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Long-Term Financing of the European Economy

Accompanying the document

GREEN PAPER

LONG-TERM FINANCING OF THE EUROPEAN ECONOMY

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1. INTRODUCTION

Productive investments are important drivers to boost productivity, improve competitiveness and ensure sustainable growth. They require generally financing over an extended time horizon. In the EU, there is a need for long-term investments not only to finance infrastructure, innovation, education and environmental projects, but also to increase competitiveness and ensure public debt sustainability.¹

This working paper accompanies the Green Paper “Long Term Financing of the European Economy” (see document [...]2013) XXX) and aims to give more insight, from an economic perspective, on investments and saving in the EU; the need and incentives to increase long-term savings; as well as the role that financial intermediation plays in channelling funds from savers to productive investments that generate capital formation and sustainable growth. The paper analyses the main problems in the current capital allocation and financial intermediation process across bank finance, which is the major financing channel in the EU (accounting for 85% of total financing in the euro area and the UK), corporate debt markets, and equity markets, including an assessment of whether these problems are of a structural nature or temporary as a consequence of the crisis. Taking into account this analysis, the Green Paper puts forward for public discussion a number of policy options, for example, related to how misalignments in financial intermediation could be reduced and how incentives for more effective and efficient allocation of funds to productive long term investments could be strengthened.

The paper is organised as follows: Section 2 presents the main characteristics of long term investment, while Section 3 is dedicated to the demand for long-term investments. Section 4 examines the past trends in investment and savings in the EU and compares these developments with the US and Japan. Section 5 discusses the reasons for restrained long-term saving, while Section 6 outlines the major intermediation channels for allocating funds from savers to the end-users of capital. Section 7 discusses inefficiencies and misalignments in the intermediation chain and developments in bank lending for non-financial corporates. It also assesses the opportunities for institutional long-term investors, such as insurers and pension funds. Corporate bond markets and other sources of finance, such as equity markets and IPOs are discussed in Section 8. The last section concludes. It is important to note that this paper focuses mainly on the two major private sources of finance: bank borrowing and corporate bond issuance. However, there are several other sources to finance long-term investments, including private equity, venture capital, leasing, hire-purchase, supply chain finance, financing through internal generated funds as well as public sector initiatives. Section 9 presents some public policy instrument to enhance financing of long-term investments. The last section concludes.

¹ See MGI (2010).

2. CHARACTERISTICS OF FINANCING LONG TERM INVESTMENTS

There is no simple or single definition of long-term financing.

In broad terms, financing long term investments or long term financing² can be considered as the process by which the financial system provides the funding to pay for investments that stretch over an extended time period. Investors engaged in long-term financing are generally expected to hold onto the assets for a long time and are less concerned about interim changes in asset prices, focused instead on long-term income growth and/or capital appreciation.

Descriptions tend to cover a range of features, including:

- **The nature of the asset classes appropriate for long-term investment.** These assets are likely to be less liquid, have long maturities that extend over the business cycle, yield first returns only after some years and carry significant risk. However, even very liquid assets can be appropriate for long-term financing, and, conversely, long-term asset classes can also be the subject of short-term trades;
- **The nature of the financial intermediation involved.** Long-term financing may require significant maturity transformation, as the majority of currently-available funds tend to be short-term, whereas the subsequent investments are made over an extended time horizon. It also involves sophisticated risk assessment, management and sometimes risk sharing, and the pooling of different sources of funds given the large size of investments; and

The nature of valuation and pricing of the assets involved. The illiquid and long-term nature of the assets complicates the risk assessment process. The economic and social value of the assets may differ from their financial value, and may not be taken into account by all investors, and accounting principles, benchmarks and credit ratings may measure only part of the value of assets. The pricing of risk by financial markets may lead to an increase in the risk-pricing of otherwise lower risk investments funded by public resources.

Alternatively, on-going international work under the auspices of the G20 on long-term investment defines long-term finance more narrowly, focusing on maturities of financing in excess of five years, including sources of financing that have no specific maturity (e.g. equities).

3. DEMAND FOR LONG-TERM INVESTMENTS

Long-term financing plays a key role in supporting productive investment, such as:

- R&D and innovation, education and professional training;
- Infrastructures, including transport, energy and communication networks;
- Industrial technology transformation and long-term capital-intensive projects;
- Health care and other welfare related assets;
- Environmental and climate change-related technologies and
- Enterprises, including in particular SMEs, throughout all stages of their development.

² The two terms “financing long term investments” and “long term financing” will be used synonymously throughout this paper.

Investments in these areas contribute to higher productivity, innovation and competitiveness and involve positive externalities. Whether publicly or privately delivered, they require periodical renewal and upgrading. This type of investments must support the Europe 2020 objectives and longer-term priorities, including sustainable economic, social, environmental and demographic developments. Box 1 illustrates the case for financing the low carbon economy. In broad terms, the provision of long-term financing is key for any strategy aimed at enhancing competitiveness in the EU through addressing investment needs for industry, enterprises and public goods. The demand for long-term investments applies across the whole economic cycle (such as the industrial innovation cycle), affecting the source and nature of financing at any one time.

The Commission has underlined the need for significantly higher long-term investment levels in the future, taking into account the lack of investment in the past across a whole range of sectors. Estimates of needs for financing long-term investments are very significant. For example, overall investment needs for transport, energy and telecom infrastructures networks of EU importance amount to EUR 1 trillion for the period up to 2020.³ Significant investment will also be needed in R&D, new technologies and innovation. Total estimated investment in the EU over the same period is around EUR 24 trillion.⁴

The overall growth of investments in Europe, including long-term investments, is mainly driven by developments in the non-financial corporate sector and, to a lesser extent, by governments and households (Chart 1). Data show that private investments in 2011 were well below their 2007 level and the decrease in private investment was four times more than the drop of real GDP over the same period.⁵ This is both demand and supply side driven, as the following sections demonstrate. The overall demand for investment in new projects is constrained by macroeconomic and financial uncertainty. For instance in terms of net demand for long-term credit from non-financial companies, recent ECB data reports a decline. The slowdown in economic activity and uncertain market outlook has lowered profitability expectations and the quality of loan applications has deteriorated following the worsening of macroeconomic conditions. The bank lending survey of October 2012 suggests that subdued lending in 2012 was caused due to a decrease in net loan demand rather than a constrained loan supply.

Box 1: The case for financing the low-carbon economy

Green Growth

In the Commission's Low-Carbon Roadmap⁶, the EU investment needs in low-carbon energy, energy efficiency and infrastructure, consistent with the political objective of limiting climate change below two degrees, were estimated at €270 billion per year. These investments would result in fuel savings of €170 – 320 billion per year and monetized health benefits of up to €8 billion a year by 2050. In order to generate these benefits for human health, the environment and the economy, it is therefore essential to mobilise more long-term investment.

³ Connecting Europe Facility: About EUR 500 billion in transport, EUR 200 billion in energy and EUR 270 billion for fast broadband infrastructures.

⁴ The total need was estimated for the EU27, using 2011 GDP data at current prices, constant investment rate at 19.8% and assuming the GDP deflator of 1.6 and an average increase of real GDP of 1% until 2020.

⁵ See MGI (2012).

⁶ See EU COM (2011) 112

Investors and stakeholders have identified⁷ various policies that would help generate investment for green growth, including long-term regulatory certainty, a phasing out of fossil fuel subsidies and a strong carbon price signal, and the use of public funds to leverage private investment. It has also been suggested⁸ that reforming the financial sector would in itself have benefits for green investments, by dis-incentivising short-termism.

In response, the Commission has started work on a 2030 Framework for Climate and Energy Policy, one of the goals of which is to increase long-term certainty for investors. A Green Paper on this topic will be released by March 2013 to invite stakeholder contributions. On a stronger carbon price signal, the Commission has invited stakeholders to comment on options for the structural reform of the European Emissions Trading System⁹, and proposed a restructuring of the Energy Taxation Directive¹⁰.

The European Council has also confirmed the Commission's proposal that climate-relevant expenditure will represent at least 20% of the EU spending in the Multiannual Financial Framework 2014 – 2020. In order to utilize their resources cost-effectively, in a context of budgetary constraints, public authorities at all levels will need to develop and deploy both proven and innovative financial instruments, in order to leverage private investment.

Stakeholders are invited to explicitly take the investment requirements for green growth into account in their general comments on long-term financing of the EU economy.

Low-carbon and climate-resilient Infrastructure investments

Global emissions of greenhouse gases are to a large extent dependent on the choice and design of infrastructure systems¹¹. In 2009, power generation, building energy use, transportation systems and waste management infrastructure accounted for 74% of net Greenhouse Gas emissions for developed countries.¹² Moreover, these infrastructure systems are generally composed of long-term capital assets, which without re-investment provide lock-in to future emissions paths."

The transformation in the design of infrastructure is necessary to address climate change goals. Given the long life span of infrastructure assets and their interconnectivity (e.g. infrastructure networks is necessary. Both low carbon and climate resilience have to be considered when infrastructure is planned, designed and constructed.

⁷ See World Economic Forum (2013)

⁸ See Kapoor et al. (2011)

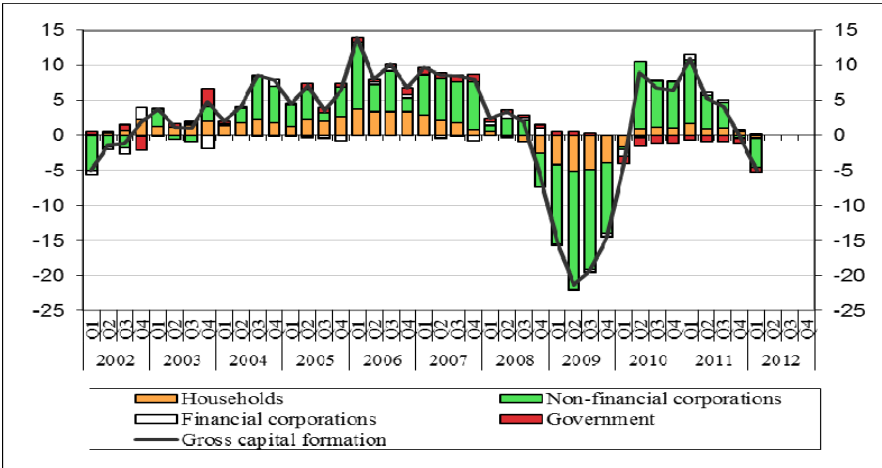
⁹ http://ec.europa.eu/clima/policies/ets/reform/index_en.htm

¹⁰ See COM (2011) 169/3

¹¹ See OECD study from Kennedy C. et al. (2012)

¹² Countries referred to in Annex 1 of the UN Framework Convention on Climate Change (UNFCCC)

Chart 1: Contributions of sectors to the growth of nominal gross capital formation in the euro area (annual percentage change and percentage point contributions)



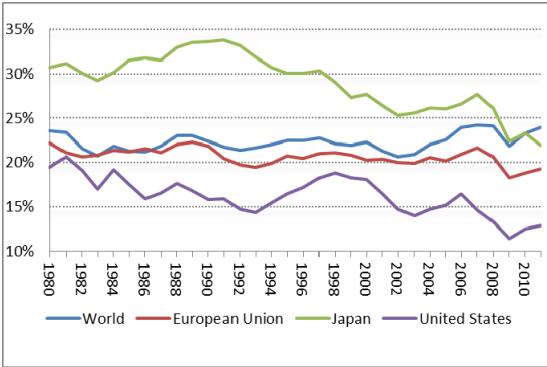
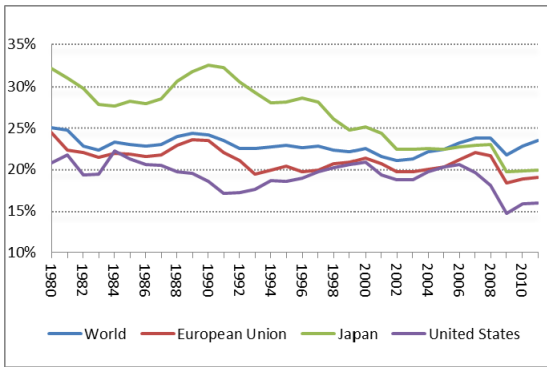
Source: Eurostat

4. INVESTMENT AND SAVINGS IN THE EU

Economic recovery and sustainable growth need to be investment-driven. Investment (gross capital formation) leads to innovations that improve the competitiveness of businesses and markets and thus also to income and jobs being secured or created. Over the last decade, aggregate investment performance in the EU has been slightly better than in the USA, but worse than in Japan and the world average. Before the crisis, the ratio of the total investment to GDP (i.e. investment rate) in the EU increased, but then it dropped significantly during the crisis (approximately by 4%-points), mirroring similar developments in other economies in the downturn. The current investment rate in the EU and other major economies is close to 20%, its lowest level since the 1980s (Chart 2). However, there are significant differences between Member States. In countries that experienced a significant increase in investment in the pre-crisis period, the trend in investment has reversed sharply and declined to relative low shares of GDP (e.g. Ireland and Spain, both of which have experienced boom-bust cycles in real estate investments).

Chart 2: Investment rate in different economies in % of GDP

Chart 3: Saving rate in different economies in % of GDP



Source: IMF database. Note: Total investment is the gross capital formation that includes mainly investments made in fixed assets.

Aggregate volumes of investment may also hide significant differences in terms of sector composition and maturity profile of the investments. For example, EU annual growth rates of investment in equipment have trailed those in the USA in the decade before crisis. As regards

R&D investments, especially those in the high R&D-intensive sectors that require long-term investment, the top 400 R&D-investing companies in the EU invested €32 bn in R&D in 2011 compared to the €160 bn invested by 487 US counterparts.¹³

The capacity of the economy to finance long-term productive investment depends on its capacity to generate and mobilise internal savings and to attract and retain foreign direct investment (FDI) for the long-term, as well as on its ability to effectively channel the funds efficiently to the right users and uses.

As regards FDI, the development of FDI inflows in the EU has been quite volatile: after falling to nearly half of the volume of the previous year, they picked up in 2009, but then shrank considerably again in 2010. In 2011, FDI increased considerably, reaching €24 bn compared to €156 bn in the previous year. In terms of sources of FDI, inward direct investments from EU Member States represented 60% of total FDI in the EU.¹⁴ In Member States that have suffered most from the sovereign debt crisis there has been a clear outflow of direct investments to other European countries. In contrast, the inflow of FDI from outside the EU has considerably increased on average compared to the pre-crisis period.

As regards savings, the ratio of the aggregate savings to GDP (i.e. saving ratio) in the EU has stabilised at 20% over the past decade and, after a drop during the crisis in 2008/2009, it picked up again. The ratio is still higher than in USA (by 5 to 8 percentage points), and the gap compared to Japan has fallen in the last two years. The majority of savings (about 80%) results from households, the rest are corporate savings (e.g. cash and cash equivalent on the balance sheets) and government savings (such as external reserves of central banks and sovereign wealth funds). It is important to note that while household saving rates in Europe have declined due to a reduction in disposable income, the savings of large corporates' in many Member States have increased¹⁵ due to delays in investment and leading to an enlargement of cash holdings during the crisis – for example, cash and equivalent positions of large firms are estimated to have increased by around four percentage points from 2009 to 2011.¹⁶ Conversely, many SMEs suffer from a continual lack of liquidity.

A comparison between Chart 2 and Chart 3 shows that in the US the gap between saving and investment demand remains significant. In Japan there is excess saving over the desired level of investment, while in Europe both investment and saving rates are at similar aggregate levels, suggesting that in principle there are sufficient funds to meet investors' needs. It is important to mention that the aggregate numbers do not reflect variations in sector composition and maturity profile (e.g. the stronger preference of savers for short- rather than long-term savings).

Strong increases in public debt and deficit levels imply that today in Europe there is less scope for government spending to provide the desired level of investment. Therefore, Member States need to attract an increasing amount of private capital to offset the decline in public capital. Moreover, levels of savings per se are not sufficient in and of themselves. What also matters is that they are channelled to appropriate investments. The analysis below sets out

¹³ In the US, over two thirds of the R&D investment comes from R&D high intensity sectors (pharmaceuticals, healthcare equipment, biotechnology and ICT) whereas in the EU, only one third comes from those sectors and about half comes from medium-high R&D-intense sectors. See EU (2011): Industrial R&D Investment Scoreboard, figure 3.

¹⁴ See EU (2012): Capital movements and the investments in the EU.

¹⁵ See MGI (2011) for development in different countries. Note that cash holding is the positive cash balance that remains after savings are used for investment, acquisitions, debt payments and share repurchases.

¹⁶ Based on Fitch (2011) and own estimations of changes in cash and cash equivalent positions of 170 large European non-financial corporates.

some of the reasons why this is not always the case.

The sources and mechanisms to collect and invest savings have a significant influence on the ability to finance long-term investments. The flow-of-funds in Chart 4 illustrates the allocation of funds from savers to the end-users and uses.

5. FINANCING CHAIN: FROM PROVIDERS TO THE END-USERS OF FUNDS

Broadly speaking, and assuming a closed economy without foreign investment inflows, savings from households, corporates and governments (on the bottom right in Chart 4) flow into the system through financial intermediaries to reach the end-users of funds (bottom left in Chart 4) which are: households that borrow for housing investment (mortgage lending) and financing of consumer goods; governments that collect funds through debt issuance; and, corporates. Corporates can either issue equity or debt in the capital markets to accumulate funds, or they can take loans from banks, which in turn could be securitized through collateral loan obligations and also end up in capital markets.

The pool of users and sources of funds are primarily linked through financial intermediation, which, when it functions properly, has the advantage of providing clients with maturity transformation, better information and lower transaction costs through economies of scale by pooling funds and operating large and well-diversified portfolios.

The leading intermediaries in most European countries are banks: retail banks that are typically very close to their clients, both on the deposit and on the lending side. In Europe, 85% of financing is provided through banks. Financial intermediaries and banks in particular, help in general to reduce the problem of asymmetric information (adverse selection and moral hazard).¹⁷ The large European banks, typically "universal banks" that offer a much broader range of services, have established themselves as the key distribution channel for a number of non-banking products.

The other way to channel funds from savers to end-users is through capital markets. Savings are used to buy/sell securities, as indicated in Chart 3 by "distribution". In addition, savings can also be pooled in collective investment vehicles and can flow to fiduciaries or asset managers, who in turn will manage these assets on behalf of the ultimate owners. The major functions of capital markets can be grouped in three categories.

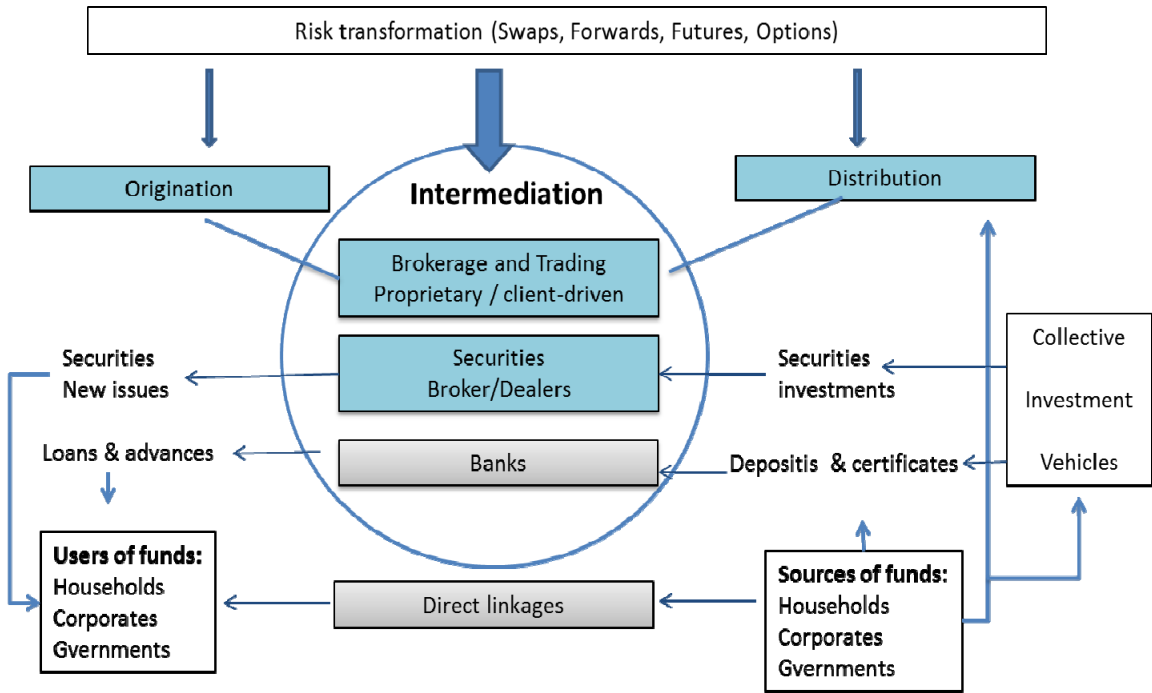
- First, origination/ underwriting that brings securities to the markets. Loans, which are originated by banks, may also end up in capital markets through securitization, e.g. asset-backed securities for credit-cards loans or collateralized loan obligations (CLO) for corporate loans;
- Secondly, brokerage and trading, which might be client-driven, either for investors or for borrower-issuer clients, or proprietary trading for the firm's own book; and
- Third, the direct distribution of securities either to institutional investors or to retail end-user.

Banks are the leading intermediaries for new product distribution, accounting for more than 50% in countries such as Belgium, Spain, France, Sweden, Italy and Portugal. Brokers are the most common intermediaries in countries such as Netherlands, Slovakia, Ireland and the UK,

¹⁷ Adverse selection occurs before a transaction and refers to the fact that bad borrowers (in terms of credit risks) are the one most likely to seek loans, and moral hazard refers to the risk of the borrower's engaging in activities that are undesirable from the lender's perspective. For more details see Mishkin 2012, Chapter 8.

while agents predominate in Germany, Poland and Slovenia.¹⁸ In addition, direct selling has increased substantially in some countries, e.g. the Netherlands, and is becoming a serious competitor to the traditional channels.

Chart 4: Flow of funds from providers to the end-users of funds



Source: based on Smith and Walter, Global Banking, Oxford University Press 2010

6. REDUCED INCENTIVES FOR HOUSEHOLDS’ LONG TERM SAVINGS

Households tend to be reluctant to commit to long-term savings for both cyclical and structural reasons. They also want to be able to manage individual liquidity shocks. It is important to note that the factors outlined below are considered from the perspective of households. From a bank perspective, even the volume of deposits could – at least partially – be considered long term.

MGI (2010) shows that the increased availability of credit during the economic boom, the “wealth effect” of asset appreciation during the stock market boom in the 90s and the real estate bubble in some Member States after 2000 have lowered the level of households savings. In an economic downturn, increased uncertainty, high unemployment and the lack of perspectives have increased the preference of savers for liquidity. The crisis experience has also increased savers’ distrust in financial institutions and markets. In addition, the current low interest rate environment makes saving less attractive.

As regards structural factors, studies suggest that most European households are very risk-averse when it comes to long-term decisions.¹⁹ Most consumers prioritise returns and safety (predictability), and therefore they regard capital guarantees as a factor of great importance. Other reasons for not saving long-term are the often poor performance of financial intermediaries to deliver reasonable return, and costs of intermediation. Market intermediaries

¹⁸ See BME report (2007).
¹⁹ See Oliver Wyman (2012) and BME (2007).

have prospered and grown – both in scale and profit – often benefiting themselves more than the end-users.

Taxation also plays an important role on the amount of savings in the economy and their allocation to different assets and investments. It influences the tax burden on lifetime income for tax payers with similar incomes but different income patterns and it affects the welfare of households by directly affecting consumption behaviour.²⁰ Tax regimes sometimes penalise saving by double-taxing interest, income, capital gains and inheritance. Structural tax privileges for investing in property have contributed to housing bubbles pre-crisis and draw private savers' funds away from other potentially more productive uses. The housing market problems in some European countries, with a large build-up in household debt, have not only reduced income for non-housing consumption, but also for savings.

Long-term saving may also be discouraged by lack of knowledge of most of the savers in financial products. Customers often do not understand them, are not willing to devote much time to financial matters, and are unlikely to closely monitor their investment decisions over time.

Due to population ageing and the reduced possibilities of public (pay-as-you-go) pension systems to pay, there is a need for funded complementary pensions and supplementary individual savings for retirement. This should, in principle, increase the pool of savings and investable capital in the long term. The traditional way of encouraging voluntary savings for retirement has been through tax incentives. Member States have already put in place a number of policies, notably with respect to pension related savings. However, there is no clear evidence for the efficiency of using tax relief to improve overall retirement savings outcomes.²¹ For instance, it is not clear that tax reliefs actually create additional saving rather than simply divert existing saving. Providing tax relief can be very expensive, costing between over 1.7 % GDP in IE and UK to less than 0.2 % GDP in SK. OECD suggests that the costs of tax relief will continue to outweigh revenues collected.

As voluntary private pension coverage has been generally low²², mandatory pension savings might collect funds in a more regular way. They have already been implemented in a number of EU Member States, for example in Sweden and some countries in the CEE. The latest example is the UK, which has been operating a mandatory scheme with automatic enrolment since October 2012. However, it is not clear whether such solution may be generalised for all EU Member States or could easily be accepted by all stakeholders.

Once the economy has picked up and confidence is restored, the recovery is likely to positively influence saving behaviours. Nevertheless, structural problems may remain unless different actions are considered to reduce barriers to long-term savings. Policy actions in this respect are discussed in the Green Paper.

7. RECENT DYNAMICS IN FINANCIAL INTERMEDIATION

In this section, inefficiencies in the intermediation chain, the bank lending gap due to the current situation in the banking sector, as well as opportunities for other intermediaries to fill this gap are discussed.

²⁰ An overview of the economics of savings taxation can be found in the Mirrlees-Review. See <http://www.ifs.org.uk/mirrleesreview/design/ch13.pdf>.

²¹ For an overview of tax incentives see for example The Social Protection Committee (2008), section 4.2. .

²² See BME (2007).

7.1. Inefficiencies in the intermediation chain

As set out in detail in Kay (2012), intermediation has to serve the end-users, i.e. corporate and other borrowers, who seek to raise funds, and savers wishing to generate returns on their savings. Kay (2012) also argues that the success of intermediation should be measured by how well it serves these two groups and less by how markets contribute to intermediate objectives per se, such as liquidity and price discovery.

Transformation of the financial system during the last decades, be it through globalisation, deregulation or other factors, has changed the culture of financial institutions and the behaviour of market participants. According to Kay (2012), a culture based on trust and relationship is replaced by one that gives trading priority and price discovery, resulting in:

- Increased fragmentation in shareholder structure, reducing incentives for engagement and the level of control by shareholders and leading to an explosion in financial intermediation;
- Complex and long investment chains, raising costs for end users and risking misalignment of incentives; and
- An undue focus of some key intermediaries, such as asset managers, on their short-term relative performance to their competitors, which is required from the environment in which they act. Their decisions are based on relative performance, rather than on the long-term prospects and underlying business of the companies or products in which they invest. On the other hand, the interests of savers and companies are in absolute performance. This misalignment of incentives between asset managers and market users is the product of the short-term performance horizon. The principal agent problem in asset management, outlined in Box 2, is one of the market failures that hamper long-term investment.

Inefficiencies arise also from the fact that banks are inherently vulnerable to confidence crises and deposit runs that are economically costly, in the sense that a fundamentally solvent and healthy bank can be forced into insolvency through depositors' self-fulfilling expectations (which may or may not be driven by fundamentals), causing severe economic pain (recall of loans and termination of productive investments). If only a limited number of depositors claim their money back, then no early liquidation of long-term projects is required. However, if many depositors run relative to what had been expected, this will force the bank to liquidate the illiquid assets (also loans) at a loss ("fire sales"). To avoid this well-known scenario, institutions have been put in place, such as deposit insurance, lender of last resort facilities (LoLR or emergency lending assistance ELA), creditor protection, and suspension of deposit convertibility.

However, safety nets also give rise to excessive risk taking behaviour on behalf of the beneficiary banks (and they create competitive distortions through an artificially lowered funding cost for beneficiary banks). Given the relatively high leverage and creditor dispersion (which leads to imperfect market monitoring), the usual problem of moral hazard stemming from limited liability takes a particularly important role in banking. In the run-up to the crisis, higher return for higher risk was achieved not by socially-valuable product innovation, but by leveraging and taking excessive risks, leaving the problem to governments if and when the bad tail risks materialised. This moral hazard risk needs to be curtailed through bank regulation and supervision.

Structural reform may significantly reduce investors' concerns that many large banks are a complex portfolio of franchises. It is very difficult to value any individual component of that

portfolio, as investments are too-complex-to-price. This undermines confidence in banks and thus negatively affects their ability to channel long term investments to high-yield investment opportunities in the real economy.

The Green Paper discusses policy actions to reach simpler, more efficient and less costly financial intermediation, where incentives should align with long-term decisions.

Box 2: Market failures and regulatory side-effects

Markets may allocate a sub-optimal amount or composition of long-term investment (LTI) for several reasons, reflecting both the market failures and regulatory side-effects.

Market failures include mainly externalities²³ (where the marginal benefit to the investor does not include the marginal social benefit given that not all costs/benefits fall to the investor); market power (which could result in the overpricing of LTI finance) and asymmetries of information which leads to indirect finance, but the issue of information problems is still present. .

Example: Asset management – principal agent problem

Long-term investors ('principals') often invest via 'agents' such as fund managers. Agents usually have better information and different objectives than their principals. It has been argued that the net result may be that agents, in pursuing their own interest, misprice securities (by mimicking their counterparts in other firms to exacerbate bubbles and crashes) and extract rents. In principle, large investors and the authorities could address these problems by changing the way investors deal with agents – e.g. by requiring agents to adopt a long-term investment approach based on long-term dividend flows rather than on short-term price movements.

Regulatory side-effects may arise from national and EU regulation. Examples of these alleged side-effects of legal frameworks can be found for example in accounting, liquidity regulation, Basel III and taxation.

Example: Accounting rules

Some commentators have alleged that fair value accounting has incentivised them to operate in a manner which might discourage long-term investment. In principle, fair value shows the market value of assets and liabilities; this information can be relevant to all types of investors as part of an overall appraisal, providing a sense of the relative financial condition of different institutions. But some argue that through the use of fair value, the volatility in the market value of their securities introduces volatility into their P&L. This is thought to be to the detriment of a long-term financing horizon, especially for institutional investors with long-term liabilities, who for internal valuation of some of their assets may use other valuation techniques (such as historic or book values). Therefore, there is a need for further analysis on the scope and relevance of fair value accounting in relation to long-term financing.

Example: Adequate taxation

Taxation influences considerably investment decisions. As outlined in Section 4, the current tax systems give a preference to debts compared to equity which influences the channels by which companies get funded. Adequate tax policy is necessary in order to avoid distortion in the allocation of savings for investment.

²³ Examples include where there is a 'collective action' problem, where LTI in an innovative industry may have ripple effects on other firms which are not 'captured' by the investing firm, and public goods (referring here to goods which no-one can be excluded from using, e.g. clean air).

Other factors: the general evolution of economic conditions seems to be biased against "patient" activities. The development of information and communication technologies has facilitated the development of short-term and speculative transactions. In addition, a number of other factors may create a short-term bias. These factors include:

- A lack of engagement by long-term investors, which can reduce the focus of companies on longer-term strategies;
- Shareholder value which currently prioritises the maximisation of share value against the longer-term fundamental value of the firm; and
- The nature of the relationship between investors and asset managers and the way asset managers' incentives are structured, which is argued by some²⁴ to contribute to increasing short-termism and mispricing.

Corporate governance policies may target this suboptimal market behaviour.

Companies investing over the long term have a clear interest in having shareholders who take a long-term view of the company and, as stewards of its long-term interests, engage in important strategy and investment discussions. However, some shareholders may pay too little heed to this crucial role. As a consequence, company directors may focus overly on its short, not long-term health. There are different reasons for this, including remuneration policies and an excess focus on the short-term share price. Improvements in this general area require more realignment of incentives between shareholders and company management. Some of the actions in the corporate governance to encourage long term engagement and long term perspective on the company are discussed in the Green Paper.

7.2. Bank lending gap

Non-financial corporates in Europe depend on banks for most of their debt finance. The share of the banking sector in Member States is large by international comparison, reflecting the European economy's greater dependency on bank intermediation. For example, bank loans and other advances accounted for 85% of total non-financial corporate debt outstanding in the euro area and in the UK in 2011, while non-financial corporate bonds accounted for only 15%.²⁵ In the USA, by contrast, the proportion between bank loans and corporate bonds was 53% to 47%. While in Europe non-financial corporates – especially mid-caps and SMEs – are highly dependent on banking sector, loans to non-financial corporates and households represent about 1/3 of banks' total assets, reflecting the asymmetric dependency between non-financial corporates and the financial sector.²⁶

European banks rely heavily on maturity transformation

In the years leading up to the crisis, European banks had relatively high loan-to-deposit ratios in international comparison (Chart 5) and they relied heavily on (often short-term) wholesale creditors and excessive maturity transformation (i.e. borrowing short and lending long) to fund their long-term lending. Although the crisis changed this, even after 2008 the ratio of (typically illiquid) loans to (stable) retail funding (the loan-to-deposit ratio) in Europe remained relatively high at 130% on average in 2011, while in the USA it has fallen from

²⁴ For example, see the 'Kay Review of UK Equity Markets and Long-Term Decision Making: Final Report', July 2012.

²⁵ See Llewellyn Consulting (2012): Financing European growth: the challenges for markets, policy makers and investors. August 2012.

²⁶ This structural bias is highlighted in the recent report of the High-level Expert Group on reforming the structure of the EU banking sector. See http://ec.europa.eu/internal_market/bank/docs/high-level_expert_group/liikanen-report/final_report_en.pdf.

around 95% to 75% since the onset of the crisis.²⁷ Moreover, European banks have stable funding ratios²⁸ that are lower than in the USA, Japan and emerging markets, suggesting also that maturity transformation was, and remains, substantial for European banks' balance sheets (Chart 6).

Chart 5: Loan to deposit ratios, 1997-2011 Chart 6: Stable funding ratios, 1997-2011



Source: BIS, Annual Report 2012.

As confidence vanished during the crisis, the interbank market – as immediate source of banking liquidity and funding – dried up, highlighting the risks associated with excessive maturity transformation. Many banks have started to de-risk their business in order to adjust to pressures in their funding through deleveraging their balance sheets (by increasing equity capital and/or disposing of assets) as well as changes in funding structures. While deleveraging after the crisis is necessary, this process may last for several years, with the consequence that credit might become less available and more costly, changing the attractiveness of different types of investments and altering the feasibility of some banks' business models.²⁹ Seen historically, private investment was often quite low for the duration of deleveraging. One of the reasons why deleveraging has been relatively slow is due to the interventions of governments and the ECB to provide swift and abundant liquidity. As these interventions are for a limited period of time, the impact of deleveraging on private investments might be more noticeable afterwards.

The ECB bank lending survey October 2012 reports that net tightening of credit standards by euro area banks for loans or credit lines to enterprises increased (15% in net terms, compared to 10% in the second quarter of 2012). The responding banks expected a further tightening of standards for the near future. The main reasons were negative economic outlook, as well as the actual bank capital positions and the related on-going need for balance sheet adjustments. In terms of company type, the tightening of credit standards has applied more for loans to small and medium-sized enterprises (SMEs) than to large ones; while in terms of maturity, the tightening of credit standards increased for both short- and long-term loans. The bank lending survey demonstrates that unless corporates – and especially SMEs – have access to alternative sources of finance, any decline in bank lending is likely to have an adverse impact on corporates' ability to finance investment.

Negative feedback loop between banks and sovereigns harm investments

Particularly challenging is the simultaneity of the deleveraging pressures on banks and sovereigns. Sovereign indebtedness has risen to peacetime highs across several Member

²⁷ See BIS 2012, annual report.
²⁸ Funding ratio refers to the proportion of the sum of retail and long term funding to the total funding.
²⁹ According to MGI 2011, the past experience shows that deleveraging episodes last six to seven years on average and reduce the ratio of debt to GDP by 25 percent.

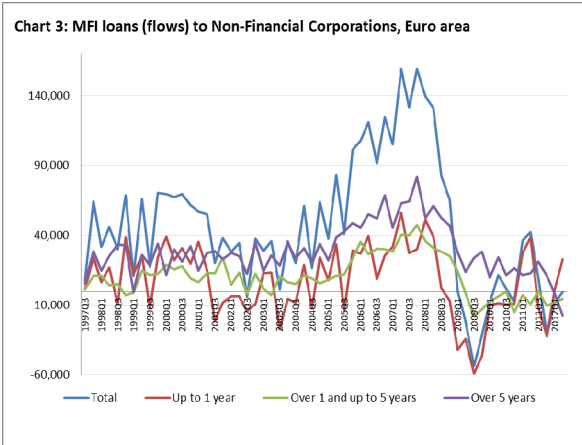
States, feeding into the balance sheets of banks. Direct exposure of banks to sovereign debt weakens their balance sheets, increases their riskiness as counterparties and makes funding more costly and more difficult to obtain. In addition, higher sovereign debt risk reduces the value of sovereign collateral that banks can use to raise wholesale funding. Other factors, such as the reduced value of government guarantees due to weaker government finances or financial contagion (sovereign to sovereign or sovereign to banks) further affect bank funding conditions. Banks participating in the ECB bank lending survey reported increased funding pressure because of the sovereign debt crisis in the second quarter of 2012. The resulting additional funding pressures might in turn affect lending to non-financial corporates across all maturities, including the long-term ones.

Different elements in the regulatory framework favour investments in sovereign debt. While sovereign debt itself in part funds long-term investments, private sector long-term investment may be at a relative disadvantage. This situation may merit consideration in the future, once market conditions allow for a comprehensive discussion.

Long-term lending and the "home-bias"

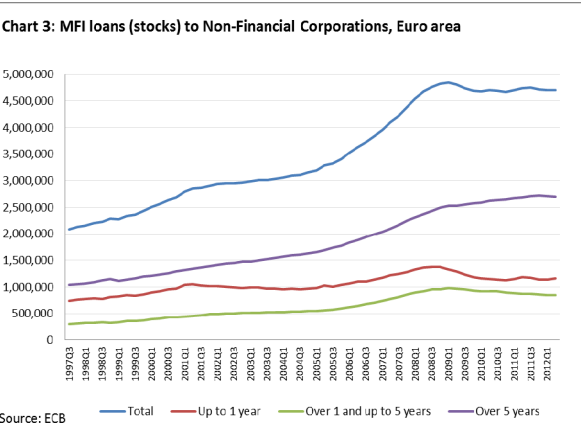
Several periods of liquidity squeeze have taken their toll on the volume of intermediation by banks. During the most severe time of the crisis from mid-2008 to mid-2009, there has been a dramatic fall in the volume of new loans by monetary financial institutions (MFIs) to non-financial firms for all maturities (Chart 7). The volume of new long-term loans, which are important for long-term productive investment, declined markedly in the first half of 2012 (Chart 7) and their stock shows a significant downward trend at the very short end (Chart 8). ESMA(2012) reports that banks have restricted credit to corporates even in cases where companies generate a positive cash flow, which would allow for the servicing of debt. In addition, banks have reduced cross-border lending, which has led global companies to increasingly rely on their own domestic financial institutions further reducing the availability of debt capital for SMEs.

Chart 7: MFI loans (flows) to non-financial corporates in the Euro Area



Source: ECB

Chart 8: MFI loans (stocks) to non-financial corporates in the Euro Area



Moreover, stress in bank funding, tighter regulation and risk management requirements are also driving an increase in "home bias", impacting the cross-border financing. Note that home bias is a well-known phenomenon in finance.³⁰ Investors are reluctant to acquire the full benefits of portfolio diversification and hold a disproportionate share of local assets. Reasons

³⁰ See French, K.R and J.M., Poterba, 1991 for home bias in equity markets.

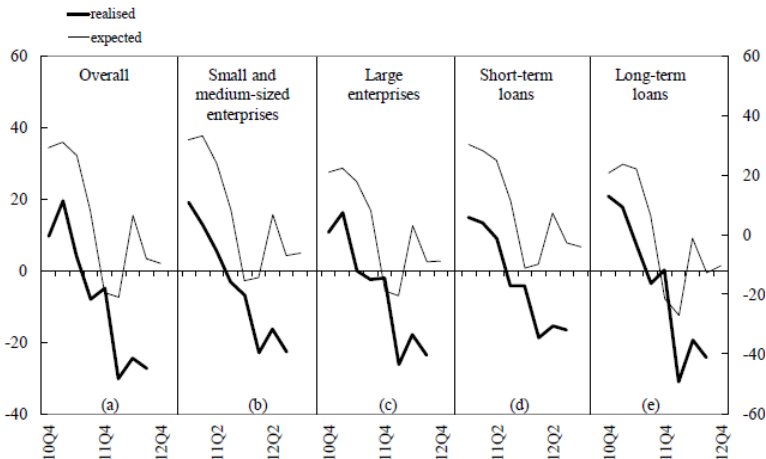
for this are (i) asset trade costs in international financial markets (such as transaction costs or differences in tax treatments between national and foreign assets),(ii) informational frictions and behavioural biases as well as (iii) costs of hedging (e.g. real exchange rate when investing in/outside Eurozone and no-tradable income risk)³¹.

A well- functioning Single Market for financial services can stimulate cross-border long-term investments. Unfortunately, cross-border lending has fallen substantially as a result of the financial crisis. The share of cross-border loans in the money markets between mid-2011 and mid-2012 plummeted 33%.. Where the need for investments is greatest, lending rates in some countries are increasing despite the low base rate. In fact, private-sector borrowing costs have started to diverge substantially according to geographic location. Companies may have similar financial strength and growth prospects, but they may be "punished or rewarded" in the markets for the budget and economic policy shortcomings of their respective home country. Some difference in private-sector borrowing costs is to be expected given that some Member States are growing whereas others are shrinking; but the current pricing differentials suggest market fragmentation (redenomination risk) is partially to blame, in addition to the differentiation in fundamentals and sovereign default risks. This is potentially inefficient, as financially-weak firms in strong countries are able to survive, whereas strong and fundamentally sound companies in programme countries may have to leave the market.

Demand for long-term loans has decreased

Negative developments in long-term lending result from worsening demand and supply conditions. It is hard to separate out whether an observed level of bank lending is the product of banks being unwilling to lend more, or of the private sector being unwilling to borrow more. The slowdown in economic activity has lowered the profitability expectations and the quality of loan applications has deteriorated following the downturn in the economic conditions. Therefore corporates have reduced their demand for credit owing to lower capital formation. This is evident from the ECB bank lending survey, in which participating banks reported a further net decline in the demand for long-term loans in the third quarter of 2012, which is more pronounced than the decline in demand for short-term loans (24% for long-term compared to 17% for short-term loans).

Chart 9: Expected demand for loans or credit lines to non-financial corporates (net-% of banks reporting a positive contribution to demand)



Source: ECB (2012) The Euro Area bank lending survey, 3rd quarter of 2012.

³¹ Non-tradable income risk refers to the fact that investors receive a part of their income that cannot be traded in financial markets. see Lucas (1982)..

Lack of confidence combined with ultra-low interest rates incentivises forbearance. Low interest rates may, in a systemic crisis, incentivise banks to speculate with the prospects of resurrection by postponing the necessary balance sheet repair and engage in "ever-greening of loans" policies (the rolling-over of impaired loans as interest-only loans, since the opportunity cost of receiving payment in the future over today is lower, which allows to hide impairments from supervisors and creditors). Low interest rates allow banks to disguise underlying credit weakness and continue lending to "bad" firms (and thus avoid capital losses). This reduces the outlook and profitability of healthy firms and thus discourages new long-term investments and the entry of new players. In addition, new lending is further curtailed if banks hold onto low return-generating loans, as they may be constrained in attracting new funding, given the uncertainty with respect to their true solvency.

7.3. Opportunities for long-term investors

Insurance companies, pension and mutual funds are the biggest institutional investors in Europe. Together, they hold an estimated total of €13.8 trn of assets, equating to more than 100% of the region's GDP.³² As banks are less able to meet the long-term funding needs of borrowers for the reasons outlined above, this creates an opportunity for insurers and pension funds (the biggest institutional investors), because they tend to have long-dated liabilities, which match the part of the lending market from which banks are retreating. This advantage arises from the economics of the insurance and pension market: insurance undertakings can fund loans with predictable long-term liabilities, such as annuities, and therefore will be less likely to face liquidity runs and be forced into a fire sale of the loans.

In the past banks have been involved in long-term project financing (e.g. infrastructure) and have invested in illiquid assets. But today and in the near future, banks might need to reduce their new investments across different illiquid asset classes, because of their funding constraints and in order to improve capital and liquidity positions. This creates opportunities for long-term investors, such as investment funds and insurance companies, to re-enter the market.³³ Estimates show that for Germany, France and the UK, which constitute more than 50% of the total European insurance market, moving into illiquid asset classes (such as commercial mortgages, infrastructure projects, SME lending etc.) could increase the value of the insurance industry in these countries by 50%.³⁴

Long-term projects, which often require a considerable amount of funds and know-how in their implementation, have intrinsic risks. Insurers and pension funds are more likely to carry the long term financing risk, but not the project and the implementation risk. Closer cooperation between investors and public authorities may help to successfully carry through these projects.

In the context of asset allocation, insurance undertakings and pension funds tend to invest more in securities (shares and bonds) than providing direct loans. EIOPA data show that insurance undertakings remain biased towards investments in government bonds, which make up 25% of total assets, followed by financials with 18% and non-financial corporates with 13% (Chart 10). However, in the last 12 months, the relative share of equity has declined slightly, while the share of non-financial corporate has risen.

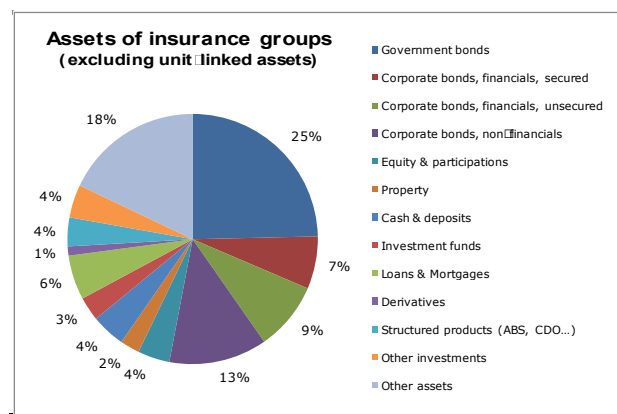
Against this background, a better channelling of long-term resources via capital markets and reduced dependence on bank funding is required. Nevertheless, such a transformation in funding structure may take some time.

³² See Fitch 2011 and EFAMA (2012).

³³ See Allen and Overy (2012).

³⁴ See Oliver Wyman (2012).

Chart 10: Asset composition of European insurance companies



Source: EIOPA (2012): EIOPA risk dashboard September 2012.

8. CAPITAL MARKETS AND OTHER SOURCES OF FINANCE

European non-financial companies finance their investment largely through bank loans, but since the onset of the crisis they have relied more on market-based funding, including different financial instruments, such as equity, debt securities, inter-company loans and trade credit. In terms of firms' capital structure, equities are still the most important source of financing, counting for about 48% of external financing sources, followed by intercompany loans (around 20%) and trade credit (around 10%) during the crisis period (Q3 2008 – Q2 2012).³⁵ When non-financial companies are observed altogether, including small-and medium-size companies (SMEs), debt securities play a minor role. However, for large corporates they are an important source of funding.

Corporate income tax (CIT) system influences considerably the financing of (long-term) investments. It is a well-known fact that CIT in many Member States favours debt over equity, as interest payments are deductible from CIT while there is generally no such relief for the return on capital. Financing neutrality is a desirable design for a taxation regime that can be reached through different options, such as a comprehensive business income tax (CBIT) where the deductibility of interest payments on debt is (fully or partly) removed, an allowance for corporate equity (ACE) where a notional interest deduction on equity is granted, or a cash-flow taxation of companies which would also exempt from tax a notional return to capital, irrelevant of the financing source. The latter two approaches have the advantage that they would in addition not distort marginal investment and would tax economic rents.

In the current market context, direct access to capital markets seems to offer European corporations some advantages for funding compared to bank debt. Longer maturities and often lower interest rates than bank loans are among the obvious advantages. But most importantly, having access to bond markets broadens the range of alternative sources of funding available to non-financial corporates in difficult times for bank lending.

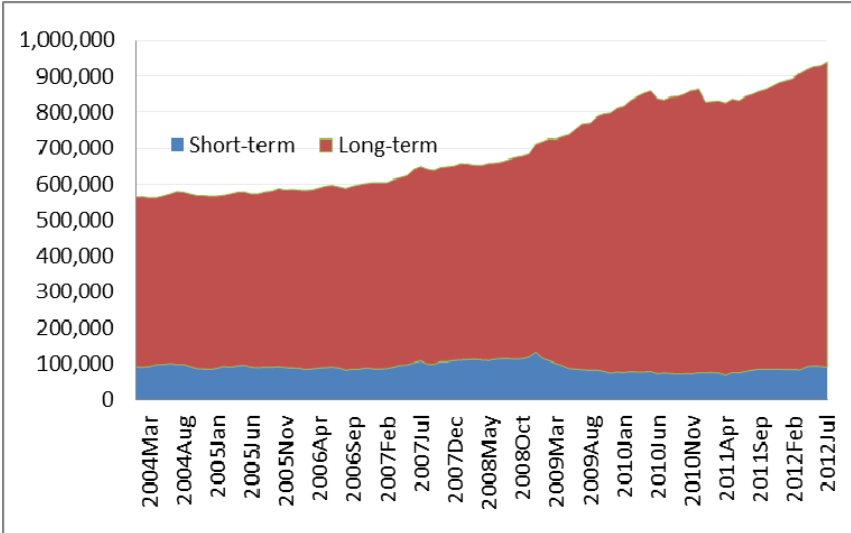
Corporate bonds markets are gaining importance

In contrast to the tight bank credit conditions, debt markets have shown more positive development. Based on the balance sheet information for 161 European firms, Fitch (2011) reported how bank debt has decreased since 2008, whereas bonds have increased over recent years

³⁵ See ECB (2012)b, chapter 2.3.

The increase in corporate bond funding is also evident from the development of the aggregate outstanding amounts of debt securities issued by non-financial corporations in the euro area. These totalled €40 bn in July 2012 (90% long-term securities), having risen from about €52bn at the beginning of 2008 (Chart 11). Total amounts outstanding have been increased since the beginning of the year, showing similar trends as in 2009. As one would expect, highly-rated companies account for most of the outstanding volume. However, there is an increasing importance of BBB and BB rated corporates in this market.

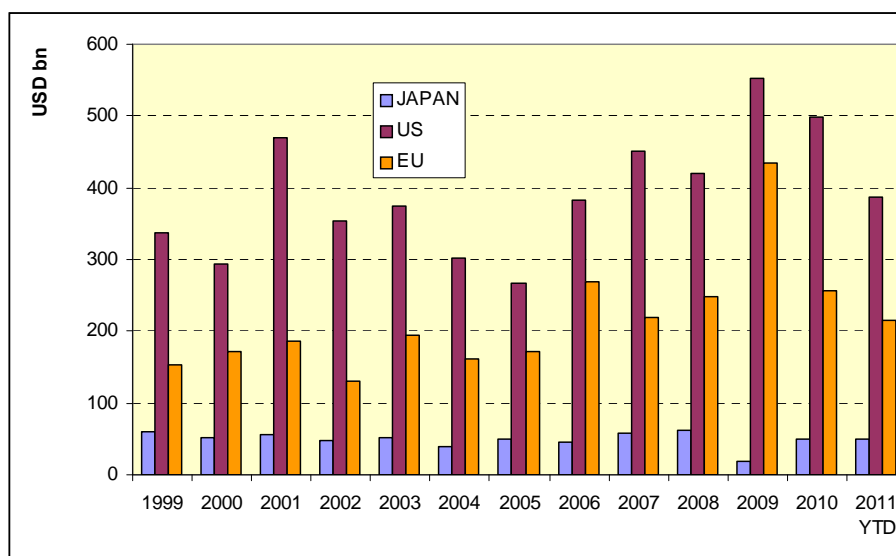
Chart 11: Outstanding amount of debt securities issued by euro area NFCs (€ million)



Source: Source: ECB funding disintermediation

Total figures of corporate bond issuance by non-financial firms show a considerable improvement in the EU in recent years compared with the pre-2007 levels (Chart 12). Although both in the USA and the EU, bond issuance by non-financial firms has followed the up and down swings of the business cycle, the EU new bond issuance for the 2007-2011 period exceeded the \$ 200 bn mark reaching over 400 mill in 2009. These levels had never been reached in the EU during the best years of the business cycle between 1999 and 2005. However, although EU corporate bond markets have developed in the recent years, the non-financial corporate bonds account still only for 15% of non-financial corporate debt (compared to 47% in the US), as mentioned earlier in the paper.

Chart 12: Annual Bond Issuance by Non-financial Firms in the EU, USA and Japan (1999-2011)



Source: Dealogic

It is important to note that the different impact that the financial crisis has had in different Member States has also quite differently affected the balance between debt and equity finance between Member States.³⁶ In the pre-crisis period, debt financing for Spanish and Italian firms was larger than equity financing, but debt financing decelerated remarkably during the crisis. By contrast, in other countries, inter-company loans and debt securities played an important role to replace reduced bank lending.

Enable access to bond markets for SME

The evidence shows that debt capital markets represent an important alternative source of funding, but at the moment they are accessible mainly for large corporates domiciled in larger countries with more developed corporate bond markets. Small-and medium-sized companies (SME) that face the more severe consequences of the credit crunch cannot afford the costs of bond issuance.

However, in countries where the economy is faring relatively better through the crisis, there are signs that an increasingly broader spectrum of firms is gaining direct access to capital markets in Europe. In particular, SME high yield bond issuance has become considerably important in Germany. Driven by the financial crisis, family-run SMEs companies willing to keep full control of the company have resorted to bond issuance given the difficulties that they find in securing bank funding. Four of the eight German exchanges have started trading “Mittelstand bonds” over the last two years. Issues range from €25 to €225 mn. Retail investors acquire some of them, but institutional investors hold between 60 and 75% of these bonds, as yields are attractive for these investors with 7 to 9%. In Stuttgart, the BondM platform gives mid-cap SMEs the possibility of issuing bonds that can be directly sold to retail investors without an investment bank underwriting the issue. Covenant and documentation provisions and costs are also kept to a minimum. The volume of corporate bonds for medium-sized companies is relatively small, but the trend to increase capital markets assess for medium-sized companies is likely to continue.

³⁶ See ECB (2012)b.

For mid-caps and SMEs, which have historically faced difficulties in accessing funding, the main cause is the lack of credible information about them. This results in increased costs and difficulty in evaluating their credit worthiness by potential providers of funds. Research on SMEs is costly and investors are generally not eager to pay for it. Provisions should be implemented to make existing research and ratings information available to a wider set of potential investors and thus helps reduce information asymmetries associated with smaller companies. In some countries, such as the US, the SME market is sustained by a market maker model based on spreads. Other models exist as well, as some market participants believe that the market maker model does not propose enough transparency.³⁷

In order to facilitate outreach to SMEs, their visibility might be facilitated through evaluations and improved information provided by credit scoring companies. Knowing their own score and understanding how it has been calculated may help SMEs to negotiate with their banks or other financing solutions. Moreover, the demand for external credit worthiness evaluation has increased, as in some countries midsize companies have and will continue to develop a stronger capital market orientation. Demand for rating equivalencies, credit standing certificates is also increasing in the 'customer-supplier-relationship', e.g. in the automotive and construction industry. Developing harmonised minimum quality standards on external credit scoring for SMEs would facilitate (cross border) financing of their investments and deepen market integration. Options in this regard are discussed in the Green Paper.

Equity markets and IPOs

Many claim that the economy, businesses and investment projects need more equity, than debt. Equity can be a better financing instrument for long-term, high-risk investments, as well as for investments with significant information asymmetries and moral hazard. Given that the crisis was fuelled by overreliance on debt, equity is probably a more appropriate financing instrument at present. However, since the crisis, macroeconomic uncertainty and the low interest rate environment may have affected companies' demand and risk appetite for long-term equity capital. Investors have instead sought refuge in government debt instruments with strong creditworthiness. In addition, preference for debt over equity investment continues to be affected by the differing tax treatment (see below). These developments appear to have had a bigger impact on mid-caps.

The financial crisis appears to have accelerated a long-term trend increase in bond purchasing that started at the beginning of the last decade. The cost of equity capital has remained high while the cost of debt finance has fallen. Overall, this highlights the equity gap in Europe, which is likely to take time to address.

In the recent years, exchanges have tended to act more as providers of liquidity rather than sources of additional capital. For example, in some cases equity markets are used for fast "exit", i.e. to extract cash from companies, rather than for cash injection. This trend became quite pronounced during the crisis, where the number of listed companies, as well as the amount of capital injected, experienced a considerable fall. According to FESE, the number of listed companies in the last five years has been reduced by 27% (from 11,914 in 2007 to 9,031 in 2011), while the capital injected to them experienced a sharp drop by 65%.³⁸ Currently, just a small part of capital (ca. 5%) is used for IPOs, whilst before crisis this was around 20%.

Besides the weak economy, and the low level of share prices that makes IPO unattractive for the listed firms, there might be other structural factors that explain low capital flows. One reason is that the business models of exchanges are based mostly on trading blue chips; hence

³⁷ See ESMA 2012.

³⁸ See FESE: <http://www.fese.be/>

there are little incentives to raise new capital and attract new IPOs. Concentrated trading on blue chips might crowd out mid-caps. Kay (2012) reports that corporates in the UK are financed either through internal funds or alternative means, such as private equity or debt issuance and mainly loans for mid-caps and SMEs.

However, providing liquidity is an important function of secondary markets. Liquid and well-functioning secondary markets encourage investments in primary markets too, as this enables investors to sell their investments quickly and at low costs when needed.

9. PUBLIC POLICY INSTRUMENTS

Public-Private Partnership (PPP) is one instrument to facilitate financing of long-term investments, especially for those projects with public good character. However, the use of PPS decreased despite a number of steps that have been taken following the Commission Communication in 2009.³⁹ The revival of this market, notably for trans-border investments, is important. Some sectorial regulations (e.g. the unbundling directive or those on feed-in tariffs, both in the energy sector) may create disincentives for long-term investments. In addition, Member States lack a credible long-term pipeline of potential PPP projects. A European framework for PPPs promoting transparency, appropriate risk transfer arrangements and deal structuring, and learning from the past experience and public finance initiatives could support their enhanced use and impact.

Public procurement sets the demand from the state (and local actors) for products, services and infrastructure. It may help public authorities to give incentives for innovation and attract investors into long-term projects. However, existing legal uncertainty arising from the absence of clear rules on the award of concession contracts creates constraints. Therefore, in December 2011, the Commission proposed a directive⁴⁰ with the aim of providing a clear and simple framework for the award of such contracts.

State Aid rules provide frameworks for public support to make investments more attractive for private investors. Examples include aid to infrastructure; support to R&D and innovation; regional development; efforts to stimulate low-carbon energy or broadband investments; and, measures to stimulate risk finance.⁴¹ The 2012 State Aid Modernisation initiative aims to orient scarce public funds towards efficient and well-designed aid which promotes growth-enhancing objectives, addresses proven market failures, has an incentive effect, while keeping distortions of competition limited.

Export credit. Several national public export credit guarantee schemes exist in Europe today, which provide support to capital-intensive investments requiring long-term finance for projects in the EU. It could be useful to analyse whether an EU Export Credit Mechanism could help the financing of long-term investment, in particular outside the EU and in non-EU currency denominated projects, in complement to those national approaches.

10. CONCLUSION

A range of factors should be considered in order to effectively finance long-term investment and growth in the European economy. These include accumulating sufficient funds for productive long term investment; addressing misalignments and inefficiencies in the financial

³⁹ See <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0615:FIN:en:PDF>.

⁴⁰ See http://ec.europa.eu/internal_market/publicprocurement/modernising_rules/reform_proposals_en.htm.

⁴¹ See http://ec.europa.eu/competition/state_aid/legislation/horizontal.html. The Guidelines on State aid to promote risk capital will be revised in 2013, in the context of the State aid modernisation initiative.

intermediation process; as well as encouraging and fostering positive trends in intermediation, such as the latest developments in corporate bond markets. However, bank credit has been the predominant source of funding for the real economy in Europe and banks will continue to play a very important role in the financing landscape in the future. A well-functioning banking system remains important for successful intermediation. At the same time, market-based financing will slowly increase in importance, helping to bring the loan to deposit ratio in Europe to levels comparable to other regions of the world. Market-based financing increases diversification of external funding sources for companies and from a financial stability perspective increases the robustness of financing investments to negative shocks. Bond issuance seems to have become a viable alternative source of funding for the bigger and best placed financial corporations, as the crisis has put pressure on firms to find alternative funding sources. Developing and deepening the capital markets is another step forward required to support effective financing of long-term investment.

There is no "one size fits all" solution to boost the long-term financing of the European economy. As discussed in the Green Paper, a debate is needed to address a broad range of interconnected factors:

- The capacity of financial institutions to channel long-term finance;
- The efficiency and effectiveness of financial markets to offer long-term financing instruments;
- The role of public policies in catalysing long-term saving and financing; and
- The ease of SMEs to access equity.

11. REFERENCES

- Allen & Overy (Dec. 2012): The future of credit.
- BIS (2012): Annual Report.
- BME (2007): The EU market for consumer long term retail saving vehicles comparative analysis of products, market structure, distribution systems and consumer saving patterns.
http://ec.europa.eu/internal_market/finances/docs/cross-sector/study_en.pdf
- ECB (2012)a: The Euro Area bank lending survey, 2nd quarter of 2012.
- ECB (2012)b: Financial Stability Review.
- EIOPA (2012): EIOPA risk dashboard September 2012.
- EFAMA (2012): Asset Management in Europe: Facts and Figures.
<http://www.efama.org/Publications/Statistics/Asset%20Management%20Report/Asset%20Management%20Report%202012.pdf>
- ESMA (2012): Securities and Markets Stakeholder Group – Report on Helping Small and Medium Sized Companies Access Funding.
https://eiopa.europa.eu/fileadmin/tx_dam/files/publications/reports/Risk_Dashboard_Sept2012.pdf
- EU COM (2011): Industrial R&D investment scoreboard.
http://iri.jrc.ec.europa.eu/research/scoreboard_2011.htm
- EU COM (2011) 112: A Roadmap for moving to a competitive low carbon economy in 2050.
http://ec.europa.eu/clima/policies/roadmap/documentation_en.htm
- EU COM (2011) 169/3: Proposal for a Council Directive amending Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity.
http://ec.europa.eu/taxation_customs/resources/documents/taxation/com_2011_169_en.pdf
- EU COM (2012): Capital movements and the investments in the EU. Commissions' services paper on market monitoring.
http://ec.europa.eu/internal_market/capital/docs/20120203_market-monitoring_en.pdf
- Fitch (2011): European corporate funding disintermediation
- French, K.R and J.M., Poterba, 1991. Investor Diversification and International Equity Markets, American Economic Review, American Economic Association, vol. 81(2), p. 222-26, May.
- Llewellyn Consulting (2012): Financing European growth: the challenges for markets, policy makers and investors.
- Lucas, R., (1982): Interest Rates and Currency Prices in a Two-Country World. Journal of Monetary Economics, 10, 335-359

- Kapoor, S and Oksnes L (2011): Funding the New Green Deal: Building a green financial system. <http://re-define.org/sites/default/files/GEF-Funding%20the%20GND%20web.pdf>
- Kay J. (2012): The Kay review of equity markets and long term decision making
- Kennedy C. and Corfee-Morlot J. (2012): Mobilising Investment in Low Carbon, Climate Resilient Infrastructure. OECD Environment Working Papers, No. 46
- McKinsey Global Institute /MGI (2010): Farewell to cheap capital? The implications of long-term shifts in global investment and saving.
- McKinsey Global Institute / MGI (2011): Debt and deleveraging: The global credit bubble and its economic consequences (Updated analysis).
- McKinsey Global Institute / MGI (Dec. 2012): Investing in growth: Europe's next challenge.
- Mirrless J. (2011): Tax by design. Oxford University Press, <http://www.ifs.org.uk/publications/5353>
- Mishking F. (2012): The Economics of Money, Banking, and Financial Markets. Ch. 8: An Economic Analysis of Financial Structure, 10th Edition,
- OECD (2011): Financial stability, fiscal consolidation and long term investment after the crisis. OECD Journal: Financial Market Trends, Vol. 2011, Issue 1.
- Oliver Wyman (2011): The real financial crisis: Why financial intermediation is failing. State of the financial service industry report 2012
- Oliver Wyman (2012): The €200 bn opportunity: why insurers should lend more.
- Smith R. and Walter I. (2012): Global Banking. Oxford University Press, 3^d edition.
- The Social Protection Committee (2008): Privately Managed Funded Pension Provision and their Contribution to adequate and sustainable pensions. <http://ec.europa.eu/social/main.jsp?catId=752&langId=en&moreDocuments=yes>
- World Economic Forum (2013): The Green Investment Report, Green Growth. <http://www.weforum.org/issues/climate-change-and-green-growth>