# The Financial System of the EU 25

Franklin Allen<sup>1</sup>

Finance Department The Wharton School University of Pennsylvania Laura Bartiloro

Research Department Banca d'Italia Oskar Kowalewski

Finance Department Leon Kozminski

Academy of Entrepreneurship

and Management

e-mail:

allenf@wharton.upenn.edu

e-mail:

laura.bartiloro@bancaditalia.it

e-mail:

okowale@wspiz.edu.pl

#### **Abstract**

We present an overview of the financial structure of the enlarged European Union with 25 countries. We start by describing the financial system development in all member states since 1995, and then compare the structure between the old and new countries. Using financial measures we document the prevailing substantial differences in the financial structure between new and old member states after the enlargement in 2004. Finally, we compare the financial structures of an enlarged EU with those of the United States and Japan. In our study we do not present any empirical evidence concerning whether bank-based or market-based financial systems are better then another but use the distinction in order to underline the existing differences in financial structures.

<sup>&</sup>lt;sup>1</sup> Corresponding author, Finance Department, Wharton School, University of Pennsylvania, Philadelphia, Pa 19104. Phone: 215-898-3629, fax:215-573-2007, e-mail: <a href="mailto:allenf@wharton.upenn.edu">allenf@wharton.upenn.edu</a>. We would like to thank Luc Laeven and Philipp Hartmann for useful comments.

## 1 The enlarged European Union of 25

## 1.1 Introduction

Despite the political and economic convergence in the European Union (EU), the financial structures of different members remain diverse. In this paper we present and compare the financial structures of the EU members after the enlargement of May 2004. The enlargement not only changed the political situation but also the structure of the financial system of the EU.

In order to present the financial structure of the enlarged EU we analyse data and provide indicators derived from the previous literature on international financial system comparison (Allen and Gale, 2000; Demirgüç-Kunt and Levine, 2001). Additionally with the purpose to better understand the countries' peculiarities we examine each indicator not only with respect to the overall European average (EU-25), but also with respect to the group the country belongs to, having separated the former European Union members (EU-15) from the new accession countries (EU-10). The distinction between former and new members allows us to understand better the differences between the two groups of countries, as well as each group's homogeneity and development over time. In our study, to the extent possible, we include in the last section of the paper also USA and Japan, to highlight the unique characteristics of the European financial system.

Our paper complements the existing studies on the differences in financial structures of countries (see Allen and Gale, 200) and specific analyses on the European financial structure (Hartmann et al., 2003). In our study we present the development of the EU financial system since 1995 and consider the accession of the 10 new member states (NMS). Previous studies compared the financial structures within the EU-15 member states (OMS) or related it to other developed countries. With our work we close the gap using new and comprehensive data on the financial system of the old and new member states. In addition in our study we provide a broad overview of the financial structure of the EU-25 as well as of the old and new member states. Finally, at the end of our paper we merge our findings on EU financial structure with the aim to compare it with those of the United States and Japan.

We do not present any empirical evidence on the relationship between GDP growth and the development of the financial system or on whether one system is better than another. In order to reliably identify any relationship we would need a longer time series, both because of statistical needs and because the evidence for the finance-growth nexus has been shown to be relevant for the long run. Since for most EU-10 countries comparable data on the financial system is rather new, we are not able to retrieve a long time series. Thus, the main purpose of this paper is a description of the financial system of the new EU, and to provide as many financial indicators as possible for drawing a picture of the EU financial structure development in the last ten years.

We start our analysis by illustrating the economic background of the enlarged EU. In section 2, we describe the main characteristics of the banking system: we highlight the banking system as almost all member states have a bank-based financial system. In section 3, we focus on the development of capital markets, while section 4 deals with other important characteristics of the financial system, such as the pension system and the role of insurance companies. We will then examine in section 5 the legal and fiscal environment. Section 6 concludes by summarizing and making a comparison of the EU financial system with the US and Japan.

## 1.2 The economic background

On May 1<sup>st</sup> 2004 the EU experienced the largest enlargement since its creation. It is not only the number of acceding countries that needs to be pointed out, but also their characteristics. In the last fifteen years, the 10 NMS except Cyprus and Malta have been engaged in a transition process involving fundamental institutional and structural changes that has dramatically turned former planned economies to market economies. These changes will take more time before they are fully complete. As a consequence, the main economic indicators for these countries still show a radically different picture compared to the 15 MS. In this section we will present some key macroeconomic and structural characteristics of these economies, and compare them with the corresponding figures for EU-15 countries.<sup>2</sup>

In particular, in this section we emphasise the economic growth data, which the traditional literature usually relates to indicators of financial development in order to verify a hypothesized finance-growth nexus. In recent years a consensus has emerged about the

<sup>&</sup>lt;sup>2</sup> See ECB (2004) for a broad survey of EU-10 economies.

important role of financial development on economic growth. Thus, understanding the existing differences in the financial structure and development may help understand the differences in growth rates across the new and old members of the EU. An extensive review of the literature on finance and growth is given by Levine (1997).

Even if the number of new member states is high, their total size, in terms of population and GDP is rather small compared to the EU-15 states. At the end of 2004 the EU-10 combined population of 74 million was one fifth of that of the EU-15, which amounted to 383 million. The weight of EU-10 countries in terms of GDP is even smaller. The GDP at current market prices was only 5 per cent (477 billion euros) of that of EU-15 countries (9,886 billion euros). This result is due to the low per capita income level of EU-10 countries.

## Figure 1 – GDP per capita

All EU-10 countries have GDP per capita in PPP terms levels lower than the EU-25 average. Among EU-15 countries only Greece, Portugal and Spain perform worse than the EU-25 average. Among EU members the highest GDP per capita is recorded in Luxembourg, but even controlling for this outlier EU-10 countries, Greece, Portugal and Spain still have values lower than the EU-25 average. In the new members group, higher GDP per capita levels can be seen in Malta, Cyprus, Slovenia and Czech Republic.

On average EU-15 economies are twice as rich as EU-10 ones. The gap between the two groups has reduced in the time span under examination only slightly. This is not surprising because GDP per capita levels are very persistent and no large variations are usually observed in short time spans. Almost all countries follow similar patterns with the exception of Luxembourg and Ireland in our sample. In those two countries the GDP per capital almost doubled in the last decade. The situation is remarkable especially in case of Ireland, which was one of the poorest countries among the MS economies in 1997. Ten year later Ireland has one of the highest level of GDP per capita among the EU-25 members states.

According to ECB (2004), inequality, as measured by Theil's inequality coefficient, in the period 1996-2003, was, on average, higher for EU-10 countries than for Greece and Portugal, on the one hand, and for Denmark, Sweden and the United Kingdom on the other. The same study argues that Cyprus and Slovenia, identified as the two most advanced EU-10 countries, could reach the EU-15 average by around the middle of the next decade. For the other

economies it could take between six and 35 years to reach the relative position of the two EU countries with the lowest GDP per capita levels, i.e. Greece and Portugal.

The reduction of the EU-10 countries differential in GDP per capita levels and the outstanding performance of Luxembourg and Irish economies are reflected in higher GDP growth rates.

#### Table 1 GDP growth rate in %.

Due to the catching-up process, EU-10 economies have grown faster than EU-15 economies. The Czech Republic was the only EU-10 country experiencing lower growth rates than the EU-25 average. Among EU-15 countries differences arise between more mature economies (like Austria, Belgium, France, Germany, Italy), whose average growth rate was around 2.8%, and countries with a more recent development (like Ireland, Finland, Greece, Luxembourg and Spain), which have recorded a growth rate higher than 3%. Among those MS countries the two extremes are Germany and Ireland. Latvia, Estonia, Lithuania and Poland are the EU-10 countries with the highest growth rates. In the NMS high growth rates in the late nineties were the result of very low activity levels recorded during the recession which occurred during the initial phase of the transition process.

The GDP per capita weighted averages of growth rates were lower than the unweighted average. In case of the EU-10 the average growth rates was only 0.2 percentage points lower, while for the EU-15 it was 0.8 percentage point lower. Finally, the weighted average for the EU-25 was 0.9 lower. The difference between the averages suggest that more mature member states develop slower than countries with low level of GDP per capita. The differences seem to be much stronger among the EU-15 countries than EU-10.

The EU-15 growth rates have fluctuated following similar patterns in the time span under consideration, while EU-10 figures have had different dynamics. However, in almost all member states we could observe a slow down in growth rates in the years 2000 – 2002. Corresponding slowdown in economic growth in almost all member states may suggest that their economies are getting more and more dependent on each others.

## 2 The banking system

## 2.1 The role of banks in the European financial system

The financial system of the EU is often described in the literature as a bank-based system, owing to the prominent role traditionally played by banks in the major economies in the EU. The main exception among EU member countries is United Kingdom where capital markets are well developed and play a significant role in the economy. Thus the financial system of United Kingdom is often called a market–based system. Both financial systems have their costs and benefits. Their evolution, even in the case of close geographic locations, has arguably been a result of the superiority of the financial system in their environment. In the literature the market-based financial system has sometimes been presented as the most efficient financial system model. Nevertheless the question about the superiority of a particular system is not widely agreed upon in the literature.

In a recent study Rajan and Zingales (2003) compared the European financial system characteristics over the last two decades. According to them in this time the European financial system moved away from a bank–based (relationship-based system) towards a market-based system (arm's length system). The underlying causes of these changes have been the process of monetary and financial integration and innovation. The ongoing process will likely result in the evolution of a more market-based system over time, but until then the bank–based system still predominates in most of continental Europe.

In our study to assess the level of development of the financial sector in the EU-25 countries, we use several frequently applied measures of size and performance of the banking sector. As the first measure we analyze the ratio of credit institutions' assets to GDP as a proxy for the depth of bank intermediation.<sup>3</sup> This proxy shows that the banking sector still plays a

\_

<sup>&</sup>lt;sup>3</sup> In order to identify credit institutions we have adopted the ECB definition: "Credit institution are: (i) an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account; or (ii) an undertaking or any other legal person, other than those under (i), which issues means of payment in the form of electronic money. In each member State the number of credit institutions includes the entities under the law of that country and the branches of foreign banks. If a foreign bank has several branches in a given country, then they are counted as a single branch. However, if the same bank has several subsidiaries, the latter are counted separately because they are considered to be separate legal entities. In the case of credit institutions that depend on a central organization (such as groups of cooperative banks), these may be counted separately."

crucial role even though non-financial sectors in the European countries increasingly direct their surplus funds away from banks toward new forms of financial intermediary.

## Table 2 Total assets of domestic credit institutions as % of GDP

In the years 1995–2004 the banking sector grew rapidly reflecting the financial deepening and integration of the EU financial system. In the same period the average growth of banks' assets outpaced GDP growth. In terms of GDP, bank assets in the EU-25 reached 308% in 2004, an increase of almost 30 percentage since 1995. This indicator amounts to 416% in the EU-15 area at the end of 2004, while in the EU-10 the level of financial intermediation was considerably lower.

The difference in the bank asset ratio to GDP between EU-15 and EU-25 is quite small, when we apply the weighted averages. Thus, the high value of the indicator for EU-25 may be driven by small countries with high bank assets as Luxembourg. A comparison of the weight averages between EU-10 and EU-25 reveals similar patterns, yet the a large difference prevails. As a consequence we may assume that in the NMS banks still have a less significant role then in EU-15 or in the EU-25.

Among all member states Luxembourg stands out in this respect, producing ratios that are twenty times higher than the lowest value observed. However Luxembourg is witnessing a decline of its banking sector in recent years. The decline can partially be explained by the new EU financial regulation, which has removed some of the existing tax advantage of investing money in Luxembourg.

In the EU-10 area, only Cyprus and Malta, the two non-transition economies among the accession countries, display a ratio comparable with the EU-15 countries. In the transition countries even after more than a decade of bank restructuring, this ratio is still under 100% even if it has distinctly increased in recent years. In these countries credit institutions are the most important intermediaries in the financial system. In this context, the Czech Republic and the Slovakia stand out as the two economies with the strongest banking systems with bank assets amounting to 100% of GDP and 88% of GDP in 2004, respectively. The high share in these two countries is partially a result of the existence of a significant banking system under the previous socialist regime. Wagner and Iakova (2001) report that Czechoslovakia entered transition with a very high ratio of bank assets to GDP, and this was reflected in high ratios even when the country split into the Czech Republic and the Slovakia in 1993. However, both

these countries are now the only European countries, together with Luxembourg, where we observe a decline in the ratio of bank assets to GDP. In the Czech Republic and Slovakia the reduction can be explained by growing competition inside the financial system and a trend of disintermediation.

At the other end of the spectrum is Lithuania, with bank assets of only around 48% of GDP in 2004, and countries like Poland and Hungary with levels between 70% and 80% of GDP in the same year.

Another widely used indicator of the importance of banks is the ratio of domestic credit provided by credit institutions divided by GDP. Credit is a broad measure of the financing of non-monetary financial institutions provided by credit institutions. The ratio includes loans and holdings of securities issued by non-monetary financial institutions. The latter include shares, other equity and debt securities. As securities can be seen as an alternative source of funds to loans, and as some loans can be securitized, this definition provides more accurate information on the total amount of financing provided by the credit institutions to the economy than a narrow definition comprising loans only. Thus, the ratio is a good proxy for the overall credit activity in the banking sector.

Table 3 Total credit granted by domestic credit institutions as % of GDP

In all EU-25 member states there has been an increase in the lending volume from 66% in 1995 to 116% of GDP in 2004. Among EU-15 countries the highest level of bank lending is observed in Luxembourg at 467% and Ireland at 176% GDP in 2004. A high level of banking activity could be observed also in Germany and the Netherlands too. When we apply the weighted averages the results are a bit lower. In the EU-15 the average lending volume was comparable to the EU-25 amounting to 120% of GDP and 115% of GDP for the years 1995-2004, respectively. However, in the new accession countries total credit granted by credit institutions is on average was three times lower of that in EU-25 or EU-15, showing that in the NMS bank lending is less developed.. Again only in Cyprus and Malta is the level of bank lending comparable to the EU-15 figures. In the transition economies bank activity is usually very low and even in the Czech Republic, which has the largest banking sector, total credit over GDP in 2003 amounts to only about one-third of bank assets, i.e. 30% of GDP.

The low level of bank lending in transition countries can be explained by the sharp economic downturn, which resulted in GDP falling between 15-20% in the first period of economic

transformation. Severe recessions led to a massive bad-debt problem in the corporate sector dominated at this time by former state enterprises. These led to widespread defaults and a substantial reduction of banks' loan portfolios. In some countries, these developments triggered banking crises, which further reduced bank assets. It strongly affected banks' lending behavior and induced a shift towards government securities. The shift from bank lending towards government securities was motivated additionally by high interest rates, which were raised in order to control inflation. Nevertheless as the economic situation improved and government securities' interest rates decreased, bank lending started to grow again. However, this situation is still very fragile as the case of Czech Republic shows, where an economic downturn and an unresolved bad-debt problem led to a shrinking of credit levels to record lows.

Another, popular measure reflecting the bank position in the financial system is the share of total deposits to GDP. The ratio reflects household deposits, which constitute the main source of funding for the banking sector and represent the ability of credit institutions to channel financial savings into investment and credits.

## Table 4 Total deposits of domestic credit institutions as % of GDP

An increase in the deposit level from 58% in 1995 to 116% in 2004 implies a strong position of the banking sector in the EU. Luxembourg and Denmark were the outliers, where the ratio of intermediation decreased. However, in case of Denmark the situation has stabilized and bank deposit has been growing again since 2002. In case of Luxembourg the decrease of bank deposits can be explained by the change the EU- tax regulation, which stimulate outflow of bank deposits mostly to third countries in the last years.

In the years 1997-1999 some member states experienced disintermediation. Then again the trend was reversed with the overall fall of stock markets in the year 2000. It is worth mentioning the high growth levels of deposits observed in fast growing economies such as Ireland, Greece and Spain, where the ratios reached 123%, 96% and 105% in 2004, respectively. When we use weighted averages the ratio of bank deposits to GDP decrease. However, again the average bank deposit level in the EU-15 was very similar to that of the EU-25. Only in the EU-10 countries the level of deposits as a share of GDP was half of that in the EU-15 or EU-25 economies. Cyprus and Malta, again the two non-transition economies among the accession countries, display a ratio comparable with the EU-15 countries. The low level of

deposits in the EU-10 countries is attributable to low level of economic development and savings. Additionally the infrastructure of the banking system is still underdeveloped compared to the EU-15. This situation is illustrated by the case of Poland where only 60% of the working population had a bank account in 2004. In Poland traditionally payments are still mostly done through a country-wide network of post office branches. Despite this the Polish Post itself was not very successful in setting up a bank. This situation could change if the Post Bank is sold to a foreign investor. At the opposite end of the spectrum to Poland is the Czech Republic, which displays high deposits, because here historically the banking tradition has been stronger and the infrastructure well developed.

#### 2.2 Market structure

European banking has experienced fundamental changes over the last decades. As a result of structural deregulation and technological innovation competition in the banking sector has intensified considerably (Vives, 2000). The implementation of a single market in banking and the introduction of the single currency accelerated integration of the market for financial services. As a consequence further increases in competition and structural changes in the banking sector have followed.

European credit institutions responded to the structural changes by consolidating activities in order to increase in size and scope. As a consequence the number of credit institutions has steadily declined in the last decades. In the EU-15 area the trend began in the 1990s and affected all types of banks, including cooperative banks and mutual savings banks. The downward trend, has in turn, increased the level of concentration in domestic markets and across European banking markets (Marques Ibanez and Molyneux, 2001).

At the same time in the transition countries a two-tier banking system was created. In most of these countries the first commercial banks were carved out of the old central bank. In Poland, for example, nine regional commercial banks were created based on the branch network of the central bank. Besides in order to promote competition the minimum capital requirement for a bank license was set at a low level and the review process was very lax. It was a regulatory mistake, which resulted in a growing number of credit institutions, but did not translate into growing efficiency of the banking system. On the contrary, the entry of undercapitalized *de novo* credit institutions created a risk to the stability of the banking system. Therefore after a brief period the authorities had to encourage foreign investors and large banks

to take them over. As a consequence the number of credit institutions after a short peak began to decline.

#### Table 5 Number of domestic credit institutions

In the last decade almost all countries have experienced a sharp decline in the number of credit institutions. In the years 1995–2004 the average number of credit institutions was reduced by more then 27%. At the same time the number of credit institutions in the EU-15 remains higher than in the EU-10. The existing differences in the banking structure between EU-15 and EU-10 are more visible when we apply the population weighted averages. In this case the number of credit institutions is three times smaller in the NMS then in MS. However, the high number of credit institutions in the MS is mainly due to a large number of cooperative and saving banks in Germany, France and Italy.

In the EU-15 the reduction in the number of credit institutions reflects a consolidation process rather than liquidation of existing institutions. Among those countries the major reductions occurred in Germany and the United Kingdom. However, at the same time Sweden, Greece and Ireland report a substantial increase in the number of credit institutions, while it remains almost constant in Denmark and Finland.

On the other hand, in the EU-10 the number of credit institutions shrank at the beginning due to the large number of failures. The number of failures has been the highest in the group of savings and cooperative banks. Meanwhile, the number decreased as external factors such as acquisition of domestic commercial banks by foreign entities or mergers between regional banks affected the ongoing trend. The pressure to merge operations stems either from inside or outside the banking system. Inside as banks try to improve efficiency through mergers, and outside as a consequence of bank consolidation outside the host country. As a result the number of credit institutions in the EU-10 dropped significantly by more then 42%, from an average of 262 in 1995 to 152 in 2004. Only in Lithuania and Czech Republic do we observe an increase in credit institutions, while in Cyprus the number was almost unchanged. In all other EU-10 countries the number of credit institutions decreased with major reductions of around 50% in Poland, Estonia, Slovenia and Latvia.

Despite the declining trend in the EU-25, the number of credit institutions remains large compared to the US or Japan. The large number reflects that the banking sector is still very fragmented. Inside the countries the banking activity is dominated often by two to five

nationwide domestic universal banks. Other remaining institutions are small, regional saving and cooperative banks. The steady development towards integrated European financial markets has reduced the number of credit institutions and made the banking sector a little more international. However, most institutions have only a domestic network and not a single bank was able to build a European-wide network.

Subsequent to the introduction of the euro competition and cross-border consolidation has intensified. As a result the number of cross-border mergers and acquisitions has been growing and the number of credit institution in the EU-25 fell from 12, 256 in 1985 to 7,444 in 2003 (Dermine, 2005). However, the volume of the cross-border transactions is still modest compared to the domestic ones.

In the EU-15 area out of a total of 2,549 transactions in the banking sector only 17% were cross-border/within-industry and 6% cross-border/cross-industry over the period 1990-1999 (Group of Ten, 2001).

Table 6 Number of domestic, intra-EU and outside-EU mergers in Europe, 2001-2004 In the EU-25 438 transactions involving at least on credit institutions were recorded over the period 2001-2004. In the EU-25 68% of these transactions were within-border transactions, 26% transactions within European Economic Area, and only 6% of deals were with third countries outside the EEA. In those period based on the number of transaction 354 (81%) deals were reported in the EU-15 and only 84 (19%) in the EU-10. We get a slight different picture of the consolidation process in the EU-25 when we compare the number of deals to the existing number of credit institution. In this case the process of merger and acquisition was more significant for the structure of the banking system in the EU-10 than in EU-15. In the EU-10 the number of mergers affected 14% of all institutions, while in the EU-10 it was only 6%. In the EU-10 the high number of mergers was due to cross-border deals or consolidation of domestic banks caused by mergers process outside the host countries. An illustrative example is the recent purchase of the German bank HVB by the Italian UniCredito, which will spur a wave of domestic mergers in the EU-10 as both banks had subsidiaries in CEE countries. HVB was the biggest foreign bank in the CEE (including EU candidate countries) with a market share of 5,4% and total assets of 35,5 bln euro at the end of 2004, while UniCredito had an market share of 4,3% and total assets of 27,2 bln euro. The merger of HVB and UniCredtio

will create not only the biggest foreign bank in CEE but also it will often the biggest institution in local markets.

The significance of foreign investors reflects the average market share of bank assets held by non-residents amounts to 28% in terms of credit institutions assets for the EU-15 and 78% for EU-10 countries at the end of 2004. As a result the difference in foreign ownership between the MS and NMS was fifty percentage point, while the EU-25 average was 44% at the end of 2004.

Table 7 Share of foreign credit institutions as % of total assets of domestic credit institutions. The existing difference between EU-15 and EU-10 in bank ownership structure is more significant when we calculated assets weighted average of foreign ownership. In the period of 1997 – 2004 the market share of foreign banks was on average 22% in the EU-25, constituting 17% in the EU-15, while in the EU-10 it was 55%.

These numbers hide enormous differences in consolidation and internationalization across bank sectors in the EU-25. In the EU-15 area the consolidation process involves mostly small and midsize domestic banks. The bigger banks have been left out of this process as there appears to be reluctance across the EU-15 to see domestic banks pass into the hands of foreigners. Thus governments and central banks encourage domestic banks to merge especially if there is a threat of foreign acquisition. The defensive nature of bank consolidation is based on the belief of the necessity of a strong home market before moving abroad (Boot, 1999).

Thus national champions are created in order to be competitive and they are protected from hostile foreign takeovers. As a consequence in many leading European countries foreign ownership does not exceed 15% of domestic credit institutions' total assets. At the other end of the spectrum, transition economies were eager to open their borders from the beginning of the economic changes and foreign entities have been active since the early 1990s. Thus, foreign entities already own more than 50% of the assets of credit institutions in these countries. In the EU-10 area foreign ownership represents on average 77% of the banking sector's asset at the end of 2003, and in some countries foreign entities control over 90% of the banking market. The privatization of credit institutions was the crucial factor affecting the ownership structure of the banking sector. Foreign investors became the new owners of the largest banks, which were formerly state-owned.

Therefore the new European Union presents a very mixed structure regarding foreign ownership. Differences are not only visible between new and old members, but between small and strong economies as well: the level of foreign ownership in 2004 is very high in Estonia, the Czech Republic, Slovakia, Hungary and Luxembourg, while it is around 50% in Cyprus, United Kingdom, and only 6% in Germany.

Divergence in foreign ownership has a strong impact on the market structure of the EU and influences the number of credit institutions and the ratio of concentration too. Davis and De Bandt (1999) provided evidence of monopolistic competition in a variety of European banking markets in the mid-1990s. They noted that the competitive environment in French, German and Italian banking markets still lags behind that in the USA. Our results of foreign penetration as a prevailing large number of credit institutions confirm that these markets are still closed to outside competition.

In order to capture the structure of the host banking system among member states we calculated the five-firm concentration ratio (CR5) and the Herfindahl-Hirschman Index (HHI) for all the twenty-five EU banking systems. Both our concentration measures are derived from assets. We assume that the level of a bank's assets is a good proxy for the level of its other financial services in the market.

The CR5 is defined as the sum of the markets share of the top five credit institutions in the industry. When we compare the percentage of the banking sector controlled by the five largest credit institutions, measured in terms of total assets, we observe an increase in this figure for most member countries in the period 1995 - 2004.

Table 8 Share of the five largest credit institutions in total assets in %

The rising trend in the CR5s reflects the ongoing process of consolidation and the decline in the number of credit institutions in the EU-25. Table 7 shows that the concentration level in the EU-25 has risen on average only 4%, from 57% in 1995 to 59% in 2004. The market share of the five credit institutions seems to be lower, when we adjust the average by assets. The assets weighted average of CR5 for EU-25 was 45% in the period 1995-2004, while for the EU-15 and EU-10 it was 45% and 60%, conversely.

However, the level of concentration is very different across member countries. In Austria, France, Germany, Italy, Luxembourg and United Kingdom the combined market share of the five credit institutions stay below 50%. Conversely, values of more then 80% can be observed

in Belgium, Estonia, Finland, Lithuania and Netherlands. This high level of concentration should be a regulatory concern as it can disrupt local competition. Additionally it is a sign of the oligopoly structure of the banking industry. In the EU-15 this is often the consequence of banks expansion in size in the course of being promoted by governments with the aim to create national champions. Marques Ibanez and Molyneux (2001) note that this can induce a "too big to fail" problem in these countries. In their opinion the increased fragility of the system is especially acute as banks attempt to regain lost profitability through the assumption of higher risk.

Across member countries market concentration is lower on average in the EU-15 than in the EU-10. The higher level of concentration in the transition economies can be explained by the still dominant position of former state-owned saving banks. Yet, even though the CR5 does not reflect it, their market share is diminishing due to the growing competition of new entrants. In addition most foreign banks after entering the market pursue the aim of enlarging their market share. As a consequence they acquire the remaining domestic credit institutions. This tendency accelerated as foreign credit institutions merged their operations as a consequence of cross-border and domestic consolidation.

The CR5 measure is very popular because it has the advantage of being easily measurable. On the other hand it has some limitations as it takes no account of the size distribution of the remaining credit institutions in the sector. Thus, any change in the sector not affecting banks inside the top five will not influence the CR5. Therefore we also use the Herfindahl-Hirschman Index (HHI), a commonly accepted measure of market concentration, which is more data intensive. The HHI is defined as the sum of the squared market shares of the individual banks. Its advantage compared to CR5 is that it makes full use of information about the market position of all banks (Bikker, 2001; Bikker and Haaf 2002a). It still attaches greater weighting to larger banks, yet it includes all banks. The upper value of the index is 10,000 in the case of a monopolist and tends to zero in the case of a large number of firms with very small market shares.

Table 9 Herfindahl-Hirschman Index (HHI) for credit institutions' total assets In the EU-25 the HHI is decreasing reflecting a downward trend in market concentration in the period 1995-2004. The main cause for the decrease is growing competition and the new entrants in the EU-10. In fact, behind this trend we can observe different behavior and levels of

concentration in the new and old member states. The banking sectors of the EU-10 remained much more concentrated throughout the sample period than those of the EU-15. In smaller member states, especially in the NMS, tend to have a high concentration in the banking sector as measured by the HHI of total banking sector assets. In Belgium, Estonia, Finland, Lithuania and Malta the HHI exceeds 1800 points, which is regarded as the high level concentration threshold in many countries<sup>4</sup>. On the other side concentration remained relatively low in Germany, Italy, Luxembourg and United Kingdom. In the last two countries the low level of concentration is due to the presence of many foreign banks. As those institution do not directly provide services to residents, so the level of concentration may be higher in the banking sector. At the end of 2004 the HHI for assets was at 1,531 for the EU-10, while for the EU-15 it was 931. However, in the last decade the level of concentration in the EU-10 fell, which can be explained by foreign bank expansion, while in the EU-15 it remained stable. Similar evidence is conveyed by the assets weighted HHI, which presents lower level of concentration in the EU-25, EU-10 and EU-15. The weighted average level of concentration was lower as larger countries have a less concentrate banking sector.

A number of recent studies have attempted to measure whether a concentrated market structure adversely affects competitive market conditions. Bikker and Haaf (2002b) and Claessens and Laeven (2004) have shown that often a more concentrated banking system goes hand in hand with a more competitive structure. Their results may suggest that a concentrated banking structure can result in economies of scale and scope, as larger banks tend to be more efficient. On the other hand high level of concentration as already present in Estonia may rise concern about over the exploitation of market power by large banks.

## 2.3 The performance of the banking sector

In the last part of this section we focus on the performance of the banking industry, providing a comprehensive set of bank characteristics in the EU-25. We use income statement and balance sheet data of commercial banks, saving and cooperative banks from the BankScope database provided by Bureau van Dijk. BankScope coverage is fully comprehensive, accounting for 90% of all bank assets. We begin our analysis by comparing the aggregate structure of credit institutions' balance sheet items. Later we discuss the existing

\_

<sup>&</sup>lt;sup>4</sup> According to US competition authorities, a number higher than 1,800 indicates a concentrated market.

differences in the structure, as they are a direct indicator of earning power and cost sources. Finally, we provide some proxies for banking system efficiency, as it has a strong impact on credit institutions' profitability. While conducting this analysis, we need to take into account that a credit institution's balance sheet structure, together with its efficiency and profitability, is strongly dependent on the structure of the financial system and competition inside the banking sector.

The ratio of total loans to total assets reflects the role of the financial intermediary in providing financing. We expect this indicator to be quite high, because of the important role played by banks in the European countries' financial systems.

#### Table 10 Loans as % of banks' total assets

On average the level of total loans to assets is almost equal in EU-15 and EU-10 countries in 2003. Changes in the ratio indicate that credit institutions have significantly improved their activity in financial intermediation in recent years. In Hungary, Estonia and Lithuania the ratio is higher then in most EU-15 countries. The indicator is particularly low only in Belgium, France, Ireland and Luxembourg. In those countries the low levels of bank credit to the private sector are a sign of the disintermediation trend and the growing importance of financial markets. Among EU-10 countries the ratio is relatively low only in Slovakia and the Czech Republic. In this case it may be explained by the restrictive lending policy of credit institutions due to bad loan problems in recent years.

The ratio of non-interest earning assets to total assets is a proxy of credit institutions' ability to manage their assets and the cost of fixed assets. These earnings are, for example, commissions paid by households for portfolio management; as a consequence this indicator sheds some light on activity differentiation.

## Table 11 Non-interest earnings assets as % of banks' total assets

On average the level of non-interest earning assets to total assets is a little lower in the EU-10 than in the EU-15 in the years 1996–2003. However, in EU-15 economies non-interest earning assets rise, while in EU-10 countries they fall. While in EU-15 countries the rise in non-interest earnings is strongly correlated with an increase in capital, in EU-10 countries the fall was probably due more to efficient management of assets. Besides, the ratio yields very different results and presents a very mixed picture of the banking industry in the EU-25. At the

end of 2003 the highest values are observed in Finland, Lithuania, Portugal and France, while the lowest values are reported in Germany and Cyprus.

Demirgüç–Kunt and Huizinga (1999) present evidence that profits appear to decline the greater the proportion of non–interest earning assets. Thus, the existing different levels could represent discrepancy in asset management and influence banks' efficiency and profitability. The ratio of customer and short-term funding to total assets provide information on the main source of financing for credit institutions. It indicates credit institutions' function as financial intermediaries in the allocation of savings. The level of the ratio has an impact on the liquidity position of a credit institution. Thus, it may influence credit institutions profitability as a higher ratio means access to cheaper sources of funds.

Table 12 Customer and short-term funding as % of banks' total assets

In the EU-25 customer and short-term funding amounts to 75% of total assets at the end of 2003. On average the ratio is higher for the EU-10 then EU-15 and amounted to 83% and 69% as of December 2003, respectively. Those ratios suggest a strong position for credit institutions in the EU-10 financial systems. In addition, the financial systems seem not to be affected by disintermediation and credit institutions are still the main institution for allocating savings. Conversely, disintermediation due to competition for savings and the change of investment behavior has significantly reduced the role of intermediaries in the EU-15 financial system. Among countries the lowest ratios are recorded for Denmark and Sweden, while the highest are observed for Cyprus, Greece, Latvia and Slovakia at the end of 2003.

We measure capital adequacy of credit institutions by dividing book equity by total assets. This measure is a proxy for stability in the banking sector. Demirgüç–Kunt et al (1999) show that profit is positively related to the lagged equity variable. In their opinion well–capitalized banks face lower expected bankruptcy costs for themselves and their customers, thereby reducing their cost of funding.

## Table 13 Equity as % of banks' total assets

At the end of 2003 the ratio of capital adequacy is almost 7% for the EU-25. The capital ratio varies considerably from one country to another, ranging from 3.43% in Belgium to 10.69% in Estonia. On average the bank capital ratios were higher in EU-10 countries than in EU-15 ones. The level of capital varies not only with the aim of satisfying prudential regulation and the decisions of the owner and managers but also on the structural features of

their markets as well as the risk of economic shocks (Marques Ibanez and Molyneux, 2001). As a result credit institutions in countries undergoing economic transition are under pressure to keep a high level of capitalization. Additionally the increase in capitalization can be partly explained by the need to fulfill the new regulation of the BIS Basel Committee.

The most popular proxies for bank efficiency are the ratio of overhead costs to total assets and the cost income ratio. We begin with the overhead costs to total assets, which show how effective credit institutions are in managing their fixed costs. By construction this ratio strongly reflects variation in employment and wage levels in credit institutions.

#### Table 14 Overhead costs as % of banks' total assets

Despite low wages the overhead variable appears to be higher in transition economies than in the EU-15. In the years 1996-2003, on average, the ratio is twice as high in EU-10 countries as in EU-15 ones. At the end of 2003 the overhead cost measure is notably high in Hungary and Poland, at 4% and 3.84% respectively. The high value of the ratio probably still reflects overemployment in credit institutions in those countries. Overall in all transition economies the ratio has decreased and in the Czech Republic it has already reached a level comparable to some EU-15 countries. Implementing new technology has been a major factor responsible for the reduction in overhead costs.

The second efficiency measure, the cost-income ratio, reflects trends in both earnings and costs. In this ratio the bank's expenditures are related to income. European banks significantly improved their costs side by reducing personnel and increasing productivity by introducing new technology. As a result there is an overall downward trend in the cost-income ratio. However, several income sources such as trading and investment banking are volatile and fluctuate over time. Furthermore due to the merger and acquisition process in some cases costs can rise in the short term. Thus, the cost-income ratio can vary in the short run, but overall the trend has been downwards in Europe since the 1990s.

#### Table 15 Cost/income ratio as % of banks' total income

In the EU-25 the average cost income ratio declined from 62.44% in 1997 to 61.85% in 2003. The table shows, however, that the trend in the cost-income ratio has been different among member countries and over time. Belgium, Estonia, Finland, France, Greece, Ireland, Italy, Malta and Spain witnessed efficiency gains, but in other countries the trend was in the reverse direction. The cost improvements reflected also by the falling ratio of overheads to

total assets can in part explain the decline trend of the income ratio. Indeed, the overhead ratio declines, both in the EU-15 and in the EU-10, and indicates operation rationalization and cost cutting strategies of credit institutions. As we mentioned earlier, the increase in productivity can be attributed mainly to the development and implementation of new technology. It could also explain the significant variation in the cost-income ratio between EU-10 and EU-15 countries in the years 1996–2003. In transition countries this indicator rose until 1999, when a high amount of investment has gone toward IT capital. Afterwards it was declining as the productivity accelerated due to the new technologies and knowledge. Additionally, the improvement was a natural consequence of privatization and acquisition by foreign entities. In both cases we can observe an improved performance of credit institutions in transition economies (Bonin et al., 2005). Thus at the end of 2003 the income ratios for credit institutions in most EU-10 countries is in line with EU-15 indicators or even outperform them.

Generally, most European credit institutions will try to increase cost effectiveness by further reducing wage costs, increasing revenue volume or by spreading operating costs over a larger asset base via consolidation, which has already partially taken place in recent years.

The trends in overhead costs and cost-income ratios are reflected in the profitability of credit institutions. We measure the profitability of credit institutions using two indicators: net interest margin and return on assets. The net interest margin equals net interest income divided by total assets. The measure reflects competitive conditions or efficiency in banking markets and allows comparison over time and across countries. We are assuming that competition enforces efficiency and lowers the margin. However, looking at Table 15 we see there are mixed results.

## Table 16 Net interest margin as % of banks' total assets

Net interest margins in EU-10 economies are almost twice as high as in the EU-15 countries. However, generally the net interest margins are declining as most credit institutions have been subject to increasing competitive pressure. In EU-10 countries the average net interest margin fell by 36%, from 5.04% in 1996 to 3.25% in 2003. In the same period net interest margins in the EU-15 countries experienced small fluctuations, in the range 1.90-2.20%. The margins vary with the interest cycle but the overall trend is downward since the 1990s. The decline in net interest margin indicates that consolidation, the fall in the number of credit institutions and foreign entry has not adversely affected competitive conditions in the

EU-25 banking system. However, the net interest margins are quite diverse. In the EU-15 the lowest values are observed in Luxembourg and France, while among EU-10 countries Malta, Cyprus and the Czech Republic are at the lower bound. Across EU-15 countries the highest values are recorded in Greece, Spain and Italy, while among EU-10 economies Hungary and Estonia hit the upper limit.

The results for return on assets (ROA) present a mixed picture for EU-25 countries. The return improved among EU-15 countries, while in EU-10 ones there was a downward trend. Given that the level of return in EU-10 countries was quite high the decline is understandable. The high returns in those countries attracted new competition, which forced a reduction in net interest margins and bank profits.

## Table 17 Return on total assets as % of banks' total assets

In 2003 profitability in Europe was almost 1%. EU-15 countries report lower profitability then EU-10 economies, reflecting increased competitive pressure in EU-15 countries. Additionally the fall in share prices at the end of the 20th century had an adverse effect on banking activities. Most EU-15 countries have kept their profits and the downturn has not been severe. However, this does not hold for all countries. In Germany, Austria and France the fall in profits in recent years indicates the fairly poor condition of many of their banks. This condition reflects the unsteady situation of the banking sector due to strong government intervention and lack of foreign competition. At the same time the rising return level in EU-10 countries indicates that banks have significantly improved their efficiency in recent years. In transition economies the credit institutions often inherited the loan portfolio and deposit base of the former state-owned banks. This meant that they continued relationships with stateowned enterprises, the vast majority of which were struggling to survive and reorganize. Additionally credit institutions were often under political pressure to continue lending to stateowned or former state-owned companies. There was also a lack of a credit culture and the credit procedures were lazy. Therefore the loan portfolios of credit institutions were often excessively concentrated either in individual industries or in geographical regions. As economic slowdown occurred it was then often accompanied by a large and expanding stock of nonperforming loans, which created solvency problems for many banks. The poor performance of credit institutions in some transition countries, like the Czech Republic, is a reflection of the bad loans problems in this period and the years following it. As the countries moved forward

with economic reforms, the financial situation of banks improved significantly. The governments often decided to restructure the credit institutions by selling them off to a foreign entity and tightening bank supervision. Thus, the increasing level of foreign capital in transition countries often reflects the growing bad debt problems in the financial system. The entry of foreign entities stabilized banking systems by providing funding for the undercapitalized and poorly performing credit institutions. As a result, the credit institutions' performance has improved substantially, helped by enhanced productivity and improving macroeconomic conditions.

Concluding, our results partially confirm and partially oppose the existing literature. According to the Demirgüç–Kunt et al (1998) well capitalized banks have higher net interest margins and are more profitable. Our study confirms these findings as we find the highest net interest margins and profitability in transition economies. However, here higher foreign ownership is positively correlated with higher interest margins. These results are different from those presented by Claessens, Demirgüç and Huizinga (2001), where they report that foreign entry in the banking industry is associated with lower non–interest income, profitability and overhead costs. However, more advanced econometric methods would be needed to draw any final conclusion from our results.

## **3** The capital markets

In the last decade European stock exchanges were not attractive to many local firms. Despite the cost of listing, many European companies decided to cross-list on the US stock exchanges. This was particularly important for companies from the high tech sector that found on the US stock exchanges better financing opportunities and greater analyst expertise. In addition export-oriented firms were interested as they used the cross-listing as an advertisement. A comprehensive review of the literature and study on the characteristics of European firms listing abroad was conducted by Pagano, Roell and Zechner (2002).

The fact that accounting standards and shareholders' rights protection were lower in many European countries and that transaction costs were usually higher can also explain why many companies decided to list overseas: the commitment to higher accounting standards or stricter rules provided companies with higher reputation and, therefore, more financing possibilities. Of course, the larger is the market, the more opportunities there are for firms wishing to expand their equity base.

Some studies have shown that cross-listing is also an outcome of income growth: when GDP rises, not only do national stock exchange markets develop, but many companies decide to list abroad too (Claessens, Kingebiel and Schmukler, 2002). There are some policy implications for large migration of listed companies. The reduction of transactions on the national stock exchange decreases its liquidity and the opportunities for small companies to get listed. A stock exchange market has large fixed overhead costs for managing trading, clearing and settlement systems, so if the number of transactions shrinks dramatically, the conditions under which the market can operate efficiently are altered.

Intra-European cross-listing was less popular and often associated with the privatizations of state-owned companies. Moreover cross-listing was induced in countries were the domestic stock markets were shallow. Thus, companies decided to list on other European stock exchange markets as they experienced a lack of demand for their stocks, which was often also the result of poor investors' rights protection.

In transition economies the privatization of former state-owned companies has induced the development of equity markets: that's how the first stock exchanges appeared in the Czech Republic, Slovakia and Poland in 1992. After that stock markets were set up in other transition countries. The aim of opening the stock markets by the government was to provide some means of allocating and trading the ownership rights that came with privatization in the first place (Bonin and Wachtel, 2003). As a consequence the future development of stock markets was strongly influenced by the privatization strategies of the government in individual countries. We can distinguish two main strategies: the mass privatization (voucher method) and the graduate approach.

A strategy of mass privatization schemes was employed in the Czech Republic, Slovakia and Lithuania. In these countries the stock markets quickly comprised a large number of companies. However, the extensive equity markets restrained the liquidity. In addition the widespread ownership limited the transparency and enforcement of corporate governance mechanisms. Thus, few companies were traded and most companies were later delisted. As an example in the Czech Republic 81% companies were delisted between 1995 and 1997 and the number of listed companies declined from 1,716 in 1995 to 55 in 2004.

A different strategy to privatization and stock market development was adopted in Estonia, Hungary, Latvia, Poland and Slovenia. In these countries the government decided to privatize only financially sound and recognized companies via the stock market. In addition minority stakes in the privatized companies were often sold prior to the initial public offering to a foreign strategic investor. This provided an additional security for the government on the success for the planned public offer and guaranteed also a higher price for the remaining shares. As a result, the equity markets in those countries have been growing gradually and provided adequate liquidity for the listed companies. In Poland, in contrast to the Czech Republic, the number of listed companies grew steadily from 8 in 1992 to 250 in 2004. However, many of those companies are currently closely held by strategic investors and therefore the equity is not always liquid. Thus, this strategic approach to market development also has some flaws but in the end it provided a more developed stock exchange to the economy.

The 21<sup>st</sup> century has started with another revolution for European stock exchange markets: deregulation, globalisation and technological developments have helped equity market integration, through the creation of stock exchange market networks. European stock exchanges have largely exploited this opportunity. They are particularly active, taking the lead in forming and joining in active network cooperation (Hasan and Schmiedel, 2003). It is also true, that the United States have already experienced this network creation over the last hundred years: from about 200 at the beginning of the 20<sup>th</sup> century, US stock exchanges have been reduced to about half a dozen today. European stock exchanges did not change over time, and started to rethink their structure only in recent years. The first nodes of this large trans-European market are Euronext, connecting the Amsterdam, Paris, Brussels and Lisbon stock exchanges, and the Nordic and Baltic stock exchange, which combines the markets of Sweden, Finland, Estonia, Latvia, Lithuania and Denmark.

Stock exchange networks satisfy the needs of companies seeking to broaden their shareholders' base and raise capital beyond local markets. Together with the dismantling of the public system, this is what has probably induced the small countries of Estonia, Latvia, and Lithuania to join the Nordic and Baltic alliance. It may be the only way they could avoid an almost sure decline of the local market, undermined by the migration of the best companies through cross-listing in international markets.

Another characteristic of stock exchange networks is their higher efficiency, granted by extended trading hours, the possibility of remote membership, lower transaction costs and greater information. All in all, an integrated European stock exchange market should lead to greater efficiency. Network externalities may contribute a lot in increasing a market size and activity.

Because of the development of the European exchange market networks, the traditional distinction between market-based and bank-based financial systems starts to be less applicable, as the very concept of national market is no longer clear cut. On the other hand we still believe that the traditional classification can be useful in summarizing a financial system' characteristics and as the stock markets integration is a present-day phenomenon (i.e. it affects only the latest years' data). At the last section of this paper we will show and discuss the traditional indicators and compare them with those of countries from other economic areas. In the meantime we will provide some information about the European stock exchange market networks as a whole, as we believe that this will be an important characteristic of the European financial system in the near future.

#### 3.1 Market size

We will look at both shares and bond markets. We will examine all listed shares and bonds in each market, regardless of the residency of the issuer and whether it is a public or private entity. Data for the bond market are scarce and of lower quality. In order not to distort the results about the equity market, and to provide more detailed insights, we will analyse the two markets separately. As dynamic movements in market indicators are heavily influenced by asset price changes, we will analyse average values over the period under examination. By doing so we are neutralizing prices effects and capturing only structural characteristics.

The share market size is usually represented by the ratio between the market capitalization of companies listed in the national stock exchange market and GDP.

Table 18 Market capitalization of listed companies as % of GDP

According to this indicator, the largest European stock exchange markets are in Luxembourg, the United Kingdom, the Netherlands, Finland and Sweden. The London stock exchange (LSE) is in absolute terms the largest in Europe; the Amsterdam stock exchange is large both in absolute and relative terms. On the other hand, in absolute values the stock exchange is not very large in Luxembourg, but, compared to GDP, it is the largest in Europe. The result for

Finland is mainly due to the single company Nokia that dominates the Finnish economy and the stock exchange. Nokia's market capitalization counted for around 60% of the total Finnish stock exchange market capitalization in the last five years. This same phenomenon holds for Sweden, even if to a much lesser extent: during the last five years, on average Ericsson represented 30% of the total Stockholm stock exchange. Among the new accession countries only Cyprus seems to have a market size comparable to previous EU members. The Wiener Börse is particularly small and this is probably due to the centrality of banks in the Austrian financial system.

The two groups are very different: the average size of the stock exchange in EU-10 countries amounts to a third of the EU-15 one. Excluding Cyprus, the market size is homogeneous in this group: the market is not very large in these countries. The evidence for the former EU members is more scattered, taking into account the different historical developments of all countries concerned.

Over time the ratio of market capitalization to GDP does not vary much in most European countries; the exceptions are Finland and Cyprus on the one hand, whose ratio has risen substantially, and Luxembourg, showing an opposite downward trend. For Finland, again, this is due to the market capitalization of Nokia, which had astonishingly high values in the period 1999-2001. Now that Nokia's shares values are to a more customary level, Finnish stock market capitalization is still high, but in line with the relatively largest European stock exchanges. The same pattern has been observed for Cyprus and for the same period (1999-2001).

The size of a stock exchange market can also be examined through the number of listed companies.

## Table 19 Average number of listed companies

EU-15 countries have larger stock exchange markets than new members. Spain and the United Kingdom have very large markets; French and German stock exchanges have many listed companies too.

The British result is predictable, while the Spanish one needs to be stressed. It is due to the fact that Spanish exchanges are an important market for companies operating in Latin America. In fact, since 1999, the Spanish exchange has a market segment dedicated to the Latin American companies that has risen a lot. At the end of 2003 Latibex had 31 listed

companies and currently and it is the third largest market by capitalization for Latin America after Brazil and Mexico.

On the London market many of the listed companies are not of domestic origin. Perhaps surprisingly, the London market is not the one that hosts the largest proportion of foreign companies. It is surpassed by Luxembourg, which is the only country where the number of foreign companies listed is higher (up to four times) than the number of domestic ones. Listings on the Luxembourg stock exchange have been strongly encouraged by its favourable legal and tax regimes. In addition the legal and political environment has become particularly attractive to set up holding companies, which allow operation in other European countries. These holding companies, created under the Act Sociétés Commerciales de Participations Financières (SOPARFIs), benefit from dual taxation agreements or the EU-Directive establishing a common tax regime between parent companies and their subsidiaries within the EU. In addition to Luxembourg, the German Deutsche Börse and the Irish market, even if smaller in size, also host a larger proportion of foreign companies (more than 20% of the total) than the British one.

Among the new members only Poland displays a number of listed companies comparable to the Slovak and Czech ones, and to EU-15 countries. For the Slovak and the Czech Republics the figure has dramatically declined in recent years. This pattern is what might be expected because of the privatization process: due to the mergers and acquisitions that usually follow privatizations, a clear decline in the number of firms listed in the EU-10 countries might be expected, but this has not always taken place. Even if still small in size, the Cyprus stock exchange is growing quickly. The number of companies listed in European markets does not show a common trend between 1995 and 2003, and the differences across countries are increasing.

It is worth noticing that the European stock exchanges are not completely dominated by the British market, as one might expect from a historical perspective, but other markets, like the Spanish and the German ones, are important. From now on, the competition from Euronext and the Nordic and Baltic stock exchange has to be taken into account too.

An important part of the domestic capital market is the market for debt securities. In the EU-25 member states bonds are traded mainly on the exchanges, yet the dealer market have been developing quite fast in the last decade. In the EU-25 especially the euro denominated

bond market has been characterised by the growing use of multilateral electronic trading systems, which allowed easier cross-border trading. The trend was clearly visible in the government bond and asset or mortgage backed securities sector. In the EU-25 the number of systems operating increased from 17 in 1997 to 31 at the end of 2003.

However, the debt securities listed on stock exchanges are still dominant. In the EU-25 the size of the domestic debt securities market reached 128.5% GDP at the end of 2004.

#### Table 20 Domestic debt securities as % GDP

The debt securities markets have been growing much faster in the EU-10 then in the EU-15 member states in the years 1995-2004. However, the debt market in the EU-10 member states is still three times smaller than that of EU-15 member states with an average of 67% GDP and 146% GDP at the end of 2004, respectively. At this time the most developed domestic bond market was in Denmark, Italy and Belgium within the EU-15 member states, and in the Czech Republic, Hungary and Poland among the EU-10 countries. The weighted average present a slight higher importance of the domestic debt securities market in the EU-25, yet the importance decreases in the EU-15 and EU-10 member states.

At first sight the domestic debt market of Luxembourg and United Kingdom seems small compared to that of other EU-15 member states. In those two countries, however, the debt market is quite well developed, but a significant proportion consists of international bonds. In those two countries they represent almost half of all the debt securities issued in the market. As a result, when international bonds are included in the assessment of the debt markets, the United Kingdom and Luxembourg have the biggest bond markets within the EU-25.

In the other member states within the EU-25 the bond market was until recently mainly domestic. Pagano and von Thadden (1998) reported that at the start of 1990s almost all public debt was issued domestically, while for private-sector issues the ratio of domestic to international debt securities was about 4:1 in Europe.

At first sight the EU-25 domestic debt securities market seems to be more developed than the equity market. However, the structure of the EU-25 debt markets as a whole is dominated by bonds issued by governments, while the rest is distributed between financial and corporate debt instruments.

It is often emphasized that the introduction of the euro created the biggest market in the world for government bonds. It is described as a single market in as much as all government bonds are issued in one currency. On the other hand the euro government debt market is represented only by twelve countries of the twenty five member states. Furthermore there is no central government issuer in the Economic and Monetary Union (EMU) and each member state has its own fiscal policy. Thus, even though it is the biggest government bond market in the world it is still divided among some national governments within the EU-25.

#### Table 21 Domestic government debt securities as % GDP

The recent increase in issuance of government debt instruments primarily reflects the financing of fiscal imbalances of member states. At the end of 2004 the value of domestic government securities as a share of GDP was 77% for the EU-25, while for the EU-15 it was 82% and 62% for the EU-10. The weighted averages presented slightly lower levels of domestic debt for the EU-25 and EU-15, while for the EU-10 the weighted average was almost ten percent lower.

Among the EU-15 member states the highest value of domestic debt was recorded for Greece, Belgium and Italy. In the EU-10 the countries with the highest figures were the Czech Republic, Hungary and Poland. In those countries the domestic government debt market has increased 121% over the period 1997 – 2004. As a result in the transition economies the debt securities markets are more developed than equity markets only due to the extent of the domestic government bond segment.

The amount outstanding of privately issued debt in the EU-25 is still relatively modest, but the issuance of bonds by financial institutions has increased noticeably in recent years.

#### Table 22 Domestic financial institutions debt securities as % GDP

In the EU-25 the share of financial institutions bonds as a share of GDP increased from 41% in 1995 to 47% in 2004. The difference in importance of the financial institution debt market between the EU-15 and the EU-10 is significant. While in the EU-15 the share of financial institution bonds was 53% of GDP, in the EU-10 it was merely 5% of GDP at the end of 2004. In addition the weighted average present a lower level of importance of the financial institutions bond in the EU-10 and EU-15, yet the indicator is slightly higher for the EU-25. In the EU-15 the financial institution bond market is dominated by mortgage-backed securities, especially by the Pfandbriefe. The Pfandbriefe is a bond of German origin, which is secured either by first-ranking mortgages or public-sector loans. Therefore the security is perceived by investors as an extremely safe investment vehicle, being covered by mortgage liens or

government guarantees. The security itself was issued for the first time more than 230 years ago, however its popularity has drastically increased among member states due to the regulatory framework at the EU level. Due to an EU-Directive the Pfandbriefe has been recognized by the ECB as Tier 1 collateral within the EU-25. Consequently, it is the only private debt instrument to be placed on a par with government bonds so far. At the same time the Pfandbriefe offers a higher yield then comparable long-term government bonds (Rasche and Hagen, 2003).

Another reason for the growing popularity of this security among financial institutions and investors was the introduction of the Jumbo Pfandbriefe in 1995, with a minimum issue volume of 500 million euro. In contrast to original Pfandbriefes, a Jumbo Pfandbriefe has to be underwritten by at least 3 banks or securities traders. Moreover with the aim to create a homogeneous and liquid market segment comparable to the government bond market, the Jumbo Pfandbriefes have been standardized. Standardization and legal recognition has sparked a growing demand for this instrument among investors. As a result, similar debt instruments have been issued in other member states such as the Cedulas in Spain, the Obligation Foncière in France, the Lettre de Gage in Luxembourg's or the Asset Covered Security in Ireland. As a result of this development Pfandbriefes are the largest segment in the private debt market within the EU-25 (Kaiser and Heilenkötter, 1999).

Unlike debt issued by financial institutions, corporate bonds are not well established in the EU financial market. Although the non-financial corporate bond market has been growing rapidly in recent years it is still the smallest segment of the debt market in the EU-25. Moreover this segment of the market has been growing much slower then the government or financial debt market.

## Table 23 Domestic corporate debt securities as % GDP

In the EU-25 the corporate bond market was equivalent to only 5.6% of GDP at the end of 2004. At the same time the average was over one percentage point higher for the EU-15 countries, while in the EU-10 the corporate bond market does not practically exist as it is equivalent to only 1.5% GDP. The weighted averages confirms that the corporate bond market has been growing steadily and is more significant in the EU-15 than in the EU-10. In addition the importance of the corporate bond market in the economy of the EU-15 and EU-10 increases when we apply weighted averages.

Although the corporate bond market is still not very large within the EU-25, it has been growing in most member states as corporations have increasingly been exploring the opportunities for direct financing with better funding conditions. The switch to debt markets was accompanied by increased financing needs, which were related to new technologies and an intensive period of mergers and acquisitions. The surge in corporate bonds may also be a consequence of EMU and the introduction of the euro. Hartmann et al. (2003) noted that after the introduction of the euro, corporate net issues have been growing and sustained the level in spite of a significant decline of non-financial corporations in recent years. The decline of the non-financial corporation was caused by a wave of mergers and a record number of failures over the last decade. Thus, Hartmann et al. (2003) attribute the growth of the corporate bond market to the introduction of the common currency rather than corporate restructuring and technological changes. These findings were confirmed also empirically by Rajan and Zingales (2003), who reported that the euro had a positive effect on the amount of net debt issued. Moreover our data shows that the largest increase in the importance of the corporate securities domestic debt market was in those member states that also introduced the euro.

Besides the introduction of the common currency, the corporate issuance of debt instruments was also encouraged by banks as a result of new BIS regulations and stronger competition in the financial system. Thus, European financial intermediaries were helping their existing customers obtain direct access to the capital market. Consequently it is hard to distinguish whether the recent changes in corporate finance towards debt securities have been driven either by market changes, corporation restructuring or the banks themselves (Pagano et al., 2004).

In the EU-10, especially in the transition economies, the bond market for non-financial corporations is still very tiny. Nevertheless, in most of these countries the government has recently made efforts to develop the debt market. For example, in Poland the legal barriers have been eased. Moreover changes in the pension system in those countries should create demand for corporate bonds, and enhance new issues in the long-term.

## 3.2 Market activity or liquidity

Size alone is not sufficient for understanding the relevance of the stock exchange in a country. It is very important to analyse its activity, usually measured as the ratio between the value of shares traded and GDP.

Table 24 Total value of shares traded as of GDP

The most active markets are the London and the Amsterdam stock exchanges. Transactions volumes are high in Spain and Sweden too. Despite its large size, Luxembourg has a very idle market, to the same extent as the Wiener Börse. The EU-10 markets have very small trading volumes; Cyprus is, again, the only exception.

Looking at market activity the difference between the two groups is higher than when we examined size. Even when countries are trying to catch up by expanding their stock exchanges, these markets are still not very active. Enlarging a market seems to be easier than having a dynamic one. Almost all markets have recorded a peak in activity in 2000; after this exceptional year they all have returned to a stable level. Intra-group differences are higher for the EU-15 countries.

We are able to provide the evidence on bonds trading volumes only for a restricted sample.

## Table 25 Average value of bond traded as of GDP

The EU-10 countries have almost no bond trading: positive trade values are recorded for Malta and Hungary, but these are quite small and much lower than the trading volumes in EU-15 countries. The data for EU-15 countries is more diverse: the stock exchanges that have a higher activity in bonds are located in Denmark, Sweden and Italy. Together with the London stock exchange and the Amsterdam stock exchange, these are the only markets which record any significant activity in bonds. For Italy the reported average is influenced by the large values traded in 1996-1998; the ratio is quite low in recent years. In the late Nineties the highest trade volumes of bonds were recorded and these years were characterized by high volatility. In recent years, trade volumes are more stable and their average level is quite low.

Combining the information on size and activity, we get a measure of a market's liquidity; the ratio between the value of shares traded and market capitalization is also known as market turnover ratio.

#### Table 26 Shares turnover ratio of stock traded in %

As far as shares' trading is concerned, the most liquid markets are the Spanish exchanges, the London stock exchange and Deutsche Börse. The high turnovers in Sweden, Italy and the Netherlands are worth mentioning, also because of their huge increase. Turnover seems to be particularly low in Luxembourg and Malta. Only Hungary and Cyprus, and Poland and the Czech Republic to a lesser extent, seem to have kept pace with the EU-15 countries. Budapest

is the only EU-10 stock exchange with an average turnover higher than the overall European average.

The difference between the two groups is quite high: average turnover for the EU-15 countries is more then twice the one for the EU-10 ones. Except for the Wiener Börse, all EU-15 markets show an ascending trend over time, even with increasing divergence between countries. The evidence for EU-10 countries is more complex, but is becoming more homogeneous over time: if there is any, except for the peak reached in year 2000, a downward trend is observed.

In all the countries examined, bond market turnover is not significant, meaning that the European bond market is not liquid. The highest ratio (0.33%) is recorded for Denmark and Sweden.

Lastly we briefly describe an indicator of stock market significance designed to measure a market's ability to finance investment for the national economy. This is the ratio of the capital raised through the stock exchange to gross fixed capital formation.

#### Table 27 Average investment financing

Again the London stock exchange and the Spanish exchange stand out. Only Malta seems to have a similarly significant stock exchange. Euronext, even if performing better than other European markets, has still some way to go before being as influential as the London stock market. The Hungarian, the German and the Polish markets' contribution to the financing of investments is fairly irrelevant.

#### 3.3 Overall market development

We will now identify in which countries the stock market is developed, and in which it is not. This does not necessarily imply that a financial system is market-based: this latter definition can be assessed only when putting together all the results. For the time being we can just observe which countries have a developed stock market as measured by the examined ratios through a cross-country comparison. As before a financial system will be said to have a developed market if its ratios are at or above the European average. We will deliberately not look at the two sub-samples separately (EU-15 and EU-10) because we are trying here to start considering the European financial system as a whole. We will also not consider the bond

market, due to the scarcity of observations since this hinders reliable cross-country comparisons.

Markets are very developed in the United Kingdom, the Netherlands, Spain, France, Germany, Finland and Sweden. Luxembourg is not included here because of its very low activity in shares, which we judge outweighs the overwhelming international importance of its bond market.

We have classified Finland and Sweden as having developed markets, but we know that the result is due to the aforementioned presence of two large firms, Nokia and Ericsson, that constitute the largest part of the two markets, both in terms of capitalization and activity.

For all other EU-15 countries it is difficult to state clearly to what extent the stock market is developed. Here are some examples: the Danish and Italian markets are quite small, but trading activity in both markets is very large and promising for future development. At the opposite extreme, Belgium and Ireland have a large capitalization, but low market liquidity. The Athens stock exchange and Euronext Lisbon are the latest markets to be included among developed markets by private mutual funds.

Among EU-10 countries only Cyprus seems to have an almost developed stock exchange market. The Eastern European countries have no developed market. Some authors have wondered whether the establishment of a stock market in some transition economies represented nothing more than a potent symbol of capitalism (Bonin and Wachtel, 2003). This doubt is legitimate, because most of these markets are still very small and illiquid, and have so far served only privatization needs. Not only are they small relative to the European average, but both size and activity are usually lower than the values recorded in countries with similar levels of output. It may well be that these markets are very young and will naturally grow and develop, but this eventual development is influenced by many factors: the appealing possibility of cross-listing, the joining of stock exchange networks, the presence of firms large enough to go public, the regulatory environment, overall economic growth, and so on. We could also wonder whether it is necessary for a small open economy to have its own stock exchange market, as long as access to foreign capital and global financial markets is guaranteed. A counter-argument is that domestic stock markets, especially in transition economies, play an important role for foreign investors, because an equity market investment, being more liquid, may represent a valid alternative to foreign direct investment. In fact, non-resident investors

have substantial holdings in transition economies that have more developed stock markets among EU-10 countries (Hungary, the Czech Republic and Poland).

#### 3.4 Euronext and the Nordic and Baltic Stock Exchange

On September 2000 Euronext N.V., a holding company incorporated under Dutch law that operates through local subsidiaries, was formed: the Amsterdam Exchange, the Brussels Exchange and the Paris Bourse received shares in this new company in exchange for their existing interests. The former companies retain their identity under the new names Euronext Amsterdam N.V., Euronext Brussels N.V. and Euronext Paris N.V. and remain under the supervision of national authorities. The Euronext stock exchange expanded at the beginning of 2002 with the merger with the Portuguese Bolsa de Valores de Lisboa e Porto, now Euronext Lisbon N.V.

Euronext works as a unified market: there is a single list and clients can have access to it through the national market, that now acts as portal to the wider Euronext list. Depending on their liquidity, shares may be traded either continuously or by call auctions held twice a day. Moreover, there are two special categories or compartments: NextEconomy, for high tech companies, and NextPrime, for traditional industries. These are designed to help raise the profile of companies complying with stricter reporting standards than required by ordinary regulation. This was exactly one of the reasons that we have mentioned as a cause for cross-listing on US stock markets. This provision is one of the reasons why we believe that Euronext can help overcome the relatively inferior position of European stock markets.

While Euronext is a typical case of horizontal integration (i.e. different markets have merged), the Nordic and Baltic security market is a case of vertical integration, as it originates from the exchange division of OMX, a Swedish company, provider of technology, processing and outsourcing solutions. In 1997 the Stockholm stock exchange established a close cooperation with the Copenhagen stock exchange. But this cooperation was just a first step towards integration. The first real alliance took place in 2003 between the Stockholm stock exchange and the Helsinki stock exchange that also brought its existing engagement of operating the exchanges in Estonia and Latvia. At the same time Lithuania participated in the merger too. In December 2004 the Copenhagen stock exchange has announced having signed an agreement for combining with OMX.

The goal of the Nordic and Baltic stock exchange market is to have access to a very large list through national markets, which are well known by national investors. While Euronext is ahead in terms of establishing a common trading platform, a central counterparty clearing house, harmonized rules and regulations, the Nordic and Baltic market still has some way to go, but has, as a strong suit, a very flexible, state-of-the-art technology, that proves to be an important component for the competitive power of a mid-sized market. We also believe that this market could be of crucial help for the three Baltic countries, whose exchange markets were completely rebuilt during the first Nineties after independence from Soviet Union. Without the Nordic and Baltic market integration, it could have taken a very long time for them to catch up with the rest of the European Union.

Both Euronext and the Baltic and Nordic stock exchange have very active derivatives markets. In 2002 Euronext bought LIFFE (London International Financial Futures and Options Exchange), now Euronext.liffe. A single market for derivatives was created by bringing together all the derivatives products together on a single electronic trading platform, LIFFE CONNECT. On the other hand, besides collecting the Nordic derivatives markets from the participating markets, OMX has started cooperation with EDX London, a British company that offers trading services on 3 linked derivatives exchanges: the Stockholm Stock Exchange in Sweden (offering Swedish and Finnish products), the Copenhagen Stock Exchange in Denmark and Norway's Oslo Børs.

The figure shows the relevance of the networks compared to the largest independent stock exchanges markets, i.e. the UK, Germany and Spain.

Figure 2 A comparison of some of the largest stock exchange market

Regardless of the fact that during the last year the Nordic and Baltic stock exchange has experienced an increase in both share trading and market capitalization, it is still the fifth stock market in Europe. For the time being the British predominance in Europe does not seem to be in danger. Even if the proposed merger between Euronext and the London Stock Exchange would have been realised, its capitalization would be still well below that of the New York Stock Exchange, in spite of the relatively small number of listed companies there. However, the European exchanges are more liquid than the NYSE: the turnover ratio is higher in the Spanish and German markets, but the Nordic and Baltic market performs quite well too, in line

with the turnover ratio of Euronext. European markets, even if smaller in size, are then more active than their main competitor.

# 4 The importance of other financial corporations

The enlargement of the EU-25 accelerated the process of financial integration and is already evident in the banking industry and capital markets. The developments in each of these main areas have been summarized above emphasizing that the extent of integration across markets is not uniform.

Insurance companies, investment funds and pension funds are notable features of OMS financial system, while in the NMS these financial institutions have only marginal importance. In part this is due to the breadth of activities and the historically strong position of universal banks. The development of these financial intermediaries is strongly connected with the problem of aging of the population and ongoing pension system reforms.

Within the EU-25 the total investments of insurance companies represented 48 per cent of GDP in 2004, an increase of almost 10 percent since 2001. In the NMS the increase was especially significant: total investments of insurance companies increased almost 30 per cent over the years 2001-2004, mainly because of an increase in spending on life insurance. The per capita life insurance premiums have increased by 37 per cent since 1996 and were equal to €776 in 2003, yet there is a lot of cross-country variation in the average life insurance spending in the EU-25 (Swiss Re, 2000; 2004).

Also investment and pension funds have become a powerful factor in the financial services industry as a result of changes in saving patterns caused by demographic changes and decreasing yields on bank deposits and other traditional financial instruments.

Owing to favorable tax treatment the assets under management by investment and pensions funds are already comparable in some countries to those of the banking industry. The growth of investment and pensions funds was encouraged also by credit institutions and insurance companies as asset management makes up an important share of their non-interest income. Nevertheless, there is still significant potential for growth as weighted average assets managed within the EU-25 without Ireland and Luxembourg amount only to 29 per cent of GDP in 2004 compared to 70 per cent in the US.

Table 28 Total investments of insurance companies and total assets under management as per cent of GDP

# 4.1 Insurance corporations

In recent years the insurance sector has been going through a period of rapid change in the EU-25, which was partly driven by the liberalization of insurance and capital markets. The harmonization of insurance regulation has created an almost homogeneous insurance market in terms of supervisory control in the EU-25, even though some differences still remain that are upheld by the authorities in the member states. The creation of a unified insurance sector and the removal of existing barriers within the EU-25 financial system has intensified the competition of insurance companies and encouraged domestic or cross-border consolidation. Moreover recent changes in information technology have provided additional incentives to consolidate and boost efficiency at the same time.

According to the Comité Européen des Assurances (2002) in spite of the tendency to consolidate in recent years, the number of active companies still remains high. In the EU-25 5,322 insurance companies operated in 2002, of which 4,693 were in the EU-15. However, the number of companies operating varies among member states between several dozen companies in the smaller insurance markets to several hundreds in the larger markets. In the large markets the average share for the five largest companies does not generally exceed 40% to 55% of the insurance market, while in the small markets the ratio lies between 60% and 70%. Consequently, the insurance market seems less concentrated then the banking market for the EU-25.

The United Kingdom, which has the largest insurance market among the member states, has also the highest number of insurers. On the other hand, the number of insurers does not always express the volume and level of the national insurance market. In Spain there are ten times as many insurance companies as in Austria, but the volume of premiums is lower. Therefore, despite the harmonization process and changes in the financial system, there are still significant structural differences between national insurance markets within the EU-25.

In our study the existing differences and the potential of the EU-25 insurance market will be documented by two indicators, premium per capita and share of premium in the formation of GDP. The first indicator presents the density of the insurance domestic market and represents the average insurance spending of each resident. It provides an indication of the

insurance purchasing power in each member state. The second indicator, penetration, measures the significance and the importance of the insurance industry in the domestic economy.

Although there are significant variations in insurance spending among member states the life insurance market has grown and strengthened in the EU-25 in the last decade.

Table 29 Per capita life insurance premium (in euro)

The growing share of life insurance in the national markets is an indication of financial market and economic development. In the EU-25 per capita life insurance premiums increased by 37% since 1996 and were equal to 776 euro in 2003. However, there is a lot of variation in the average life insurance spending per capita and growth among EU-25 countries. Moreover, the EU-10 lags significantly behind the average of the EU-15 in life insurance penetration. In the years 1996–2003, on average, life insurance spending in the EU-10 countries was 10 percent of that in the EU-15. The lowest levels of spending were reported in Latvia and Lithuania, and it was more then hundred times lower compared to countries with the highest per capita expenditures. The level of the spending reflects the still very weak position of the life insurance industry in the transition economies. However, the industry should develop as pension reforms are put in place and the economic situation improves.

In the EU-15 the United Kingdom, Ireland and Finland have the highest per capita expenditures in 2003 while in the EU-10, Cyprus, Malta and Slovenia are in this position. In the EU-10 countries the low level of density was compensated by higher growth rates of life insurance premiums. In the EU-10 the growth rate in insurance premiums was 70% for the years 1996-2002, while in the EU-15 it was 53%. In the EU-25 the life insurance sector growth was fuelled by growing concerns about state social security based on the pay-as-you go system. Since many people fear that the future benefit may be inadequate, there has been an increase in demand for life insurance products, especially in more developed countries. This growth is often fuelled also by additional tax brakes offered by the governments with the aim of encouraging the growth of private pension systems.

At the same time the non-life insurance industry was developing much slower than in the life insurance sector.

Table 30 Per capita non-life insurance premium (in euro)

The average growth rate in non-life insurance spending was 9% for the EU-25 in the years 1996 - 2003, with the growth rate being almost twice as fast in the EU-15 as in the EU-10. In

2004 the average non-life insurance spending was 755 euro in the EU-25, while in the EU-15 it was 1,059 euro and in the EU-10 it was 248 euro.

In the EU-10 the higher level of non-life expenditure per capita was largely determined by car insurance. In the transition economies it is the most important line of business in insurance services mainly due to the introduction of the statutory minimum coverages by the EU. The legal obligation of minimum coverage explains also the high growth rates in the non-life insurance sector in the transition countries. As a result, Latvia and Lithuania, which have the lowest levels of insurance spending per capita among the EU-25, have a non-life per capita expenditure five times larger then that for life insurance.

On the other hand, the low level of growth in non-life business reported in the EU-15 was mainly due to the saturation of markets, lack of demand and falling premium rates following an increase in competition after the EU insurance market deregulation. Nevertheless among old member states the highest non-life insurance spending was reported in United Kingdom, Netherlands and Ireland. As in the EU-10 the highest levels could be observed again in Cyprus, Malta and Slovenia.

The country's level of insurance spending indicates the significance of the insurance industry in the financial system and economy. In the EU-25 the life and non-life insurance industry account for a total premium income of 6.14% of GDP. However, the development of the industry is unevenly distributed among member states and the life and non-life businesses.

## Table 31 Life Insurance premiums as % of GDP

In the EU-25 the average level of life insurance premiums was 3.25% of GDP in the year's 1996–2003. In the EU-15 the share of life premiums to GDP increased from 3.69% in 1996 to 4.62% in 2003, while in the EU-10 the share increased from 0.94% to 1.33%. Consequently, the life insurance sector grew twice as fast in the EU-10 as in the EU-15. Nevertheless the significance of the life insurance industry in the economy is minor, especially in the transition countries. In Lithuania and Latvia, which had the lowest ratio among all member states, the share of life insurance premiums to GDP was 0.40% and 0.09% in 2003, respectively. Those countries were followed by Greece with a share of 0.93% in 2003, which was even lower then in the other EU-10 countries.

On the contrary, the highest share of life insurance penetration reported was in the United Kingdom with 8.62% in 2003, followed by Belgium and Finland both with 6.81%. The

highest shares among the EU-10 were reported again in Malta and Cyprus with a ratio of 2.52% and 2.29%, respectively.

The share of life insurance penetration between the lowest and highest values among member states presents enormous differences in the significance of the insurance industry within the EU-25 financial system. On the other hand the level of development of the non-life insurance industry is more balanced in the EU-25.

Table 32 Non -life Insurance premiums as % of GDP

In the EU-25 the share of non-life premiums to GDP increased slightly from 2.74% in 1996 to 2.76% in 2003. The increase of non-life penetration was mainly stimulated by development of the industry in the EU-10, which reported a growth rate of 34.86% in the years 1996–2003. In contrast in the same period the growth rate for the EU-15 was negative at -3.62%. As mentioned before, the stagnation of the non-life business has been mostly due to massive competition in a saturated market, at the same time as the EU-10 countries benefited from a low level of per capita expenditure presenting a large potential for growth.

In all member states the non-life insurance industry is an important part of the economy and the penetration ratios varied between 1.11% and 4.94% in 2003. The lowest share of non-life insurance premiums to GDP was recorded for Lithuania, while the highest was for the Netherlands. Consequently, the existing differences in penetration between member states are less substantial in the non-life insurance industry than in the life insurance industry.

Concluding, there are still large differences in the importance and penetration of insurance in the EU-25. This primarily concerns the difference between the EU-15 and EU-10, but there are also differences within those two groups of member states. Moreover they are more significant in the life insurance market then in the non-life market, which may be a result of differences in the state social security system and the tax treatment of private pension plans.

# 5 The legal and fiscal environment

# 5.1 The legal system

La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997, 1998) (henceforth LLSV) provided evidence that legal rules and their enforcement are determinants of financing patterns. In their study they collect data on legal treatment of shareholders and creditors, the efficiency

of the legal system in enforcing contracts and accounting standards. According to LLSV (1998) legal origin may explain the international variation in financial systems and the level of financial development. The results were later confirmed by Levine (1997), who using cross-country data from LLSV presented evidence that the legal status of a country has an effect on financial development and long—term economic growth. Since then various studies have shown that legal origin has an influence on economic growth by shaping the national financial system. Thus in this section we present the legal treatment of shareholders' and creditors' rights, banking institutions regulations and the efficiency of the legal system in the member states of the European Union.

Simplifying to some extent, the legal system in the member states consists of EU law and domestic law. The EU law is based on treaties, regulation, directives and decisions. The rights granted by the EU legislation have priority over the domestic law and may be claimed even if member states have failed to introduce them into domestic law or have not implemented them correctly. As a result, the legal system in the EU gets more uniform as the member states are responsible for making their domestic laws in order to conform with EU regulations. Nevertheless the legal systems still differ among member states as in many countries unique legal solutions have prevailed in conformity with their legal tradition and heritage.

In Europe the origins of the legal system are derived either from Roman law or common law, which is based on case law applied in Great Britain. LLSV (1998, 1999). Note that within the Roman law tradition there are major families that modern laws originate from: French, German and Scandinavian. As a consequence they divide countries into those with prominently English, French, German or Scandinavian legal origins of company or commercial law. In the EU the traditional distinction among civil law families has become difficult as they become more homogeneous as a result of the ongoing exchange of legal models. It would be very problematic to classify, for example, the Polish legal system, within one of the subfamilies. LLSV would probably classify the Polish legal system to the French civil tradition since the Napoleonic Code was introduced in the Duchy of Warsaw in 1808. However, in Poland the civil code was again revised in 1933, where the creditor rights were then based on the Swiss law, and the new commercial code was almost a copy of the German Commercial Code. In addition a significant revision of the civil law and commercial law, which was a part

of the ongoing process of harmonizing the national legislation with EU directives, was finished in 2001. As a result a new company law was introduced, which was strong influenced again by the German Law. Therefore the Polish civil law, where commercial law is only a part of it, presents currently a mixture of French and German law. Thus, any classification into the three civil law families would be almost impossible and misleading. In order to avoid any problems with legal classification we decided so to use the historical distinction and divide the countries legal origin only in either to be civil law or common law. Subsequently we had no problem in the classification of the member states legal origin with the exception to one country. The country was Malta, where the legal origins compromise both the civil law and common law. However, in Malta the private law is derived from Napoleonic codes and thus we classified the legal system to the civil law family. Among the member states only Great Britain, Ireland and Cyprus belong to the common law family and in the rest 22 EU countries the legal system origins from the Roman civil law.

We use two indexes to measure the legal treatment of shareholders and creditors in a country. These indexes are created by aggregating indicators, which can take the value of zero or one. The first index of shareholder rights aggregate six indicators and it ranges from zero to six. The indicators provide information on the rights of minority shareholders against large shareholders. A higher value of the index means that the shareholders are better protected against expropriation by large shareholders and management and therefore should be more willing to provide external financing. Additionally to this index we present an indicator for voting procedures and mandatory dividend. The first indicator shows if companies are subject to one – share – one vote rules in the country, which should better protect investors. The second indicator can be treated as a substitute for the weakness of protections for minority shareholder rights (LLSV, 1998). LLSV (1998) show that common law countries provide better protection for shareholders' rights in the EU. The highest value is observed in Great Britain, whereas Belgium and France have the lowest levels in the EU area. The level of shareholder protection is considerably higher in EU-10 countries than in EU-15 countries. The high values are mostly due to regulations in the transition economies, which improved significantly in recent years in order to attract outside investors. Compared to the average indicators of LLSV (1998) calculated for 49 countries, the EU provides better shareholder

protection based on the index and the regulation of a single vote per share but provides on average a lower mandatory dividend.

# Table 33 Shareholders' rights in Europe

The second index, creditors' rights, aggregates four indicators and it ranges from zero to four. The first two focus on the rights of creditors in reorganizations and the next two on bankruptcy. In countries with a higher value of creditor rights, outside investors have more rights relative to the management and other stakeholders, and should therefore be more willing to provide external financing. We use legal reserve requirements as an additional indicator to measure shareholder rights. This requirement obliges companies to maintain a minimum level of capital to avoid liquidation. The regulation protects creditors of a company as they have limited possibilities to force liquidation before the capital is wasted (LLSV, 1998). We can observe that the index of creditors' rights is higher for common law countries then for civil law countries. On the other hand, the required legal reserve could only be observed in the civil law countries. Slovakia and Great Britain have high levels of creditor rights among the member states, while Estonia, Finland, Greece, Hungary, Lithuania and Portugal have low levels of creditors' rights. The new accession countries present higher creditors' rights and require higher legal reserves then the EU-15 countries. Compared to the average indicators of LLSV (1998) calculated for 49 countries, the EU has a lower level of creditor rights but requires a higher legal reserve.

# Table 34 Creditors' rights

In order to better understand the performance of the financial system in the EU, we examine different regulations for bank activities in the member states. In the last decades, the regulation of the financial system of EU has changed dramatically. In 1993 the single market in banking was inaugurated, transforming the regulatory environment for financial institutions and markets in the EU. The intent was to unify regulation by defining and specifying the banks activities that could be undertaken inside the EU. The regulation introduced also the concept of a *single license* and *mutual recognition*. Since then bank licensed in any EU nation are allowed to do business in any other EU nation on whatever basis it considers most advantageous. Additionally the host nation allows banks to do whatever is permitted in that bank's domestic sector and recognizes also the primacy of home—country control. Today the primacy of home—country supervision is often seen as the main barrier in cross - border merger and acquisitions inside the EU. The national central banks and their supervision arms prevent cross-border consolidation in order to keep control of their domestic banks and financial system.

The main stage in the convergence process of European banking was the Second Banking Directive, which was adopted in 1989 to be implemented at the beginning of 1993. Thus, by the end of 1992 all member states had to have in place laws and regulations consistent with this directive. The harmonization of legislative financial regulation and the adoption of common prudential regulation favored the full integration of the previously segmented banking sector. It was expected that the elimination of regulatory disparities would have created the necessary condition to obtain convergence in financial structures and bank performance. However, Montanaro, Scala and Tonveronachi (2001) point out that contrary to expectation, experience presents a lack of convergence in the structural models of banking. They observe a significant process of polarization and divergence in the performance of the European national banking sectors. The lack of convergence can be explained partly by the prevailing disparities in financial regulation, state intervention and protectionism.

The range of activities that credit institutions are able to undertake by law has an impact on the profitability and safety of the banking sector. Thus in order to present the existing disparities inside the EU financial system we use an index on the degree to which national regulatory authorities permit banks to engage in securities, insurance and real estate activities and ownership of non-financial firms. The index is an aggregate of the four activities rated from one to four, with larger numbers representing greater restrictiveness. We have also a measure which equals one if the country's banking system has deposit protection and zero otherwise. The banking systems in civil law countries are less restricted then in common law ones. Among the member states the less restrictive banking systems are in the Netherlands and the United Kingdom, while Malta and Luxembourg are the only two countries in the EU, which don't provide deposit protection. Furthermore, the activity of banks in the EU-15 area is more restricted then in the new accession countries.

#### Table 35 Financial systems' regulations

The legal system can only provide a protection of shareholders', creditors' and financial institutions' rights if there are procedures and courts able to enforce them. LLSV (1998) note that a strong legal enforcement could substitute for weak rules since well–functioning courts can step in and protect the rights. On the other hand even the best rules are weak without a well functioning enforcement. Therefore we use four measures to proxy for the quality of law enforcement. The first three indicators measure the differences in contract

enforcement by providing information on the number of procedures from the moment the plaintiff files the lawsuit in court until the moment of actual payment, the associated time and cost of the whole procedure. The last indicator is an assessment of the law and order in member states that ranges from zero to ten, with a lower number representing weak law and order. This indicator is an overall index based on 22 components of risk constructed by the Composite International Country Risk Guide (CIRG) and we calculate it as an average over the period 1995–2003. In the EU, common law countries have better law enforcement then civil law countries. Denmark, Ireland, Netherlands and United Kingdom are the countries with the best law enforcement, whereas the Czech Republic, Italy, Poland and Slovenia are those with the longest procedures and highest costs of law enforcement. Nevertheless on average the EU-10 countries present better law enforcement then the EU-15 countries. In the new accession countries the system is less formal and the time to enforce the contract is shorter and the cost lower. On the other hand, the EU-15 countries have a higher level of law and order than EU-10 countries. The lowest level in the EU-25 is recorded for Luxembourg. On average the indicator law and order index is higher in civil law countries then in common law countries.

#### Table 36 Law enforcement

Concluding, the results show that the legal environment in the EU-10 countries seems to be superior to those in the EU-15 countries. The new accession countries provide better legal protection for investors and are more efficient in enforcing them. Additionally in the EU-10 countries the banking system is less restricted then in the EU-15 area, which should result in higher efficiency and lower risk. Taking into account the legal families in the EU-25 we observe that countries belonging to the common law family provide considerably better shareholder protection then civil law countries. The existing differences are smaller in the case of creditors' rights and the right of banks to engage in different non bank activities. Thus, EU-25 countries with common law provide better protection for investors, more freedom for banks and are more efficient than civil law countries.

# 5.2 The corporate and capital income taxes

The EU has a single financial market and is also integrated in real terms, yet the tax policies in the member states still present a lot of discrepancy. As a result there is a lot variation in the tax rates among member states although most of the governments have taken

steps to harmonize the tax levels. In addition, most governments have decided to reduce the existing tax burden with the intention to improve countries' competitiveness and enhance future economic growth. It has been long assumed that the existing level of countries' corporate and capital income taxes affect the level of economic development, mainly through foreign direct investments flows. This assumption was confirmed empirically by various studies, which reported that the level of taxes influence investment decisions of multinational firms (Bénassy-Quéré et al., 2001; Desai et al., 2002). Thus, there is currently a strong belief that member states may use corporate tax cuts in order to attract foreign companies with the aim of reducing domestic unemployment at the expense of other member states. The problem is especially severe since capital markets are becoming integrated in the EU, allowing capital mobility, and hence they are tax sensitive. Furthermore the introduction of the common currency reduced the transaction costs and eliminated the exchange rate uncertainty among EMU members. However, the problem seems to be more acute between old and new member states as the latter may offer not only a lower tax rate but also lower production costs due mainly to lower wages.

As a consequence most member states recently implemented tax reforms aimed at reducing corporate income tax rates, which constitute a large part of capital taxation. The lower level of corporate taxes should improve the performance of capital markets in the longer term. The outcome of this trend was an overall reduction of the corporate income tax rate in recent years.

# Table 37 Effective top statutory tax rate on corporate income

The average corporate tax rates were lower in EU-10 than in the EU-15 in the years 1995-2004 and were 27.51% and 35.15% respectively. In 2004 the average corporate tax burden in the EU-10 was 7.64% lower than the average level of EU-15 countries. However, the lower ratio of corporate taxes in EU-10 is often counterbalanced by the higher ratio of indirect taxes and in addition in the Czech Republic, Poland and Slovakia by high social contributions.

The considerable tax difference between the member states has been an area of tension between the new and old member countries in the recent past. There is widespread concern that low tax countries impose a fiscal externality on other member states attracting investment that would otherwise be located in high tax areas within the EU-25. Countries that are often mentioned to be affected by this trend are especially Germany and France. These two countries

had the highest levels for the average top statutory corporate tax in the EU-25, while the lowest ratio was recorded in Ireland, Cyprus, Lithuania and Latvia. In addition, Ireland has also the lowest ratio among all member states and is the only country in the EU-15, which has a ratio lower than the average for the EU-10.

The low level of corporate taxes in Ireland is often mentioned as one of the reasons for its high economic growth in the last decades. As a consequence the transition economies have decided to follow this example and have accelerated the reduction of corporate tax rates in recent years. In fact, this process induced a tax competition among the member states and thus the reduction in corporate tax rates is already an EU-25 wide trend. As a consequence the average top statutory corporate tax rate in the EU-25 was 32.10 per cent and decreased almost 22% between 1995 and 2004.

Capital gains taxes are another burden, which may influence the development of financial systems across countries. In almost all member states dividends paid and other distributions made by companies to resident and non-residents and for both corporations and individuals are liable to taxes. Until recently the rates on capital taxes have varied across member states in spite of the governments' calls for a law designed to ensure an effective taxation of savings income and dividends within the EU-25. The idea behind this was to make sure that all member states apply the same tax on all capital gains.

Nevertheless, after more than twenty years of discussion the Council of EU Finance Ministers reached a political agreement on the harmonization of the taxation of cross-border interest payments to private clients within the EU in June 2003. The EU Savings Tax Directive came into effect on July 1, 2005 and should prevent future private financial outflows to other member states in order to avoid taxation in the resident country.

The new Directive ensures effective taxation of cross-border savings income paid to individual investors within the EU as it introduces an automatic exchange of information on cross-border interest payments to EU-resident in other EU countries. However, the tax and information exchange does not apply to private clients from countries outside the EU-25. Only 22 of 25 EU member states introduced an automatic exchange of information on cross-border interest payments. In Austria, Belgium, Luxembourg and San Marino (Italy) a withholding tax was introduced instead, which applies currently at a rate of 15% until 1 July 2008. Thereafter the rate will rise to 20% until 30 June 2011 and onwards a withholding tax of 35% will apply.

The introduction of the harmonization was only possible because important financial centers with European origin, such as Switzerland, Liechtenstein and Monaco along with dependent territories such as the Channel Islands, Aruba and the Cayman Islands, have also agreed to introduce a withholding tax on EU citizens' interest income or an exchange information system with the member states. It is worth mentioning, however, that Bermuda, was missed by accident and the Directive does not apply there, but this may change in the future.

On the other hand, the Directive does not harmonize the tax rates on interest income at the national level, where different systems are still in place. Domestic interest tax will still remain the responsibility of the governments and vary across the member states.

Table 38 Capital income taxation as of July-2005 (general rates in %)

In the EU-25 the average tax on interest payments to residents is currently 13.45%, while to non-EU-residents it is significantly lower with a rate of 5.66%. The lower tax rates for non-EU-residents are aimed to attract private foreign investors to invest in national debt instruments. Moreover on average the current tax rate is noticeably lower in the EU-10 than the EU-15. The average rate for the EU-10 is 7.80%, while for the EU-15 it is 17.21%. Lower taxes rates in new member states are again intended to attract foreign investors, especially to the transition economies as those are in need of huge funds in order to finance economic development. Nevertheless the tax rate shows a lot of variation within the EU-25. The highest tax rates on interest payments for residents were in Germany and Sweden with 31.65% and 30%, respectively. Conversely, there are several member states, which do not impose a tax on interest payments at all. Thus, even after the implementation of the EU Saving Directive differences in savings taxation still prevail within the EU-25. In addition, the European private investor will still have many opportunities to avoid taxation, for example, by moving their funds to financial centers in Asia. Consequently, the new tax law may lead to a decrease in funds invested in debt instruments in the EU in the long term. In addition, there is some concern that more effective taxation of interest income may lead to higher interest rates and entail a higher interest burden for governments (Becker, 2005).

Moreover, the directive covers only interest income but not dividends, capital gains or non-interest-bearing instruments. Consequently, private investors may substitute equity for debt instruments in order to avoid taxes. However, the average tax rate on dividend payments to residents and non-residents is currently 15.98% and 16.72%, respectively. Thus it is

currently higher than the average rate on interest payments in spite of the also higher risk of equity instruments. The dividends withholding tax is lower in the EU-10 with an average rate of 13.60%, then in the EU-15 with an average rate of 17.57%. In the transition countries lower withholding taxes provide an additional incentive for foreign investors to buy shares in privatized companies on the stock exchanges. However, as equity markets develop the governments may switch to higher taxation, as has already happened in Poland. Nevertheless there are still member states, which do not impose dividend withholding taxes at all, such as the United Kingdom or Malta.

Consequently, the main aim of the new directive, to mitigate the tax-related distortion of investment decisions, has not yet been achieved within the EU-25. However, there are already some governmental propositions to expand the scope of the law on other instruments or introduce an EU-wide final tax on all financial instruments. However, past experience shows that this could be a long process. On the other hand, without the introduction of an EU-wide final tax law it may be very difficult to prevent the capital outflow from the EU-25 member states to off-shore financial centers around the world.

# 6 Comparing the EU with the US and Japan

The enlargement of the EU has created a unified economic area with a population of 456 million people and a combined GDP of 10,207 billion euros at the end of 2004. This puts the EU-25 slightly ahead of the United States with a population of 292 million and GDP of 9,434 billion euro, while it is almost three times bigger then Japan's GDP of 3,758 billion euro with a population of 127 million.

Until now we have documented the financial structures across member states. However, the EU-25 is an economic area with a unified economic market and (perhaps) the political ambition to create in the future a federation of states. Therefore, in this section we compare the financial structure of the EU-25 with those of Japan and the United States. In order to present the transformation and structural changes in the financial system due to the recent enlargement, we will in addition compare the structures with those of new (EU-10) and old (EU-15) member states.

With the aim to compare the financial structure, we follow the literature and classify first a financial system either to be bank-based or market-based (see Allen and Gale, 2000). This bilateral classification allows us to stress the differences in financial structures, yet we do not provide evidence on whether one system is better than another. In our analysis we concentrate only on describing the current developments in financial structures as we try to point out the significant differences.

Figure 3 Size of financial markets (average, 1995 –

Figure 3 presents the average size of financial markets as a percentage of GDP. We use the size of a country's (region) financial markets in order to be able classify the different financial structures. The figure presents clearly that the EU-25 has a bank-based financial system. Moreover, the EU-15 and EU-10 are also clearly bank-based economies, where banks are significantly more important in old member states than the new accession countries. On the other hand, stock markets are less developed in the EU-25. In addition they are less significant in the EU-10 than the EU-15. Furthermore the debt securities markets are also more developed in the EU-15 than in the EU-10, yet they are mainly dominated by public bonds as we have seen. However, even by ignoring this fact and adding the debt market and capital market together the importance in the economy would be lower than the banks. Consequently, the structure of the EU-25 financial system is obviously bank-based.

The United States is significantly different and presents an almost opposite financial structure to the EU-25. In the US the debt market and stock market are the most important financial markets in the economy. Moreover the importance of the banks in the economy is the lower then in Japan and even in the EU-10. Thus, the US financial structure may evidently be defined as market-based.

The Japanese financial structure could be defined as market- and bank-based. In Japan the significance of the debt market and stock market in the economy is larger then that of banks. In this case we would classify Japan financial system as market-based. Nevertheless, the Japanese debt market is dominated mainly by public bonds and the private sector debt market is rather small as we will show later. As a result when comparing only the private debt market and stock market together with the banks' significance in the economy, we have a different picture of the Japanese financial system. In this case the Japanese financial system would be defined as bank-based. Consequently, the Japanese financial system is not easy to classify as it

features present a mixture of both structures at the same time depending only on the measures applied.

Our first findings and classifications of country's (region's) financial system are in line with related work on financial structures (Allen et al., 2004; Hartmann et al., 2003; Allen and Gale, 2000). Therefore, considering the results of previous studies the financial structure of the EU has not changed in spite of the enlargement. In addition our results show that the existing differences in financial structures across the most important economic regions and countries have not been affected in the last decades.

Our results presents noticeably that banks are the most important institution in the financial system of the EU-25. Thus, we continue our analysis in comparing first the main characteristics of the banking system, then concentrate on the capital market and finally the insurance sector.

Figure 4 Bank credit and liabilities (average, 1995 -2003)

Figure 4 shows the main components of banks' balance sheets as a percentage of total assets. The figure again presents that banks' are the most important financial intermediaries in the EU-25. The importance of banks' in the EU-25 economy is similar to the level observed for Japan, yet they are more important in the EU-15. The decline in the level of bank intermediation in the economy was due to the accession of new member states, where the financial system in less developed. However, the significance of banks' as financial intermediaries in the EU-10 is similar to the United States despite the huge differences in financial system development. As a result it suggests evidence on the insignificant role of banks in the US economy. However, the structure of banks' balance sheets main components is comparable across the regions and countries with the exception of the EU-10.

In new member states the level of deposits is higher than the level of domestic credit to the private sector. This difference can be explained by three factors. First, most of the new member states are transition economies, where banks are the most developed financial institution and have not been strongly affected by the disintermediation process. Therefore the ratio of financial assets held in banks by household in those countries is higher then in more developed financial systems. Second, most transformation economies underwent a bad loan problem in the banking system, which was mostly caused by former state owned enterprises. This caused banks to constrain lending to private enterprises going forward. The final factor

was high interest rates on government securities, which was part of a monetary policy aimed at reducing inflation. Consequently, in transformations economies the level of government securities in banks portfolio is very high compared to developed countries'. However, in recent years the interest rates on government bonds have been slowly declining, while banks' have learned to apply modern credit scoring methods, which results in a growing willingness to lend to private enterprises again. Therefore, the existing differences will decline as banks increase their loan portfolio, while the level of deposits will decrease due to growing competition and a financial outflow toward other financial intermediaries. Consequently, in those countries we are already observing a rapid development of the private debt market, which is caused by an increase in the issuance of financial bonds. In the last decade banks have move to other sources of funding, mainly debt securities, in order to compensate the continuing decrease in deposits and balancing the gap between financial liabilities and assets.

Figure 5 Bank concentration and efficiency (average, 1996 – 2003)

Figure 5 shows that the banking sector in the EU-10 countries is fairly concentrated. The combined market share of the five biggest banks (CR5) was the highest among the regions and countries, and caused an increase in concentration in the EU-25. Nevertheless the concentration degree in the EU-15 was significantly higher than in Japan and the United States. It is usually argued that concentration is closely linked to a country's market size. In smaller countries the degree of concentration tends to be higher due to the presence of a few large banks in the financial system. The main reason behind this argument is the level of banks' scale economies in the market. In a smaller market fewer banks may be able to reach an adequate scale to be profitable, whereas in a large market, a smaller percentage share may provide a sufficient scale to operate efficiently. Henceforth, the high degree of concentration in the EU-25 illustrates the low level of integration and foreign bank penetration in the banking system, especially in the former member states. However, the recent wave of European cross-border mergers and acquisition may lead to a decrease in the concentration in the long term.

Figure 5 suggests that the concerns about the adverse effects on banking competition due to the concentrated nature of the EU-25 banking sector have mostly turned out to be unfounded. The banking sector in the EU-25 and EU-15 is more efficient than in the United States based on net interest margin and overhead costs in spite of the higher degree of concentration. Furthermore in the EU-10 and the US banking sectors we can observe a

comparable level of efficiency, while the degree of concentration is quite different at the same time. However, the factor behind the high inefficiency of the banking sector in the EU-10 and United States are quite different. In the EU-10 the ratios were driven mainly by the transition economies. In those countries the high interest rates on loans charged by banks compensate for the high level of loan defaults, while the overheads costs were caused by excessive employment and low application of modern technology. Nevertheless, recent studies present evidence that the efficiency of banks has been increasing in transition economies in recent years (Bonin et al., 2005; Fries and Tacit, 2005). As a consequence, the considerable differences in efficiency between the EU-15 and EU-10 will decline and the level of bank efficiency will be more uniform across the EU-25. In the United States the high overhead costs are mainly due to a still large number of small banks despite the merger boom of the last decade. Those banks have high overhead costs on average as they are not able to benefit from the effects of scale. The significant variation in net margins between the United States and other countries reflects differences in bank activity, rather than in efficiency or competition. In the United States the banks are more focused on short-term and consumer financing, while in Europe and Japan they are more commercially based and long-term oriented.

In Japan the degree of concentration in the banking sector is between the level observed in the United States and EU-25. However, the efficiency of Japanese banks is close to that of the EU-15. The Japanese banks have the lowest overhead costs, while the net margins are comparable to the lowest in the EU-15. Thus, we may deduce that the level of banks efficiency is affected by the degree of development and countries financial structure.

Figure 6 Equity market development (average, 1995-2003)

The United States with a market-based financial system has a stock market, which is more active and more efficient then that of EU-25 or Japan. As shown in Figure 6 only the United States has an equity market, where the value of stock transactions relative to the economy is larger than its market capitalization. Thus the US equity market is not only an important part of the economy but is also very vibrant. Furthermore, the turnover ratio shows that the US market has also the largest value of transactions relative to the market's size, which we interpret as a sign of effectiveness.

The importance of the Japanese equity market in the economy is larger than that of the EU-25 relative to the economy, yet it was smaller than that of the EU-15. The stock markets of

the EU-15 tend to be more active and more efficient then that of Japan. Nevertheless the importance of equity markets in the EU-25 decreased after the accession of the new member states. In the EU-10 the stock markets are relatively small and show a low level of liquidity. Additionally the substantial difference in the level of value traded and turnover ratio suggest that only a few stocks are traded. In transition economies these are mainly the stocks of the largest, privatized companies, which are due to their size and liquidity of interest to institutional investors.

Figure 7 Debt market development (average, 1995-2004)

An important part of the capital markets is the debt securities market. As shown at the beginning of this section the most developed debt market is in the United States, followed by Japan and finally the EU-25. Nevertheless the structure of the debt market varies significantly across the countries. In Japan and EU-25 the debt market is dominated by government bonds, while in the United States the larger proportion are financial bonds. In Japan the importance of domestic government securities relative to the economy is twice as large as in the UE-25. Besides, the level of government securities was significant larger than in the United States, where the level was comparable to the EU-15.

In Japan and the EU-25 financial institution bonds are the second largest segment in the domestic debt market. In the United States they surpass even the government bond market. The high level of financial debt securities relative to the economy reflects the ongoing change in the intermediation process in the banking sector. Banks in order to substitute for the decrease in traditional deposits have turned in recent years to the debt markets. Thus, the large number of financial debt securities reflects the change in the structure of financing banks.

In the EU-25 the proportion of corporate bond financing is low compared to the United States and Japan despite the recent increase in issuance. This situation may be explained by the strong position of banks in financing large and small companies in the EU-25. Conversely, in the United States bank loans to large companies are insignificant and banks have to compete with the debt market even for medium sized companies (Pagano and von Thadden, 2004). After the accession of the EU-10 the structure of the EU-25 debt market changed only slightly. In the EU-10 only the government debt market is well developed, while the segments for finance and corporate bonds have a negligible position. The current situation mirrors the strong position of banks in collecting deposits and financing corporations, especially in the transition

economies. With the decrease in banks' importance in the financial system due to an increase in competition we can observe a growing issuance of financial bonds, and recently also corporate bonds. Those segments of the market are very small in the EU-10 compared to EU-15, thus the difference in the EU-25 between public and private debt increased after the accession. Nevertheless we may expect that the difference between public and private bonds will return to pre-accession levels as the financial systems develop in the transition economies.

Figure 8 Insurance market penetration (average, 1996 - 2003)

In recent years the importance and penetration of the insurance sector was growing in all the countries, especially the life segment. Figure 8 shows the penetration of the insurance market, which refers to the ratio of direct premiums to GDP. The indicator represents the relative importance of the insurance industry in the domestic economy.

The highest penetration of the insurance industry we can observe in Japan, followed by the United States. In Japan the insurance sector is strongly dominated by the life segment, which is almost five times bigger than the non-life segment. In Japan the high degree of life insurance penetration can be explained by the historically high level of domestic saving.

Although the size of the insurance sectors in the United States and EU-15 are only slightly smaller than that of Japan they are more balanced. In the United States the degree of non-life insurance penetration is higher then that of the life segment. The existing differences may be due to different pension planning in the United States, where it is more based on private provision using direct investments and mutual funds.

In the EU-10 the penetration of insurance is very low, especially the life segment in transition economies. The accession resulted in a decrease in insurance penetration in the EU-25. Moreover in the EU-25 the differences between life and non-life insurance are now more balanced than in the EU-15. However, economic and financial development connected with reforms in the pension system in transition countries should result in growing interest in life insurance. Consequently life insurance should grow faster in those countries in the near future. Thus, the differences between life and non-life penetration may widen again in the EU-25 to the degree observed in the EU-15.

## 7. Concluding Remarks

We have presented evidence on the financial structures in the EU-25 focusing on the

differences between the previous countries in the EU-15 and the accession countries in the EU-10. The financial system varies significantly between the old and new member states. In addition there is a lot of variation within the EU-10 and EU-15. Both the EU-10 and the EU-15 (with the notable exception of the UK) have bank-based financial systems. The banking systems in the EU-15, whether measured by assets to GDP, credit to GDP, or deposits to GDP are more developed than in the EU-10. The market structure for banking services in the EU-10 is more concentrated than in the EU-15. Banks in the EU-10 are more oriented to consumer and short term funding. Perhaps the most striking difference between the EU-10 and the EU-15, though, is the much higher share of the market for banking services held by foreign banks in the EU-10 than in the EU-15.

In the UK and the Netherlands equity markets are well developed. The development of trans-national markets such as Euronext and the Nordic and Baltic Stock Exchange is an important development that seems set to continue in the coming years. The experience of the transition economies in the EU-10 regarding stock markets is an interesting one. Despite considerable efforts to develop stock markets as a major component of the financial system, they are not very important. In countries like the Czech Republic, Slovakia and Lithuania that adopted mass privatization, the number of firms listed has shrunk dramatically. For example, in the Czech Republic the number of listed firms fell from 1,716 in 1995 to 55 in 2004. In other countries, such as Poland, that adopted a strategy of listing only strong companies, the number of firms listed remains small.

The importance of bond markets varies significantly. Markets for government debt are important in almost all the EU countries while markets for debt issued by financial institutions are important in many. Corporate debt markets are important in only a few countries. Securitization of mortgages based on the model of the German Pfandebriefe has been quite successful in a number of countries.

The insurance sector is much less important in the EU-10 than in the EU-25. This is particularly true for the life insurance part of the industry. The non-life part is relatively more important in the EU-10 countries because of EU requirements mandating a minimum level of insurance for cars.

The important differences between the EU-10 and the EU-15 need to be taken account of by policymakers going forward. For example, prior to the accession foreign banks played an

important role in very few countries. Thus policies such as supervision by a bank's home regulator could be readily justified. Now, however, with foreign banks important in so many countries this is not so clear.

We have also compared the EU with the United States and Japan. Despite the differences between the EU-10 and the EU-15, the accession of the new member states did not change significantly the financial structure of the EU-25 compared to those of the United States and Japan. After the accession, the financial structure of the EU-25 is still dominated by banks, while the capital markets are less developed compared to the United States. Noteworthy changes occurred only in the structure of the EU-25 debt market and insurance sector, yet those changes are caused by the low level of economic and financial development of the transition countries. As the new member states develop and will economically converge we assume the existing changes in the structure will decline and develop toward the levels observed in the EU-15. Nevertheless, we believe strongly that more research needs to be done on financial integration in the EU-25 with the aim to understand the structural changes in the financial system caused by the integration of member states.

## References

- Allen, F., M. K. F. Chui, A. Maddaloni (2004), "Financial systems in Europe, the USA, and Asia", *Oxford Review of Economic Policy*, **20** (4), 490 508.
- Allen, F., D. Gale (2000), Comparing financial systems, Cambridge, MA: The MIT Press.
- Barth, J. R., L. G. Dopico, D. E. Nolle, J. A. Wilcox (2002), "Bank safety and soundness and the structure of bank supervision: a cross-country analysis", *International Review of Finance* **3** (3-4), 163-188.
- Barth, J. R., L. G. Dopico, D. E. Nolle, J. A. Wilcox (2003), "An international comparison and assessment of the structure of bank supervision" in D. Arner and J. Lin (eds.), *Financial regulation: a guide to structural reform*, Hong Kong: Sweet and Maxwell Asia.
- Bénassy-Quéré A., S. Dées, L. Fontagné, G. Gaulier A. Kadareja, A. Lahrèche-Révil (2001), "The reform of taxation in EU member states", mimeo, Centre d'Études Prospectives et d'Informations Internationales, April.
- Becker, W. (2005), "EU Savings Tax Directive is close to the finish line", Financial Market Special, EU Monitor No. 25, Deutsche Bank Research, May.
- Bikker, J. A., A. A. T. Wesseling (2003), "Intermediation, integration and internationalizations: A survey on banking in Europe", Research Series Supervision No. 53, March.
- Bikker, J. A., K. Haaf. (2001), "Competition, concentration and their relationship: an empirical analysis of the banking industry" DNB Staff Report No. 68, De Nederlandsche Bank, July.
- Bikker, J. A., K. Haaf (2002a), "Measures of competition and concentration in the banking industry: a review of the literature" *Economic and Financial Modeling*, **9**, 53 98.
- Bikker, J. A., K. Haaf (2002b), "Competition, concentration and their relationship: An empirical analysis of the banking industry", *Journal of Banking and Finance*, **26** (1), 2191-2214.
- Boning, J. P., I. Hasan, P. Wachtel (2005), "Bank performance, efficiency and ownership in transition countries" *Journal of Banking and Finance*, **29**, 31 53.
- Boot, A. W. A. (1999), "European lessons on consolidation in banking", *Journal of Banking and Finance*, **23**, 609 613.
- Claessens, S., A. Demirgüç-Kunt, H. Huizinga (2001), "How does foreign entry affect domestic banking markets?", *Journal of Banking and Finance*, **25**, 891-911.
- Claessens, S., D. Klingebiel, S. Schmukler, (2002), "The future of stock exchanges in emerging markets", CEPR Discussion Paper No. 3301.
- Claessens, S., L. Laeven (2004), "What Drives Bank Competition? Some International Evidence" *Journal of Money, Credit and Banking*, **36**, 563-584.

Comité européen des assurances (2002), "Single European insurance market: the way forward", CEA ECO.

Davis, E. P., O. De Bandt, (1999), "A cross-country comparison of market structures in European banking", ECB Working Paper No. 7, September.

Demirgüç-Kunt, A., H. Huizinga (1999), "Determinants of commercial bank interest margins and profitability: some international evidence", *World Bank Economic Review*, **13**(2), 379-408.

Desai, A., C. F. Foley, J. R. Hines (2002), "Chains of ownership, tax competition, and foreign direct investment.", NBER Working Paper No 9224, August.

Dermine, J. (2005), "European banking integration: Don't put the cart before the horse", Conference Proceeding *Cross-Border Banking Regulatory Challenges*, Federal Reserve Bank of Chicago, 6-7 October.

ECB (2002), Report on financial structures, European Central Bank, Frankfurt am Main.

Fries, S., A. Tacit (2005), "Cost efficiency of banks in transition: Evidence from 289 banks in 15 post-communist countries", *Journal of Banking and Finance*, **29**, 55-81.

Galati G., K. Tsatsronis (2001), "The impact of the Euro on Europe's financial markets." BIS Working Paper, No. 100, Basel, July.

Group of Ten (2001), "Consolidation in the financial sector", BIS Working Paper, Basle.

Hartmann, P, A. Maddaloni, S. Manganelli (2003), "The Euro-area financial system: structure, integration, and policy initiatives", *Oxford Review of Economic Policy*, **19** (1), 180 – 213.

Iftekhar H., H. Schmiedel (2003), "Do networks in the stock exchange industry pay off? European evidence", Bank of Finland, Discussion Papers No. 2003/02, January.

Kaiser, H., Heilenkötter A. (1999), "The bond market in the European Monetary Union", EMU Watch No. 79, Deutsche Bank Research, November.

Levine, R. (1997), "Financial development and economic growth: Views and Agenda", *Journal of Economic Literature*, **35** (2), 688 – 726.

Marques, I. D., P. Molyneux (2001), "Integration of European banking and financial markets", EIFC – Technology and Finance Working Paper 14.

Montanaro E., C. Scala, M. Tonaveronachi (2001), "The unified European banking market and the convergence of national banking sectors" in E. P. M. Gardener, P. C. Versluijs (eds.), *Bank strategies and the challenges in the new Europe*, Houndsmills: Palgavere.

Pagano, M., A. Roell, and J. Zechner (2002), "The geography of equity listing: why do companies list abroad?", *Journal of Finance*, **57** (6), 2651-2694.

Pagano, M., E-L. von Thadden (2004), "The European bond markets under EMU", Oxford Review of Economic Policy, **20** (4), 531-554.

Rajan, R., L. Zingales (2003), "Banks and markets: the changing character of European finance" in V. Gaspar, P. Hartmann, O. Sleijpen (eds.), *The transformation of the European financial system*, Frankfurt: European Central Bank.

Rasche, H. L. Hagen (2003), "The Pfandbriefe and other covered bonds in the EU capital market: development and regulation", Financial Market Special, EU Monitor No. 7, Deutsche Bank Research, October.

Swiss Re (2000a), "Europe in focus: Non-life markets undergoing structural change", Sigma No. 3/2000.

Swiss Re (2000b), "World insurance in 1999: Soaring life insurance business", Sigma No. 9/2000.

Swiss Re (2001a), "Insurance industry in Central and Eastern Europe – current trends and progress of preparations for EU membership", Sigma No. 9/2001.

Swiss Re (2001b), "World insurance in 2000: another boom year for life insurance; return to normal growth for non-life insurance", Sigma No. 6/2001.

Swiss Re (2002), "World insurance in 2001: turbulent financial markets and high claims burden impact premium growth", Sigma No. 7/2002.

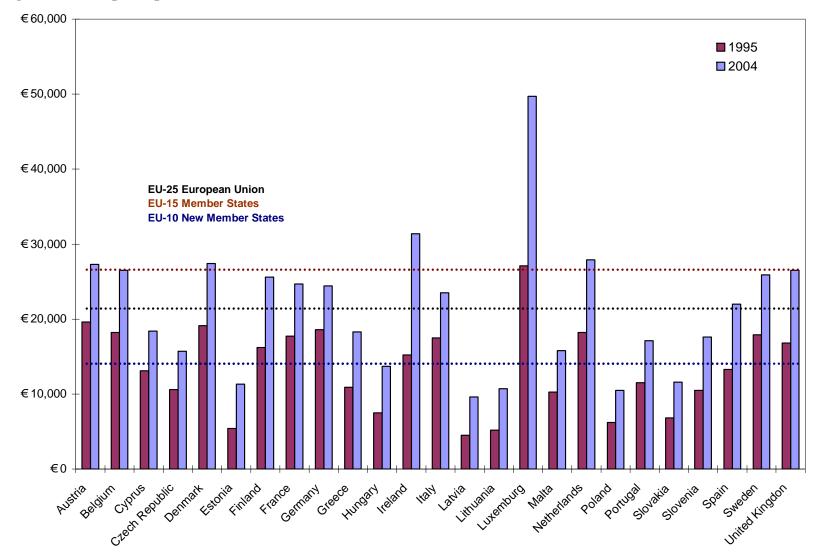
Swiss Re (2003), "World insurance in 2002: high premium growth in non-life insurance", Sigma No. 8/2003.

Swiss Re (2004), "World insurance in 2003: insurance industry on the road to recovery", Sigma No. 3/2004.

Wagner, N., Iakova, D (2001), "Financial sector evolution in the Central European economies: Challenges in supporting macroeconomic stability and sustainable growth" IMF Working Paper No 141.

Vives, X. (2000), "Lessons from European banking liberalization and integration." in S. Claessens, M. Jansen (eds.), *The internationalization of financial services: Issues and Lessons for Developing Countries*, Hague: Kulwer Law International.

Figure 1 – GDP per capita in PPP terms in euro.



Source: Eurostat

Table 1 GDP growth rate in %.

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean
1	Austria	1.6	2.0	1.6	3.9	2.7	3.4	0.8	1.4	0.7	2.2	2.0
2	Belgium	2.4	1.2	3.5	2.0	3.2	3.8	0.6	0.7	1.1	2.9	2.1
3	Cyprus	6.1	1.9	2.4	5.0	4.6	5.0	4.1	2.1	1.9	3.7	3.7
4	Czech Republic	5.9	4.2	-0.7	-1.1	1.2	3.9	2.6	1.5	3.7	4.0	2.5
5	Denmark	2.8	2.5	3.0	2.5	2.6	2.8	1.6	1.0	0.4	2.4	2.2
6	Estonia	4.5	4.5	10.5	5.2	-0.1	7.8	6.4	7.2	5.1	6.2	5.7
7	Finland	3.4	3.9	6.3	5.0	3.4	5.1	1.1	2.3	1.9	3.7	3.6
8	France	1.7	1.1	1.9	3.4	3.2	3.8	2.1	1.2	0.5	2.3	2.1
9	Germany	1.7	0.8	1.4	2.0	2.0	2.9	0.8	0.2	-0.1	1.6	1.3
10	Greece	2.1	2.4	3.6	3.4	3.4	4.4	4.0	3.9	4.3	4.2	3.6
11	Hungary	1.5	1.3	4.6	4.9	4.2	5.2	3.8	3.5	3.0	4.0	3.6
12	Ireland	9.9	8.1	11.1	8.6	11.3	10.1	6.2	6.9	3.7	4.9	8.1
13	Italy	2.9	1.1	2.0	1.8	1.7	3.0	1.8	0.4	0.3	1.2	1.6
14	Latvia	-0.9	3.8	8.3	4.7	3.3	6.9	8.0	6.4	7.5	8.5	5.6
15	Lithuania	3.3	4.7	7.0	7.3	-1.7	3.9	6.4	6.8	9.7	6.7	5.4
16	Luxembourg	1.4	3.3	8.3	6.9	7.8	9.0	1.3	1.7	2.1	4.5	4.7
17	Malta	6.2	4.0	4.8	3.5	4.0	6.3	-1.7	2.3	-1.7	1.4	2.9
18	Netherlands	3.0	3.0	3.8	4.3	4.0	3.5	1.2	0.2	-0.9	1.4	2.4
19	Poland	7.0	6.0	6.8	4.8	4.1	4.0	1.0	1.4	3.7	5.3	4.4
20	Portugal	4.3	3.5	4.0	4.6	3.8	3.4	1.7	0.4	-1.2	1.0	2.5
21	Slovakia	5.9	6.2	4.6	4.2	1.5	2.0	3.8	4.6	4.5	5.5	4.3
22	Slovenia	4.1	3.5	4.6	3.8	5.2	3.9	2.7	3.3	2.5	4.6	3.8
23	Spain	2.8	2.4	4.0	4.3	4.2	4.2	2.8	2.0	2.4	3.1	3.2
24	Sweden	4.1	1.3	2.4	3.6	4.6	4.3	0.9	2.1	1.6	3.6	2.9
25	United Kingdom	2.8	2.7	3.3	3.1	2.8	3.8	2.1	1.6	2.2	3.1	2.8
	EU-25 average <sup>a</sup>	3.6	3.2	4.5	4.1	3.5	4.7	2.7	2.6	2.4	3.7	3.5
	EU-15 average <sup>a</sup>	3.1	2.6	4.0	4.0	4.0	4.5	1.9	1.7	1.3	2.8	3.0
	EU-10 average <sup>a</sup>	4.4	4.0	5.3	4.2	2.6	4.9	3.7	3.9	4.0	5.0	4.2
	EU-25 average <sup>b</sup>	2.7	1.9	2.8	3.0	2.9	3.6	1.8	1.2	1.2	2.5	2.4
	EU-15 average <sup>b</sup>	2.5	1.7	2.6	3.0	2.9	3.6	1.8	1.1	0.9	2.3	2.2
	EU-10 average <sup>b</sup>	5.4	4.7	4.8	3.7	3.2	4.1	2.5	2.5	3.9	5.0	4.0

Source: Eurostat, World Development Indicators
Note: aggregates are unweighted averages, baggregates represent GDP per capita in PPP-weighted averages

Table 2 Total assets of domestic credit institutions as % of GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	213.3	221.0	223.3	236.7	243.3	250.9	265.6	251.3	258.4	268.0	243.2	25.6
2	Belgium	291.2	315.7	306.0	298.4	303.1	282.0	305.4	296.5	307.4	322.3	302.8	10.7
3	Cyprus	85.9	168.4	193.6	206.1	240.1	264.7	341.2	307.0	294.8	305.9	240.8	255.9
4	Czech Republic	132.1	130.5	128.2	134.5	134.9	135.8	115.1	101.1	97.2	99.7	120.9	-24.5
5	Denmark	118.0	164.5	211.0	227.0	235.5	251.6	253.5	276.3	289.7	309.3	233.6	162.1
6	Estonia	35.9	33.0	63.0	56.0	62.0	68.0	65.5	69.9	77.6	94.4	62.5	163.2
7	Finland	117.0	99.7	97.0	93.3	99.5	98.4	119.7	117.6	129.2	141.9	111.3	21.3
8	France	173.1	174.0	243.8	239.0	251.1	246.6	251.7	247.4	252.0	267.9	234.7	54.7
9	Germany	205.0	225.7	256.2	275.3	285.9	298.7	296.7	297.0	295.5	29.7	246.6	-85.5
10	Greece	98.0	99.0	107.0	118.5	137.6	155.8	153.9	141.6	150.0	137.9	129.9	40.7
11	Hungary	36.1	33.9	33.3	57.0	61.9	65.8	68.0	66.8	71.5	80.1	57.4	121.7
12	Ireland	129.4	135.3	261.3	302.1	337.8	345.5	367.9	363.7	413.5	486.4	314.3	275.9
13	Italy	139.0	145.3	155.6	143.2	147.0	151.8	152.0	160.6	163.4	168.4	152.6	21.2
14	Latvia	31.0	36.0	49.0	44.1	50.4	58.2	78.9	74.0	86.0	101.3	60.9	226.8
15	Lithuania	27.9	20.2	25.0	26.7	29.5	30.9	32.3	33.6	39.5	47.5	31.3	70.0
16	Luxembourg	2 876.0	3 113.7	3 351.4	3 201.4	3 194.0	3 044.8	3 274.3	2 905.5	2 738.2	2 708.5	3 040.8	-5.8
17	Malta	177.9	181.8	184.7	197.8	203.3	202.5	324.6	365.1	424.4	476.8	273.9	168.0
18	Netherlands	216.0	223.6	231.2	254.8	263.0	285.6	282.7	291.6	309.4	343.3	270.1	58.9
19	Poland	48.8	51.1	52.8	57.6	59.1	61.6	64.4	57.3	56.0	67.6	57.6	38.5
20	Portugal	158.0	160.9	163.8	190.4	196.2	174.6	272.8	260.6	254.6	242.5	207.4	53.5
21	Slovakia	76.0	114.0	109.6	102.7	92.1	93.2	92.0	83.7	72.1	87.7	92.3	15.4
22	Slovenia	61.1	59.6	57.9	63.0	69.1	66.8	80.8	84.4	86.6	93.6	72.3	53.2
23	Spain	159.0	164.7	170.5	172.9	177.9	202.4	183.6	184.2	192.5	205.0	181.3	29.0
24	Sweden	152.0	165.1	178.3	157.4	165.7	167.2	184.5	184.9	189.5	208.9	175.4	37.5
25	United Kingdom	239.0	284.1	329.2	304.4	328.3	335.2	363.7	351.1	386.4	406.4	332.8	70.0
	EU-25 average <sup>a</sup>	239.9	260.8	287.3	286.4	294.7	293.5	319.6	302.9	305.4	308.0	289.9	28.4
	EU-15 average <sup>a</sup>	352.3	379.5	419.0	414.3	424.4	419.4	448.5	422.0	422.0	416.4	411.8	18.2
	EU-10 average <sup>a</sup>	71.3	82.8	89.7	94.6	100.2	104.7	126.3	124.3	130.6	145.4	107.0	104.1
	EU-25 average <sup>b</sup>	181.7	196.8	225.5	225.6	236.4	243.0	249.9	247.1	255.9	215.1	227.7	18.4
	EU-15 average <sup>b</sup>	187.6	203.3	233.1	233.1	244.3	251.5	258.8	256.5	265.6	219.1	235.3	16.8
	EU-10 average <sup>b</sup>	66.6	70.7	71.1	77.1	78.6	81.0	82.3	75.5	75.0	84.7	76.2	27.2

Source: ECB, Eurostat, National Central Banks
Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent GDP in PPP term weighted averages

Table 3 Total credit granted by domestic credit institutions as % of GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	94.0	97.0	114.4	120.4	127.9	139.3	124.3	123.7	122.1	125.1	118.1	29.8
2	Belgium	74.7	76.9	95.0	99.1	108.4	115.1	103.7	106.9	106.6	107.2	98.5	42.7
3	Cyprus	80.2	88.0	93.8	98.5	110.1	114.8	121.4	124.8	122.1	141.1	109.5	52.2
4	Czech Republic	70.7	69.5	70.0	59.9	53.8	47.9	39.6	37.7	39.0	38.7	54.2	-44.8
5	Denmark			134.1	138.3	140.7	138.4	145.9	150.0	154.7	164.4	143.2	15.4
6	Estonia	14.0	18.0	24.7	23.7	24.3	23.9	39.0	42.7	54.3	65.4	29.4	287.4
7	Finland	66.0	61.9	48.4	53.2	59.4	66.4	59.4	61.1	65.5	69.4	60.1	-0.8
8	France	101.9	102.1	85.4	86.7	93.1	102.3	89.3	88.5	90.3	92.9	93.3	-11.4
9	Germany			205.2	218.1	227.0	237.8	144.4	140.9	139.9	135.8	187.6	-31.8
10	Greece	33.6	34.6	35.9	42.4	49.9	62.4	62.1	66.8	71.4	76.4	51.0	112.6
11	Hungary	22.5	22.1	24.3	24.2	26.1	32.2	35.5	37.9	42.5	48.3	29.7	89.0
12	Ireland	70.3	74.5	88.3	107.2	148.2	179.4	163.0	152.3	149.5	176.2	125.9	112.7
13	Italy	95.6	93.1	72.3	76.5	83.0	92.8	82.9	84.5	86.7	88.0	85.3	-9.3
14	Latvia	7.1	6.6	9.7	13.7	14.5	17.2	31.3	35.4	45.1	56.5	20.1	531.7
15	Lithuania	14.3	10.8	10.6	11.0	12.8	11.4	15.2	17.2	23.9	30.4	14.1	67.4
16	Luxembourg			546.5	676.2	791.9	845.5	218.5	578.8	494.8	467.3	593.2	-9.5
17	Malta	95.8	105.0	104.8	109.5	113.9	108.2	162.4	174.4	191.1	200.1	129.5	82.1
18	Netherlands	112.5	118.7	125.0	142.9	161.8	182.3	146.2	151.4	159.9	174.1	144.5	42.2
19	Poland	17.3	20.9	22.7	24.5	26.5	27.3	27.9	30.1	30.8	34.8	25.3	78.1
20	Portugal	70.5	77.8	78.5	99.9	130.7	162.7	132.1	135.7	135.7	136.8	113.7	92.5
21	Slovakia	36.7	43.9	56.0	53.9	54.5	51.3	37.6	39.6	31.6	36.3	44.1	-14.1
22	Slovenia	25.7	27.0	26.7	30.8	33.9	36.2	39.3	39.3	42.1	47.3	33.4	63.7
23	Spain	102.3	102.3	83.2	94.2	107.2	124.5	100.6	104.2	110.5	120.6	103.2	8.1
24	Sweden	114.1	112.2	97.2	89.8	104.3	111.5	107.6	110.2	110.9	114.5	106.4	-2.8
25	United Kingdom	122.3	126.1	121.6	120.0	145.8	163.4	132.6	131.7	139.1	142.2	133.6	13.7
	EU-25 average <sup>a</sup>	65.6	67.7	95.0	104.6	118.0	127.8	94.5	110.6	110.4	115.6	101.0	68.4
	EU-15 average <sup>a</sup>	88.1	89.8	128.7	144.3	165.3	181.6	120.8	145.8	142.5	146.1	135.3	61.7
	EU-10 average <sup>a</sup>	38.4	41.2	44.3	45.0	47.0	47.0	54.9	57.9	62.2	69.9	50.8	61.9
	EU-25 average <sup>b</sup>	71.6	72.6	113.3	118.8	130.3	141.9	108.3	109.2	111.8	114.5	109.2	59.9
	EU-15 average <sup>b</sup>	76.5	77.3	117.1	123.7	136.3	149.4	114.0	114.6	117.2	119.9	114.6	56.8
	EU-10 average <sup>b</sup>	31.8	33.8	35.6	34.4	34.8	34.9	34.6	36.1	37.6	41.9	35.6	31.4

Source: ECB, Eurostat, National Central Banks
Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent GDP in PPP term weighted averages

Table 4 Total deposits of domestic credit institutions as % of GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	85.0	84.4	91.7	96.8	101.7	104.2	97.4	95.7	97.8	97.9	95.3	15.1
2	Belgium	74.6	80.3	105.6	121.7	133.5	135.5	128.3	132.2	135.6	142.8	119.0	91.4
3	Cyprus	86.7	92.9	98.6	99.5	113.1	113.2	121.1	125.3	120.6	126.8	109.8	39.1
4	Czech Republic	62.2	59.1	59.0	55.3	53.2	59.2	61.6	68.8	67.1	69.2	61.5	11.1
5	Denmark	53.7	55.0	55.9	56.0	52.5	47.3	53.8	56.1	56.7	62.2	54.9	15.7
6	Estonia	16.3	18.9	23.2	21.4	25.3	28.9	40.9	41.7	42.0	45.8	30.4	181.0
7	Finland	54.2	54.5	54.5	54.5	59.0	61.2	50.5	50.8	52.6	53.2	54.5	-1.9
8	France	65.8	68.5	71.6	75.3	76.2	78.8	70.2	69.5	75.5	77.0	72.8	16.9
9	Germany	62.4	67.2	104.8	111.2	117.3	121.1	112.6	111.9	113.1	113.3	103.5	81.7
10	Greece	57.1	59.1	75.3	81.1	95.2	110.0	103.0	94.0	90.8	95.6	86.1	67.4
11	Hungary	40.2	40.7	39.8	38.7	38.9	38.6	46.5	44.8	42.0	44.4	41.5	10.4
12	Ireland	65.9	69.9	91.4	110.4	139.6	162.7	111.9	109.5	115.2	122.7	109.9	86.0
13	Italy	57.3	58.6	60.6	59.8	59.9	62.5	55.9	58.8	57.2	58.0	58.9	1.2
14	Latvia	16.6	15.0	18.3	17.3	16.8	21.0	45.0	51.4	56.1	65.7	32.3	295.7
15	Lithuania	14.3	10.8	11.9	12.4	14.4	17.1	22.3	23.2	25.1	30.1	18.2	110.7
16	Luxembourg			1340.1	1218.5	1010.0	1018.3	991.1	872.3	859.5	859.4	1021.2	-35.9
17	Malta	114.5	116.6	125.0	130.3	135.5	140.9	184.3	203.8	194.9	204.9	155.1	79.0
18	Netherlands	77.9	82.5	103.3	112.6	121.6	136.8	117.3	115.6	119.7	122.4	111.0	57.2
19	Poland	25.7	29.1	30.8	34.4	35.2	36.0	39.0	40.0	38.9	45.6	35.5	77.3
20	Portugal	76.1	72.6	107.4	114.4	127.9	137.7	104.0	99.1	100.3	102.2	104.2	34.4
21	Slovakia	54.9	57.4	55.7	53.5	55.0	57.2	18.1	18.4	20.1	21.7	41.2	-60.5
22	Slovenia	31.7	34.3	37.2	39.8	40.6	44.3	57.8	58.7	56.9	56.7	45.8	78.8
23	Spain	73.6	66.9	88.0	91.9	106.0	124.6	104.1	103.3	103.4	104.4	96.6	41.8
24	Sweden	40.4	42.2	48.7	38.7	45.6	50.7	50.8	51.2	52.0	51.2	47.2	26.8
25	United Kingdom	72.4	78.9	108.1	101.0	109.8	107.8	115.5	109.2	115.6	117.6	103.6	62.4
	EU-25 average <sup>a</sup>	57.5	59.0	120.3	117.9	115.4	120.6	116.1	112.2	112.4	115.6	104.7	101.1
	EU-15 average <sup>a</sup>	65.5	67.2	167.1	162.9	157.1	164.0	151.1	142.0	143.0	145.3	136.5	122.0
	EU-10 average <sup>a</sup>	46.3	47.5	49.9	50.3	52.8	55.6	63.7	67.6	66.4	71.1	57.1	53.5
	EU-25 average <sup>b</sup>	63.4	65.9	86.0	88.0	93.5	98.1	91.2	90.2	92.5	94.3	86.3	48.6
	EU-15 average <sup>b</sup>	65.8	68.2	89.1	91.4	97.6	102.7	94.6	93.2	95.5	96.9	89.5	47.3
	EU-10 average <sup>b</sup>	38.4	39.6	40.2	40.8	41.2	43.2	45.5	47.3	46.1	50.6	43.3	31.8

Source: ECB, Eurostat, National Central Banks
Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent GDP in PPP term weighted averages

**Table 5 Number of domestic credit institutions** 

-	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria		1,019	995	898	875	848	836	823	814	796	878	-21.9
2	Belgium	120	116	131	123	117	118	112	111	108	104	116	-13.3
3	Cyprus						404	406	408	405	405	406	0.2
4	Czech Republic	55	53	50	45	42	119	96	83	77	74	69	34.5
5	Denmark	204	203	213	212	210	210	203	178	203	202	204	-1.0
6	Estonia	18	15	12	6	7	7	7	7	7	9	10	-50.0
7	Finland	349	347	348	348	346	341	369	369	366	363	355	4.0
8	France			1,258	1,226	1,158	1,099	1,050	989	939	897	1,077	-25.4
9	Germany	3651	3542	3,420	3,238	2,992	2,742	2,526	2,363	2,148	2,148	2,877	-41.2
10	Greece	39	41	55	59	57	57	61	61	59	62	55	59.0
11	Hungary	295	292	286	294	260	241	230	225	219	217	256	-26.4
12	Ireland			71	78	81	81	88	85	80	80	81	12.7
13	Italy	970	937	935	921	890	841	843	821	801	787	875	-18.9
14	Latvia	43	39	37	27	23	21	19	19	19	23	27	-46.5
15	Lithuania	17	26	37	42	48	52	53	68	71	74	49	335.3
16	Luxembourg	220	221	215	212	211	202	194	184	172	162	199	-26.4
17	Malta						22	17	14	16	16	17	-27.3
18	Netherlands	744	658	648	634	616	586	561	539	481	461	593	-38.0
19	Poland	1,591	1,475	1,378	1,272	858	754	713	667	660	653	1,002	-59.0
20	Portugal	257	243	238	227	224	218	212	202	200	197	222	-23.3
21	Slovakia	33	29	29	27	25	23	23	22	21	21	25	-36.4
22	Slovenia	41	36	34	30	31	28	24	22	22	24	29	-41.5
23	Spain	316	313	416	404	387	368	366	359	346	346	362	9.5
24	Sweden	116	175	237	223	212	211	149	216	222	212	197	82.8
25	United Kingdom	486	478	557	521	496	491	452	451	426	413	477	-15.0
	EU-25 average <sup>a</sup>	478	488	504	481	442	403	384	371	355	350	426	-26.8
	EU-15 average <sup>a</sup>	623	644	647	622	591	561	535	517	491	482	571	-22.6
	EU-10 average <sup>a</sup>	262	246	233	218	162	167	159	154	152	152	190	-42.1
	EU-25 average <sup>b</sup>	1073	1053	1206	1148	1047	976	919	873	816	805	992	-25.0
	EU-15 average <sup>b</sup>	1114	1102	1295	1236	1158	1081	1018	966	899	886	1075	-20.5
	EU-10 average <sup>b</sup>	871	812	762	708	490	447	421	396	391	387	568	-55.6

Source: ECB, Eurostat, National Central Banks
Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent population weighted averages

Table 6 Number of domestic, intra-EU and outside-EU mergers in Europe, 2001- 2004

	Country	Domestic	Intra-EEA	Outside-EEA	Total	Domestic	Intra-EEA	Outside-EEA	Total
						to av	erage number of	credit institutions (ir	1%)
1	Austria	4	2	0	6	0.5	0.2	0.0	0.7
2	Belgium	5	1	0	6	4.6	0.9	0.0	5.5
3	Cyprus	0	0	0	0	0.0	0.0	0.0	0.0
4	Czech Republic	3	10	1	14	3.6	12.1	1.2	17.0
5	Denmark	5	6	2	13	2.5	3.1	1.0	6.6
6	Estonia	0	1	0	1	0.0	13.3	0.0	13.3
7	Finland	2	1	0	3	0.5	0.3	0.0	0.8
8	France	43	7	1	51	4.4	0.7	0.1	5.3
9	Germany	42	9	2	53	1.8	0.4	0.1	2.3
10	Greece	8	4	0	12	13.2	6.6	0.0	19.8
11	Hungary	9	7	1	17	4.0	3.1	0.4	7.6
12	Ireland	1	2	1	4	1.2	2.4	1.2	4.8
13	Italy	82	8	3	93	10.1	1.0	0.4	11.4
14	Latvia	1	1	3	5	5.0	5.0	15.0	25.0
15	Lithuania	0	4	0	4	0.0	6.0	0.0	6.0
16	Luxembourg	0	3	0	3	0.0	1.7	0.0	1.7
17	Malta	0	0	0	0	0.0	0.0	0.0	0.0
18	Netherlands	8	5	3	16	1.6	1.0	0.6	3.1
19	Poland	14	15	0	29	2.1	2.2	0.0	4.3
20	Portugal	3	8	1	12	1.5	3.9	0.5	5.9
21	Slovakia	1	5	0	6	4.6	23.0	0.0	27.6
22	Slovenia	4	4	0	8	17.4	17.4	0.0	34.8
23	Spain	13	4	1	18	3.7	1.1	0.3	5.1
24	Sweden	4	1	0	5	2.0	0.5	0.0	2.5
25	United Kingdom	48	4	7	59	11.0	0.9	1.6	13.5
	EU-25 total/average	300	112	26	438	3.8	4.3	0.9	9.0
	EU-15 total/average	268	65	21	354	3.9	1.6	0.4	5.9
	EU-10 total/average	32	47	5	84	3.7	8.2	1.7	13.6

Source: ECB

Table 7 Share of foreign credit institutions as % of total assets of domestic credit institutions

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria			3.4	2.7	2.7	2.8	19.4	21.4	19.6	19.4	11.44	479.06
2	Belgium			30.4	26.9	23.7	24.9	24.9	24.0	22.9	23.2	25.1	-23.8
3	Cyprus			10.2	10.9	11.3	11.7	12.8	12.7	12.3	30.1	14.0	194.8
4	Czech Republic	16.0	20.0	24.0	26.0	39.0	75.4	93.3	94.2	95.9	91.8	57.6	473.9
5	Denmark			4.5	6.3	4.3	5.2	16.2	13.0	16.0	16.2	10.2	260.8
6	Estonia	2.0	3.0	29.0	90.0	90.0	97.0	98.0	98.0	99.2	98.0	70.4	4798.1
7	Finland			8.4	8.2	9.5	8.1	6.8	9.1	7.4	59.5	14.6	607.3
8	France			10.4	9.9	11.3	15.0	9.6	12.7	11.1	11.4	11.4	9.2
9	Germany			4.3	4.3	4.0	4.1	4.7	6.1	6.0	6.3	5.0	45.9
10	Greece			15.8	12.7	11.0	11.6	8.8	21.7	22.0	24.8	16.1	57.0
11	Hungary	41.8	46.2	53.0	64.0	66.4	68.1	70.0	90.7	83.0	77.0	66.0	84.2
12	Ireland			24.8	55.9	57.2	57.9	59.4	47.3	43.9	45.4	49.0	83.5
13	Italy	4.5	4.8	7.0	8.0	7.4	6.5	5.5	5.6	5.9	7.7	6.3	71.1
14	Latvia	36.0	53.0	55.0	63.1	66.2	69.9	67.8	54.4	53.9	57.8	57.7	60.6
15	Lithuania	0.0	28.0	41.0	51.0	37.0	57.7	81.1	88.1	88.7	93.0	56.6	741350.2
16	Luxembourg			92.5	94.5	94.5	92.2	94.6	93.7	93.9	94.1	93.7	1.7
17	Malta		45.6	47.1	56.5	56.7	57.9	59.2	72.8	68.2	39.1	55.9	49.5
18	Netherlands			7.2	6.5	5.2	11.2	11.3	10.3	11.8	12.1	9.4	66.8
19	Poland	4.2	13.7	15.3	16.6	47.2	69.5	68.7	67.4	67.8	67.6	43.8	1509.5
20	Portugal			14.8	21.0	14.7	22.2	24.6	25.1	26.5	26.1	21.9	76.4
21	Slovakia	19.0	23.0	30.0	30.0	31.0	43.0	90.5	95.6	96.3	97.0	55.5	410.5
22	Slovenia	4.0	5.0	5.0	4.8	15.3	15.6	15.6	23.1	24.2	38.0	15.1	850.0
23	Spain			12.5	11.5	9.2	9.0	11.2	9.9	11.0	11.5	10.7	-8.1
24	Sweden			2.5	4.4	3.6	5.4	5.8	6.6	7.6	8.7	5.6	244.6
25	United Kingdom			52.2	52.9	50.1	52.5	50.5	47.4	49.8	51.3	50.8	-1.8
	EU-25 average <sup>a</sup>	14.2	24.2	24.0	29.5	30.7	35.8	40.4	42.0	41.8	44.3	36.1*	84.4*
	EU-15 average <sup>a</sup>			19.4	21.7	20.6	21.9	23.5	23.6	23.7	27.8	22.8	43.6
	EU-10 average <sup>a</sup>	15.4	26.4	31.0	41.3	46.0	56.6	65.7	69.7	76.1	77.5	50.6	404.2
	EU-25 average <sup>b</sup>	0.6	0.7	20.3	20.4	20.4	22.6	19.4	22.3	22.8	29.2	$22.2^{*}$	43.5*
	EU-15 average <sup>b</sup>			15.8	16.3	15.5	16.9	16.5	17.0	17.4	19.0	16.8	19.9
	EU-10 average <sup>b</sup>	14.3	19.1	23.0	27.0	42.1	61.7	69.9	71.3	70.4	70.4	46.9	390.7

Source: ECB, Eurostat, National Banks, BankScope, \*calculated as 1997-2004 Note: \*aggregates are unweighted averages, \*baggregates represent assets weighted averages

Table 8 Share of the five largest credit institutions in total assets in  $\,\%$  (CR5)

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	39.2	39.0	48.3	42.0	41.0	43.0	44.9	45.6	44.2	43.8	43.1	11.8
2	Belgium	51.2	52.2	54.0	63.0	76.0	75.0	78.3	82.0	83.5	84.3	70.0	64.6
3	Cyprus		96.1	91.6	91.6	92.7	92.7	71.5	69.3	69.7	69.4	82.7	-27.8
4	Czech Republic	70.0	69.0	67.0	66.0	65.0	66.0	64.4	65.7	65.8	64.0	66.3	-8.6
5	Denmark	80.0	77.0	70.0	71.0	71.0	60.0	67.6	68.0	66.6	67.0	69.8	-16.3
6	Estonia		75.0	83.0	99.0	99.0	99.0	98.9	99.1	99.2	98.6	94.5	31.5
7	Finland	70.6	71.7	88.0	86.0	86.0	87.0	79.5	78.6	81.2	82.7	81.1	17.1
8	France	41.3	41.2	40.0	41.0	43.0	47.0	47.0	44.6	46.7	44.7	43.7	8.2
9	Germany	16.7	16.0	17.0	19.0	19.0	20.0	20.2	20.5	21.6	22.1	19.2	32.6
10	Greece	82.0	87.0	56.0	63.0	67.0	65.0	67.0	67.4	66.9	65.0	68.6	-20.7
11	Hungary	59.0	58.0	53.0	54.0	54.0	53.0	56.4	54.5	52.1	52.7	54.7	-10.7
12	Ireland	44.4	42.2	41.0	40.0	41.0	41.0	42.5	46.1	44.4	43.9	42.7	-1.1
13	Italy	32.3	32.1	31.0	25.0	26.0	23.0	29.0	30.6	27.0	26.0	28.2	-19.4
14	Latvia	53.0	52.0	51.0	61.0	61.0	62.0	63.4	65.3	63.1	62.4	59.4	17.7
15	Lithuania	76.0	80.0	84.0	90.0	91.0	88.0	87.6	83.9	81.0	78.9	84.0	3.8
16	Luxembourg	30.0	29.0	23.0	25.0	26.0	26.0	28.0	30.3	31.8	29.7	27.9	-1.0
17	Malta			98.0	98.0	98.0	97.7	79.6	82.0	79.3	78.7	88.9	-19.7
18	Netherlands	76.1	75.4	79.4	82.0	82.0	81.0	82.5	82.7	84.2	84.0	80.9	10.3
19	Poland	48.2	48.8	46.2	42.9	47.7	46.5	54.7	53.4	52.3	50.2	49.1	4.2
20	Portugal	74.0	80.0	46.0	45.0	44.0	59.0	59.8	60.5	62.7	66.5	59.8	-10.1
21	Slovakia	75.0	68.0	63.0	60.0	59.0	63.0	66.1	66.4	67.5	66.5	65.5	-11.3
22	Slovenia	63.0	63.0	62.0	63.0	63.0	63.0	67.6	68.4	66.4	64.1	64.4	1.7
23	Spain	47.3	46.0	45.0	45.0	52.0	54.0	44.9	44.3	43.9	41.9	46.4	-11.4
24	Sweden	73.0	63.0	59.0	60.0	60.0	62.0	54.6	56.0	53.8	54.4	59.6	-25.5
25	United Kingdom	47.0	33.0	24.0	25.0	28.0	28.0	28.6	29.6	32.8	34.5	31.1	-26.6
	EU-25 average <sup>a</sup>	56.8	58.1	56.8	58.3	59.7	60.1	59.4	59.8	59.5	59.0	58.8	4.0
	EU-15 average <sup>a</sup>	53.7	52.3	48.1	48.8	50.8	51.4	51.6	52.5	52.8	52.7	51.5	-1.8
	EU-10 average <sup>a</sup>	63.5	67.8	69.9	72.5	73.0	73.1	71.0	70.8	69.6	68.6	70.0	8.0
	EU-25 average <sup>b</sup>	38.5	35.7	33.3	34.3	36.2	36.9	39.9	38.3	39.8	44.8	37.8	16.4
	EU-15 average <sup>b</sup>	38.2	35.4	33.0	33.9	35.9	36.6	39.7	38.0	39.5	44.6	37.5	16.8
	EU-10 average <sup>b</sup>	57.1	60.2	61.3	59.5	61.2	61.0	61.7	61.7	61.4	60.3	60.5	5.6

Source: ECB, Eurostat, BankScope Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent assets weighted averages

Table 9 Herfindahl-Hirschman Index (HHI) for credit institutions' total assets

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change
1	Austria		648	515	515	511	548	561	618	557	552	558	-96
2	Belgium	986		669	909	1518	1506	1587	1905	2065	2100	1472	1114
3	Cyprus		2931	2747	2724	2778	2733	1304	1339	1392	1365	2146	-1566
4	Czech Republic		2551	2533	2269	1994	1847	1263	1199	1870	1103	1848	-1448
5	Denmark			1431	1442	1499	863	1119	1145	1114	1146	1220	-285
6	Estonia			4312	4573	4961	5210	4067	4028	3943	3887	4372	-425
7	Finland	2110	2274	2150	2120	1960	2050	2240	2050	2420	2680	2205	570
8	France	398	399	449	485	509	587	606	551	597	623	520	225
9	Germany	148	159	114	133	140	151	158	163	173	178	152	30
10	Greece			885	1165	986	1122	1113	1164	1130	1069	1079	184
11	Hungary		2886	2101	1895	1749	1409	892	856	783	795	1485	-2091
12	Ireland			500	473	480	486	512	553	562	556	515	56
13	Italy	316	291	201	210	220	190	260	270	240	230	243	-86
14	Latvia		1679	1450	1756	1304	1383	1244	1234	1144	1021	1357	-658
15	Lithuania		3353	2972	3320	3625	3188	2503	2240	2071	1854	2792	-1499
16	Luxembourg			210	222	236	242	275	296	315	304	263	94
17	Malta			4411	3921	3953	3553	2163	2390	2199	2015	3076	-2396
18	Netherlands	2058		1654	1802	1700	1694	1762	1788	1744	1726	1770	-332
19	Poland		850	859	788	731	705	821	792	753	692	777	-158
20	Portugal			577	575	566	986	991	963	1044	1093	849	516
21	Slovakia		2875	2643	1803	1965	1821	1205	1252	1191	1154	1768	-1721
22	Slovenia		2346	2314	2006	1966	1964	1582	1602	1496	1425	1856	-921
23	Spain	376	389	285	329	441	581	551	529	521	482	448	106
24	Sweden			830	790	790	800	760	800	760	854	798	854
25	United Kingdom			208	221	250	264	282	307	347	376	282	376
	EU-25 average <sup>a</sup>		1688	1481	1458	1473	1435	1193	1201	1217	1171	1369	-517
	EU-15 average <sup>a</sup>	913	693	712	759	787	805	852	873	906	931	823	238
_	EU-10 average <sup>a</sup>		2434	2634	2506	2503	2381	1704	1693	1684	1531	2119	-903
	EU-25 average <sup>b</sup>		211	389	427	459	475	519	521	551	670	469	459
	EU-15 average <sup>b</sup>	334	189	370	409	444	461	512	513	542	662	444	473
	EU-10 average <sup>b</sup>		1940	2024	1782	1693	1565	1143	1142	1279	1087	1517	-853

Source: ECB, Eurostat, BankScope Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent assets weighted averages

Table 10 Loans as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		49.84	50.50	51.25	49.11	49.16	51.34	51.25	50.35	2.83
2	Belgium	36.94	35.30	38.58	39.63	42.83	39.91	42.21	41.89	39.66	13.40
3	Cyprus	55.30	55.33	58.42	57.15	57.81	54.97	56.84	55.42	56.41	0.22
4	Czech Republic	45.63	46.05	40.99	35.08	30.17	32.30	32.91	37.25	37.55	-18.37
5	Denmark	66.42	61.85	61.53	64.20	64.80	61.75	58.17	58.86	62.20	-11.38
6	Estonia	48.82	55.97	59.67	56.23	59.05	57.83	64.55	69.53	58.96	42.42
7	Finland	55.43	58.30	62.40	64.86	64.50	62.78	64.34	53.47	60.76	-3.54
8	France	40.66	40.83	41.19	39.01	39.09	37.07	36.69	36.38	38.87	-10.53
9	Germany	62.27	61.98	60.94	57.44	57.43	57.31	57.05	56.82	58.91	-8.75
10	Greece	35.44	34.95	35.57	38.37	41.03	44.46	51.73	55.21	42.10	55.78
11	Hungary	31.28	33.53	37.09	40.53	47.69	50.38	58.60	63.90	45.38	104.28
12	Ireland		59.52	54.99	53.90	53.10	54.54	50.76	46.85	53.38	-21.29
13	Italy		49.94	50.84	55.88	57.27	58.14	57.34	60.48	55.70	21.11
14	Latvia	17.62	26.84	44.39	44.69	39.03	45.68	47.85	50.72	39.60	187.85
15	Lithuania	50.39	43.27	43.57	48.15	43.05	43.83	50.81	60.02	47.89	19.11
16	Luxembourg	19.94	22.36	22.37	22.76	23.36	23.87	23.04	21.24	22.37	6.52
17	Malta		53.39	49.89	49.44	50.73	50.33	49.42	48.79	50.28	-8.62
18	Netherlands	62.54	60.22	57.29	61.02	60.70	59.66	60.65	58.14	60.03	-7.04
19	Poland	35.37	40.22	42.40	47.84	46.56	44.99	47.03	49.14	44.19	38.93
20	Portugal		50.09	57.02	60.92	63.85	67.41	69.88	64.83	62.00	29.43
21	Slovakia	48.61	46.52	45.81	48.11	44.10	31.46	34.77	40.16	42.44	-17.38
22	Slovenia	42.75	44.66	47.83	51.96	52.51	48.92	50.34	52.90	48.98	23.74
23	Spain	46.21	49.04	51.87	53.59	53.55	55.22	58.64	60.27	53.55	30.43
24	Sweden	64.77	72.09	71.94	73.36	74.42	74.72	74.99	75.61	72.74	16.74
25	United Kingdom		53.72	53.39	54.9	54.06	53.86	54.52	55.04	54.21	2.46
-	EU 25 average	45.60	48.23	49.62	50.81	50.79	50.42	52.18	52.97	50.08	16.16
	EU-15 average	49.06	50.67	51.36	52.74	53.27	53.32	54.09	53.09	52.20	8.21
	EU-10 average	41.75	44.58	47.01	47.92	47.07	46.07	49.31	52.78	47.06	26.42

Table 11 Non-interest earnings assets as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		3.49	5.33	4.83	5.11	6.94	6.92	6.81	5.63	95.31
2	Belgium	3.18	3.92	4.94	5.42	6.77	8.49	7.51	7.57	5.97	138.47
3	Cyprus	2.64	2.40	2.70	5.13	4.16	3.46	3.16	2.58	3.28	-2.26
4	Czech Republic	8.74	10.64	10.48	7.96	6.87	5.79	5.88	5.59	7.74	-36.04
5	Denmark	3.39	6.22	6.86	6.09	5.44	5.31	7.51	4.63	5.68	36.53
6	Estonia	9.08	9.86	10.65	9.79	9.39	8.45	7.32	6.34	8.86	-30.20
7	Finland	5.84	6.36	7.27	7.35	6.92	8.79	10.19	13.62	8.29	133.11
8	France	6.57	6.86	8.39	9.81	9.14	9.54	8.79	9.21	8.54	40.24
9	Germany	2.01	1.79	1.77	2.27	2.26	2.47	2.36	2.36	2.16	17.31
10	Greece	4.22	5.56	3.84	4.93	4.55	4.89	3.66	3.37	4.38	-20.07
11	Hungary	6.68	6.61	6.01	6.98	6.29	5.82	5.15	4.75	6.04	-28.89
12	Ireland		5.45	10.17	9.74	10.15	9.82	7.92	7.39	8.66	35.66
13	Italy		7.00	7.44	5.66	5.92	6.80	7.46	8.14	6.92	16.27
14	Latvia	11.13	11.30	12.54	10.38	8.90	7.50	7.48	6.28	9.44	-43.55
15	Lithuania	19.89	13.55	18.76	18.12	16.05	16.49	13.29	12.74	16.11	-35.95
16	Luxembourg	2.54	3.23	3.31	4.43	5.34	6.02	3.92	3.97	4.09	56.34
17	Malta		2.75	2.85	3.69	3.64	3.33	3.24	3.53	3.29	28.43
18	Netherlands	3.75	4.33	4.09	4.87	4.86	5.61	4.80	5.37	4.71	42.99
19	Poland	11.50	10.37	11.86	7.48	7.55	11.31	8.67	8.54	9.66	-25.75
20	Portugal		8.46	7.67	9.04	7.71	8.31	7.81	10.75	8.54	27.07
21	Slovakia	3.95	4.30	5.06	5.62	5.90	4.49	3.75	3.82	4.61	-3.24
22	Slovenia	4.64	4.50	4.00	3.99	3.96	5.00	3.66	3.43	4.15	-25.96
23	Spain	5.58	6.00	6.70	8.12	9.94	10.44	8.95	8.18	7.99	46.61
24	Sweden	7.78	7.13	7.01	7.59	7.00	7.10	7.95	6.51	7.26	-16.35
25	United Kingdom		7.48	7.46	6.71	7.46	7.58	7.51	7.81	7.43	4.44
	EU-25 average	6.48	6.38	7.09	7.04	6.85	7.19	6.59	6.53	6.77	0.81
	EU-15 average	4.49	5.55	6.15	6.46	6.57	7.21	6.88	7.05	6.29	57.06
	EU-10 average	8.69	7.63	8.49	7.91	7.27	7.16	6.16	5.76	7.39	-33.74

Table 12 Customer and short–term funding as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		64.35	68.53	68.66	67.87	68.68	66.52	66.33	67.28	3.07
2	Belgium	80.63	83.59	84.02	84.65	81.06	82.02	81.86	81.90	82.46	1.58
3	Cyprus	89.38	88.46	87.63	87.05	86.72	86.90	87.59	87.34	87.63	-2.29
4	Czech Republic	84.22	84.54	82.63	81.04	81.21	83.77	82.71	82.61	82.84	-1.91
5	Denmark	43.56	48.62	44.96	44.28	39.07	37.86	37.53	38.66	41.82	-11.25
6	Estonia	80.29	83.59	74.04	77.83	78.15	77.61	79.54	78.14	78.65	-2.67
7	Finland	81.88	82.61	78.80	76.80	74.66	69.20	68.12	66.22	74.79	-19.12
8	France	77.33	77.36	75.98	71.22	68.68	68.53	68.77	67.47	71.92	-12.75
9	Germany	72.60	72.28	71.91	71.33	68.54	69.32	69.41	71.28	70.83	-1.82
10	Greece	89.79	89.13	89.36	85.16	86.38	88.18	88.87	86.13	87.88	-4.08
11	Hungary	85.52	83.26	83.64	81.02	81.84	82.18	77.71	74.20	81.17	-13.23
12	Ireland		84.13	76.05	76.55	76.42	78.63	71.07	70.00	76.12	-16.80
13	Italy		67.52	67.05	63.42	62.97	61.86	64.27	65.31	64.63	-3.29
14	Latvia	80.66	81.68	88.10	82.72	84.13	86.18	86.52	87.24	84.66	8.16
15	Lithuania	75.94	79.97	76.30	82.65	80.96	83.07	83.62	84.36	80.86	11.08
16	Luxembourg	86.07	84.71	82.90	82.05	80.47	80.39	79.41	79.26	81.91	-7.90
17	Malta		89.94	84.96	85.12	85.58	86.49	86.49	86.01	86.37	-4.37
18	Netherlands	71.72	71.08	70.32	67.36	68.00	68.41	67.88	67.84	69.08	-5.42
19	Poland	81.30	82.89	84.40	85.36	83.92	82.11	79.89	80.38	82.53	-1.13
20	Portugal		82.82	83.66	81.69	79.25	76.08	73.48	72.57	78.51	-12.38
21	Slovakia	89.66	90.58	94.65	88.71	87.08	88.25	86.84	86.20	89.00	-3.86
22	Slovenia	75.95	77.08	84.32	84.61	83.32	84.48	82.93	82.89	81.95	9.14
23	Spain	84.30	83.65	82.52	79.65	77.14	76.24	75.61	74.12	79.15	-12.08
24	Sweden	47.34	50.12	46.37	46.80	55.14	57.86	56.70	53.73	51.76	13.50
25	United Kingdom		77.21	76.87	77.21	75.80	76.37	75.94	74.97	76.34	-2.90
	EU-25 average	77.80	78.45	77.60	76.52	75.77	76.03	75.17	74.61	76.49	-4.10
	EU-15 average	73.52	74.61	73.29	71.79	70.76	70.64	69.70	69.05	71.67	-6.08
	EU-10 average	82.55	84.20	84.07	83.61	83.29	84.10	83.39	82.94	83.52	0.47

Table 13 Equity as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		4.31	3.94	3.88	3.89	4.19	4.35	4.59	4.16	6.50
2	Belgium	3.09	3.29	3.59	3.69	3.73	3.27	3.45	3.43	3.44	11.00
3	Cyprus	5.08	5.15	5.14	7.49	8.51	6.74	6.15	5.66	6.24	11.42
4	Czech Republic	6.29	7.24	6.82	7.45	6.19	6.14	6.63	6.76	6.69	7.47
5	Denmark	6.74	5.99	5.84	5.45	4.92	4.56	4.43	4.53	5.31	-32.79
6	Estonia	9.96	7.17	13.56	13.79	12.08	10.52	11.04	10.69	11.10	7.33
7	Finland	4.61	4.59	4.88	5.24	6.39	5.78	5.87	10.03	5.92	117.57
8	France	4.11	4.11	4.08	4.03	4.24	4.35	4.40	4.57	4.24	11.19
9	Germany	5.45	5.37	5.15	4.72	4.72	4.57	4.67	4.62	4.91	-15.23
10	Greece	3.98	4.25	5.68	9.99	8.70	7.54	6.04	6.65	6.60	67.09
11	Hungary	5.81	7.94	7.47	6.80	7.59	8.19	8.77	8.58	7.64	47.68
12	Ireland		6.07	6.64	6.42	6.87	6.66	4.85	4.46	6.00	-26.52
13	Italy		6.39	6.69	8.98	8.21	7.94	7.69	7.60	7.64	18.94
14	Latvia	12.39	13.25	6.55	10.11	8.86	9.31	8.99	8.74	9.78	-29.46
15	Lithuania	7.59	6.84	10.81	10.02	10.48	10.27	10.72	9.66	9.55	27.27
16	Luxembourg	3.38	3.16	3.62	3.73	3.83	3.85	4.34	4.24	3.77	25.44
17	Malta		5.78	8.33	8.07	8.12	7.89	7.78	8.79	7.82	52.08
18	Netherlands	5.25	4.67	4.21	4.46	4.29	4.02	4.08	4.01	4.37	-23.62
19	Poland	6.33	7.73	7.41	8.19	8.98	9.75	10.40	10.23	8.63	61.61
20	Portugal		5.47	6.14	6.28	5.37	5.29	5.46	5.75	5.68	5.12
21	Slovakia	4.19	3.57	5.50	5.20	6.99	7.98	8.77	9.37	6.45	123.63
22	Slovenia	10.84	10.90	10.10	9.84	9.84	9.29	9.25	9.17	9.90	-15.41
23	Spain	6.05	6.30	6.51	6.69	7.46	7.39	7.39	7.11	6.86	17.52
24	Sweden	4.08	3.95	4.15	4.41	4.28	4.45	4.38	4.56	4.28	11.76
25	United Kingdom		4.52	4.72	4.88	5.20	5.20	5.06	5.02	4.94	11.06
	EU-25 average	6.06	5.92	6.30	6.79	6.79	6.61	6.60	6.75	6.48	11.35
	EU-15 average	4.67	4.83	5.06	5.52	5.47	5.27	5.10	5.41	5.17	15.78
	EU-10 average	7.61	7.56	8.17	8.70	8.76	8.61	8.85	8.77	8.38	15.19

Table 14 Overhead costs as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		1.69	1.70	1.60	1.40	1.59	1.69	1.63	1.61	-3.48
2	Belgium	1.37	1.29	1.51	1.46	1.54	1.48	1.43	1.33	1.43	-3.09
3	Cyprus	2.12	2.13	2.25	2.32	2.26	2.23	2.37	2.29	2.25	8.08
4	Czech Republic	2.72	2.66	4.52	3.52	3.24	3.28	2.66	2.52	3.14	-7.47
5	Denmark	1.26	1.36	1.30	1.30	1.15	1.11	0.99	0.90	1.17	-28.44
6	Estonia	5.84	3.92	4.15	4.75	4.01	3.44	3.49	2.80	4.05	-52.05
7	Finland	2.44	1.99	2.06	1.77	1.51	1.48	1.83	2.09	1.90	-14.44
8	France	1.75	1.73	1.74	1.55	1.64	1.55	1.52	1.47	1.62	-15.84
9	Germany	1.75	1.67	1.64	1.58	1.54	1.53	1.49	1.44	1.58	-17.74
10	Greece	2.64	2.63	2.55	2.59	2.57	2.54	2.69	2.59	2.60	-1.83
11	Hungary	4.71	4.23	4.50	5.42	4.92	4.55	4.49	4.01	4.60	-15.01
12	Ireland		1.91	2.64	2.53	2.08	1.58	1.12	0.85	1.82	-55.47
13	Italy		2.68	2.60	2.87	2.43	2.47	2.30	2.46	2.54	-8.42
14	Latvia	6.25	5.57	9.84	6.07	4.58	4.16	3.60	3.18	5.41	-49.12
15	Lithuania	6.82	6.14	5.30	4.61	5.03	5.20	4.41	3.39	5.11	-50.25
16	Luxembourg	0.62	0.62	0.69	0.70	0.76	0.76	0.84	0.78	0.72	26.41
17	Malta		1.67	1.55	1.60	1.58	1.49	1.39	1.49	1.54	-10.75
18	Netherlands	1.90	1.91	1.90	1.98	2.02	1.94	1.91	1.72	1.91	-9.40
19	Poland	2.79	3.35	4.03	4.23	4.33	3.84	4.07	3.84	3.81	37.49
20	Portugal		2.22	2.45	2.19	1.93	1.85	1.85	1.79	2.04	-19.59
21	Slovakia	2.70	3.52	3.43	3.86	4.00	5.25	3.42	3.28	3.68	21.51
22	Slovenia	3.25	3.61	3.74	3.62	3.60	3.10	3.15	3.06	3.39	-5.61
23	Spain	2.40	2.46	2.56	2.42	2.25	2.33	2.21	1.95	2.32	-18.80
24	Sweden	0.95	0.93	1.01	1.00	1.08	1.09	1.01	0.94	1.00	-0.81
25	United Kingdom		1.75	1.77	1.71	1.70	1.88	1.75	1.77	1.76	0.87
	EU-25 average	2.86	2.55	2.86	2.69	2.53	2.47	2.31	2.14	2.55	-24.99
	EU-15 average	1.71	1.79	1.87	1.82	1.71	1.68	1.64	1.58	1.72	-7.45
	EU-10 average	4.13	3.68	4.33	4.00	3.75	3.65	3.31	2.99	3.73	-27.75

Table 15 Cost/income ratio as % of banks' total income

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria	61.40	66.95	69.95	69.41	65.31	66.46	67.55	65.62	66.58	6.87
2	Belgium	68.47	66.08	64.17	66.64	68.12	69.36	69.84	67.72	67.55	-1.10
3	Cyprus	62.88	63.37	64.70	46.87	65.56	67.52	71.84	67.39	63.77	7.17
4	Czech Republic	59.34	53.37	83.88	67.68	75.05	72.75	63.25	61.48	67.10	3.61
5	Denmark	50.74	58.87	59.41	62.61	60.81	61.07	60.11	52.64	58.28	3.74
6	Estonia	61.46	53.12	83.31	66.99	59.89	58.47	59.25	52.86	61.92	-13.99
7	Finland	62.25	57.15	56.04	56.07	42.74	48.17	65.82	59.06	55.91	-5.12
8	France	72.62	72.01	72.18	69.49	67.93	69.16	70.40	67.37	70.15	-7.23
9	Germany	62.23	62.48	65.61	67.14	67.23	69.19	65.12	65.93	65.62	5.95
10	Greece	72.23	64.66	61.55	46.89	56.31	62.69	71.2	59.89	61.93	-17.08
11	Hungary	67.62	65.81	70.52	79.67	74.39	69.76	67.39	63.15	69.79	-6.61
12	Ireland		60.14	62.95	66.82	64.28	58.98	55.34	51.83	60.05	-13.82
13	Italy	69.6	73.73	67.49	76.1	68.31	68.68	67.7	69.59	70.15	-0.01
14	Latvia	55.52	65.32	70.23	75.13	68.38	64.46	64.85	60.68	65.57	9.29
15	Lithuania	63.36	80.07	81.6	77.24	78.47	90.43	78.84	79.98	78.75	26.23
16	Luxembourg	45.17	46.4	43.78	50.46	52.15	53.05	54.43	54.53	50.00	20.72
17	Malta		53.22	52.62	53.86	48.91	48.81	50.27	47.11	50.69	-11.48
18	Netherlands	68.88	72.21	74.68	71.52	74.2	76.84	75.94	70.34	73.08	2.12
19	Poland	51.54	55.04	69.16	64.09	65.82	63.31	64.21	68.36	62.69	32.63
20	Portugal	56.5	59.88	62.7	62.03	60.21	59.45	60.12	61.06	60.24	8.07
21	Slovakia	65.25	79.08	83.52	153.77	69.25	82.39	70.27	70.73	84.28	8.40
22	Slovenia	53.00	59.15	60	62.61	58.07	64.62	62.34	64.12	60.49	20.98
23	Spain	62.95	61.58	62.23	61.38	59.54	57.83	57.92	54.31	59.72	-13.73
24	Sweden	42.9	50.56	53.64	54.56	50.62	53.19	52.89	49.48	50.98	15.34
25	United Kingdom	60.3	60.75	57.86	55.82	56.69	61.21	61.34	61.03	59.38	1.21
	EU-25 average	60.70	62.44	66.15	67.39	63.13	64.71	64.33	61.85	63.84	1.89
	EU-15 average	61.16	62.23	62.28	62.46	60.96	62.36	63.71	60.69	61.98	-0.76
	EU-10 average	60.00	62.76	71.95	74.79	66.38	68.25	65.25	63.59	66.62	5.98

Table 16 Net interest margin as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		1.82	2.32	1.65	1.74	1.77	1.86	1.80	1.85	-1.10
2	Belgium	1.54	1.74	1.87	1.50	1.45	1.50	1.41	1.40	1.55	-9.09
3	Cyprus	2.14	2.24	2.47	2.41	2.82	2.64	2.45	2.51	2.46	17.29
4	Czech Republic	3.51	3.61	4.56	3.42	3.24	3.12	2.74	2.54	3.34	-27.64
5	Denmark	1.81	1.97	1.87	1.72	1.52	1.57	1.42	1.36	1.66	-24.86
6	Estonia	5.66	6.14	6.09	5.09	5.36	5.04	4.63	4.03	5.26	-28.80
7	Finland	2.37	3.62	2.35	2.17	2.40	2.03	2.06	1.92	2.37	-18.99
8	France	1.63	1.62	1.48	1.45	1.14	1.13	1.12	1.15	1.34	-29.45
9	Germany	2.39	2.31	2.12	2.13	1.88	1.78	1.8	1.86	2.03	-22.18
10	Greece	2.13	2.5	2.67	2.89	2.66	2.87	2.85	3.51	2.76	64.79
11	Hungary	4.63	5.05	4.87	4.51	4.72	4.76	4.97	4.62	4.77	-0.22
12	Ireland		2.27	2.49	2.03	1.9	1.9	1.81	1.29	1.96	-43.17
13	Italy		2.87	2.82	2.22	2.92	2.94	3.05	2.99	2.83	4.18
14	Latvia	7.71	6.34	7.12	6.7	5.19	4.45	3.5	3.1	5.51	-59.79
15	Lithuania	9.17	7.16	5.88	5.99	5.58	4.71	4.2	3.42	5.76	-62.70
16	Luxembourg	0.82	0.79	0.76	0.73	0.67	0.73	0.71	0.68	0.74	-17.07
17	Malta		2.45	2.51	2.24	3.22	2.35	1.65	2	2.35	-18.37
18	Netherlands	1.9	1.93	1.86	1.84	1.67	1.59	1.63	1.63	1.76	-14.21
19	Poland	4.67	5.61	5.65	5.2	5.48	4.48	3.76	3.38	4.78	-27.62
20	Portugal		2.79	3.01	2.7	2.69	2.5	2.46	2.23	2.63	-20.07
21	Slovakia	3.21	2.63	1.97	1.1	2.96	3.4	3.83	3.58	2.84	11.53
22	Slovenia	4.67	4.48	5.54	4.3	4.87	3.96	3.56	3.29	4.33	-29.55
23	Spain	2.99	3.16	3.13	3.02	3.02	3.21	3.02	2.75	3.04	-8.03
24	Sweden	1.62	1.48	1.32	1.38	1.42	1.49	1.54	1.54	1.47	-4.94
25	United Kingdom		1.93	2.32	2.24	1.99	1.94	1.88	1.69	2.00	-12.44
	EU-25 average	3.40	3.14	3.16	2.83	2.90	2.71	2.56	2.41	2.89	-29.06
	EU-15 average	1.92	2.19	2.16	1.98	1.94	1.93	1.91	1.85	1.98	-3.47
	EU-10 average	5.04	4.57	4.67	4.10	4.34	3.89	3.53	3.25	4.17	-35.59

Table 17 Return on total assets as % of banks' total assets

	Country	1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria		0.25	0.34	0.36	0.43	0.37	0.33	0.41	0.36	64.00
2	Belgium	0.33	0.65	0.69	0.55	0.68	0.49	0.37	0.45	0.53	36.36
3	Cyprus	0.73	0.75	0.68	2.18	0.95	0.43	-0.47	-0.06	0.65	-108.22
4	Czech Republic	0.16	0.44	-2.25	-0.90	0.47	0.85	1.23	1.28	0.16	700.00
5	Denmark	0.79	0.84	0.74	0.62	0.65	0.45	0.41	0.58	0.64	-26.58
6	Estonia	3.34	3.64	-1.58	1.49	1.61	2.33	2.22	2.17	1.90	-35.03
7	Finland	0.35	1.50	0.83	1.12	1.69	1.39	0.53	1.00	1.05	185.71
8	France	0.25	0.31	0.32	0.44	0.52	0.47	0.36	0.40	0.38	60.00
9	Germany	0.26	0.30	0.29	0.23	0.33	0.19	0.21	0.18	0.25	-30.77
10	Greece	0.60	0.71	1.04	2.98	1.40	0.90	0.42	0.94	1.12	56.67
11	Hungary	1.16	1.75	1.18	0.60	1.31	1.57	1.72	1.73	1.38	49.14
12	Ireland		0.92	1.32	1.00	0.92	0.69	0.87	0.68	0.91	-26.09
13	Italy		0.36	0.52	0.39	0.66	0.69	0.68	0.75	0.58	108.33
14	Latvia	2.65	3.27	-9.94	0.55	1.88	1.77	1.43	1.41	0.38	-46.79
15	Lithuania	2.38	-0.22	1.19	1.32	0.60	-0.09	0.92	1.27	0.92	-46.64
16	Luxembourg	0.48	0.56	0.71	0.49	0.56	0.51	0.48	0.54	0.54	12.50
17	Malta		0.93	0.96	0.92	1.15	1.08	0.87	1.08	1.00	16.13
18	Netherlands	0.51	0.58	0.45	0.61	0.58	0.50	0.36	0.47	0.51	-7.84
19	Poland	2.15	1.97	0.41	1.19	1.15	0.97	0.46	0.43	1.09	-80.00
20	Portugal		1.05	0.96	1.11	1.04	0.84	0.74	0.79	0.93	-24.76
21	Slovakia	0.06	-1.26	-3.63	1.47	1.52	1.05	1.23	1.34	0.22	2133.33
22	Slovenia	1.08	1.11	1.49	0.93	1.28	0.86	1.12	0.88	1.09	-18.52
23	Spain	0.70	0.89	0.94	0.98	1.05	0.99	0.88	0.94	0.92	34.29
24	Sweden	0.81	0.48	0.62	0.69	0.78	0.65	0.59	0.65	0.66	-19.75
25	United Kingdom		0.66	0.88	0.88	0.96	0.71	0.58	0.63	0.76	-4.55
	EU-25 average	0.99	0.90	-0.03	0.89	0.97	0.83	0.74	0.84	0.76	-15.30
	EU-15 average	0.51	0.67	0.71	0.83	0.82	0.66	0.52	0.63	0.67	23.49
	EU-10 average	1.52	1.24	-1.15	0.98	1.19	1.08	1.07	1.15	0.89	-24.31

Table 18 Market capitalization of listed companies as % of GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	13.8	14.7	17.4	16.1	15.7	15.7	12.9	15.4	21.5	29.6	17.3	113.9
2	Belgium	37.9	44.4	55.9	98.1	73.6	79.9	73.0	52.1	57.5	219.6	79.2	478.9
3	Cyprus	28.4	26.4	23.6	27.8	220.4	125.9	64.7	14.2	7.9	31.7	57.1	11.5
4	Czech Republic	28.4	29.6	22.7	19.7	20.0	19.7	15.0	21.6	19.5	28.8	22.5	1.5
5	Denmark	31.2	39.2	55.5	57.3	60.8	68.0	59.6	44.6	60.4	62.3	53.9	99.6
6	Estonia			22.3	9.3	32.2	33.9	24.6	34.5	41.7	57.4	32.0	156.8
7	Finland	34.0	49.4	59.8	119.4	273.3	244.9	157.1	105.5	105.2	98.5	124.7	189.4
8	France	33.6	38.0	48.0	68.3	102.2	110.6	88.9	67.3	77.1	92.7	72.7	175.9
9	Germany	23.5	28.2	39.1	51.0	67.9	67.9	57.8	34.5	44.9	44.0	45.9	87.4
10	Greece	14.5	19.4	28.2	65.6	170.1	98.9	73.8	51.7	62.0	61.6	64.6	324.3
11	Hungary	5.4	11.7	32.8	29.8	33.9	25.7	20.1	20.2	20.2	28.8	22.8	435.8
12	Ireland	38.9	47.5	61.6	76.6	72.0	86.4	73.3	49.2	55.3	62.2	62.3	59.9
13	Italy	19.1	20.9	29.5	47.6	61.7	71.5	48.4	40.2	41.9	47.2	42.8	147.2
14	Latvia	0.2	2.7	5.5	5.8	5.4	7.3	8.3	7.8	10.3	12.1	6.5	6333.5
15	Lithuania	2.1	11.1	17.2	9.6	10.5	14.0	9.9	10.4	19.1	29.0	13.3	1288.0
16	Luxembourg	168.4	180.1	194.0	187.3	180.0	173.5	121.0	106.6	140.9	161.0	161.3	-4.4
17	Malta	4.7	14.2	13.8	22.4	52.7	52.8	35.9	35.9	38.4	52.7	32.3	1011.2
18	Netherlands	85.9	92.0	124.4	153.3	174.4	172.8	119.3	95.9	95.5	107.8	122.1	25.4
19	Poland	3.4	5.5	7.9	12.2	18.0	18.8	13.9	15.0	17.7	29.4	14.2	776.5
20	Portugal	17.1	22.0	36.6	56.0	57.8	57.0	42.2	35.1	39.4	43.6	40.7	154.8
21	Slovakia	6.4	10.5	8.6	4.4	3.5	3.7	2.6	7.8	8.5	10.7	6.7	67.8
22	Slovenia	1.6	3.3	8.3	11.7	10.3	13.4	14.2	20.8	25.7	30.1	13.9	1836.1
23	Spain	33.9	39.8	51.7	68.4	71.7	89.8	80.1	70.4	86.6	94.9	68.7	180.2
24	Sweden	71.7	91.3	110.3	112.4	148.5	137.1	106.0	73.4	95.3	108.8	105.5	51.6
25	United Kingdom	124.0	146.1	150.4	166.8	200.6	179.0	155.0	119.2	134.4	131.5	150.7	6.0
	EU-25 average <sup>a</sup>	34.5	41.2	49.0	59.9	85.5	78.7	59.1	46.0	53.1	67.0	57.4	94.3
	EU-15 average <sup>a</sup>	49.8	58.2	70.8	89.6	115.4	110.2	84.6	64.1	74.5	91.0	80.8	82.6
	EU-10 average <sup>a</sup>	8.9	12.8	16.3	15.3	40.7	31.5	20.9	18.8	20.4	28.3	21.4	216.4
	EU-25 average <sup>b</sup>	42.7	50.1	60.5	76.8	98.2	97.6	78.9	60.1	69.3	78.7	71.3	84.3
	EU-15 average <sup>b</sup>	45.4	53.1	63.7	81.6	104.7	103.7	83.7	63.1	72.8	81.9	75.4	80.4
	EU-10 average <sup>b</sup>	9.2	12.0	15.1	15.6	22.5	20.5	15.2	16.8	18.4	28.2	17.3	206.9

Source: World Development Indicators, World Federation of Exchanges

Note: <sup>a</sup> aggregates are unweighted averages, <sup>b</sup> aggregates represent GDP in PPP term weighted averages

Table 19 Average number of listed companies

Austria       9       127       -355       -231         Belgium       8       155       -327       -203         Cyprus       8       83       -88       -275         Czech Republic       9       477       306       119         Denmark       9       232       -250       -126         Estonia       7       20       -151       -338         Finland       9       129       -353       -229         France       8       734       252       376         Germany       6       880       398       522         Greece       9       263       -219       -95         Hungary       9       52       -119       -306         Ireland       9       89       -393       -269         Italy       9       269       -213       -89         Latvia       4       16       -155       -342         Lithuania       4       48       -123       -310         Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands		No Obs.		Difference with respect to the EU-15 average	Difference with respect to the EU-10 average	Difference with respect to the EU-25 average
Cyprus         8         83         -88         -275           Czech Republic         9         477         306         119           Denmark         9         232         -250         -126           Estonia         7         20         -151         -338           Finland         9         129         -353         -229           France         8         734         252         376           Germany         6         880         398         522           Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151 <t< td=""><td>Austria</td><td>9</td><td>127</td><td>-355</td><td></td><td>-231</td></t<>	Austria	9	127	-355		-231
Czech Republic         9         477         306         119           Denmark         9         232         -250         -126           Estonia         7         20         -151         -338           Finland         9         129         -353         -229           France         8         734         252         376           Germany         6         880         398         522           Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151           Poland         9         176         5         -182 <tr< td=""><td>Belgium</td><td>8</td><td>155</td><td>-327</td><td></td><td>-203</td></tr<>	Belgium	8	155	-327		-203
Denmark         9         232         -250         -126           Estonia         7         20         -151         -338           Finland         9         129         -353         -229           France         8         734         252         376           Germany         6         880         398         522           Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151           Poland         9         176         5         -182           Portugal         8         125         -357         -358	Cyprus	8	83		-88	-275
Estonia 7 20 -151 -338 Finland 9 129 -353 -229 France 8 734 252 376 Germany 6 880 398 522 Greece 9 263 -219 -95 Hungary 9 52 -119 -306 Ireland 9 89 -393 -269 Italy 9 269 -213 -89 Latvia 4 16 -155 -342 Lithuania 4 48 -123 -310 Luxembourg 9 269 -213 -89 Malta 9 9 9 -162 -349 Netherlands 8 207 -275 -151 Poland 9 176 5 -182 Portugal 8 125 -357 Slovakia 6 729 558 371 Slovenia 9 103 Sweden 9 276 -206 -82 United Kingdom 9 2506 2024 2148	Czech Republic	9	477		306	119
Finland         9         129         -353         -229           France         8         734         252         376           Germany         6         880         398         522           Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151           Poland         9         176         5         -182           Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         276         -206         -82	Denmark	9	232	-250		-126
France         8         734         252         376           Germany         6         880         398         522           Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151           Poland         9         176         5         -182           Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         276         -206         -82           United         Kingdom         9         2506         2024         2148 </td <td>Estonia</td> <td>7</td> <td>20</td> <td></td> <td>-151</td> <td>-338</td>	Estonia	7	20		-151	-338
Germany         6         880         398         522           Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151           Poland         9         176         5         -182           Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         103         -68         -255           Spain         9         276         -206         -82           United         Kingdom         9         2506         2024         2148 </td <td>Finland</td> <td>9</td> <td>129</td> <td>-353</td> <td></td> <td>-229</td>	Finland	9	129	-353		-229
Greece         9         263         -219         -95           Hungary         9         52         -119         -306           Ireland         9         89         -393         -269           Italy         9         269         -213         -89           Latvia         4         16         -155         -342           Lithuania         4         48         -123         -310           Luxembourg         9         269         -213         -89           Malta         9         9         -162         -349           Netherlands         8         207         -275         -151           Poland         9         176         5         -182           Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         103         -68         -255           Spain         9         276         -206         -82           United         Kingdom         9         2506         2024         2148	France	8	734	252		376
Hungary       9       52       -119       -306         Ireland       9       89       -393       -269         Italy       9       269       -213       -89         Latvia       4       16       -155       -342         Lithuania       4       48       -123       -310         Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Wingdom       9       2506       2024       2148	Germany	6	880	398		522
Ireland       9       89       -393       -269         Italy       9       269       -213       -89         Latvia       4       16       -155       -342         Lithuania       4       48       -123       -310         Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148	Greece	9	263	-219		-95
Italy       9       269       -213       -89         Latvia       4       16       -155       -342         Lithuania       4       48       -123       -310         Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148	Hungary	9	52		-119	-306
Latvia       4       16       -155       -342         Lithuania       4       48       -123       -310         Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands       8       207       -275       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148	Ireland	9	89	-393		-269
Lithuania       4       48       -123       -310         Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148	Italy	9	269	-213		-89
Luxembourg       9       269       -213       -89         Malta       9       9       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Latvia	4	16		-155	-342
Malta       9       9       -162       -349         Netherlands       8       207       -275       -151         Poland       9       176       5       -182         Portugal       8       125       -357       -233         Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Lithuania	4	48		-123	-310
Netherlands         8         207         -275         -151           Poland         9         176         5         -182           Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         103         -68         -255           Spain         9         965         483         607           Sweden         9         276         -206         -82           United         Kingdom         9         2506         2024         2148           EU-15 average         482           EU-10 average         171	Luxembourg	9	269	-213		-89
Poland         9         176         5         -182           Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         103         -68         -255           Spain         9         965         483         607           Sweden         9         276         -206         -82           United         Kingdom         9         2506         2024         2148           EU-15 average         482           EU-10 average         171	Malta	9	9		-162	-349
Portugal         8         125         -357         -233           Slovakia         6         729         558         371           Slovenia         9         103         -68         -255           Spain         9         965         483         607           Sweden         9         276         -206         -82           United         Kingdom         9         2506         2024         2148           EU-15 average         482           EU-10 average         171	Netherlands	8	207	-275		-151
Slovakia       6       729       558       371         Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Poland	9	176		5	-182
Slovenia       9       103       -68       -255         Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Vingdom       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Portugal	8	125	-357		-233
Spain       9       965       483       607         Sweden       9       276       -206       -82         United       Kingdom       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Slovakia	6	729		558	371
Sweden       9       276       -206       -82         United       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Slovenia	9	103		-68	-255
United Kingdom 9 2506 2024 2148 EU-15 average 482 EU-10 average 171	Spain	9	965	483		607
Kingdom       9       2506       2024       2148         EU-15 average       482         EU-10 average       171	Sweden	9	276	-206		-82
EU-15 average 482 EU-10 average 171	United					
EU-10 average 171	Kingdom	9	2506	2024		2148
EU-10 average 171	EII 15 avarage			400		
<u> </u>	_					
EII 25 average 359	EU-10 average EU-25 average			358		

Period averages (1995-2003 when feasible). Data refer to all companies listed on the national stock exchange market (both residents and non residents). Sources: World Federation of Exchanges, ISI - Emerging Markets. For Cyprus, Belgium, France, the Netherlands and Portugal only domestic listed companies are reported. For these five countries the source is World Bank - World Development Indicators.

Table 20 Domestic debt securities as % GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	91.8	88.8	85.3	88.5	84.3	79.2	74.9	89.6	106.7	114.1	90.3	24.3
2	Belgium	251.3	238.6	201.6	209.2	172.3	154.8	145.1	171.2	196.1	203.5	194.4	-19.0
3	Cyprus						32.5	36.0	48.1	60.1		44.2	84.8
4	Czech Republic	29.5	26.4	25.9	45.0	50.5	44.5	45.2	66.5	83.3	90.5	50.7	206.2
5	Denmark	256.1	238.1	209.9	226.7	186.7	168.1	166.9	208.8	246.3	282.8	219.0	10.4
6	Estonia						2.1	2.0	3.1	3.3		2.6	60.9
7	Finland	95.7	95.5	82.3	89.4	76.6	62.2	57.8	68.8	88.3	98.0	81.5	2.5
8	France	132.8	125.9	112.1	112.6	97.3	93.4	89.8	108.6	138.6	154.1	116.5	16.0
9	Germany	118.5	116.9	108.7	122.6	107.2	99.0	84.4	96.7	115.0	119.9	108.9	1.2
10	Greece	114.6	122.0	105.3	109.7	90.6	84.0	82.9	108.8	136.3	156.4	111.1	36.5
11	Hungary	41.1	50.5	41.3	44.8	43.8	38.7	40.5	53.2	69.0	77.3	50.0	87.8
12	Ireland	66.1	63.3	49.7	47.5	42.0	35.8	29.4	35.4	60.7	73.6	50.3	11.2
13	Italy	216.0	206.7	169.8	175.4	150.1	135.3	130.7	156.3	189.8	208.8	173.9	-3.3
14	Latvia						7.8	8.0	10.3	11.1		9.3	41.9
15	Lithuania						13.3	14.0	15.7	16.4		14.8	22.9
16	Luxembourg												
17	Malta						59.0	63.0	66.7	72.6		65.3	23.0
18	Netherlands	123.3	117.9	108.9	116.6	110.9	102.7	99.7	118.6	153.2	171.4	122.3	39.0
19	Poland	28.5	25.2	21.9	22.9	21.0	21.1	25.4	32.5	42.3	58.4	29.9	105.1
20	Portugal	85.7	85.5	69.7	76.7	69.9	66.7	66.6	88.5	115.0	132.6	85.7	54.8
21	Slovakia	18.4	18.9	19.1	18.1	15.5	13.0	28.6	33.2	38.0	43.1	24.6	133.7
22	Slovenia						35.0	29.0	47.0	46.7		39.4	33.6
23	Spain	95.1	92.9	84.3	88.2	80.8	67.8	63.5	77.8	101.1	123.9	87.5	30.3
24	Sweden	169.6	156.6	131.2	134.4	120.0	90.2	77.8	95.7	124.1	132.9	123.3	-21.7
25	United Kingdom	77.5	86.1	71.3	68.8	66.0	52.5	49.8	54.7	61.8	72.4	66.1	-6.5
	EU-25 average <sup>a</sup>	111.8	108.7	94.4	99.8	88.1	65.0	62.9	77.3	94.8	128.5	93.1	15.0
	EU-15 average <sup>a</sup>	135.3	131.1	113.6	119.0	103.9	92.3	87.1	105.7	130.9	146.0	116.5	7.9
	EU-10 average <sup>a</sup>	29.4	30.2	27.0	32.7	32.7	26.7	29.2	37.6	38.8	67.3	35.2	128.9
	EU-25 average <sup>b</sup>	124.8	121.5	105.5	110.7	97.4	87.5	82.0	97.0	118.5	131.1	107.6	5.1
	EU-15 average <sup>b</sup>	131.1	128.4	111.8	117.1	103.0	92.4	86.1	102.3	125.4	139.2	113.7	6.1
	EU-10 average <sup>b</sup>	26.1	25.3	22.3	26.7	26.4	27.4	30.8	41.3	51.7	57.6	33.6	120.9

Table 21 Domestic government debt securities as % GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	45.1	44.3	43.1	45.6	45.0	42.6	40.6	47.0	52.0	53.4	45.9	18.4
2	Belgium	164.7	158.5	137.2	144.1	118.6	106.7	102.3	120.6	140.4	148.1	134.1	-10.0
3	Cyprus						29.9		40.9	47.5		39.5	58.7
4	Czech Republic	22.8	19.0	18.7	37.4	42.1	35.8	37.8	58.1	73.1	79.6	42.4	249.2
5	Denmark	101.1	93.1	77.9	79.4	67.7	57.3	52.1	63.9	67.0	70.5	73.0	-30.3
6	Estonia						0.4		1.6	1.4		1.1	221.6
7	Finland	51.9	56.4	50.8	53.4	45.7	39.1	36.4	42.0	54.5	58.9	48.9	13.4
8	France	58.0	58.7	54.7	60.6	52.8	49.1	47.3	59.0	77.3	84.8	60.2	46.2
9	Germany	36.1	36.8	34.8	39.8	36.2	34.4	33.7	43.2	56.3	64.3	41.6	77.9
10	Greece	110.6	120.8	104.3	108.5	90.2	83.8	82.6	108.5	135.6	155.7	110.1	40.7
11	Hungary	40.1	49.5	38.3	42.8	41.4	36.4	38.0	50.6	62.3	70.2	47.0	75.1
12	Ireland	61.0	60.0	43.3	39.3	33.2	24.9	18.3	22.1	31.5	35.6	36.9	-41.7
13	Italy	164.2	155.2	128.9	134.4	112.3	98.9	91.5	105.0	123.8	131.6	124.6	-19.8
14	Latvia						7.4		9.2	10.0		8.9	34.2
15	Lithuania	1.4	2.6	4.0	5.6	5.8	12.6		15.0	15.6		7.8	983.9
16	Luxembourg												
17	Malta						52.8	0.0	58.0	63.0		43.4	19.4
18	Netherlands	77.1	74.1	64.1	68.0	57.8	48.5	43.9	52.7	67.1	74.6	62.8	-3.2
19	Poland	28.5	25.2	21.9	22.9	21.0	21.1	25.4	32.5	42.3	58.4	29.9	105.1
20	Portugal	66.1	61.4	46.2	47.3	41.7	39.1	39.5	54.9	71.6	84.3	55.2	27.6
21	Slovakia	18.4	18.9	19.1	18.1	15.5	22.0	28.6	32.5	33.6	43.1	25.0	133.7
22	Slovenia	2.2	10.0	24.5	18.1	17.1	18.0	0.0	27.6	25.9		15.9	1059.7
23	Spain	73.3	74.8	69.3	72.3	61.1	53.2	47.3	54.6	61.8	64.0	63.2	-12.7
24	Sweden	83.9	77.1	66.7	70.2	62.8	48.1	39.5	48.2	63.1	68.1	62.8	-18.8
25	United Kingdom	56.6	59.3	47.3	43.5	40.1	32.5	30.6	33.9	38.1	46.9	42.9	-17.2
	EU-25 average <sup>a</sup>	63.2	62.8	54.7	57.6	50.4	41.5	41.8	49.2	58.9	77.3	55.7	22.4
	EU-15 average <sup>a</sup>	82.1	80.8	69.2	71.9	61.8	54.2	50.4	61.1	74.3	81.5	68.7	-0.8
	EU-10 average <sup>a</sup>	18.9	20.9	21.1	24.1	23.8	23.7	21.6	32.6	33.0	62.8	28.3	232.2
	EU-25 average <sup>b</sup>	72.5	71.3	61.7	65.1	56.5	50.3	47.4	57.2	69.6	76.9	62.8	6.1
	EU-15 average <sup>b</sup>	77.1	76.2	66.0	69.2	59.8	53.0	49.8	59.7	72.9	80.3	66.4	4.2
	EU-10 average <sup>b</sup>	24.7	24.1	21.5	25.9	25.4	25.3	26.2	38.3	47.4	54.5	31.3	121.0

Table 22 Domestic financial institutions debt securities as % GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	34.8	30.6	25.5	29.4	25.2	17.4	15.8	19.8	25.1	30.7	25.4	-11.6
2	Belgium	67.1	57.9	49.3	42.7	33.7	32.1	30.4	36.1	43.6	50.2	44.3	-25.1
3	Cyprus	82.0	79.7	73.5	82.2	70.1	63.2	48.6	50.2	52.7	48.6	65.1	-40.8
4	Czech Republic	3.8	1.2	1.0	1.1	0.4	0.2	0.3	0.3	0.7	0.7	1.0	-81.2
5	Denmark	0.3	0.3	0.9	0.6	0.8	0.7	0.8	1.0	5.1	5.3	1.6	1419.8
6	Estonia												
7	Finland	49.6	49.5	39.4	39.4	35.6	33.0	32.0	39.6	49.3	55.9	42.3	12.7
8	France						0.3		1.1	0.8		0.7	126.8
9	Germany						0.0	0.0	0.0	0.4			0.0
10	Greece									2.8		2.8	
11	Hungary						3.3		3.1	2.9			-13.4
12	Ireland	41.0	38.5	39.9	42.7	44.7	39.7	40.8	50.3	69.0	81.1	48.8	97.6
13	Italy	0.0	0.0	0.0	0.0	0.0	0.0			1.4	0.0	0.2	0.0
14	Latvia	8.5	11.2	12.4	16.1	16.5	17.1	16.7	19.1	28.0	30.8	17.6	263.0
15	Lithuania						0.3		0.1	2.0		0.8	546.0
16	Luxembourg						9.9		18.7	20.1		16.2	103.6
17	Malta	12.1	10.2	8.7	8.6	11.6	8.6	9.2	12.7	21.8	33.8	13.7	178.7
18	Netherlands	79.4	72.9	57.8	55.6	48.3	33.5	27.9	37.1	50.3	53.5	51.6	-32.7
19	Poland	16.7	22.6	20.7	22.3	23.2	17.9	17.2	18.9	21.3	23.3	20.4	39.7
20	Portugal	36.7	34.6	30.5	32.1	28.0	20.0	23.4	23.8	27.9	39.2	29.6	6.8
21	Slovakia	50.4	47.5	41.7	43.9	38.3	33.7	31.5	38.1	44.1	53.5	42.3	6.2
22	Slovenia	1.2	1.2	1.3	1.3	1.3	2.2	2.3	3.2	4.5	2.6	2.1	114.7
23	Spain	34.8	30.6	25.5	29.4	25.2	17.4	15.8	19.8	25.1	30.7	25.4	-11.6
24	Sweden	67.1	57.9	49.3	42.7	33.7	32.1	30.4	36.1	43.6	50.2	44.3	-25.1
25	United Kingdom	82.0	79.7	73.5	82.2	70.1	63.2	48.6	50.2	52.7	48.6	65.1	-40.8
	EU-25 average <sup>a</sup>	36.7	34.6	30.5	32.1	28.0	20.0	23.4	23.8	27.9	39.2	29.6	6.8
	EU-15 average <sup>a</sup>	50.4	47.5	41.7	43.9	38.3	33.7	31.5	38.1	44.1	53.5	42.3	6.2
	EU-10 average <sup>a</sup>	1.2	1.2	1.3	1.3	1.3	2.2	2.3	3.2	4.5	2.6	2.1	114.7
	EU-25 average <sup>b</sup>	48.1	46.0	40.2	41.6	36.4	32.2	28.3	32.3	38.4	41.7	38.5	-13.3
	EU-15 average <sup>b</sup>	49.3	47.5	41.8	43.4	38.3	33.9	30.0	34.5	41.1	45.0	40.5	-8.7
	EU-10 average <sup>b</sup>	1.2	1.2	1.2	1.2	1.2	1.5	1.0	1.7	3.5	1.7	1.5	42.5

Table 23 Domestic corporate debt securities as % GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	10.7	15.4	16.8	16.6	22.2	23.4	24.9	30.7	46.0	51.2	25.8	378.2
2	Belgium	10.1	9.6	8.5	6.2	6.4	5.9	8.2	11.6	16.2	18.6	10.1	83.4
3	Cyprus						1.1		0.5	0.4		0.7	-60.9
4	Czech Republic	1.1	1.7	1.7	1.7	2.4	3.3	3.3	4.4	5.0	5.9	3.1	426.9
5	Denmark	14.2	13.4	13.2	14.6	12.0	10.2	9.2	10.2	12.4	13.0	12.2	-8.9
6	Estonia						1.1		0.6	0.8		0.8	-26.9
7	Finland	8.9	8.4	6.0	6.7	5.8	5.8	5.7	7.0	8.7	8.4	7.1	-5.1
8	France	7.7	9.3	8.1	9.2	10.8	12.2	12.0	13.5	17.7	19.0	12.0	147.4
9	Germany	0.4	0.4	0.4	0.5	0.9	1.4	2.1	3.2	6.0	7.1	2.2	1858.7
10	Greece	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100.0
11	Hungary	0.7	0.7	2.1	1.4	1.6	1.6	1.6	1.6	1.6	1.8	1.5	153.3
12	Ireland	5.2	3.3	6.4	8.3	8.8	10.8	11.0	13.3	29.2	38.0		636.5
13	Italy	2.2	2.0	1.5	1.6	2.2	3.4	7.2	11.7	16.7	21.3	7.0	855.9
14	Latvia						0.1			0.4		0.2	385.2
15	Lithuania						0.7		0.7	0.4		0.6	-40.5
16	Luxembourg												
17	Malta						2.9		5.6	6.7		5.1	128.5
18	Netherlands	5.1	5.3	4.9	5.9	8.4	14.5	15.0	15.6	17.1	15.7	10.7	207.2
19	Poland									2.1		2.1	
20	Portugal	11.2	13.1	11.0	13.2	11.7	10.5	10.4	14.5	15.4	17.4	12.8	55.3
21	Slovakia						1.0	0.0	0.5	2.4		1.0	144.5
22	Slovenia			2.1	0.8	2.3	1.1	0.0	0.7	0.8		1.1	-64.5
23	Spain	9.6	7.9	6.4	7.4	8.1	6.0	7.0	10.5	17.4	26.1	10.6	171.2
24	Sweden	6.3	6.6	6.8	8.6	9.0	8.6	10.4	10.4	10.7	11.3	8.9	80.2
25	United Kingdom	4.2	4.2	3.3	3.0	2.7	2.1	2.1	1.9	2.3	2.2	2.8	-46.6
	EU-25 average <sup>a</sup>	6.1	6.3	5.8	6.2	6.8	5.6	7.2	7.7	9.9	6.5	6.8	5.9
	EU-15 average <sup>a</sup>	6.8	7.1	6.7	7.3	7.8	8.2	8.9	11.0	15.4	8.1	8.7	18.8
	EU-10 average <sup>a</sup>	0.9	1.2	2.0	1.3	2.1	1.4	1.2	1.8	1.7	1.5	1.5	64.0
	EU-25 average <sup>b</sup>	4.3	4.5	4.0	4.4	5.0	5.5	6.4	8.1	11.5	13.4	6.7	209.6
	EU-15 average <sup>b</sup>	4.8	5.0	4.4	4.8	5.4	5.8	6.7	8.7	12.3	14.7	7.2	203.3
	EU-10 average <sup>b</sup>	0.3	0.4	0.7	0.6	0.7	1.0	0.8	1.2	2.4	1.3	1.0	303.8

Table 24 Total value of shares traded as of GDP

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	11.0	8.9	5.9	8.3	5.6	4.9	3.8	2.8	4.3	8.2	6.4	-0.3
2	Belgium	5.5	9.7	12.1	22.1	23.5	16.7	18.1	13.8	12.4	20.1	15.4	2.6
3	Cyprus	3.4	5.2	3.4	6.5	69.2	101.2	35.9	1.9	0.7	1.1	22.9	-0.7
4	Czech Republic	6.6	13.8	12.6	7.9	7.0	11.8	5.5	8.2	9.7	16.5	10.0	1.5
5	Denmark	14.4	18.9	27.7	40.9	36.0	57.9	44.3	29.9	31.6	40.1	34.2	1.8
6	Estonia			30.1	16.6	5.1	6.0	3.7	3.4	6.2	7.7	9.8	-0.7
7	Finland	14.7	17.6	29.7	46.6	88.8	172.3	147.7	134.1	101.0	117.9	87.0	7.0
8	France	23.5	17.8	28.6	40.7	54.6	82.8	81.6	65.1	56.6	65.5	51.7	1.8
9	Germany	23.3	32.3	25.4	35.5	38.6	57.2	76.5	62.1	47.7	51.8	45.0	1.2
10	Greece	5.2	6.7	17.3	38.4	157.2	84.8	31.9	18.7	22.4	21.4	40.4	3.1
11	Hungary	0.8	3.6	16.3	34.1	30.0	26.0	9.3	9.2	10.0	13.0	15.2	15.4
12	Ireland	19.5	16.8	20.3	48.8	53.0	15.2	21.9	27.0	28.6	24.1	27.5	0.2
13	Italy	7.9	8.3	17.0	39.8	45.4	72.4	50.6	45.5	45.2	48.1	38.0	5.1
14	Latvia		0.2	1.4	1.3	0.6	2.9	2.0	1.3	1.3	0.8	1.3	2.8
15	Lithuania	0.5	0.6	2.4	2.0	2.7	1.8	1.7	1.3	1.1	2.1	1.6	3.2
16	Luxembourg	1.1	2.9	3.2	6.2	5.2	6.1	2.2	1.3	1.0	1.2	3.0	0.0
17	Malta	0.5	0.4	0.7	1.6	9.2	4.9	1.2	1.4		1.7	2.4	2.5
18	Netherlands	59.9	82.4	75.6	106.8	120.0	182.7	269.1	110.5	90.6	104.7	120.2	0.7
19	Poland	2.0	3.6	5.2	5.3	6.8	8.8	4.0	3.1	4.1	6.9	5.0	2.4
20	Portugal	3.9	6.4	19.7	42.3	35.4	51.1	24.8	16.7	14.5	20.5	23.5	4.2
21	Slovakia	4.3	11.1	10.2	4.7	2.3	4.4	4.6	3.3	2.0	1.6	4.9	-0.6
22	Slovenia	1.7	2.0	1.8	3.4	3.5	2.5	4.1	0.5	2.6	3.6	2.6	1.1
23	Spain	10.2	41.2	80.7	118.9	123.6	175.5	143.4	154.8	111.5	120.5	108.0	10.8
24	Sweden	37.6	50.6	71.2	82.1	94.8	162.8	137.4	90.6	87.7	119.1	93.4	2.2
25	United Kingdom	45.0	48.6	62.4	82.0	94.2	127.5	130.8	174.0	119.8	173.2	105.8	2.9
	EU-25 average	13.2	17.1	23.2	33.7	44.5	57.6	50.3	39.2	33.9	39.7	35.2	201.5
	EU-15 average	18.8	24.6	33.1	50.6	65.1	84.7	79.0	63.1	51.7	62.4	53.3	231.2
	EU-10 average	2.5	4.5	8.4	8.3	13.6	17.0	7.2	3.4	4.6	6.5	7.6	163.8

Source: World Development Indicators, World Federation of Exchanges

Table 25 Average value of bond traded as of GDP

	nobs	Value of bond traded / GDP	Difference with respect to the EU-15 average	Difference with respect to the EU-10 average	Difference with respect to the EU-25 average
Austria	8	0.00	-0.99		-0.78
Belgium	5	0.00	-0.99		-0.78
Cyprus	0				
Czech Republic	0				
Denmark	8	5.49	4.50		4.71
Estonia	0				
Finland	8	0.00	-0.99		-0.78
France	5	0.37	-0.63		-0.41
Germany	8	0.46	-0.54		-0.32
Greece	0				
Hungary	4	0.03		0.00	-0.75
Ireland	7	0.47	-0.52		-0.31
Italy	8	1.75	0.76		0.97
Latvia	0				
Lithuania	0				
Luxembourg	8	0.11	-0.88		-0.67
Malta	5	0.04		0.02	-0.73
Netherlands	5	0.79	-0.21		0.01
Poland	8	0.01		-0.01	-0.77
Portugal	6	0.06	-0.93		-0.71
Slovakia	0				
Slovenia	8	0.01		-0.01	-0.77
Spain	8	0.02	-0.97		-0.75
Sweden	8	3.43	2.43		2.65
United Kingdom	8	0.95	-0.04		0.17
EU-15 average		0.99			
EU-10 average		0.02			
EU-25 average		0.78			

Source: World Federation of Exchanges; World Bank, World Development Indicators
Data refer to listed bonds yearly traded values, period averages (1996-2003 when feasible)

Table 26 Shares turnover ratio of stock traded in %

	Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	78.3	61.8	70.7	47.4	37.9	29.8	27.7	21.3	25.1	34.0	43.4	-56.6
2	Belgium	15.6	23.2	23.1	28.9	27.5	20.7	24.1	247.9	24.9	14.9	45.1	-4.3
3	Cyprus	15.3	18.9	14.6	26.6	39.2	56.6	39.9	11.0	6.3	3.6	23.2	-76.2
4	Czech Republic	24.9	50.3	45.7	38.0	36.7	60.3	34.1	36.6	52.5	72.8	45.2	191.9
5	Denmark	45.2	54.2	56.7	73.0	60.0	86.0	66.6	60.4	65.4	71.4	63.9	58.0
6	Estonia				98.2	17.6	18.9	13.6	14.9	18.3	16.6	28.3	-83.1
7	Finland	44.5	41.8	53.3	53.0	44.3	64.3	75.6	106.8	105.8	124.3	71.4	179.3
8	France	146.6	49.8	64.1	68.7	62.4	74.1	84.6	88.0	85.7	81.7	80.6	-44.3
9	Germany	211.4	123.2	137.6	144.9	107.5	79.1	124.7	140.5	130.0	123.7	132.3	-41.5
10	Greece	37.0	40.2	72.5	86.5	131.1	63.7	39.1	26.0	44.0	37.5	57.7	1.3
11	Hungary	17.3	41.6	73.4	113.9	95.8	90.7	44.4	46.5	57.6	57.3	63.8	231.0
12	Ireland	56.7	24.5	83.4	81.8	90.9	19.2	29.5	50.5	60.7	44.5	54.2	-21.6
13	Italy	45.2	43.8	65.8	104.1	82.7	104.0	87.9	109.1	121.5	114.5	87.9	153.4
14	Latvia		16.6	34.4	1.4	0.2	48.6	26.3	24.0	15.7	7.9	19.5	-52.6
15	Lithuania	39.5	5.1	17.6	39.4	48.5	14.8	15.1	17.5	8.2	9.3	21.5	-76.4
16	Luxembourg	0.7	1.7	1.7	3.4	2.9	3.4	1.5	2.3	0.8	0.8	1.9	19.3
17	Malta	16.0	4.5	4.7	9.0	10.0	9.3	2.8	3.4	2.6	4.0	6.6	-74.9
18	Netherlands	75.1	92.4	67.2	70.7	145.1	101.4	191.8	123.7	104.1	108.8	108.0	44.8
19	Poland	71.5	84.8	78.4	54.4	45.8	49.9	26.1	28.7	26.6	30.6	49.7	-57.2
20	Portugal	23.1	33.2	65.8	93.4	63.0	85.5	52.5	52.4	42.4	52.5	56.4	127.2
21	Slovakia	69.9	135.9	108.0	73.7	59.7	129.8	140.7	179.5	29.4	18.2	94.5	-73.9
22	Slovenia	69.0	66.8	40.4	2.0	1.6	20.7	30.5	27.7	12.7	13.9	28.5	-79.8
23	Spain	33.6	113.1	169.9	201.9	178.5	210.7	177.2	211.1	157.5	143.3	159.7	326.6
24	Sweden	61.6	64.4	67.8	73.9	73.1	111.2	112.8	96.2	113.6	123.7	89.8	100.9
25	United Kingdom	77.1	36.8	44.4	53.4	51.9	66.6	78.4	135.4	100.6	140.5	78.5	82.3
	EU-25 average <sup>a</sup>	55.4	51.2	60.9	65.7	60.6	64.8	61.9	74.5	56.5	58.0	60.9	4.6
	EU-15 average <sup>a</sup>	63.4	53.6	69.6	79.0	77.3	74.6	78.3	98.1	78.8	81.1	75.4	27.8
	EU-10 average <sup>a</sup>	40.4	47.2	46.3	45.6	35.5	49.9	37.4	39.0	27.6	28.3	39.7	-30.0

Source: World Development Indicators, World Federation of Exchanges

**Table 27 Average investment financing** 

	Gross fixed capital formation	New capital raised	%
Athens	35.20	1.80	5.11
Borsa Italiana	258.10	6.20	2.40
Budapest	16.70	0.00	0.00
Copenhagen	39.40	0.80	2.03
Deutsche Börse	408.30	0.20	0.05
Euronext	492.90	36.00	7.30
Helsinki	27.50	0.40	1.45
Irish	29.80	1.50	5.03
London	272.80	34.40	12.61
Luxembourg	5.30	2.20	41.51
Malta	0.90	0.10	11.11
Spanish Exchanges (BME)	182.70	21.40	11.71
Stockholm	44.90	na	na
Warsaw	38.70	0.10	0.26
Wiener Börse	50.30	1.10	2.19

Year 2002. Billions of dollars. Source: World Federation of Exchanges  $\,$ 

Figure 2 A comparison of some of the largest stock exchange market

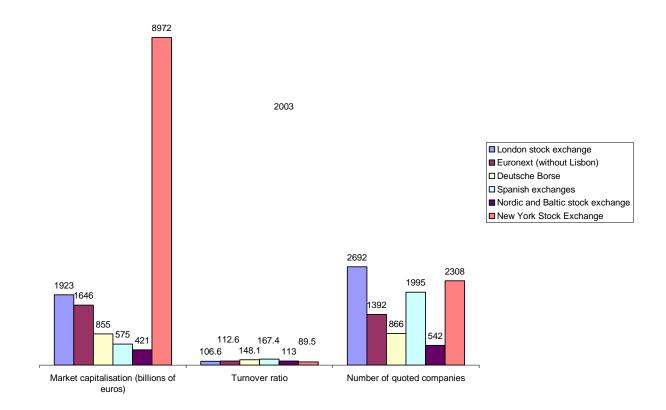


Table 28 Total investments of insurance companies and total assets under management as per cent of GDP

	Insurance c	ompanies	Pension	funds	Investme	ent funds
	1995	2004	1995	2004	1995	2004
Austria	26.6	28.8	3.7	4.3	45.3	51.7
Belgium	45.5	57.7	5.7	4.1	34.1	33.4
Cyprus	n/a	n/a	n/a	n/a	n/a	n/a
Czech Republic	7.2	9.3	2.4	3.7	4.0	4.3
Denmark	53.8	63.3	23.3	192.8	21.2	39.2
Estonia	2.3	3.4	0.0	1.9	n/a	3.5
Finland	23.7	25.5	n/a	n/a	9.0	14.4
France	55.9	59.9	0.0	0.0	43.3	48.5
Germany	44.6	49.3	n/a	11.7	37.6	38.9
Greece	9.2	7.2	0.0	0.0	13.2	9.5
Hungary	4.9	4.4	4.0	6.6	5.0	5.3
Ireland	48.2	58.2	43.7	42.0	242.7	292.5
Italy	25.2	29.4	0.5	0.9	31.5	20.8
Latvia	2.2	2.0	0.2	0.4	0.2	0.5
Lithuania	1.6	2.3	0.0	0.1	n/a	n/a
Luxemburg	130.0	130.3	n/a	n/a	3,878.3	3,797.9
Malta	10.9	13.9	0.0	0.0	13.0	23.5
Netherlands	66.3	65.8	100.8	106.9	25.1	20.1
Poland	5.1	7.1	2.7	7.9	1.7	4.7
Portugal	20.6	24.6	11.5	10.7	19.8	21.9
Slovakia	5.6	7.2	n/a	n/a	n/a	5.0
Slovenia	6.0	8.9	0.9	2.0	11.5	8.0
Spain	21.9	24.3	6.6	7.7	23.3	24.8
Sweden	0.1	31.3	0.0	0.0	35.6	42.1
United Kingdom	108.6	95.0	73.6	64.5	22.6	24.8
EU-25 average a	46.6	48.3	17.6	21.9	39.6	41.0
OMS average a	50.3	52.2	19.0	23.5	42.9	44.4
NMS average a	5.2	6.7	2.3	5.4	2.8	4.6

Source: ECB, National Central Banks and Eurostat a GDP in PPP terms weighted averages

n/a= not available

Table 29 Per capita life insurance premium (in euro)

		1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria	897.7	586.3	630.8	672.4	560.5	566.0	613.4	917.4	680.6	2.2
2	Belgium	850.7	806.3	981.7	1113.7	1158.5	1034.4	1251.6	2267.8	1183.1	166.6
3	Cyprus	318.7	291.6	309.8	871.4	423.3	259.6	298.6	433.2	400.8	35.9
4	Czech Republic	49.5	44.0	51.0	59.7	52.9	64.8	97.0	157.7	72.1	218.4
5	Denmark	1593.5	1385.0	1575.4	1366.6	1129.8	1222.0	1489.2	2304.8	1508.3	44.6
6	Estonia				10.9					10.9	
7	Finland	1923.7	1551.3	1735.6	1863.1	1611.1	1469.9	1669.3	2405.8	1778.7	25.1
8	France	1979.5	1713.4	1409.4	1483.9	1327.6	1135.8	1276.1	1999.8	1540.7	1.0
9	Germany	967.5	786.5	797.5	812.4	630.8	603.9	696.6	1052.5	793.5	8.8
10	Greece	121.9	113.3	118.4	143.7	109.4	97.5	109.7	172.1	123.2	41.1
11	Hungary	39.4	38.3	46.4	53.4	58.4	53.1	72.5	112.1	59.2	184.8
12	Ireland	1147.9	1237.8	1444.5	1931.2	1743.9	1522.9	1619.1	2615.9	1657.9	127.9
13	Italy	373.3	426.9	580.3	701.1	513.2	645.5	855.7	1400.8	687.1	275.2
14	Latvia		6.4	6.1	8.0	2.4		2.7	4.5	5.0	-28.8
15	Lithuania							10.3	22.7	16.5	120.6
16	Luxembourg	744.1	685.8	663.6	623.3	499.1	497.2	794.3	1313.4	727.6	76.5
17	Malta			123.8			165.0	198.9	333.4	205.2	169.3
18	Netherlands	1610.0	1398.6	1535.0	1488.4	1253.2	1204.6	1225.6	1766.6	1435.3	9.7
19	Poland	29.2	30.6	30.5	40.9	45.8	43.6	47.9	67.8	42.0	132.0
20	Portugal	365.7	297.0	365.5	413.4	326.9	271.3	395.8	691.6	390.9	89.1
21	Slovakia	26.7	0.0	38.2	40.8	42.0	47.8	60.8	97.1	44.2	264.0
22	Slovenia	95.2	81.8	118.4	85.6	78.0	91.1	119.5	196.4	108.2	106.2
23	Spain	425.4	387.0	392.9	484.4	513.2	439.7	556.0	552.7	468.9	29.9
24	Sweden	1031.0	708.3	740.6	1422.4	1404.8	1214.4	1165.2	1812.5	1187.4	75.8
25	United Kingdom	1819.6	1951.3	3783.6	2667.5	2797.1	2299.8	2533.6	2960.5	2601.6	62.7
	EU-25 average	781.4	660.3	760.0	798.2	740.1	679.5	715.0	1069.1	775.5	36.8
	EU-15 average	1056.8	935.7	1117.0	1145.8	1038.6	948.3	1083.4	1615.6	1117.7	52.9
	EU-10 average	93.1	70.4	90.5	146.3	100.4	103.6	100.9	158.3	107.9	70.0

Table 30 Per capita non-life insurance premium (in euro)

		1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria	1245.6	966.8	931.5	847.4	652.2	642.0	759.7	1171.6	902.1	-5.9
2	Belgium	1062.8	1031.1	776.6	716.2	554.5	548.9	642.3	985.2	789.7	-7.3
3	Cyprus	289.5	258.0	260.1	251.7	205.4	210.4	272.4	432.5	272.5	49.4
4	Czech Republic	132.1	121.2	135.3	127.4	111.1	120.1	160.8	253.4	145.2	91.9
5	Denmark	1090.7	886.8	925.3	841.0	658.6	653.6	825.9	1220.0	887.8	11.9
6	Estonia										
7	Finland	580.3	501.6	538.2	495.0	413.0	409.0	479.2	664.8	510.1	14.6
8	France	1003.1	785.7	789.8	733.9	566.8	564.8	675.8	1052.6	771.6	4.9
9	Germany	1392.9	1103.0	1055.6	973.6	746.7	725.3	842.6	1267.8	1013.5	-9.0
10	Greece	130.8	114.1	109.9	117.6	95.3	102.0	129.7	215.7	126.9	64.9
11	Hungary	85.1	78.2	79.9	79.1	67.3	74.7	104.2	168.2	92.1	97.7
12	Ireland	780.9	705.8	690.7	685.0	613.5	685.4	936.8	1534.9	829.1	96.6
13	Italy	598.1	514.3	542.9	527.5	412.4	416.9	501.6	763.3	534.6	27.6
14	Latvia		46.5	62.1	63.6	59.2		62.0	97.4	65.1	109.5
15	Lithuania							44.4	63.8	54.1	43.6
16	Luxembourg	1516.1	1200.2	1253.9	1124.5	864.0	902.8	1034.8	1510.2	1175.8	-0.4
17	Malta			236.9			189.0	233.9	333.1	248.2	40.6
18	Netherlands	1345.9	1087.1	1110.3	1075.6	862.0	876.8	1112.3	1733.5	1150.4	28.8
19	Poland	71.1	78.4	89.9	83.9	68.7	81.8	88.7	115.7	84.8	62.7
20	Portugal	407.6	334.2	336.8	313.0	282.3	256.1	360.1	529.6	352.5	29.9
21	Slovakia	78.7	76.4	87.3	72.3	59.1	61.9	79.9	141.2	82.1	79.3
22	Slovenia	478.7	305.4	284.4	320.4	324.3	335.2	407.2	624.5	385.0	30.5
23	Spain	551.1	436.6	427.5	436.6	368.1	387.8	476.1	743.8	478.4	35.0
24	Sweden	844.4	669.7	609.5	552.1	455.2	418.8	530.0	854.7	616.8	1.2
25	United Kingdom	859.6	828.9	834.7	790.3	674.9	739.7	1134.4	1630.5	936.6	89.7
	EU-25 average	692.6	551.4	529.1	510.3	414.3	427.4	495.6	754.5	546.9	8.9
	EU-15 average	894.0	744.4	728.9	681.9	548.0	555.3	696.1	1058.5	738.4	18.4
	EU-10 average	189.2	137.7	154.5	142.6	127.9	153.3	161.5	247.8	164.3	31.0

Table 31 Life Insurance premiums as % of GDP

		1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria	2.51	2.02	2.15	2.45	2.61	2.75	2.61	2.59	2.46	3.19
2	Belgium	2.54	2.98	3.57	4.52	5.68	5.18	5.57	6.81	4.61	168.11
3	Cyprus	2.12	2.28	2.39	6.92	3.82	2.46	2.39	2.29	3.08	8.02
4	Czech Republic	0.77	0.77	0.85	1.08	1.16	1.31	1.50	1.72	1.15	123.38
5	Denmark	3.77	3.79	4.28	3.92	4.03	4.51	4.84	5.18	4.29	37.40
6	Estonia				0.29					0.29	
7	Finland	6.20	5.87	6.21	7.02	7.42	6.99	6.98	6.81	6.69	9.84
8	France	5.90	6.34	5.10	5.70	6.59	5.73	5.61	5.99	5.87	1.53
9	Germany	2.65	2.72	2.71	2.96	3.00	3.00	3.06	3.17	2.91	19.62
10	Greece	0.82		0.93	1.14	1.12	1.00	0.94	0.93	0.98	13.41
11	Hungary	0.71	0.77	0.88	1.05	1.37	1.16	1.18	1.20	1.04	69.01
12	Ireland	4.79	5.33	5.61	7.26	7.50	6.30	5.42	6.04	6.03	26.10
13	Italy	4.79	1.89	2.54	3.24	3.41	3.81	4.39	4.82	3.61	0.63
14	Latvia		0.25	0.21	0.29	0.09		0.08	0.09	0.17	-64.00
15	Lithuania				0.29			0.28	0.40	0.32	37.93
16	Luxembourg	1.41	1.64	1.44	1.33	1.27	1.19	1.75	2.09	1.52	48.23
17	Malta			1.26			1.99	2.14	2.52	1.98	100.00
18	Netherlands	4.97	5.29	5.68	5.60	5.85	5.66	4.98	4.93	5.37	-0.80
19	Poland	0.64	0.77	0.70	0.96	1.21	1.07	1.04	1.12	0.94	75.00
20	Portugal	2.67	2.55	3.05	3.58	3.37	2.76	3.46	4.14	3.20	55.06
21	Slovakia	0.61	0.72	0.90	1.05	1.28	1.44	1.46	1.38	1.11	126.23
22	Slovenia	0.80	0.79	0.81	0.81	0.92	1.08	1.15	1.25	0.95	56.25
23	Spain	2.27	2.53	2.51	3.01	3.92	3.32	3.65	2.38	2.95	4.85
24	Sweden	2.85	2.42	2.48	4.96	5.94	5.74	4.55	4.74	4.21	66.32
25	United Kingdom	7.27	7.87	8.94	10.30	12.71	10.73	10.19	8.62	9.58	18.57
	EU-25 average	2.91	2.84	2.83	3.32	3.83	3.60	3.30	3.38	3.25	16.38
	EU-15 average	3.69	3.80	3.81	4.47	4.96	4.58	4.53	4.62	4.31	24.96
	EU-10 average	0.94	0.91	1.00	1.42	1.41	1.50	1.25	1.33	1.22	41.24

Table 32 Non -life Insurance premiums as % of GDP

		1996	1997	1998	1999	2000	2001	2002	2003	Mean	Change (%)
1	Austria	2.51	3.34	3.17	3.09	3.04	3.12	3.23	3.30	3.10	31.47
2	Belgium	2.54	3.82	3.80	2.91	2.72	2.75	2.86	2.96	3.05	16.54
3	Cyprus	2.12	2.01	2.01	2.00	1.85	2.00	2.18	2.28	2.06	7.55
4	Czech Republic	0.77	2.12	2.25	2.32	2.44	2.43	2.49	2.76	2.20	258.44
5	Denmark	3.77	2.43	2.50	2.41	2.35	2.41	2.68	2.74	2.66	-27.32
6	Estonia				1.43					1.43	
7	Finland	6.20	1.90	1.93	1.86	1.90	1.94	2.00	1.88	2.45	-69.68
8	France	5.90	2.91	2.86	2.82	2.81	2.85	2.97	3.15	3.28	-46.61
9	Germany	2.65	3.81	3.59	3.55	3.55	3.60	3.70	3.82	3.53	44.15
10	Greece	0.82	0.87	0.86	0.93	0.98	1.04	1.11	1.17	0.97	42.68
11	Hungary	0.71	1.56	1.51	1.55	1.58	1.63	1.70	1.80	1.51	153.52
12	Ireland	4.79	3.04	2.70	2.57	2.64	2.84	3.14	3.55	3.16	-25.89
13	Italy	1.39	2.28	2.38	2.44	2.39	2.46	2.58	2.63	2.32	89.21
14	Latvia		1.84	2.13	2.32	2.12		1.83	1.97	2.04	7.07
15	Lithuania				0.78			1.19	1.11	1.03	42.31
16	Luxembourg	1.41	2.88	2.73	2.39	2.19	2.15	2.28	2.40	2.30	70.21
17	Malta			2.29			2.28	2.52	2.52	2.40	10.04
18	Netherlands	4.15	4.12	4.11	4.05	4.02	4.12	4.52	4.84	4.24	16.63
19	Poland	0.64	1.97	2.06	1.97	1.82	2.00	1.92	1.91	1.79	198.44
20	Portugal	2.67	2.87	2.80	2.71	2.91	2.61	3.14	3.17	2.86	18.73
21	Slovakia	1.76	1.87	2.06	1.86	1.80	1.86	1.92	2.00	1.89	13.64
22	Slovenia	4.05	2.94	2.57	2.88	3.84	3.96	3.91	3.98	3.52	-1.73
23	Spain	2.93	2.85	2.73	2.71	2.81	2.93	3.12	3.20	2.91	9.22
24	Sweden	2.34	2.29	2.04	1.92	1.93	1.98	2.07	2.23	2.10	-4.70
25	United Kingdom	3.44	3.34	3.15	3.05	3.07	3.45	4.56	4.75	3.60	38.08
	EU-25 average	2.74	2.59	2.53	2.36	2.49	2.56	2.65	2.76	2.59	0.51
	EU-15 average	3.17	2.85	2.76	2.63	2.62	2.68	2.93	3.05	2.84	-3.62
	EU-10 average	1.68	2.04	2.11	1.90	2.21	2.31	2.18	2.26	2.09	34.86

Table 33 Shareholders' rights in Europe

Country	One Share - One Vote	Provu hu	Shares Not Blocked before Meeting	Cumulative Voting / Proportional Representation	Oppressed Minority	Preemptive Right to New Issues	Percentage of Share Capital to Call an Extraordinary Shareholder Meeting	Shareholde rights	rMandatory dividend
1 Cyprus	0	0	0	1	1	1	0.10	4	0
2 Ireland	0	0	1	0	1	1	0.10	4	0
3 United Kingdom	0	1	1	0	1	0	0.10	5	0
Common law - origin average	0.00	0.33	0.67	0.33	1.00	0.67	0.10	4.33	0.00
4 Austria	0	0	0	0	0	1	0.05	2	0
5 Belgium	0	0	0	0	0	0	0.20	0	0
6 Czech Republic	0	0	1	0	1	1	0.05	4	0
7 Denmark	0	0	1	0	0	0	0.10	2	0
8 Estonia	1	0	1	1	0	1	0.10	4	0
9 Finland	0	0	1	0	0	1	0.10	3	0
10 France	0	1	0	0	0	1	0.10	3	0
11 Germany	0	0	0	0	0	0	0.05	1	0
12 Greece	1	0	0	0	0	1	0.05	2	0.35
13 Hungary	0	0	0	1	1	0	0.10	3	0
14 Italy	0	0	1	0	0	0	0.10	2	0
15 Latvia	0	0	0	1	1	1	0.05	4	0
16 Lithuania	1	0	0	1	0	1	0.10	3	0
17 Luxembourg	1	1	0	0	1	1	0.20	4	0
18 Malta	0	0	0	1	1	1	0.10	4	0
19 Netherlands	0	0	0	0	0	1	0.10	2	0
20 Poland	0	0	0	1	1	1	0.10	4	0
21 Portugal	0	0	1	0	0	1	0.05	3	0
22 Slovakia	1	0	0	1	1	1	0.05	4	0
23 Slovenia	1	0	1	0	1	1	0.05	4	0
24 Spain	0	0	0	1	1	1	0.05	4	0
25 Sweden	0	0	1	0	0	1	0.10	3	0
Civil law - origin average	0.27	0.09	0.36	0.36	0.41	0.77	0.09	2.95	0.02

Source: Company law or commercial code; LLSV (1998)

**Table 34 Creditors' rights** 

	Country	No Automatic Stay on Assets	Secured Creditors First Paid	Restrictions for Going into Reorganization	Management Does Not Stay in Reorganization	Creditor Rights	Legal Reserve Required as a % of Capital
1	Cyprus	0	1	1	1	3	0
2	Ireland	0	1	0	0	1	0
3	United Kingdom	1	1	1	1	4	0
	Common law - origin average	0.33	1.00	0.67	0.67	2.67	0.00
4	Austria	1	1	1	0	3	0.10
5	Belgium	1	1	0	0	2	0.10
6	Czech Republic	1	0	1	1	2	0.00
7	Denmark	1	1	1	0	3	0.25
8	Estonia	0	0	0	1	1	0.34
9	Finland	0	1	0	0	1	0.00
10	France	0	0	0	0	0	0.10
11	Germany	1	1	1	0	3	0.10
12	Greece	0	0	0	1	1	0.33
13	Hungary	1	0	0	0	1	0.75
14	Italy	0	1	1	0	2	0.20
15	Latvia	0	1	1	0	2	0.00
16	Lithuania	0	0	0	1	1	0.50
17	Luxembourg	0	0	1	1	2	0.10
18	Malta	0	1	1	1	3	0.00
19	Netherlands	0	1	1	0	2	0.00
20	Poland	1	0	1	1	3	0.66
21	Portugal	0	1	0	0	1	0.20
22	Slovakia	1	1	1	1	4	0.00
23	Slovenia	0	1	1	1	3	0.00
24	Spain	1	1	0	0	2	0.20
25	Sweden	0	1	1	0	2	0.20
	Civil law - origin average	0.41	0.64	0.59	0.41	2.00	0.19

Source: Company law or commercial code; LLSV (1998)

**Table 35 Financial systems' regulations** 

	<b>Ability of banks to engage in:</b> Country	Securities	Insurance	Real estate	Nonfinancial firms	Restricted banking	Deposit Insurance
1	Cyprus	2	2	1	3	2	1
2	Ireland	1	4	1	2	2	1
3	United Kingdom	1	2	1	1	1.25	1
	Common law - origin average	1.33	2.67	1.00	2.00	1.75	1.00
4	Austria	1	2	1	1	1.25	1
5	Belgium	2	2	3	2	2.25	1
6	Czech Republic	1	2	2	3	2	1
7	Denmark	1	2	2	2	1.75	1
8	Estonia	2	2	2	2	2	1
9	Finland	1	3	1	2	1.75	1
10	France	1	2	1	2	1.5	1
11	Germany	1	3	1	2	1.75	1
12	Greece	2	3	2	2	2.25	1
13	Hungary	2	2	2	2	2	1
14	Italy	1	2	4	3	2.5	1
15	Latvia	1	2	3	2	2	1
16	Lithuania	2	2	3	2	2.25	1
17	Luxembourg	1	2	1	2	1.5	0
18	Malta	1	3	3	3	2.5	0
19	Netherlands	1	2	1	1	1.25	1
20	Poland	1	3	3	2	2.25	1
21	Portugal	1	2	3	2	2	1
22	Slovakia	1	2	2	3	2	1
23	Slovenia	2	2	2	3	2.25	1
24	Spain	1	2	3	1	1.75	1
25	Sweden	1	2	3	3	2.25	1
	Civil law – origin average	1.32	2.23	2.18	2.14	1.95	0.91

Source: Bank law, J.R. Barth, L. G. Dopico, D. E. Nolle, J. A. Wilcox (2002, 2003)

Table 36 Law enforcement as 2004

	Country	Procedures to enforce a contract	Time to enforce a contract (days)	Cost to enforce a contract (% of GNI per capita)	Law & Order
1	Cyprus				7.85
2	Ireland	16	183	7.00	8.69
3	United Kingdom	12	101	0.50	8.30
	Common law - origin average	14.00	142.00	3.75	8.28
4	Austria	20	434	1.00	8.68
5	Belgium	22	365	9.10	8.49
6	Czech Republic	16	270	18.50	7.72
7	Denmark	14	83	3.80	8.71
8	Estonia				7.40
9	Finland	19	240	15.80	8.70
10	France	21	210	3.80	8.05
11	Germany	14	154	10.40	8.37
12	Greece	15	315	8.20	7.56
13	Hungary	17	365	2.40	7.57
14	Italy	16	645	3.90	7.97
15	Latvia	19	189	7.50	7.34
16	Lithuania	30	150	5.80	7.29
17	Luxembourg				9.05
18	Malta				8.13
19	Netherlands	21	39	0.50	8.69
20	Poland	18	1000	11.20	7.74
21	Portugal	22	420	4.90	8.14
22	Slovakia	26	420	13.30	7.53
23	Slovenia	22	1003	3.60	7.86
24	Spain	20	147	10.70	7.92
25	Sweden	21	190	7.60	8.31
	Civil law - origin average	19.63	349.42	7.47	8.06

Source: World Development Indicators

Table 37 Effective top statutory tax rate on corporate income (in %)

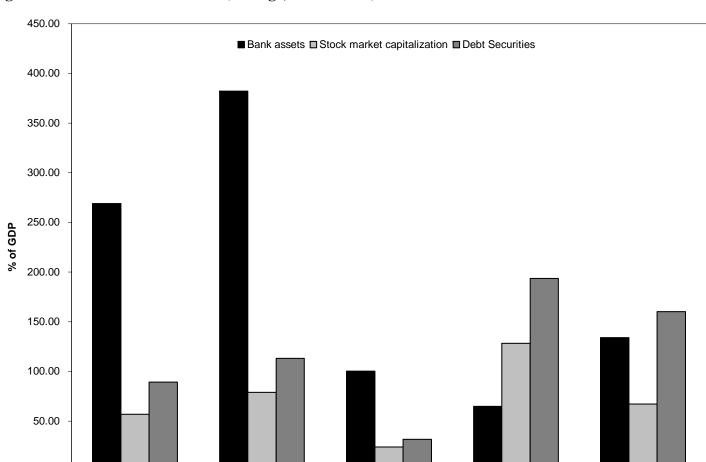
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Mean	Change (%)
1	Austria	34	34	34	34	34	34	34	34	34	34	34.00	0.00
2	Belgium	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	34	34	38.96	-15.42
3	Cyprus	25	25	25	25	25	29	28	28	15	15	24.00	-40.00
4	Czech Republic	41	39	39	35	35	31	31	31	31	28	34.10	-31.71
5	Denmark	34	34	34	34	32	32	30	30	30	30	32.00	-11.76
6	Estonia	26	26	26	26	26	26	26	26	26	26	26.00	0.00
7	Finland	25	28	28	28	28	29	29	29	29	29	28.20	16.00
8	France	36.7	36.7	36.7	41.7	40	36.7	36.4	35.4	35.4	35.4	37.11	-3.54
9	Germany	56.8	56.7	56.7	56	51.6	51.6	38.3	38.3	39.6	38.3	48.39	-32.57
10	Greece	40	40	40	40	40	40	37.5	35	35	35	38.25	-12.50
11	Hungary	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	17.7	19.41	-9.69
12	Ireland	40	38	36	32	28	24	20	16	12.5	12.5	25.90	-68.75
13	Italy	52.2	53.2	53.2	41.3	41.3	41.3	40.3	40.3	38.3	37.3	43.87	-28.54
14	Latvia	25	25	25	25	25	25	25	22	19	15	23.10	-40.00
15	Lithuania	29	29	29	29	29	24	24	15	15	15	23.80	-48.28
16	Luxembourg	40.9	40.9	39.3	37.5	37.5	37.5	37.5	30.4	30.4	30.4	36.23	-25.67
17	Malta	35	35	35	35	35	35	35	35	35	35	35.00	0.00
18	Netherlands	35	35	35	35	35	35	35	34.5	34.5	34.5	34.85	-1.43
19	Poland	40	40	38	36	34	30	28	28	27	19	32.00	-52.50
20	Portugal	39.6	39.6	39.6	37.4	37.4	35.2	35.2	33	33	27.5	35.75	-30.56
21	Slovakia	40	40	40	40	40	29	29	25	25	19	32.70	-52.50
22	Slovenia	25	25	25	25	25	25	25	25	25	25	25.00	0.00
23	Spain	35	35	35	35	35	35	35	35	35	35	35.00	0.00
24	Sweden	28	28	28	28	28	28	28	28	28	28	28.00	0.00
25	United Kingdom	33	33	31	31	30	30	30	30	30	30	30.80	-9.09
	EU 25 average	35.04	35.04	34.73	33.87	33.26	32.12	31.08	29.75	28.65	27.42	32.10	-21.74
	EU-15 average	38.03	38.15	37.78	36.74	35.87	35.30	33.76	32.61	31.91	31.39	35.15	-17.44
	EU-10 average	30.56	30.36	30.16	29.56	29.36	27.36	27.06	25.46	23.76	21.47	27.51	-29.74

Source: Eurostat

Table 38 Capital income taxation as of July-2005 (general rates in %)

		Interest payments to				payments to
	Countries	Residents	Residents in (other) EU State	Non-residents	Residents	Non-residents
1	Austria	25	15	0	25	25
2	Belgium	15	15	15	25	25
3	Cyprus	10	IS	10	20	0
4	Czech Republic	15	IS	15	15	15
5	Denmark	0	IS	0	28	28
6	Estonia	0	IS	0	26	0
7	Finland	29	IS	0	28	28
8	France	25	IS	15	25	25
9	Germany	31.65	IS	0	25	25
10	Greece	15	IS	15	0	0
11	Hungary	0	IS	0	20	20
12	Ireland	20	IS	0	20	20
13	Italy	12.5	IS	12.5	12.5	27
14	Latvia	0	IS	0	0	10
15	Lithuania	0	IS	0	15	15
16	Luxembourg	0	15	0	20	20
17	Malta	15	IS	0	0	0
18	Netherlands	0	IS	0	25	25
19	Poland	19	IS	20	15	15
20	Portugal	20	IS	20	15	25
21	Slovakia	19	IS	19	0	0
22	Slovenia	0	IS	0	25	15
23	Spain	15	IS	0	15	25
24	Sweden	30	IS	0	0	30
25	United Kingdom	20	IS	0	0	0
	EU 25 average	13.45		5.66	15.98	16.72
	EU-15 average	17.21		5.17	17.57	21.87
	EU-10 average	7.80		6.40	13.60	9.00

\* IS – Exchange Information System Source: Deutsche Bank Research, PriceWaterhouseCoopers



EU-10

**United States** 

Japan

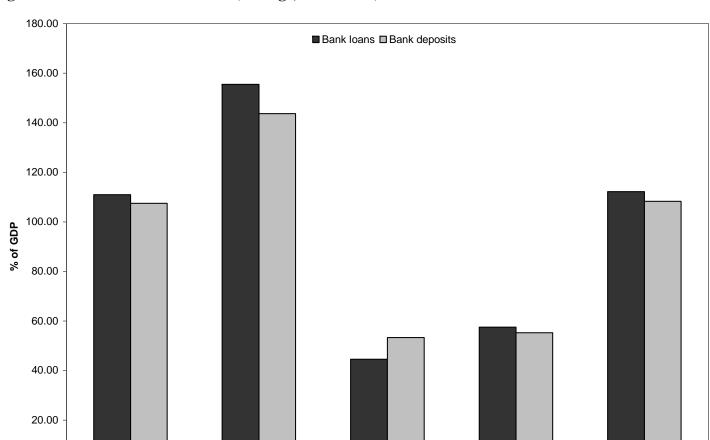
Figure 3 Size of financial markets (average, 1995 – 2003)

Sources: ECB, Eurostat, BIS, WDI, WFE.

EU-25

Note: EU-25, EU-15 and EU-10 aggregates represent GDP in PPP term weighted averages

EU-15



EU-10

**United States** 

Japan

Figure 4 Bank credit and liabilities (average, 1995 -2003)

Sources: ECB, Eurostat, WDI

EU-25

0.00 -

Note: EU-25, EU-15 and EU-10 aggregates represent GDP in PPP term weighted averages

EU-15

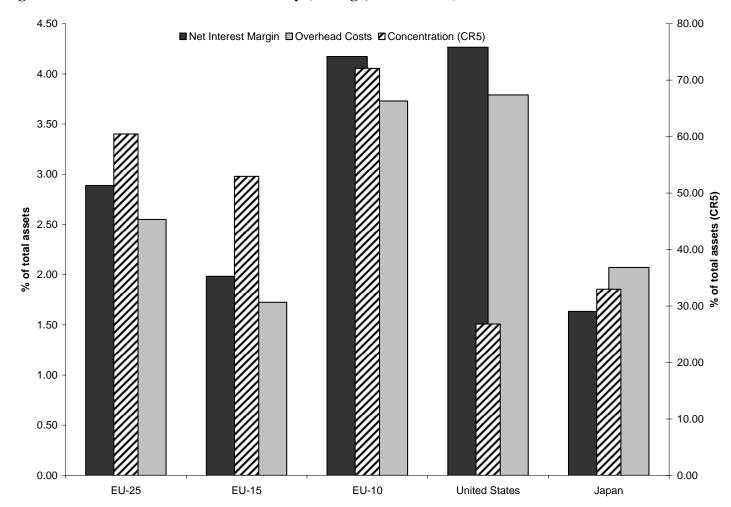
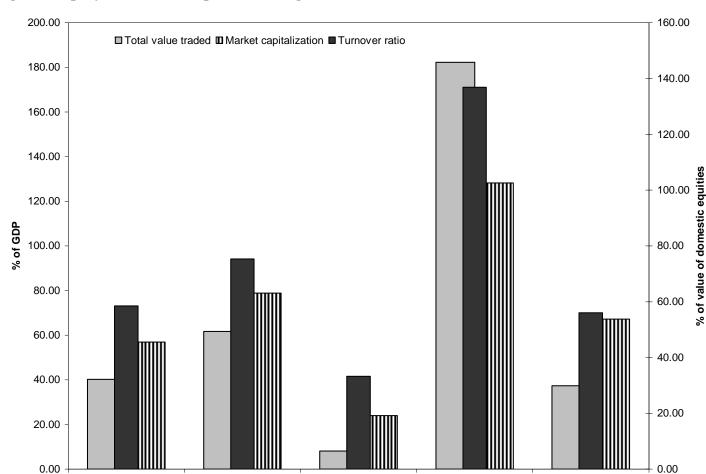


Figure 5 Bank concentration and efficiency (average, 1996 – 2003)

Sources: ECB, BankScope

Note: EU-25, EU-15 and EU-10 aggregates represent asset weighted averages for CR5



EU-10

**United States** 

Japan

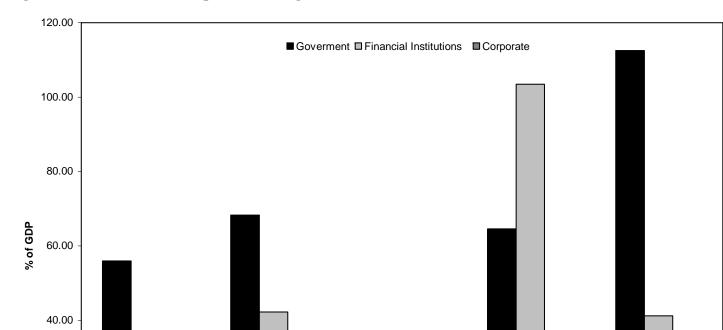
Figure 6 Equity market development (average, 1995-2003)

Sources: WDI, WFE

EU-25

Note: EU-25, EU-15 and EU-10 aggregates represent GDP in PPP term weighted averages for Market Capitalization

EU-15



EU-10

**United States** 

Japan

Figure 7 Debt market development (average, 1995-2004)

Sources: BIS

20.00

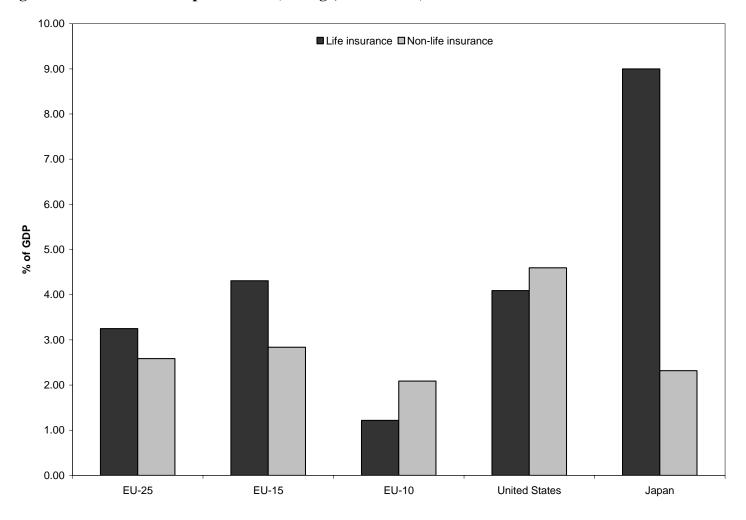
0.00 -

EU-25

Note: EU-25, EU-15 and EU-10 aggregates represent GDP in PPP term weighted averages

EU-15

Figure 8 Insurance market penetration (average, 1996 - 2003)



Sources: SwissRe