Regulation of the European securities markets

The Financial Services Action Plan (FSAP) and its implementation have influenced the debate about the European single market for financial services since the Plan was adopted in May 1999. Containing a multitude of individual measures, the European Union's Action Plan is the most ambitious initiative for integrating capital markets and achieving a single market for financial services in the EU to date. The discussions have been broadly based and – triggered by the report of the Committee of Wise Men – have also covered legislative and institutional aspects. Whilst almost all of the FSAP's 42 measures have been completed as Directives and Communications, implementation in national legal systems is still outstanding in many areas. This gives cause to consider the regulation of the European securities markets from a central bank's point of view and to address three focal aspects of the FSAP: the new Directive on markets in financial instruments, the Directive on financial collateral arrangements and the Commission Communication on Clearing and Settlement. In a separate section, the shift of focus towards greater capital market orientation in connection with the FSAP will also be considered in the light of its impact on corporate financing and monetary policy.

The central bank and financial infrastructure

Besides responsibility for monetary policy, which is at the centre of the public's perception, a central bank's key tasks have also always included providing a financial infrastructure and ensuring financial system stability – even though these tasks are not often noted by the public. A central bank's stability policy responsibility, therefore, has both a macroeconomic – ie monetary and foreign exchange policy – and a microeconomic – ie financial – dimension. From such a functional perspective, it stands to reason that central banks concern themselves intensively with issues relating to the development of financial markets. In doing so, they focus not only on the supervision and regulation of the financial markets but also on the financial infrastructure. The central bank's involvement in this area is due to the fact that structural changes within the financial system can also have a direct effect on the transmission of monetary impulses.

The following evaluation of the more intensive integration of the European financial markets as envisaged by the FSAP will be carried out in the light of this fact. Three focal aspects of the FSAP, which are in a way illustrative of the entire project whilst simultaneously being in accordance with its essential significance, are the new Directive on markets in financial instruments, the Directive on financial collateral arrangements and the Commission Communication on Clearing and Settlement.

The underlying aim of the Action Plan is to enhance efficiency in bringing together savers accumulating financial assets and investors in real capital. The expected outcome is that investors will obtain higher risk-adjusted returns, enterprises will gain easier access to sources of financing and, all in all, financial resources will be allocated more efficiently. As a result, growth and employment levels should rise. This is why the FSAP is one of the cornerstones of the Lisbon Process, which was started by the EU at the beginning of 2000.

Single market for financial services

EU financial market integration ...

A single market for financial services is an element of the economic convergence of Europe. Financial market integration is characterised by the reciprocal opening-up of the national financial markets and free movement of capital, which may also lead to the structural convergence of the national financial sectors, but is hardly likely to result in total homogeneity. Such extensive structural congruence is, however, not a condition for successful integration.[1]

... brings about overall welfare gains ...

A key feature of integrated financial markets is that the prices (interest rates, fees etc) of similar financial products converge via the mechanics of the market if the economic agents are able to make decisions without being restricted to their home countries by financial market regulation. This leads to im-

1 European Central Bank, Measuring financial integration in the euro area, *ECB Occasional Paper No 14*, May 2004, pp 6-10.

proved market liquidity and capital allocation in the entire economic area, which may result in lower capital procurement costs for enterprises and more attractive investment options for households.

... even in not fully integrated markets

Fully integrated markets are predicated on the same information being available to all market participants and on pricing depending solely on the structure of the financial instrument and not, for example, on the place of issue or custody. In reality, such full integration of previously segmented markets is unlikely to occur on financial markets as, apart from incomplete information, "soft" factors based on economic agents' preference for domestic instruments – owing to eg nationality, traditions and language – are also always important with regard to investment and financing decisions.

Uniform structures and harmonised legal bases ...

The single currency, internationally functioning payment and securities settlement infrastructures and the harmonisation of legal and tax provisions are essential preconditions for the development of integrated financial markets in Europe. Nevertheless, price dispersions will continue to exist. One reason for this is that many investors are of the opinion that information can be better assessed within a narrow, regional radius. This stance leads to an overweighting of regional assets, ie a regional bias. This is compounded by the differences between ex ante expected risks and de facto realised risks, which may also lead to a deviation from the law of one price, including in a regional dimension.

... including in the area of taxation

The Lisbon European Council set itself the deadline of 2005 for the legal integration of the single market for financial services. The Stockholm European Council in March 2001 brought forward this deadline to the end of 2003 for securities legislation. As far as the elimination of tax barriers and distortions is concerned, the intended application of the Directive on taxation of savings income in the form of interest payments[2] as of 1 July 2005 will be a first step on the path to EU financial market integration in the area of taxation.

Regulation of the securities markets

Furthermore, financial markets – in particular securities markets – require a stable regulatory framework for the regulation and supervision of the markets and their participants. In this respect, investor protection and consumer protection also contribute to the efficient allocation of capital.

Minimal harmonisation ...

The legal and regulatory integration of the EU securities markets is a relatively difficult undertaking in view of the high level of national securities regulation. The principle of minimal harmonisation with mutual recognition (European passport, country of origin principle) takes account of this and avoids a duplication of regulations and supervision.

... vis-à-vis full harmonisation

However, minimal harmonisation means that cross-border financial market participants have to deal with different regulations. They are therefore increasingly pressing for a change from minimal harmonisation to full harmonisation. In the case of full harmonisation, national legislators (including in the

2 2003/48/EC.

International composition of domestic individuals' securities portfolios *

Data in %

Item	Total	Direct invest-ments (shares, bonds)	Domes-tic mutual funds open to the general public 1
End-2002			
Domestic-issued securities	63	81	34
Foreign-issued securities	37	19	66
End-1987			
Domestic-issued securities	79	81	61
Foreign-issued securities	21	19	39

* Portfolios held at domestic credit institutions; market values. — 1 Composition of assets in domestic mutual funds open to the general public.

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country of origin) would no longer have any scope to lay down regulations beyond the EU's provisions. As most of the EU member states wish to retain this flexibility, the principle of minimal harmonisation will continue to be applied in most cases, although detailed directives with extensive comitology provisos[3] already come very close to full harmonisation.

Progress made in integration in the money market ...

Financial market integration in the EU has made most progress in the uncollateralised money market owing to the Eurosystem's single monetary policy.[4] Here, the banks' rate information provided for EONIA[5] usually varies by only a few basis points. However, in the collateralised money market, which is now more important than the uncollateralised money market, integration is still quite uneven owing, above all, to differences in collateral instruments and practices as well as problems in the transfer of paper and tax aspects. The last two issues also apply to the securitised money market.

... in the bond markets ...

In the bond markets, there has been an increase in the homogeneity of portfolio compositions and, with that, of developments in yields. Euro-area government bonds, in particular, provide evidence of this.[6] The introduction of the euro has permanently furthered cross-border diversification.[7] The adjacent table combines bonds, shares and mutual funds open to the general public to show how the percentage of foreign-issued securities in individuals' portfolios has increased.

... and in the equity markets

In the equity markets, it is particularly evident that domestic orientation has been increasingly superseded by a pan-European investment outlook, especially amongst institutional investors.[8] This development was already apparent before the introduction of the single currency. However, the percentage of EU-issued securities in domestic individuals' portfolios is still lower than the value arising from the market capitalisation of German shares in comparison with European shares. Nevertheless, complete convergence with the European market portfolio is not to be expected for reasons relating to information costs as mentioned earlier.

3 See the Directive on markets in financial instruments (FIMD) 2004/39/EC.
4 See European Central Bank, *Euro Money Market Study 2002*, November 2003.
5 Euro Over Night Index Average.
6 See explanations on page 37.
7 See European Central Bank, *The Euro Bond Market*, July 2001.
8 See European Central Bank, *The Euro Equity Markets*, August 2001.

The Financial Services Action Plan

Regulation of securities markets

European provisions for regulating securities markets already existed before the FSAP came into being. Initial efforts to harmonise the single market for financial services focused on classical (universal) banking operations and supervision of the same.[9] In addition, however, stock exchange-specific directives already existed at an early stage.[10] The Insider Dealing Directive[11] was adopted in parallel with the deregulation and liberalisation of the securities markets,[12] which started in the mid-1980s. This Directive focused on fair play in the issue of and trade in securitised payment claims. It can be proven that the cost of raising equity capital on the equity market is lower in markets with effective insider trading laws.[13]

The Investment Services Directive of 1993[14] – which gave investment firms a Community-wide licence in the form of the European passport – and the Capital Adequacy Directive (CAD)[15] were even more important for the formulation of national securities legislation. From the point of view of the countries with a predominantly universal banking sys-

9 See the First Banking Coordination Directive (77/780/EEC) and the Second Banking Coordination Directive (89/646/EEC).
10 See the Directive on stock exchange listing (79/279/EEC) and the Directive on prospectuses (80/390/EEC).
11 89/592/EEC.
12 For example, the "Big Bang" on the London Stock Exchange (1986), the solution to the difference plea problem in the case of futures contracts under German law (1989) and the Bundesbank's statement on DM issues (1992).
13 U Bhattacharya and H Daouk, The World Price of Insider Trading, *Journal of Finance*, February 2002, pp 75-108.
14 93/22/EEC.
15 Directive on the capital adequacy of investments firms and credit institutions (93/6/EEC).

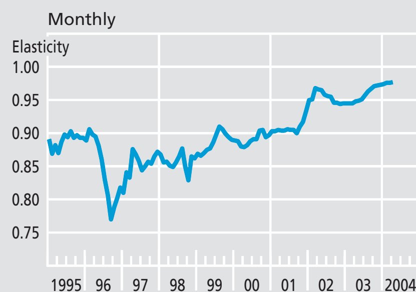
Degree of integration in the market for government bonds in the euro area

The degree of financial market integration may be seen from the market prices. The more the market prices for comparable financial instruments converge and/or the more closely market prices are correlated, the more integrated financial markets are said to be. Factors relevant to the market as a whole should therefore impact in the same way on similar financial instruments even if individual factors which are relevant to valuation, such as differing credit ratings, do not always allow price levels to converge entirely.

How far the euro-area markets for government bonds are already integrated is to be illustrated by the reaction of European government bonds to price fluctuations of selected benchmark bonds. The chart below shows the average regression coefficients, which measure the reaction of European government bonds to a 1% price change in German government bonds. The estimates relate to national price indices for European government bonds with a maturity of seven to ten years. The regression coefficients are the result of estimates using weekly data and a moving two-year period and, owing to the way the estimation approach is designed, may be interpreted directly as elasticity.

Average elasticity of European government bonds with respect to German government bonds

Monthly



Source: Bloomberg and Bundesbank calculations.

The closer the coefficient is to 1, the more closely the European government bonds respond to movements in the price of German benchmark bonds. The elasticity of European government bonds to changes in the prices of German benchmark bonds is currently 0.98. Looking at the price side, the euro-area market for government bonds has therefore become markedly more integrated since the launch of monetary union.

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tem, the CAD was intended, above all, to create a level playing field, ie to ensure that the operations of British investment houses (and American ones whose European domicile is in London) are also subject to a capital adequacy obligation comparable with that applicable to commercial banks.

Core principles of the FSAP

The FSAP was presented in May 1999 following a Commission consultation process involving the governments of the member states. It is divided into four sections: professional investors, private investors, the strengthening of supervisory structures and general, in particular fiscal conditions for the integration of the financial markets.[16] Subsequent amendments increased the number of measures to 42. In order to achieve financial market integration, the FSAP focuses on three core principles with regard to the regulation of securities markets. Firstly, EU suppliers are to be granted equal access to all EU securities markets. Secondly, for this purpose, the member states recognise the rules and supervision of the other member states (home country control). Finally, in order to ensure that participants can compare quality and costs effectively, maximum transparency is to be established.

Lamfalussy procedure

As the extensive FSAP programme was to be rapidly implemented, the Commission sought ways to speed up the legislative process whilst at the same time taking recourse to the resources available in the member states' authorities. The Committee of Wise Men under the chairmanship of Baron Lamfalussy was established with the mandate of drawing up appropriate proposals.[17] As the Lamfalussy procedure was likely to infringe the European Parliament's rights, it agreed to the procedure only after the Commission had promised to consider any fundamental concerns on the part of the Parliament in the comitology procedure. It is not yet possible to assess conclusively whether the Lamfalussy procedure, which has been applied in the case of four directives since 2001, has improved the legislative process and ensured common and rigorous implementation and enforcement. However, it must be stressed that the material appropriateness of directives and regulations takes precedence over the speed of introduction. On 31 March 2004, the European Parliament approved a proposal for a directive extending the Lamfalussy procedure to the fields of banking, insurance and investment funds.

Directive on markets in financial instruments

The Investment Services Directive of 1993 already applied the term "regulated market"

16 Communication from the Commission (COM/99/232) of 11 May 1999.
17 Levels one and two of the Lamfalussy procedure comprise the actual legislative process. At the first level, the EU Council and Parliament – on the basis of proposals from the Commission – adopt framework directives and regulations, which sometimes still have to be given definite shape. At the second level, the Commission issues detailed technical implementing measures in a "comitology procedure", during which it is assisted by two committees: the European Securities Committee (ESC) which, in its comitology function, seeks the member states' views, and the Committee of European Securities Regulators (CESR), which advises the Commission on the preparation of implementing measures. The third level involves common implementation and application in the member states, above all through consultation in CESR. Compliance with EU law is to be checked and enforced consistently at the fourth level. Extensive consultations are to be held with market participants before and during the entire procedure.

Investment Services Directive and Directive on markets in financial instruments

and contained provisions regarding transparency. However, it hardly interfered with the structures of the national securities markets. Its successor – the recently adopted Directive on markets in financial instruments (FIMD)[18] – will now also create European stock exchange legislation with the aim of establishing fair competitive conditions between regulated markets, ie stock exchanges, multilateral trading facilities (MTF) and banks' proprietary trading systems. This means, above all, that the concentration rule will have to be abolished in several national legal systems. Instead, stock exchange laws can in future contain provisions allowing banks to execute client orders in-house outside a stock exchange or an MTF only with the clients' consent.

Well-functioning stock exchange

The functions of securities trading are to set prices for securities and to provide transformation services with regard to the lot size, maturity, risks and liquidity of securities. The microstructure of the markets is a key factor in price aggregation. In order to guarantee depth, breadth and robustness – ie tight spreads, a sufficient volume of orders and price continuity – the market has to be organised in such a way as to foster liquidity and transparency. The public auction market has traditionally been the venue for this. It is better able to fulfil these tasks if more participants route their orders to the stock exchange.[19]

In the debate about amending the Investment Services Directive, it was argued that stock exchanges should no longer be given preferential legal treatment over MTFs and banks' proprietary trading systems as all three systems are profit-oriented.

However, this view should be qualified by the fact that stock exchanges ensure ease and breadth of access, liquidity, investor protection and confidence in pricing in a more direct manner than competing trading systems. Although it may be true that the desire for more competition or regard for special client wishes (eg immediate execution of an order, after-hours trading) are reasons against stock exchange monopolies, the increase in the significance of OTC trading platforms which is to be expected in line with their legal status enhancement could, however, lead to a certain fragmentation of liquidity with a corresponding impact on the pricing of securities and the allocation function of the capital market.

Internalisation, pre-trade transparency and the obligation to contract

Modern technologies have been making further ways of bringing together supply and demand in securities attractive for a number of years. The problem facing the European institutions therefore concerned the organisation of competition between the various transaction services providers as well as the resultant consequences for the efficiency and stability of the financial markets. The internalisation provisions contained in the proposed directive

18 2004/39/EC, Official Journal L 145 of 30 April 2004, pp 1-44. The new title was chosen by way of a Council Common Position. The proposal from the Commission bore the title "Directive on investment services and regulated markets", which actually corresponded more closely to the content of the Directive.
19 Regarding the problem of internalisation (= in-house execution of client orders against bank-owned securities holdings or by acting as a counterparty to a transaction), see also E Theissen, Internalisierung und Marktqualität: Was bringt Xetra Best?, *Kredit und Kapital*, 4/2002, pp 550-571.

published in November 2002 were particularly disputed. The Parliament and the Council have now found a compromise regarding pre-trade transparency and the obligation to contract[20] which improves price competition and investor protection.

The Directive on financial collateral arrangements

The aim of the Directive on financial collateral arrangements[21] – following on from the Settlement Finality Directive of 1998 – was primarily to eliminate those substantive legal differences in civil and insolvency law which impede cross-border securities transactions.

Legal differences in provision and recovery

Prime examples of this are the complex formal requirements for the provision of collateral assets which exist in some legal systems. The same applies to recovery: judicial authorisations, waiting periods and so on have to be adhered to, but stand in the way of the timely recovery of collateral assets at the market price.

Title transfer structures have been widely recognised and used in Germany for collateralisation purposes for a long time. However, they have hardly gained acceptance in the legal systems of its neighbouring countries.[22]

The insolvency laws of some member states likewise make it more difficult to recover collateral as they recognise neither the right to offset claims in insolvency nor the right to separate satisfaction. For example, separate satisfaction is generally unheard of after the initiation of proceedings in countries with a "Napoleonic" legal system.[23] By contrast, both the right to offset claims in insolvency and to separate satisfaction have been generally recognised under German insolvency law since the end of the 19th century. The provisions relating thereto have also remained largely unchanged in the new Insolvency Code which came into force on 1 January 1999.[24]

EU-wide introduction of transfer of title for collateralisation purposes

Hence, the Directive on financial collateral arrangements introduced the concept of a transfer of title for collateralisation purposes throughout the EU for the first time. Furthermore, it established the principle of informal provision and (non-state) self-help in the realisation of collateral for all member states. Finally, it introduced the right to offset claims in

20 According to this compromise, systematic internalisers in listed liquid shares are to be obliged to make public firm (bid and/or offer) prices. In the case of illiquid shares, prices must be disclosed to clients only upon request. These obligations apply to transactions up to a standard market size, which depends on the turnover size category of the relevant share. The publicly quoted price may not be improved for retail investors. However, orders from professional investors can be executed at better prices than those publicly quoted if the order in question is larger than that of a retail client. Systematic internalisers are allowed to decide – on the basis of their business policy – to which investors they will give access to their prices. Examples of business policy criteria are creditworthiness, counterparty risk and final settlement aspects. Moreover, an internaliser is allowed to limit the number of transactions either from the same client or in total. This means that internalisers, in principle, also have to execute the transactions of non-clients, which include professional investors or competitors (moderated obligation to contract).
21 2002/47/EC, Official Journal L 168 of 27 June 2002, pp 43-50.
22 See the Belgian Sart/Tilman case of 1996. Belgium and Luxembourg have now enacted special legislation as a result.
23 See, for example, Articles 621-24 and 621-25 of the French *code de commerce*.
24 See sections 50-51 and 94-96 of the German Insolvency Code (*Insolvenzordnung*). The only restrictions concern non-possessory collateral, which is virtually negligible in connection with securities.

insolvency and the right to separate satisfaction in the whole of the EU.

All in all, the Directive on financial collateral arrangements seems like a small revolution (albeit only with regard to its more narrow scope of application in the form of financial instruments and cash balances) as previous attempts to substantively harmonise collateralisation and insolvency legislation in Community law had been unsuccessful.

In Germany, the Directive was implemented by way of the relevant Act of 8 April 2004.[25] The adoption of this Act was preceded by a lengthy debate in specialist journals and the daily press. The discussion centred on the issue of the personal scope of application, which the Directive partly leaves up to the member states.

Whilst the Federal Government wanted to implement the Directive to include explicit application for bank/non-bank relationships, this idea met with political resistance in the Bundestag. The compromise reached is that, in the case of bank/non-bank relationships, securities collateral will be subject to the regime of the Directive only as part of repurchase operations, securities lending and short-term (money market-related) monetary credit, whereas for longer-term monetary credit the existing legislation will continue to apply.[26]

The political signal which this sends, namely that longer-term credit relationships should be denied the advantages of the Directive, may cause some concern at first sight. Nevertheless, it must be borne in mind that – irrespective of the Directive – applicable German law already provides extensive protection in the event of insolvency for the pledging or transfer of title normal in securities trading (with delivery being made via the securities clearing system). Therefore, there is no reason to fear that the longer-term credit relationships between German banks and their clients will suffer any drawbacks.

Communication from the Commission on Clearing and Settlement

On 28 April 2004, the European Commission presented its second Communication on Clearing and Settlement[27] and invited the parties concerned to comment. The aim of the Communication is to make an important contribution to financial market integration in the EU by creating an efficient and safe cross-border market for clearing and settlement.

Complex cross-border settlement

Whereas securities settlement has reached a high level of efficiency at a national level, the market infrastructure for cross-border settlement is complex. Market and technical differ-

25 Federal Law Gazette I, pp 502-513.
26 Section 1 (17) of the German Banking Act (*Gesetz über das Kreditwesen*) as amended by Article 5 of the Implementing Act of 8 April 2004.
27 Communication from the Commission (COM/2004/312) of 28 April 2004, "Clearing and Settlement in the European Union – The way forward". In the following, the term "clearing" is understood to mean the involvement of a central counterparty in a transaction between two counterparties, thus centralising the bilateral counterparty risks. The term "settlement" is understood to mean the transfer of ownership rights in securities, for example through booking on securities accounts. This function is carried out by securities settlement systems (sometimes also referred to as central securities depositories) and commercial banks alike.

ences such as market practices, system operating hours as well as national civil and tax legislation act as barriers. This has already been described in the two Giovannini reports.[28] These differences lead to long process chains as well as higher transaction costs and settlement risks. Moreover, the Commission draws attention to the absence of a level playing field and a common supervisory framework for securities settlement providers. It therefore intends to create a harmonised regulatory framework for clearing and settlement through the adoption of a framework Directive. The aim of three further initiatives is to coordinate the activities to remove barriers through cooperation between the private and the public sector, to set up a group of experts to clarify legal and tax issues, and to employ competitive instruments (Articles 81, 82 and 86 of the EC Treaty) in the preventive supervision of mergers and the control of abusive practices.

Framework Directive on Clearing and Settlement

The following core principles of the proposed framework Directive, which all aim to increase competition among the clearing and settlement systems, are to be more clearly defined in a comitology procedure. The draft standards for securities settlement systems prepared by a joint working group of the ESCB (with the participation of the Bundesbank) and the CESR could serve as a basis for this.

– Banks and investment firms, stock exchanges and MTFs as well as clearing and settlement systems are to be granted comprehensive rights of non-discriminatory access to clearing and settlement systems in other member states. This will help to extensively network the systems and allow the users of these systems to freely choose from among the clearing and settlement facilities.

– A common regulatory and supervisory framework is to ensure a level playing field for the system operators as well as the mutual recognition of the settlement systems by the relevant national supervisory authorities. The Commission hereby intends to use a functional approach, which means that, regardless of the kind of institution concerned, identical activities would be regulated in an identical way. Moreover, the Commission is considering the introduction of capital adequacy rules for providers of settlement services; it is possible that these will go further than the existing prudential supervisory regulations. The common regulatory framework is to be supplemented by cooperation between national supervisors. This would create a basis for a European passport for all institutions active in the field of securities settlement, which would allow these institutions to offer clearing and settlement services throughout Europe.

– The Commission intends to draw up extensive transparency requirements for the governance of settlement systems. It is in favour of making a distinction in accounting practices between core and supplementary business areas. This would make

28 November 2001 and April 2003.

any cross-subsidisation from core business earnings transparent. Furthermore, it is to be possible for clients to obtain only parts of a central securities depository's bundle of services and to selectively acquire services from other providers.

Ensuring free competition ...

Overall, the measures proposed by the Commission are a step in the right direction. By creating a level playing field and linking the systems, it intends to release market forces, which should lead to a rise in cross-border securities trading with improved risk diversification and lower transaction costs for investors as well as lower capital costs for issuers. All further consolidation will be left up to the market players and the owners of the various providers of clearing and settlement services. The Commission expressly does not intend to become involved in the discussion about the user-owned/user-governed or profit-oriented governance models. Moreover, it takes a neutral stance with regard to the debate about the horizontal and vertical integration of settlement services and the desired number of providers at the end of a further European consolidation process.

... requires competitively neutral regulations

Within the framework of the intended Directive on Clearing and Settlement, therefore, it is all the more important for all of the measures envisaged by the Commission to be competitively neutral. The consistent and appropriate use of the functional approach with regard to the planned Directive is of paramount importance here. However, this approach is also a major challenge. This has already been shown in the as yet uncompleted discussions about the ESCB-CESR standards, as commercial banks and central securities depositories operate in partially overlapping business areas. If the Directive were to define some functions imprecisely, for example, in the regulation of lending activities for the monetary settlement of transactions, this could lead to undesirable competitive distortions between central securities depositories and large commercial banks. Furthermore, it is questionable whether further rules for dealing with risks in connection with short-term loans extending beyond the existing prudential supervisory regulations are necessary. The Commission's comments on specific governance rules for securities settlement business are very extensive as they envisage binding regulations on clearing and settlement whereas the governance regulations that apply to most financial services and any other branches of economic activity are just recommendations. Moreover, the fact that these rules are not to be applied across the board, but rather only with respect to central securities depositories and central counterparties, should be critically questioned.

Capital market orientation and corporate financing

The central goal of the new regulatory approach connected with the FSAP is – as set out above – to deepen the integration of the financial markets through harmonising the regulatory frameworks. In essence, the objective is to enable an increase in the market liquidity in the securities market. In doing so, it is assumed that there are positive parallel developments in trading costs and the user

cost of capital. Moreover, reduced transaction costs, which find their counterpart in declining intermediation margins, are supposed to allow for improved risk allocation. The trend towards financial intermediation beyond banks' balance sheets, which was established on the basis of a number of technological factors, is also promoted by regulatory means in this respect. The associated potential emphasis on the orientation of the capital market signifies new opportunities, but also challenges for corporate financing and, therefore, fairly directly, for monetary policy too.

Own funds and borrowed funds

Change is necessary, in particular, in the continental European financial structures, which have a strong universal banking orientation.[29] This also applies to the German corporate sector which – as a direct expression of the institutional (eg regulations concerning company pension plans) and, not least, tax conditions – is characterised by low equity capital ratios and predominantly bank lending-based external financing. Equity financing became considerably more attractive towards the end of the 1990s owing to high share prices. However, the sharp market price correction since the spring of 2000 has perceptibly diminished the importance of shares as financing instruments. Although it must be noted that, during the boom period, the financing of capital expenditure through the issuance of shares and other equity increased – in relation to the volume of gross investments – it fluctuated sharply over time. For example, the volume of share issuance in relation to gross investments amounted to -3.8% in 2003, which means that, in net terms, more shares were removed from the market through repurchasing than were issued.

Bank loans and corporate bonds

In view of the available choices for corporate debt financing – bank loans or bond issuance – it is possible to make a rough distinction between more "bank-based" and more "capital-market-oriented" financial systems. The table on page 45 shows the volume of bonds and outstanding loans to enterprises[30] in relation to GDP for the USA, Germany and the euro area.

In this analysis of recent developments, there are also signs of a slight increase in the importance of corporate bonds vis-à-vis corporate loans in Germany. However, credit development in Europe and the USA also reflects the weak economic activity of the past few years. The bond-based financing of German enterprises is actually likely to be greater as, owing to the trade tax burden of the interest on longer-term debt, many enterprises issue long-term bonds through foreign subsidiaries and convert them into short-term loans.

Bank-based system

There are diverse reasons why corporate financing via bank loans has up to now been of such profound importance in Germany as well as in many other continental European financial systems. Obstacles such as the former issue authorisation obligation or the stock exchange turnover tax go only a short way to-

29 For a comprehensive overview, see J P Krahnen and R H Schmidt (eds) (2004), *The German Financial System*, Oxford University Press.
30 For Germany and the euro area: domestic MFI lending to non-financial enterprises; for the USA: US commercial bank lending to non-financial US enterprises (commercial and industrial loans). Corporate bonds include commercial paper.

wards explaining the negligible role played by corporate bonds in Germany up to the end of the 1990s. After all, the predominance of financing via bank loans continued even after these obstacles were removed.[31] Therefore, besides the problem of the trade tax on the interest on longer-term debt, there must be more fundamental reasons for the financing behaviour of German enterprises.

Decentralised economic structure

The size structure and the legal structure should be considered first of all. The German economy is dominated by medium-sized enterprises, which usually have established links to a house bank. Direct capital market financing is out of the question for many of these enterprises for cost reasons. The average cost of, say, a bond issue (eg commissions, advisory fees and listing costs) can amount to several percentage points in the case of a smaller issue. The costs of corporate disclosures must also be added later.[32] Financing via bond issuance is, therefore, an option used mainly by listed public limited companies as they have to comply with extensive disclosure requirements anyway. These disclosure requirements also help to reduce the information asymmetry which generally exists in financing operations. Banks reduce this information asymmetry by means of credit assessments, which they carry out before entering into a contract, and through constant monitoring during the term of the contract.[33] The efficiency of long-established relationship banking can be found, above all, in the attendant cost reductions.

Corporate financing, bonds and MFI lending at nominal values

as % of GDP (year-end values)

Region/year	Bonds	Loans
USA		
1998	25.3	10.6
2000	26.4	10.9
2003	26.5	7.9
Germany		
1998	0.2	41.3
2000	0.5	39.9
2003	2.3	38.2
Euro area		
1998	4.3	39.5
2000	5.3	41.6
2003	7.0	41.9

Sources: Bloomberg, BIS, Bundesbank, ECB.

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Bank loans and relationship banking

Bank loans can be advantageous for enterprises in that the originating banks usually pass on any changes in their refinancing terms to their debtors only gradually, which has an interest rate smoothing effect.[34] In this connection, close bank/client ties, which are attractive for both sides, and competitive considerations both play a role. Moreover, in comparison with bonds, bank loans allow for a considerably greater degree of flexibility if a subsequent adjustment of the payment obli-

31 See also Deutsche Bundesbank, The relationship between bank lending and the bond market in Germany, *Monthly Report*, January 2000, pp 33-47.
32 However, it is possible that capital market financing via intermediaries will become more relevant for small and medium-sized enterprises – namely through using bank loans as collateral for the issuance of securities, ie asset-backed securities.
33 See A Hackethal (2000), *Banken, Unternehmensfinanzierung und Finanzsysteme*, p 52 ff.
34 See Deutsche Bundesbank, The pass-through from market interest rates to bank lending rates in Germany, *Monthly Report*, March 2002, pp 49-62.

gations should become necessary.[35] If an enterprise encounters financial difficulties, a lending bank is usually prepared to grant relief from payment obligations if it considers the enterprise to be viable. In the case of bond issues, however, negotiations on debt restructuring often prove to be very difficult or sometimes even impossible owing to the large number of (normally anonymous) bond creditors.

Method of financing is extremely important

Although it may be argued (according to the Modigliani-Miller theorem) that the method of financing is irrelevant in a perfect capital market, empirically more robust approaches highlight the importance of various financing options for an enterprise's development.[36] The capital market is, in particular, normally not yet open to young and innovative enterprises, which are not very transparent from an informational point of view. The same usually applies for size reasons. Although a capital base can be acquired via private equity, young enterprises are particularly dependent on bank lending for their external financing needs.

Corporate bonds

The issuance of corporate bonds (including short-term borrowing by way of commercial paper) has been gathering pace in Europe since around the end of the 1990s, but marketable external capital is still of secondary importance for corporate financing in Germany. One reason for this development was the introduction of the euro, which furthered the convergence of the previously national bond markets and the emergence of a broad and deep euro capital market. Moreover, high investment volumes during the technology boom as well as for mergers and acquisitions could be financed only via the capital market. The issuance of corporate bonds accordingly focused on a few industry sectors, such as the car and air transport industry and telecommunication and IT enterprises. There were also demand-side stimuli for an upturn in the corporate bond market. Thus, institutional investors became more important worldwide. These investors are increasingly on the lookout for investment alternatives to government bonds and bank debt securities which have dominated up to now. The decline in yields in the market for government bonds has further reinforced this trend.[37] The possibility of investing in a broad and deep market is particularly important for institutional investors.

The stability of corporate financing

A greater capital market orientation in corporate financing raises the question of how this will affect the stability of enterprises and the financial system. Additional financing options basically lead to a diversification of financing methods and thus to increased market efficiency and also, in principle, to greater robustness. On the other hand, the marked decline in commercial paper programmes following the market corrections, for instance, shows that obtaining market access can sometimes also be difficult. As a reduced willingness to incur risks tends to be a phenom-

35 See Deutsche Bundesbank, Recent developments in the corporate bond market, *Monthly Report*, April 2004, pp 15-25.
36 See, for instance, R G Hubbard (1998): Capital Market Imperfections and Investment, *Journal of Economic Literature*, Vol 36, No 1, pp 193-225.
37 See Deutsche Bundesbank, Recent developments in the corporate bond market, *Monthly Report*, April 2004, pp 15-25.

enon which emerges on both the credit market and the bond market at the same time, this reciprocal interchange of financing sources is empirically rather implausible. Evidence of such a connection is provided by the volatility of the financing flows in both forms of debt financing in relation to total debt financing as well as the correlations between the financing flows.[38]

Capital market financing more volatile ...

A comparison of the financing flows in euro-area bond and credit financing from the first quarter of 1998 to the third quarter of 2003 reveals a variation coefficient of 0.57 for credit financing and 0.77 for bond financing.[39] The financing flows in bond financing therefore tend to be more volatile than in credit financing. As enterprises are interested in stable financing flows for reasons of planning certainty, they will take the greater volatility of bond financing into consideration in their business decisions, even if the comparison of variation coefficients does not reveal whether the wider dispersion is caused by demand-side or supply-side factors.

... but nevertheless an added value

The correlation between the financing flows sheds further light on the degree of interchangeability of the two forms of debt financing. If it is negative, this indicates that the financing sources tend to develop in opposite directions and would, in this respect, complement each other in some situations. There is a weakly positive correlation of 0.17 for the aforementioned period, which suggests that the two financing sources develop relatively independently of one another. A decline in credit financing is therefore not automatically countered by an increase in direct capital market financing. However, the emergence of a larger corporate bond market expands the range of financing possibilities available to enterprises.

Integration of the EU financial markets is changing the market structure

The increased integration of the EU financial markets is also changing their microstructure. The trend towards a more intensive capital market orientation in the development of external financing sources is likely to continue. With respect to the effects of integrated capital markets – which in a positive market environment are distinguished by increased liquidity and efficient capital and risk allocation – market access restrictions cannot be ruled out. In recessionary periods in particular, access to external funds is sometimes noticeably more difficult in capital market-dominated systems. An accentuation of financial cycles is then an almost inevitable consequence.[40]

Bank-oriented systems and capital market orientation: sensible complements

In the past, lending in relationship banking-oriented systems was less volatile in recessions. These systems thus helped to stabilise the economy as a whole.[41] The increase in the significance of the financial markets, which is accentuated by the efforts to integrate the European capital market, is likely to heighten robustness. In particular, the possi-

38 See also European Central Bank, *Monthly Bulletin*, October 2003, pp 12-14.
39 The variation coefficient (the ratio of the standard deviation to the arithmetic mean) is used here as a measure of volatility. This variable allows for better comparability of time series of varying sizes.
40 See P Artus, Rating, cycle économique, cycle financier, CDC IXIS Flash, No 2001-221; see also Banque de France, Le cycle financier: facteurs amplificateurs et réponses envisageables par les autorités monétaires et financières, *Bulletin de la Banque de France*, November 2001, No 95, pp 41-65.
41 See M Kueppers (2001), Curtailing the Black Box: German banking groups in the transmission of monetary policy, *European Economic Review 45*, pp 1907-1930.

bilities for improving risk management – and thus increasing growth potential – are being expanded at an individual company level. Financial market integration is expected to allow investors to achieve a higher level of efficiency, ie a better risk-return ratio.[42]

Integrated financial markets have an impact on monetary policy

A robust financial system is an essential prerequisite for a successful monetary policy. In this respect, there is a large degree of consistency between a central bank's key task of ensuring monetary stability and its efforts to safeguard financial stability. Conversely, this means that, with an intensified capital market orientation, monetary policy makers have to review their operational measures for any potential impact on the financial markets. This is because greater financial market integration changes the backdrop against which monetary impulses are transmitted.

42 See A Brender and F Pisani (2001), *Les marchés et la croissance*, Economica, Paris.