

Perée, Eric; Riess, Armin

Article

The transformation of finance in Europe: introduction and overview

EIB Papers

Provided in Cooperation with:

European Investment Bank (EIB), Luxembourg

Suggested Citation: Perée, Eric; Riess, Armin (2003) : The transformation of finance in Europe: introduction and overview, EIB Papers, ISSN 0257-7755, European Investment Bank (EIB), Luxembourg, Vol. 8, Iss. 1, pp. 11-34

This Version is available at:

<https://hdl.handle.net/10419/44827>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

ABSTRACT

This paper introduces the topic of Europe's changing financial landscape and highlights the findings of the contributions to this volume of the EIB Papers. Key points emerging from this overview include: (i) a variety of factors are reshaping Europe's finance, notably the Single Market, EMU, demographic trends, increasing wealth, technological progress, and financial innovation; (ii) further integrating Europe's financial systems, across borders and segments, should significantly increase economic welfare; (iii) although the functions that financial systems perform are being reallocated - implying a move towards the Anglo-Saxon paradigm - banks will remain important and should maintain their comparative advantage in financing small and medium-sized enterprises; (iv) the economic case in favour of a move towards funded pension systems - which would boost capital markets - is not as compelling as often assumed.

Eric Perée (e.peree@eib.org) and Armin Riess (a.riess@eib.org) are, respectively, Head and Deputy Head of the Economic and Financial Studies Division of the EIB. The views expressed are strictly personal.

The transformation of finance in Europe: introduction and overview

Change is not made without inconvenience, even from worse to better.

Richard Hooker

1. Introduction

Financial systems perform various functions, notably the clearing and settlement of payments, mobilisation and allocation of investment funds, intertemporal smoothing of consumption by households and expenditure by firms, and the pooling and sharing of risks (Allen and Gale 2000, Merton and Bodie 1995). In developed financial systems, these functions are carried out by a range of institutions, which can be broadly grouped into financial markets (for stocks, bonds, futures contracts, options, etc.) and financial intermediaries, banks in particular. One may wonder why there are different institutions essentially offering similar financial services. One reason is that services are similar, but far from identical, and there is thus scope to specialise on the basis of comparative advantages. But, of course, the structure of financial systems does not develop on the basis of comparative advantages alone. Another reason why we see different types of financial service providers is that financial sector regulation, by design or accident, has created different playing fields, thereby fostering specialisation and the creation of walls between various segments of the financial system.

These walls have been crumbling rapidly - even disappearing - in recent years, and a new financial landscape is emerging in Europe. A number of powerful forces are shaping this process. European integration, in particular the creation of the European Monetary Union (EMU) and moves towards the Single Market for financial services, is arguably the most important regulatory and institutional stimulus for change. In addition, advances in information technology and innovative financial instruments are revolutionising the way financial services are produced, distributed, and consumed, and they contribute to increasing interdependencies between various financial intermediaries as well as between intermediaries and financial markets. And then, increasing wealth and population ageing are fundamentally altering the demand for and, consequently, the supply of financial services.

How well financial systems fulfil their functions has an enormous impact on the welfare of nations (see, for instance, Rajan and Zingales 2003), and efforts to improve the performance of the financial system are an important element of the Lisbon process, i.e. the EU strategy to make Europe the most competitive region in the world by 2010. It is against this background that this paper examines key issues in the transformation of finance in Europe and highlights, at the same time, the main themes of the other contributions to this volume of the *EIB Papers*. Since our intention is to introduce and to highlight, our approach is inevitably eclectic. The next section sets the stage by reviewing key features and drivers of Europe's changing financial landscape. Section 3 discusses the importance of finance and financial structure for economic development and reviews the benefits of financial sector integration in the European Union. Section 4 informs about



Eric Perée



Armin Riess

progress, or lack thereof, in integrating EU capital markets, i.e. one important segment of the financial system. In Section 5, we investigate the link between population ageing, pension reforms, and capital markets and, in this context, we challenge the view that pension reforms have to include a switch to funded pensions. The issue is of interest since a major boost to capital markets is commonly expected to result from introducing or extending funded pensions. Section 6 moves on to a related topic, namely the role of institutional investors such as pension funds, insurance companies, and mutual funds. At this stage of the analysis, it will have become clear that banks are facing formidable challenges and we thus ask (and try to answer) in Section 7 whether banks are on the run and for which financial system functions they are likely to maintain their comparative advantage. This leads us straight to Section 8, where we will discuss whether the changes in Europe's financial landscape will put small and medium-sized enterprises (SMEs) into a squeeze. On this topic, we will be brief since our companion edition (*EIB Papers* Volume 8, Number 2) focuses exclusively on the financing of SMEs in Europe.

2. Key features and drivers of Europe's changing financial landscape

Before considering how Europe's financial landscape is changing, it is worthwhile making a short detour to take stock of what is the current European financial system and what are the underlying forces driving the transformation.

To consider the continental European financial system as being bank-based rather than market-based is too simplistic.

The continental European financial system is usually described as being bank-based, in contrast to the market-based Anglo-Saxon system. Such a basic description runs the risk of being too much of a caricature: neither the European nor the US financial system is a polar case. They essentially differ in the relative proportion of finance that is channelled through banks or markets. Hartmann *et al.* (2003) provide a more balanced comparison between the eurozone and the United States, and ECB (2002) provides similar information on individual EU countries. Nevertheless, while the aggregate financial depth of both regions are relatively similar, both studies highlight a few striking differences. First, US non-financial corporations obtain a substantial share of their external finance from the capital market while this source of funding is far less important in the eurozone. Second, US households have a much stronger preference for equities. Third, European non-financial firms have substantial shareholdings in other non-financial firms (this is related to group pyramid structure) and also have extensive intercompany debt. Finally, eurozone financial institutions have large amounts of interbank deposits.

The world of finance has undergone significant transformation in the last two decades on a worldwide basis. In the European context, the creation of the Single Market and the launch of EMU have amplified the underlying forces steering the transformation. Following the BIS (2001), these forces can be grouped into seven broad classes: technology, advances in finance theory, retrenchment of the state in the provision of finance, free capital flows, introduction of worldwide financial standards, institutionalisation of management of savings, and demographic changes.

Without the rapid and continuous progress in information and telecommunication technology, finance as we know it currently would have been impossible. Massive increases in computing power and faster data transmission enabled the application of

new financial theory, facilitated advances in risk management and the unbundling of financial risks.

The dismantling of restrictions to capital flows as well as a lower involvement of public authorities in the direct provision of financial services - although at different speeds across countries - have made the finance industry much more responsive to market forces. This has been accompanied by the introduction of worldwide standards in most fields of finance (the Basel capital adequacy agreement for banks is just one example).

In most developed countries, there has also been a tremendous move towards institutionalised management of savings. An ever-growing share of financial assets is nowadays controlled by professional asset managers, irrespective of whether they operate within banking conglomerates or outside. This process has certainly not run its full course as discussed in Section 6 below.

Beyond these general forces, the transformation of the European financial landscape also receives some additional impetus from the European integration, namely the Single Market and EMU. Let us consider the influence of these European factors on finance.

To begin with, the overall monetary philosophy underpinning EMU is that aggregate price stability is a useful goal and that inflation cannot enhance economic growth and efficiency in the medium term. Stable and low inflation should reduce the economic risk, driving down risk premia, and ultimately enabling investors to adopt longer time horizons for their investment. This should lead to the development of an equity-based culture and the development of longer maturity instruments.

Second, the adoption of the single currency in most of the EU has eliminated currency risk in cross-border investment decisions. As noted by Brookes (1999), performance of cross-border investments prior to the euro was mainly driven by country-specific factors. In a nutshell, about three-quarters of the performance of cross-border investment was ultimately related to exchange rate fluctuations and domestic monetary policy. As the exchange rate factor disappears with EMU and monetary policy is conducted for the whole eurozone, past investment strategies break down and, consequently, asset managers and investors will have to adopt a different investment strategy. For example, equity investment will shift away from country factors in favour of sectoral allocations and bond investments should be attracted to more credit risk (emergence of a corporate bond market).

Following the elimination of currency risk in eurozone cross-border investment decisions, asset managers and investors had to revise their investment strategies.

Third, the replacement of national currencies by the euro should lead to the disappearance of a regulatory-driven home bias of many institutional investors, facing strict limits on the extent of currency mismatches that they are allowed to bear. For example, in many European countries, life-insurance companies (one of the largest investors' group) are prevented from running currency risk. Hence, they are forced to invest their reserves in the currency in which their liabilities are denominated. Before the introduction of the euro this led to two consequences: financial markets were segmented along national currency lines and, as most national markets are small, liquidity was rather poor. The disappearance of national currencies and their replacement by the euro removed market fragmentation overnight and widened

considerably the set of investable securities. This should lead to the convergence of returns (for a given risk level) across the eurozone, much higher levels of liquidity, and much bigger cross-border investment flows.

To conclude, a variety of forces are reshaping the way financial services are provided. But to what extent does it matter? Specifically, what is the role of finance in an economy? Are there some financial services that are more important than others? And what can we expect from the creation of the Single Market for financial services? This is what we turn to next.

3. The importance of finance revisited and the benefits of financial integration

There are at least two reasons why changes in Europe's financial landscape are of eminent interest. One is that financial development is widely seen as promoting economic growth and, as a result, furthering the development of Europe's financial system ultimately promises a better supply of its citizens with goods and services of all kinds. But it should be pointed out that the growth-enhancing effect of financial development has been, and still is, subject to controversy despite ample cross-country evidence for a positive correlation between progress in the financial and the real sphere of an economy. However, observing a link between finance and growth does not inform on the direction of cause and effect. Indeed, as Arestis and Demetriades (1997) - for instance - reveal, economists hold conflicting views about the causality between finance and growth. In addition, within the finance-causes-growth camp, there are opposing views as to which type of financial system is better for promoting economic growth: should countries rely mainly on bank finance or on capital market finance?

Financial development matters for economic growth, financial structure does not.

Thorsten Beck brings us up to date on both controversies, reviewing the respective role of banks and capital markets, their relative advantages, and their complementarities. He argues that variation in both banking sector and capital market development can explain variation in economic growth, but the degree to which a financial system is market- or bank-based cannot explain differences in economic development across countries. Finance thus matters but not who provides it. These conclusions clearly echo other studies, in particular Demirgüç-Kunt and Levine (2001, p.8), who conclude that "no evidence exists that distinguishing countries by financial structure helps explain differences in economic performance. More precisely, countries do not grow faster, financially dependent industries do not expand at higher rates, new firms are not created more easily, firms access to external finance is not easier, and firms do not grow faster in either market-based or bank-based financial systems". This insight has important policy implications. For one thing, as neither banks nor markets outperform each other, economic policies should not try to tilt the level playing field in favour of either banks or markets. For another, given that financial development as such is of considerable importance, policies should aim at creating the conditions for an efficient provision of financial services, with crucial conditions including the effective protection of creditors' and shareholders' rights, transparency to reduce informational asymmetries between lenders and borrowers, high-quality accounting standards, and adequate means and incentives for private agents to monitor and exercise market discipline vis-à-vis banks as well as stock markets.

The second reason for a keen interest in Europe's changing financial landscape relates to the first one: an important aspect of the ongoing change concerns the integration of EU countries' individual financial systems into the Single Market for financial services, and the creation of such a market is clearly a critical step in furthering financial development in Europe. In a financially fully integrated region there would be no geographical discrimination of economic agents to access and invest funds within the region. As a result, the price of a given financial service would be same throughout the region (Cabral *et al.* 2002), and this law of one price would apply to stock exchanges, bond markets, and wholesale as well as retail banking. Moving towards that ideal offers a variety of advantages, including economies of scale and scope, the supply of financial services on the basis of comparative advantages, and better access to financial services for those savers and users of funds that are currently operating in financially less developed regions of the EU. In sum, financial integration is expected to result in a more efficient mobilisation and allocation of resources, thereby boosting GDP.

Three recent studies aim at assessing the impact of further EU financial integration on the performance of EU economies. Giannetti *et al.* (2002) point out that in terms of financial development many EU countries still lag behind the financially most advanced countries, the United States or the most developed EU economies, and that the degree of financial development continues to differ substantially across EU countries notwithstanding progress towards integrating national financial markets in the EU over recent years. This indicates scope for raising the performance of EU economies by moving closer to the most-advanced-country benchmark.

To illustrate the growth enhancing potential of financial sector integration, Giannetti *et al.* simulate the effect of financial integration - interpreted as firms' access to a financial system similar to that of the United States - on the growth of value added in the EU manufacturing industry. These simulations rest on cross-sectional regression analyses that estimate the link between firm growth and financial development while controlling for other variables that may vary across countries and firms, such as differences in firms' dependence on external finance. The simulations indicate for the EU as a whole that annual growth could be boosted by close to 1 percentage point. The results also suggest that small firms should benefit more than large firms from financial integration provided that EU financial sector integration contributes to the development of local financial markets or makes small firms less dependent on local providers of finance. All this implies that financially less advanced EU members with a high share of small and medium-sized enterprises should benefit most from the Single Market.

The second study (London Economics 2002), prepared for the European Commission, takes a different approach to gauging the macroeconomic impact of integration of EU financial markets. First, the study estimates the impact of European financial market integration on the cost of equity and bond finance and, second, simulates the likely macroeconomic impact of the estimated changes in the cost of equity and bond finance. The simulation results suggest an EU-wide real GDP increase of close to 1 percent. It is worth noting that a good part of the simulated output increase results from an increasing use of market finance and not only from a general decline in the unit cost of corporate finance - a result that seems to be in conflict with the findings of Beck (this volume) and Demirgüç-Kunt and Levine (2001) that financial structure does not matter for economic growth. We will see

Empirical evidence suggests that further financial integration in the EU will bring significant benefits.

that a possible clash with the Beck/Demirgüç-Kunt/Levine (BDKL) view is a recurring theme of this paper.

The third study (Heinemann and Jopp 2002) has a different focus than the previous two. It concentrates on the integration of retail markets for financial services, notably those offered by banks, insurance companies, and investment funds. Reflecting this approach, the study highlights benefits of financial integration that accrue to private households and firms with no access to capital market finance. Benefits pointed out by Heinemann and Jopp include a wider choice in products, particularly in small countries; an annual cost saving potential of EUR 5 billion in the investment fund industry (based on the current size of the sector); a significant improvement in the risk-return profile of private investors' investment portfolio due to enhanced risk diversification possibilities; and lower interest payments on mortgage loans, ranging from 0.8 to 2.6 percent of the loan amount.

In sum, although simulations such as those reviewed here can only approximate the benefits of financial integration - and to quantify these benefits a number of simplifying assumptions have to be made - they clearly indicate that fully integrating EU national financial systems should lead to significant benefits. Against this background it is useful to briefly review the status of creating the Single Market. We do this in the next section for capital markets and in Section 7 for banking.

4. Towards a single EU capital market

There have been considerable delays in creating the Single Market for financial services, but the process has gained momentum in recent years.

Graham Bishop recalls that European capital markets were to be unified by the Single Market programme that was completed in 1992. Although the Directives necessary for creating the Single Market for financial services were formally in place, there have been considerable deficiencies and/or delays in fully implementing them. New attempts towards creating the Single Market have been under way since the turn of the millennium: the year 2000 saw the launch of the Financial Services Action Plan (FSAP) - consisting of 42 measures to streamline the regulation of retail and wholesale financial markets - to be implemented by end-2005; subsequently, the Lamfalussy committee came up with an ambitious proposal to increase the speed and flexibility of European regulatory processes, with both speed and flexibility being considered crucial for bringing into existence the long-promised single EU capital market; in parallel to this committee, the Giovannini group has examined what hinders cross-border clearing and settlement of securities' markets transactions and how these obstacles could be removed.

Bishop - who is closely related to both the Lamfalussy committee and the Giovannini group - stresses that the current EU legislative system in general lacks a mechanism for keeping secondary legislation attuned to changing circumstances, a failure possibly leading to high economic cost especially in the rapidly changing sphere of finance. The process proposed by the Lamfalussy committee would go a long way in establishing such a mechanism. One of its hallmarks is open and transparent discussion with all market users at every level. At the same time, it gives rise to constitutional concerns and, in fact, implies a constitutional innovation because there must be a delegation of authority to amend legislation from the national governments to "somewhere" at a European level. Obviously, the process proposed by the Lamfalussy committee for securities market regulation can be applied to the regulation of other financial services, generally

introducing speed and flexibility in adapting the regulatory framework for Europe's financial system.

Overall, although the benefits to European citizens from further financial integration are substantial, the creation of a unified EU financial market has been a long time in the making. As with other aspects of integration, an important reason for this is that tearing down national barriers, although beneficial to the EU economy at large, creates winners and losers. As Giannetti *et al.* observe, potential winners include the relatively efficient suppliers of financial services and users of such services that currently have to rely on less efficient suppliers. By extension, possible losers include less efficient providers of financial services and those non-financial firms that currently enjoy an advantage in their markets because they have access to more efficient financial systems than their competitors. But as Bishop suggests, eventually inevitable changes to the process of regulating EU financial markets will also create winners and losers among those that are currently involved in this process: institutional prerogatives are likely to shift from the national to the European level as well as between the European Commission, Council of Ministers, and European Parliament. In sum, in light of competing interests, the completion of the Single Market for financial services is unlikely to be clear sailing, and temporary setbacks should not come as a surprise.

5. Population ageing, pension reforms, and capital markets

There seems to be a consensus that population ageing and pension reforms will spur the development of EU capital markets in the period ahead - a view clearly expressed, for instance, by both Bishop and Davis (this volume). The essence of this position is that ageing and sweeping pension reforms, the latter characterised by a switch from public pay-as-you-go (PAYG) pension systems to private funded pension systems, will possibly increase saving and will certainly raise the share of saving channelled through capital markets. We find the first part of this proposition less straightforward than it seems at first glance. More generally, we doubt that a switch from PAYG to funded pension systems can defuse the pension time bomb. But if it cannot, such a switch is less compelling and the resulting boost to capital markets less likely to materialise.

Box 1 sets out why we are sceptical. Suffice to summarise here the key results. First, expected population ageing stimulates national saving and capital markets. But once ageing sets in - in the period after 2010 for the EU - this stimulus disappears or goes in reverse. Second, the way societies try to ensure the standard of living of their pensioners (PAYG vs. funding) has little impact on national saving and, thus, a move towards funded pension systems does not raise it. Third, the notion that funding fosters economic growth because a larger share of saving is channelled through capital markets (and/or intermediaries that provide finance via capital market products) presupposes that the financial structure of an economy matters for economic growth - a hypothesis not supported by the BDKL position reviewed above. In sum, the economic case in favour of funded pension systems as a means of coping with ageing is not as compelling as often presumed. In any event, the preference for funded systems may weaken in the face of bearish capital market conditions. The substantial decline in the value of pension fund assets since the stock market peak in 2000 has brought to the fore the investment risk associated with funded pensions, and the possibility that

Demographic trends over the next ten years and a move towards funded pension systems will boost capital markets.

Box 1. Some basic truths about ageing and pensions in greying societies

An observation to start with is that while ageing and pension reforms are usually mentioned in one breath, one needs to examine their respective impact on saving and capital markets separately. To spill the beans upfront: expected ageing will indeed give impetus to saving and capital markets until ageing actually sets in, but pension reforms will probably have little impact on saving and work in favour of capital markets only if they imply a move towards funded pension systems, which is by no means decisive for addressing the pension problem in ageing societies. Indeed, erroneous belief in the power of funded pensions to cope with demographic challenges distracts from what is really necessary to defuse the pension time bomb.

Ageing, saving, and capital markets

What can we say about the link between ageing, on the one hand, and saving and capital market developments on the other? The effect of ageing on saving rests on the life-cycle hypothesis. In general, people save when they are young and working while they dissave later in retirement. The overall level of saving in an economy then depends on the age structure of the population, and changes in the age structure alter the level of saving. Saving is relatively high when the share of people working (workers from here on) in the overall population is high. By extension, saving is relatively low (and falling) if the share of pensioners in the total population is high (and rising).

While there is much talk of an ageing EU population, the EU as a whole is still in the phase of its life cycle where saving is rising. In fact, European Commission estimates (European Commission 2002) suggest that because of underlying demographic trends, the aggregate propensity to save (that is the combined saving rate of workers and pensioners) has been on the rise since the late 1980s and will continue to go up until about 2010. Thereafter, ageing is projected to kick in, resulting in a steep decline (equivalent to about 5 percent of GDP) in the saving ratio in the period 2010-2050. In sum, expected ageing suggests a further increase in saving over the next ten years or so; a good part of this is likely to flow through capital markets; but demographic developments also suggest that actual, as opposed to expected, ageing will be a drag on saving and capital markets from 2010 onwards.

Before discussing the link between pension reforms and capital markets, it is useful to sketch projected demographic developments and, more important, to illustrate why reforms are inevitable. A useful indicator for illustrating demographic trends is the dependency ratio, i.e. the ratio of the population below 15 or above 64 to the population aged between 15 and 64. For the EU as a whole, this ratio is expected to increase from around of 0.5 in 2000 to 0.725 by 2050 (European Commission 2002). In other words: at present, two workers support one dependent (either young or old) while only 1.4 workers will have to shoulder this burden by 2050. The increasing strain on pension systems can be illustrated as follows: assuming no change in the generosity of PAYG pension systems and in key parameters such as labour force participation rates and the effective retirement age, public pension expenditure are projected to rise from an EU average of around 10.5 percent of GDP to about 17 percent of GDP by 2050 (European Commission 2002).² The impact of demographic trends on the cost of providing for the elderly will be stronger still due to rising health expenditure associated with population ageing. In concluding, it is

² These projections differ from those reported in Table 1 of Bishop (this volume). The projections summarised in that table, indicating an increase in public pension expenditure of "only" 3.5 percent of GDP, are those of the European Policy Committee (European Commission 2001). The differences between the projections illustrated in this introduction and that of the European Policy Committee (EPC) are spelled out in detail in Mc Morrow and Roeger (2002). The main difference is that the EPC projections are based on a higher labour force participation rate and lower structural unemployment, and they account for the long-term effect of pension reforms that had already been introduced by 2000. The general point here is that while long-term projections of public pension expenditure are subject to considerable uncertainties, they nevertheless illustrate the pension problem arising with population ageing.

important to point out that we have looked at the fiscal implications of ageing to illustrate the increasing burden - and the need for inter- and intragenerational burden sharing - resulting from population ageing. But this does not mean that privately organised pension and health systems would not face similar challenges.

Alternative pension systems and national saving

In light of the increasing pension burden, there can be little doubt that pension reforms are necessary. The (partial) replacement of PAYG with funded pension systems is commonly seen as a key element of pension reforms (see, for instance, European Commission 2002, Heinemann and Jopp 2002, OECD 2003, and Mc Morrow and Roeger 2002). But why is funding seen as a solution to the pension problem? For one thing, starting with Feldstein (1974), a number of economists have argued that PAYG systems curb national saving and, by extension, a switch to funded systems would raise saving and investment and, thus, income. For another, even without an increase in saving, funding is envisioned to foster economic growth and generally improve the conditions for coping with demographic challenges.

If at least one of these claims holds, a case in favour of funded systems can be made, with direct and indirect implications for capital markets: as funded systems rest on the accumulation of financial assets, such as equity and debt securities, it seems natural to expect an increasing role of capital markets; in addition, should saving rise, a good part of it can be expected to flow through capital markets. The trouble is that both claims can be disputed.

We begin with a critical look at the Feldstein hypothesis and inquire about the level of national saving under alternative pension systems. As pointed out above, a common - though admittedly not completely uncontroversial - view is that life-cycle considerations together with a society's age structure determine the level and time profile of saving. If this is so, saving should not be affected by how societies ensure the livelihood of their retired population. In questioning this position, it is tempting to argue that under a funded system the workers can save that part of their income that was transferred before to pensioners under PAYG, thus boosting saving. But the argument is obviously incomplete. To demonstrate why, it is useful to distinguish between the real-life situation of gradually switching from PAYG to a funded system and the hypothetical situation of replacing overnight a PAYG system with a mature funded pension system.

To start with the real-life situation, it is clear that pensioners that are not financed any longer by social security contributions of the active population under PAYG still need to receive their pension. Governments can finance existing public pension liabilities by borrowing, raising taxes, cutting non-pension expenditure, or a combination of the three. Let us investigate these possibilities, notably their impact on saving, one-by-one. Raising taxes directly offsets abolished social security contributions, thus leaving workers' disposable income and their saving unchanged. Government borrowing means a decline in government saving (or an increase in dissaving), which counteracts the increase in private saving, leaving national saving unaffected (in fact, the private sector's additional financial assets may simply comprise government bonds issued to finance existing pension obligations). In rescuing the claim that a switch to a funded system fosters saving, one could argue that additional private saving will earn a return, making future pensioners better off than they would be otherwise. It is true that additional private saving is expected to generate a return, but it is also true that taxpayers will have to cough up the interest on the extra government debt. As a result, there will be no net benefit to society at large and, in fact, the additional interest and profit income of future pensioners will have to contribute to meeting the additional interest obligation of the government. That leaves the option of financing existing pension promises by reducing non-pension expenditure. Ignoring the impact of cuts in non-pension expenditure on economic activity, this mode of financing does not affect government saving and, therefore, safeguards the increase in national saving stemming from additional private sector saving. However, it would be wrong to attribute this to a switch from PAYG to funded pensions: if there is

scope for painlessly reducing non-pension expenditure, governments could do this under any pension system, thereby reducing the current tax burden or repaying government debt and, thus, leaving more room for private sector saving. In sum, while our reasoning ignored some of the finer points and, for brevity, did not spell out underlying assumptions, it indicates that the hope for higher national saving allegedly resulting from a switch to private pension schemes is not well founded.

But suppose we woke up tomorrow in a world where the transition from PAYG to funded pensions has been completed. Would we not live in a more spendthrift society with a higher level of saving? In this world, workers do not have to contribute to public pension schemes and can save more than they could have under PAYG, and government pension obligations have disappeared with the death of the last PAYG-supported pensioner. At first glance, it seems as if national saving is higher because workers can save more than under public pension schemes. Again, the picture is incomplete. For one thing, having the possibility to save more does not necessarily mean that workers will save more. But this is not the main problem, as contributions to funded pension schemes can be made mandatory. But higher saving by workers does not imply higher national saving. The catch is that pensioners, not supported by the government, dissave by selling financial assets to finance their consumption. Simply put, in a mature funded system, workers' additional saving and purchase of financial assets corresponds to pensioners' dissaving and sale of financial assets. The bottom line is that even after the transition from public to private pension schemes, there are no convincing reasons to expect a higher level of national saving.³

Funded pensions and demographic challenges

The level of saving apart, a case for replacing PAYG with funded pension arrangements could be made if there are other reasons to believe that funding is better than PAYG in coping with the demographic challenges. Following Barr (2000), we will argue that this is not the case.

To start with three simple truths that hold under any pension system - PAYG and funded: first, all other things being equal, ageing implies a declining workforce and, consequently, a decline in the output of goods and services; second, in any one year, the consumption of pensioners has to be met by goods and services produced in that year; third, as pensioners receive no wage income, they can only consume by exercising claims on today's output obtained during their working lives. Funded and PAYG pension systems differ in the way pensioners have acquired claims on today's output. But under both systems ageing implies that pensioners and workers have to share a lower level of output, and from the perspective of pensioners this could mean the value of claims on output is not what it appeared to be when claims were acquired. But the two systems differ in how disillusionment becomes visible.

Under PAYG pension schemes, workers acquire a promise that they will receive a transfer from the government when in retirement. In the typical continental European public pension scheme, the promised transfer is equal to a proportion of the wage income received before retirement (replacement ratio), with this income often indexed to general wage developments after retirement. Due to ageing and the associated decline in output, the promises made are impossible to keep unless, that is, workers increase their pension contributions and thus reduce their claim on (a lower) output.

Under funded pension systems, workers acquire claims on future output by accumulating financial assets. To illustrate how the value of these claims shrinks in an ageing society, suppose that during

3 Supporters of funded pension systems often point out that the expected return on mature funded pension systems is higher than the implicit return on public pension systems. While this is true, the comparison is incomplete because beneficiaries of funded pension systems are exposed to higher risk. As Barr (2000), for instance, has pointed out, funded as well as PAYG systems face common risk and uncertainties. But funded pension systems face additional risks such as investment risk, management risk, and annuities market risk.

their working lives pensioners simply accumulated money balances. When in retirement, pensioners draw on these funds to finance their consumption. But as output is lower than it was, too much money is chasing too few goods and inflation ensues, trimming down the real value of pensioners' nominal claims on output. Alternatively, suppose that during their working lives pensioners have invested in bonds, equities, and real estate and upon retirement they start selling these assets to finance their consumption. The trouble is that in an ageing society there are fewer people interested in buying these assets and, thus, pensioners face a decline in the nominal value of their assets and, by extension, their claim on output.

Two mechanisms could brighten the assessment of funded pension systems' capacity to deliver on their promises. First, it is often argued that the switch from PAYG to funding promotes economic growth. We have argued that there are no compelling reasons for a growth-enhancing increase in saving and investment. But higher economic growth could come from a more efficient mobilisation and allocation of saving. One may argue, for instance, that under a funded pension system a higher share of saving is channelled through capital markets rather than banks and that this fosters economic growth. This presupposes, however, that market-based financial systems outperform bank-based systems - a hypothesis that is difficult to maintain in light of the BDKL finding that financial development matters for the performance of a country, but financial structure does not.

Second, under funded pension systems it could be easier for workers to acquire claims on the output of other countries. In fact, our discussion has so far assumed a closed economy. In an open economy, pension saving can be invested in foreign countries. But to what extent would this mitigate the effects of ageing on the standard of living in ageing EU countries and, equally important, what is the role of a funded pension system as opposed to a PAYG scheme?

To begin with a very basic observation: funds invested abroad are not available for domestic investment; it follows, that foreign investment can bring relief only if the marginal return on foreign investment is higher than that on domestic investment. And then, investing in countries with demographic trends similar to those in the EU, such as Japan, would not help at all. From this we infer that foreign investment needs to take place in countries with better investment opportunities and where ageing kicks in much later than in Europe. Furthermore, investment will have to go to countries that are expected to be net exporters of goods and non-factor services at the time when European pensioners need to sell their assets. Otherwise, the currency of the country in which pensioners hold their assets depreciates and, as a result, accumulated pension assets purchase less goods and services than pensioners had anticipated. Finally, there is an external creditworthiness issue: given that the repayment of external finance depends as much on debtor's willingness as on their capacity to repay (Gersovitz 1984), one may doubt debtors' incentives to honour obligations to creditors who, for demographic reasons, have ceased to be suppliers of external finance. In sum, there are pitfalls on the way towards ensuring the sustainability of pensions through foreign investment.

But the main point still needs to be mentioned: the foreign escape route - to the extent that there is one - is not a prerogative of a funded pension system, but can be taken under PAYG as well. We have argued above that the level of saving is the same under PAYG and funding and, thus, the latter does not magically create an additional nest egg that could be invested in young, promising, and creditworthy nations. The main question is then whether the portfolio choice of institutional investors - made on behalf of workers contributing to funded pension schemes - leads to a greater emphasis on foreign investment than the choice of workers made under PAYG. This may be the case, but it cannot be taken for granted.

In sum, there are no strong reasons to believe that a switch from PAYG to a funded pension system fundamentally improves the performance of economies, thereby softening the burden associated with an ageing population.

funded schemes may not deliver on the promises they seem to have made surely caught headlines.¹

The recent difficulties of funded pension arrangements indicate another misconception about pension reforms and the related expectation of a stimulus to capital markets. When arguing in favour of funded pension systems, unreformed and, thus, unsustainable public pension schemes are typically judged against defined contribution (DC) pension plans, i.e. funded pension schemes that allocate the investment risk to plan members. But this is, of course, an apples-and-oranges comparison. Current, unreformed PAYG schemes promise generous pensions, essentially a high replacement ratio indexed to inflation or general wage developments. In addition, as the effective retirement age has fallen and life expectancy increased, pensioners get a pension for an increasing number of years. By contrast, DC pension plans do not promise more than the market value of accumulated pension assets when plan members retire, except for a possible, but not obligatory minimum guaranteed return. As argued in Box 1, due to population ageing and the resulting output contraction, the purchasing power of these assets is very likely to fall short of what pension plan members had hoped. What is more, given the increase in life expectancy, pension assets will have to be stretched out over a longer retirement period, which means that plan members have to be content with a lower annual pension and/or postpone retirement. Such consequences are, of course, all too familiar from the debate on public pension reforms. It thus transpires that for a meaningful comparison between PAYG and funded pensions, one should compare reformed PAYG schemes (characterised by lower replacement ratios and a higher retirement age) to the type of funded pension plan (DC) that is commonly envisaged in a move towards funded pensions.

A switch from PAYG to funded pension systems would probably contribute little to defusing the pension time bomb.

The bottom line of all this is that the choice of pension system is of secondary importance for addressing the challenges of an ageing population (Barr 2000). What really matters in addition to lower replacement ratios and a higher retirement age are growth-enhancing policies, a substantial reduction in structural unemployment, an increase in labour participation rates, and migration.

So, does this all mean that the switch to funding and its related boost to capital markets will not happen? Probably not. Although neither PAYG nor funded pensions can alter the consequences of ageing, they differ in how risks and uncertainties are shared. At one end of the spectrum, DC pension plans leave the risk that acquired claims on future output do not yield the targeted standard of living with individual pension plan members (assuming that governments do not step in if funded pension plans fail to deliver on what they seem to have promised). At the other end, under PAYG schemes, risks are broadly shared among current and future taxpayers, pensioners, and contributors to PAYG schemes. Striking a better balance between individual and broad risk sharing could be one reason for supplementing reformed PAYG schemes with funded pension systems. Related to this, one could speculate about a more sinister, political-economy explanation: policy makers plainly anticipate that a lower number of workers leads, all other things being equal, to a lower output that needs to be shared with a higher number of pensioners; with the writing clearly on the wall, it may be politically opportune for the state to scale down provision of public pensions, replace them with privately funded schemes, and then -when crunch time comes - to not only dismiss any blame for the problem, but to come to the rescue of allegedly failed privately funded pensions.

¹ "How's your pension doing?" (*The Economist*, May 8, 2003) and "Broke: fixing America's private pension plans" (*The Economist*, January 23, 2003), for example.

6. Institutional investors on the rise

We have argued that pension reforms are inevitable, but that a move towards funded pension systems as such does not solve the pension dilemma. However, as the political momentum currently works very much in favour of such a shift (and those that would benefit from it), we need to look at the financial market implications of moving towards funded pension systems. An important implication is that it will enhance the role of institutional investors, largely comprising pension funds, (life) insurance companies, and mutual funds.

E. Philip Davis devotes his paper to the role of institutional investors, in particular their impact on financial system stability and efficiency. He starts by reviewing how and why institutional investors have grown over the last decades in major OECD countries. Three key insights emerge from this review: first, the growth in institutional investment has been formidable, clearly entailing a shift away from traditional bank intermediation; second, the author attributes the increasing importance of institutional investors to two factors: for one thing, their success in offering financial services relatively more efficiently than banks and in outperforming direct holdings of financial assets by retail investors and, for another, population ageing in the context of funded pension systems, notably in Anglo-Saxon countries; third - and following from the last point - institutionalisation can be expected to grow rapidly in continental Europe with a move to funded pension systems.

The growth in institutional investment has been formidable, clearly entailing a shift away from traditional bank intermediation.

On the issue of financial system stability, the author concludes that the institutionalisation of investment has the potential to support financial sector stability although it does - at times - seem to be linked to a rise in volatility for stocks held by institutions and/or liquidity failures, notably in debt markets. Furthermore, a salient feature of the financial market developments in recent years has been the considerable transfer of credit risk from banks to insurance companies, i.e. an important group of institutional investors, via securitised claims (such as collateralised debt obligations) and credit derivatives. Davis observes that such a process is widely seen as driven by regulatory arbitrage, whereby insurance companies are seen as less, or at least differently, regulated than banks and are thus willing to hold credit risk at prices banks cannot afford. One may want to add here that until the recent economic downturn, insurers - facing a decline in long-term government bond yields - were eager to add high-yielding credit risk transfer instruments to their portfolios.

There are concerns that banks' shedding of credit risk, in particular when motivated by regulatory arbitrage, may weaken financial system stability because it leads to more concentrated and less transparent risk and to a loss of diversity in risk assessment (Persaud 2002). In this context, Persaud also argues that the way insurance companies manage credit risk exacerbates stock market volatility, which - in turn - hampers fixed capital formation and exposes pension saving to greater risk. While acknowledging the regulatory and supervisory challenges resulting from credit risk transfers, official observers have stressed the stability-enhancing potential of such transfers (OECD 2002, BIS 2003, and Padoa-Schioppa 2002). The OECD, for instance, points out that risk transfer instruments may have made the deteriorating quality of credits witnessed since the second half of 2001 more manageable as credit losses have been more dispersed. In this context, it is

important to note that while the net transfer of risks is largely from banks to insurers, there has been a substantial reallocation of risks within the banking sector. This allows banks, notably those with a strong regional base, to maintain and even expand relationships with regional clients without undue geographical and sectoral risk concentration. Overall, regulatory arbitrage apart, the transfer of credit risks has potential to yield genuine economic benefit, in particular when other financial market participants are in a better position than the credit-originating bank to take credit risk.

Credit risk transfer mechanisms have strengthened interlinkages between institutional investors and banks as well as between banks and capital markets.

Another conclusion is obvious: the transfer of credit risk from banks to insurance companies links these two financial sectors, strengthening the direct links resulting from the creation of bancassurance groups, and it builds further bridges between banks and financial markets (OECD 2002 and Padoa-Schioppa 2002). This obviously highlights the concern that in a more integrated market where the boundaries between different types of institutions are porous, regulation needs to be structured so as to bring about the most efficient provision of financial services.

Returning to the contribution of Davis, we move on to discussing other macroeconomic consequences. Davis investigates the implications of institutionalisation on the level and maturity structure of saving, capital accumulation, and allocative efficiency. While neither economic theory nor empirical evidence clearly indicate a positive impact on the level of saving, empirical results suggest a shift to long-term assets, which tends to reduce the cost and increase the availability of equity and long-term debt financing to companies, thereby fostering capital accumulation and economic growth. In addition, the author argues that an accelerated growth of institutional investors has potential to strengthen corporate governance and thus the efficiency of firms. Overall, the author's general conclusion is that an institutionalised financial sector raises economic efficiency.

But is this conclusion not, again, in conflict with the BDKL position that financial development matters for the performance of a country, but financial structure does not? We will not attempt to answer this question, but it indicates that the debate about the importance of financial structure for economic development seems to be far from settled. One thing should be clear though: an increasing importance of institutional investors in the mobilisation and allocation of savings does not really fit the bank vs. market dichotomy. It is true that with institutionalisation capital market finance, i.e. equity and debt securities, increasingly replaces traditional bank lending. But it is also true that banks participate in the growth of institutional investment, for instance, through their involvement in the mutual fund industry and mergers or joint ventures with insurance companies. Probably more important, to the extent that institutional investors are active shareholders and/or holders of debt securities, they develop a relationship with firms that may have features of the traditional bank-firm relationship. In fact, in addition to trading a firm's securities, building a relationship with the firm is a key mechanism for improving corporate governance. In sum, the increasing role of institutional investors may be seen, as Davis does, as a move of continental European financial systems towards the Anglo-Saxon paradigm, but it is, at the same time, not necessarily a shift from relationship to arms-length provision of finance.

One reason why a growing role of institutional investors is expected to foster economic growth is the potential for improvements in corporate governance at the level of firms. A

note of caution needs to be added here, however. The hope for better corporate governance of firms presupposes that institutional investors themselves are well governed and act in the interest of their owners and/or beneficiaries. But the task of setting the right incentives for managers and of monitoring their behaviour arises not only at the level of non-financial firms but also at the level of institutional investors and, in fact, it may be even more challenging in the case of institutional investors. This is best illustrated for pension funds. In contrast to the management of firms, managers of pension funds do not face the disciplinary threat of hostile takeovers, for instance. And then, other forms of corporate control, such as pressure from banks and other creditors, are non-existent. Finally, the free-rider problem that discourages small and dispersed shareholders of firms from exercising corporate control applies to pension funds too. What is more, while the presence of large shareholders in public companies may help overcome the free-rider problem, this remedy is not available in the case of pension funds given that they usually have no large shareholders. In sum, the hope that the growing importance of institutional investors will strengthen corporate governance may be misplaced unless, that is, there are mechanisms for monitoring the monitors.

Institutional investors are believed to improve the corporate governance of non-financial firms. But this eludes the problem of corporate governance of institutional investors.

To conclude, institutional investment is on the rise and there is further scope for expansions, notably in continental Europe. Does that put banks on the run?

7. Banks on the run?

To answer the question upfront: despite the growing importance of institutional investors, banks continue to be the dominant actors in European finance, but the transformation of European finance is closely linked with the transformation of the banks themselves and a change in the scope of their activities. According to the textbook definition, a bank collects money in the form of deposits, which are redeemable at face value at short notice, and invests these funds into illiquid, longer maturity loans generating uncertain payoffs. One key characteristic of a bank in such a set-up is that they provide bundled services, comprising credit assessment and monitoring, funding of loans, payments system, and loan and deposit administration. Furthermore, because of differences in the liquidity of assets and liabilities, banks are prone to runs that can translate into systemic problems.

Even to the casual observer it is clear that the textbook view of banks is not perfectly aligned to what banks are currently doing. Over the last twenty years, banks have been transforming at a rapid pace and there is little sign that the pace of change will abate any time soon. Against this background, this section reviews the performance of European banks and sheds light on the process of integration and consolidation in EU banking.

At the start of EMU, Hurst *et al.* (1999) conducted an analysis of euro-area banking and this provides a useful starting point to our discussion. They concluded that the overall picture of the typical euro-area bank at the launch of the euro was that of a bank generating relatively low returns on shareholders' funds with a balance sheet loaded with mostly high quality assets, when compared to Anglo-Saxon banks. While many explanations could potentially explain this situation, the authors hypothesised that this could be the result of an inadequate product mix, riddled by cross-subsidies, a too high and inflexible cost structure, and a possibly distorted competitive environment given the substantial involvement of mutually and publicly controlled banks.

Compared to the situation in the mid-1990s when aggregate return on equity of euro-area banks was below 10 percent, the aggregate profitability of euro-area banks had edged up to about 15 percent by the end of the last decade. While this improvement might be related to the reshaping of banks, an important driver of the recovery in profitability has been the fall in provisions and credit losses at the time of robust expansion of the European economy. While the rise in overall bank profitability towards the end of the last decade is encouraging, the ups and downs of provisioning does not say that much about the longer-term prospects of banks.

The profitability of banks in the eurozone has increased in recent years, but banks need to boost net income to sustain this increase.

A sustained increase in profitability depends more on the evolution of net income and costs than on provisioning. There is little sign that euro-area banks have been able, in aggregate, to lift their income generation power in recent years. Net interest income expressed in percent of equity has continued on a steady downward trend, falling from around 40 percent in the early 1990s to below 30 percent in 2000. Furthermore, its share in total income has fallen markedly. The exact reasons for this can be debated, but one factor that is likely to have played a key role is the increasingly competitive environment facing banks as a result of deregulation and consolidation in the past decade. Growing competition from capital markets has reinforced this process. It is well documented that the share of non-interest income in total income has risen dramatically. However, this positive development owes much to the mediocre development of net interest income. Furthermore, one should note that the growth in non-interest income has been insufficient to fully compensate for the decline in interest income and, as a result, total income expressed in percent of equity has fallen too.

The second channel for sustaining profitability is to reduce costs. Indeed, competition and bank consolidation have generated a wave of cost cutting in the banking sector. The downward trend in cost has largely matched the decline in gross income, leaving the ratio of net income to equity fairly stable. Although the number of banks has come down dramatically as a result of mergers, the decline in the number of bank branches has been relatively moderate.

Naturally, European averages hide substantial variations across countries and banking statistics are no different in this respect. Country differences continue to affect banking performance. This obviously raises the issue of whether the European banking market has become more integrated over time, especially since the introduction of the euro. Since the adoption of the Second European Banking Directive in 1992, any bank properly licensed in one EU country is allowed to provide its services through branches on a cross-border basis without authorisation by the host country. As observed and discussed by Dermine (2003) among others, the Second European Banking Directive has had little impact on the integration of the banking markets. When banks expand their business across borders, they hardly ever use the provisions of the Directive. Instead they set up subsidiaries, subject to host country authorisation and regulation.

Cabral *et al.* (2002) review the state of integration of the banking market in the eurozone. Their analysis distinguishes three broad categories: wholesale banking, capital market and large corporate finance, and retail and small businesses. They find that the unsecured interbank loan and deposit market is completely integrated, but that there remains some fragmentation in the repo market, mainly because of clearing and settlement obstacles.

For capital market activities and relations with large corporates, the authors find that fragmentation across eurozone countries has made ways for a fairly well integrated financial market. Further integration is prevented by the imperfectly integrated clearing and settlement infrastructure. In corporate lending, information barriers continue to support a home bias and thus limit integration. The area where the integration process has been the slowest is retail banking. More homogeneous macroeconomic fundamentals, in terms of inflation and interest rate levels, have led to a convergence of retail loan and deposits rates. However, there remain significant differences across countries in bank intermediation margins, suggesting that market segmentation remains strong.

Further integration of the banking market and improvement in profitability of European banks is very likely to come with bank consolidation. Consolidation can best be defined as a reshaping of the industry structure, either through mergers and acquisitions (M&As) or through changes in the market share of existing institutions (including exit of weaker ones). Of these, M&As is the predominant form of consolidation in the financial industry. Before examining how the banking industry is consolidating in the eurozone, let us first consider how mergers and acquisitions can bring economic benefits in any industry. There are several channels.

A first potential source of economic benefits could be derived from economies of scale, that is to say that when all factor inputs are increased proportionally the volume of output increases more than proportionally. In such circumstances, larger institutions enjoy a competitive edge as their size allows them to produce at lower unit cost. In practice, most of the available evidence suggests that economies of scale are quickly exhausted and thus does not support M&As to form very large banks. It should be noted, however, that more recent studies indicate that the point at which scale economies disappear has been increasing over time, possibly a consequence of the high cost of IT investment.

A second type of benefit may derive from economies of scope: for example through synergies where the banking firm can leverage the revenues from its traditional products with related products that can be sold to existing customers. The development of bancassurance strategies is a clear sign of the belief in scope economies. However, the available empirical evidence does not provide much support for the view that economies of scope are significant. It should, however, be recognised that economies of scope are inherently difficult to measure.

A third way of generating benefits would be through operating efficiency gains if a bank is able to shift down its cost curve by moving to best practice in combining inputs. In any industry at any one time, not all firms are as efficient as the best performer, and Wagenvoort and Schure (1999) found that European banks could achieve efficiency gains in the order of 15-20 percent, with substantial variation across countries. This suggests that there is tremendous scope for increasing efficiency through mergers if more efficient operators are able to transfer their better operating procedures to less efficient banks. It should be observed, however, that a non-negligible share of operating cost is made of labour cost and that reduction in labour cost can be hard to obtain in the short-term.

A fourth way to improve the economics of banking is to lower risk for a given level of nominal profitability, in other words to obtain a higher risk-adjusted profitability. This

There is considerable scope for raising the operating efficiency of EU banks.

essentially means altering the structure of assets to improve the risk-diversification potential of the business or to alter the geographic spread of activities to reach a better diversification level.

A final channel through which mergers may benefit (merging) banks is through an increase in market power. While this is certainly a sensible strategy seen from an individual banking institution, even if the institution would certainly not want to boast about this, it is not a desirable approach from a wider economic perspective.

While these value-maximising motives are likely to be present, there may also be other motives for mergers and acquisitions in banking that are equally important. This could include “empire building” by bank managers who value large size in itself for reasons of prestige, or because they want to make the institution large enough so that it is “too-big-to-fail”, thus increasing the chance that the government would come to its rescue in times of trouble.

Let us now consider the actual experience of banking consolidation in the eurozone. According to ECB data, the number of credit institutions in the eurozone has declined from 11,130 in 1990 to 8,961 in 1995 and 7,109 in mid-2002. The pattern of a steadily declining number of institutions is visible in most countries. The number of credit institutions does not tell much, however, about the density of banking services provided in each country, nor does it say much about whether possible overbanking is been rectified. The sharp decline in the number of credit institutions has in many countries not been accompanied by a similar decline in the number of bank branches or bank staff. Two different country groupings are clearly distinguishable in this context. The first group includes Scandinavian and the Benelux countries, which have reduced not only the number of institutions, but also the number of branches and employees. This group thus appears to have taken the lead in bank consolidation and has also likely enjoyed substantial efficiency gains from this process. In fact, in almost all countries the number of branches has come down faster than the number of employees. This means that there has not only been an across-the-board downsizing, but also structural shifts in the product mix of banks, for example away from traditional intermediation towards non-interest income. Alternatively, it could be that the downsizing process is slowed by the difficulties and constraints in shedding labour.

An important driver of bank consolidation in many EU countries has been the ongoing retreat from the sector by governments.

It is important to note that one key driving force behind bank sector consolidation in nearly all countries is the ongoing retreat from the sector by governments, be it as owners or guarantors of banks. Naturally, the withdrawal of the public sector as an owner has not proceeded at the same pace in all countries and this could explain why the consolidation wave has proceeded at an uneven pace across countries.

Cross-border consolidation has been rather limited and when it occurred it took place in relatively homogeneous regions such as Benelux and Scandinavia. In theory, most factors supporting national consolidation could also justify cross-border consolidation. Why is it that domestic consolidation has been the rule and cross-border consolidation the exception? This is discussed in detail by Dermine (2003). The benefits from domestic consolidation are likely to be easier and faster to obtain. Indeed, the potential for short-term cost reductions is higher within national borders. In addition, there is also an in-built tendency to favour “in-market” consolidation as domestic players can avoid increase in

competition that would result from foreign firms taking over one of their competitors. However, once the process of national consolidation has run its course, a wave of cross border consolidation is the logical next step. But will it happen in the near term?

One reason why it may not is that there remains a range of impediments that are unlikely to disappear any time soon. Persistent tax and legal differences, like in bankruptcy proceedings, efficiency of court proceedings, as well as cultural and language differences are making it difficult to reap economies of scale and scope in cross-border consolidation. One should note for example that even in markets that have seen some cross-border consolidation, there is seldom a retail-banking product that can be sold in exactly the same form in two neighbouring countries.

In addition, one should also note that in several cases, some of them well publicised, national authorities have been reluctant to accept takeover of domestic banks by foreign institutions. Furthermore, it should be noted that even if the cross-border consolidation of banking in the EU has been very moderate so far, this does not mean that EU banks have not ventured abroad. Indeed, throughout the 1990s there has been a considerable investment by EU banks in other markets in Latin America, Central and Eastern Europe and the United States. It might well be that the overbanked EU market was not seen as attractive enough compared to these alternatives.

It is in the retail and small-business segment that most of the fragmentation in European banking lies. Would cross-border consolidation be the answer to this fragmentation? Rosengren (2003) compares the European experience with that of the United States. For several decades the United States had strong restrictions on the provisions of interstate banking services. These restrictions have been completely abolished recently. Yet, despite the dismantling of these restrictions and the absence of most of the cultural barriers that exist in Europe, it is still striking to observe that in most of the main economic regions of the United States the provision of banking services is usually controlled by regional-based institutions and that none of these institutions has a national franchise. It could well be that the time since the dismantling of the restriction to interstate provision of banking services has been too short for the full adjustment to have taken place by now. But at this moment, one might as well conclude that the US evidence does not suggest that cross-border banking consolidation will necessarily happen on a massive scale in the retail and SME sector. In these sectors, banks are essentially dealing with soft (private) information that cannot be transmitted easily. In such a context, Stein (2002) shows that there is a natural tendency for small banks to focus on local markets and for large banks to focus on business covering a wider geographic area but is also based on hard (public) information.

Retail and small-business lending in the EU continues to be fragmented, and integration in this banking segment is likely to be slow and limited.

There is a mitigating factor, however. Regionally based and possibly national institutions might not achieve adequate risk diversification. This obviously raises the issue of what is the required geographic coverage to achieve an appropriate diversification of risk. It is difficult to answer this question with any precision. It is plausible that before EMU there was enough scope for diversification within national borders and thus that cross-border consolidation was not going to reduce risk. Even if one believes that this is correct, it is also true that adequate diversification prior to EMU might not be adequate any longer with EMU. Indeed, the risks borne by banks are ultimately related to the macroeconomic environment. When countries had their own national currency, monetary policy could

offset some of the (country-specific) macro shocks and this certainly reduced the risk embedded in the books of the banking industry. With EMU, the role of monetary policy as a (country-specific) shock absorber has been downgraded, if not eliminated altogether. Thus, the risks borne by regionally or nationally focused banks have, *ceteris paribus*, increased with EMU. Cross-border consolidation could be one way to restore adequate risk diversification. But this is not the only way. Indeed, appropriate use of credit derivatives would probably lead to the same outcome in a more economical way.

Contrary to most other industries where the conglomerate approach has fallen out of fashion, the concept has been very popular in the financial industry.

The choice confronting financial institutions is not only an issue of national vs. cross-border consolidation. Recent years have also witnessed a dramatic expansion of a range of activities performed by many financial institutions: investment banking, private banking, asset management, and insurance. Contrary to most other industries where the conglomerate approach has fallen out of fashion, the concept has been very popular in the financial industry. National Bank of Belgium (2002) reviews this trend. It is certainly too early to judge whether this conglomerate approach or scope expansion delivers the expected benefits. It is probably fair to say that requirements to reap the benefits of synergies across very different business lines are not any less demanding than those necessary to succeed in cross-border consolidation.

Arnoud Boot offers an interesting perspective on the issue. He starts from the review of the economics of consolidation that essentially supports that scale economies are quickly exhausted and that it is very difficult to demonstrate the existence of economies of scope. Yet, it is a fact of life that banks have been broadening their activities in the last few years. One reason could be that advances in information technology make it easier to manage conglomerates than before. Alternatively, it could be that this evolution is another episode of "empire building" by entrenched management. Boot proposes an alternative explanation. He observes that the world of banking and finance has been changing rapidly in the last two decades and that the outcome of this process of change is unknown. Thus, there is tremendous uncertainty about how banking will shape up in the future and about the relative future strength of each institution. In such a set-up, broadening the range of activities of an institution is an appropriate reaction to strategic uncertainty and serves two purposes. On the one hand, it allows presence in a wide range of business lines, thus increasing the probability of being in the few that will eventually succeed. On the other hand, it is also a way for banks to gain better information about their relative strengths and weaknesses. However, it should be observed that this situation is only a temporary phenomenon and the scope-driven consolidation wave should eventually make way for much more focused institutions.

Boot's perspective looks extremely appealing when one compares the banking industry with other industries. It is indeed striking that the production process in banking is considerably more vertically integrated than in other sectors of the economy. As said above, banks provide bundled products. It is natural to ask whether the production chain of banks could not be broken up in the future.

It is not clear that all the various functions of banks (i.e. credit assessment and monitoring, funding of loans, payments system, and loan and deposit administration, etc.) have to be performed within the same institution. On the contrary, one could argue that the bundled provision of these services does not constitute an efficient allocation of resources. "Where

does the comparative advantage of banks really lie?" is the question to be answered. The development of securitisation and credit derivatives markets is a clear example of the blurring demarcation line between banking intermediation and capital markets. These two techniques essentially offer banks ways to outsource/redistribute part of the risks to parties that are better placed to bear them, and to allow banks to specialise where they have a comparative advantage: collecting and processing information and monitoring borrowers.

Irrespective of whether there will be a more fundamental reorganisation of banking and finance in the medium term as suggested by Boot, concentration and competition are issues that certainly relate to the recent consolidation. According to ECB (2002), concentration has increased considerably in nearly all national markets. Because of its particular nature banking supervisors have usually tended to privilege stability over efficiency. Vives (2002) reviews whether competition considerations should feature more prominently in banking public policy. His conclusions are that it is only in the retail and SME segment of the banking business that market power is a serious concern and where active competition policy is called for. This leads to the question of what this all implies for the financing of SMEs.

8. Small and medium-sized enterprises in a squeeze?

There are concerns that the transformation of finance in Europe, in particular the changes sweeping through the banking sector, adversely affect the supply of finance to small and medium-sized enterprises (SMEs). Our companion edition (*EIB Papers* Volume 8, Number 2) examines SME finance in the context of Europe's changing financial landscape, featuring contributions by **Rien Wagenvoort** (EIB), **Ulrich Hommel** and **Hilmar Schneider** (European Business School), **Michel Dietsch** (University of Strasbourg), and **Luigi Guiso** (University of Sassari). At the risk of generalising a little, three common findings of the contributions - which cover different countries (France, Germany, and Italy) - are worth mentioning here. First, perhaps in contrast to conventional wisdom, small businesses in all countries maintain a relationship with more than one bank (multiple banking). Second, there is no evidence that bank consolidation has reduced the supply of finance to SMEs. On the contrary, in France, SME financing seems to have improved with consolidation. Third, while the current economic downturn has made banks more reluctant to lend, credit rationing of SMEs does not seem to be a widespread phenomenon. Having said this, credit rationing occurs and is more likely, the smaller the firm is. What is more, Wagenvoort finds signs of financial market imperfections in the sense that the growth of small businesses, in comparison to large firms, depends more on internal finance, implying that small firms cannot to the same extent as large firms compensate a possible shortage of internal funds by external finance.

All in all, the outlook for SME finance in Europe's changing financial landscape is not as gloomy as often feared - on the contrary. One reason for this is that new information and communication technologies contribute, at a lower cost, to reducing information asymmetries between lenders and borrowers, thereby making SME lending more attractive. Another reason is that partly due to advances in information technology new banking methods emerge that allow banks to price their resources more effectively. Moreover, the use of credit risk transfer mechanisms (such as the securitisation of SME

Concerns that the transformation of finance in Europe will adversely affect SME finance are exaggerated. In fact, the outlook for SME finance is positive.

loans) is spreading, enabling banks to focus on comparative-advantage activities, notably credit risk assessment, loan origination, and credit risk monitoring - all activities crucial for the provision of finance to SMEs. And then, equity capital for SMEs should become increasingly available through the development of capital markets and venture capital finance. Finally, the Second European Banking Directive of the EU aims at boosting competition between banks, thereby improving the terms and conditions of bank finance, including those supplied to SMEs. Overall, while the transformation of Europe's finance will not be frictionless, we are convinced that SMEs will not be left out in the cold.

9. Conclusion

Europe's financial landscape is changing in many ways and for a variety of reasons. One thing is clear though: like the constants of nature, the functions that financial systems fulfil have not altered at all, and the changes that we observe relate to how these functions are carried out and by whom.

Physicists have observed that if the constants of nature were not constant, the Universe we live in would not be what it is (Barrow 2002) and there would probably be no creatures to ponder about its creation and its future. Something similar applies to the earthly matter of finance. If financial systems were not functioning as they do in the industrial countries, these countries would most likely not be industrialised and the bulk of its citizens would literally be struggling to make a living as, in fact, the majority of people in the developing world is.

Promoting competition in an environment where property rights are effectively protected is the key to prosperity.

But what determines whether financial systems and, by extension, whole economies function or not? It seems that competition in an environment where property rights are protected is the essential recipe for well-functioning financial and economic systems. In this respect, Europe - undoubtedly already fairly developed compared to most parts of the world - is in the process of spicing up the recipe. Two main ingredients are being added. One is the stimulation of competition across EU countries through the creation of the Single Market for financial services and the introduction of the euro. The other is the promotion of competition between different segments of the financial system, implying that the boundaries between financial markets and banking are becoming increasingly porous. Economic policies play a crucial role in fostering both dimensions of competition. But it is clear that progress in information technology and the ingenuity of financial system participants are equally important.

From the perspective of market players all this means that cards are being reshuffled. As Richard Hooker reminded us at the beginning of this overview, this may be inconvenient for some. But the bright side of it is that even after cards have been reshuffled everybody still has a role to play.

References

- Allen, F. and Gale, D. (2000). *Comparing financial systems*. MIT Press, Cambridge (Mass.) and London.
- Arestis, P. and Demetriades, P. (1997). "Financial development and economic growth: assessing the evidence". *Economic Journal*, (107), pp.773-799.
- Barr, N. (2000). "Reforming pensions: myths, truths, and policy choices". IMF Working Paper No. 00/139.
- Barrow, J.D. (2002). *The constants of nature*. Random House, London.
- BIS (2001). "The changing shape of fixed income markets". BIS Working Paper No.104, Basel.
- BIS (2003). "Credit risk transfer - Report submitted by the Working Group established by the Committee on the Global Financial System", Basel.
- Brookes, M. (1999). "The impact of EMU on portfolio management". *EIB Papers*, (4:1), pp. 19-33.
- Cabral, I., Dierick, F. and Vesala, J. (2002). "Banking integration in the euro area". European Central Bank Occasional Paper No. 6.
- Demirgüç-Kunt, A. and Levine, R. (2001). "Financial structure and economic growth", in Demirgüç-Kunt, A. and Levine, R. (eds.), *Financial structure and economic growth: a cross-country comparison of banks, markets, and development*. MIT Press, Cambridge (Mass.) and London.
- Dermine, J. (2003). "European banking: past, present and future", in Gaspar, V., Hartmann, P. and Sleijpen, O. (eds.), *The transformation of the European financial system; Proceedings of the 2nd ECB central banking conference*. European Central Bank, Frankfurt.
- ECB (2002). *Report on financial structures*. European Central Bank, Frankfurt.
- ECB (2002). *Structural analysis of the EU banking sector: year 2001*. European Central Bank, Frankfurt.
- European Commission (2001). "Budgetary challenges posed by ageing populations", Report of the working group on ageing populations to the Economic Policy Committee, Brussels.
- European Commission (2002). *The EU economy: 2002 review*. European Commission, Brussels.
- Feldstein, M.S. (1974). "Social security, induced retirement and aggregate capital accumulation". *Journal of Political Economy*, (82), pp. 902-956.
- Giannetti, M., Guiso, L., Jappelli, T., Padula, M. and Pagano, M. (2002). "Financial market integration, corporate financing and economic growth". European Commission DG ECFIN Economic Paper No 179.
- Gersovitz, M. (1984). "Banks' international lending decisions", in Smith, G. W. and Cuddington, J. T. (eds.). *International debt and the developing countries*. World Bank, Washington, D.C.
- Hartmann, P., Maddaloni, A. and Manganelli, S. (2003). "The Euro area financial system: structure, integration and policy initiatives". European Central Bank Working Paper No 230.
- Heinemann, F. and Jopp, M. (2002). "The benefits of a working European retail market for financial services"; Report to the European financial services Round Table. Institut für Europäische Politik, Berlin.
- Hurst, C., Perée, E. and Fischbach, M. (1999). "On the road to wonderland? Bank restructuring after EMU". *EIB Papers*, (4:1), pp. 83-103.
- London Economics (2002). "Quantification of the macro-economic impact of integration of EU financial markets"; Final report to the European Commission DG for the Internal Market, November 2002.
- Mc Morrow, K. and Roeger, W. (2002). "EU pension reform: An overview of the debate and an empirical assessment of the main policy reform options". European Commission DG ECFIN Economic Paper No 162, Brussels.

- Merton, R. C. and Bodie, Z. (1995). "A conceptual framework for analysing the financial environment", in Crane, D.B. et al. (eds.), *The global financial system, a functional perspective*. Harvard Business School Press, Harvard, USA.
- National Bank of Belgium (2002). "Financial conglomerates". *Financial Stability Review*, (1), pp. 61-78.
- OECD (2002). *Financial Market Trends*, (82), June 2002, Paris.
- OECD (2003). *Financial Market Trends*, (84), March 2003, Paris.
- Padoa-Schioppa, T. (2002). "Securities and banking: bridges and walls". *BNL Quarterly Review*, (222), pp. 241-261.
- Perée, E. and Steinherr, A. (2001). "The euro and capital market: a new era". *World Economy*, (24:10), pp. 1295-1308.
- Persaud, A. (2002). "Where have all the risks gone?" Mercer Memorial lecture, November 14, 2002.
- Rajan, R.G. and Zingales, L. (2003). *Saving capitalism from the capitalists*, Random House Business Books, London.
- Rosengren, R. (2003). "Comment on European banking: past, present and future", in Gaspar, V., Hartmann, P. and Sleijpen, O. (eds.). *The transformation of the European financial system; Proceedings of the 2nd ECB central banking conference*, European Central Bank, Frankfurt.
- Stein, J.C. (2002). "Information production and capital allocation: decentralized versus hierarchical firms". *Journal of Finance*, (57:5), pp. 1891-1921
- The Economist (2003). "How's your pension doing?" 8 May 2003.
- The Economist (2003). "Broke: fixing America's private pension plans". 23 January 2003.
- Vives, X. (2001). "Competition in the changing world of banking". *Oxford Review of Economic Policy*, (17:4), pp. 535-547.
- Wagenvoort, R. and Schure, P. (1999). "Who are Europe's efficient bankers". *EIB Papers*, (4:1), pp.105-126.