible investments'

Questionnaire for Insurance Companies

March 1996

Note:
A questionnaire with a similar structure was used for the banking survey

R.C.S. Conseil has been assigned by the European Commission to carry out the present study on 'the consequences of Internal market integration for the level and exploitation of intangible investments' by European companies.

'Intangible investment' is defined here in a broad sense; it includes, among other things, expenditure on the following items: Development of products and services, Information Systems (including software), Commercial (marketing, advertising) and Education, Development of organisational competences and capabilities, enhancement of quality of products and services (table 1, page 3).

The study encompasses an overall analysis of intangible investments in Europe. It also includes a survey limited to the <u>main players</u> for identified sectors of activities where, on the one hand, intangible investments constitute or could constitute a critical issue, and where, on the other hand, policy measures related to Internal Market integration are supposed or expected to have an impact.

The enclosed questionnaire covers the main points of this survey. It does not aim to assess your specific activities, but exclusively to elicit a global overview of the situation in Europe, in order to formulate recommendations to the European Commission on possible policy measures with respect to the completion of the Internal Market.

Data and points of view collected will be treated as <u>confidential</u>. They will not be transferred as such to any third party, including the European Commission, or used for other aims than those of the present study.

Each of the companies contributing to the survey will be entitled to <u>feedback</u> from the study in the form of a Report presenting the main elements of intangible investments and their contribution to competitiveness, in relation to Internal Market integration.

The following questions are expressed in overall terms (at the level of the whole company or sector of activity), as well as at the level of the main functions of the value-added chain of the Insurance industry: Development of products and services, Policy administration, Claims management, Collection of premiums, Information logistics, Commercialisation, Distribution and Communication, Human resources, organisation, competences and capabilities, etc.

Table 1

The main items of intangible investments considered for the study and their related functions of the value-added chain of the Insurance sector

Development of Products and Services

Development of new products and services

Policy Administration

- Increasing capacity of policy administration systems and operating tools
- · Improving the quality and productivity of policy administration systems capabilities

Claims Management

- · Increasing capacity of claims systems and capabilities
- · Improving quality and productivity of claims systems and capabilities

Collection of Premiums

- Increasing premiums collection systems and capabilities
- Improving quality and productivity of premiums collection systems and capabilities

Information Logistics

(information technology and telecommunications networks and related services)

- · Increasing information systems (software) and telecommunications networks
- · Improving quality and productivity of software and telecommunications networks

Commercialisation, Distribution and Communication

- Market research
- Advertising
- Corporate communication (for image building)
- Access to external electronic information (data on-line, etc.)
- · Distribution systems and channels
- Improving quality and productivity of commercial & communication systems and tools (customer scoring and lists, data bases, etc.)

Human Resources, Organisation, Competences and Capabilities

- Human resources training and development
- Organisational restructuring and development
- Specific competences and capabilities development

Transfunctional Support Services

- Consulting services
- Legal services
- · Accounting services

1 - Company and interviewed person(s) identification

Company's name:	••••••		
Name of the person(s) interviewed	Position (s)		
		• • • • • • • • • • • • • • • • • • • •	
Address:			•
		•••••	
Tel:		•••••••••••••••••••••••••••••••••••••••	•••
Fax:			
	1993	1994	1995
Overall turnover (premium written l	life and non-life)*		
•			
Overall employment Please specify the currency and the amount of the control of the currency and the amount of the currency and the currency and the amount of the currency and the currency	verall development of your a		the period 1993
Please specify the currency and the amo	verall development of your a		the period 1993
Please specify the currency and the amo 2 - Could you characterise the ov 1995, in terms of growth, internation	verall development of your a conalisation, diversification o		
Please specify the currency and the amo 2 - Could you characterise the ov 1995, in terms of growth, internation	verall development of your a conalisation, diversification o	f clients, etc.?	
Please specify the currency and the amo 2 - Could you characterise the ov 1995, in terms of growth, internation	verall development of your a conalisation, diversification o	f clients, etc.?	
Please specify the currency and the amo 2 - Could you characterise the ov 1995, in terms of growth, internation	verall development of your a conalisation, diversification o	f clients, etc.?	
Please specify the currency and the amo	verall development of your a conalisation, diversification o	f clients, etc.?	
Please specify the currency and the amo	verall development of your a conalisation, diversification o	f clients, etc.?	
Please specify the currency and the amo	verall development of your a conalisation, diversification of activities (penetrate	f clients, etc.?	

3 - More specifically, could you indicate how your activit three years in terms of creation of branches, subsidiaries, dimarket (if any)?	-
4 - As far as your competitive position is concerned, co competitive scope of your activities (national, European or gl	· -
Your activities' dominant scope	
□ national	
☐ European (European Union)	
□ Global	
Breakdown of your 1995 turnover (in %)	
domestic market	
European Union (excluding domestic market)	
• other (please specify)	
Total	100%
5 - With regard to the criteria for external procurement,	Paramatan da
following factors, which you consider as important for a gactivities (outsourced services) by your company?	
Please check the most important items in your point of view; please from $1 = low$ to $5 = high$.	se rate the selected items as follows:
Criteria	Rating
• price	
differentiation of services	
quality of supply	
• normalisation of supply (type ISO 9000)	
• quality certification (for instance, by professional organisations	s)
implementation of suppliers' distribution networkssupply of services on a European scale	
• supply of services on a European scale	
Others (please specify)	
•	

6 - Among these components of intangible investments, which do you consider most critical for your competitiveness? And, among the items subject to an external sourcing, could you indicate your main procurement basis?

Please check the corresponding box

			Level of crucial importance per field				Your main procurement basis		
	low<> high		u	for intangible items					
Key functions and related fields									
of intangible investments	"					(on	ly for t	hose	
	1	2	3	4	5			urced,	
	_	_	•	•	_		sugges		
					1		ereafte		
								•	
						Natio-	Euro-	World	
						nal	pean	-wide	
							basis	basis	
Product Development									
Development of products and services									
Policy Administration									
• Increasing policy administration systems and operating tools									
• Improving quality and productivity of policy administration									
systems and tools									
Claims Management									
Increasing claims systems and capabilities									
• Improving quality and productivity of claims systems and									
capabilities									
Collection of Premiums									
Increasing premiums collection systems and capabilities									
• Improving quality and productivity of premiums collection									
systems and capabilities									
Information Logistics							,	,	
• Increasing information systems (software) and telecoms									
networks capacities									
• Improving quality and productivity of information systems									
and telecoms networks									
Commercialisation, Distribution and Communication						r			
Market research									
Distribution channels and networks									
Advertising									
Corporate communication (for image building)									
• Access to external electronic information (on-line data, etc.)									
Human Resources, Organisation and Competences									
Human resources education and training									
Organisational restructuring and development									
Specific competences and capabilities development									
Transfunctional Support Services									
Management consulting services									
Legal services (including for mergers and acquisitions)									
Accounting services									

7 - The Internal Market programme has defined specific policy measures designed to encourage the broadening of the competitive scope of European companies and therefore the reinforcement of their competitiveness in the market-place. Some of these measures are dedicated to your sector of activities (e.g. directives on the Insurance sector), whereas others have a horizontal scope (norms, free movement of services, etc.). In your opinion, among all these measures, which are those that had or could have a <u>direct or indirect impact</u> on the <u>overall</u> level of intangible investments of your company? Could you also specify the nature of this impact?

	Policy measures with a <u>direct or indirect impact</u>	Nature of the impact on your company's overall level of intangible investment
•	Policy measures with a direct impact:	
•	Policy measures with an indirect impact:	
ļ		

8 - Could you specify the nature of the <u>direct or indirect impact</u> on intangible investment, for the main concerned functions of your company's value-added chain?

Nature of the impact on the level of your company's intangible investment for specific functions or items					
Development of products and services:					
Technical functions (Policy administration, Collection of premiums, Claims management):					
Information logistics: software and telecommunication networks, Management					
Information systems:					

8 - (continued) Could you specify the nature of the <u>direct or indirect impact</u> on intangible investment for the main functions of your company's value-added chain?

Nature of the impact on the level of your company's intangible investment for the main functions or items						
Commercialisation, distribution and communication (market research, data on-line, advertising services ,etc.):						
Human resources training, organisation and competences development:						
Transfunctional supporting services (consulting services, accounting services, legal servi-	ces,					
etc.):						

9 - Could you indicate the impact on your intangible investments of the Europeanisation of the insurance sector's market strategies?
10 - In other words, would you say that the implementation of the Internal Market programme has led to better use of intangible investments by the European insurance sector (for instance, via better use of commercial and information available from external sources, either on a European or world-wide scale, or the development of specific competences)?
11 - In a mid-term perspective (1996-2000), and notably by taking into account the single currency (Euro) perspective, could you describe, in few words, what should be the impact of the Internal Market achievement on your company resources allocation, specifically with regards to intangible investments?

measures of In	ese elements in mind ternal Market integr order to help you to ac	ation that should	be considered by	the European
		•		
·				
Comments				
	***************************************	***************************************		
·				

13 - Finally, what is your best estimate for your 1994 expenditure by type of intangible investment per function of the value-added chain (and if possible for the main items that benefited from a resource allocation)? Could you also indicate the 1992-1994 average growth for these investments?

-> This question should be answered only if data are available off-the-shelf

Development of Products and Services Development of products and services Technical Functions (policy administration, claims management, collection of premiums) Increasing technical functions systems and operating tools Improving quality and productivity of technical functions systems Information Logistics Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication Market research	Signif. increase	Stable	Signif. decrease
Technical Functions (policy administration, claims management, collection of premiums) Increasing technical functions systems and operating tools Improving quality and productivity of technical functions systems Information Logistics Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication			
Technical Functions (policy administration, claims management, collection of premiums) Increasing technical functions systems and operating tools Improving quality and productivity of technical functions systems Information Logistics Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication			
(policy administration, claims management, collection of premiums) Increasing technical functions systems and operating tools Improving quality and productivity of technical functions systems Information Logistics Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication	_		
Increasing technical functions systems and operating tools Improving quality and productivity of technical functions systems Information Logistics Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication			
Information Logistics Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication			
Information (software) systems and networks Telecommunications networks expenditures Commercialisation, Distribution and Communication			
Telecommunications networks expenditures Commercialisation, Distribution and Communication			
Commercialisation, Distribution and Communication			
Market research			
Advertising			
Corporate communication (for image building)			
Access to electronic information (on-line data, etc.)			
Human Resources, Organisation and Competences			
Human resources training and development			
Organisational restructuring and development			
Specific competences and capabilities development			
Transfunctional Support Services			
Management consulting services			
Legal services (including for mergers and acquisitions)			
Accounting services			
TOTAL			

Comments	ì
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European Commission

Directorate-General XV

Internal Market and Financial Services

Study on

'The consequences of Internal Market integration

for the level and exploitation

of intangible investments'

Questionnaire for the Agro-food Industry

March 1996

R.C.S. Conseil has been assigned by the European Commission to carry out the present study on 'the consequences of Internal market integration for the level and exploitation of intangible investments' by European companies.

'Intangible investment' is defined here in a broad sense; it includes, among other things, expenditure on the following items: Research and Development, Information Systems (including software), Commercial (marketing, advertising) and Education, Development of organisational competences and capabilities, enhancement of quality of products and services (table 1, page 3).

The study encompasses an overall analysis of intangible investments in Europe. It also includes a survey limited to the <u>main players</u> for identified sectors of activities where, on the one hand, intangible investments constitute or could constitute a critical issue, and where, on the other hand, policy measures related to Internal Market integration are supposed or expected to have an impact. Agro-food industry is one of these sectors.

The enclosed questionnaire covers the main points of this survey. It does not aim to assess your specific activities, but exclusively to elicit a global overview of the situation in Europe, in order to formulate recommendations to the European Commission on possible policy measures with respect to the completion of the Internal Market.

Data and points of view collected will be treated as <u>confidential</u>. They will not be transferred as such to any third party, including the European Commission, or used for other aims than those of the present study.

Each of the companies contributing to the survey will be entitled to <u>feedback</u> from the study in the form of a report presenting the main elements of intangible investments and their contribution to competitiveness, in relation to Internal Market integration.

The following questions are expressed in overall terms (at the level of the whole company or sector of activity), as well as at the level of the main functions of the value-added chain: Research & Development, Production, Logistics, Commercialisation, Distribution and communication, Human resources, Organisation, competences and capabilities, etc.

Table 1

The main items of intangible investments considered for the study and their related functions of the value-added chain of the Agro-food Industry

Research & Development

- · Research & Development
- Technology acquisition
- Patents, licences
- · Designs and trade marks
- Quality of R&D and innovation processes and tools (data base, anticipation and adaptation to market needs, etc.)

Production

- · Increasing production systems and operating tools
- Improving quality and productivity of producing systems capabilities
- · Search for competitive outsourcing capabilities

Logistics

- Improving procurement systems and capabilities
- · Increasing information systems and telecommunications networks
- Improving quality and productivity of information systems and telecommunications networks

Commercialisation, Distribution and Communication

- Market research
- Advertising
- Corporate communication (for image building)
- Distribution systems and channels
- Improving quality and productivity of commercial & communication systems and tools (customers scoring and lists, data bases, etc.)

Human resources, Organisation, Competences and Capabilities

- · Human resources training and development
- Organisational restructuring and development
- Specific competences and capabilities development

Transfunctional Support Services

- Consulting services
- Legal services (including for mergers and acquisitions)
- Accounting services
- etc.

1 - Company and interviewed person(s) identification

. ·	••••••	•••••••		
Name of the person(s) interviewed	Position (s)			
	`			

Address:			************	
		•••••	••••••	
Tel:	******			•••
Fax:				
		1993	1994	1995
• Overall turnover (premium written l	ife and non-life)*			
Overall employment				
Please specify the currency and the amo	ount of units used.			
1995) in terms of creation of branc				
1995) in terms of creation of branc				
1995) in terms of creation of branc				
1995) in terms of creation of branc				
1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,		
1995) in terms of creation of branc	hes, subsidiaries	s, distributors,		
1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,		
2 - Could you indicate how your 1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,		
1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,	outside your	
1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,	outside your	
1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,	outside your	
1995) in terms of creation of branc (if any)?	hes, subsidiaries	s, distributors,	outside your	

3 - As far as your competitive position is concerned, could you characterise the present competitive scope of your activities (national, European or global)?

Your activities' dominant scope	
□ national	
☐ European (European Union)	
□ Global	
Breakdown of your 1995 turnover (in %)	
domestic market	
• European Union (excluding domestic market)	
• other (please specify)	
Total	100%

4 - The Internal Market programme has defined specific policy measures designed to encourage the broadening of the competitive scope of European companies and therefore the reinforcement of their competitiveness in the market place. Some of these measures are dedicated to your sector of activities (e.g. directives on the agro-food sector), whereas others have a horizontal scope (norms, free movement of services, etc.). In your opinion, among all these measures, which are those that had or could have a <u>direct or indirect impact</u> on the <u>overall</u> level of intangible investments of your company? Could you also specify the nature of this impact?

	Policy measures with a <u>direct or indirect impact</u>	Nature of the impact on your company's overall level of intangible investment
•	Policy measures with a direct impact:	
	Policy measures with an indirect impact:	

5 - Could you specify the nature of the <u>direct or indirect impact</u> on intangible investment for the main concerned functions of your company's value-added chain?

Nature of the impact on the level of your company's intangible investment for specific functions or items, and its related policy measures					
Research and development:			4 - 4/2		
Production:					
				:	
		e.			
Logistics (procurement, software and telecomm	nunications netw	vorks):			

5 - *(continued)* Could you specify the nature of the <u>direct or indirect impact</u> on intangible investment for the main concerned functions of your company's value-added chain?

Nature of the impact on the level of your company's intangible investment for the main functions or items
Commercialisation, distribution and communication:
Human resources training, organisation and competences development:
Transfunctional supporting services (consulting services, legal services, etc.):

6 - More generally, could you indicate the impact on your intangible investment of the development of European agro-food sector's cross-border investments?
7 - In other words, would you say that the implementation of the Internal Market programme
has led to better use of intangible investments by the European agro-food sector (for instance, via better use of commercial and information available from external sources, either on a European or world-wide scale, or the development of specific competences)?
8 - With regards to intangible resources mobility, what impact of the Internal Market has already registered on human resources mobility (for instance, on researchers, executives, and services providers mobility)?

		your sector of activities turing, redeployment, dec	(for instance, ha	
		r		
currency (Euro) pe	erspective, could you tet achievement on	-2000), and notably by to describe, in few words, your company resources	what should be t	he impact of
				,

12 - With regards to the criteria for external procurement, could you indicate, among the following factors, which are those that you consider as important for a greater use of external intangible activities by your company?

Please check the most important items in your point of view. Please rate the selected criteria as follows: 1 = low; 5 = high.

Criteria	Rating
• price	
• differentiation of services	
• quality of supply	
• normalisation of supply (type ISO 9000)	
• quality certification (for instance, by professional organisations)	
• implementation of suppliers' distribution networks	
• supply of services on a European scale	
Others (please specify)	

13 - Among these components of intangible investments, which do you consider most critical for your competitiveness? And, among the items subject to an external sourcing, could you indicate your main procurement basis?

Please check the corresponding boxes

Key functions and related fields of intangible]	Level	of cr	ucial		,	our ma	in
investments		importance per field				procurement basis		
mvestments		•	•			for in	tangible	e items
	low<			> h	igh		ly for t	
					-	main	ly outso	urced,
·	1	2	3	4	5	as	sugges	ted
							ereafte	
						Natio-	Euro-	World
						nal	pean	-wide
							basis	basis
Product Development								
Development of products and services								
Technology acquisition								
Production								
Increasing production systems and operating tools								
• Improving quality and productivity of production systems and								
tools								
Search for competitive outsourcing capabilities								
Logistics								
Improving procurement systems and capabilities								
Increasing information systems (software) and telecoms	一			一	$\overline{}$			
networks capacities	_		_	_	_			
Improving quality and productivity of information systems								
and telecoms networks		_	_	_	_			
Commercialisation, Distribution and Communication		******			-			
Market research								
Distribution channels and networks		=						
Advertising					吉			
Corporate communication (for image building)				ö	一			
• Access to external electronic information (on-line data, etc.)	<u> </u>	$\overline{}$			님			
Human Resources, Organisation and Competences		<u> </u>	<u> </u>	<u> </u>				
Human resources education and training						· I		
Organisational restructuring and development		<u> </u>						
Specific competences and capabilities development	븝	-	-	=======================================	님			
Transfunctional Support Services		ш_	<u> </u>		لسا			
Management consulting services						···	1	
Legal services (including for mergers and acquisitions)								
Accounting services	븝				님			
* Accounting services		<u> </u>		Щ.	<u> </u>			
Comments								
Comments								
			-					 1
								I

14 - Finally, what is your best estimate for your 1994 expenditure by type of intangible investment per function of the value-added chain (and, if possible, for the main items that benefited from a resource allocation)? Could you also indicate the 1992-1994 average growth for these investments?

-> This question should be answered only for items with data available off-the-shelf

	Expenditure*		of growth ems over to 1993-199	the period
Items of intangible investment		Signif.	Stable	Signif.
Č		increase		decrease
Research and Development				
Development of products and services				
Technology acquisition				
Production				
Increasing production systems and operating tools				
Improving quality and productivity of production function systems				
Search for competitive outsourcing capabilities				
Logistics	_			
Improving quality of procurement systems and capabilities	_	,		
Information technology (software) systems and networks				
Telecommunications networks				
Commercialisation, Distribution and Communication				
Market research				
Advertising				
Distribution systems and channels				
Corporate communication (for image building)				
Access to electronic information (on-line data,) expenditures				
Human resources, Organisation and Competences				
Human resources training and development expenditures				
Organisational restructuring and development expenditures				
Specific competences and capabilities development expenditures				
Transfunctional Support Services				
Management consulting services expenditures				
Legal services (including for mergers and acquisitions) expenditures				
Accounting services expenditures				
TOTAL				
* Please specify the currency used.				

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European Commission

Directorate-General XV

Internal Market and Financial Services

Study on

'The consequences of Internal Market integration

for the level and exploitation

of intangible investments'

Questionnaire for Services Companies and/or related associations

- R&D contracts
- Technical engineering
- Software and data processing
 - Advertising
 - On-line data
 - Market research
 - Public relation services
 - Personal related services (vocational training)
- Other management and consulting services (accounting, consulting, legal services, mergers and acquisitions, etc.)

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'Intangible investment' is defined here in a broad sense; it includes, among other things, expenditure on the following items: Research and Development, Information systems (including software), Commercial (marketing, advertising) and education, Development of organisational competences and capabilities, Enhancement of quality of products and services, etc.

The study encompasses an overall analysis of intangible investments in Europe. It also includes a survey limited to the <u>main players</u> for identified sectors of activities where, on the one hand, intangible investments constitute or could constitute a critical issue, and where, on the other hand, policy measures related to Internal Market integration are supposed or expected to have an impact.

The enclosed questionnaire covers the main points of this survey. It does not aim to assess your specific activities, but exclusively to elicit a global overview of the situation in Europe, in order to formulate recommendations to the European Commission on possible policy measures with respect to the completion of the Internal Market.

Data and points of view collected will be treated as <u>confidential</u>. They will not be transferred as such to any third party, including the European Commission, or used for other aims than those of the present study.

Each of the companies contributing to the survey will be entitled to <u>feedback</u> from the study in the form of a report presenting the main elements of intangible investments and their contribution to competitiveness, in relation to Internal Market integration.

1 - Company and interviewed person(s) identification

Company's name:		•••••		
Name of the person(s) interviewed	Position (s)			
		•••••		
Address:			**********	

• Tel:	*******	••••••		•
• Fax:	•••••	•••••	••••••	·•
		1993	1994	1995
Overall turnover (premium written l	life and non-life)*			
• Overall employment				
1994, in terms of growth, internation	onalisation, divers	sification of cl	ients, etc.?	
				0 400 till til på 149 til gran må sen har har har må når sår sår
• Internationalisation (Europeanis	tation) of activities	s (penetration	of external n	narkets)
			P 12 41 12 40 40 40 40 40 40 40 40 40 40 40 40 40	•••••
• Diversification of clients (penetration	on of new clients)			

Your activities' dominant scope	
□ national	
☐ European (European Union)	
☐ Global	
Comments	
Breakdown of your 1995 turnover (in %)	
domestic market	
• European Union (excluding domestic market)	
• other (please specify)	
Total	100%
4 - Could you specify the breakdown of your 199 value)?	25 turnover by type of clients (approximat
Public organisations	
Industry	
Financial services	
Other businesses (please specify)	
Total	100%
5 - With regard to your supply capacity, could you cross-border cooperation (if any)?	specify the nature of your recent Europea

years in terms of creation of branches, subsidiaries, distributors, outsic (if any)?	eloped over the last five le your domestic market
•	
7 - With regard to the conditions of competition in the marketplace, co the following factors, those that you consider as critical for your success Please check the most important criteria. Please rate the selected items as 5 (high)	ss?
Criteria	Rating
• price	***************************************
• economies of scale	
differentiation of services	
• quality of supply	
• normalisation	
quality certification distribution networks	
distribution networks	
distribution networks	
distribution networks Others (please specify)	

encourage the broadening of the competitive scope of European companies and therefore the
reinforcement of their competitiveness in the market-place. Some of these measures are notably of concern for your sector of activities (free movement of services, free movement of
funds, public procurement, norms, etc.). Could you describe how the Internal Market
Programme may have affected the development of your sector of activities in terms of mergers
and acquisitions, the entrance of new players and profitability?
Mergers and acquisitions
• Entrance of new players
• Profitability
9 - Could you describe in general terms what impact (direct or indirect) have already registered on your activities as a direct or indirect result of the Internal Market programme?

8 - The Internal Market programme has defined specific policy measures designed to

10 - In this framework, could you specify what are the policy measures of the Internal Market programme that had or could have the most important impact on your activities?
11 - More specifically, could you indicate the impact on your activities of the development of European industry and services cross-border investments, and more generally of the Europeanisation of companies' market strategies?
12 - With regard to intangible resources mobility, what impact of the Internal Market has already registered on human resources mobility (for instance, on researchers, executives, and services providers mobility)?

13 - More generally, would you say that the implementation of the Internal Market programme has led to better use of your services by European operators (for instance, via better use of commercial, technological and scientific information, and more generally via better use of externalised services either on a European or world-wide scale)?
14 - In the field of R&D and technology, could you describe the impact of the Internal Market on R&D cooperative agreements (for instance, have alliances, mergers and acquisitions led to restructuring, redeployment, decrease or on the contrary to an increase in companies' R&D and technological effort)?
15 - What is, in your opinion, the impact of Public Procurement Directives on your activities? Do you consider that they have already contributed to the creation of a European market for intangible services procurement? From this perspective, what impact has already registered on your strategy?

16 - Could you specify how the Internal Market programme has had an impact on your
strategic and operational decisions regarding your development (for instance, has the Internal
Market Programme led to an 'industrialisation' of your activities), especially for the following
dimensions?

• Innovation
• Production
• Marketing
• Pricing
• Communication and image building
• Alliances
• Other aspects ('industrialisation'*, standardisation of products and services, etc.)
* The term 'industrialisation' refers to an organisation of service activities on an 'industrial basis', via the
implementation of key functions such as R&D, production, quality control and standardisation of supply of services.

17 - With regard to your present and future development, what are the main remaining factors that you consider as important obstacles for your development?

Please check the most important criteria. Please rate them as follows: from 1 = low, to 5 = high

Criteria	Rating		
 lack of information on supply barriers to entry into national markets lack of credit financing insufficient 'incitative' character of taxes and accounting rules non-uniformity of taxes and accounting rules non-protection or insufficient protection of intangible investments insufficient harmonisation of taxation rules heterogeneity of social legislation limited access to public procurement (in other European countries) barriers to access to specific activities (in specific countries) 	Rating		
Others (please specify)			
•			
Comments			
18 - With all these elements in mind, what European policy measures would be required to improve the conditions of better use of your services by European operators?			

19 - Additional comments?		
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