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WORKING PAPER

A SINGLE MARKET IN FINANCIAL SERVICES: EFFECTS ON GROWTH, EMPLOYMENT AND THE REAL ECONOMY

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PUBLISHER: European Parliament
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AUTHOR: Simona Amati
Directorate-General for Research
Economic, Monetary and Budgetary Affairs Division
Tel: (00352)4300-22476
Fax: (00352)4300-27721
Internet: samati@europarl.eu.int

EDITOR: Ben Patterson
Directorate-General for Research
Economic, Monetary and Budgetary Affairs Division
Tel: (00352)4300-24114
Fax: (00352)4300-27721
Internet: gpatterson@europarl.eu.int

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EXECUTIVE SUMMARY

1. Introduction

A single market in financial services has been under construction since 1973, underlying its importance as a motor for growth and job-creation in the European Union. The key objective has been to develop prudentially integrated pan-European financial services and capital markets by 2005.

Politically, the deadline for the implementation of the Financial Services Action Plan was set for 2005 at the Lisbon European Council of March 2000. The aim is to eliminate all barriers to pension fund investments and to cross-border marketing of investment services and investment products; to enhance comparability for companies' financial statements; and to improve the depth and functioning of the risk capital market by increasing the possibility of financing new companies.

This paper examines the possible effects of current changes in financial markets on job creation and growth potential in the European Community. The first part analyses developments in the wholesale and the retail markets. The second focuses on the creation of a sound risk capital market in order to boost employment in Europe.

2. The wholesale market

One of the major recent developments in the wholesale market is the **wave of stock market mergers**. Whether such mergers represent the best way to increase market efficiency is, of course, a matter of debate. Mergers imply conversion costs; but co-operation agreements and linkages between stock exchanges may be more costly and even more highly demanding than mergers.

Mergers aim to create significant added value for shareholders once they achieve critical mass. One of the benefits for investors, issuers and intermediaries – independently from their size – is the possibility for market participants to benefit from lower spreads, thanks to a higher rate of liquidity.

Precedents reveal that exchange mergers have often been planned, but have been difficult to implement. The failures are especially due to difficulties in harmonising national regulations and in the *tendency to preserve the national stock exchange position and its idiosyncratic characteristics*. Six market mergers have already aborted, and the difficulties arise from common listing procedures and common governance structure. If supervision is simply divided between two centres, there is the possibility of *regulatory arbitrage behaviour*, with companies shifting listings from one centre to the other to achieve a competitive regulatory advantage.

As stock exchanges are increasingly influenced by current market competition rules, more importance has to be placed on internal efficiencies. Clearing and settlement processes cannot remain further fragmented because of the need to reduce operational costs. The first step is to create a central counterparty for all securities in all currencies; but because clearing organisations are often owned by the exchanges whose products they clear, exchanges have to merge. Delays in achieving an efficient market for securities and their derivatives are damaging the creation of a common risk capital market.

Linked to the merger wave, which has already given a growing input to the financial sector, **wider investment possibilities**, especially for institutional investors, will help sustain the growth trend in the financial sector and make possible the creation of more liquid and deeper financial markets in the European union.

One of the major difficulties hampering the development of a risk capital market in the Community is the fact that investors are reluctant to invest their savings in businesses where the outcomes are relatively unpredictable and therefore risky. One source of information, which companies can provide in order to increase investors' willingness to invest, is to make companies' **financial statements more transparent and more comparable**. An increase in the level of competition between companies of correlated business sectors will be a direct influence. But the fact that different accounting standards are permitted reduces the scope for comparing financial statements, nationally and, even more, internationally. This is a recipe for confusion on the part of investors and hinders raising capital in other Member State markets.

New-technology companies, such as dotcom enterprises, represent an additional challenge for accountants. Dotcoms come to the market on the basis of an idea and a few people. Their balance sheets lack tangible assets. Instead they are crucially dependent on human capital which does not appear on the balance sheet. Their most important resources are intangible. However, investors have been putting money into those companies in the hope of massive returns with minimum effort.

Directly linked to financial reporting are considerations of **European company law**, especially in the field of company mergers. One of the basic requirements is to reorganise the competencies of the European Commission and the National Competition Authorities. The fact that different authorities in different countries may be involved in notification and investigation processes can lead to diverging priorities and to conflicting remedial actions. One of the major considerations may be to determine whether a merger is likely to lead to job losses or to an increase in employment. Applying the criterion of "public interest" can result in mergers being disallowed when they threaten jobs. By contrast, an "employment-insensitivity" stance focuses on an efficient functioning business market in which employment is considered a by-product.

The best solution is to extend the Commission's jurisdiction to those concentrations that come within the legal framework of more than one national system. When mergers have an effect on intra-Community trade, a uniform approach has to be implemented, and the best way to achieve this is through a single authority. Considering the differences in the legal and fiscal framework, such as the different information required from different regulators, harmonisation would be impossible. Centralisation represents the best solution.

Pension schemes constitute one of the most important issues relating to the wholesale market in financial services. Because *discriminatory tax barriers distort competition and limit labour mobility*, supplementary pension schemes are not able to benefit from economies of scale. They are obliged to create nation-specific products and develop idiosyncratic investment policies for specific markets. Country-specific products acquire unique characteristics, required to benefit from national tax relief provisions. One direct effect of this situation is a high degree of fragmentation in pension products, reflecting differences in national context, which increases transaction costs and often leads to multiple country-specific infrastructures to manage pension products, with further increases in cost.

A Community regulation should ensure that migrant workers are not subjected to double taxation. This cannot be achieved unless countries agree on a joint tax regime. One of the major difficulties in permitting deductibility of pension contributions is the loss of revenues. Nevertheless, the compensating revenue from taxing pension payouts will be become substantial after years. This means a shift in the revenue schedule, not a loss of revenue.

Furthermore, pension reform will improve EU's competitiveness through more liquid pension funds for the development of a risk capital market.

Beside the creation of a Community-wide approach, the mutual recognition of pension funds has to be encouraged in the short term. This implies allowing tax relief in the host country for both employee and employer contributions to home country pension plans in a non-discriminatory way. Furthermore the taxation of employers' contributions to home country plans as if they were employees' income has to be avoided.

Supplying a source of medium term capital, pension funds can improve the capital flow in favour of the private sector, if an adequate supervisory framework is present in order to protect the beneficiaries. The increase in pension funds and development of their investment strategies stimulate job creation while reducing non-wage labour costs.

3. The retail market

Developments in retail financial markets spread through several fields, but the main issues are concentrated in the e-commerce sector.

Productivity patterns in the economy are changing. New products are arising, which escape traditional definitions, and existing products are made more efficiently. The market is mostly characterised by the provision of product-plus-service packages (i.e. sales linked to the maintenance services, follow-up sales, delivery, etc.). The Internet is boosting revenues because *previously inaccessible markets are becoming reachable and entry barriers have been lowered*. This means greater competition in the market and a downward pressure on costs in order to sustain competitive advantage. Difficulties arise when traditional products are not time-sensitive or data-driven and cannot be delivered directly down wires. The opening of markets will lead to increased competition, more customer choice, lower prices and improved services. An increase in the interactivity with the market is helping to adapt the products and the services to individual consumer requirements.

Electronic networks and technologies allow small companies to act like larger ones by using a low cost infrastructure to promote their products. Technology creates the opportunity to *personalise services and products on a larger scale* and to achieve therefore more *specialised market segments*. Because the web acts as a greater *equaliser* and the *competitive advantage for market leaders is time-limited*, the only way to sustain it is to have a *flexible infrastructure,* which allows for continuous innovation. E-commerce itself *shrinks the distance between producers and consumers*, while *intermediaries are changing their role*. No more traditional retailers or wholesalers are needed, but network access providers, authentication and certification service providers and electronic payment system infrastructures.

The proposed directive creating a new form of credit institution – i.e. electronic money institutions – imposes obligations in relation to authorisation by competent authorities, initial capital requirements and investment limitations. The legal framework, besides increasing competition in the business, increases the efficiency of payment transactions because within a more secure network environment, payment transactions can be performed faster and at lower cost.

This has a direct impact on employment. Dissemination of the technology is creating the need for *new types of professionals* and is therefore creating new stable employment opportunities. The increase in the number of institutions and volume of business will furthermore create employment both on a national and a cross-border basis. Beside financial resources to develop e-commerce plans, which companies currently lack, skilled management resources are needed to implement and make those plans work.

On the other hand, a new technology is judged by its capacity to allow businesses to reorganise their production processes in order to become more efficient. The new economy offers the possibility of reorganising business, moving from a centralised to a more decentralised organisation structure, focused on outsourcing and online procurement. Traditional businesses are trying to pursue opportunities in order to adapt e-commerce and the new economy technologies to this structure. The process is affecting all off-line businesses. Most of the companies with web sites are still thinking how to exploit them in order to better meet the needs of the customers.

4. The risk capital market

The European capital market is led by acquisition finance. The loan and the bond markets are providing a range of complementary financial products, loans being used for immediate funding for mergers and acquisitions, and the bond market providing longer-term refinancing at successive stages.

The present situation leads European entrepreneurs to depend on bank loans to start their businesses. This is particularly inadequate and counterproductive in the case of start-ups, for which initial cash flows are likely to be limited or even negative. Bank facilities have the disadvantage of being less flexible in terms of the price and time conditions applied and more expensive. They generally do not provide support advisory functions compared to venture capital.

The disadvantage of the European securitisation market, compared to that of the US, is that the latter is homogenous. Companies can pool assets denominated in the same currency in which they issue bonds. Using the € for this market can overcome this disadvantage, but regulatory regimes within the Member States still diverge.

In these circumstances, in order to attract investors, firms have to respect disclosure, transparency and corporate governance standards. But this is particularly difficult for small and medium size enterprises. For this reason it is important that uniform accounting, disclosure and transparency rules are set for every company. Furthermore a high degree of fragmentation is present within the regulated stock markets and regulatory organisations. Consolidation has to be achieved, not only at market level, but also at a supervisory level through having a unique supervisory authority in order to enhance market capitalisation and the uniformity of the rules applied. Both factors are crucial ones for venture capital.

Certain new forms of funding, such as “incubators” that offer funds and expertise to new-economy companies in return for equities, are not covered by an authorisation framework. They are therefore exposing themselves to litigation if deals do not go well. Commercially, the lack of a legislative framework for e-commerce is therefore reducing its potential development. Other factors that inhibit the development of e-commerce are the speed of connection to electronic networks, the lack of secure connections, lack of adequate service/products, insufficient knowledge of the process and the lack of security in the the transactions. The last two issues are relatively more significant to the developments of e-commerce.

5. Conclusions

Financial services – the banking and insurance sectors – represent a significant percentage of EU GDP and have a high potential for employment expansion. As the European situation is characterised by a significant degree of fragmentation in both the economic and legislative dimension, the goal is to achieve a market-driven mechanism in order to pass from a fragmented framework to a *specialised* one, in which the geographical dimension is overtaken by a *sector-based focus*. This relates to both the wholesale and the retail financial markets.

The long-term goal of the action to achieve a single market in financial services is to create and develop an *efficient capital market*. This will both reduce the cost of raising capital and make possible a much *faster response* to the specific needs of operators on financial markets. Faster response times are critical to achieve competitiveness, and to maintain a competitive advantage, especially for businesses linked with the new economy.

Equity supply has more than doubled over the last decade, due to privatisation and liberalisation, and to the corporate restructuring which has been boosted by the introduction of the single currency. Issuers are becoming more *proactive* because they are spontaneously offering themselves for market listing.

The cult of equity investment is spreading. In particular, it is becoming a good mechanism for allocating *long-term capital* within economies. Yet the stock market capitalisation of the EU is approximately half that of the US. The percentage of cross-border trading is limited and private savings – 20 per cent of GDP – are not invested efficiently. As a result, job creation is limited, because returns on private savings and investment decisions are not optimised. The capitalisation of European investment and pension funds and insurance instruments account alone for more than the EU’s GDP.

The current wave of merger proposals is one of the *major market-driven forces* moving towards specialisation. However, it is not a question of establishing linkages between different technical and operational gateways or strategic linkages between markets, but of achieving an environment within which *specialised segments* on the supply and the demand sides can operate efficiently. Moreover aborted merger proposals have demonstrated how nationalistic feelings and different economic interests can result in incomplete merger plans. Merger proposals need to involve the creation of a central cross-market counterparty for Europe’s securities markets in order to achieve a complete merger of the settlement and clearing functions.

Beside the creation of the necessary conditions for the development of an efficient capital market, *easy access* to it has to be guaranteed on competitive terms. Mutual recognition of prospectuses and prudential and supervisory rules based on the principle of the home Member State, would encourage issuers and intermediaries to trade and deal easily across borders, at lower costs and without discrimination against foreign financial products.

Beside the implementation of the Financial Services Action Plan, every action undertaken at Community level has to face a *trade-off* between the maximum harmonisation of business rules within a home-country control system, and a minimum harmonisation approach within a system of national rules in the host country.

There may be situations in which the mutual recognition of the provision of services and products may result in investors suffering from *discriminatory behaviour* against foreign companies or service providers because the products offered and authorised by one Member State may not be authorised in another. The result is that, when the mutual recognition of practices based on the principle of the home Member State does not provide an environment based on perfect competition, *harmonisation* may be required.

On the supply-side, investors must be able to *access free investment opportunities* without being hampered by legal, administrative or information barriers, nationally or internationally. Better disclosure conditions, the elimination of investment restrictions and the harmonisation of tax treatment throughout the EU, would permit institutional investors, who currently manage a significant amount of savings, to increase potential returns on investment.
Tax harmonisation and the reduction of regulatory and administrative burdens is improving the business environment; however Europe is lacking in the *development of service markets*. Europe's employment deficit is partly determined by a service gap relative to other economies e.g. the US. The growth of the "new economy" is increasing the need to remove barriers to the trading and supplying of new products. Most of these will have to be conceived as services rather than goods, and most of the traditional ones will have to be *reoriented and rethought* in order to be supplied as services.

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INTRODUCTION

The progress achieved in developing a single market in financial services has to be seen in the wider context of globalisation. In particular the introduction of new technologies and advanced applications in the international financial system has created a new dimension of competition that removes geographical barriers. It has transformed traditional markets in specialised and segmented markets, and changed the market structure by removing the time dependence of the transactions performed.

Financial markets have responded to these changes by developing a cross-border presence and operating on a world-wide basis. Nevertheless the need for a harmonised legislative framework is increasing. Most merger activities taking place recently, such as stock exchange mergers, are moving from a situation of geographical fragmentation towards one of functional segmentation, in which specialisation is of increasing importance.

This process implies de-regulation and a subsequent re-regulation carried out not at a national but at an international level. The developments in the financial sector are wrongly defined as an outcome of liberalisation. However, technological changes and the trend in macroeconomic variables have also played an important role.

In the early 1960s, European Union actions were not successful in efforts to liberalise the financial sector, while the ambition to uniform financial services in the Community has boosted the creation of a single market. However, in all countries the financial sector is more regulated than other sectors. Financial services affect all economic performance and may have contagious effects on other economic sectors. Furthermore, banking and insurance activities gain strategic importance in relation to their geographical location. The latter underlines the need to reduce of a nation-based focus. For this reason the current trend can be defined as *financial transnationalisation*.

A single market in financial services has been under construction since 1973, underlying its importance as a motor for growth and job-creation in the European Union. The key objective has been to develop a prudentially sound integrated pan-European financial services and capital market by 2005.

The major aims are:

- to reach a secure environment in which all consumers and investors may derive maximum benefit and better allocation of resources at reduced capital cost;
- to achieve a greater pool of liquidity;
- to strengthen the European economy and the potential for inward investment; and
- to improve entrepreneurship and a knowledge economy.

The introduction of the Euro has brought the opportunity to reduce to a minimum the cost of capital and financial intermediation. Nevertheless, the Union's financial markets still faces a partly fragmented and partly segmented system due to a number of factors:

- the existence of a high number of independent national stock exchanges;
- inefficient and expensive clearing and settlement systems;
- the presence of few pan-European listings;
- the low level of investment in venture capital;

- the growth of new forms of issues, such as ATS[1] or ECNs[2], which imply the need for a different consumer protection framework, e-commerce secure environment provisions and fraud prevention rules; and
- the existence of different national regulators and therefore different applications of the same country rule.

Recognising the changing financial environment, in June 1998 the Cardiff Council invited the Commission to endorse a "Framework of Action" in order to improve the creation of the single market for financial services. In response to the mandate, a Communication[3] was endorsed by the Commission identifying a "*range of issues calling for urgent action to secure the full benefits of the single currency and an optimally functioning European financial market*[4]*"*.

Politically, this major objective has been supported at various European Councils[5]. At the Lisbon European Council the deadline for the implementation of the Financial Services Action Plan was set for 2005 and the following five priorities were set:

- eliminating barriers to pension fund investment and undertakings of collective investment in transferable securities;
- enhancing comparability for companies' financial statement and their mutual recognition internationally;
- review of the Investment Services Directive in order to enable investment service providers to operate across borders without confronting overlapping administrative formalities and impediments;
- creating a single passport for issuers; and
- improving the depth and functioning of risk capital market by increasing sources of finance, especially for start-ups.

During the Summit the increasing importance of co-operation in order to achieve agreements on e-commerce and to introduce redress mechanisms and dispute resolution systems was emphasised. Enhancement of the legal framework will boost consumer confidence. Rapid progress on the pending legislation on the distance selling of financial services and in the field of take-over-bids was urged. Furthermore a deadline of 2003 was set even for the Risk Capital Action Plan.

One of the instruments currently available, and implemented by economic agents and public authorities in order to assess the changes and achievements reached in a specific sector and determine its relative performance, is benchmarking. In particular this is implemented as an instrument for assessing the level of competitiveness in the EU within different economic entities such as sectors, regions, companies, etc.. It is based on two elements: identifying the cause of different competition structures; and the improvements needed. For the first goal, social-economic indicators are implemented, such as social behaviour information, market structures; commercial practices etc. For the second, the relative best practise is identified as an instrument for mobilising agents and resources to define the future trend of development.

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[1] **A**lternative **T**rading **S**ystems.

[2] **E**lectronic **C**ommunication **N**etworks.

[3] COM(1998)625.

[4] COM(1999)232 final.

[5] Lisbon, Cardiff, Cologne and Helsinki European Councils.

The aim of this paper is to examine the possible effects of the current development of financial markets on job creation and growth potential in the Community. It is divided into two parts, following the general approach, separating developments in the wholesale financial markets from the retail sector. This sub-division permits separation of the different features of the operators acting in the two market sectors. The third part focuses on the effect of financial markets on the development of a risk capital market, one of the major sources of employment creation.

CHAPTER I - THE WHOLESALE MARKET

Stock market developments

Major external factors, which have significantly affected the operational environment of stock exchanges in the last decade, are providing a rapidly changing background for the development of strategic exchange mergers. Some of the more important factors influencing the financial world are:

- the deregulation and liberalisation of economies;
- increasing competition between market participants and the growing strategic importance of the size of undertakings;
- the current technological developments in the communication and business sectors;
- the pressure on long-term pension liabilities; and
- market consolidation and the development of more homogenous security market structures and financial instruments.

One external driving force, which is changing the operational environment, is the growing power of the Internet as a cheap and fast trading vehicle. The result is increasing the pressure on intermediaries - brokers, market makers or exchanges - to lower their internal costs. Furthermore, the desire to invest cross-border more cheaply, especially in Europe following the introduction of a single currency, is making separate stock exchanges less useful.

Commodities have long been traded world-wide, but the equity markets have always been characterised by nationalism in terms of regulation, accounting standards, and protectionism of the status of national exchanges as financial centres. Investors fear currency risk[6] and are concerned at dealing with companies they do not know. Only recently are investors learning the potential benefits of differentiating their risks across borders.

An important feature characterising European stock exchanges especially is their national limitation. Trading has to move across borders. Internet share dealing began approximately five years ago in the US[7]. Low commissions attracted investors, together with easy access to information and time-saving trading possibilities. Specialists have already estimated that around 10 per cent of customers are interested in investing in international shares. The percentage is likely to increase if investors become more familiar with foreign companies and issuers.

Exchange trading does not mean only "*buys and sells shares*[8]". Competition between national and even intra-national exchanges has been already high, but meanwhile pressure from electronic communication networks - ECNs - has increased the number of participants involved in the business and is eroding the trading volumes of conventional exchanges. The time in which initial public offerings - IPO - will be listed on ECNs is not far away.

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[6] Risks involved in investment transactions are the:

- trading risk - due to daily price fluctuations;
- liquidation risk - due to the liquidity situation of the clearing members; and
- instrument risk - due to the characteristics of the financial instrument used.

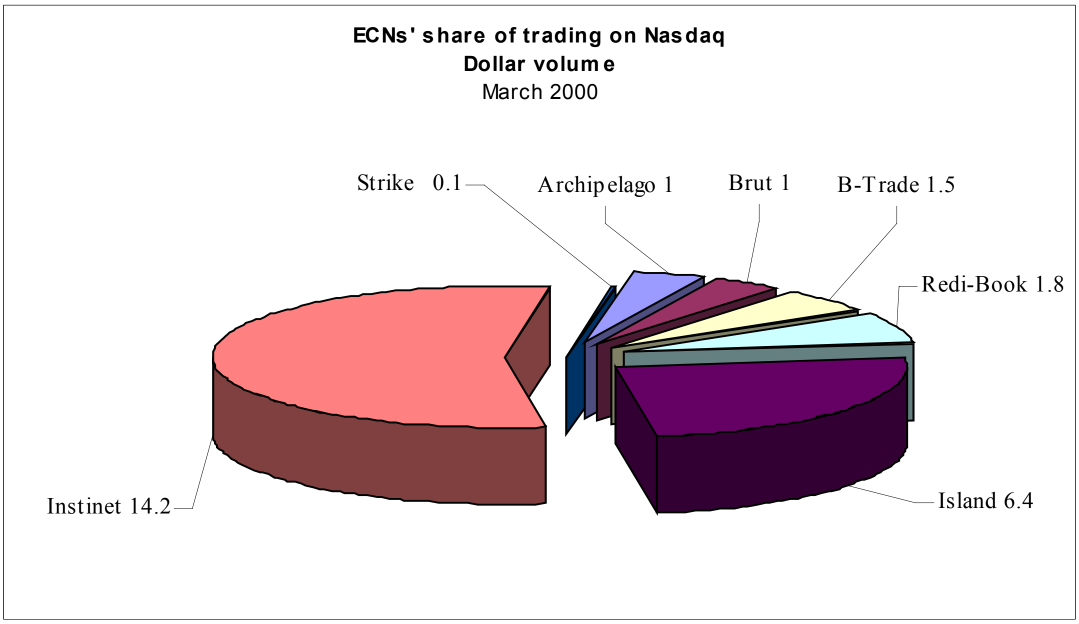
[7] As a trading system the Internet has still limitations. In particular it is too slow to be effective on a wholesale market, free of intermediaries and accessible to all type of investors independently from their size.

[8] *Financial Times,* 23 May 2000.

ECNs were launched after the antitrust investigation in 1997, when the Securities and Exchange Commission - SEC[9] -, the chief market regulator, introduced new rules on handling orders. This regulation was a reaction to the scandal on the Nasdaq stock exchange in 1996, when the market makers were accused of illicitly widening their trading spreads. As trading volumes have recently increased, so has ECNs business. Electronic systems give the investor an alternative access to most of the stocks traded on the conventional exchanges.

Alternative trading systems - ATS - and ECNs have flourished in the US providing high liquidity performances in stocks listed on the New York Stock Exchange - NYSE. Rival trading systems are also growing in Europe, such as Tradepoint or Jiway[10] and are undermining more traditional markets that are price-driven and telephone-based. In this field the European stock exchanges seem to be less vulnerable than their American counterparts, because the former are already partly based on electronic trading systems. On the other hand the American counterparts have an advantage in back-office operations, which are already quite integrated. In fact the costs and the operational complexity of trading systems are moving slowly from trading operations to back-office operations, as clearing and settlement services.

Graph 1



Source: Financial Times

ECNs[11] do only a nominal business in trading conventional exchange's stocks. Rules preclude them from accessing the order display systems of listed stocks. Their advantages rely on using the Internet to execute orders faster and their prices are competitive because most ECNs do not charge license fees for trader firms. Savings can be passed on this way to the customer. The only cost charged is a relatively small fee per trade they execute. They scan the market

[9] The NYSE protects its customers by ensuring that the member firms have sufficient operational capital. It performs an annual audit and member firm monthly report analysis on its activities. The Financial and Operational Surveillance Committee and the Securities and Exchange Commission - SEC - are self-regulatory organisations. They establish guidelines to face financial difficulties and anticipate capital erosion.

[10] Jiway is the proposed market for online investors.

[11] NYSE and Nasdaq are no longer going to price in sixteenths of dollars, which were too tight, but to two decimal places. Some ECNs already do this.

for the best deal, determine the execution method and route the order. As result they provide liquidity to the market without the intervention of market makers.

ECNs are now pressing to be regulated as exchanges rather than as trading systems. It will provide them with the benefits of listing all conventional stock exchange stocks; to be a self-regulated company; and to have linkages to other international exchanges.

The success of ECNs in handling growing shares of stock exchanges' business has led to worries on the liquidity dispersion between different trading systems. Empirical evidence shows how competition has always brought significant advantages to the customers. The long-lasting rivalry between NYSE and Nasdaq has demonstrated it clearly. Especially in the case of the fixed-income market, the transfer of a large amount of business to electronic trading systems allows more efficient price formation in a known opaque and relatively illiquid market[12]. On the other hand, internal and external pressures combine with the existence of low barriers to entry to leave conventional exchanges in a precarious situation and with thin margins.

The explosion during the past few years of electronic communication networks (ECNs), demonstrate this global trend. Conventional markets have recently perceived how their current structures were quickly becoming inadequate for the incoming electronic age. ECNs have led the business into longer trading hours compared to the current trading day ranging from 9:30 a.m. to 4:00 p.m. Initial fears on the possibility of lower liquidity in after-hours have been partly avoided by the ability quickly to match orders electronically. In this way trading spreads can be kept low. Stock exchange opening hours were set to match the needs of institutional investors. Private investors, on the other hand, are exerting pressure to have a 24-hours service.

As private clients account for approximately 70-80 per cent of the number of daily trades and represent, even in value, a large sector, they must be taken seriously. Of special concern is a possible lack of liquidity, in the event that not enough customers trade shares after-hours to match bid and offer. This could increase the volatility of prices and increase the bid-offer spread. One possibility is to charge an additional premium to customers trading outside the conventional hours.

Some national exchanges have risked marginalisation. Conventional exchanges do have an adequately strong technology to fight the growth of electronic commerce, but only if they cut costs and boost liquidity.

1. Pro and contra

One of the major merger proposals recently aborted saw the London Stock Exchange Limited - LSE - and Deutsche Börse AG announcing their plan for a merger of equals to create a new company, to be called iX-international exchanges plc.. The ultimate aim was to permit all European equity trading to be undertaken in euro.

Headquartered in and managed from London with major operations in Frankfurt, the new exchange would have created a designated market for blue chip stocks in London, which would have operated under the UK legislation; and a high-growth market based in Frankfurt operated under the German legislation. The decision to list blue chip stocks in Frankfurt raised concerns about the fact that listings can move from one category to the other. If this

[12] Some critics argue that because these instruments are infrequently traded, the bond market will remain relatively immune to the flourishing of alternative trading systems.

were not the case, small companies, after developing into mature business, would not have the possibility to move.

The technology of both organisations would have been transferred to an operating subsidiary of iX. The electronic trading platform for the cash markets would have been Xetra, the system already in use and provided by Deutsche Börse's existing system subsidiary and would have remained based in Germany, with local systems support also provided in London. The major goal was to permit significant cost savings through the exploitation of technical and operational synergies, together with a reduction of the complexity of IT operations and savings for the customers.

Xetra could have created benefits especially for small trading firms because it provided a proven system operating through remote access and a unified platform for secondary market trading using a common regulatory approach for all European equities. iX would have supported the initiative to set up a central counterpart and to establish straight-through processing at low costs. The settlement service would have been provided on a co-operation basis.

The reasons for the abortion of the merger have to be found in the major reasons for stakeholders to judge the future performance of exchange mergers. Their relative convenience is based on how far the following factors can be achieved:

- costs savings;
- efficiency in finalising the transactions especially in terms of time savings;
- liquidity of the market;
- depth of the market;
- transparency of the price formation;
- publicity of information provided;
- continuity of trading;
- fair governance and regulation provisions performed by a single body of regulation;
- proper stratification by size and sector rather than geography;
- common trading platform to support the stratified market structure and the inclusion of the relative derivatives; and
- rationalisation and merger of clearing and settlement systems.

Both markets - the UK and the German - had an excellent performance this year. LSE, the biggest European market by capitalisation[13], almost doubled pre-tax profits due to record volumes in technology stocks, following the global boom in technology markets, the launch of the techMARK index[14], and the take-over battles in the telecommunication sector. The stock exchange had an estimated value of 300m/$400m when it was demutualised in March 2000. 199 years of mutual ownership ended when its members voted in favour of the conversion into a commercial company[15]. A direct effect of this process was a restructuring of the business and of the methods of trading. Following the terms of the demutualisation plan,

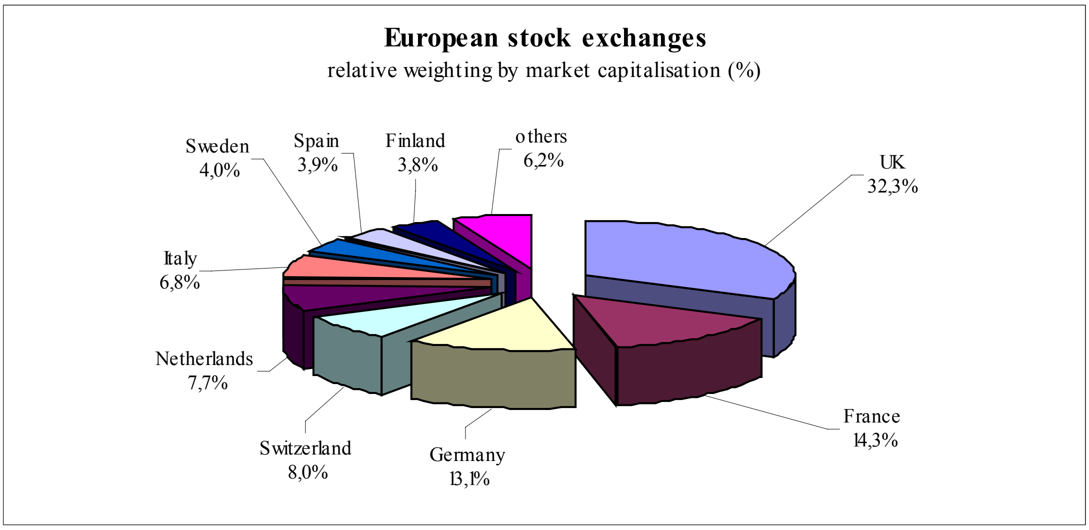
[13] Market capitalisation is the total amount of the company's shares outstanding on the market multiplied by the correspondent price per share.

[14] The two techMARK indices -the FTSE techMARK All-Share and the FTSE techMARK 100- were introduced by the London Stock Exchange in conjunction with the FTSE International at the end of November 1999.

[15] *Financial Times*, 15 April 2000.

the member firms become shareholders and no single participant can own more than 4.9 per cent of the exchange.

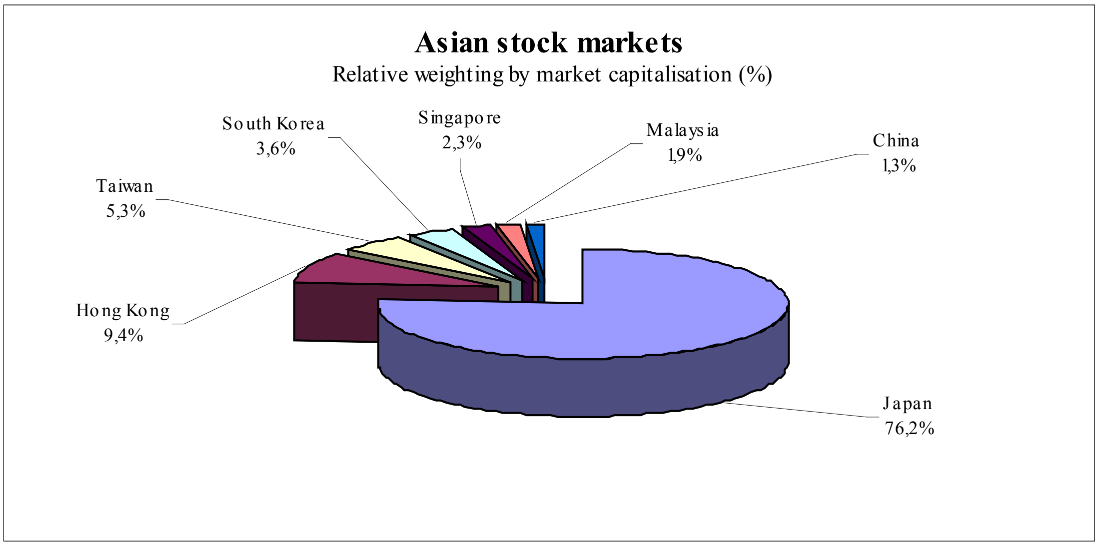
Graph 2



Source: The Economist - Surveys

Deutsche Börse, the third largest market by value, also reported high net incomes due to the technology boom. Frankfurt is expanding into a market for profitable mergers and acquisitions and flotation. In 1997 the Frankfurt's derivatives exchange merged with the Swiss counterpart to form Eurex[16]. The results were impressive because in less than one year the electronic system gained 95 per cent of the trading in German government bond futures contracts from Liffe, London's derivatives market. Estimates suggest that if Frankfurt were to have demutualised years ago, the exchange market value of up $1,5bn-$2bn would now be markedly higher[17].

Graph 3



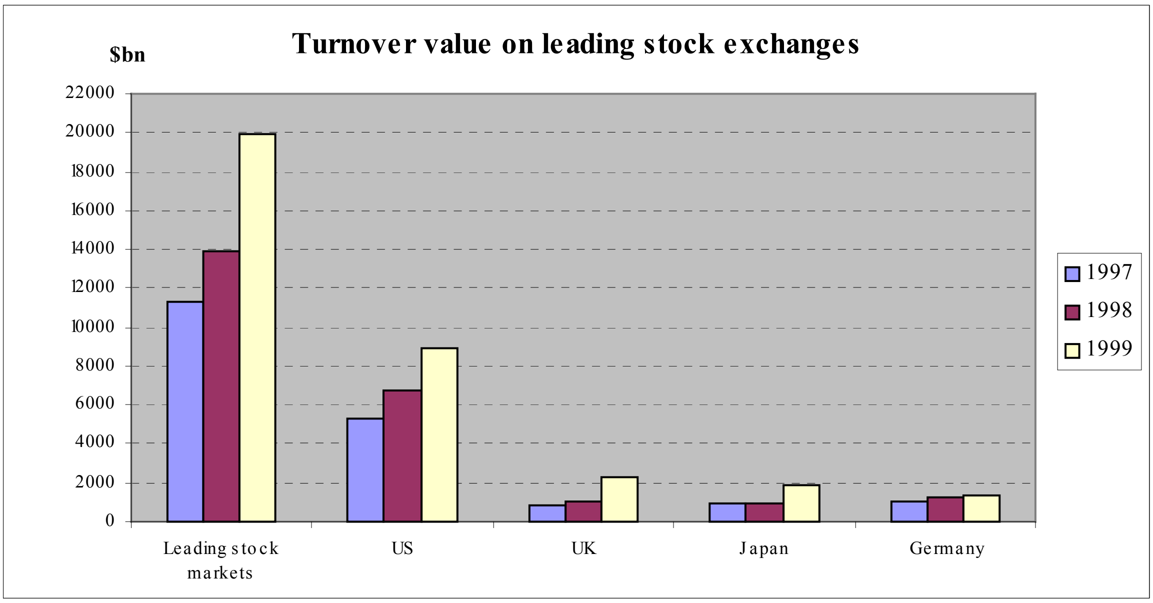
Source: The Economist - Surveys

[16] Eurex was created at the end of 1996.

[17] *Financial Times*, 25 April 2000.

In recent years the German exchange has brought together regional exchanges and has strengthened its technology and its derivative exchange. The UK exchange, by contrast, has a narrower remit, without the derivative element so valuable to Frankfurt. The outcome could have improved the strengths of both financial cultures and systems. The blue chip market in London would have exploited the current regulatory framework, its liquidity and transparency, while the high-tech market in Frankfurt would have exploited the technology strengths and its innovation culture.

Graph 4



Source: The Economist - Surveys

The merger would have provided an increase in the depth and the range of market and company information available to the participants and to the customers. The effect would have been to enhance market visibility and price transparency.

The factors driving mergers are the synergetic effects that arise from several areas especially in the technological sector. The common unified trading platform should have attracted on average more trading volumes from other existing exchanges, permitting the aborted exchange to gain a relative high revenue growth with respect to the separate performances that London Stock Exchange Limited and Deutsche Börse could achieve alone. Higher trading volumes result directly in higher operating margins for market operators and probably therefore, in declining spreads for the customers.

Like other trading platforms, Xetra enables decentralised access for all market participants and long trading hours for equities and fixed income securities. The electronic processing system allows orders to be entered into the system and matched when other markets around the world have different opening hours. Longer hours make it possible to have easier market information. This enables different products, such as equities or fixed income products, to be traded on a common platform. High transparency arises from the fact that the system provides access to the central order book for all participants, showing at what price and in what quantities a supply or a demand for every security is traded. Designated sponsors were introduced in the system to provide additional liquidity in the event of a temporary imbalance in supply and demand for a security. They are obliged to provide tradable offers and bids in the security for which they have been registered[18]. Because the system automatically matches the orders, transaction costs are low.

One of the benefits for investors would have been in the field of taxation. It would not have been possible for a single exchange to have shares on which stamp duty[19] has to be paid (UK regulation) and some on which it does not. One possibility is to cut out the stamp duty.

On the other hand, converting the technological platform from the UK's Sets[20] trading system to the Xetra system, its German equivalent, would have had costs. Some specialists argued that these costs would account for approximately £1bn, the start-up costs of the Sets system introduced only in 1997. The latter was expensive to introduce and opposed by market makers. It is not operated by the exchange itself but by Andersen Consulting, while Xetra is run by Deutsche Börse.

The setting and clearing systems would not have taken part in the merger proposal and presented one of the major weak points of the plan. Clearing and settlement costs account, in fact, for a high percentage of the transaction costs in European equity transactions. Leaving the settlement systems separate would have resulted in an increase of the operational costs.

Euroclear and Clearstream, the two clearing and settlement giants, have recently considered a merger of their operations after strengthening their equity business[21]. Traditionally they were clearing houses for fixed income products. Clearstream was created through the merger of Cedel International and Deutsche Börse Clearing. Euroclear, meanwhile, became the clearing and settlement arm of Euronext. The best solution would be to have a dominant system like that in the US, to lower significantly the fragmentation of European clearing and settlement systems. Market participants, especially in London, are known to prefer the separation of the trading systems, and the settlement and clearing functions to be controlled by different organisations; but studies show how a rationalisation of clearing would imply no more than a quarter of the current costs.

The proposal to divide the regulation of the two markets is dangerous because the regulatory standards applied on the merged exchange should be the same, independently of where the markets are based in, and managed from. The most controversial question is how to organise the regulation. The growth and derivatives market, to be operated in Frankfurt and subjected to German standards, should have the same regulation as the combined market for blue chip stocks to be based in London and regulated by UK standards.

The German regulation is split between several entities while the UK one is consolidated. The Financial Services Authority - FSA - monitors the obligations, which the stock exchange has as a recognised exchange, and monitors the protection of clients funds, held by the exchange members. It also supervises compliance with the conduct of business rules and the execution of transactions. The FSA together with the Domestic and International Rules Committees, provide the UK's regulatory framework. Most of Frankfurt's trading in listed shares is off-exchange, and does not have to be reported to the exchange but to the federal security regulator. All trading in the UK is reported immediately. Furthermore, a separate regulation on the markets might imply worries about a possible split of liquidity.

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[18] http://www.xetra.de

[19] In some countries, a government tax is levied on certain documents or contracts, the payment of which is shown by the stamping of the document.

[20] Set is an electronic limit order book used to trade blue chip stocks.

[21] Investment banks are the largest shareholders in Euroclear and Clearstream.

The current regulation between the two financial centres differs in some aspects, in particular in the level of disclosure required from companies[22] and because the UK market has high standards in supervision and surveillance. In London, all trades must be promptly reported to the exchange; while in Germany trades not done on the exchange do not have to be reported. More differences arise for example, from the way the exchanges regulate and treat 'block trades" - the trading in large amounts of stocks in a single transactions[23]. The UK regulation considers that block trades have to be reported directly after they are agreed, while the German regulation does not require reporting. Differences also concern the trading of "odd" lots[24] of shares, on the information characteristics displayed on the respective technology trading systems[25] referring to the trading volumes and the prices quoted. Transparent trading rules are vital to achieve the best price information for smaller stocks because of the lower liquidity and because they are usually traded over-the-counter[26] rather than on electronic systems.

The introduction of common listing requirements and international accounting standards are unlikely to have been enough to enable a smooth performance of the merged institutions; and trading rules are complicated by the proposed presence of Nasdaq in the growth market, which makes the harmonisation process more difficult.

An additional difficulty for companies listed on the UK market was the possible increase in the risk of investment and operational costs due to the denomination of the stocks listed on iX in euro. The current idea is that, on the new market, trading would have been in different currencies, but that there would have been only one currency per stock. The concern was therefore to have the choice of listings on the merged exchange in either sterling or euro. Pension funds and insurance companies need assets expressed in sterling to match their sterling liabilities.

A dual quoting system in sterling and euro might have brought fragmentation and increased the cost of trading. The single platform supports multiple markets as well as multiple currencies. It is left to the company to decide the currency in which it will raise capital, pay dividends and express its accounts. Nevertheless, the currency in which a share will be traded will be a separate issue and should be the euro.

Companies that wanted to be listed on the new merged exchange wished to have the possibility of being listed in both markets, the blue chips market and the high growth market, and feared the fact that companies would be forced to move from London to Frankfurt. If the two markets were submitted to different regulations, a separation of the listings would have been necessary.

Further weak points arose from the competitive positions of national retail brokers and from interference with national exchange positions. Fears centred on the fact that the merger could undermine the status of one of the two stock exchanges as financial centres. Plans to locate the administration and management in UK could have disadvantaged the German trading platform in the case of future investment decisions. Nevertheless a merger should not have

[22] *Financial Times*, 25 May 2000.

[23] A transaction which is at least 75 times the normal market size for a security of 2000 shares or above, or 50 times the normal size for a security of 1000 shares or more.

[24] Trading order for a number of shares between 1 and 99, which is lower than the minimum lot established for trading on the floor.

[25] Sets system and Xetra system.

[26] The auxiliary stock market in which securities not listed on regular exchanges are traded.

been considered as a hostile take-over by one stock exchange of another in order to undermine its relative position, but as a way to gain from synergies and to profit from a common strategic structure, otherwise difficult to achieve.

2. Other merger propositions

Milan's Stock Exchange was the first in Europe to launch a separate after-hours trading session, with the aim of attracting small private investors. The results confirmed that large institutional investors do not participate. Small investors showed little enthusiasm. Most of the critics argued that the price fluctuation limit set had a disincentive effect.

A joint venture between Nasdaq Europe and London's Techmark[27] and Frankfurt's Neuer Markt will create a growth market with linkages to Nasdaq operations in America and Japan. The issuers will be able to collect liquidity outside their national markets and investors will increase access to foreign companies. The Nasdaq-Japan, a partnership with the Osaka exchange and a Japanese Internet investment group is expected. Once a trading platform is established in each country, they will be linked in the 24-hours global trading platform. Lately even NYSE, the world largest stock exchange, has discussed linkages with Latin American exchanges and Toronto Stock Exchange.

Connections between conventional exchanges and ECNs are increasing. In the Unites States, Nasdaq - the screen-based electronic stock market - wants several electronic communication networks to begin directing order flows in New York Stock Exchange stocks to Nasdaq[28]. *"Electronic communications networks, or ECNs, operate as electronic stock order matching systems. They are regulated within Nasdaq's parent organisation, the National Association of Security Dealers, and have made their market overwhelming in Nasdaq stocks ... Several changes have worked to allow for greater access to trading in NYSE listed stocks outside the floor of the exchange, most notably, the recision of the NYSE's Rule 390.* [29]*"* Rule 390, the "Market Responsibility Rule", was seen as anti-competitive. Now dealers can trade Big Board stocks away from the floor of an official exchange.

In UK E-Crossnet, an order-matching system, was launched recently to provide a new way to trade block of stocks more cheaply. It represents the electronic version of an over-the-counter matching system[30]. It has the aim of reducing the costs of trading large volumes of partly illiquid securities. This cost seems to be one of the major difficulties on the equity market, because spreads are gradually reduced by increasing competition. "*Some investors claim that unusually large orders in smaller stocks can cost them an additional 5 to 10 per cent of the value of the deal*[31]".

iX did not represent the only merger proposal. In June 2000 it was announced that 10 exchanges[32] were in talks to create an alliance, to be known as the Global Equity Market (GEM), through the development of a common market structure and the linkage between trading systems. The initiative provides an alternative and more comprehensive proposition to

[27] London Stock Exchange market for innovative technology companies.

[28] *Financial Times*, 12 June 2000.

[29] *Financial Times*, 12 June 2000.

[30] An order matching system is a system that permits that the buyer and the seller of the same stock do business without using the exchange's electronic order book. For LSE for example, without using Sets.

[31] *Financial Times* Survey, Stock and derivatives exchanges 0300 - E-trading.

[32] New York, Tokyo, Amsterdam, Brussels, Paris, Australia, Hong Kong, Toronto, Mexico and Sao Paolo.

the planned Anglo/German merger connected to Nasdaq[33]. The details are currently under discussion, but the GEM proposition focuses on the reduction of the costs charged for trading in cross-border equities by increasing the use of a central counterparty and increasing the straight-through processing of trading systems. The former objective implies lower clearing costs.

A second merger wave for Italy's and Spain's stock exchanges is planned. A wide approach, implicating more than two exchanges, will improve the synergy possibilities and will avoid the complexity of standardising and adjusting the operational framework every time a new exchange plans to join the merger in the future.

The GEM proposal follows the initial decision of three European exchanges - Amsterdam, Brussels and Paris - to merge to form Euronext, which was launched formally on 22 September 2000. This is the first fully integrated cross-border currency, stock, derivatives and commodities market. It offers an integrated trading, clearing and settlement solution on a European basis by providing a unified trading platform and a central counterparty. Listed companies will remain based on their current exchanges, but shares will be traded on the common platform and listing requirements harmonised. It will be divided in three segments:

- blue chips;
- high-technology stocks; and
- growth stocks.

The key difference between Euronext and other planned but aborted mergers is that the latter were planning a partial merger, while the former is focusing on a complete merger. The aim is to gain a single order book, develop a common set of trading rules and a single rulebook, under which the participant's listing rules will be harmonised. The combined exchanges operate trading floors in their own exchanges and each lists stocks of the partners. As the merged entity has a common trading platform, which is already in use in some stock exchanges in other time zones, as for example Toronto and São Paolo stock exchanges, it is supposed to expand. The connection with similar technology-based trading platforms all over the world, especially in different time zones, is one of the major goals exchange mergers try to reach.

3. Effects

More integrated securities markets are bringing benefits to EU enterprises in terms of competitiveness and job creation. The aims are to improve the possibilities for raising capital and trading securities across borders, of developing a reliable and cost-efficient exchange and market infrastructure and of instituting effective supervisory requirements.

It has been questioned whether mergers represent the best solution for developing market efficiency. Mergers imply conversion costs; but co-operation agreements and linkages between stock exchanges are also costly and even more highly demanding than mergers. Co-operation needs, in fact, a major effort to standardise the procedures and the operational environment of all the participants. When a high number of participants are present, linkages imply a growing complexity and a higher harmonisation burden. Furthermore, synergies cannot be exploited, as through mergers. Especially for stock exchanges, if liquidity is spread over a high number of trading systems, price transparency and price information will become

[33] Critics remarked how the market structures of London and Paris seem to be more similar than those of London and Frankfurt. This means that a London-Paris merger would be more suitable than a London-Frankfurt merger.

more difficult in the case of co-ordination agreements - factors which are the core of stock exchanges.

The flourishing of ECNs' already dispersed liquidity and the fact that investors have been focusing on a determined range of targets, such as Internet or IT stocks, and that they are structuring their portfolios from a country-based focus to sector-based focus, is accelerating the process. The best solution is to include electronic trading systems in future or current merger proposals. The combination of conventional and regulated structures with high-speed electronic systems has been generally expected. This permits use of the technology as a driving factor to lower the costs of trading and investing.

Mergers aim at creating significant added value for shareholders when they successfully achieve critical mass. One of the benefits gained through a merger for investors, issuers and intermediaries, independently from their size, is the possibility to benefit from lower spreads, thanks to a higher rate of liquidity.

The smaller stakeholders, such as private client brokers, will have the opportunity to widen consistently the range of products they can offer to their clients. More products on offer means that the customer's portfolio can be *more differentiated* and *the risk can be reduced*. The direct effect is a possible increase in gains for the client and indirectly for the brokers. Start-ups, especially Internet companies, will gain from *greater market disclosure*. Time for listing and the possibilities for raising capital will also increase.

On the other hand, larger customers of the market - investment banks - will especially benefit from the setting-up of the *central counterparty*[34] for the netting of the transactions and a common rulebook. The former has advantages in trading anonymity and in back office costs, because it allows transactions to be netted against each other before settlement operations. The fact that the many thousands of stocks listed on foreign exchanges have for the moment crossing borders does not depend on the unwillingness of the customers to invest in foreign stocks. Furthermore, it depends on other external difficulties, such as little information availability on foreign stocks, different regulations and different redress mechanisms, etc..

Precedents show how exchange mergers have often been planned, but are rather difficult to implement. The failures are due especially to difficulty in harmonising national regulations and in the *tendency to preserve the national stock exchange position and its idiosyncratic characteristics*. Six market mergers in the US have already aborted, and the difficulties arise from common listing procedures and common governance structure. If supervision is simply divided between the two centres, there could be possibilities for *regulatory arbitrage behaviours*, with companies shifting listings from one centre to the other to achieve a competitive regulatory advantage.

A further concern is whether a unique exchange could exercise a monopoly power. *"Because trading always gravitates to whichever market has the biggest share of liquidity, stockmarkets have a tendency to be natural monopolies*[35]*."* Competency is one of the forces that can naturally regulate monopoly. But, as was shown, even monopolies are vulnerable if a strong regulatory framework is present. NYSE was protected until now by restrictive rules and practices; but as they were scrapped, it became more vulnerable. Its major mistake was failure to develop when market structures and investors' needs were changing. For this reason, some

[34] The clearinghouse is contracting as principal counterpart for the buyer and for the seller in every transaction. It guarantees both parties that open contracts are finalised. The contract is therefore divided in two separate contracts enabling each part to take independent decisions.

[35] *The Economist*, June 17th-23th 2000, pp. 18.

companies have begun investing in rivals' ECNs. It was too slow to adapt its market structure to the changing environment. Furthermore its attitude against initial public offerings penalised it, a ban which was lifted only in 1984[36]. This attitude helped Nasdaq to become notorious in helping "young" companies to raise capital. The time for demutualising has arrived for every stock exchange, without exception.

On most stock exchanges a specialist has access to the limit-order book, and has the information on supply and demand flows for a determined share. The specialist has ultimately two functions. He aggregates buy and sell orders for a particular stock and intervenes in trading in the market to reduce volatility and provide liquidity. The first function can be overtaken be an electronic subject. In terms of liquidity an exchange can attract additional trading volumes if it provides a good liquidity basis, even without specialist intervention. Investors are attracted by trading volumes even if other trading possibilities exist, which are more efficient but less liquid[37]. NYSE for example is considered to be the most liquid[38] exchange because of its relative dimensions.

Nasdaq[39], the first electronic stock market providing an efficient vehicle for raising capital, has no specialist through which transactions pass. A characteristic of this market is that it allows multiple participants - divided into market makers[40] and ECNs[41] - in the market to trade a single stock.

What has to be recognised is that shareholders are controlling the exchanges' future. They killed the iX merger proposal and turned down the take-over offer from Sweden's OM group. Big investment banks have an international outlook while generally small brokers have a domestic one, and the demutualisation process has not outweighed this conflict. It is important to underline to shareholders the advantages of a more international and wide-spread solution linked to the participating US markets. Nasdaq already planned to build up a European presence before the iX proposal came into existence. But in considering co-operation or merger proposals it has to be pointed out that the LSE trades only equities, with derivatives traded separately by Liffe. Both have therefore to be included in potential and future proposals and traded on the same electronic platform.

Who will run the LSE is irrelevant; but LSE itself seems to forget that to do business it needs to change and move with the times. Its idea to remain an independent operator is only isolating it.

Furthermore cheap technology linked to high-volume telecommunications has reduced the importance of geographical locations and has created low-cost alternatives to traditional exchanges. Remote access to trading floors is reality, and investors are becoming price-conscious and mobile. Screen trading is reducing the value of the trading process.

[36] *The Economist*, June 17th-23th 2000.

[37] *The Economist*, June 17th-23th 2000.

[38] Some critics argue that only some of the companies listed are really liquid. For the other there are normally brief periods in which intermediaries are requested to put their own capital at risk and become the counterpart for the investor.

[39] To trade on Nasdaq, ECNs have to be certified and registered.

[40] Market makers are independent dealers who compete for investor orders by committing capitals.

[41] Archipelago L.L.C, Instinet Corporation, NexTrade, Strike Technologies, etc..

The goal of mergers is to make it possible to deal with and settle all futures, over-the-counter debt, derivatives and commodities products. Nevertheless, the collapsed proposals show how myopia, different economic interests and nationalism can make merging hard.

Besides the positive or negative aspects of the OM bid for LSE, the fact that a stock exchange can be considered for a take-over bid is opening a new era. Even relative small companies may be ready and capable to take over an entire stock exchange, a fact that was unthinkable only a few years before.

OM couldn't bring much liquidity on its own to the market. But this may be important only in the short run, because, although stocks have secondary listings on other markets, trading is concentrated in their domestic markets. In the electronic age, trade will migrate to the most efficient market.

As stock exchanges are becoming more and more determined by current market competition rules, they have to place more importance on their internal efficiencies. Clearing and settlement cannot remain further fragmented because of the need for specialist staff and for multiple relations with clearing houses, which inverse operational costs. Markets cannot afford any more to have trading and back office operations remaining separate. The first step is to create a central counterparty for all securities in all currencies, but because clearing organisations are often owned by exchanges whose products they clear, exchanges have to merge. Delays in achieving an efficient market for securities and their derivative are damaging the creation of a common risk capital market.

UCITS

Undertakings for collective investment in transferable securities - UCITS - covered by European legislation, are harmonised investment funds, open-ended, publicly sold undertakings investing in transferable securities according to the principle of risk-spreading. UCITS have a manager, a pool of assets and a depository. The latter has a safe-keeping function towards the unit trust's assets.

UCITS may be constituted according to the core Directive 85/611/EEC, under:

- the law of contract, as common funds managed by management companies; or
- trust law, as unit trusts; or
- statute, as investment companies[42].

With the adoption of the UCITS Directive in 1985 the first step was taken towards the co-ordination and regulation of collective investment undertakings, even if only for a part of them. The main aim was to ensure a high level of protection for investors at Community level and to provide flexibility in the legislation. The latter was achieved through the introduction of the principle of mutual recognition to permit the marketing of UCITS's units in every Member State without further authorisation of the host country. It aligned the procedure to that concerning the cross-border provision of services. What was missing was a common approach in order to cover all kind of collective investment undertakings and to have flexible legislation, which could adapt to the changing environment.

Laws from different Member States differ consistently from one state to the other, particularly with regard to the control and supervision imposed. As a result, they distort competition between undertakings and equivalence in the protection of unit holders.

The UCITS's Directive focused essentially on the "product", while regulation in terms of "management companies" was lacking. There were no harmonised market access rules such as the initial minimum capital requirements, and no detailed prudential framework. Cross-border activity also lacked a regulation. The marketing possibilities of the units had not been contemplated such as the establishment of branches or the provision of services abroad.

The core Directive has been amended twice: by 88/220/EEC, introducing mortgage credit bonds and by 95/26/EC with a view to reinforcing prudential supervision. The aim was to provide the possibility of exchanges of information between the competent authorities in all Member States.

The Commission has prepared a package of measures in two further proposals adopted on May 2000, the provisions of which should enter into force no later than 31 December 2002.

The first proposal[43] focuses on the "product" in terms of the type of investment funds covered by the legislation[44]. It extends the range of financial assets in which collective investment undertakings are allowed to invest.

Its objective is to remove the barriers to the cross-border marketing of units of collective investment undertakings. Several measures are involved:

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[42] 385L0611.

[43] COM(00)329.

[44] UCITS can be regarded as a product to be distributed either:

- by management company; or
- by an investment company.

- the extension of the freedom to market their units even for undertakings investing in financial assets other than transferable securities such as bank deposits, money market instruments, units of other UCITS and unharmonised funds and financial derivatives;
- updating investment possibilities following recent developments in portfolio management techniques;
- freedom in tracking of indices.

Taking into account the current rapid developments on financial markets, it has been considered desirable to widen the investment product range in which undertakings may be allowed to invest. Financial assets[45], other than transferable securities and OTC derivatives[46], which are sufficiently liquid, have been included as eligible investment instruments. Prudential aspects are covered through the definition of a consistent set of provisions, which include a limited ceiling for investments in OTC derivatives. The major issue is the risk involved in these instruments, especially in terms of:

- insolvency risk;
- liquidity risk; and
- the possibility to proceed to a frequent valuation of the instruments.

The proposals therefore outline the conditions under which financial derivatives may be used, and how to determine their daily value in a precise way. Derivatives have to be available for sale and liquidation on a daily basis. Because OTC derivatives are now fully defined as eligible investment instruments, the distinction between assets contained in the investment portfolios of undertakings for different purposes[47], as "general investment purposes", "hedging purpose" and "purpose of efficient portfolio management" has been cancelled. The new disclosure rules of the fund's risk-profile, which has to be contained in the documents distributed to the customers, are intended to cover the possible higher volatility of UCITS assets due to the inclusion of derivatives. Even if one of the major objectives is to avoid unnecessary entry barriers, especially due to initial capital requirements, the inclusion of OTC derivatives in portfolios as eligible instruments has increased the necessity for higher capital requirements. It has been raised from the initial € 50,000 level to € 125,000 for management companies, which cover activities of individual and collective portfolio management.

Allowing investments in derivatives has the effect of raising the potential volatility of the funds return on one hand, but has also the effect of reducing the risk-aversion of investors. By enhancing the information given to the funds participants, the investors can become acquainted by direct experience with the negative as well as the positive outcomes of a more risky investment strategy and gain confidence within a more risky environment. Reducing risk-adverse behaviour is part of a wider concept of fostering an increasing equity culture in the Community, which is indirectly linked to further job potentialities in the economy.

The second proposal[48] focuses on the "services provider" in terms of rules governing the management company of investment funds. The aim is to reinforce the single market in the field of UCITS and to update the supervision framework through:

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[45] Money market instruments are now also defined as transferable securities.

[46] The initial proposal allowed investments in standardised derivatives traded on regular markets as key change, but excluded over-the-counter -OTC- instruments for prudential reasons.

[47] COM(2000)329 final.

[48] COM(2000)331.

- The updating of the legislation governing management companies of UCITS and to align it with existing for other operators in the financial services sector. The goal is to increase their relative competitiveness.
- The revision of the restrictions, which prevent management companies from providing individual portfolio management services.
- The creation of a European Passport available for the shares of harmonised investment companies[49] and for the units of UCITS managed by management companies. They will have the opportunity to establish their distribution network for the units of the undertakings they manage in all Member States, even through branches or through electronic distribution channels[50], and will be allowed to market their units in all other Member States. The prerequisite will be to inform the competent authorities and present the correspondent with translated documents.
- The inclusion of individual portfolio management practices besides collective ones. The main aim is to prevent segmentation between collective and individual portfolio management and also to enable management economies of scale. The fact that it is permissible for management companies to carry out individual portfolio management - for private or institutional investors - beside the common management of collective investments, also includes the possibility of managing pension funds. Rules preventing conflicts of interest between the two management categories have been set up in order to avoid a prejudice for the stability of the investment strategy.
- The updating of the provisions concerning the information documents. To provide the most transparent information framework, a new simplified version of the information package presented to the investors has been introduced; the simplified prospectus. It is prepared in addition to the already existing full prospectus for UCITS and will be presented as a summary of the latter. The aim is to provide a more investor-friendly document in order to represent a major information source for the average investor profile. The prospectus has to focus especially on the risk profile adopted and on the investment instruments used, together with economic and commercial information. The latter underlines the tax regime, the entry and exit commissions required and the marketing possibilities of the units of the undertaking. The information will be presented in a clear and summarised form.

The documents provided to the public and to the competent authorities have to underline the investment limits imposed on derivatives operations and underline the risk involved in those operations. The simplified prospectus is a mandatory information document to be offered to the investors before the conclusion of the contract. It must be translated in the official language of the host Member State. The distribution of the full version won't be mandatory.

The aim of the introduction of a simplified prospectus, in addition to the complete one already in existence, is to provide more exhaustive information to the potential investors in all the Union. The key concept is to gain maximum harmonisation of this prospectus throughout the different Member States.

[49] Non-harmonised funds cover two categories, either:

- European funds not covered by the national legislation of a Member State, but which are not covered by the Directive 85/611/EEC; or
- All funds of non-Member States.

[50] COM(1998)451 final.

UCITS that choose a specialised investment policy should avoid excessive concentration in liquid assets issued by the same body. The limit of investment in assets of a single issuer has been therefore lowered and has been extended for debt securities. Excessive concentration especially in deposits with a single credit institution should be avoided. Concerns have been expressed in terms of liquidity and counter-party risk of this instrument. Even the replication of the composition of a certain stock-or debt securities index has to reflect a high diversification level and be adequately published.

The limits[51] for investments of harmonised funds in the units of non-harmonised funds have been increased and qualitative limits have been introduced. This position aims to prevent opaque cross-investment of UCITS in other undertakings, especially in order to avoid the insurgence of cascades of funds. For that reason the proportion of cross-investments has to be monitored also on a daily basis.

1. Effects

Collective investment undertakings where investors' money is placed by specialists in a diverse range of assets according to defined risk criteria, can offer investors without a specialist knowledge a means of investing in a specialised market. They represent currently more than 20% of EU GDP and it is therefore important to ensure investors' protection without penalising the development potentialities of these undertakings. Collective investment undertakings are a vehicle to channel savings into productive investments. Especially in periods with low interest rate trends, these vehicles are an increasing popular alternative to traditional investments in public sector bonds.

The direct effect of the updated measures is to widen the range of products that can be offered to the investors[52], and on the other hand, through the provision of the European Passport, to accelerate the process of desintermediation of financial services. This means that intermediation on financial services will be managed more and more through institutional investors rather than by credit institutions as conventionally done. The effect is a change in the liability structure of credit institutions[53].

The consideration that a wider range of investment products has been allowed and that units can be marketed more easily across borders will increase in the long run the competition environment between management companies. As a result price determination in relation to the quality of these products will be improved.

Wider investment possibilities permitted by the amended Directive will contribute to sustaining the growth trend in the financial sector linked to the merger wave which has already given a growing input to the sector. It will allow the creation of more liquid and deeper financial markets in the European union even if the volatility of the units of collective investment undertakings will probably increase due to the possibility of investing in OTC derivatives. By contrast this provision will increase on average the return to investors which will boost new investments, partly in financial assets and partly in direct investment in the real economy. Indirect effects will be observed in employment figures.

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[51] From a 5% to a 30% limit.

[52] UCITS are permitted to invest not only in listed shares and bonds, but also in bank deposits (cash funds), money market instruments (money market funds) standardised option ad future contracts dealt on regulated exchanges and units of other collective undertakings (funds of funds).

[53] 399Y1007.

The updating of the rules for management companies and of the information required for investors increases the competitiveness of the management companies in relation to other financial operators such as banks, insurance companies or investment firms, together with the reinforcement of the supervision framework and the level of investor protection. The modification has introduced therefore harmonised and partly automatic authorisation procedures for management companies, a wider regulation for the provision of services and the opening of branches in other Member States and covers the rules for a stricter co-operation network between the competent authorities in the different states. The introduction of the European Passport in order to allow freedom to provide services in the Union and permission to set up branches abroad constitutes a milestone. It will permit an expansion of business across borders and increase international competition.

Minimum standard rules aim to increase the prudential framework provided for investors and the public in general and to increase the transparency for the competent supervisory authorities. The most important ones concern:

- investment and risk-spreading rules; and
- investor information provisions.

The provision of a minimum level of investor protection ensures higher cross-border marketing of the units.

Requirements for increased transparency on the investment risk profile adopted and of the information provided will increase the attractiveness of investments in UCITS's units and will boost the growth of equities in this sector. This will create an alternative supply of capital formation, which may represent an alternative source of venture capital and will boost employment figures. The fact that this sector will be allowed to manage individual portfolios and even pension funds will enable it to improve dynamically due to more diversification possibilities. It will have a direct effect on competition within the pension funds sector.

Concentration of investments in assets issued by a single institution increases the insolvency risk even if it can be differentiated which type of security should be invested in. The fact that an investor could conclude contracts other than deposits as equities, debt securities or derivative contracts does not reduce the exposure to insolvency risk of the investors.

It is necessary to guarantee the internal overview of collective undertakings linked with external supervision control mechanisms. "*By virtue of mutual recognition, management companies authorised in their home Member States shall be permitted to carry on the services for which they have received authorisation throughout the European Union by establishing branches or under the freedom to provide services*[54]". In accordance with the principle of the home country control only the Member State in which the undertaking has its registered office is competent for the approval of the fund rules and for the prudential supervision of management companies. Every Member State has the right to establish stricter rules than those laid down in the directive, especially with regard to the authorisation conditions of these undertakings and in terms of the prudential framework required.

Harmonised rules for a compensation mechanism should be introduced to guarantee some minimum redress to unit holders in case the undertaking is unable to fulfil its obligations to its investors.

[54] COM(2000)331 final.

Financial reporting

1. Accounting

The need to improve the comparability of companies' financial reporting in order to have sound financial information which is relevant, timely, reliable and comparable has been recently underlined. This permits increased safeguarding of the interests of investors, creditors and other stakeholders and allows the development of the EU securities market which lags behind the US capital market size. To achieve this aim, common financial reporting standards are needed. Currently in the EU many different financial reporting rules and interpretations of these exist and the reporting system is fragmented.

The present diversity of accounting approaches in the Union is the result of the legislation set up by the Accounting Directives. A general UE legislative approach has permitted different national specifications. Companies have been required to report to different accounting standards within the same Member State and even within the same stock exchange.

Taking into account local legal and tax conventions was justifiable when investors and/or stakeholders were predominantly of the same nationality as the company. Today investors increasingly purchase international securities.

Recently standard-setting itself has evolved rapidly. In the Commission's Communication on a new accounting strategy of 1995[55], it was proposed that Member States should allow global players looking for capital on international capital markets to prepare their consolidated financial statements in accordance with International Accounting Standards - IAS. Since then, some Member States[56] have allowed listed companies to prepare consolidated financial statements in accordance with:

- the IAS standards; or
- the US Generally Agreed Accounting Principles - GAAP; or
- the national standards based upon the EU Accounting Directives[57].

IAS are accounting standards developed by the International Accounting Standards Committee[58] - IASC - and set up in the 1970s by accountancy bodies in a number of industrialised countries. They have been developed thorough international co-operation, in line with the Accounting Directives, with increased detail. They have the advantage of being drawn up with an international perspective, rather than conforming to a specific environment.

The US GAAPs on the other hand, have been developed and set up by the Financial Accounting Standards Board in co-operation with the Securities and Exchange Commission and the accounting profession. The fact that these standards have been developed and modified only at US level, without any input from outside, makes it difficult to apply them to Europe. The standards reflect in fact the litigious national environment of the US and are very detailed and voluminous. The Securities and Exchange Commission automatically supervises those EU companies applying US GAAPs.

[55] Accounting Harmonisation: a new strategy vis-à-vis international harmonisation, 14.11.95.

[56] Austria, Belgium, Germany, France, Finland, Italy and Luxembourg.

[57] The Fourth Company Law Directive (78/660/EEC) harmonises the content of annual accounts required by Member States of limited liability companies and the Seventh Company Law Directive (83/349/EEC) co-ordinates the content of consolidated accounts of groups of companies.

[58] Recently an internal restructuring process of IASC has been outlined.

The proliferation of financial statements using different reporting standards leads to the situation in which financial reporting cannot easily be compared and hampers the possibility of cross-border investment. The aim is to achieve a single and simple set of accounting standards, internationally accepted.

The enforcement of a common approach includes the implementation or development of a number of elements, such as timely interpretation and implementation guidance, a statutory audit, an effective system of sanctions and a supervision framework beside the creation of a common and clear set of accounting standards.

In order to ensure a proper and common application of accounting standards it is important to provide high quality financial reporting. The establishment of benchmarks for auditing, the development of professional ethics standards and of an assurance system for the statutory function should determine a common approach for auditing and professional ethics.

On 13 June 2000 the Commission outlined a strategy for future financial reporting to help eliminate the remaining barriers to cross-border trading in securities. The recommendation to use a single set of accounting standards would permit company accounts to be more transparent, easily compared and would enhance the possibilities of raising capital in the Union. The Communication announces that all listed EU companies will be required to prepare their consolidated financial statements in accordance with IAS at the latest by 2005. This will allow companies to adapt their accounting systems during the transitional period. At present only a few hundred companies apply these standards, while by 2005 it has been calculated that almost 7000 listed companies will conform to the system.

In the meantime the Accounting Directives have to be amended in order to clarify the legal basis for financial reporting. Companies which apply IAS do not always comply with them. *High quality accounting standards do not guarantee per se efficient financial reporting, but the correct and rigorous application of them will increase the credibility and well functioning of the mechanism*. Common guidance is needed in order to underline the way in which the standards have to be applied, and an external supervision framework is necessary to protect the interests of investors.

In order to simplify and increase comparability in this sector it would be advisable to require the *compulsory preparation* also of individual accounts in accordance with the IAS and to extend this requirement to unlisted companies even with a more extended transition period if necessary[59].

The Commission proposal will contain transitional agreements in order to encourage early compliance with the standards together with the rules for the establishment of an endorsement service. The service will allow the maintenance of the setting of accounting standards under EU influence and will oversee the integration of IAS in the Union. The mechanism will determine whether the standards adopted conform to European public policies. One of the major tasks of the endorsement service will be to guarantee that IAS standards will conform to the EU environment and represent an appropriate basis for financial reporting for European listed companies.

The service will have a two-tier structure; a technical and a political one. The political level will include all Member States, and will operate the official endorsement. Member States will be represented in committees with the task of updating the present legislation. Highly qualified experts will form the technical level and be assisted by the private sector.

[59] The Commission will propose to leave to the Member States the possibility to extend the application of IAS to unlisted companies and to individual accounts.

Specialised groups will be formed in order to deal with specific issues or in case standards have a particular impact on supervisory and prudential issues.

The Commission is furthermore supporting the effort to create a *single body* responsible for financial reporting standards that could be used for listing purposes throughout the world. This will permit in particular international issuers to use common standards for the preparation of their accounting statements for cross-border offerings and listings. The best way to achieve this goal is to enhance the *co-operation efforts with US authorities* in order to ensure the mutual recognition of both systems. This will enable securities to be traded in and outside the European Union on the basis of a single set of financial reporting standards.

The International Accounting Standards[60] Committee may become one of the global accounting standard setters in co-operation with the Accounting Advisory Forum[61]. More than 25% of the companies in the EU currently report under IAS with this figure rising to 50% if EU candidate countries and the EFTA countries are included in the calculation. In order to avoid national public interest distorting decisions, the nationality of IASC Board members has to extend beyond the borders. Beside its legitimisation, one major requirement for an international standard setter is independence from national standard setters.

The widespread acceptance of IAS set by IASC allows companies seeking stock listing outside the EU to prepare a single set of accounts instead of two. This would lower costs for companies and increases their comparability. Further co-operation of IASC with the US standards-setting authorities would provide a potential harmonisation through mutual recognition of the two standards in use.

Linked to this is the increase in the use of the *self-registration* procedure for EU securities issuers. The procedure comprises the supply of a reference document and a security note to be filed to the relevant national authorities. The aim is to ensure, through the use of a common registration system, a secure access to other European markets, including financial information.

To enhance the comparability in financial reporting, the Fourth Directive sets out the legal framework for the presentation of annual accounts and disclosure requirements. It addition, it describes methods for the valuation of items in the balance sheet. Companies are required to value their assets at the purchase or production cost, referred to as historical cost. Member States can, however, require the re-valuation of certain categories of assets or their valuation at replacement cost.

The dynamic change in international financial markets has resulted in the use, not only of traditional financial instruments; such as shares and bonds, but furthermore in various derivative forms[62]. The growth in the use of those instruments is outpacing the adaptation of accounting legislation.

In order to modernise the EU's accounting rules, the introduction of the *fair value* accounting model for certain financial assets and liabilities rather than its historical cost has been proposed, in particular as regards the widespread use of derivatives[63]. Derivatives, often used

[60] The IASC is an independent private sector body comprising representatives of 143 professional accounting bodies from 103 countries. The Commission has an observer status on the ISAC, which approves International Accounting Standards.

[61] It is a body of experts from the main parties interested in accounting in the European Union. It is not a standard-setting body.

[62] As futures, options, forward contracts and swaps.

[63] The term derivative refers to a financial instrument, which derives its value from an underlying price or rate.

for risk management, may bring associated risk and may rapidly increase or reduce the risk profile and the financial position of a company. The impact of these instruments is properly reflected in the company financial statement. Fair value is generally defined *as the amount for which an asset could be exchanged or a liability settled, between knowledgeable and willing parties in an arm's length transaction. In practice, there is often an active market in the instruments and the fair value will be the market value*[64].

Financial instruments are generally held for trading purposes and to generate profits through short-term buy and sell operations. In this case realisation of the profits is certain and therefore does not affect significantly the profit and loss account and the distribution of the profits. The best solution is to permit accounting for the changes in the fair values of non-trading instruments in a fair value equity reserve in the balance sheet.

Financial instruments are also used for hedge accounting in order to hedge against potential fluctuations in the value of the underlying instrument. In this case the net effect of the changes in the value of the underlying instrument and the inverse change in value of the derivative instrument should be neutral and therefore does not raise additional difficulties.

2. Effects

One of the major difficulties hampering the development of a risk capital market in the Community is the fact that investors are reluctant to invest their savings in businesses where the outcomes are relatively unpredictable and therefore risky. One source of information, which companies can provide in order to improve investors willingness to invest is to make company financial statements more transparent and more comparable. An increase in the competition level between companies of correlated business sectors will be a direct result.

The fact that different accounting standards are permitted reduces the possibility of comparing financial statements, nationally and, even more, internationally. This is a recipe for confusion on the part of supervisors and investors and disrupts raising capital in other Member State markets. It is therefore necessary to require the compulsory application of IAS standards, even for individual accounts, and to extend the requirement to unlisted companies. The fact that unlisted companies, which are generally small and medium size enterprises, already prepare their financial accounts in accordance with the international accepted standards, increases their credibility and future possibilities of their achieving a listing and attracting venture capital. Their development will be boosted.

In order to increase comparability, even in the short run, it should be a requirement that all or certain categories of companies adopt the fair value accounting method. All derivative instruments should be valued by the same method. Certain types of balance sheet item, such as fixed assets or long term debt and especially liability items cannot be valued at fair value. For this reason the own debt of a company should be excluded and, in order to take into account the company's own credit risk, *a reserve* can be added in the balance sheet.

This valuation method would particularly influence those instruments which have no historic cost, but a significant fair value. The amendment, on the other hand, would not affect SMEs because they do not produce consolidated accounts and because they generally do not make use of financial instruments and therefore do not need to report them.

[64] COM(2000)80 final, Proposal of the European Parliament and of the Council amending Directives 78/660/EEC and 83/349/EEC as regards the valuation rules for the annual and consolidated accounts of certain types of companies, 24.02.2000.

This harmonisation has to take place internationally and not be focused merely on the Community level, but in co-operation with the Securities and Exchange Commission. As a common set of accounting standards cannot be implemented in both Europe and the US because of the different and idiosyncratic litigious environments, there must be a bilateral recognition of the standards used. This will be particularly important in order to achieve an adequate repartition of the supervision of European companies located in Europe or of US companies located in Europe, which may be willing to prepare financial statements according to either own standards. Mutual recognition would reduce the necessity of preparing an additional set of accounting standards.

New-technology companies, such as dotcom enterprises, represent an additional challenge for accountants. Dotcoms come to the market on the basis of an idea and a few people. Their balance sheets lack tangible assets. Instead they are crucially dependent on human capital which does not appear on the balance sheet. Their most important resources are intangible. However investors are putting money into those companies in the hope of massive returns with minimum effort.

Accounting professionals face pressure because traditional accounting and estimates of value creation are no longer appropriate. As those companies are based on human capital, it is difficult to evaluate their intellectual property. New economy companies illustrate how inadequate the measure and valuation of assets can be when the value is not stored in equipment, plants or buildings but in intangible assets. Paradoxically, investment in human capital is presented in the balance sheet as an expense and not an asset. If accountants want to continue playing a role in the future they have to adapt to the new environment and contribute to the search for reliable measures for human assets.

3. Auditing

The link between international accounting and auditing is quite strict. The statutory audit should be a part of the enforcement structure and should aim to monitor the application of IAS standards by companies.

The object of the audit has been defined as enabling the auditor to express an opinion on how the financial statement of a company has been prepared in accordance with the financial reporting framework. The statutory auditor has an essential role in giving credibility to the financial reporting of companies because he guarantees the reliability of financial information. There is a risk that a company's accounts will not be accepted in international capital markets unless audited by an independent professional in accordance with internationally accepted standards[65].

The legal framework lacks a common view and definition of the role, position and liability of the auditor. The lack of harmonised legislation hampers the access of European companies to international capital markets. An increase in the level of transparency would be reached through the harmonisation of the financial information published by companies, and through an increase in the reliability of the information.

The 8th Council Directive of 10 April 1984 on the approval of persons responsible for carrying out the statutory audits of accounting documents, defines the minimum qualifications of the statutory auditor. But it does not contain any specific guidance on many questions regarding the audit function nor regarding the role, the position and the liability of statutory

[65] http://europa.eu.int/comm/internal_market/en/company/audit/news/399.htm
Accounting: Commission Communication on the statutory audit in the European Union.

auditors. As a result differences arise in the way issues are dealt with at national level or subjected to self-regulation by the accountancy profession.

The aim is to create a common view on statutory audit at Community level. The following issues are not adequately covered in the 8th Directive[66]:

- ***the role and responsibilities of the auditor in***:
  - Fraud. The auditor has the task if he suspects fraud, to investigate until his suspicions are confirmed or allayed. In certain cases the fraud has to be reported to a regulatory body determined by each Member State.
  - The functioning and quality of the system of internal control.
  - Respect of a company's legal obligations. The auditor cannot be expected to report on issues beyond his competence or expertise. The direct responsibility of legal obligations should be borne by the internal control.
  - Environmental responsibilities. This includes trade sanctions, product development policies and safety levels of operations conducted by the client company.
  - Correctness of financial statements respecting the accounting principles, legal provisions and showing a true and fair view.
  - Guaranteeing the financial soundness of a company. Auditors have the task of alerting the director when factors are present which may reduce the resources or the company's financial strength.

- ***the contents of the audit report***. The audit report is the medium through which the auditor communicates with shareholders, creditors, employees and with the public. The company law of each Member State specifies the content of the report, and should be harmonised and standardised at EU level. It lays down generally:
  - whether the annual report is consistent with the annual accounts;
  - whether the annual report gives a true and fair view of the financial situation of the company;
  - whether the annual accounts comply with company law; and
  - whether the audit is set out in accordance with the auditing standards.

- ***the independence of the auditor***. The auditor must demonstrate that he can perform his task in an objective manner. He should be independent of, and separate from, the management and supervisory boards of the client company. The responsibilities of the auditors should be limited by the fact that the directors of the client company are in the position to prepare the accounts, and have therefore to bear the direct responsibility for them. Furthermore a long period of auditing the same company is counterproductive because this can lead to a too close relationship between the auditor and the company manager. A *rotation period* should be imposed at EU level with a maximum of years (e.g. 7 years) after which a different auditor has to be appointed.

- ***appointment and dismissal rules for auditors***.

[66] http://europa.eu.int/comm/internal_market/en/company/audit/news/696.htm
Accounting: Commission adopts Green Paper on the Role, Position and Liability of Statutory Auditors.

- ***the level of the audit fee***. This is normally agreed in advance. In case of disclosure of malpractice or fraud an additional fee for the extra work has to be agreed between the director and the auditor.
- ***limitations on the liability of the auditors***.
- ***freedom of establishment and provision of services***. *The freedom of establishment of an individual auditor in another Member State has been achieved through Directive 89/48/EEC on the mutual recognition of professional qualifications*[67]. Auditors have to acquire the qualification of the host country through an aptitude test, but are exempt from following the complete educational programme.
- ***the auditing of SME***[68]. External auditors are needed even for small companies because generally they do not have internal control mechanisms.
- ***auditing in groups of companies***. With the increase in the complexity and size of groups of companies, the auditor faces increased difficulties to treat the group as a financial entity and to achieve the global picture of the significant activities and the relevant links within the group. The appointment of a *group of auditors* has been therefore proposed, each one working on a part of the company's group and exchanging information. The group report would be prepared jointly.

The question of the *position* of the statutory auditor within the company and in the role of internal audits should be seen in a wider context of corporate governance. The directors of the company are responsible for the preparation of the financial statements and the role of the auditor is to report on the statements presented by him to the shareholders and to everyone who bears potential interests in the company.

Professional *liability* is rather differently managed in different Member States. In order to avoid making audit firms responsible for amounts which are disproportionate with the audit fee and with the auditor's direct responsibility, upper limits have to be set at Community level. A *standardised upper cap* to be set in order to limit the amount that an audit firm has to pay in the event of litigation can be left to the Member States. Auditors could also be allowed to limit further beyond the cap set at EU level the amount in case of litigation. A *mandatory professional insurance for auditors* has been proposed. In this case a refusal by the audit firm to accept the appointment of high-risk clients and to discriminate against clients on the base of the litigation framework of the country of belonging must be avoided.

The Commission furthermore adopted a Communication[69] on the future of statutory auditing in the UE on 7 May 1998. A Committee on Auditing formed by auditing experts nominated by the Member States which will work in co-operation with the Accounting Advisory Forum has been proposed. The major tasks of the Committee will be to:

- review the existing International Standards of Auditing developed by the International Federation of Accountants (IFAC) and guarantee their use at EU level;
- examine the audit quality monitoring systems in the Member States; and

[67] Green Paper, *The role, the position and the liability of the statutory auditor within the European Union*.

[68] **S**mall and **M**edium **E**nterprises.

[69] Commission Communication "Statutory audit in the European Union, the way forward", OJ C 143 of 8 May 1998.

- examine the core principles on independence of the auditor developed by the European Accounting profession. Not all Member States have set up systems of quality control and some are more supervision mechanisms rather than control ones.

4. Effects

One of the more controversial issues relates to the separation of competencies between internal and external auditors. The external auditor cannot be made responsible for issues which are beyond his competence. This will reduce the potential for conflicts and a possible overlapping of tasks carried out. Nevertheless a wider involvement of *internal auditors* will be appropriate, especially in co-operation with the Committee on Auditing. This will increase its efficiency particularly for the setting up of the international standard guidelines.

Stricter co-operation is also required when considering environmental responsibilities. Because of the growing importance of environmental issues in every business sector of the modern economy, product development policies, such as production safety level verifications, have to be conducted by external auditors in co-operation with internal auditors who have a more comprehensive knowledge of the internal procedures of the company. Nevertheless, considering their role and function and the international impact of the results of their work, external auditors they should bear the environmental responsibility.

Because of the credibility function correlated to the auditing function, it is particularly important for small and medium size enterprises to have access themselves to external auditing. As for the reporting requirements, the fact that an independent professional audits a company enables unlisted companies to have access more easily to risk capital and to achieve a future listing.

As far as freedom to provide cross-border services is concerned, some Member States require individual auditors to have a professional establishment in the host country. The aim of this requirement is to maintain an active monitoring of the professional providing services on the territory and to guarantee the quality of the service provided. Once a professional possesses the necessary professional title required in the host country, the obligation to have an establishment becomes unnecessary and a burden.

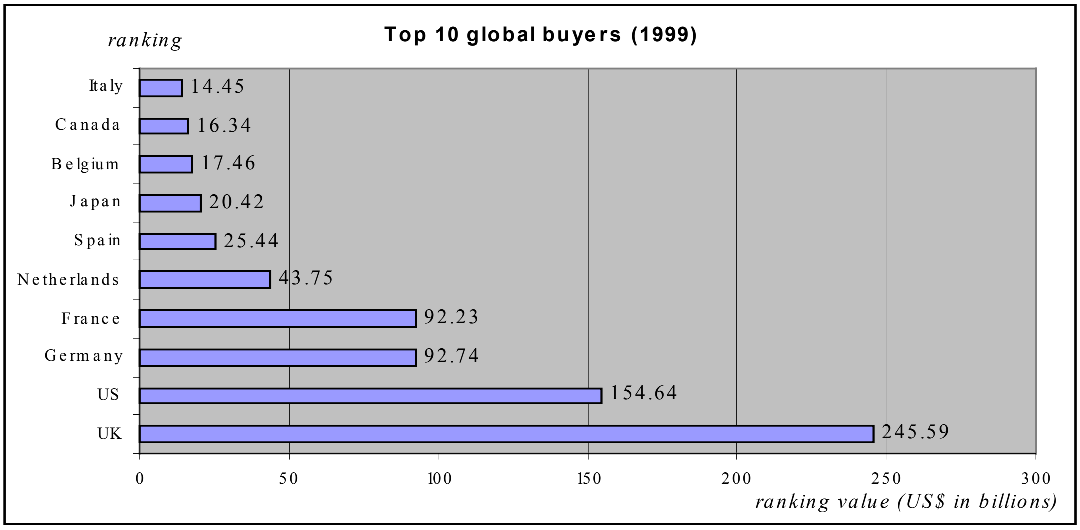
On the other hand, freedom for audit firms to provide services can be exercised in many forms of partnership and ownership, but most Member States do not allow them. The creation of a subsidiary for an audit firm by foreign professionals, for example, is made difficult by national laws of the host country that restrict the possibilities of establishment. Strict laws have been set for the ownership, management and control of audit firms. The majority of the voting rights in an audit firm in fact must be held by natural persons or firms of auditors approved under the law of the host country. Discrimination provisions are often based on the ground of nationality. The Communication therefore underlines the importance of a mutual recognition framework of auditing services and of auditing requirements.

Company law

1. Cross-border mergers

With the opening of the markets, the deregulation of state industries and the rapid growth of emerging economies, the number of cross-border mergers and acquisitions has increased substantially, and the patterns have changed. Cross-border operations grew nearly 50% last year while 75% of them took place in Western Europe. The most acquisitive country was the UK, which accounted for 30% for those deals, while the US remained the country attracting most purchases[70].

Graph 5



Source: ABCNEWS.com

Cross-border operations are defined as deals between companies based in at least two different countries. A distinction can be made within this category between:

- Community transactions, which involve only companies based in the European Union; and
- international transactions, which involve at least one non-Community company.

National transactions involve companies in one and the same Member State. Yet, even if the major impact of the transaction is supposed to be national, spill-over effects are increasingly likely because of the growing links between the States.

How these operations are defined and managed is especially important if this is to be a smooth development of the Single Market. The consolidated regulation at present has some weak points. Council Regulation No. 4064/89, the Merger Regulation, was adopted in December 1989 and entered into force in September 1990. It applies to:

- mergers;
- acquisition of interests; and
- establishment of concentrative joint ventures;

where, as stated in Article 1(2),

[70] *Financial Times.*

- the world-wide turnover of each of at least two of the undertakings concerned do not exceed a certain level; and
- the undertakings concerned achieve not more than a certain fraction of their aggregate Community-wide turnover in one and the same Member State.

One of the basic principles of that legislation was to subject to the Commission's exclusive jurisdiction those significant concentrations whose impact could potentially go beyond any single national market. Following the subsidiarity principle, the Commission should have sole competence only for those mergers with a Community dimension.

The Community-wide significance of a merger has to be defined on the grounds of its market-dominating effects. When a transaction falls within the jurisdiction of a country it is usually evaluated by reference to:

- the size of the parties;
- the size of the transaction;
- the market share of the parties; and
- the potential effect of the transaction on the competition situation within the country.

Merger control has to apply more to those concentrations operating in markets with high aggregate turnovers and/or where conglomerates are involved in the concentration procedure. In order to achieve and quantify those effects more easily, the Commission bases its decisions on quantitative criteria that define merger projects with cross-border effects. This permits achievement of legal certainty and the applicability of the merger regulation framework, but has nevertheless some negative aspects.

The Regulation establishes that the procedure for examining transactions is split into two phases. In the first, the Commission must determine if the operation falls under its jurisdiction. If it does, it is necessary to examine if the operation raises concerns about the competition situation or strengthens a dominant position. In the event of doubts, a more detailed analysis is necessary.

One advantage of falling under the Community legislation is the application of the *one-stop shop principle*, which allows the administrative and notification costs for cross-border operations to be kept relatively low[71]. Companies involved in concentrations under exclusive jurisdiction of the Commission therefore need in fact, to make only one prior notification to it. The aim is to allocate the decision to the body which is potentially best equipped to deal with concentrations.

The exclusive jurisdiction of the Commission also ensures that all mergers with a significant international impact will be subjected to a uniform set of rules (*level playing field*). National rules on merger control still diverge to a large extent. Some do not have any merger control while others are based either on voluntary or on compulsory notification procedures (Annex 1).

The scope and the structure of mergers are increasing and boundaries between various services are shifting and melting. When more than one authority plays a part in the decision process of a concentration, legal uncertainty may arise and different or even conflicting decisions may be taken in the different countries. For the regulating authorities this can also result in jurisdictional disputes, difficulties in conducting an investigation especially when the information source is located outside its jurisdiction, and can result in conflicting remedial

[71] The notification procedure requires companies to fill in the standard single form.

actions proposed. The multiple notification requirements add effort and financial costs for undertakings and represent therefore a major obstacle to market integration. In contrast the single notification to the EU merger control authority (one-stop shop) is cost- and timesaving. A further cost is the lost opportunity to the parties to conduct business jointly during the investigation process.

"The Canadian government supported a proposed merger between de Havilland (Canada) and a European firm, ATR, because de Havilland was likely to go out of business unless the merger went ahead. Canada used a combination of the "total welfare" (retained jobs) and "efficiency exception" provisions of its law to allow the merger. Canada was willing to approve the merger because there was no potential competition problem in Canada itself. The EU, however, blocked the merger, arguing that the resulting company would have a dominant position (50%) in the world market for turbo-prop commuter aircraft[72]".

This example demonstrates how co-operation between authorities of the different countries involved could be difficult if the priorities they have are different or in contrast.

Empirical evidence shows how some concentrations, the effect of which spreads over national borders, may not fall under the Commission's legislation. Concentrations between conglomerates of the same nationality which fall outside the regulation can have substantial repercussions across the Community. The legislation determines that the Commission is responsible for mergers as soon as they have a Community dimension, defined on the basis of the annual turnover of the companies. Furthermore, mergers with a significant cross-border impact may be excluded from the scope of the regulation if the companies involved achieve a certain limit of their Community turnover in one and the same Member State.

The turnover threshold of Article 1 of the Merger Regulation was supposed to be modified in 1993. The review was postponed and the regulation recently amended through Council Regulation 1310/97 in order to bring the legislation into line with the realities and development in the Single Market. One of the major amendments concerned the introduction of a subparagraph 1(3) to Article 1. The aim was to provide a solution to a problem, which has been pointed out throughout the Community: namely, that a percentage of mergers failed to meet the turnover requirements of the Merger Regulation and had therefore to be notified at national level in a number of Member States.

2. Effects

New subparagraph 1(3) aims to target transactions with a relatively low turnover, but that still require notification in *three or more Member States*. It is based on the assumption that the involvement of only two Member States can be dealt with through bilateral agreements. But this has been shown only to complicate the notification procedure and to increase the costs implied. Concentrations not achieving the amended turnover thresholds, but falling within the jurisdiction of two or more national control authorities, are likely to be considered of Community-wide significance.

The best solution is to extend the Commission's jurisdiction to those concentrations that come within the legal framework of more than one national system. When mergers have effects on intra-Community trade a uniform approach has to be implemented, and the best way to achieve it is through a single authority. Considering the differences in the legal and fiscal

[72] http://www.consumerinternational.org/campaigns/competition/competition5.html

framework, such as the different information required from different regulators, harmonisation will be roughly impossible. Centralisation represents the best solution.

One of the basic requirements is to reorganise the competence between the Commission and the National Competition Authorities. In establishing this reorganisation three criteria are applied.

- the turnover thresholds[73];
- the two-thirds rule, also contained in the subparagraph introduced by the amended legislation; and
- the corrective mechanism of Article 9, whereby one or more Member States can request the Commission to assess mergers that fall below the turnover thresholds; or, on the other hand, a Member State can request the transfer of competence if the transaction specifically affects competition in that Member State[74].

A simplified *balance* between these three elements has to be found in order to simplify the regulation framework and ensure a wide application of the one-stop shop principle.

Mergers falling under the new subparagraph 1(3) introduced have a clear Community dimension. Nevertheless the existing legislation does not ensure that *all* mergers with such a dimension will fall under the Commission's amended legislation. A relative high percentage of the transactions have been shown to fail to meet the three country requirements set out in paragraph 1(3).

Furthermore, what has emerged from various studies is that the *level of turnover* required is less of a determinant in excluding transactions from the Community legislation than the *number of Member States* where such turnover levels are required. This means that, even with lower required turnover, only some of the transactions would have been candidates to fall under Community regulation.

The solution is the abolition of subparagraph 1(3), and, instead, a lowering of the turnover thresholds set by Article 1(2). This means lowering the world-wide turnover requirement and the Community turnover requirement. Furthermore, in order to acquire more legal flexibility, the thresholds establishing the Community dimension of concentrations should be adjusted by the Council acting by a qualified majority on a proposal of the Commission.

In order to add flexibility and to avoid the necessity of changing the turnover thresholds with the changing environment, using *market share thresholds* would be more appropriate than regulating merger activities on the basis of maximum turnover thresholds.

A second difficulty arises from the two-thirds principle. This could lead to a discrimination effect against those companies having their core business in larger Member States compared to those having it in smaller Member States. If Article 9 can be relied on as a safeguard for any specific interest or concern on the part of individual Member State, it is justified to propose the abolition of the two-thirds rule.

Most of the transactions with potentially cross-border effects will then fall under Community legislation and a wide range of companies will benefit from the one-stop shop facility. A high level-playing field is assured. Nevertheless, transactions within a Member State with cross-border effects may remain reasonably under the regulation framework on the individual Member State concerned. The existing system of exclusive jurisdiction has to be reorganised and redistributed between the Community and the National Competition Authorities.

[73] Defined by Article 1(2) and 1(3).

[74] COM(2000)399 final.

Relying on market share thresholds rather than on turnover thresholds allows the inclusion in Community legislation of even the new technology industries that generally do not generate high levels of turnover. The latter are especially important because they represent the high-growth companies which are the main participants in venture capital markets and therefore potentially the main actors in creating new employment in terms of new business operators and new jobs, even high-quality and high salary jobs.

National banking transactions are a large proportion of all national operations performed in the last years, but cross-border mergers in the banking sector are rare because they involve more difficulties. "*Mergers between car manufacturers or consumer goods companies allow production to be centralised because the products are essentially the same across Europe. The same is not true for many financial services*[75]*"*. On the other hand banking products such as life insurance policies or accounts are generally country-specific and depend heavily on the legal and tax structure in the different countries. As tax systems are still not harmonised, synergies and economies of scale are not possible. Intra-market mergers still remain the simplest way for banks to grow and merge their back-office operations without incurring the risk of branch overlap.

In the case of credit and financial institutions the criteria commonly applied by the regulations are based on assets rather than turnover calculations. In order to avoid difficulties arising from the fact that certain transactions were excluded from the calculation based on assets, the use of gross banking income should be preferred. The amending Regulation (397R1310) adopted the proposed change.

The fact that different authorities of different countries may be involved in the notification and investigation process can lead to diverging priorities and to conflicting remedial actions. One of the major priorities may be whether a merger is likely to lead to job losses or to an increase in the employment level. The application of a "public interest" priority disallows mergers that result in significant job losses; in contrast, an "employment-insensitivity" priority focuses on an efficient functioning business market in which employment is considered a by-product. This trade-off has to be considered.

3. Takeover bids

The Council of Ministers adopted on June 19th a Common Position on the proposed Directive on takeover bids[76]. The Directive is an important element in achieving the target of a single market in financial services by 2005, set by the Lisbon European Summit. The substantial differences in national laws in fact do not permit cross-border operations to be carried out with a high degree of legal certainty. The aim is to guarantee legal certainty in the field of takeovers, especially for cross-border mergers and acquisition activities, by respecting the principle of subsidiarity; this means by setting minimum guidelines for minority shareholders. It defines a limited number of general requirements, which Member States should implement through more detailed rules.

[75] *Financial Times*, Survey - Banking in Europe.

[76] *"Take-over bid shall mean an offer made to the holders of the securities of a company to acquire all or part of such securities by payment in cash and/or in exchange for other securities. A bid may be either mandatory, if so provided by Member States as a means to protect minority shareholders, or voluntary".* Amended proposal for a European Parliament and Council Directive on company law concerning takeover bids.

The two major aims of the proposed Directive are to provide:

- the ***minimum guidelines*** for the conduct of takeover bids, focusing on the transparency of the procedure and the disclosure requirements; and
- an ***equivalent protection level for minority shareholders*** throughout the EU for companies listed on stock exchanges in the event of a change in control.

Protection for minority shareholders

- When the acquisition or change of control of a listed company takes place, Member State must protect minority shareholders. All Member States have to guarantee their protection by introducing the *mandatory bid rule*[77] and extend it to *all* remaining securities of the offeree company. This prevents the acquisition of companies for a price which does not reflect their true value. In several Member States[78] there is still no obligation to make a public offer for all the remaining shares or the obligation is limited to a certain percentage. Equal treatment of the holders of shares in the offeree company who are in the same position has to be granted.
- The board of the target company will be forbidden from taking any defensive measure during the period of acceptance of the bid once it has received formal notice.
- Member States currently permit the board of the target company to take defensive measures in the event of a hostile bid without prior consent of the shareholders. In order to avoid measures being taken without taking account of the interests of the company's shareholders it has to be ensured that the board of an offeree company must act in the interests of the company as a whole, focusing especially on safeguarding jobs.
- When the consideration of the offeror does not consist of liquid securities admitted to trading on regulated markets in one or more Member States, the consideration has to include at least a cash consideration as alternative. This gives the shareholders of the target company the possibility of deciding to become a shareholder of the offeror or to leave the company. It protects them against a potential decrease in value of the securities offered. Furthermore it minimises the risk of a possible manipulation of the shares' value offered in exchange[79].

Supervisory authority

The proposed Directive requires Member States to designate one or more authorities with the aim of supervising the entire course of a takeover bid. The authorities may be private or public. A distinction between the law of the Member State where the target company is listed (*market rule*) and the law of the Member State where the company has its registered office (*home rule*) has been introduced. Considerations related to the procedure and the price of a takeover bid have to be dealt with in accordance with market rules and supervised by the

[77] *"The archetype for the Mandatory Bid Rule (MBR) is the UK City Code on Takeovers and Mergers, which is a self-regulatory code. ... The Corporate Law Economic Reform Program Act 1999 re-wrote the takeover provisions of the Corporations Law, with the new provisions coming into force on 13 March 2000.... The CLERP Bill included provisions for a MBR, under which a prospective purchaser would be permitted to exceed the statutory takeover threshold of 20 per cent of the total voting rights in a company before being required to make a full takeover bid. ... It requires the acquirer to offer the same bid price to all shareholders, regardless of whether they held controlling interests or not. ... Other jurisdictions have adopted a MBR. ... For instance, France, Germany and Ireland have enacted a MBR, although with different threshold limits".*
http://www.aph.gov.au/senate/committee/corp_sec_ctte/manbid/contents.htm.

[78] E.g. The Netherlands, Germany, etc..

[79] *Takeover Directive - questions and answers*, Brussels, 18/06/2000.

authorities of the Member State where the target company is listed. Considerations related to disclosure and to information requirements have to be dealt with in accordance with home rules where the target company has its registered office. Co-operation between authorities from different Member States is therefore necessary.

Information

The bidder has to draw up a document containing all the necessary information on the bid and submit it to the supervision authority. Member States have introduced provisions in order to ensure mutual recognition of offer documents.

Disclosure

Takeover bids have to be made public and prevent the creation of false markets in securities of the companies involved in the offer. False markets can be created, in particular, where the variations of the price of the securities are moved artificially: for example, through the publication of false or exaggerated information. This impedes the normal functioning of the market. Furthermore, disclosure provisions have to be extended to shareholders resident in Member States other than that of the offeree company's registered office or that in which the securities are listed. It has been accepted that the principle of disclosure to shareholders should be extended to employees.

The Directive has been sent to the European Parliament under the co-decision procedure for second reading.

4. Effects

The major effect of the current trend in takeover bids is related to the emphasis on shareholder value. Companies are finding themselves more and more exposed to the risk of being the target of highly valued national, but more frequently, foreign predators. The increase in the competition environment created by monetary union might force companies into high-risk strategies, in order to follow the so-called "short-term oriented shareholder value philosophy". Anglo-Saxon short-termism increases the level of risk taken by the company. Until now the shared vision in continental Europe saw companies accountable not only to shareholders, but also to stakeholders such as workers and suppliers. The focus has been shifted from a long-term social goal to a short-term monetary goal. The fact that markets are no longer protected within the national boundaries increases the risk situation and potentially penalises employment. International competition is putting on pressure to lower costs; and employment is a cost.

Pensions – The Green Paper

Maintaining a high standard of welfare protection has always been considered a central objective by all Member States. Pension benefits represent a key variable of welfare protection systems. Expenditure by state pension schemes accounts for nearly half of all welfare spending and ranges between 9% and 15% of Gross Domestic Product in the Community.

Without any intervention, the level of expenditure could reach 15% to 20% of GDP[80], and leave Member States facing a consistent under-funding problem, creating a debt crisis. Figures are rising steeply due to the increasing ageing of the EU population, although the gravity of the situation varies from one Member State to another, depending on the demographic structure. 40% of the EU population is forecast to be 65 years of age or over in 2025. In 1995 the figure was under 23%. Population ageing, the persistence of long-term unemployment, especially among older workers, and the trend towards earlier retirement and its budgetary implications raise the crucial question of the viability of pension schemes.

Retirement systems, which are mainly the responsibility of the individual Member State, are based on three pillars:

1. social security schemes;
2. occupational schemes; and
3. personal pension plans.

The state is the leading pension provider through pillar 1 schemes, which are commonly financed in the EU area on a pay-as-you-go basis and are generally compulsory (Annex 2). This means that current workers' contributions are used to fund pension payments to retired persons[81]. This implies a risk that recent demographic trends will lead to a significant increase in public spending.

Plans considered under pillar 2 and 3 are known as supplementary schemes because their aim is to supplement public schemes. They are likely to become increasingly important, but will not replace pension schemes under pillar 1.

Schemes under pillar 2 have a link to a professional occupation, and therefore to employment. For this reason they are known as "occupational schemes". Generally they are financed and managed on a funded basis, which implies that employees' contributions are managed as savings and invested to finance future pension benefits. Frequently they provide coverage for biometric risks i.e. death, invalidity and longevity risk.

These plans may be organised in different ways, which are currently under revision, through:

- the creation of or participation in a pension fund separate from the employer. The fund is responsible for the investment policy of the contributions paid in and the pay-out of the benefits. Funds may be open when different companies from different industrial sectors may join the fund, or can be closed when participation is limited to companies of a given sector or of a single company. The most important differentiation is between "defined

[80] *"Over the period 1990 to 1996, expenditure on old-age benefits in the Union (including survivors' benefits) increased on average by 3½% a year in real value terms. The number of people above retirement age went up by 1½% a year, implying a rise in the average benefit paid per person of 2% a year, which is broadly in line with the long-term growth of GDP per head. Over this period, however, because of the depressed rate of GDP growth, it meant that average pensions rose by slightly more than GDP per head."* COM(2000)163.

[81] COM(1999)134 final.

benefit" schemes, in which the employer guarantees the payment of a predetermined level of benefits, and "defined contribution schemes", in which benefits vary according to the returns on the contribution invested by the fund and the contribution themselves are fixed. Defined benefit systems are more common throughout Europe and usually cover also biometric risks.

- The employer undertakes to pay benefits to his employees and makes provision for commitments on the liability side of the balance sheet. This is known as the "book reserve mechanism";
- Life assurance contracts in which the contributions paid to a life assurance company are invested and paid back by the company. Life assurance companies are regulated at Community level.
- The purchase of securities through an undertaking for collective investment in transferable securities in which the contributions paid are used to buy securities and the benefits vary depending on the return provided by the securities. UCITS are regulated at Community level.

Pillar 3 includes all contracts subscribed individually with service providers. These plans have acquired major importance in those countries where state schemes do not provide high benefits. In some countries, such as the UK, the US and Canada, occupational schemes cover approximately half of the working population and are completed by private pension plans.

The major cause for the development of funded schemes in some countries - e.g. the UK and the US - rather than others has been that in the former, contributions by employers and employees to funded schemes have been tax-deductible. In other countries by contrast, only contributions to state schemes were tax-free.

If a sufficient pension is guaranteed by the basic state pension scheme, the need for supplementary pensions decreases[82]. Common emphasis is put on limiting the future transfers which will be necessary, particularly those for which governments are responsible, or on increasing the finance available. This represents a second best solution. It focuses on the possibility of relying on public financed schemes by increasing the period of contributions required to qualify for a full pension, reducing the pension paid in relation to past earnings, or relating it more closely to contributions and creating special funds to finance future transfers[83].

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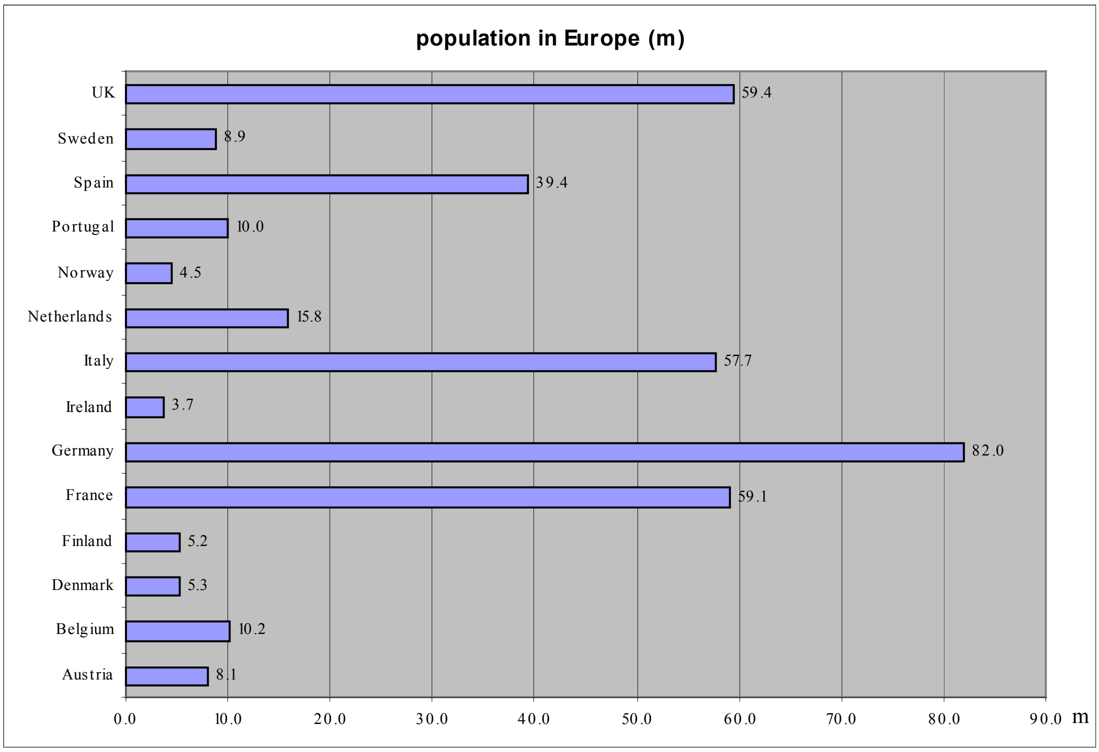
[82] E.g. Occupational pension schemes in Germany have declined in the past years because of their costs to employers, tax disadvantages and the generosity of state pensions. The government is trying to encourage private funded alternatives to supplement first pillar schemes. A draft pension bill will give employees the right to have up to 4% of their gross incomes paid tax-free into occupational or private schemes. With the same aim the French government won the approval for private sector employees to be able to contribute to company savings plans before tax deduction. (*Financial Times*, 06/08/2000).

[83] *"In order to increase available finance, the contributions paid by higher and middle income earners in Spain have been increased without compensating rises in future pension entitlement, while in Italy, contributions paid by the temporary self-employed have been raised. In Denmark, contributions were effectively increased from 1998 by incorporating an extraordinary charge of 1% levied in 1997 into the system for funding supplementary pensions. In The Netherlands, where a ceiling has been imposed on the rate of contributions, the Government has set up a special fund, into which it contributes an amount each year calculated to meet the peak in expenditure in the years after 2020. In France, there is a proposal to increase the contributions required for a full pension from 40 to 42.5 years, and, as in Spain, a fund has been created to consolidate the finance available for pensions. In Ireland, a Social Welfare Pension Fund Reserve was set up in 1998, using money from tax revenue and privatisation of telecommunications, to fund the future cost of pensions. The high rate of economic growth, however, has enabled the full rate of social contribution to be reduced and the basic pension to be increased significantly in both 1998 and 1999.",* COM(2000)163.

As the system moves towards supplementary pension schemes, insurance companies and investment funds are crowding-out the bank-based financial sector. This leads progressively to a disintermediation process of pension management.

Graph 6



Source: FT

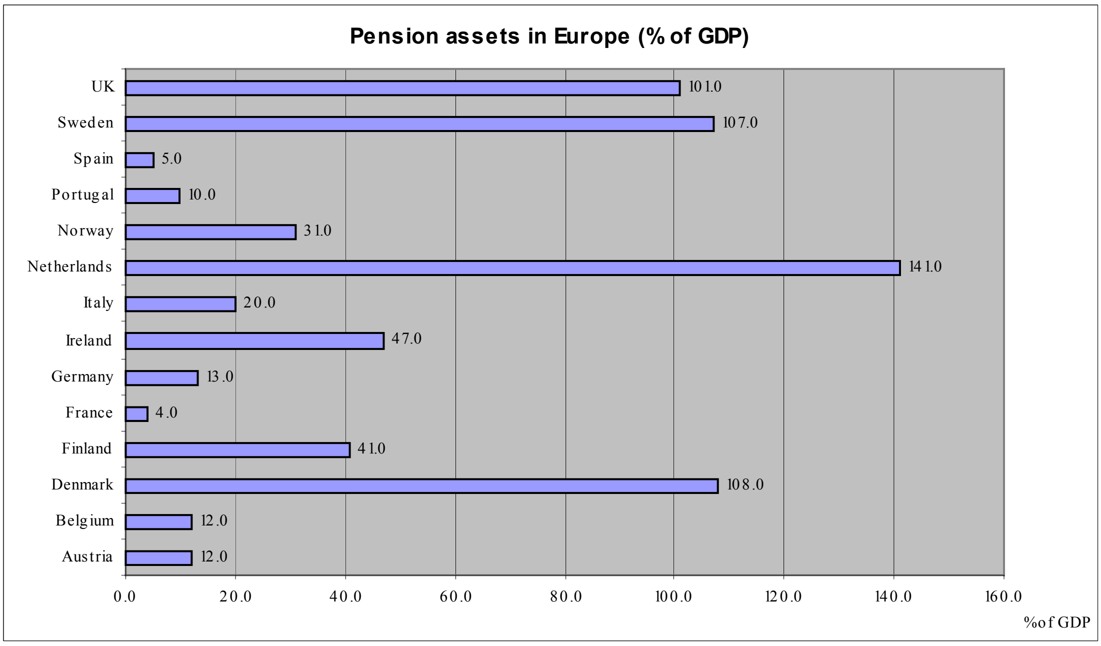
It has been stated that pay-as-you-go systems under-perform compared to funded systems. The former are financially unsound as the contributions are used entirely to finance pensions and therefore to support current consumption. As the capacity of the system to cope with the payment of the benefits is dependent on the income earned by the current active working population, the contributions to the system are highly dependent on changes in the demographic structure and in the productivity performance.

In contrast, the provision of pension benefits from funded schemes is entirely provided by the investment return and gradual capital accumulation. This makes possible a reduction in the contributions needed. The system is independent from the contribution of current workers and therefore unaffected by changes in the population structure. It is mainly dependent on financial returns.

The main difficulty is switching from pay-as-you-go schemes to funded ones is how to adjust to the new regime without considerably increasing labour costs. During the transition period, contributors would have to pay twice: once for the pension of those who have just retired and once for their own pensions. This would increase labour costs. For funded systems, on the other hand, transition from one pension system to the other will not influence contribution and benefit levels[84].

[84] *A solution to the Social Security Crisis from a MIT Team*, Modigliani et al., Working Paper 4051, 11/1999.

Graph 7



Source: FT

Many benefits are linked to an increase in funding pension schemes because of their greater flexibility and superior financial solvency. Funding increases the supply of long-term funds to capital markets. This is especially valuable for small and medium sized enterprises because markets achieve a higher level of liquidity and can support long-term investment policies. In the long run economic growth and job creation is supported and financial innovation and diversification possibilities are boosted.

The value of supplementary schemes in providing an investment is enhanced when no cross-border portfolio restrictions are present. Where pay-as-you-go schemes are able to provide investment funds - i.e. are in surplus - those can usually be deployed only at a national level.

One solution for the ageing population would be to introduce *compulsory funded schemes*, following the example of the poorest countries. These countries have an incentive to develop domestic sources of long-term stable savings, rather than be subjected to periodically unstable capital in- and outflows. Funding shifts the pension burden from the public to the private sector.

Most of the recent community work has been focusing on supplementary schemes because part of this area has no proper legal framework at Community level. The work has been centred on three basic principles:

1. The determination of prudential rules for pension funds. As pension funds are covered by national legislation, the introduction of a minimum harmonisation of prudential supervision is necessary.
2. the removal of obstacles for the free movement of workers; and
3. the co-ordination of Member States' tax systems.

1. Prudential rules

Workers require maximum security and maximum possible returns for their future pensions. With the introduction of the single currency some basic requirements for pension schemes have been levied. The elimination of the currency risk and the currency matching requirement[85] help reinforce the level of security of investment portfolios for investment strategies focusing on the Euro area.

To manage pension funds the basic prudential requirements are as follows:

- Separation of the assets of the pension fund and of the sponsoring company[86].
- Definition of the powers of the supervisory authority and its field of intervention. The supervision of the fund and of the depositors should be separated and could be required to report to different authorities.
- Authorisation of funds by a competent authority (licensing) and the establishment of a sanction mechanism.
- Strict criteria for the authorisation of the pension's managing staff.
- Transparent periodic statement and disclosure mechanism for the fund's members. This implies the introduction of the Statement of Investment Principles - SIP - a concise document produced by the Board of Directors stating the Board's risk perception and tolerance and the risk management policy, the prudential principles and the fund's return strategy and asset allocation policy[87].
- Risk control management mechanisms and diversification obligations.

To ensure an adequate level of protection for funds an estimate has to be made of the duration and the cost of the commitments. Pension funds have always to guarantee that they have enough liquid assets, denominated in the same currency of the commitments, in order to be able to pay the benefits arriving to maturity.

Assets have to be properly chosen in order to match liabilities. Considering the nature of pension liabilities the differentiation between defined benefit scheme and defined contribution schemes is important. By the former, the benefit is calculated through a formula which links generally the annual pension to the employee's years of contribution. Those schemes can be:

- under-funded, when the fund is worth less than the present value of the benefits promised;
- over-funded, when the fund is worth more than the present value of the benefits promised;
- funded, when the fund is worth the present value of the benefits promised; or
- unfunded.

The employer bears the investment risk.

In defined contribution schemes the benefits are calculated taking into account the contribution made by the employees and the investment returns gained on the contributions. The beneficiary bears the investment risk. This creates difficulties especially for poorer participants who potentially are not able to absorb the risk. For this reason defined benefit schemes are generally preferred.

Differences in the structure of asset portfolios regarding the relative concentration on equities versus the concentration on bonds are important. It is considered more prudent to invest a part

[85] The requirement that a high proportion of a pension fund's assets are denominated in the same currency as the fund's liabilities. This requirement was one of the major obstacles to the early initiative of the Commission for a Directive proposal. Currency matching requirements can still be applied regarding non-convertible currencies because of the different risk profile and higher level of illiquidity compared to convertible currencies.

[86] Company which uses the services of a fund to provide pensions to employees.

[87] UK pension fund trustees are already required to incorporate in the SIP their "policy on socially responsible investment" which implies that they will be held accountable for their ethical stance and their fund's performance.

of assets in equities because, due to their lower volatility rate in the longer run related to fixed-income assets, they can better meet the long term nature of pension liabilities. This is due to the fact that the constant growth trend of the real economy and of productivity in the long run is reflected in the quotation of the companies on the stock markets. Fixed-income assets, especially government bonds, present a more stable performance in the short run, while in the longer term they are subjected to inflation trends. This is because real returns on bonds are greatly influenced by unanticipated inflation. Therefore countries with high inflation rates should invest heavily in equities in order to achieve high yields. *Equities are regarded as an efficient tool to tackle inflation risk of future pension payments*.

When comparing the performance of equities and fixed-income securities, several further considerations have to be taken into account besides the volatility level: for example, the different inflation rates in the Member States and the length of the periods considered. It is common to consider periods of ten years too short to compare the relative performances; periods of thirty years may be more adequate.

Most Member States are increasingly operating passive investment policies[88] but still lack an equity culture. As a result equity markets are less developed in these countries and capital formation on the markets is under-performing. This is one of the major concerns related to the development and availability of risk capital on the European markets. Only a few countries, such as the UK, the Netherlands and Ireland, have developed equity markets with a high market capitalisation.

Furthermore an increased market capitalisation in the share market is partly due to a rise in companies' share prices, while in fixed income markets it is the effect of increased debt issuance. This has negative effects from the investor's point of view because the new issuance does not necessary reflect an increase in the request from investors for government bonds, rather an increased need for cash. Too much debt issuance puts pressure on the country's credit standing and increases the possibilities of default.

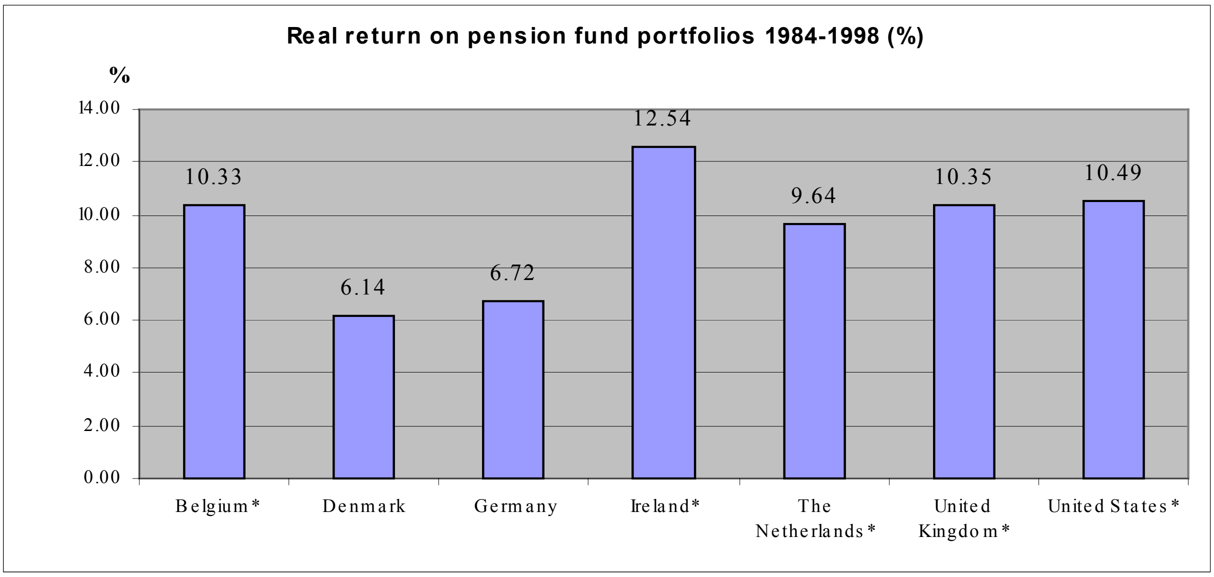
In those countries in which pension funds operate relatively more successfully, the quantitative limits to investment strategies are reduced or not present at all. Graph 8 shows how these countries (*) have an advantage in terms of better returns generally provided by non-restrictive investment strategies compared with countries in which investments are bound especially to the performance of government bonds.

Enabling pension funds to invest on a continental scale and consistently in shares, increases their relative performances. Cross-border investments will increase the potential supply of capital to European business and represent a source of venture capital and of job creation. They permit a higher diversification level of investment portfolios. Diversification is one of the more successful means of maintaining a balanced level of risk and improves the performance of a portfolio.

Quantitative asset allocation rules for pension funds, applied in different ways between Member States, prevent funds from proceeding to a highly diversified and potentially high-return investment strategy, and reduce the possibility of operating on an EU-wide basis. In particular it has been demonstrated that limits on the proportion of equities which funds may invest in could reduce the rate of return of the investments without improving the security level of the investment.

[88] E.g. tracking market indices.

Graph 8



Source: European Commission, 99

Quantitative restrictions have a relatively small impact on investment strategies, demonstrated by the fact that generally the limits of investments in equities are never reached in the countries concerned. The regulatory ceiling is higher with respect to the investment percentage reached for this type of assets. But, even considering the fact that a large number of other factors - such as the characteristics and development possibilities of different financial markets and the nature of the liabilities - influence investment strategies, quantitative limits contribute to maintaining a risk-averse behaviour. This attitude is especially counterproductive in Europe where risk-averse behaviour is already widespread.

2. Risks

For pension schemes, risk in the broadest sense means incapacity to meet liabilities: i.e. default risk. But further types of risks, such as the investment risk and management risk, have also to be considered. Liability risk is, from the security point of view, the most important, and arises from the risk of inadequate reserves in the fund, unknown external events or wrong estimation of macroeconomic variables, such as inflation rates, or changes in assumptions, such as changes in mortality rates. It can be best controlled through the use of ALM techniques[89] and regular actuarial valuations.

In the case of guaranteed funds, fund managers may incur a moral hazard problem. In fact managers, knowing that benefit rights will be honoured, may apply risky investment strategies. A possible solution would be to limit the guarantee coverage to fraudulent or illegal situations. In the case of insurance companies, the difficulties arise from in the fact that future pensioners are not the only creditors, but only one of a list of creditors whose rights are ranked with respect to national legislation.

Some countries require pension funds to have a solvency margin. As long as the funds do not guarantee a certain fixed return or do not cover biometric risks, a solvency margin should not be required. This prevents the increase of the burden on pension funds if not required by a correspondent increase in the risk level currently or potentially faced.

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[89] **A**sset-**L**iability **M**anagement techniques.

Management risk refers to the quality of management techniques, and is therefore linked to human behaviour, including excessive exposure to risk or fraudulent behaviour. It can be controlled by the separation of the control function from the management one, disclosure requirements, internal and external auditing and the imposition of sanctions.

Investment risk refers to the uncertainty due to market behaviour, and to investment strategies. It is difficult to measure and has to be controlled through prospective measures. Credit risk and currency risk are included in this risk class and can be compensated by the use of derivative contracts[90].

The principle that qualitative limits correspond better to pension fund investment strategies rather than qualitative rules is based on the matching requirement. Pension funds have to be differentiated because of their maturity. Mature funds will have liabilities with a relatively short time-horizon and with a high degree of risk aversion, while immature ones will have a long time-horizon and a net cash inflow[91]. The share of liquid assets and cash in the portfolio of a mature fund has therefore to be higher. This shows that any predetermined quantitative restrictions may be appropriate only for some pension funds, while a qualitative approach can be generally applicable.

Quantitative limits commonly increase country and asset-specific risks. Furthermore they reduce the flexibility of the system in the event of rapidly changing environments. Investment restrictions are better implemented as safeguard systems, reducing the risk of excess concentration in certain categories of assets, and as diversification requirements regarding the class of assets in which the fund may invest.

The "prudent person" principle consists of general rules for those responsible for the conduct of pension funds such as trustees, asset managers and fiduciary agents, and is not directly linked to the fund's performance. The aim of these quantitative restrictions is to preserve those managing from imprudent investment decisions, which could endanger future returns. The fund does not have to assume unnecessary risks.

This principle has gained wide support because it allows the achievement of a better matching of assets in relation to their nature and to the duration of the commitments. Liabilities usually extend over decades. An investment policy which allows a variety of assets with different liquidity levels may achieve better results.

A wider approach, already in use in some Member States, is the modern asset-liability management - ALM - technique, of which the prudent person principle may be regarded as a component. It emphasises the widespread agreement that financial returns should be balanced by risk assessment methods comparing assets to liabilities. It focuses on the fact that limiting the investment possibilities through quantitative rules and establishing a range of asset types in which funds may be entitled to invest, represents only a second best solution. Unnecessary risk assumption and exposure has to be achieved rather through diversification techniques. Portfolio diversification is achieved by pooling assets the returns on investment of which are imperfectly correlated. Mathematical ALM techniques are mainly used in big institutions because of their realisation cost, while medium institutions apply liquidity planning strategies.

The concept of prudent person management is perhaps not interpreted uniformly by all operators in the different Member States. ALM techniques are dependent on the assumptions made and have to be used as a scenario-testing model. The strategic allocation of assets does not only depend on the liability structure, but also on the changing environment and the level

[90] "Study on the prudential regulation of occupational pension funds", European Commission, 19/11/1999.

[91] The inflow of contributions exceeds the outflow of pension benefits.

of risk aversion. Derivatives are generally not in widespread use by fund management; but it has been suggested that options and warrants should be valued at the market value and futures in accordance with the underlying value[92]. In order to achieve a widespread use of these techniques, their application methodology and assumption formulation need to be generalised and commonly recognised.

Those countries applying the prudent person principle and/or ALM techniques require a strict supervision framework. This can be divided into internal and external control mechanisms through the competent supervisory authority (external control), the external auditor (external control) and the scheme actuary or fund manger (internal control).

Internal auditing has to ensure that the assets reflect the nature and duration of the liabilities. It is performed through measurement of the investment risk[93] and through the formal separation of the auditing of front-office and back-office functions. The external auditor, on his side, has to ensure that the internal control system has been implemented efficiently and that it provides the correct coverage of existing liabilities. Furthermore, every pension fund generally reports to the competent national supervisory authority on the structure of its liabilities, and its investment policy, and presents its annual accounts. Risk diversification procedures and internal control mechanism are checked.

Besides allowing managers of pension funds to have any provider of management services[94] in the EU without restrictions, a further prudential rule provides an appropriate calculation method for the technical reserves required by funds. In particular, the imposition of a minimum level of finance and an evaluation of the assets covering technical reserves are essential in order to cover potential loss of value.

Pillar 2 and 3 schemes account for differences in:

- the duration of the commitments, which are generally shorter in the case of pillar 3; and
- knowledge of the purchasers of the different products; purchasers under pillar 2 are provided with access to actuarial consultancy on the associated risks to the product purchased, while purchasers under pillar 3 are generally not provided with this service.

Under these considerations an approach focusing on the product or the pension operation, instead of an approach focusing on the type of operator, may be given preference. For the same commitment, pension operations should be subjected to equivalent prudential legislation for assets and liabilities.

Furthermore a distinction should be made between pension provisions and retirement provisions. This implies a differentiation between funds that cover biometric risks and pension funds, which do not cover these risks. Two proposals for a Directive should be issued.

3. Supervisory framework

The shift of emphasis towards second pillar pension schemes, and the introduction of hybrid pension plans[95], increases the risk that the supervisory authorities, working on a national

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[92] "Study on the prudential regulation of occupational pension funds", European Commission, 19/11/1999.

[93] Technical risk relating to pension liabilities and actuarial calculations should be separated from financial risk relating to assets covering liabilities.

[94] E.g. agent, asset manager.

[95] E.g. a combination of defined benefit -DB- and defined contribution -DC- schemes.

basis, lack a flexible adaptation to these structural changes. Co-operation between national authorities has already taken place: for example, through the International Association of Insurance Supervisors.

An adequate supervision framework can scarcely be based on information from pension funds themselves, but rather through pre-defined regulation and supervision. The most often considered system is based on a light regulation which allows the fund to define itself the operational parameters, but relies on a detailed supervision framework. This system has to be supported by a high level of information disclosure of the fund's documents for contributors and especially for the authorities. The system is therefore expensive, but gives the fund management a high degree of freedom.

Disclosure requirements could be differentiated by type of fund. Requirements should be higher for defined contribution plans where members bear the risk. The minimum disclosure level will require the presentation of:

- the Annual Report;
- regular actuarial valuations;
- ALM studies and information on asset management performance, such as portfolio valuations and risk monitoring techniques; and
- the Statement of Investment Principles - SIP.

and should be harmonised. A first step would be to introduce a standardised and simplified licensing framework.

In case of difficulties, the supervisory authority should require the fund to prepare and present a recovery plan, or impose the transfer of a certain percentage of the total assets to a different sound service provider. Under its supervision the fund has to publish an annual report on its activity in order to increase transparency and comparability of the different performances. This will boost competition between the institutions and their efficiency. In fact the institutions operating in the supplementary pension market are not only pension funds and life insurance companies, but also banks, mutual funds and investment companies.

4. Free movement of workers

The Commission has already taken a number of steps in the field of pension schemes. The most recent are the Action Plan "Financial Services: Implementing the framework for financial markets" and the Communication "Towards a Single Market for Supplementary Pensions" of May 1999. It has furthermore announced the issue of a proposal for a Directive.

The Commission published the Green Paper on Supplementary Pensions in the Single Market[96] on 10 June 1997. After an overview of the economic and demographic trends and difficulties affecting Member States' pension schemes, it discusses how supplementary pension schemes may be improved through Community legislation.

Apart from the major area of discussion which focuses on how to improve returns on pension fund investments without compromising the security level of the fund, the most important areas where further action is needed are as follows.

[96] COM(1997)238.

4.1. Transferability of pension rights

The European Union already has rules applying to migrant workers which co-ordinate pension schemes falling under the social security system (pillar 1). Similar arrangements are lacking for supplementary pension schemes.

In the absence of bilateral agreements, transfers to other Member States of acquired pension rights are liable to tax. Migrant workers who want to maintain their membership of their home-country scheme, need the establishment of an agreement between the past and the present employer.

Different methods in the actuarial calculation of transfer values and their fiscal treatment makes transferability of rights of supplementary pension schemes very complicated. The subject is strictly bound to the fund type considered. The nature of funded schemes theoretically permits the possibility of the transfer of pension funds, while book-reserve and pay-as-you-go schemes do not permit a similar transferability because no contributions are set aside.

A common denominator for the calculation of the amount of capital transfers and the conversion into future pensions may help[97]. While actuarial valuation methods could be harmonised at Community level, not all actuarial assumptions (e.g. mortality rate, interest rate, inflation rate, rate of return, growth rate of earnings etc.) can be easily simplified and harmonised. The most controversial issue arises from mortality tables, which still show considerable cross-border differences. Eventually, fund-specific harmonisation principles for mortality tables might be achieved.

At Community level common rules for the tax treatment of pension funds have to be developed basing on the following principles:

- pension capital has to be transferred directly to the new pension administrator in the host country;
- dispensation of the transfer has to be granted;
- future payments of pension benefits have to be subjected to the fiscal treatment of the host country; and
- provision of information between the Member States.

A possible solution to the transferability of pension rights could be to give contributors to pension funds units for their periodical payments. Migrant workers who wish to switch from one fund to another would achieve this by selling old fund units and buying new fund units[98]. The value of units would be based on market values. To regulate the sale and purchase of units would be easier than harmonising transferability of rights. This would also enhance cross-border competition between pension funds.

4.2. Qualifying conditions for acquiring supplementary pension rights

Long vesting periods[99] for supplementary pension schemes reduce the capacity of workers to react in response to labour market developments.

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[97] COM(1999)134 final.

[98] "The future of Supplementary pension in Europe", FEFSI, Discussion Paper PI-2002, January 2000.

[99] Period during which the employee has to comply with the basic conditions set by the supplementary pension scheme in order to mature the rights to the benefits.

As supplementary pension schemes generally operate on a contractual basis, it is for the social partners to negotiate a reduction of the vesting period. Nevertheless, a flexible principle concerning the maximum duration of vesting periods should be defined at Community level.

4.3. Cross-border membership

"*Directive 98/49/EC of 29 June 1998 allows workers who are posted by their employers to another Member State, to remain affiliated to the supplementary pension schemes in the Member State where they were previously working. All other workers moving for a limited period of time to another Member State do not have this option*[100]".

Cross-border membership has to focus on two principles.

- the preservation of acquired rights for migrant workers, and
- the ability of workers temporarily posted by their employer to another Member State to continue contributing to their supplementary pension scheme in the home country.

Cross-membership enables migrant workers to avoid changing from one scheme to another with loss of pension rights. In practice, to reach this goal, a harmonisation of the prudential framework and a mutual recognition of different fiscal provisions in the Member States are necessary.

In the majority of the Member States the tax treatment reserved to supplementary pension schemes concluded with non-resident institutions is less favourable than the treatment reserved for resident institutions. As a rule, tax deductibility is available only for contributions to domestic schemes. In order to benefit from tax relief policies, a non-resident has to buy national products. No mutual recognition is granted. The direct effect is discrimination against non-national funds. Fiscal treatment has always been one of the major forces acting within the balance savings-investments. Special attention has to be paid to it.

Difficulties arise because some Member States operate deferred taxation policies and others up-front taxation policies. The former, such as the **EET** system[101] where the contributions are **exempt**, the growth of the policy is **exempt** and the benefits are **taxed**, are more attractive for employers and employees. Up-front taxation plans, such as the **TEE** system mean that the contributions are **taxed**, the growth of the policy is **exempt** and the benefits are **exempt**.

This can lead to a situation in which a migrant worker may be prevented from continuing with a policy undertaken in its country of residence for two reasons. Either the host Member State does not allow the deduction of the premiums paid; or it taxes the contributions paid by the employer which would not have been taxed by the home country.

A harmonisation of the system used may be helpful. It has been said that the EET system is more appropriate because it does not levy taxes on contributions but taxes the benefits when the pension is paid out. If the beneficiary does not reach the retirement age, the beneficiary has avoided paying out taxes on contributions without receiving benefits. A second argument is that EET systems preserve the future tax base. Other systems might experiment with a reduction of the tax base in periods of demographic imbalance by taxing the contributions.

It is often misunderstood how tax deferral can benefit both the contributors and the public authority. Experience shows how excellent returns from investment income policies and capital gains can produce almost 70% to 90% of the capital from which the annuities are paid

[100] COM(1999)134 final.

[101] This model is used by most OECD countries including Japan and the U.S.

and only the minor part is paid from the contributions. Already some countries present a consistently positive fiscal cash flow, which can be increased with the funding process. Countries such as the US, the UK, Ireland and the Netherlands already enjoy positive fiscal cash flows.

The taxation of the income of funds is discriminatory because it is generally more difficult for an institution based in another Member State to recover the withholding tax paid on dividends[102]. Moreover the taxation of capital gains imposed on non-resident institutions investing in national assets biases the asset allocation strategy.

5. Effects

Discriminatory tax barriers distort competition and limit labour mobility. Supplementary pension schemes are therefore not able to benefit from economies of scale. They need to create nation-specific products and develop idiosyncratic investment policies for specific markets. Country-specific products have unique characteristics required to benefit from national tax relief provisions. The direct effects of this situation include a high fragmentation level of pension products based on national features, which increase transaction costs and the need to establish often multiple country-specific infrastructures to manage pension products, with an increase in the costs. The fact that the migrant working population as a percentage of the total working population is low does not justify the discriminatory tax treatment accorded to resident institutions[103].

A Community regulation should ensure that migrant workers are not subjected to double taxation. This cannot be achieved unless countries agree on a joint tax regime. One of the major difficulties in permitting deductibility of pension contributions is the loss of revenues. Nevertheless the compensating revenue from taxing pension payouts will become substantial after years. This means a shift in the revenue schedule, not a loss of revenue. Furthermore, pension reform will improve the EU's competitiveness through more liquid pension funds for the development of a risk capital market.

The establishment of bilateral treaties between Member States[104] does not reduce the need for harmonisation and does therefore not represent a viable solution. Bilateral agreements have the disadvantage of achieving a solution which binds only two Member States. They lead to a proliferation of texts and potentially to the different treatment of identical situations. Furthermore after the implementation of bilateral agreements it is more difficult to introduce a multilateral approach.

Beside the creation of a Community-wide approach, the mutual recognition of pension funds has to be encouraged in the short term. This implies allowing tax relief in the host country for both employee and employer contributions to home country pension plans in a non-discriminatory way[105]. Furthermore the taxation of employers' contribution to home country plans as employees' income has to be avoided[106].

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[102] COM(97)283.

[103] New products should be created to which would apply a uniform tax treatment in all member States, such as the US "IRA" or "401K" fund. These schemes are based on a defined contribution basis.

[104] It has been stated that bilateral tax treaties do not represent the best solution because they deal with distribution of taxing rights and do not include treatment of tax advantages.

[105] This means in the same way as provided for domestic employees and employers.

[106] COM(97)283.

Supplying a source of capital at medium term, pension funds can improve the capital flow in favour of the private sector, if an adequate supervisory framework is present in order to protect the beneficiaries. The increase in pension funds and development of their investment strategies stimulate job creation while reducing non-wage labour costs.

Big companies have already asked to be able to run cross-border pension schemes for all their workers in different EU countries.

5.1. Problems of mis-selling

Increasing pension provision through private funded schemes, however, does not necessarily take place without problems. Britain's pension industry provides an example of a two decades-old financial fallout from the "mis-selling" of private pensions.

The scheme originated in the concern of the Government of that time that occupational schemes were discouraging labour mobility. In many instances, employees who moved jobs had their retirement entitlements from their former occupational schemes reduced or frozen.

The solution was the Personal Pension Plan. Employees could opt out of employer-sponsored occupational pension schemes and invest in new personal policies.

It turned out, however, that such personal pensions were in many cases inferior to company plans because of heavy up-front commissions and management fees. Aggressive selling by the agents of several companies resulted in large numbers of people taking out personal pensions when they would have been better off staying in their company's scheme. When this became clear the industry was faced with a long process of identifying the scope of the mis-selling and eventually with providing compensation.

It is now clear that those selling pension schemes have a responsibility to make an accurate actuarial comparison between any existing plan in which the client has invested and the personal one. In the event of a personal plan proving inferior – and if the employer refuses to let policyholders back into company schemes – the pension seller must undertake to pay out at least the same benefits that the employer plan would have provided.

5.2. Mutual fund based system

In order to guarantee a high level of flexibility in the regulation of pension funds, payments in and out should not be linked by rigid mathematical formulae. Each employee should have the possibility to fix its contribution/withdrawal rate. This will make it possible to vary, even temporarily, the agreed payments flow. It implies that some employees will lose the tax privilege beyond a certain contribution level. On the other hand it increases the flexibility level. The ownership of pension assets will allow the *portability* of the rights across the border and across different types of funds.

Another advantage of mutual fund based systems is that the own contributions will be the basis of own future pension benefits and payments (*transfer-neutrality*) and that the system allows a high *asset diversification* of international financial markets.

The UK government recently launched a radical reform of the pension system in relation to two target groups; current poorest pensioners and low-earning workers[107] who do not already have a private pension. Like all personal pensions, stakeholder pensions will be defined

[107] Targeted are full-time workers earning between £9 000 and £18 500 a year.

contribution schemes but with guaranteed employer access and minimum standards. Employers will be required to designate a stakeholder pension for all employees.

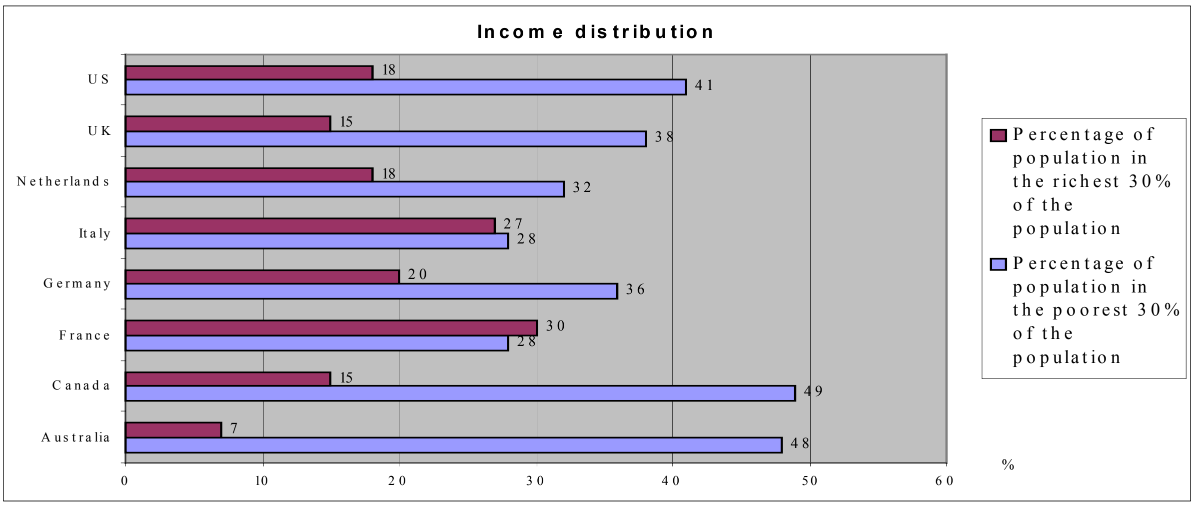
The introduction of a Minimum Income Guarantee Scheme for poorer pensioners has also been proposed together with the replacement of the State Earnings-Related Pension Scheme (SERPS) by the State Second Pension (SSP) and the introduction in April 2001 of stakeholder pensions. The aim is to remove the link between earnings and state pensions by making the SSP a flat rate system for lower earners. Middle earners are expected to contract into private pension schemes.

Personal pensions have been criticised for imposing high upfront charges. Stakeholder pensions, on the other hand give the public access to low cost pension schemes for the first time. A single percentage charge on the value of the fund is levied to cover normal operating costs but the total annual charges will have to be less than 1 per cent. One of the major reasons for imposing a uniform charging structure is to allow consumers to do cost comparisons between different schemes easily. This will increase competition between pension products and will encourage the purchase of retirement schemes.

Charging a proportion of the fund value instead of contributions covers the fund from potential contribution breaks especially considering the target group. Low and middle class earners are more likely to experience periods of unemployment and therefore to have contribution breaks. Furthermore charging a percentage of the fund's value means that in mature schemes older members are subsidising younger members. If participants tend to stay in the scheme during their whole working lives this effect tends to be averaged out.

In the past investment companies had to incur the expenses of setting up an insurance arm in order to be able to provide pension plans. With the possibility of launching stakeholder pensions - low-cost, flexible personal pensions especially for middle-income groups of workers -, investment companies will be able to enter the pension market more directly. The flexibility of the scheme is determined by the fact that everybody below 75 years, regardless of his earning situation, will be entitled to contribute to a stakeholder pension and will be able to interrupt contributions without having to pay a penalty. Low contributions will not be penalised by annual percentage charges.

Graph 9



Source: IFS

Competition between different stakeholder schemes requires participants to be able to switch from one scheme to the other on a costless basis. Not only have capital transfers from one plan to the other to be costless but people have to be able to contribute to more than one fund without extra costs. The creation of a clearing house will make it possible[108].

The tax regime applied to personal pensions will be applied also to stakeholder pensions. Contributions and returns will be tax-free. Pensions will be taxed up to a ceiling of the value of the fund.

Because stakeholder pensions will be directed especially to middle-income groups of workers it will be probably be a niche product. In order to extend its diffusion, government incentives are to be introduced.

It has been stated that because of the low charges that can be levied, it is probable that many pension companies will not have the possibility of paying for the high cost of advisers. This will be possible for stakeholder pension schemes set up by employers because the cost can be split between groups of employers.

This proposal is in line with the UK's specific occupational situation. In fact the major difference with other countries is the fact that UK pensioners are less likely to be at the top for income distribution (Graph 9).

The fact that the UK is not experiencing an unsustainable rise in state pensions is not primarily linked to the ageing effect of the population, but to the difference in the generosity of public pension systems. A second reason is because, while for 25 years state pensions rose in line with earnings, they now rise in line with prices, which grow more slowly[109].

Beside the introduction of stakeholder pensions, relying on the financing structure of traditional funded pension plans can represent a further solution. The system structure can be characterised as follows. The fund has to be fully funded: this means that contributions are totally invested in financial assets and can represent the only source of financing pension benefits. The fund offers defined real benefits (Box 1), which are based on a fixed real rate of return on contributions, guaranteed by a sponsor. The sponsor is responsible for managing the investment and the capital gains with the minimum requirement of achieving the expected fixed return rate. The sponsor has to be a nation-wide institution. The fact that a single sponsor is operating the pension scheme will reduce the management cost of the investment portfolios by increasing management economies of scale. This approach will guarantee high diversification levels.

Guaranteeing the solvency of the sponsor will be the national Government, which will intervene if the sponsor cannot achieve the promised real rate of return. This will ultimately shift the investment risk onto the government. Even if the risk under defined benefit schemes is minimised, the decision is justified by the fact that governments can better absorb the risk and redistribute it to a large number of age-group workers.

It has been demonstrated that, relying on government budget surpluses and an efficient investment policy, it is possible to complete the transition from a pay-as-you-go system to a fully funded system "*with contribution reduced by as much as two-thirds, without any increase in contributions along the way*"[110].

[108] *The Government's Proposals for Stakeholder Pensions*, C. Emmerson and S. Tanner, IFS, 10/1999.

[109] *Pension Reform: An International Comparison*, IFS, 04/02/1999.

[110] *A solution to the Social Security Crisis from a MIT Team*, Modigliani, et al., Working Paper 4051, 11/1999.

Box 1

The major problems with investment returns is the fact that when inflation is high, nominal returns are high but a significant part of the return compensates investors for the erosion of the real value of their capital. Investors may suffer from money illusion if focusing on nominal returns. What is determinant is the real return on investment after inflation.

In periods of low inflation, real returns from bonds and equities were high. As the yield of an investment is inversely correlated with the bond's or equity's price, a falling inflation rate makes yields drop in line, and prices increase, boosting capital gains for investors.

CHAPTER II - THE RETAIL MARKET

e-commerce

The European Commission has already pushed for the opening of markets in those sectors that constitute the infrastructure of e-commerce, such as telecommunications and advertising, and in those that can benefit from e-commerce such as financial services.

The results of the Commission's Green Paper on "Financial services: meeting consumers' expectations" published in May 1996 outlined the major areas of concern and the measures needed in order to increase efficiency in the marketing of financial services. Besides the absence of an overriding approach to consumer protection in the Single Market for financial services, major difficulties are outlined in the survey:

- **The refusal of intermediaries to sell financial services to non-residents:**

  The service provider has more than one reason to expand the distribution of its services across borders; but many risks are also linked to a cross-border strategy. First of all the services may need to be differentiated and adapted to the legal environment of the destination country and to the potentially different necessities of foreign consumers. The level of risk involved in cross-border products may therefore be different. Furthermore distribution costs have to be faced especially when the service provider lacks a distribution network in the destination country and has therefore to bear additional costs in order to appoint a representative.

- **The lack of access to financial services and to financial expertise especially for the low-income population**

- **The low quality of the service**

- **The lack of consumer information and means of redress:**

  The approach adopted focuses on co-operation mechanisms between the industry and consumer groups in order to achieve a self-regulatory framework.

- **The activities of unregulated intermediaries:**

  Situations of aggressive selling by unregulated intermediaries have often been reported:

- **Distance contracts for financial services:**

  With the growth of open computer networks such as the Internet the medium for distance trading in financial products is already set up. The spread of computers into households facilitates the development of the "virtual bank" as a key distribution channel between consumers and providers of financial services. The major concern associated with this phenomenon relates to protection mechanisms for basic consumers' rights. Rules have been laid down concerning specific features, such as the consumer's right to a defined examination period before agreeing to a financial contract, or to be informed a priori of the contractual terms and conditions proposed. The supplier, on his side, has to maintain those conditions during the examination period. The consumer has to be granted a period during which he can withdraw from the contract without penalty and justification, depending on the contract concluded. Furthermore the consumer must also have the right to be refunded by the supplier in the event that the financial services supplied do not correspond to the ones ordered or that the services are partially or totally unavailable. Provision of services which have not be requested (inertia selling) and the supply of financial services without the consumer's prior consent have to be prohibited.

- **Mortgage credit**
- **New means of payment:**

  A new generation of products – i.e. electronic-money products – has emerged recently. They differ widely from remote access ones because they can be used without requiring access to a bank account. Redress procedures, information requirements for consumers and respective liabilities for parties involved have to be laid down.

Because of the intangible nature of financial services, they are suited to distance selling. Financial services are defined and dealt with as services and are already governed by Community rules even if some of them, such as mortgage credits, are governed by national provisions that are applied independently from the way the services are sold.

The legislative approach adopted recently by the Parliament focuses on a framework regulation for issues common to almost all financial services, such as information transparency, protection of legal rights, right of access to services, etc. and on specific directives such as for distance contracts of financial services and e-money.

In the field of distance contracts[111] the Commission supported a maximum harmonisation approach under which the proposed directive on distance marketing[112] should harmonise Member States' rules at a maximum level. Concerns in this field relate to defective or incomplete delivery for unsolicited services or goods especially when the identity of the consumer placing the order is not carefully determined; and situations in which customers receive unsolicited calls from suppliers without knowing the commercial reason of the contact[113].

The definition of distance contract covers contracts where distance communication alone was used up to and including the conclusion of the contract. Contracts provided on an occasional basis are therefore not covered.

1. Electronic money

Electronic money is a digital form of cash and takes the form of value stored on a technical device as such a chip card or a computer hard disc. The widespread use of prepaid cards has the potential to replace a substantial part of low-value cash payments in the long term, while the "network-money" or "software money", which is transferable from one computer to another, is becoming increasingly important for electronic commerce. It can be stored on a PC and used to buy virtual products over the network, or real products which require a physical delivery. The use of electronic money has certain similarities to cash. Instead of using credit cards, which require a prior agreement of the credit card company or the bank and the advance of funds, or debit cards, which require the existence of a bank account, no authorisation is required for electronic money, neither from a bank nor from a third party.

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[111] *"Distance contract means any contract concerning financial services concluded between a supplier and a consumer under an organised distance sales or service-provision scheme run by the supplier, who, for the purpose of that contract, makes exclusive use of means of distance communication up to and including the time at which the contract is concluded"*, COM(1999)395 final, pp. 18.

[112] Proposal for a Directive of the European Parliament and of the Council concerning the distance marketing of consumer financial services and amending Council Directive 90/619/EEC and Directives 97/7/EC and 98/27/EC.

[113] Although the practise may be legal, skilled operators may be able to take advantage of the situation.

Chip cards have the advantage of allowing very small electronic payments such as fractions of a Euro. One disadvantage on the other hand is that monetary value that can be stored on a chip card is generally limited.

The proposal for a Directive[114] defines the business activities that electronic money institutions can undertake and the rules concerning:

- prior authorisation by competent authorities;
- the initial capital and on-going own funds requirements;
- the limitation on investments;
- the supervisory framework;
- sound and prudent rules for issuers of electronic money; and
- a single passport for electronic money institutions.

Business activities and the investment capabilities of electronic money institutions are different from those applying to banking institutions. Initial and on-going fund requirements have been introduced in order to ensure that electronic money institutions have own funds, proportionate to their operations. The introduction of limits on investments reflects the need to contain the exposure to liquidity risks of issuers. Funds received in exchange for the electronic money issued should be invested only in highly liquid assets with low credit risk weighting.

Other risks are associated with e-money. The major one is the operational risk and concerns about the soundness of the e-money issuer, while the reputation risks are linked to the confidence consumers have in relation to the use of e-money.

The proposed Directive creates a new form of credit institution. Institutions issuing electronic money have to guarantee that electronic money is accepted as a means of payment by undertakings other than the issuing institutions.

> "*The amendment to the First Banking Directive defines electronic money institutions as credit institutions thus submitting them to the provisions of the First and Second Banking Co-ordination Directives thereby allowing them the European Passport. At the same time it creates a level playing field as between different types of credit institution.*[115]"

This solution enhances competition in the financial sector because it avoids banks having a monopoly on the issuing of electronic money. The provisions regarding capital requirements, which guarantee financial stability and an adequate consumer protection level, nevertheless balance the high competition.

The business activities of electronic money institutions other than the issuing of electronic money should be restricted to the provision of non-financial services delivered through electronic devices and the provision of financial and non-financial services.

The proposal refers only to multi-purpose electronic money, such as pre-paid cards that can be used for more than one purpose, subject only to the amount of the monetary value stored in the card, and does not cover single purpose cards, such as phone cards.

[114] Proposal for a European Parliament and Council Directive on the taking up, the pursuit and the prudential supervision of the business of electronic money institutions, Explanatory Memorandum.

[115] Idem.

The key issues relate to:

- taxation – in order for e-commerce to develop, it is vital for tax systems to provide tax neutrality for new activities compared to more traditional commerce;
- electronic authentication of signatures;
- privacy and protection of personal data;
- security and confidentiality of information.

The latter issue is one of the most controversial, and relates especially to the use of electronic signatures. Entity authentication mechanisms only control access to the exercise of certain rights and cannot be used as alternatives to hand-written signatures.

Electronic signatures allow the person or company receiving data over electronic networks to determine the origin of the data (*authentication of data source*) and to check that data are complete and unchanged (*integrity of the data*). The data have to be accompanied by a certificate from a service provider in order to allow the identification of the sender. Service providers are liable for the validity of the content of the certificate they issue. In order to ensure the free movement of certificates, the Directive sets down minimum liability rules for service providers.

Electronic signatures have to be legally recognised as hand-written signatures. Legal recognition has to be granted irrespective of the technology used[116] to produce electronic signatures. Service providers represent the third party, mutually trusted by both parities. The certificates they provide do not always relate to electronic signatures but can be envisaged for other uses. The Directive focuses therefore on the function of the certificate[117] and links to the identity or role of a subject. The service provider has to indicate the limit on the value of the transaction for which the certificate issued is valid, in order to limit the liability of the provider for damages in excess of that value limit.

Following the principle of contractual freedom within the constraints of national law, the authorisation service has to be regarded as a service offered to provide high-level certification services. International interoperability of certification mechanisms, such as the *mutual recognition of certification authorities*, has to be developed. Different kinds of transaction may require different levels of certification or may even not require it.

A prior authorisation should not be required to service providers to take up or pursue their activities in the EU. In the event of disagreement between service providers and the recipient of the service, free access to out-of-court dispute settlements has to be ensured by Member States.

2. Effects

The proposed directive creating a new form of credit institution - i.e. electronic money institutions - imposes obligations in relation to the authorisation by competent authorities, initial capital requirements and investment limitations. The legal framework, besides increasing competition in the business, increases the efficiency of payment transactions because within a more secure network environment, payment transactions can be performed faster and at lower costs.

[116] Digital signatures, biometrics identification techniques such as fingerprints or voice recognition, public-key cryptography, etc.

[117] Certificates issued by the competent authority may be used to establish the jurisdiction applicable to the transaction.

The value of Information Technology - IT - and the Internet lies in their capacity to store, analyse and communicate information in a *precise way* and *rapidly* at *negligible costs*. It has amplified brainpower. Not every invention has the same relative importance for the development of society and not every invention has the same economic impact on the business environment. The Internet may be less significant from the social point of view with respect to other inventions but it has measurable economic impact. One effect is linked to communication costs. As communication costs fall, more linkages between computers are created and the technology is expanding widely and deeply throughout the economy. The benefit of being online increases *exponentially* with the number of connections finalised.

This has a direct impact on employment. Wide-spreading of the technology is creating the need for *new types of professionals*[118] and is therefore creating new stable employment opportunities. The increase in the number of institutions and volume of business will furthermore create employment both on a national and a cross-border basis. Besides financial resources to develop e-commerce plans, which companies are currently lacking, skilled management resources are needed to implement and make those plans work.

On the other hand a new technology is judged by its capacity to allow businesses to reorganise their production processes in order to become more efficient. The new economy is offering the possibility of reorganising business, skipping from a centralised to a more decentralised organisation structure, focused on outsourcing and online procurement. Traditional businesses are trying to pursue opportunities in order to adapt e-commerce and the new economy technologies to this structure. The process is affecting all off-line businesses. Most of the companies with web sites are still thinking how to exploit them in order to better meet the needs of the customers.

Productivity patterns in the economy are changing. Besides the creation of new economic operators, productivity as a whole is changing. New products are arising, which loosen the traditional definition of products, and existing products are made more efficiently. The market is mostly characterised by the provision of product-plus-service packages (i.e. sales linked to maintenance services, follow-up sales, delivery, etc.). The Internet is boosting revenues because *previously inaccessible markets are becoming reachable and entry barriers have been lowered*. This means greater competition on the market and a stress on the side of the costs for companies in order to sustain their competitive advantage. Difficulties arise when traditional products are not time-sensitive or data-driven and cannot be delivered directly down wires. Market opening will lead to increased competition, more customer choice, lower prices and improved services. An increase in the interactivity with the market is helping to adapt the products and the services to individual consumer requirements.

With the creation of Internet start-ups, the risk capital market is achieving a more critical mass. In the last years a significant number of successful initial public offerings by these companies have been flourishing. Investors are captured by the hope of extremely high returns in a very limited period of time. The real risk lies in a speculative approach from investors, which can penalise in the long run the companies' development.

Building trust for users and consumers is a determinant for the reaching of critical mass. In this framework consumer protection is essential. Privacy, authentication measures, favourable taxation, access to infrastructure and redress mechanisms have to be fostered. Co-operation measures within business and industries are needed in order to increase privacy and data protection on global networks. Co-operation measures make it possible to find on-field solutions for practical security issues such as the need to generate automatically an audit trail

[118] Webmaster, security manager, specialised lawyers, etc..

for e-cash transactions or the many incompatibilities between the legal commitment of countries towards fraud in electronic commerce.

Electronic commerce increases the cross-fertilisation of experience. SMEs are more vulnerable to the emergence of e-commerce because they are price-takers and therefore increasingly price sensitive compared to larger firms. They have nevertheless several ways to respond to this challenge, even if they may have difficulties in adapting to the new technology-based environment. On one hand, they need to look into the potential of alliances and specialisation in order to compete against large firms. On the other, they can focus on markets in remote geographical regions or niche markets.

The advantages of electronic commerce have to be clearly shown to companies in order to channel their potential investments. Pilot projects play an important role in raising awareness. As SMEs often lack resources to implement new applications individually, pilot projects typically develop business models and market strategies.

One of the major benefits of e-commerce is to give easy access to information, even on firms' internal business activities. This is a huge opportunity for enterprises like SMEs to access information about the market and its features from the same sources available to large companies reducing the latter's competitive advantage.

Since young people are more attuned to the benefits of the new economy, every initiative related to them will have a greater impact on the economy and eventually change the cultural basis of society. The eLearning initiative[119] is mobilising educational communities as well as economic players in the Community to change the training system. Its main areas of concern are infrastructures and equipment supply and creation, training, services and the networking of relevant projects at European level. The most important goal is to reduce the risk-averse behaviour of investors in Europe in order to accelerate the development of a risk capital market, which is one of the major sources of employment creation.

The effects on employment are relatively unclear. Most of the destructive effect of new technologies will focus on the inadequacy of skills of workers. This will represent the first step. E-commerce is first an investment, which will have costs in terms of money and human resources. Then as growth is achieved it will become a means to expand. Job creation is usually a response to business growth. Between the two steps there is an unavoidable delay. The new employment potential will be mainly in information-based services and in small companies specialising in web-related services. Electronic commerce is encouraging the virtual mobility of workers.

The future working environment will probably be different from today's, both physically and functionally. Flexible working hours will be required; some professionals such as intermediaries will disappear, some jobs will be dissociated from their traditional physical locations. Remuneration will be more skill-based than experience-based.

Even if technology is changing the business organisation at micro- as at macro-level, it is not eliminating economic laws. The business cycle has not been eliminated and inflation is still a risk for every economy. This is the reason why governments and businesses still have to fear volatility on stock markets and take action to prevent it.

Economists fear that e-money may cause central banks to lose their power over monetary policy. Central banks have control on short-term interest rates because they are monopoly suppliers of currency and of deposits made by banks, which represent the monetary base. If

[119] "e-Learning: Designing Tomorrow's education initiative", COM(2000)318 final.

the use of e-money can eliminate both components, central banks lose control of the base money. But even in a situation without currency and banks, there will always exist a long-term interest rate that matches borrowers demand for e-money to lenders' supply determined by the market. Central banks will still be able to vary interest rates by borrowing or offering e-money at more or less the prevailing market rate.

3. Future trends

International electronic commerce currently generates a turnover of around € 200 billions. It consists of four segments. At present the biggest segment is business-to-business[120], even if business-to-consumer[121], consumer-to-business and consumer-to-consumer are gaining in importance.

Financial markets have specific features. In particular, the demand side is characterised by disparities between the players involved. Individual consumers, on one hand, are a significant part of market demand, but have weak mobilisation possibilities and generally lack technical expertise on products of an increasingly complex nature. Furthermore, in certain sectors e.g. distance contracts, the legal framework is not fully defined and the consumers' position and rights have to be reinforced. On the other hand global players represent the other demand component and give more weight to a flexible legal environment.

Financial services have been mainly offered and concluded through traditional face-to-face methods, while distance-marketing methods are increasingly used in a domestic and international context. The difference from traditional methods is the absence of a simultaneous physical presence of the parties at any time. The key is the link to technology networks, through which every single step of the transaction is finalised, beginning with the search for information by the consumer, to the promotion and selling of products and services. Only the distribution stage may be dealt differently through networks, in the case of electronic services or products, or through physical delivery to the customer. This latter aspect has created difficulties for companies that cannot deal with the number of deliveries in a reasonable timeframe because of the geographical distance between supplier and consumer.

Electronic networks and technologies allow small companies to act as larger ones by using a low cost infrastructure to promote their products. Technology creates the opportunity to *personalise services and products on a larger scale* and to achieve therefore more *specialised market segments*. Because the web acts as a greater *equaliser* and the *competitive advantage for market leaders is time-limited*, the only way to sustain it is to have a *flexible infrastructure,* which allows for continuous innovation. E-commerce itself *shrinks the distance between producers and consumers*, while *intermediaries are changing their role*. No more traditional retailers or wholesalers are needed, but network access providers, authentication and certification service providers and electronic payment system infrastructures.

Internet-based transactions have low costs, the barriers to enter the market are low and margins are getting thinner. Competition is increasing especially because competitors are *only a mouse-click*[122] away from each other.

Technological advances are expanding over the boundaries of the PC. Recently every company offering financial services over the Internet is now expanding over *other channels*

[120] Transactions taking place between two enterprises.

[121] It embraces the normal retail activity such as book selling or online broking.

[122] *The Economist*, Survey Online Finance, The virtual threat, 20.05.2000.

such as mobile phones, personal digital assistants (PDA) and even television. In some countries banking and broking activities are already offered on Wireless Application Protocol - WAP - phones. Even if WAP phones do not yet fully provide Internet access, they do support simple structures in order to provide transaction possibilities for financial services. Mobile commerce (m-commerce) is trying to make Internet services accessible from the telephone. Issuing and paying bills electronically is growing exponentially, and apart from the time advantages achieved, savings in paper, handling and postage are estimated to be significant.

In the banking sector, most transactions are expected to be virtual already before the end of the decade. The Internet itself has become one of the major forces for *disintermediation* which banks have to face. It has been stated that banks are undergoing the "fourth disintermediation" stage. The first involved the crowding-out of savings, mutual funds and life insurance policies at the expense of bank deposits. The second focused on capital markets, which took some banks' traditional role as providers of credit. Third, technological development helped streamline back-office operations. Now, fourth, the distribution of banking products and services is going to be disintermediated[123]. The possibility of a fifth disintermediation is now mooted in which the electronic networks and technologies will bypass banks in clearing and settlement services[124].

Especially in Asia, new banks which operate only on-line are already growing. Thanks to the reduction of costs due to the new technologies, on-line banks plan to apply low interest rates in order to attract customers. In this way it is easier for banks, as for companies, to expand their business across Europe without bearing heavy fixed costs.

Furthermore, with the voice recognition age, new trends will emerge. User interfaces will become easier to understand and consumers will require less specialist knowledge in order to access the new technology. But a common legal framework is missing. The prevention of fraud, the security of transactions, the protection of privacy and intellectual property rights require appropriate electronic security mechanisms.

[123] Idem.

[124] Idem.

Insurance

The EU's single market in insurance is the third largest in the world after the US and Japan. Nevertheless insurance companies face an uncertain legal framework with regard to the products they want to offer and the rules governing their activities.

Within the European Union different fora exist within which insurance regulatory and supervisory authorities meet to discuss regulation frameworks and practical issues. The Insurance Committee (IC) is attached to the European Commission and was set up in 1991. Its role is to assist the Commission in giving advice and laying down the preparatory prudential legislation for the insurance sector. Individual insurance companies positions are not dealt with in this forum because they fall within the exclusive competence of national supervisory authorities, apart from situations where the financial position of an individual company can give rise to prudential issues which need a response at Community level.

After the signature of the Treaty of Rome, the Conference of Insurance Supervisory Authorities of the Member States of the European Economic Community was established. The goal was to provide a forum for the exchange of information between insurance supervisors and the follow-up of the practical implementation of EC-insurance directives.

In addition, the International Association of Insurance Supervisors - IAIS - was established in 1994, also to provide an official forum to discuss insurance regulatory and supervisory issues. Its major tasks are to develop practical world-wide standards for the supervision of the insurance sector.

The major sectors where action has been recently taken relate to

- the authorisation and financial supervision of insurance undertakings;
- the “general good” principle; and
- insurance mediation.

1. Authorisation and financial supervision

The Third Council Directives 92/49/EEC and 92/96/EEC completed the establishment of a single market in the insurance sector. They introduced a single system for the authorisation and financial supervision of insurance undertakings under the principle of the supervision provided by the home Member State. The single authorisation – “European Passport” – issued by the home country enables an insurance undertaking to provide its insurance business anywhere in the EU under the rule of freedom of establishment or under that of freedom to provide services.

On-field surveys, however, have revealed the extent to which the supervisory authorities of host countries apply different conditions to foreign undertakings regarding the conduct of their business on the host territory. Such *differentiated treatment* prevents the customer from gaining the most differentiated access to insurance undertakings in Europe and to a wide-spread range of products potentially available within the Community. The Commission has therefore set out specific criteria[125] in order to determine the dividing line between business provided by the opening of a branch or agency; and business provided under the freedom to provide services in another Member State.

[125] European Commission, Commission Interpretative Communication, Freedom to provide services and the general good in the insurance sector, Brussels, 02.02.2000.

The provision of services is generally differentiated from the freedom of establishment by its temporary character, while the latter is based on the lasting presence of the provider in the host country. The temporary character of the services provided is defined by reference to their duration, frequency, periodicity and continuity[126]. The only substantial difference between the rules on the provision of services and the rules on establishment concerns the notification procedure, which is more detailed for the establishment of a branch. The purpose of the notification required for the opening of a branch is to ensure exchange of information between the supervisory authorities.

Since the abolition of restrictions[127], any insurance undertaking can simultaneously carry out its business in the same country both under the freedom to provide services provisions and through a branch. This applies even if the activity performed under both rules is the same activity.

The branches of insurance undertakings and insurers operating under the rules of the freedom to provide services do not have to respect the provisions of the host Member State regarding the maximum technical interest rates[128].

With respect to home country control, the home Member State is alone responsible for guaranteeing compliance by an authorised insurance undertaking with the conditions under which the authorisation has been granted. The host Member State itself has no right to question the authorisation. Authorisation provided by the competent authorities of the home Member State is granted for a particular class of insurance, and further authorisation has to be sought by undertakings which extend the business to an entire class or to other classes. If the Member State's law permits insurance classes to be carried out simultaneously, the authorisation for more than one can be granted.

Financial supervision includes the following aspects:

- the state of solvency of the undertaking;
- the establishment of technical provisions; and
- the assets coverage of the technical provisions.

Supervision is based on annual accounts with regard to the financial situation and solvency capabilities of the undertaking. Current proposals[129] would strengthen the position of competent authorities by giving them the power to take remedial action where the interests of the policyholders were threatened. This would permit higher investor protection.

There would then be two direct effects.

- *Increased revenues* for insurance companies as a result of the growing number of policyholders; and
- *deeper and more liquid insurance markets*.

This will be important if the volatility of markets increases and the market value of assets backing the solvency margin changes significantly.

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126 Idem, p. II.

127 The Third Insurance Directives (Directives 92/49/EEC and 92/96/EEC) abolished all restrictions on simultaneous exercise.

128 Each Member State sets up a maximum technical interest rate, which has to be changed in order to calculate the bases for the technical provisions.

129 COM(2000)634 and COM(2000)617.

In order to assess the overall financial position of an insurance undertaking, the solvency margin is only one of the parameters that have to be considered beside adequacy of technical reserves, the asset and investment risk, etc.. The inclusion of criteria related to the competence of management permits a *more comprehensive protection of investors*.

2. The solvency margin

One of the more important regulatory instruments to ensure consumer protection is the requirement for insurance undertakings to establish an adequate solvency margin[130].

The solvency margin is a measure, harmonised at EU level, to achieve the mutual recognition of financial supervision of insurance undertakings. Though minimum harmonisation is provided, Member States are free to establish more stringent rules for any undertakings they authorise. Insurance companies are therefore able to choose the country in which they obtain authorisation, taking into account the varying rules in relation to the solvency margin. *Prima facie*, this will distort competition.

The solvency margin consists of all equity capital available to cope with unexpected costs and to respect commitments to policyholders and creditors at any time. Its amount has to be linked to the volume of risks underwritten. The measurement of the solvency margin depends substantially on the way assets and liabilities are assessed. The principles of calculation have therefore been harmonised for annual and consolidated accounts. The calculation of technical provisions is based on actuarial principles, though this does not guarantee a secure coverage of claims and costs. Therefore an additional reserve to act as buffer against unexpected costs has been introduced.

It has been stated that failures of insurance undertakings are rarely related to an insufficient solvency margin, but rather to other factors such as failure of reinsurance, investment or asset-liability mismatches. Excessive costs and rapid growth risks are not dealt with in the present solvency margin scheme, though more sophisticated methodologies – not currently applicable in Europe – do take them into consideration.

The minimum solvency margin is determined according to the classes of insurance underwritten. A guaranteed fund also has to be established corresponding to a fraction of the required solvency margin. Its consistency is expressed in monetary form and not as a percentage of the risks subscribed. Under the current proposals[131] the fund has been strengthened and indexed in line with inflation. The updating of the fund is provided for *automatically*, which permits a *flexible* legislative framework.

The proposals require higher regulatory capital. Small mutual associations will no longer satisfy the new premium income thresholds and will no longer be entitled to the single European passport. An effect of the proposals will be to *increase the entry barriers* on the specific market because of the higher requirements. Increasing entry barriers and increasing the solvency margin requirements are *penalising especially the formation of new small business and therefore penalising potential employment*. The fact that the respect of the minimum solvency requirements gives them the possibility to benefit from the single passport does not compensate for the disadvantaged situation they are starting from.

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[130] The formula for the solvency margin requirement in non-life business is different to that for life business. For the latter it is based on the amount of technical provisions, while for the former one it is the higher of two formulas, one based on premiums and the other based on claims.

[131] COM(2000)634 and COM(2000)617.

Box 2

Risk-based Capital – RBC – is one of the models used by the insurance industry for measuring solvency. Key elements of risk in the liabilities are defined as "risk factors". The solvency margin is calculated by multiplying risk factors by a measure of volume and adding them together.

The concept was first developed in the USA and Canada in the late 1980s as an answer to frequent instances of insolvency in order to better measure exposure to specific risks such as asset risk[132], insurance risk[133], interest rate risk[134] and business risk[135]. RBC estimates results in a mathematical formula.

One advantage of this methodology is that it assesses both assets and liabilities, and different types of risks. On the other hand, it has been criticised for its mechanical approach. It is well suited to market environments *where products are similar* (and therefore also the resulting *assets and liabilities)*. It becomes less suitable for differentiated environments where insurers have to deals with a variety of products as in the case of Europe.

One of the early issues related to the solvency margin was whether a US-style RBC calculation should be introduced to replace the current formulae. Empirical evidence has not so far shown the solvency margin to have significant flaws, nor the superiority of the US-style RBC as a regulatory tool.

3. Other parameters

The home Member State requires insurance undertakings[136] to cover technical provisions with respect to the entire business by matching assets. Percentages have been laid down which have to be invested in certain asset categories. Because the financial environment is changing rapidly, however, the percentages do not permit a flexible legislative framework. Therefore *it is preferable to avoid laying down fixed percentage values when rules based on principles* can reach the same goal.

The first paragraph of article 24 of the Proposal for a Directive of the European Parliament and of the Council concerning life assurance[137] could therefore be omitted in favour of the maintenance of the second paragraph, which determines the rules and principles for investment diversification. Assets covering technical provisions take into account the type of business carried out and have to be adequately diversified. Defined categories of assets are authorised to cover technical provisions; but more detailed rules on acceptable assets can be fixed by the Member States.

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[132] The risk that a company will not realise the full value of its assets.

[133] The risk of an incorrect pricing of the company's products.

[134] The risk due to movements in interest rates.

[135] The risk related to the management of the company and its strategy.

[136] Life assurance undertakings.

[137] COM(2000)398 final.

In some Member States national legislation establishes the criteria to be followed when calculating the premiums for third-party motor insurance. The criteria prescribe the coefficients for the reduction or increase of premiums through a compulsory scale. On the one hand, mandatory systems reduce the likelihood of accidents because they increase the carefulness of drivers and the transparency and comparability between insurance products. On the other hand, however, they do not respect the principle of tariff freedom for insurance undertakings.

Clauses imposing mandatory levels of excess in insurance policies are supposed to combat insurance fraud. They may also be said to protect consumers from a significant rise in the premiums as a result of insurers having to meet a large number of very low value claims. It has to be questioned, however, if this provision really has the aim of protecting customers or whether it limits competition between insurers.

Capital redemption products marketed in a Member State by a service provider authorised in that Member State are also permitted in countries where these products are not regarded as insurance activities. Even if the permission is based on the principle of mutual recognition between Member States, it gives rise to possible discrimination between national and non-national service providers. In fact, providers authorised by their own Member State may be able to market products abroad which cannot be marketed by providers in other Member States and gives them a *competitive advantage*. Because such imbalances in competition distort the efficiency of the insurance market, and because the principle of mutual recognition is coherent with the single licence provision, an effort has to be made to *harmonise those insurance products* which are commonly authorised and recognised in the Community.

The key issues contained in the Directive on the supplementary supervision of insurance undertakings in insurance groups[138] aim to ensure a high level of protection for policyholders and to reduce the distortions due to differences between Member States' legislation. The key provisions relate to the double use of capital in the calculation of the adjusted solvency margin of the insurance undertaking, which should be eliminated under the Directive. Some paid-in parts of the capital of insurance companies, such as profit reserves, have therefore to be included in the calculations of the adjusted solvency margin.

When evaluating the level of the group's own funds, the resources of the parent company of an insurance group have to be included. The supervisory authority has to monitor those transactions internal to the insurance group and has to be provided with any information needed for supplementary supervisory purposes.

The proposed Directive on the Reorganisation and Compulsory Winding Up of Insurance Undertakings[139] covers the failure of insurance undertakings with branches in other Member States. The winding-up process will be subjected to a single procedure initiated in the home Member State where the undertaking has its registered office and governed by the home state bankruptcy law in accordance with the principle of home country control.

In order to protect insurance creditors, the proposal provides two options which can be chosen by the Member State in the event of winding up proceedings. One option gives insurance claims absolute precedence over any other claims with respect to assets representing technical

[138] 98/78/CE.

[139] Amended Proposal COM(89) 394 final. OJ C 235, 06.10.1989.

provisions. The second option gives precedence with respect to the whole assets of the undertaking over any other claims except on rights in rem[140].

The fact that Member States have the option, when winding up proceedings, to choose between two different protection levels, creates a potentially discriminatory environment. A single option has to be applied within the Community in order to increase the harmonisation of practices. The "general privilege" has the advantage of ensuring an appropriate level of protection of insurance creditors as well as a balance with other creditors of the undertaking. This allows claims on salaries to be taken into account, and therefore protects employment.

4. The general good

A controversial issue relates to the “general good” concept developed by the case law of the Court of Justice. In carrying out insurance activities in a host Member State, insurance undertakings must comply with national conditions in order to respect the general good principle. It defines the framework within which the host Member State can invoke this concept in order to enforce compliance by an insurance undertaking to its national rules.

In order to maintain a flexible and evolving approach, the Court has never given a firm definition of “the general good”; but this has given rise to some legal uncertainty. The level of what is regarded as general good depends strongly on specific national traditions. Moreover, the concept implies a reversed onus of proof. In case of dispute, the Member State imposing the restrictions has to demonstrate that the national provisions satisfy the conditions set out by the Commission[141].

The harmonisation directives define the minimum level of the general good principle and the sectors not falling within the scope of the legislation. The discriminatory restrictions imposed by a Member State cannot be justified on the ground of economic considerations. Furthermore, it is necessary to consider if there may not be less restrictive means of achieving the general good objective and/or that the object is safeguarded by rules to which the provider of the service is already subjected under the rules of the home Member State.

In order to decrease the legal uncertainty arising from the Court of Justice’s case law and to avoid excessive implementation of the general good clause, it might be preferable to achieve a *legal common definition* of the concept at Community level. However this would partly penalise the flexibility of the current legislative approach. Insurance companies are already under the supervision of their home country and therefore already respect provisions regarding consumer protection, fraud prevention, worker protection, etc.. The general good concept should be implemented only under exceptional circumstances and be strictly defined in order not to limit the freedom of action and provision of services in other Member States. Furthermore distortion of the competitive environment and *penalising the cross-border development of the insurance sector* have to be avoided.

5. Insurance mediation

The “European passport” has led to an increase in business, especially relating to large industrial and commercial risks. There has been less impact on insurance for private individuals, because no legal framework for intermediaries is available in order to allow them

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[140] http://europa.eu.int/comm/internal_market/en/finances/insur/2k-529.htm
Financial services: Commission welcomes political agreement on the winding up of insurance institutions.

[141] European Commission, Commission Interpretative Communication, "Freedom to provide services and the general good in the insurance sector", Brussels, 02/02/2000, p. 22.

to take full advantage of the fundamental freedoms. Intermediaries[142] are therefore unable fully to meet the need of customers who wish to insure risks in other Member States. Insurance intermediaries are still subject to national legal requirements, and the lack of clear obligations on intermediaries when acting in cross-border segments markets. This segmentation of markets prevents insurance customers, firms and individuals having access to a wider range of products. The proposed single registration system for intermediaries will *facilitate the protection of customers' interests and cross-border activity*.

At present only Directive 77/92/EEC contains provisions which are binding on intermediaries in the insurance sector. It does not harmonise the professional requirements needed for agents or brokers, but designates measures to facilitate the free movement of those intermediaries within the Community. Subsequent Community rules[143] require insurance intermediaries to have

- general, commercial and professional knowledge and ability;
- professional indemnity insurance;
- good repute; and
- financial capacity.

The professional indemnity enables a customer who is a victim of an intermediary's negligence to obtain compensation. A determined amount is set out in the proposal for the directive, but *in order to maintain the flexibility of the legislation it could be more appropriate to guarantee 100% compensation*. In the same way, financial soundness is required as additional protection against the potential bankruptcy of an intermediary and to avoid loss of the premiums which are paid by the customer to the broker.

A recently proposed Directive on insurance mediation[144] would make registration on the basis of a minimum set of professional requirements compulsory for all legal or natural entities taking up or carrying on the activity of insurance or reinsurance mediation. Supervision would be based on the principle of home country control.

The registration system for intermediaries has been preferred to an official authorisation system because of the high number of intermediaries. Registration must be carried out in the Member State in which the registered office of the legal person is located or where the central administration of the natural person is located. The provision is intended to prevent intermediaries having the possibility of avoiding stricter rules in the Member State where they are established.

In order to guarantee the interests of customers, it would be preferable to include every insurance intermediary in the coverage of the Directive, especially because small intermediaries can have difficulties in the field of financial soundness.

The distinction between agents and brokers is not present in every Member State and it is therefore more consistent to make a distinction relating to the *type of risk* the intermediary acts for.

When considering the information provided by the insurance intermediary to the customer, it is up to the intermediary to determine if it advises the customer and who is liable in the event

[142] Brokers, general agents, banks, etc.

[143] Recommendation 92/48/EEC of 18 December 1991.

[144] Proposal for a Directive of the European Parliament and of the Council on insurance mediation, COM (2000) 511 final, Brussels, 20.09.2000.

of negligence. The intermediary should provide reasonable advisory and liability functions, especially since business is likely in future to be much more based on the provision of related services than on products alone.

6. Future trends

The effects of these proposals and directives are beginning to be seen in the form of a greater competition in national markets and an increase in the differentiation of products. Innovation has increased, especially as a result of the abolition of controls such as approval of policy conditions and tariffs by supervisory authorities. Individuals and business are encouraged to buy cross-border products.

The major obstacle remaining is linked to the fact that an insurance undertaking may have difficulties in assessing precisely the level of risk in other Member States and may therefore have difficulties in setting adequate premium tariffs for insurance contracts. The investment needed in order to achieve a correct assessment of the risk born in another Member State does not generally justify the cross-border marketing of products. A way forward is linked to new technologies, which increase remote selling possibilities, such as direct selling of products via the Internet, and may reduce the investment required to enter the market.

Price differentials are still high within the Union because of the diverging characteristics of the national markets. Tax differences are also an obstacle, especially where national legislation does not permit tax deduction of life insurance premiums under contracts concluded with an insurer not established on the national territory.

Insurance companies have been quite slow to move on-line for a number of reasons. The complexity of products means that customers need to talk about them rather than acquire them virtually. Cross-border services provided by insurance undertakings via electronic commerce are of course subject to the provisions covering the freedom to provide services. But the current legal framework in the insurance sector only addresses in a limited way the use of new technologies and electronic networks. The place where the technological means to provide the service are located does not represent the Member State of establishment of the insurer that carries out the business, but the Member State of establishment of the insurance undertaking with which a policy has been concluded.

The present legal framework is based on the concept of a physical branch. If future developments make it possible to have only a “virtual” branch, able to take decisions without contact with the parent company, the legislation will have to be revised.

Finally, a coherent approach towards the supervision of financial conglomerates has to be outlined.

CHAPTER III - RISK CAPITAL

The importance of a pan-European risk capital market for the creation of jobs has often been noted. In particular – although it is small in relation to other financial markets – the risk capital market is of significant importance in providing a source of equity financing for innovative and early-stage business.

Empirical evidence from the US indicates this. Despite its fall during 2000, the Nasdaq stock market has been developing for over 25 years, and has been crucial in financing fast-growing businesses in the US, giving small and medium size enterprises access to venture capital. Risk capital markets in Europe are of more recent development, and lack a similar capital potential for new companies.

The major conditions for entrepreneurs, in order to develop their business and products efficiently in the shortest period of time, are to be able to access

- the *right financing*
- within a *convenient timeframe* and
- with the *adequate linked advisory functions*.

This means that entrepreneurs need access to

- seed[145] and start-up capital[146], in order to begin a business;
- intermediate and development capital[147] in order to expand the business when the production reaches the critical mass; and finally
- private or institutional investors[148] in order to expand the shareholder base and diversify management control. The latter stage has to be supported by liquid and deep primary and secondary markets in order to go public and to trade shares.

The EU risk capital market has performed strongly in the last few years. The favourable performance has extended to all segments, i.e. investment by business angels, venture capital investment and the high-growth equity market[149].

Venture capital is not limited to the role of providing capital but extends its function to the provision of technical and managerial expertise. It is a subset of private equity, and covers investment made for the start-up, early development or expansion and restructuring of a business. In Europe the term is used generally for private equity, including management buy-outs and buy-ins (MBO/MBIs).

True venture capitalists, moreover, do not just pour money into a company and wait for returns. They become involved as board members and management advisors in order to define business plans.

In the Commission's Communication of April 1998 "Risk capital: a key to job creation in the European Union[150]", six barriers inhibiting European risk capital markets are identified:

[145] Initial financing to research, develop and assess an original concept before an enterprise reaches the start-up phase. Generally provided by incubators, founders or angels.

[146] Financing provided for product development and initial marketing. Its goal is to help companies which are in the process of setting up a business or are in business, but have not already sold their product commercially.

[147] Financing provided to a company for its future growth and expansion.

[148] Institutional investors include insurance companies, investment funds and pension funds.

[149] The so-called "new markets".

- market fragmentation;
- institutional and regulatory frameworks;
- taxation;
- the paucity of high-technology SMEs in the EU;
- lack of human resources; and
- cultural barriers.

Beside the lack of transparency on the risk capital market and the limited correlation between risk and return, the European Union has a relatively low level of entrepreneurship. This specifically illustrates the need to improve the conditions and availability of risk capital on the European markets. EU cross-border activities are numerically limited and show a relatively small size of deals.

In order to achieve the creation of venture capital dynamics throughout the whole business life chain and to orient it towards high risk and high tech investment opportunities, action has to be taken at Community and national level to:

- improve the development of, and access to, specialised stock markets;
- promote entrepreneurship within educational and training systems;
- reduce all administrative barriers and facilitate the start-up of companies, especially across borders;
- increase fiscal incentives for early-stage investments;
- develop networking and clustering between universities, research centres and financial specialists and advisors;
- create a formal network for business angels;
- promote innovative employee ownership schemes; and
- introduce incentives for recruitment in early-stage companies.

> *"The Community is implementing a number of financial programmes to stimulate the mobilisation of capital for innovative companies in fields where private investment is lacking: seed capital (CREA, the new Seed Capital action launched by the Commission in November 1998); innovation (the Innovation and Technology Equity Capital (I-TEC) pilot project, and other measures promoting the co-operation between financial sources, researchers and industry under the research and development framework programme); early stage SMEs (the Luxembourg Growth and Employment Initiative consisting of three schemes: a risk-capital facility ("ETF start-up"), a scheme of financial contributions for the establishment of transnational joint-ventures ("Joint European Venture"), and a guarantee facility ("the SME Guarantee Facility"). The EU Structural Funds, and in particular the European Regional Development Fund (ERDF), co-finance through the mechanism of multiannual Operational Programmes Member States' actions aimed at facilitating SME access to venture capital in the least developed regions of the Union. In addition, the European Investment Fund (EIF) acts as a catalyst in the financing of venture capital funds focused on early-stage and technology investments while the European Investment Bank (EIB) is a leading source of finance through its new risk-sharing operations reinforced by the call from the Cologne European Council for a further € 1 billion be set aside for the period 2000-2003.*" [COM(1999)493-EN]

[150] SEC(98)552.

Besides actions at Community level, initiatives have been taken in some Member States in order to set up venture capital funds for investments in high-technology businesses. These aim at encouraging an increase in investment in start-up companies. Venture funds, managed by private sector companies, attract capital from various sources: from government as well as financial institutions. This avoids funds being allocated directly to enterprises, but channels investment towards them. The fact that funding from different sources is pooled in a venture fund avoids the problems involved in direct state aid.

Nevertheless, in some European countries venture capital is largely dominated by the public sector. But government is not equipped to deal with high-risk venture capital: first, because it cannot get involved in the management process of start-up; and secondly, because government administrators often face political pressures to invest in particular projects and in critical areas. Rather, a more encouraging fiscal environment has to be created for the involvement of the private sector: the tax base has to be widened and tax rates reduced.

Small- and medium-sized enterprises are the motor of the labour force. Three-quarters of the labour force of the Community is absorbed by SMEs and it has been stated that a significant fraction of the risk capital invested is allocated to the hiring process. Furthermore, informal investors such as business angels or incubators[151] target investment more successfully than formal investors. For this reason proposals to introduce a system of public financial risk capital would be not appropriate even in those sectors where private capital is missing. In all cases of public funding, the potential advantages need to be weighed against the risk of market distortion and against the risk of crowding out the private sector.

1. Access to specialised stock markets

In order to develop high growth companies, access to specialised stock markets is essential to trade their shares. The mergers recently under consideration between European stock exchanges in order to create a pan-European high growth- and blue chip market could reduce significantly the fragmentation of European markets and lead to more specialisation. Fragmentation is a characteristic which has always preoccupied investors and represented a relative advantage for the US. EASDAQ[152], AIM[153], Euro-NM[154] and other capital markets are contributing to an increase in the specialisation of the markets and to a shift in focus from a national-based point of view to a sectoral and specialised basis.

In order to access capital markets even SMEs have to guarantee a high level of transparency. Therefore they must provide standardised financial statements, uniform documentation and disclosure and have access to expertise in order to achieve a listing. Harmonisation is necessary for accounting rules, taxation rules and stock exchange platforms.

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151 *"An incubator takes budding entrepreneurs into its fold, becoming involved in every stage of its development. For this they receive a similar equity stake to venture capitalists, but at a lesser price as they invest earlier. Most incubators will manage the start-up in-house, providing office space, equipment, advice, personnel, and funds. This hands-on approach aims to produce successful companies that can leave the incubator as a freestanding economic entity. If a start-up fails to secure second-round funding after a period of time - anything from 6 months to a year - the incubator will leave it to battle on alone"*, http://www.ft.com/specials/sp9a42.htm

152 **E**uropean **A**ssociation of **S**ecurities **D**ealer **A**utomated **Q**uotation - Brussels.

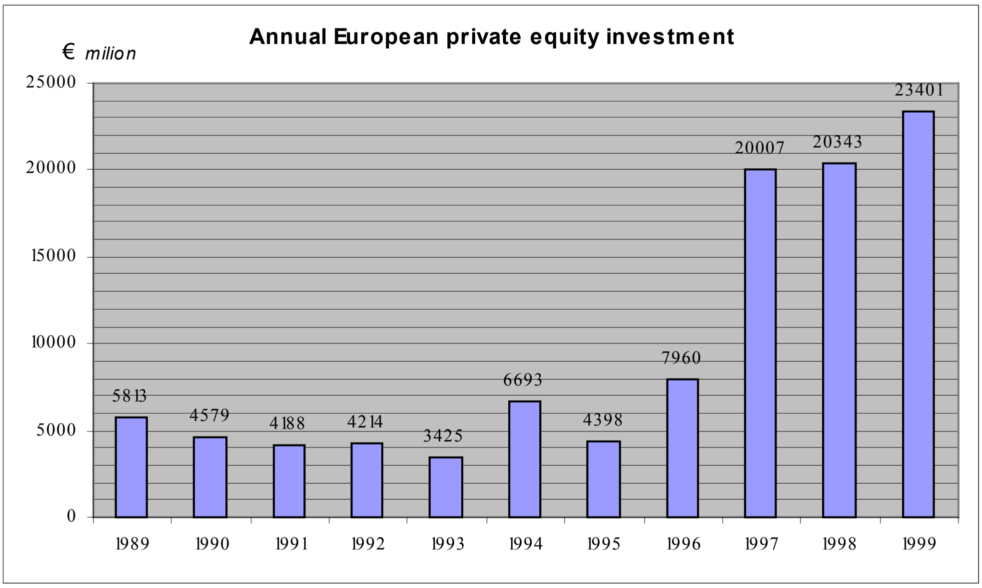
153 London Stock Exchange's **A**lternative **I**nvestment **M**arket.

154 Alliance between Nouveau Marché (Paris), Neuer Markt (Frankfurt); Nouveau Marché (Brussels) and Nieuwe Markt (Amsterdam).

One major difference between **investors on-line** in the U.S. and in Europe is that the latter are sophisticated but few. Generally such Europeans invest mainly on US markets. US investors, on the other hand, are not necessarily sophisticated; but are both numerous and invest widely.

The Internet makes available information on venture capital, if not the possibility of getting funds directly on-line. The recent development of electronic share-trading through electronic communication networks (ECNs) will help companies to list and trade their shares round the clock and cross-border, and will decrease the cost of raising capital.

Graph 10



Source: EVCA, Yearbook 2000

The use of the Internet is widespread for on-line trading of stocks listed on stock exchanges (e.g. e-broking/e-trading) as for on-line IPOs. It lowers the costs of underwriting, commissioning and legal advisory services and permits high flexibility. These systems enhance the equity culture of a society. Nowadays the on-line trading systems most in use can be divided into two types.

- The first focuses on the vocal recognition of the client and can operate from every fixed or mobile telephone without adding phone call costs. It permits banking and trading services.
- The second is available through the electronic network and supplies a software programme in order to monitor in real time the market listings on international stock markets. This software was formerly only available to professional brokers.

Beginning from 1995, online trading has increased exponentially in the US and in Europe, even if in relative terms the US approach has been much wider. There are two major concerns. One is the need for an educational campaign on how to perform and choose investments on-line.

The second concerns web sites which give advice on how to invest on-line, which securities to buy and why. The difficulty is to separate the broking from the advisory function. The first includes direct involvement in the investment of funds; and brokers have to be authorised in order to do this. Those giving only advice, however, do not need authorisation. Yet, in practice, it is not easy to disentangle the two functions: at what point does giving advice become an assumption of responsibility? The fact that the supervisory authorities have no power in relation to advisers perhaps represents a weak point in the current system of regulating securities markets.

2. Taxation

The taxation provisions applying to risk capital and equity are crucial in determining the propensity to invest, on both the demand and supply sides. The taxation of debt in Europe is, in general, lower than taxation on equity income; and Europe is more dependent on debt than equity financing. This creates an opportunity to reverse the current position by lowering the taxation of equity income (dividends), so increasing the tax incentives for risk investment. This would be in line with the general object of promoting entrepreneurship and job creation.

Capital gains tax – CGT – also affects the rate of return on investment, and influences investment decisions taken by individual and institutional investors. In addition, it affects any remuneration taken in the form of assets. Start-ups, which are unable to pay initially high salaries, often offer **stock options** as part of the remuneration package.

Stock options give the employee the right, but not the obligation, to purchase a set amount of shares in the company for which they work, at a fixed price. The rights must be exercised within a specified period of time. These schemes increase the motivation and productivity of employees because they create a direct link between the remuneration received by the employee and the results achieved by the company. Furthermore, they encourage co-operation and information-sharing within the company. At a European level, such schemes are contributing to an increasing development of more participatory forms of work organisation[155]. Stock options are largely used in high-technology companies. They are a tool to attract talents, even if companies in early stages of development cannot afford to pay high salaries. They also promote wage flexibility.

Stock options are nevertheless underdeveloped in Europe because of unfavourable taxation provisions, (as well as ownership resistance, especially in family-based enterprises). Two features have to be considered relating to the present taxation system.

- The first concerns **the moment at which the investor becomes liable for tax**. Depending on the taxation regime, taxes on stock options can be payable on the grant of the option, on the exercise of the option or on the sale of the underlying share. In the first two cases the beneficiary becomes liable to tax before receiving any benefit.
- The second feature concerns **the type of tax** for which the beneficiary is liable. Income taxes are often higher than capital gain[156] taxes. This means that the taxation of stock options makes them unattractive to employees. The most suitable taxation regime is to make beneficiaries liable to capital gains tax on the sale of the underlying shares[157].

3. “Business angels”

Investors in some start-ups can expect spectacular returns; but this reflects the risks involved – eighty per cent of such companies fail to perform. In addition, venture capital funds usually

[155] European Commission, *European Economy*, "Risk capital: Implementation of the Action Plan", No 12 - December 1999.

[156] Tax on the difference between the sale price and the exercise price of the stock option.

[157] European Commission, "Risk capital markets, a key to job creation in Europe. From fragmentation to integration", *Euro papers*, No 32, January 1999.

have to invest significant amounts in order to assess the business project, the technology, the market, and the management team, and to monitor the process.

For smaller amounts, “business angels” are the most suitable source of funds. As they are individuals with expertise and, generally, direct personal experience of the business in which they are interested, they are willing to take the risk of investing both financial resources and time and expertise in very early-stage companies. These wealthy individuals have often been entrepreneurs themselves. They are widespread in Finland, the Netherlands and in the UK.

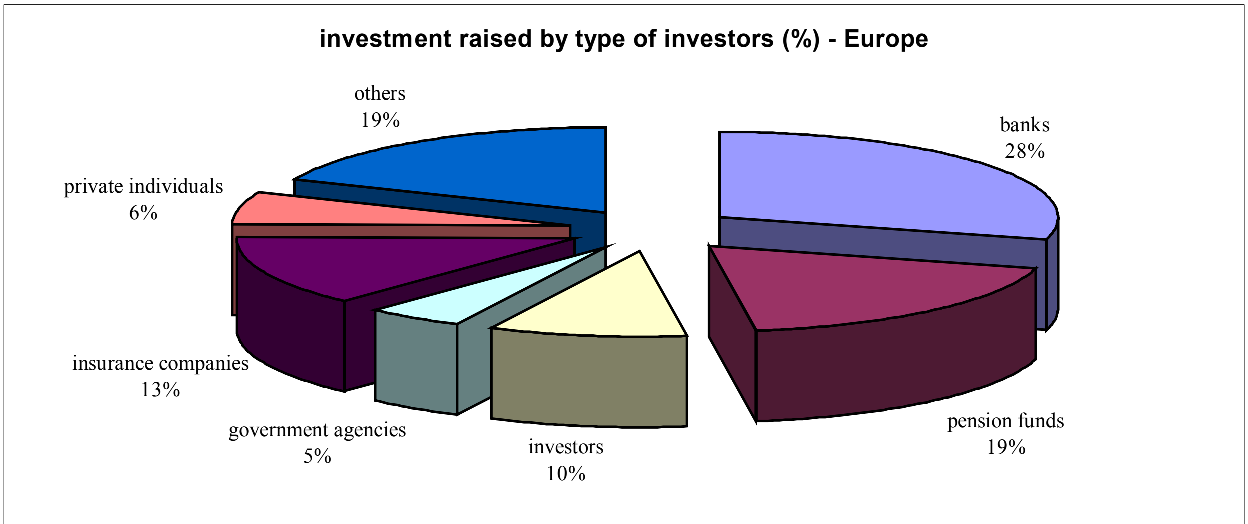
However, the actual market mechanism to match demand and supply of business angels is inefficient and random. Contacting a business angel is generally difficult and time-consuming. An active network such as the European Business Angels Network – EBAN – and a web site for business angels should be set up. The creation of a one-stop-shop risk capital web site is important in order to provide a single access point for projects seeking venture capital and for different capital sources available in the Community.

In the absence of business angels – either due to a lack of interest in the specific business concerned or due to their limited number – family savings and loans provide a fall-back solution.

4. “Clustering”

“Clustering” consists of bringing together all the personalities involved in the venture capital process, from university researchers to venture capitalists and merchants. In particular, the link to academic and industrial research is the primary source of potentially new companies and of future employment.

Graph 11



European figures show the low interest in seed and start-up companies in relation to expansion, replacement and buy-outs. The most active type of investors are generally banks, followed by corporate investors and insurance companies. Institutional investors seem to have more interest than private individuals .

Source: European Venture Capital Report

This dynamic is almost lacking in Europe, with two direct consequences.

1. Many good European ideas end up in the US where the conditions are more favourable.
2. SMEs are far from reaching their full potential in terms of job creation.

What is needed is the development of a mechanism to maintain financial and entrepreneurial capacity in the Union. This can be achieved in a number of ways:

- by developing a European venture capital market;
- by attracting foreign venture capital; or
- by implementing both measures, so creating an *international* venture capital market where risk capital is offered by international sources.

5. Educational and training system

In Europe savings are much higher than in the US; but willingness to invest them and the mechanisms to invest are missing.

A key problem is the high risk aversion of European investors, which is self-reinforcing. Investment propensity is generally linked to high return expectations. In conditions of high risk aversion, investment will only take place if there is an expectation of very high returns. But the higher the expectations, the greater the likelihood that they will be unfulfilled. The gap between realised return and return expectations then further re-enforces investors' risk aversion.

The high level of risk aversion of European investors has a number of causes.

- The discouraging legal and taxation framework relating to risk capital.
- The excessive punishment of failure, which is regarded as a sign of the incapacity of, or of excessive risk-taking by, the management, and not as part of a "learning-by-doing" process.
- Employees are reluctant to leave secure positions to establish their own companies.
- Southern European countries like Italy have a culture of small, family-driven enterprises, in which excessive emphasis is placed on maintaining control over the decision-making process. Venture capitalists are unwelcome because of the fear of losing control to them.

Such factors partly explain why, in Europe, SMEs are undercapitalised: their level of indebtedness is on average twice the level of their own funds. Besides the lack of specialised venture capital markets, entrepreneurs are, in general, reluctant to let outsiders acquire shares of equity in their companies.

European investors' lack of an equity culture, and their preference for debt securities as secure investments, explain why investments in life insurance and especially in deposits are disproportionately high in Europe.

In addition, entrepreneurship traditionally had very low visibility within European educational systems; but improvements are taking place. In the 14 to18 age group, "baby traders" are beginning to appear, practising one of the most risky and profitable activities – "stock picking" on the exchanges. The young investors generally acquire a capital "float" from their parents and have to manage it.

One of the best initiatives, which has been introduced in the US and should be developed in Europe, is the introduction in schools of classes on stock management and dealing. This should involve the organisation of simulation activities in order to acquire knowledge of trading rules; and also competitions between young traders from different schools or universities.

In order to exploit the potentialities of information technology, the Community has to create a widespread entrepreneurial culture, and increase the qualifications and level of technical knowledge of employees and the potential workforce. In sectors requiring high qualifications job vacancies exceed supply because of the lack of qualified workers. The information technology sector[158] is one of the most dynamic in the Community and currently represents more than 15% of its GDP. It is also growing significantly more than other sectors. It has high employment potential because it is creating new business opportunities. New market niches are appearing and, in response, new operators have to be found.

In the last decade the outflow of qualified workers from Europe to the US has increased. Structural action is therefore needed in the cases of both young and older people in order to train the first and retrain the second. The two are also linked: the re-qualification of older workers is made easier by training for flexibility at school level. The results can also improve the overall level of entrepreneurship.

Information technology products also have to be offered at low prices in order to gain a high level of penetration in all classes of the population. The price and the speed at which these products are changing still represents one of the major barriers to their diffusion.

Finally, significant restructuring is currently taking place in working methods within companies. Hierarchical differences are being reduced and priority is being given to group work and individual autonomy. A "polyvalence of competencies" and a higher degree of personal responsibility are required. This, in turn, is leading to a fast-moving job market, a need for continuous training and focused job switches.

Yet the European market is currently characterised by the lack of such training, and by difficult access to new technologies. The work force is consequently unqualified for the emerging "new economy".

6. The administrative burden

Starting a company is hampered in Europe by a number of administrative procedures. Especially in southern European countries such as Italy, Greece and Spain, the administrative burden is two or three times that in the US and also in some northern European countries such as Denmark or Luxembourg. This has a direct negative impact on the maintenance of the time advantage which a new start-up company can have, and indirectly on the initial budget of a firm.

It is better to introduce stricter supervisory controls when a company has been set up than to hamper the initial constitution of the firm. This would foster risk capital formation. The same applies to minimum capital formation requirements, which are sometimes prohibitive for start-ups that have not yet accumulated capital.

This situation has cultural roots. The US and European entrepreneurial and political classes have different mental approaches.

In the US, business development and the creation of economic value are seen as primary goals, with the creation of jobs an indirect effect. This supports a less risk-averse approach towards innovation. In Europe the social aim is considered the primary goal, with the creation of new companies considered an instrument to generate jobs rather than an end in itself. Social targets require a more conservative approach, which explains the more risk-averse behaviour and the more complicated administrative registration requirements and patent

[158] Mobile phones, digital television, Internet, audio-visual services, computer networks, tele-distribution of optic networks, etc.

filing. While in the US the relatively light administrative burden enhances the growth of companies, in Europe the relative heavy burden is designed to protect employees.

Changing the situation in Europe therefore requires a change in political focus. And if the role of national intervention in economics[159] is to be reduced, its role must be taken over by the private sector.

In order to avoid over-regulation and excessive burdens, especially on SMEs, promoting simpler regulation is essential. Business requires a stable, transparent and accessible legislative framework, flexible enough to facilitate entrepreneurship and to stimulate investment and innovation. The Commission's initiative "Simplification of Legislation" – SLIM – aims to increase transparency, to establish more systematic consultation between Member States and to develop coherence within different national regulations initiatives throughout the EU.

7. Job creation

Venture capitalists do not pour money into a company and wait for returns. They become involved as board members and management advisors in order to define business plans. But such investors need to have a fair reward for the risks they take.

Venture capital opens up possibilities for young people who wish to implement innovative ideas. It also opens up new possibilities for older people with experience. The leverage effect of venture capital is high. Investors lose only the amount they have invested in the event of failure, but achieve thirty, forty or more times what they have invested as return if the investment succeeds. There is no room for a cautious approach, because with start-ups there is no product, no company, only a few people and an idea.

Risk capital is a non-conventional financing method through which the providers of funds assume more risks than investors in conventional financing[160]. Adequate security or collateral rarely exists in the case of venture capital investment. The potential return earned is uncertain and depends on the growth potential of the business. Conventional lenders, on the other hand, generally earn their returns in the form of interest charges and scheduled repayments.

Because for any individual the investment risk is high, a diversified group of investors intervening in a diversified group of companies substantially reduces the risks. They never invest in a single product but in companies and products that have a large potential market.

There also exists a certain cut-off under which venture capitalist cannot invest because the companies can't absorb enough financial resources in order to make a difference in the portfolios of the investors.

When venture capitalists invest in early-stage companies, the current performance of the IPO market does not affect their decision. The price at which they invest is more determinant than the amount they invest, because start-ups need several years to develop their products and further years to build up their sales to qualify for an IPO. A company which is invested in today does not qualify for IPO for several years and today's IPO market situation is therefore not relevant.

[159] Privatisation policy, pension reform, degree of legislative constraints, etc.

[160] Such as bankers for lines of credit or mortgage holders.

The simple fact that the US Nasdaq is more liquid than European stock exchanges of the same size attracts entrepreneurs who want to develop their businesses. For this reason US IPOs raise, on average, more capital than equivalent operations in Europe.

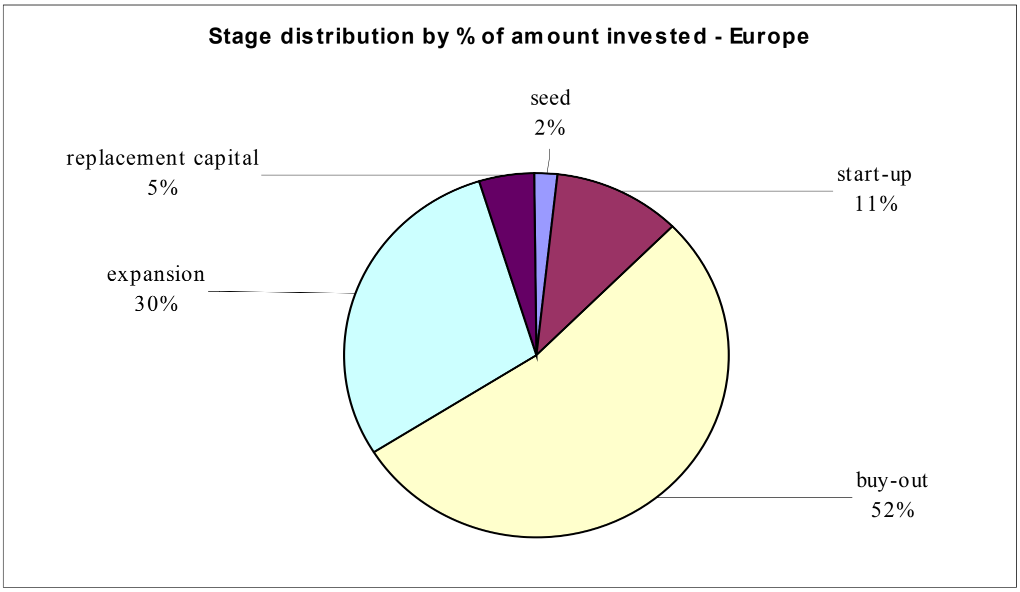
The interdependence between private equity and capital markets is essential. Most companies backed by venture capital on high growth markets have seen their natural development in IPOs. Even if highly innovative companies do not have high potential in job creation in terms of number of jobs, nevertheless the jobs they do create are on average permanent positions and of high quality. Furthermore when the innovative process becomes constant over time, the employment potentialities increase rapidly in the further development stages of the company. To attract higher-skilled workers, higher wages are paid.

Start-ups, early stage business, high growth small and medium size enterprises, technology- and R&D based business have more difficulty in finding adequate financing especially because of their higher risk potential.

The advantage of venture capital is the fact that it does not increase the financial burden on the company, because the funds do not have to be repaid. From the point of view of the company the new funds represent only a change in the ownership structure.

The two most developed national capital markets in Europe are the German and the British. The latter is characterised by a significant use of the capital to finance buy-outs[161]. Less than 5% are used for early-stage financing, while in Germany the figure is significant higher. Expansion funding[162] and bridge financing[163] are also determinant. These are late-stage financing methods.

Graph 12



Source: European Venture Capital Report

[161] Take-over of a company using borrowed funds. In case of Management Buy-outs -MBOs- a company or a subsidiary is purchased by the people who run it; the management. In case of Management Buy-ins –MBIs– an outside manager or group may buy into a company with the support of private equity investors.

[162] Funds used when companies are trading profitably in order to allow further growth and expansion.

[163] Funds needed by a company in the transition from being privately owned to going public.

In the EU a large fraction of the venture capital raised is invested in management-buy-outs – MBOs – and corporate restructuring operations, which have both a relatively small impact on job creation, or even have a job-destructive impact. In comparison, investments in the early stage of enterprises create a high number of both high and low-skilled jobs. These jobs are generally not temporary, but permanent positions (provided, of course, that the firm succeeds).

European firms are currently investing too little in the "new economy"; and this is leading to a low creation of jobs. But the low volume of investment is not the only problem. Most companies are failing to reorganise their internal procedures in order to exploit and adapt to the new technological potential of the investment which *is* carried out.

For example, most companies are setting up web pages; but only a quarter or less are also setting up on-line commerce possibilities. This applies to Europe and even to the US. The new technologies are mostly used in order to automate and speed up internal operations and processes, without considering modifications to management systems and possible applications external to the company.

One of the most innovative ideas has been to attract and offer venture capital on-line. This makes possible an easy overview of the potentialities as companies are categorised in stages of development, size, geographic location and competitive strategies. This differentiation permits the creation of specialised on-line marketplaces to match offer and demand. In recent years EU information technology companies have obtained one-third of the total amount of venture capital received in the US, with a direct effect on the growth potential of jobs.

In this fast-developing environment, the situation presented does not always have a win-win result. Internationally, labour unions are facing a decline in their membership and influence. In companies of the new technology sector – information and communications technology, media and software – labour unions are almost non-existent. The reality of working is changing from the traditional wage/salary-based system of remuneration to one based on freelance work and performance-based pay. The standard 35-40-hour week is being replaced by one in which individuals work for 50 to 60 hours a week.

The traditional focus of trade unions – the opposition of labour to capital – is losing influence. Employees often own shares in the company for which they work. Proposals for pension systems in Europe demonstrate how unions have begun to adapt to the changing environment.

What unions must now aim for is not just higher wages, but wage flexibility and equal educational opportunities for everyone. Training will be one of the major source of skills for the labour force, and skills will represent the most important asset for workers in the knowledge economy.

8. Future trends

The European market is led by acquisition finance. The loan and the bond markets are providing a range of complementary financing products, with loans being used for immediate funding for mergers and acquisitions, while the bond market provides longer-term refinancing at successive stages.

The present situation causes European entrepreneurs to depend on bank loans to start their businesses. This is particularly inadequate and counterproductive in the case of start-ups, for which initial cash flows are likely to be limited or even negative. Bank facilities have the disadvantage of being less flexible in terms of the price and time conditions applied, more expensive and generally do not provide advisory support functions compared to venture capital.

Different financing methods, such as the use of securitisation and mentoring, are increasing in relative importance. “Mentoring”[164] is an initiative strongly supported at European level, as more flexible instruments have to be implemented by financial institutions such as micro-credits for credit unions, savings banks or informal investors in order to support SMEs of different business sectors, as well as high technology companies.

The use of securitisation – the process of raising finance for customers by selling their securities rather than lending them money directly – is spreading quickly and may represent an additional financing method even for small and medium size enterprises. The advantage of the method is its relative low cost, while accessing to bond markets can be very expensive for low-rated companies. The latter have, in fact, to pay high premiums to investors because of the higher credit risk, while high-rated companies can raise funds on the bond market without paying high premiums.

The disadvantage of the European securisation market compared to that of the US, is that the latter is homogenous. Companies can pool assets denominated in the same currency in which they issue bonds. Using the € for this market can overcome this disadvantage, but regulatory regimes within the Member States still diverge.

The basic requirement of capital investors is to be able to diversify their portfolios so as to reduce the general risk, while at the same time having an adequate rate of return. They need to achieve a net positive balance between the successful and the unsuccessful.

In these circumstances, in order to attract investors, firms have to respect disclosure, transparency and corporate governance standards. But this is particularly difficult for small and medium size enterprises. For this reason it is important that uniform accounting, disclosure and transparency rules are set for every company. Furthermore a high degree of fragmentation is present within the regulated stock markets and regulatory organisations. Consolidation has to be achieved, not only at market level, but also at a supervisory level through having a unique supervisory authority in order to enhance the market capitalisation and the uniformity of the rules applied. Both factors are driving factors for venture capital.

A number of venture capitalists are creating syndicates to finance enterprises with large investment requirements. In order to sustain start-ups as well, such syndicates have to be encouraged also to include early stage investments in their investment portfolios. These can provide diversification in the investment portfolios when they reach critical mass.

In order to exploit efficiently all the potentialities of common investment instruments used for financing, ranging from subordinated debts, preferred shares and private equity, the instrument or the combination of instruments have to be chosen in relation to the development stage of the company (see Table 1). It is easier to acquire a business that has already reached its critical mass than to build one organically.

The critical issue is to have local expertise[165]. Venture capitalists in Europe continue to look for a way to buy companies cheaply. Driven by the recent good performances of Internet

[164] *"A sheltered relationship that allows learning and experimentation to take place and personal potential and new skills to flourish through a process in which one person, the mentor, supports the career and development of another, the mentee, outside the normal superior/subordinate relationship. Mentoring is increasingly used to support the personal/professional development of women"*, http://eurodic.ip.lu:8086//cgi-bin/edicbin/expert.pl.

[165] *Financial Times*, "Survey: Private equity".

companies, incubators are often chasing deals to provide seed funding, technical developments and headhunting services for companies in this sector.

Table 1 Type of venture capital investment

Type of venture capital investment	Example of usage
Purchase of stock (equity)	Growth, expansion and R&D
Loan (debt)	Operations (i.e. acquisitions, etc.)
Combination of stock and loan	Product launch (etc.)

Investment banks may be new entrants in the sector. They have historically been paid for their advisory functions, management and underwriting functions and for raising money to finance deals. In addition, some are beginning to compete with venture capital funds with the aim of retaining the advisory function and providing financing, but also of gaining a part of the equity. But investment banks are suitable funding sources only for already developed companies.

Considering the demand side, the major difficulty is attracting the scarce venture capital present on the markets. Capturing the interest of the investor is the most important thing; and the main focus must be the target market. This has to be large enough to justify the planned investment. Venture capitalists will be less interested to invest large amounts of money in companies for which the market is limited and has limited growth potentialities. On the other hand, a focus on markets which have not yet been exploited will be attractive. Investors are also likely to be more willing to invest in environment-related or biotechnology companies than in traditional ones.

Certain new forms of funding, such as “incubators” that offer funds and expertise to new-economy companies in return for equities, are not covered by an authorisation framework. They are therefore opening themselves to litigation if deals do not go well. Commercially, the lack of a legislative framework for e-commerce is therefore reducing its potential development. Factors that inhibit the development of e-commerce are the speed of connection to electronic networks, the lack of secure connections, lack of adequate service/products, insufficient knowledge of the process and the lack of security in the transactions. The last two issues are relatively more significant to the developments of e-commerce.

Venture capital corporations, as collectors of funds, and venture capital funds invest in companies. The latter are closed-ended funds with a legal entity. A venture capital fund manager creates it by issuing certificates in order to raise funds. A venture capital fund certificate is regarded as a security. Harmonised Community legislation is lacking for venture capital funds. Under the general good principle the cross-border commercialisation of funds' units in the Community is restricted and cannot reach its critical mass.

CONCLUSIONS AND FUTURE DEVELOPMENTS

Financial services – banking and insurance sector – represent a significant percentage of EU GDP and have a high potential for employment expansion. As the European situation is characterised by a significant degree of fragmentation in both the economic and legislative dimension, the goal is to achieve a market-driven mechanism in order to pass from a fragmented framework to a *specialised* one, in which the geographical dimension is overtaken by a *sector-based focus*. This relates to both the wholesale and the retail financial markets.

The long-term goal of the action to achieve a single market in financial services is to create and develop an *efficient capital market*. This will both reduce the cost of raising capital and make possible a much *faster response* to the specific needs of operators on financial markets. Faster response times are critical to achieve competitiveness, and to maintain a competitive advantage, especially for businesses linked with the new economy.

Equity supply has more than doubled over the last decade, due to privatisation and liberalisation, and to the corporate restructuring which has been boosted by the introduction of the single currency. Issuers are becoming more *proactive* because they are spontaneously offering themselves for market listing.

Investors, for their part, are becoming enthusiastic at the performances of pan-European equity funds, leaving national ones to stagnate. Many issuers have raised funds from short-term investors, rather than stable institutions. But the result has been volatile pricing, because many shareholders bought stocks only to resell them later, and make short-term easy profits. This has driven prices down. In this framework, stock market indices have turned from relatively objective indicators of market performance to reflections of investment portfolios.

IPO volume reached high levels mostly due to the technology, media and telecommunications – TMT – sectors. This opened up new sources of capital and converted retail investors into venture capitalists.

It has been observed that retail investors buying financial products – for example life insurance – do not look for the best deal. Normally they follow sentimental recommendations or focus on one known company. The sophistication of the customer is still relatively *low* in terms of information usage.

The cult of equity investment is spreading. In particular, it is becoming a good mechanism for allocating *long-term capital* within economies. Yet the stock market capitalisation of the EU is approximately half that of the US. The percentage of cross-border trading is limited and private savings – 20 per cent of GDP – are not invested efficiently. As a result, job creation is limited, because returns on private savings and investment decisions are not optimised. The capitalisation of European investment and pension funds and insurance instruments account alone for more than the EU's GDP.

The current wave of merger proposals is one of the *major market-driven forces* moving towards specialisation. However, it is not a question of establishing linkages between different technical and operational gateways or strategic linkages between markets, but of achieving an environment within which *specialised segments* on the supply and the demand sides can operate efficiently. Moreover aborted merger proposals have demonstrated how nationalistic feelings and different economic interests can result in incomplete merger plans. Merger proposals need to involve the creation of a central cross-market counterparty for

Europe's securities markets in order to achieve a complete merger of the settlement and clearing functions.

High-technology specialised markets, which are supposed to represent the major source of risk capital and therefore source of future employment possibilities, are characterised generally by a *high degree of volatility*. Volatility in individual stocks is directly linked to an increase in investment risk. Big markets are still dominated by public-sector borrowers and by mutual banks that show little enthusiasm for stock market flotation.

Volatility can be explained, on the one hand, by the increased speculative activities of hedge funds; and, on the other hand, by an insufficient liquidity in the market. Stock markets have also been competing to trade in the stocks of start-ups in the new economy, and have lowered their listing standards to achieve the goal. This raises the issue of positioning high-volatility stocks, such as technology stocks, in venture capital portfolios rather than on publicly listed markets. Nevertheless this would not permit the wide development of a risk capital market. The creation of specialised stock markets is therefore essential.

Beside the creation of the necessary conditions for the development of an efficient capital market, *easy access* to it has to be guaranteed on competitive terms. Mutual recognition of prospectuses and prudential and supervisory rules based on the principle of the home Member State, would encourage issuers and intermediaries to trade and deal easily across borders, at lower costs and without discrimination towards foreign financial products.

Beside the implementation of the Financial Services Action Plan, every action undertaken at Community level has to face a *trade-off* between the maximum harmonisation of business rules within a home-country control system, and a minimum harmonisation approach within a system of national rules in the host country.

There may be situations in which the mutual recognition of the provision of services and products may result in investors suffering from *discriminatory behaviour* towards foreign companies or service providers because the products offered and authorised by one Member State may not be authorised in another. The result is that, when the mutual recognition of practices based on the principle of the home Member State does not provide an environment based on perfect competition, *harmonisation* may be required.

On the supply-side, investors must be able to *access free investment opportunities* without being hampered by legal, administrative or information barriers, nationally or internationally. Better disclosure conditions, the elimination of investment restrictions and the harmonisation of tax treatment throughout the EU, would permit institutional investors, who currently manage a significant amount of savings, to increase potential returns on investment.

Removing tax distortions, in particular, would increase the free movement of capital which is determinant for risk capital formation. Higher returns *would reduce the risk-adverse behaviour of retail investors* and permit institutional investors to channel savings into more productive investment forms. Personal savings are currently one of the worst-used resources in the Community. The capacity to *channel financial resources* would give institutions such as pension funds or life insurance companies a much more significant role in the investment.

Another factor is the current development of the "new economy", including the operational and legislative framework to which services and operations on the Internet or through electronic networks are subjected. Consumers taking the initiative of accessing web sites operated by financial service providers in another Member State, for example, should be aware that the web site operates under the laws of the foreign country.

The taxation of services or products supplied and delivered through wire is becoming increasingly difficult because of *different fiscal treatments* and the difficulty of *following the tracks* of the products or services supplied through the electronic network. This is partly due to the *high volume* of transactions performed, the *rapidity* of the performances and the *unsupervised framework of action* under which electronic networks act.

Fiscal policy is in fact one of the major opportunities Europe has to achieve full employment. After years of negative employment performance in the Community, Europe has a chance to turn its labour markets around. Workers have been undergoing a high degree of *wage restraint*. In the last few years the increase in wages has lagged behind the advance in nominal domestic product. One direct effect is that employment is rising faster than it has done in the past, even in upswings of the economic cycle. After the fiscal austerity to qualify for EMU membership, governments have the possibility of making substantial reductions in taxes, especially on labour so that unions will continue their current wage moderation policy.

Governments have taken the opportunity to implement directly employment initiatives such as minimum wage policies or initiatives for young people for the creation of temporary work. Nevertheless such efforts have had relatively little impact on productivity, and structural improvements have been limited. This underlines the relative superiority of a *market-driven approach* compared to a government-based one. Furthermore, previous experience underlines the fact that employment strategies have been generally nationally, and to a lesser extent regionally, focused. Nevertheless a wider market-driven approach is overtaking the national dimension and leaving employment performances mostly dependent on a Community and regional level.

Tax harmonisation and the reduction of regulatory and administrative burdens is improving the business environment; however Europe is lacking the *development of service markets*. Europe's employment deficit is partly determined by a service gap relative to other economies e.g. the US. The growth of the "new economy" is increasing the need to remove barriers to the trading and supplying of new products. Most of these will have to be conceived as services rather than goods, and most of the traditional ones will have to be *reoriented and rethought* in order to be supplied as services.

For example a company such as Amazon.com already performs quite well through electronic networks in the short run. However, it will meet difficulties in the longer run, when the volume of transactions increases too much for deliveries of the products to be made in an adequately short timeframe. The distribution channel has not been reorganised in order to match the new economy context.

The most competitive companies will be those which, understanding the fact that a "new economy"-based demand does not match a traditionally-based supply, will reorient their products. If books cannot be delivered in an adequate timeframe, the offering of books in electronic form, which can *itself* be downloaded, can represent the solution. Furthermore, agreements can be made through which the payment of an annual charge creates a long-term relationship with the customer. In order to achieve a more *service-oriented focus*, which will be competitively more relevant, the simple supply of products, i.e. books, music, etc., can be linked to future services such as the supply of upgrading for electronic products, i.e. upgrades of dictionaries, encyclopaedias, etc..

The natural development of this approach creates a constant flow of physical products and transforms them into services. Many traditional products, commercialised through traditional methodologies, can be reoriented.

The trend toward globalisation and a knowledge-driven economy has accelerated. The challenge of innovation has been largely taken over by innovative ventures such as high growth companies based on advanced technologies. But *whether a company is technology-based on not*, *uniform and common conditions have to be created* in order to allow every kind of company and business to adapt to the new changing environment, and to invigorate the entire economic and social fabric. This because all companies have the potential to achieve a competitive position if basic conditions are present.

In *traditional sectors* too, these developments are likely to generate employment opportunities. Low-technology industries are "buying in" innovation from suppliers and advisors. Traditional businesses have the possibility of reconverting their operations to increase sensitivity towards the *natural environment*, which will be one of the leading sources of demand for new products and services and of employment possibilities.

Innovation does not have to be directly founded on research. It can also be linked to *new management and investment methods*, which can be performed as much by low- as by high-technology-based companies.

The transfer of technology to SMEs, and the development of their capacity to absorb the technology, is a pillar innovation. *Clustering* is therefore mostly encouraging; but where technology "valleys" cannot be created, either because the related businesses and companies are geographically separated or because of the lack of specific resources, *technology-specific competence networks* have to be created.

Globalisation is acting on three sectors. It is creating

- an *internationalisation of commerce*, which has overtaken productivity growth;
- the *internationalisation of capital flows*; and
- *growing information flows*.

The effects of a development have to be judged on the basis of the structural changes they create both in the short and in the long run. Even if the more visible and short-term related changes are currently to be seen in the high-technology sector, the major effects will be observed in the traditional sectors, as restructuring processes take place.

Local employment activity does not generally arise spontaneously. The obstacles to achieve financing for start-ups are increasing the need to develop specialised risk capital markets. Some financing measure are relatively unknown, such as micro-credits, local investment capital and resources of corporate foundations which have to be adequately publicised in order to gain the awareness of small investors. A *unified system* for the sponsorship of alternative financing methods should be outlined.

The private sector is the main driving force behind economic activity in Europe. The net job creation potentialities are currently in the service sectors, especially those that address local needs. There is therefore a need to develop and *support entrepreneurship* at local level, particularly in *start-ups and SMEs* which face difficulties in financing themselves. The competitive position of these companies is dependent on the competitive position of the territory and the business in which they are involved, as well as on the availability of human and social resources.

The *lack of skilled workers* is one of the major problems for the new economy. It increases the mismatch between demand and supply in the labour market. A direct result is pressure on wage-costs as firms compete for scarce skills. This calls for more investment in learning *throughout the entire working period,* including both training in basic education and upgrading training. Though the direct provision of public finance for companies risks distorting competition and the crowding out of the private sector, fiscal incentives to increase the training of employees are probably necessary.

Finally, if productive employment is to be increased, ways must be found to improve the competitivity of companies other than by cost-cutting reductions in the labour force. One important possibility lies in improved asset management.

But this will not be achieved without more efficient capital markets; and the key to this, in turn, is improved integration at the European level.

BIBLIOGRAPHY

Community Institutions

Commission of the European Communities

Amended Proposal for a Directive of the European Parliament and of the Council amending Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), COM(2000)329 final, Brussels, 30.05.2000

Amended Proposal for a Directive of the European Parliament and of the Council amending Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) with a view to regulating management companies and simplified prospectuses, COM(2000)331 final, Brussels, 30.05.2000

Amended Proposal for a European Parliament and Council Directive relating to the taking up and pursuit of the business of credit institutions, COM(1999)109 final, Brussels, 22.07.1999

Amended Proposal for a European Parliament and Council Directive on the taking up, the pursuit and the prudential supervision of the business of electronic money institutions, COM(2000)333 final, Brussels, 29.05.2000

Communication from the Commission to the Council and the European Parliament, Review of SLIM: Simpler Legislation for the Internal Market, COM(2000)104 final, Brussels, 28.02.2000

Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, 2000 Review of the Internal Market Strategy, COM(2000)257 final, Brussels, 03.05.2000

Communication from the Commission to the Council and the European Parliament, Fifth Report of the Commission on the implementation of the Decision on the provision of Community interest subsides on loans for small and medium-sized enterprises extended by the European Investment Bank under its temporary lending facility (the SME Facility), COM(2000)376 final, Brussels, 22.06.2000

Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, Acting Locally for Employment. A Local Dimension for the European Employment Strategy, COM(2000)196 final, Brussels, 07.04.2000

Communication from the Commission to the Council and the European Parliament, Innovation in a knowledge-driven economy, COM(2000)567 final, Brussels, 20.09.2000

Communication from the Commission, Community policies in support of employment, COM(2000)78 final, Brussels, 1.03.2000

Communication from the Commission to the Council and the European Parliament, Progress report on the Risk Capital Action Plan, COM(2000)685, Brussels, 18.10.2000

Communication from the Commission to the European Parliament on the co-ordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions, SEC(2000)69 final, Brussels, 19.01.2000

Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, Benchmarking. Implementation of an instrument available to economic actors and public authorities, COM(97)153 final, Brussels, 16.04.1997

Communication from the Commission to the European Parliament concerning the common position of the Council on the adoption of a Parliament and Council Directive on the reorganisation and winding-up of insurance undertakings, SEC(2000)1714 final, Brussels, 19.10.2000

Communication from the Commission to the European Parliament, the Council, the European Central Bank and the Economic and Social Committee, A Framework for Action on combating fraud and counterfeiting of non-cash means of payment, COM(1998)395 final, Brussels, 01.07.1998

Communication from the Commission, Towards a single market for supplementary pensions, COM(1999)134, Brussels, 11.05.1999

Communication from the Commission to the European Parliament concerning the common position of the Council on the adoption of a European Parliament and Council Directive on company law concerning takeover bids, SEC(2000)1300, Brussels, 26.07.2000

Communication from the Commission to the Council and the European Parliament, EU Financial Reporting Strategy: the way forward, COM(2000)359, Brussels, 13.06.2000

Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions - The competitiveness of European enterprises in the face of globalisation: how it be encouraged, COM(1998)718 final, Brussels, 20.01.1999

Communication from the Commission to the Council and the European Parliament, Risk capital: Implementation of the action plan. Proposals for moving forward, COM(1999)493 - EN

Communication of the European Commission, Risk Capital: A key Job Creation in the European Union, SEC(98)0552, 04.1998

Commission Interpretative Communication, Freedom to provide services and the general good in the insurance sector, COM(1999)5046, Brussels, 02.02.2000

Communication from the Commission, The statutory audit in the European Union: the way forward, 08.05.1998 - EN

European Economy, Supplement A, No 12, 12.1999

European Economy, Supplement A, No. 2, 02.1999

Financial services: Building a framework for action, Communication from the Commission, COM(1998)625 final, Brussels, 28.10.1998

Implementation of the Seventh Directive in EU Member States, 01.01.1998

Institutional arrangements for the regulation and supervision of the Financial Sector, 01.2000-10-30

Overview of the responses to the Green Paper on supplementary Pensions in the Single Market, COM(97)283, 06.04.1998

Proposal for a Directive of the European Parliament and the Council concerning life insurance, COM(2000)398, Brussels, 28.06.2000

Proposal for a European Parliament and Council Directive amending Council Directive 93/6/EEC on the capital adequacy of investment forms and credit institutions, COM(97)71 final, Brussels, 16.04.1997

Proposal for a European Parliament and Council Directive on insurance mediation, COM(2000)511 final, Brussels, 20.09.2000

Proposal for a European Parliament and Council Regulation amending Council Regulation (EC) No 2223/96 on the reclassification of settlement under swap arrangements and under forward rate agreements, COM(1999)749 final, Brussels, 10.01.2000

Proposal for a European Parliament and Council Directive on a common framework for electronic signatures, COM(1998)297 final, Brussels, 13.05.1998

Proposal for a European Parliament and Council Directive amending Council Directive 79/239/EEC as regards the solvency margin requirements for non-life insurance undertakings, COM(2000)634 final, Brussels, 25.10.2000

Proposal for a European Parliament and Council Directive amending Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) with a view to regulating management companies and simplified prospectuses, COM(1998)451 final, Brussels, 17.07.1998

Proposal of the European Parliament and of the Council on the admission of securities to official stock exchange listing and on information to be published on those securities, COM(2000)126 final, Brussels, 20.07.2000

Report from the Commission to the European Parliament and the Council, Growth and Employment Initiative. Measures on financial assistance for innovative and job crating Small and Medium Sized Enterprises (SMEs), As at 31 December 1999, COM(2000)266 final, Brussels, 12.05.2000

Report from the Commission to the European Parliament and the Council, the European Central Bank and the Economic and Social Committee, Financial Services Action Plan, Progress Report, COM(1999)630 final, Brussels, 24.11.1999

Report from the Commission, Progress on Financial Services, Second Report, COM(2000)336 final, Brussels, 30.05.2000

Report from the Commission to the Council and the European Parliament on Consumer complaints in respect of distance selling and comparative advertising, COM(2000)127 final, Brussels, 10.03.2000

Report from the Commission to the Council on the application of the Merger Regulation thresholds, COM(2000)399, Brussels, 28.06.2000

Study on pension schemes of the Member States of the European Union, MARKT/2005/99-EN Rev.2, 05.2000

Report from the Commission Results of the fourth phase of SLIM, COM(2000)56 final, Brussels, 04.02.02000

Report on social protection in Europe 1999, COM(2000) 163 final, Brussels, 21.03.2000

Report to the European Council - Job opportunities in the information society exploiting the potential of the information revolution, COM(1998) 590 final

Report to the Insurance Committee on the need for further harmonisation of the solvency margin, COM(97)398 - EN, 24.07.1997

Risk capital markets, a key to job creation in Europe. From fragmentation to integration, *Euro Papers*, No 32, 01.1999

Study on the prudential regulation of occupational pension funds, 19.11.1999

US perspectives on consumer protection in the global electronic marketplace, 21/4/1999

Council of the European Union

Document of the Presidency, Economic occupation, reforms and social cohesion Towards an Europe of the innovation and the knowledge, Brussels, 12.01.2000

European Central Bank

Possible effects of EMU on the EU banking system in the medium and long term, Brussels, 05.11.1999

Report on Electronic Money, 08.1998

European Parliament

Committee on Economic and Monetary Affairs, Hearing on the Communication from the Commission: Implementing the Framework for financial markets, 19.11.1999

Committee on Economic and Monetary Affairs, Hearing on the Communication from the Commission: Implementing the Framework for financial markets, 8.11.1999

Common Position on the reorganisation and winding up of credit institutions, C5-0423/2000, 04.09.2000-10-28

Draft Report on the Commission communication "Risk capital: Implementation of the action plan", 05.06.2000

Other Institutions and Research Centres

Deutsche Bundesbank, Ein Alan Greenspan macht keine neue Aera, 1.08.2000

Deutsche Bundesbank, Electronisches Geld und seine bankaufsichtliche Relevanz, 15.07.2000

Deutsche Bundesbank, iX-Fragen an den "Finanzplatz e.V.", 2.08.2000

Deutsche Bundesbank, Keine Angst mehr vor dem E-Geld, 31.07.2000

EVCA Homepage, *Yearbook 2000*, European Private Equity Highlights,

FEFSI, The future of supplementary pension in Europe, *Discussion Paper PI-2002*

Fund Forum International, Conference Day One, 05.07.2000

Institut fuer Finanzdienstleistungen, Hearing of the Committee on Economic and Monetary Affairs on the Action Plan of the Commission Implementing the Framework for Financial Markets, Brussels, 23.11.1999

IOSCO, 25th Annual Conference, 05.2000

LSE, *Rejection of approach from OM Gruppen*, 29.08.2000

OECD, OECD Ministerial Conference, "OECD Action Plan for Electronic Commerce", Ottawa, 7-9.10.1998

OM, *OM Group Offer for LSE PIc*, 11.09.2000

Simpson Thacher & Bartlett, Structuring International Acquisition Transactions, 21.08.2000

UNCTAD, Cross-border mergers & acquisition dominate foreign direct investment flows, 11.11.1998

Works

FOX, *Three European stock exchanges plan merger, from Euronext exchange*, 20.03.2000

Fulman R., Venture cap did well but debt did better, 11.08.2000

Ghirardani P., Gwynne R., Harwood S., Fighting Business Fraud, Stephenson Harwood, 08.1996

Heltrun, The impact of the development of electronic commerce on the employment situation in European commerce, Athens, 06.1998

Santangelo G., *The Single Market for Financial Services: the European Response to the Process of Financial Transnationalisation*, University of Reading, 04.1997

Articles

B*usinessweek*, Europe's Bankers Need One Set of Rules, 3.07.2000

Economist, A suitable case for treatment, 28.06.2000

Economist, Breaking cover, 20.05.2000

Economist, Capitals of capitals, 9.05.2000

Economist, Define and sell, 26.02.2000

Economist, E-money revisited, 22.07.2000

Economist, High-tech finance, 26.10.2000

Economist, How mergers go wrong, 22.07.2000

Economist, Investors, unite, 25.10.1997

Economist, Regulating the Internet, 10-16.06.2000

Economist, Running into trouble, 17-13.06.2000

Economist, Settling scores, Leaders

Economist, Shocking times in Throgmorton Street, 2.09.2000

Economist, Shopping around the web, 26.02.2000

Economist, Stockmarket valuations, 12.10.2000

Economist, Survey international banking, On a wing and a prayer, 17.04.1999

Economist, The failure of new media, 19.08.2000

Economist, The other sort of channel conflict, 20.05.2000

Economist, The virtual threat, 20.05.2000

Economist, The virtual threat, Survey

Economist, Untangling e-comonics, 23.09.2000

Financial Times, A blueprint for the new exchange, 18.09.2000

Financial Times, Accountants to get the measure of the person, 30.08.2000

Financial Times, Age of discontent, 10.08.2000

Financial Times, Agence Europe: Ecofin Council agrees to speed up work for strengthening integration of financial markets, 7.06.2000

Financial Times, Another link in Nasdaq's chain, 03.05.2000

Financial Times, ASPa for consumers, Survey

Financial Times, Banking in Europe, Survey

Financial Times, Banks in row over M&A tables, 28.08.2000

Financial Times, Battle for the London exchange: A complete guide, 1.09.2000

Financial Times, Big banks to create securities counterparty, 22.10.2000

Financial Times, Big boost for Germany's pension reforms, 05.09.2000

Financial Times, Boost for German pension deal, 08.08.2000

Financial Times, Bourse merger hits new problems, 18.05.2000

Financial Times, Bourses merge, 17.04.2000

Financial Times, Braclays and Nomura to open shopping portal, 12.10.200

Financial Times, Branch equity, 6.07.2000

Financial Times, Brussels aims to quicken financial services harmonisation, 4.07.2000

Financial Times, Brussels investment boost, 31.05.2000

Financial Times, Changing the guard, 21.04.2000

Financial Times, Choice of currency to be key issue, 03.05.2000

Financial Times, Cross-border mergers, 10.10.1999

Financial Times, Deutsche Boerse approves LSE merger, 23.05.2000

Financial Times, Deutsche Boerse backs merger with London, 23.05.2000

Financial Times, ECB head rejects "new economy" claims, 5.07.2000

Financial Times, e-commerce support, Survey

Financial Times, Editorial comment: Strong economy brings more jobs, 12.07.2000

Financial Times, Emphasis moves to shareholder value, Survey

Financial Times, e-signatures get final approval, 01.07.2000

Financial Times, EU funds sales to soar, 20.08.2000

Financial Times, EU proposes investment funds be allowed to invest in wider range of assets, 31.05.2000

Financial Times, Euro Markets: Bourse fortunes tied to flotation, 2.10.2000

Financial Times, Euronext launches rival to LSE, 22.09.2000

Financial Times, Euronext plans new LSE move, 18.09.2000

Financial Times, Euronext ponder new approach to LSE, 24.09.2000

Financial Times, Euronext puts pressure on European markets, 21.03.2000

Financial Times, Euronext to adopt FTSE system, 22.06.2000

Financial Times, Euronext to create global equities market, 7.06.2000

Financial Times, Europe's chance for full employment, 11.07.2000-10-28

Financial Times, European e-business review, 1.02.2000

Financial Times, European equities overtake US strengths of telecoms, 2.07.2000

Financial Times, European IPOs: Technology drives the markets, Survey.

Financial Times, European Venture Capital Report Guide, 06.06.2000

Financial Times, Europe's bourses, 21.03.2000

Financial Times, Exchange set for management shake-up, 14.09 2000

Financial Times, Exchanges face legal action over use of iX name, 08.05.2000

Financial Times, France advances, 06.08.2000

Financial Times, Frankfurt exchange link plan be blocked, 18.05.2000

Financial Times, Frankfurt ponders hostile LSE bid, 12.09.2000

Financial Times, GEM and iX choose different paths, 7.06.2000

Financial Times, German exchange considers launching hostile bid for LSE, 12.09.2000

Financial Times, Germany urged to change tax on pensions, 25.20.2000

Financial Times, Goldman Sachs in e-venture, 13.06.2000

Financial Times, Green light for high-tech venture capital fund, 10.07.2000

Financial Times, Greenspan criticises "back office" market transactions, 16.10.2000

Financial Times, Hard talking begins in proposed exchange merger, 12.05.2000

Financial Times, Healty facade hides forex market frustrations, 2.06.2000

Financial Times, How would-be clients can discover hidden hazards, Survey

Financial Times, In need of a thorough overhaul, Survey

Financial Times, International capital markets 2000, Survey

Financial Times, International Capital markets, Survey on global finance

Financial Times, Irish Times: Business &Finance, 12.07.2000

Financial Times, iX may reduce settlement costs, 9.06 2000

Financial Times, iX merger. 12.05.2000

Financial Times, Key points of the merger, 03.05.2000

Financial Times, Keyboard's last word, 7.08.2000

Financial Times, Leading banks agree anti-money laundering code, 20.10.2000

Financial Times, Lex: UK gilts, 13.08.2000

Financial Times, Liffe offers LSE technology link, 20.09.2000

Financial Times, Lisbon bourse talks to join Euronext in 2001, 3.10.2000

Financial Times, LME hires OM Technology, 14.09.2000

Financial Times, LSE and Deutsche Boerse clear merger obstacle, 25.04.2000

Financial Times, LSE board faces vote rebellion over iX, 13.09.2000

Financial Times, LSE chief all but out merger with rivals, 25.10.2000

Financial Times, LSE could be valued at $1bn, 4.07.2000

Financial Times, LSE crises deepens, 15.09.2000

Financial Times, LSE to create European market for growth stocks, 7.10.2000

Financial Times, Malaysia modernises bond markets, 2.07.2000

Financial Times, m-commerce: Poised to deny America IT pie, European e-business review

Financial Times, Merrill offers new pensions, 10.07.2000

Financial Times, Ministers support fast EU rulings on bids, 15.05.2000

Financial Times, MPs to quiz exchange on listing shares in euros, 14.05.2000

Financial Times, Nasdaq to announce network link with NYSE, 12.06.2000

Financial Times, New wave of US stocks goes decimal, 25.09.2000

Financial Times, NYSE rules out hostile bid for LSE, 5.10.2000

Financial Times, NYSE steps up Euronext talks, 10.05.2000

Financial Times, Payroll taxes become a pain, 17.08.2000

Financial Times, Pension Fund Investment, Survey

Financial Times, Pension Fund Investment, Survey

Financial Times, Pension funds want solvency test scrapped, 18.07.2000

Financial Times, Personal Finance, 17.08.2000

Financial Times, Private equity - The Buy-Out Market 2000, Survey

Financial Times, Report calls for changes to spur venture capital funding in EU, 19.10.2000

Financial Times, Retail stockbrokers seek to delay vote on iX, 19.06.2000

Financial Times, SEC launches probe on audit, 08.08.2000

Financial Times, Seductive software services on offer, Survey

Financial Times, Sets may be scrapped early next year, 03.05.2000

Financial Times, SFE plans deal with clearing business, 14.09.2000

Financial Times, Shadow over the talks on potential Frankfurt merger, 05.04.2000

Financial Times, Shareholder prompted to rethink their votes, 12.09.2000

Financial Times, Shareholders control exchange's future, 13.09.2000

Financial Times, Stock exchange outsider with a record of reform, 21.04.2000

Financial Times, Stock markets 'must merge to survive', 23.05.2000

Financial Times, Stocks and Derivatives Exchanges 0300, Survey on E-Trading

Financial Times, Swedish state increased holding before bid, 13.09.2000

Financial Times, Talking Stock: Internet crunch-time?, 23.08.2000

Financial Times, The long view: Technology markets spread volatility, 20.10.2000

Financial Times, Trust managers set to offer pensions, 11.07.2000

Financial Times, UK and Germany consider Nasdaq deal, 02.05.2000

Financial Times, UK fund managers appeal on iX standards, 25.05.2000

Financial Times, UK mulls pension rescue fund, 13.08.2000

Financial Times, Watchdog examines Sweden's OM share trading, 13.09.2000

Financial Times, Wholesale banking, Survey

Financial Times, Banks question stock market link, 09.05.2000

IFS, Partnership in pensions: an assessment, 11.08.2000

IFS, Pension reform: An international comparison, 04.02.2000

IFS, The government's proposals for stakeholder pensions, Briefing Note No. 1, 10.1999

Inc, How to finance anything, 01.04.2000

Inc, Small Talk, 15.05.1996

Inc, The Defiant Ones, 04.10.2000

Inc, The forgotten role of venture capital, 04.10.2000

Inc, The French connection, 04.10.2000

La Repubblica, Borse in Rete: due campioni a confronto, 05.10.2000

La Repubblica, Interet: parte la prima banca giapponese solo in Rete, 12.10.2000

La Repubblica, La Borsa online ha fatto boom, 05.10.2000

La Repubblica, La carica dei baby-trader liceali e investitori, 05.10.2000

Licht A. N., *Stock market integration in Europe*, Harvard Law School, 03.1997

Red Herring, Eurobankers found missing!, 04.10.2000

Red Herring, Off the Infobahn and into a Rut, 04.10.2000

Red Herring, VCs in Europe, 15.03.2000

Single market news, Directive sur les OPA: Position commune du Conseil, No. 22, 07.2000

Single market news, Financial reporting standards: Commission outlines a new strategy, No. 22, 07.2000

The Standard, Nasdaq to Expand Role of ECNs in NYSE Trading, 13.06.2000

The Wall Street Journal, Insurers Eye Internet Via Banks, 26.06.2000

The Wall Street Journal, Long hours pose challenge to unions, 05.10.2000

The Wall Street Journal, Some Mergers Fail to Reach 'Day 1', 26.06.2000

Electronic addresses

http://eur-op.eu.int/opnews/100/en/t04012.htm

http://eur-op.eu.int/opnews/100/en/t11.htm

http://europa.eu.int/comm/economy_finance/document/financialmrkt/riskcapital_en.htm

http://europa.eu.int/comm/internal_market/en/amn/smn13/s13mn17.htm

http://europa.eu.int/comm/internal_market/en/company/account/index.htm

http://europa.eu.int/comm/internal_market/en/company/account/news/2k-187.htm

http://europa.eu.int/comm/internal_market/en/company/account/news/186.htm

http://europa.eu.int/comm/internal_market/en/company/account/news/1132.htm

http://europa.eu.int/comm/internal_market/en/company/audit/committ/index.htm

http://europa.eu.int/comm/internal_market/en/company/audit/news/1134.htm

http://europa.eu.int/comm/internal_market/en/company/audit/news/399.htm

http://europa.eu.int/comm/internal_market/en/company/audit/news/696.htm

http://europa.eu.int/comm/internal_market/en/company/company/news/takeoverfaq.htm

http://europa.eu.int/comm/internal_market/en/company/company/news/takeover2.htm

http://europa.eu.int/comm/internal_market/en/company/company/news/takeover.htm

http://europa.eu.int/comm/internal_market/en/company/company/news/34.htm

http://europa.eu.int/comm/internal_market/en/company/company/news/strategy.htm

http://europa.eu.int/comm/internal_market/en/company/company/news/studies.htm

http://europa.eu.int/comm/internal_market/en/finance/general/969.htm

http://europa.eu.int/comm/internal_market/en/finances/actionplan/progress1.htm
Financial Services Action Plan –First Progress Report

http://europa.eu.int/comm/internal_market/en/finances/actionplan/introexperts.htm
Forum Group of Market Experts – Explanatory note

http://europa.eu.int/comm/internal_market/en/finances/banks/2k-454.htm

http://europa.eu.int/comm/internal_market/en/finances/banks/307.htm

http://europa.eu.int/comm/internal_market/en/finances/banks/capad.htm http://europa.eu.int/comm/internal_market/en/finances/banks/coopl.htm

http://europa.eu.int/comm/internal_market/en/finances/banks/cpad.htm
Financial services: consultation launched on new capital adequacy framework

http://europa.eu.int/comm/internal_market/en/finances/company/company/news/1022.htm

http://europa.eu.int/comm/internal_market/en/finances/consumer/566.htm

http://europa.eu.int/comm/internal_market/en/finances/consumer/891.htm

http://europa.eu.int/comm/internal_market/en/finances/consumer/99-559.htm

http://europa.eu.int/comm/internal_market/en/finances/consumer/bio516.htm

http://europa.eu.int/comm/internal_market/en/finances/consumer/lv1.htm

http://europa.eu.int/comm/internal_market/en/finances/general/2k-24.htm
Financial Services Policy Group discusses securities markets

http://europa.eu.int/comm/internal_market/en/finances/general/2k-99.htm

http://europa.eu.int/comm/internal_market/en/finances/general/587.htm

http://europa.eu.int/comm/internal_market/en/finances/general/590.htm

http://europa.eu.int/comm/internal_market/en/finances/general/637.htm

http://europa.eu.int/comm/internal_market/en/finances/general/637.htm

http://europa.eu.int/comm/internal_market/en/finances/general/716.htm

http://europa.eu.int/comm/internal_market/en/finances/general/727.htm

http://europa.eu.int/comm/internal_market/en/finances/general/87.htm

http://europa.eu.int/comm/internal_market/en/finances/general/fsgp.htm
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http://europa.eu.int/comm/internal_market/en/finances/general/pogroup.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/116.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/2k-529.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/703.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/87.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/882.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/generalgood.htm

http://europa.eu.int/comm/internal_market/en/finances/insur/insen.htm

http://europa.eu.int/comm/internal_market/en/finances/pensions/447.htm

http://europa.eu.int/comm/internal_market/en/finances/pensions/507.htm

http://europa.eu.int/comm/internal_market/en/finances/pensions/856.htm

http://europa.eu.int/comm/internal_market/en/finances/pensions/pensions.htm

http://europa.eu.int/comm/internal_market/en/media/infso/sign.htm

http://europa.eu.int/comm/internal_market/en/smn/smn20/s20mn06.htm

http://europa.eu.int/comm/internal_market/en/speeches/spch114.htm

http://europa.eu.int/comm/trade/faqs/e_comm.htm

http://europa.eu.int/eur-lex/en/lif/dat/1998/en_392L0049.html

http://europa.eu.int/eur-lex/en/lif/dat/1998/en_392L0096.html

http://europa.eu.int/eur-lex/en/lif/dat/1998/en_398Y1214_02.html

http://europa.eu.int/eur-lex/it/lif/dat/1997/it_397R1310.html http://europa.eu.int/eur-lex/it/lif/dat/1997/it_398R0447.html

http://europa.eu.int/eur-lex/it/lif/dat/1998/it_398L0078.html

http://europa.eu.int/scadplus/leg/en/lvb/l2403a.htm

http://europa.eu.int/scadplus/leg/en/lvb/l24221

http://europa.eu.int/scadplus/leg/en/lvb/l26007.htm

http://europa.eu.int/scadplus/leg/en/lvb/l26014.htm

http://europa.eu.int/scadplus/leg/it/lvb/l26039.htm

http://news.bbc.co.uk/hi/english/business/business_basics/newsid_366000/366797.stm

http://strategis.ic.gc.ca/SSG/is10121e.html

http://traker.enetpep.co.uk/archive/000101book.html

http://www.1999.cliffordchance.com/library/newsletters/inter_funds/section9.html

http://www.bourse-de-paris.fr/indexgb.htm

http://www.cipe.org/pub/cee/hungary/vc.html

http://www.consumersinternational.org/campaigns/competition/competition5.html

http://www.cosatu.org.za/docs/1998/competbi.htm, Competition Bill

http://www.eudel.com/eudel/newsletter4445/eu_risk_capital.htm

http://www.euronext.com/em/euronextinfo/history/index.html

http://www.europateam.cc.cec/eur-lex/en/lif/dat/1985/en_385L0611.html

http://www.europateam.cc.cec/eur-lex/en/lif/dat/1988/en_388L0220.html

http://www.europateam.cc.cec/eur-lex/en/lif/dat/1995/en_395L0026.html

http://www.europateam.cc.cec/eur-lex/en/lif/dat/1999/en_399Y1007_02.html

http://www.europeanvc.com/perspective.htm

http://www.exchange.de/INTERNET/EXCHANGE/mainpage_e.php3

http://www.ft.com/ftsurveys/industry/sc22c26.htm
Single market: Crucial for EU's competitiveness

http://www.globaltechnoscan.com/venture_capital_in_europe.htm

http://www.growco.com/vencap.htm

http://www.hugheshubbard.com/data/whatnew/articles/highC.html

http://www.iasc.org.uk/news/cen8_097.htm

http://www.ici.org/issues/eu_ucits_new2000.html

http://www.isolaandisola.com/fiducits.html

http://www.itdd.co.uk/stats/value.htm

http://www.law.kuleuven.ac.be/icri/projects/report.data/execituve.htm

http://www.law.wisc.edu/newsletter/1997/Oct6/cross-border.htm

http://www.lawinfo.com/forum/uci_1.html

http://www.londonstockexchange.com

http://www.macfarlanes.com/bulletins/financial/98/autumn.html

http://www.msnbc.com/news/468474.asp?cp1=1

http://www.nasdaq.com

http://www.nasdaqnews.com/news/pr2000/ne_section00_111.html http://www.neweconomyindex.org/states/part5_page5.html

http://www.nyse.com/content/articles/NT0005EF3E.html

http://www.nyse.com/content/articles/NT0005F632.html

http://www.nyse.com/regualtion/surveillance.html

http://www.oecs.org/dsti/sti/it/ec/prod/dismantl.htm

http://www.oft.gov.uk/hotml/rsearch/sp-arch/speech37.htm

http://www.parliament.the-stationery-office.co.uk/pa/cm199899/cmstand.../91021s01.ht

http://www.pionline.com/pension/reports/story1.htm

http://www.pionline.com/pension/reports/story2.htm

http://www.portugal.ue-2000.pt/uk/docmne_main02.htm

http://www.pwcglobal.com/lu/eng/about/press-rm/luxbus_ucits_0400.html

http://www.repubblica.it/europa.lex/politica/politica000…/politica000622_e_direttiva.htm
Risparmio, identica tuela nell'Unione europea

http://www.repubblica.it/online/smau/rifkin/rifkin/rifkin.html
"Il mondo? In affitto" La profezia di Rifkin.

http://www.reuters.com/magazine/mayjun00/euro.htm

http://www.risk.ifci/ch/142660.htm

http://www.sonpo.or.jp/english/eng_4909.html

http://www.stern.nyu.edu/~mbloch/docs/roadtoec/ec.htm

http:www.abbl.lu/uk/opcvm.htm

Annex 1

TABLE 2: Selected Countries with Notification Provisions

Countries	Notification Regulation	Procedure
Australia	Voluntary notification system under the 1995 Competition Policy Reform Bill.	An application for an authorization must be made within 14 days of the execution of the agreement.
Austria*	Pre-merger notification is required if in the fiscal year preceding the merger, the parties had: (i) a combined worldwide turnover of ATS 3.5 billion (US$ 282.5 million); and (ii) at least two parties had a turnover of ATS 5 million (US$ .4 million) within Austria. Post-merger notification is required if the combined aggregate worldwide turnover of all the parties to a concentration is equal or greater than ATS 150 million (US$ 12.1 million), but less than the turnover or asset thresholds required for pre-merger notification.	Notification is made to the Cartel Court. A concentration cannot be implemented until the Cartel Court has issued confirmation that: (1) no Official Party has requested a review; (2) the 5-month period in which the Cartel Court may prohibit the concentration has elapsed; or (3) the concentration is not prohibited. The concentration is considered to be approved if, within 4 weeks of notification, no investigation is opened.
Belgium*	Pre-merger notification required when the combined worldwide turnover of the parties in the previous business year exceeds BF 3 billion (US$ 82.7 million) and combined firm market share over 25% in a relevant product market in Belgium.	Notify Competition Service, using Form CONC C/C-1 within one week from signature, announcement or acquisition of control one week from signature, announcement or acquisition of control. Initial decision rendered within one month and there is a maximum of 75 days for further investigation. Clearance required before completion.
Brazil	The 1994 Act provides for a voluntary pre-closing and mandatory post-closing notification system. Mandatory post-closing filing obligation is triggered if: (i) any of the parties to the transaction has annual sales in Brazil exceeding 100.000.000 UFIR, a Brazilian unit of value based on a consumer index established by the Brazilian Treasury Ministry on a quarterly basis (approximately US$88 million at current exchange rates); or (ii) the combined firm will have a 20% or higher share of a properly-defined relevant product/service market in Brazil in which there is a competitive overlap between the parties (i.e. a single-firm >20% share does not trigger the filing obligation).	Notification to CADE (Conselho Administrativo de Defesa Economica) before or within 15 days of merger.
Canada	Pre-merger notification is required when the combined assets of the parties in Canada or the combined turnover of the parties from sales in, from or into Canada exceeds Cdn $400 million (US$ 288.6 million), and the Target's Canadian assets or turnover in or from Canada exceeds Cdn $ 35 million (US$ 25.3 million). Note: For overview of relevant provisions of Canadian Competition Act and the Investment Canada Act, see October 14, 1997 memorandum of Stikeman, Elliott.	If a transaction qualifies for mandatory notification, notice is provided to the Bureau of Competition.
Czech Republic	Pre-merger notification is required where a market share in the relevant market in greater than 30 percent. It is recommended that those approaching 30 percent notify.	Application is made to the Ministry for Economic Competition. The Ministry must issue a decision within 60 days in a difficult case.
Denmark *	Pre-merger notification required where the merger will or may result in the creation of a "dominant influence" over a relevant market or a material restriction of competition. As there are no fixed guidelines of what constitutes a dominant influence, it is recommended that notification be made of any merger which could possibly result in a "dominant influence."	Merger notification must be made within 14 days of execution of the agreement. Failure to notify within specified period will render the agreement void. Informal advance rulings from the Competition Council may be obtained.
European Union & European Economic Area	All mergers with a Community dimension must be pre-notified. The Commission of the European Communities has sole jurisdiction over mergers with a "Community dimension" that fall above certain thresholds. As of 3/1/98, concentrations subject to notification requirements if: (1) the aggregate worldwide turnover of the parties is over 5 billion ecus and; (2) the Community-wide turnover of each of at least two	Notification must be made to the Commission's Merger Task Force on Form CO (24 copies) with supporting documentation. Commission must reach preliminary decision within one month from the effective date of notification. As of 3/1/98, the deadline is six weeks where the

	parties exceeds 250 million ecus (unless each of the parties achieves more than 2/3 of its aggregate Community-wide turnover in one member state). Notification requirements also apply to concentrations where: (1) the aggregate worldwide turnover of the parties exceeds 2.5 billion ecus; and (2) Community-wide turnover of each of at least two parties exceeds 100 million ecus; and (3) in each of at least 3 member states, the aggregate turnover of all the parties exceeds 100 million ecus; and (4) in each of at least 3 member states the turnover of each of at least two parties exceeds 25 million ecus (unless each of the parties achieves more than 2/3 of its aggregate Community-wide turnover in one member state).	parties submit commitments intended to form basis of a clearance decision. There are provisions for "Second-stage" investigations where there are questions as to the market dominance. These second-stage proceedings can last a maximum of four months. Parties are not allowed to put into place the transaction until final decision is rendered.
France*	Pre-merger notification is voluntary, but recommended for mergers where: (i) combined French turnover of all parties is at least FF 7 billion (US$ 1.19 billion) and each of at least two parties has French turnover of at least FF 2 billion (US$ 338.6 million); or (ii) combined firm French market share of at least 25% in a relevant product market.	Voluntary notification is recommended for either a proposed merger or for a merger that has been in effect for fewer than 3 months.
Germany *	Pre-Closing: Notification is required if: (i) one party has worldwide turnover exceeding DM2 billion (US$ 1.13 billion); or (ii) each of at least two parties has worldwide turnover exceeding DM 1 billion (US$ 564 million). Local "effects" required (see below). Post-Closing: Notification is required if combined worldwide turnover of the parties exceeds DM 500 million (US$ 282 million). Local "effects" required.	If a transaction qualifies for mandatory notification, notice is provided to the Federal Cartel Office. If the Cartel Office takes no action within one month after notification of the transaction, the parties will be free to proceed to completion.
Greece*	Pre-merger notification required if: (i) the parties will have a market share in Greece of at least 25%; or (ii) the total world-wide turnover is equal to or exceeds the equivalent in drachmas of 50,000,000 ECUs (US$ 55.5 million) and at least 2 of the firms have a turnover in the Greek market of at least the equivalent in drachmas of 5,000,000 ECUs (US$ 5.5 million). Post-merger notification required if: (i) the parties will have a market share in Greece of at least 10%; or (ii) the total turnover of the firms is at least the equivalent in drachmas of 10,000,000 ECUs (US$ 11.1 million).	Pre-merger notification to the Competition Committee must occur, within ten working days from conclusion of the agreement. Investigation period generally one month with a possible extension of two months. No implementation of transaction allowed prior to decision of Competition Committee.
Hungary	Pre-merger notification is required and parties to merger must apply jointly to the Office of Economic Competition (OEC) if: (i) the parties will have a joint market share of greater than 30% in the relevant market; or (ii) the parties' total turnover is HUF 10 billion per year (approximately US$ 51.1 million in 1996).	Upon notification, the Competition Council must rule on the merger application within 90 days, but the deadline can be extended once up to 6 months. If the Competition Council fails to meet the deadlines, then permission for the merger is deemed granted.
Ireland*	The statutory notification thresholds do not state whether they are based on the parties' worldwide or Irish-only turnover and the Irish authorities have not adopted an official public position. An informal, but consistent practice has therefore developed as follows: Notification required if: (i) Each of at least two parties has worldwide assets exceeding IR£ 10 million (US$ 14.6 million) or each of at least two parties has worldwide turnover exceeding IR£ 20 million (US$ 29.3 million); and (ii) The Target has Irish assets exceeding IR£ 10 million (US$ 14.6 million) or Irish turnover exceeding IR£ 20 million (US$ 29.3 million).	Each of the parties must notify the Minister for Enterprise, Trade and Employment in writing within one month of an offer capable of acceptance having been made. Upon notification, the Minister has 3 months to make a decision on the merger. The Minister must decide within 30 days whether to refer the matter to the Competition Authority. If referred, Competition Authority must report back to the Minister generally within 30 days.
Italy*	Pre-merger notification is required if target has Italian turnover exceeding LIRE 671 billion (US$ 39 million) or combined Italian turnover of the parties exceeds LIRE 67.1 billion (US$ 390 million).	Upon notification, the Authority has 30 days, to notify the parties as to whether the merger will be investigated. If an investigation is started, the Authority has 45 days to inform the parties of its decision.
Japan	Mandatory pre-notification provisions of the Antimonopoly Act apply only to "acquisitions of businesses" between Japanese firms or where the Japanese subsidiary of a foreign firm is merging with a Japanese firm.	
Korea, South	Mandatory post-merger notification required under Article 7(4) of the Monopoly Regulation and Fair Trade Act if the combined firm's equity exceeds 5 billion won (US$ 5.5 million), or its assets exceed 20 billion won (US$ 22 million);	Parties must notify the Korean Fair Trading Commission within 30 days of the board resolution, partners' vote, etc. Under Article 12, the Commission must review the

	and the interaction substantially restricts competition in any relevant market.	transaction within 60 days. Maximum statutory period is 90 days.
Mexico	Pre-merger notification required for mergers if: (i) the value of the transaction(s) amount(s) to over 12 million times the daily minimum wage prevailing in the Federal District, (ii) the transaction(s) result(s) in accumulation of 35% or more of the assets of an entity whose assets or sales amount to more than 12 million times the daily minimum wage prevailing in the Federal District, or (iii) 2 or more entities are involved and their joint or separate volume of sales total more than 48 million times the daily minimum wage prevailing in the Federal District and the transaction results in accumulation of assets exceeding 4.8 million times the daily minimum wage prevailing in the Federal District. (Fed. Law of Econ. Comp., § 20.)	Notice to the Federal Competition Commission must be made in writing and the Commission can seek additional information. The Commission must issue its decision on the merger within 45 days of notification. If no decision is rendered, then the merger is deemed to be approved.
Nether-lands*	Pre-merger notification required if: (i) combined worldwide turnover exceeds NLG 250 million (US$ 126 million); and (ii) at least two of the firms each have annual turnover in the Netherlands of NLG 30 million (US$ 15 million).	Upon notification, parties must wait for decision for 4 weeks, but if second phase inquiry opened, parties must wait for decision for an additional 13 weeks.
Portugal*	Pre-merger notification required if, as a result of the merger: (i) combined firm acquires a market share in Portugal of 30% or more; or (ii) combined firm has Portuguese turnover of at least PTE 30 billion (US$ 167 million).	Upon notification to the Minister, the Minister has 50 days to refer transaction to the Competition Council. If referred, Competition Council has 30 days to report to the Minister. After the Minister has been notified by the Competition Council, the Minister has an additional 15 days to make decision. Transaction is ineffective until clearance granted.
Russia	Pre-merger notification to Federal Anti-Monopoly Agency is required for acquisitions if net value of assets of acquirer exceeds 100,000 times minimum monthly wage or acquirer listed in State Register of Monopoly Enterprises as "dominant," i.e. market share above 35%.	Notice required within 15 days of registration of transaction. Transactions concluded without approval invalidated by Federal Anti-Monopoly Agency. Applicant informed within 15 days of application for approval of transaction
Sweden*	Pre-merger notification required if parties have combined worldwide turnover exceeding Skr 4 billion (US$ 527 million). The Act applies to any merger where at least one party carries on business activities in Sweden or where an undertaking carrying on activities in Sweden is affected.	Notification is submitted to the Competition Authority. Following submission of a completed notification, the Competition Authority has thirty days to either issue a clearance decision or a decision to initiate a special investigation.
United Kingdom *	No pre-merger notification obligation, but advisable to notify if: (a) combined firm has a U.K. market share "as a result of the merger" exceeding 25%; or (b) Target has worldwide assets exceeding UK£ 70 million (US$ 113 million). In addition, local "effects" required: at least one party must "carry on business" in the U.K.	There are three methods of notification: statutory clearance, informal clearance and confidential guidance.
United States	Hart-Scott-Rodino Act requires pre-merger notification.	

Source: Hubard, H. & Reed LLP, The high cost of cross-border merger reviews

Annex 2

TABLE 3: Social security pensions

Country	Nature of the system(s)	Pay-as-you-go/funded Contribution method(s)	Benefit: Flat-rate/ earnings related	Benefit: Connection to pillar 2
1. Austria	Compulsory State pension for all employees, self-employed and civil servants	Pay-as-you-go. Employers' contribution 12,55%, employees' contribution 10,25% of annual salary.	Dependent on the amount of contribution.	None.
2. Belgium	Compulsory State pension – covers all employees, self-employed persons and civil servants.	Pay-as-you-go: financed through contributions of the employer (8,86% of salary), the employee (7,5%) and a state subsidy (2,2%).	Depends on amount of contributions	No.
3. Denmark	1. Compulsory State pension. 2. Compulsory ATP – supplementary pension.	1. Pay-as-you-go – no direct contribution financed through direct taxes. 2. Contribution amounts by both employee and employer are graded according to the weekly hours worked by the employee.	1. Flat rate plus additional amounts related to other income form pensions. 2. Related to amount and timing of contribution.	1. Yes, supplementary pensions from 2 and or 3 rd pillar can reduce State pension. 2. No.
4. Finland	Compulsory State pension.	Pay-as-you-go – financed through contributions of the employer (2,4–4,9% of annual salary).	Related to amount of contribution, family status, years and place of residence.	Yes, other pensions can reduce State pension.
5. France	Compulsory State pension.	Pay-as-you-go: financed by contributions from the employer (9,8% of salary) and the employee (6,55%).	Depends on amount of contributions.	No.
6. Germany	Compulsory State pension.	Pay-as-you-go – employer and employee each pay 9,75% of salary.	Dependent on the amount of contributions paid in and years of contribution.	None.
7. Greece	1. Compulsory State pension. Basic general and special statutory schemes for employees, the self-employed, civil servants and the like, seamen and farmers. 2. Compulsory statutory supplementary schemes for employees, the self-employed, and civil servants and the like.	Financed on the pay-as-you-go principle: the employee's contribution is 6,67% of annual salary, and that of the employer is 13,33%. For persons insured for the first time as from 1 January 1993, an additional contribution of 10% is payable by the State.	Depends on amount of contributions. The amount of the supplementary pension depends on the years of contribution and the number of dependants.	No.
8. Ireland	Compulsory State pension	Pay-as-you-go – financed through taxes.	Flat-rate with additional amounts.	No.
9. Italy	Compulsory State pension.	Pay-as-you-go principle. Contributions amount to 32,70% of salary, with 8,89% paid by the employee.	The benefits are the result of the product of the contributions and the actuarial factors calculated on the basis of the beneficiary's age.	No.
10. Luxembourg	Compulsory State pension: only available to those whose earnings are below the social-security threshold.	Pay-as-you-go principle. The employee, the employer and the State each pay 8% of salary.	Depends on amount of contributions.	Yes. Earnings or supplementary pension above a certain limit

				can reduce the amount of pension.
11. Netherlands	Compulsory State pension.	Pay-as-you-go – only the employee pays contributions of 17,9% of the annual salary to a maximum of EUR 22.233.	Related to years of residency.	No.
12. Portugal	Compulsory State pension.	Pay-as-you-go – the employee pays 11% and the employer pays 23,75% of annual salary.	Related to average earnings in best 10 contribution years within the last 15 years of the contributory career.	No.
13. Spain	Compulsory State pension.	Pay-as-you-go: financed through contributions of the employee (6,4% of annual salary) and of the employer (30,8% of annual salary).	Depends on average salary during the 15 years prior to retirement.	No.
14. Sweden	1. Basic scheme. 2. Prefunded pension scheme.	1. Pay-as-you-go – financed through a contribution of 16% of earnings. 2. Individually funded system financed through 2,5% of earnings.	1. Related to life earnings and years of employment (because of maximum amount per year). 2. Related to premium paid.	1. No. 2. No.
15. UK	1. Compulsory Basic State Pension. 2. SERPS – additional pension for employees earning over EUR 98,95 per week and who are not contracted-out of the state scheme.	Pay-as-you-go – employee currently makes contribution of 10% weekly earnings between EUR 98,95 and EUR 749,60 and employer of 12,2% of employee's weekly earnings above EUR 124,43.	1. Flat-rate – related to years of contribution with a minimum number. 2. Related to earnings throughout working life between lower and upper limits.	Yes, supplementary schemes meeting certain requirements can contract out of SERPS.

Source: *Study on pension schemes of Member States of the European Union*, May2000

TABLE 4: Occupational pensions

Country	Nature of the system(s)	Providers of pension services/ Products	Contributions	Pension products – defined benefit/ defined contribution/ hybrid schemes
1. Austria	Voluntary – no obligation for the employee or employer. 11% of the working population are covered.	Life insurance companies, pension funds and enterprises through creation of reserves (only tax-deductible to a limited extent, certain level of insolvency insurance).	No general rules, fixed according to the particular scheme.	Schemes using pension funds and life insurance companies are funded; pensions, which are financed through reserves, are partly funded. Defined-contribution and defined-benefit pensions are both common.
2. Belgium	Partly voluntary: any employee joining the company after a pension scheme has been set up is required to join. If no scheme exists, the employee has a free choice. 31% of the working population are covered by this type of scheme.	Pension funds, life insurance companies. Operating on a book-reserves basis is not allowed.	No general rule. Contributions determined individually for each scheme.	Funded. Mainly defined contributions.
3. Denmark	Compulsory – collective agreements. 80% of the working population is covered by occupational pension insurance.	Pension funds, life insurance companies and banks.	Contribution from employee is 12% on average.	Funded, mainly defined contribution.
4. Finland	1. Compulsory – law – the employer is obliged to set up an occupational pension and the employee is obliged to be a member. (Pillar 1) 2. Additional voluntary schemes. (Pillar 2)	1. Insurance companies and pension funds. Fewer than 300 members of scheme – compulsory to use insurance company. More than 300 members – the employer may set up his own pension fund. 2. Additional voluntary pension foundations must have at least 30 members and pension funds 300 members.	1. Average contribution 21,5%. The employee pays 4,7% (in 2000), the employer the remaining part. 2. The premiums are almost entirely paid by the employers, although in some pension arrangements there is also an employee's contribution (mostly 0–3% of the yearly wages).	1. Mixed pay-as-you-go or funded depending on industry. Defined benefit. 2. As a rule funded and defined benefit.
5. France	1. Membership of the ARRCO/ AGIRC schemes is compulsory by law. As a result, the entire working population is covered by an occupational pension scheme. On 1 January 2000 these schemes fall within the scope of the Community Regulation coordinating social ecurity schemes. 2. It is possible to ubscribe to supplementary schemes on a voluntary basis.	1. The pensions organisations (that are members of the ARRCO or AGIRC schemes) are managed by the employers' and employees' organisations. 2. The voluntary pension schemes are usually managed by life assurance companies.	1. The contributions due under the ARRCO schemes amount to 3,75% of salary for the employer and 2,5% for the employee. The contributions to the AGIRC schemes are slightly higher. 2. There is no general rule for personal schemes.	1. The compulsory element (ARRCO/ AGIRC) operates on the pay-as-you-go principle. 2. Pension amounts above the compulsory minimum are financed in accordance with the funding principle

6. Germany	Voluntary. Based on the initiative of the employers. About 50% of the working population are covered by an occupational pension scheme.	Companies through creation of reserves (compulsory insolvency insurance), pension funds, life insurance companies and support funds.	No general rules, fixed according to the particular scheme.	Funded. (Pay-as-you-go for civil servants). Defined benefit.
7. Greece	Voluntary – at the employer's discretion. 5% of the working population are covered by an occupational pension scheme.	Mainly, life assurance companies; to a lesser extent, pension funds.	No general rule. Contributions determined individually for each personal scheme.	Funded. Defined benefits.
8. Ireland	Voluntary – 50% of the working population is covered by occupational pension insurance.	Investment funds (pension funds).	No general rules – fixed in individual scheme. However maximum pension rules set by tax authorities.	Funded. (Civil servants – pay-as-you- go.) Mainly defined benefit.
9. Italy	Voluntary on the part of workers; adhesion of firms is linked to the labour contracts they apply.	Pension funds. For newly constituted funds, investments are entrusted to managers (banks, insurance companies, investment firms, or mutual fund management companies), and payment of pension benefits to insurance companies.	No general rule. Fiscal rules are an important factor in the definition of contributions.	Funded. Newly constituted funds are defined contributions. Old schemes are also defined benefits or hybrid.
10. Luxembourg	Voluntary – This type of scheme is only available to those whose earnings are above the social-security threshold; 30% of the population are covered by such an occupational pension scheme.	Life insurance companies, pension funds or the companies themselves through book reserves (no compulsory insolvency insurance).	No general rule – Contributions determined individually for each scheme.	Funded. Defined benefits.
11. Netherlands	Partly voluntary – the Ministry of Social Affairs has the right to make a scheme compulsory on request of social partners. 91% (1991) of the working population is covered by occupational pension insurance.	Company funds, industry wide pension funds or life insurance companies.	No general rules – fixed in individual scheme.	Funded. In general defined benefit.
12. Portugal	Voluntary – 15% of the working population is covered by an occupational pension scheme.	Pension funds managed by life assurance companies or pension fund management companies.	No general rules – contributions are laid down in personal schemes.	Funded. Defined benefits.
13. Spain	Voluntary – 15% of working population is covered by an occupational pension scheme.	Life assurance companies, pension funds, mutual provident societies (as a general rule, the constitution of provisions on the liabilities side of the balance sheet is not allowed).	No general rule – contributions laid down in each personal scheme.	Principle of funding. Mixed system.
14. Sweden	Compulsory – collective agreements. 90% of the working population is covered by occupational pension insurance.	Companies through book reserves (with compulsory credit insurance, a state guarantee or a municipal guarantee), pension foundations and life insurance companies.	No general rules – fixed in individual scheme.	Funded. Defined benefit. (Civil servants schemes are funded on a pay-as-you-go basis.)
15. UK	Voluntary – around 46% of the employed working population are members of occupational pension	Most schemes are currently set up by employers under trust law. Banks, insurance companies, asset managers,	No general rules – fixed in individual scheme.	Funded maximum income limit of EUR 115.929 for occupational pension

	schemes. (Though as explained in section 15.2.1 SERPS is effectively a compulsory scheme for employees.)	accountants, actuarial advisers and building societies can provide pension services.		schemes on a funded basis – occupational pension schemes funded on a pay-as-you-go basis exist for those above the income limit). Generally defined benefit.

Source: *Study on pension schemes of Member States of the European Union*, May2000

TABLE 5: Supervisory authorities and principles

Country	Supervision and regulation authority	Supervisory principles – pension funds
1. Austria	The body responsible for supervising and regulating life insurance companies is the Federal Ministry of Finance, V/D division and for pension funds V/14 division.	Supervision is file-based, on the basis of annual reports, actuarial statements and the statistical information received periodically or annually. On-site inspections of life insurance companies are made regularly; for pension funds they are possible but not commonly used.
2. Belgium	Supervisory body and regulatory authority for life insurance companies and pension funds: Ministry of Economic Affairs and Insurance Supervisory Body.	The supervision of pension funds is carried out by means of documentary verification. Although always possible, on-site inspections are rarely carried out.
3. Denmark	The regulatory and supervisory body of life insurance companies and pension funds is the Financial Supervisory Authority.	The Financial Supervisory Authority performs on-site inspections and file-base supervision on the basis of annual accounts, the audit book, and the report on the register of assets etc.
4. Finland	The supervisory body of insurance companies and pension funds is the Insurance Supervision Authority. However, the Ministry of Social Affairs and Health is responsible for drafting of legislation concerning the insurance institutions, and for intergovernmental issues related to this.	Supervision of pension funds is done on the basis of annual accounts, actuarial statement and the statistical information received every year. The Insurance Supervision Authority has the right to inspect the pension fund at any time and attend certain meetings as an observer.
5. France	The regulatory authority for life assurance companies is the Finance Ministry and their supervisory body is the Insurance Supervisory Commission. The regulatory authority for the provident institutions and mutual societies covered by the Mutual Insurance Code is the Social Security Minister and their supervisory body is the Supervisory Commission for Mutual Societies and Provident Institutions. The supplementary schemes are regulated by the Social Security Minister and supervised by the Audit Office and the Social Affairs Inspectorate.	As the pension schemes are financed in accordance with the pay-as-you-go principle, the prudential rules and supervision methods differ from those applicable to occupational pension schemes operating on the funding principle.
6. Germany	The regulatory body for life insurance companies and pension funds is the Federal Ministry of Finance. Supervision is the responsibility of the Federal Insurance Supervisory Office or the relevant regional supervisory authority.	Supervision of the pension funds is based on examination and, if necessary, approval of the documents to be submitted. These include the articles of association, the general insurance terms, the technical operating plan with the rules for calculating the premiums and premium reserves, including the calculation bases and mathematical formulae used, as well as the specific calculations which are conducted at regular intervals and all external and internal accounting documents. On-site inspections of the entire business operations of pension funds are possible. Any amendments to the articles of association, the general insurance terms and the technical operating plan have first to be examined and authorized before becoming effective.
7. Greece	The supervisory body for life assurance companies and pension funds is the Development Ministry.	Supervision is carried out by means of documentary verification, but on-site inspections are also possible.
8. Ireland	The regulatory body for life assurance companies is the Department of Enterprise, Trade and Employment. Occupational pension schemes are regulated by the Pensions Board.	Supervision of life assurance companies under the Insurance Acts and Regulations. Supervision of pension schemes under the Pensions Act.
9. Italy	Regulation powers are shared mainly between the Ministry of Labour, the Ministry of the Treasury and the Commissione di Vigilanza sui Fondi Pensione (COVIP). COVIP supervises autonomous occupational funds and open funds, sharing some responsabilities with Bank of Italy, ISVAP and Consob. Non-autonomous occupational funds set up within banks and insurance companies are	Establishment of new pension funds and modifications of funds' by-laws must be authorized. All aspects of funds' activity are examined, by means of regular reporting and meetings with managers. On-site exams are also possible.

	supervised by Banca d'Italia and ISVAP respectively. Insurance companies are supervised by ISVAP.	
10. Luxembourg	The regulatory authority and supervisory body for life insurance companies and pension funds is the Insurance Commissioner's Office.	Supervision is carried out by means of documentary verification, although on-site inspections are also possible.
11. Netherlands	The regulatory body of life insurance companies is the Ministry of Finance and for pension funds the Ministry of Social Affairs and Employment. The supervisory body for life insurance companies and pension funds is the Insurance Supervisory Board.	Supervision of pension funds is file-based. On site inspections are part of the supervision.
12. Portugal	The regulatory and supervisory body for life assurance companies and pension funds is the Instituto de Seguros de Portugal.	Supervision of the pension funds is by means of documentary verification. On-site inspections are possible.
13. Spain	The supervisory body and regulatory authority for life assurance companies and pension fund is the Finance Ministry (Insurance Division).	The supervision of pension funds is by means of documentary verification. On-site inspections are possible.
14. Sweden	The regulatory and supervisory body of life insurance companies and mutual benefits societies is the Financial Supervisory Authority. Pension foundations are supervised by the municipal council in the region where the pension foundation is situated.	Supervision of insurance companies and mutual benefits societies is done on a file basis. On-site inspections are possible. Supervision of pension foundations is done mainly through annual reporting.
15. UK	The regulatory body for occupational pension schemes is the Occupational Pensions Regulatory Authority (Opra) and for life insurance companies Financial Services Authority (FSA).	As the regulator, Opra's principal activities are to ensure that schemes comply with legislation governing their operation and, as the Registrar of Occupational and Personal Pension Schemes, to maintain a register of such schemes. 0n-site checks may also be carried out.

Source: *Study on pension schemes of Member States of the European Union*, May 2000

TABLE 6: Prudential rules applied to pension funds and tax treatment of occupational pensions

Country	Prudential rules	Tax treatment
1. Austria	Pension funds are subject to a solvency margin. This is laid down in the Pension Fund Act and is 1% of the premium reserve. The investment of pension funds is regulated by law. At least 40% of the assets have to be invested in mortgage bonds, government bonds and debentures, denominated in euro. This category also includes capital funds which invest more than the above-mentioned assets. A maximum of 40% of the assets may be invested in stocks and similar securities. Within this ceiling, a maximum of 25% of the assets may be invested in securities if they are denominated in foreign currency. Investments in buildings and property are allowed up to a maximum of 20% of the assets and within this ceiling 10% may be invested in buildings and property located abroad. There are additional upper limits for specific individual risks. There is no currency-matching requirement.	EET system for contributions of the employer; contributions of the employee can only be deducted to a limited extent, benefits are taxed at only 25%.
2. Belgium	Pension funds are not subject to any particular solvency margin requirement. However, a draft bill imposes a solvency margin for pension funds under certain circumstances. The regulations applicable to pension funds stipulate 15% at most in the company sponsoring the pension fund and 40% at most in real estate, with 10% remaining in deposits. Representative assets must be denominated in the same currency as the liabilities or in a convertible currency.	EET (lump sums are taxed at 16,5% and annuities at the standard rate of income tax).
3. Denmark	Pension funds are as life insurance companies submitted to the rules in the life insurance directives. That means that these companies are subject to the same rules as regards to the solvency margin and technical provisions. Concerning the investment restrictions a maximum of 40% may be invested in "high risk assets" – these include domestic equities, foreign equities and unlisted securities. Furthermore a maximum of 20% is allowed to be invested in foreign assets, property loans and investment trust holdings 40% and 60% in domestic debt. At least 80% currency matching is required. In case of EU currency, up to 50% of liabilities can be covered by assets denominated in euro. Self-investment is not allowed.	EET (real interest tax on yield of bonds, 5% tax on yield of shares (as from 2000, 26% pension yield tax on yield of bonds, 5% pension yield tax on yield of shares). Annuity payments taxed as normal income and lump-sum at 40%).
4. Finland	Pension funds are not submitted to any solvency margin or guarantee requirements. There are certain rules for the investment of assets.	EET.
5. France	Strictly speaking, pension funds as such do not exist in France.	Pensions are taxed as personal income.
6. Germany	As from 1999 pension funds will, in particular, have to meet the same solvency requirements as other life insurance companies. The solvency margin will then be up to 4% of the premium reserve or 0,3% of the risk capital, where the minimum guarantee fund is exceeded. A number of assets, which the law classifies as higher-risk investments, may only be included in the restricted assets up to a certain percentage. For interests in companies which are located in the EC there is an upper limit of 30%, which may be extended by 5% to a maximum of 35% by claiming a specific opening clause. Once the opening clause has been used, it cannot be used for other investments. A specific quota of 10% applies to interests relating to one company. The quota for property and real estate funds is 25%, for investments in non-member countries the quotas are 6% for non-EU shares and 5% for non-EU bonds. Where the restricted assets cover technical provisions resulting from risks covered in the European Community or from life insurance policies taken out in the Community, a maximum of 5% of the "premium reserve stock" (separate part of the restricted assets) and 20% of the remaining restricted assets may be placed in countries outside the European Community. In principle there is a currency-matching requirement but this does not apply provided neither the premium reserve stock assets nor the remaining restricted assets to be invested exceed the quota of 20% of commitments in a particular currency respectively.	TTE/EET
7. Greece	Pension funds are not subject to any particular solvency margin requirement. Investments are not subject to any restriction. However, pension funds may not invest more than 20% of their assets in unit trusts authorised to invest in foreign assets. There is no requirement as regards the currency in which assets must be denominated.	Pensions are taxed in the same way as other personal income.
8. Ireland	Insurance Regulations are based on the EU Life Assurance Directives and set down provisions, in relation to life assurance business in general, for the	Lump-sum pension payments are, to some

	diversification of assets, the prudent valuation of assets and liabilities and the holding of a solvency margin.	extent, tax exempt. Pensions beside lump-sums are taxed as normal income.
9. Italy	For newly constituted occupational funds, no minimum solvency margin is needed, as they are defined contribution and entrust the payment of pension benefits to insurance companies. These funds cannot manage directly their assets, but must appoint managers (banks, insurance companies, investment firms, or mutual funds management companies). A general "prudent person" principle applies to investments, with quantitative limits in order to achieve appropriate diversification and limit investment in the sponsoring company. Prudential rules restrict investment in securities not traded on the main regulated markets, and in securities issued by resident in non-OECD countries.	Taxation of pension funds was recently reformed. According to the new fiscal regulation, to be implemented since 2001: contributions are not taxable up to a cretain ceiling; pension fund earnings (inclusive of capital gains) are subject to an 11% tax rate; benefits paid as lump sum are subject to separate taxation; pension benefits are taxed as income on a progressive basis.
10. Luxembourg	Pension funds are not subject to any particular solvency margin requirement. A number of rules nevertheless apply to investment of the assets, which must be diversified. In addition, a number of restrictions apply to the location of the assets, although there is no specific requirement regarding the currency in which investments are denominated.	The employee's contributions are only tax-deductible within certain very narrow limits. Lump-sum payments receive preferential tax treatment.
11. Netherlands	There are no legal solvency margin requirements for pension funds. However, pension funds must be pre-funded, i.e. the assets must at least equal the technical provisions. The pension funds in the Netherlands are subject to a 5% self-investment-limit. Investments must be made according to the prudent man principle. There is no currency-matching requirement.	EET.
12. Portugal	Pension funds must observe the same solvency margins as life assurance companies.	Contributions to pension schemes are tax-deductible up to a certain limit.
13. Spain	Pension funds must respect a solvency margin of 4% of the mathematical reserves and 0,3% of the risk capital relating to death and disability risks. A minimum solvency margin of EUR 224.148 is also applied to defined-benefit schemes when the risks are borne by the fund itself and not by an insurance company. The investment policy of pension funds must respect the general principle of diversification. Investments are limited to 5% of the total securities in circulation of the company in question. An amount equal to 90% of the pension fund assets must be invested in quoted securities, deposits, immovable property or mortgage loans. A minimum of 1% of the assets must be invested in current accounts or on the money market. There is no particular requirement as to the currency in which the assets must be denominated. The sum of a fund's investments in the shares of a given company and the risks assumed by the fund by virtue of the loans granted to this company or guaranteed by it must not exceed 10% of the fund's total financial assets. This limit also applies to securities issued and loans contracted or guaranteed by different companies in the same group. These limits do not apply to certain issuers, such as the State.	Pensions are taxed in the same way as other income.
14. Sweden	Pension funds are not submitted to any solvency margin requirement. The liabilities in the pension foundation are calculated through models supplied by the Financial Supervisory Authority. There are no special rules for investment of pension foundation capital, except a statutory provision specifying that capital shall be invested in a satisfactory way, i.e. the majority of investments should be made in bonds, loans and retroverse loans to contributors. There is no currency-matching requirement. Mutual benefit societies can voluntarily submit to rules laid down by the insurance Directives. If they don't, they have to meet with national legislation that is similar to those rules, laid down in the Mutual Benefit Societies Act.	Pension foundations are legible for taxes on a pro-forma income calculated as a risk-free return on invested capital.
15. UK	Most private sector trust based defined benefit occupational pension schemes are subject to a statutory minimum funding requirement – a discontinuance test designed to give scheme members a reasonable assurance that if the sponsoring employer becomes insolvent, the scheme will be able to deliver the	EET (preferential treatment of lump-sum pension payments).

	accrued rights. The assets of occupational pension schemes are invested according to the prudent man principle. There is also, except in the case of certain very small schemes, a 5% limit on self-investment in the sponsoring company. There is no currency-matching requirement.

Source: *Study on pension schemes of Member States of the European Union*, May 2000

TABLE 7: Personal pensions/individual agreements

Country	Provider/Manager of private pensions	Tax treatment
1. Austria	Life insurance companies	Premiums are tax-deductible under certain conditions.
2. Belgium	Life insurance companies and banks.	The premiums are tax-deductible under certain conditions.
3. Denmark	Life insurance companies and pension funds	Premiums are tax-deductible under certain conditions.
4. Finland	Life insurance companies	Premiums are not tax-deductible (except in the case of those pension policies which meet certain criteria). The proceeds from the insurance are considered as taxable investment income after deduction of the premiums from the capital sum due. There maining amount is taxed at 28%.
5. France	Life assurance companies.	Under regular-premium life assurance policies, which are very clearly defined, individuals are granted tax relief in respect of the premiums.
6. Germany	Life insurance companies	Life insurance companies offer funded financial services for old age, disability and surviving dependents provision. Contributions to life insurance policies are tax-deductible if the term of the insurance policy is at least 12 years. Benefits on expiry of the policy are not taxed. With life annuities only the interest portion is taxed as a lump sum during the period when the pension is drawn.
7. Greece	Life assurance companies.	Up to 15% of the premiums paid annually are tax-deductible.
8. Ireland	Life insurance companies	Premiums are tax-deductible under certain conditions.
9. Italy	Life insurance companies	Life insurance premiums are taxed at 2,5%. They are tax-deductible at 19% of their total amount, with a ceiling of EUR 1.241.142 per annum.
10. Luxembourg	Life insurance companies.	Premiums are tax-deductible under certain conditions.
11. Netherlands	Life insurance companies	Premiums are tax-deductible under certain conditions.
12. Portugal	Life assurance companies and pension fund management companies.	Premiums and contributions are tax-deductible under certain conditions.
13. Spain	Life assurance companies, pension fund management companies.	Premiums are not tax-deductible. Contributions to pension plans are deductible.
14. Sweden	Primarily life insurance companies and banks.	Premiums are tax deductible under certain conditions. The benefits are taxed as income. The capital linked to the policies is taxed within the insurance company with a special yield tax.
15. UK	Typically provided by insurance companies, but also banks, building societies, friendly societies and unit trusts may offer them.	Premiums are tax-deductible under certain conditions.

Source: *Study on pension schemes of Member States of the European Union*, May 2000

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