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Initial reflections on the obstacles to the development of deep and integrated EU capital markets

Accompanying the document

Green Paper

Building a Capital Markets Union

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1. INTRODUCTION

This Commission Staff Working Document accompanies the Green Paper on Capital Markets Union. It presents initial reflections and analysis of the range of factors impeding the development of integrated and well-functioning capital markets in the EU.

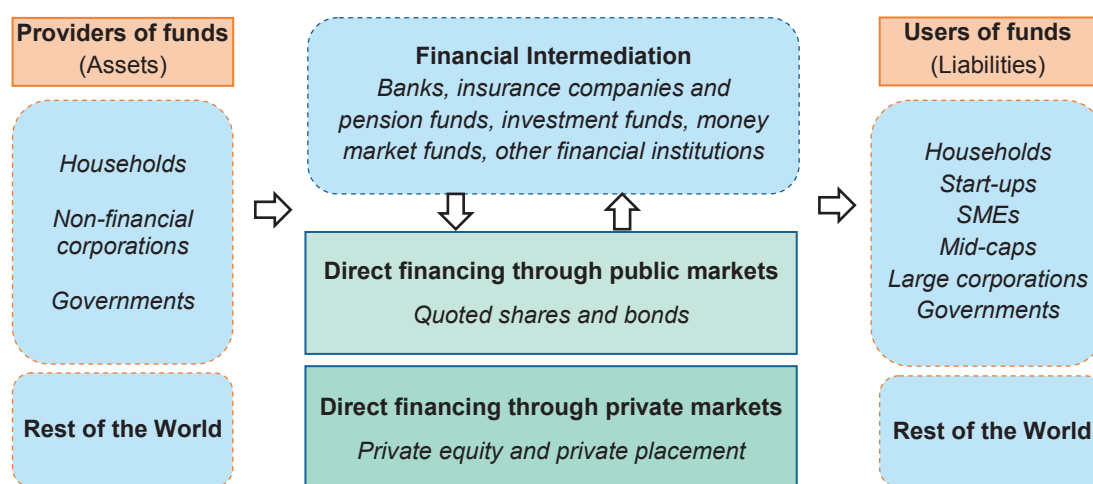
EU capital markets have been radically transformed in the last decades due to, inter alia, financial innovation, technological development, the introduction of the euro, the growth of derivative instruments, globalisation, and the regulatory and market response to the financial and economic crisis. As in the case of financial institutions, some capital markets have proved resilient to the crisis. Others have proven to be inherently fragile or, in the absence of adequate safeguards, have transmitted shocks and contributed to the build-up of systemic risk.

Understanding whether and to what extent EU capital markets are working well is challenging. This document is a first step in identifying the relevant issues. Further economic analysis will be undertaken to inform policy-making in developing an action plan on Capital Markets Union.

2. OVERVIEW OF CAPITAL MARKETS AND THEIR MAIN FUNCTIONS

Figure 1 below attempts to capture the main thrust of the flow of funds in an economy. Whilst capital markets are predominantly concerned with direct financing, they are also closely interlinked with financial intermediaries who are themselves active on capital markets.

Figure 1: Stylised view of capital markets in the broader financial system



The term "financial markets" is often used to refer to all sorts of markets in the financial sector, including ones that are not directly concerned with raising finance, such as commodity and foreign exchange markets. In the narrow sense, financial markets are formed by money markets and capital markets. The money markets are used for raising short-term finance (sometimes for loans that are expected to be paid back as early as overnight), whereas the capital markets are used for raising longer-term finance, such as the purchase of shares, or for loans that are not expected to be fully paid back for at least a year.¹

¹ Sullivan, Arthur; Steven M. Sheffrin (2003). Economics: Principles in action. Upper Saddle River, Pearson Prentice Hall. p. 283. ISBN 0-13-063085-3.

Funds borrowed from the money markets are typically used for general operating expenses to cover brief periods of illiquidity or short-term financing needs. For example, a company may have incoming payments from customers that have not yet cleared, but may wish to immediately pay out cash for its payroll. When a company borrows from the primary capital markets, the purpose is often to invest in additional physical capital goods, which will be used to help increase its future income. It can take many months or years before the investment generates sufficient return to pay back its cost.

In this narrow sense, modern capital markets consist of:

- i. Debt and equity markets that intermediate funds between savers and those that need capital;
- ii. Derivatives markets that facilitate risk management, consisting of contracts such as futures, options, interest rate and foreign exchange swaps, typically associated with underlying debt and equity instruments; and
- iii. Securitisation and structured finance markets² that improve funding access further by broadening the potential investor base.

The basic functioning and the main benefits of capital markets are explained in more detail in the subsection sections below.

2.1. Market-based (direct) vs. bank-based (indirect) financing

Capital markets financing is often labelled "direct", because it occurs through direct exchange of securities between investors and borrowers.³ This differs from "indirect" financing via financial intermediaries, notably banks, which collect deposits from savers and lend funds to borrowers. The latter is also referred to as the "bank-based model", as opposed to the "market-based model" in the case of direct financing. But this traditional distinction is less valid now as banks have become increasingly active in capital market intermediation.⁴ Every economy has a mixture of both rather than being a pure model of one or the other. The two types of intermediation should rather be treated as complementary to one another and interlinked. For example, with securitisation, banks certify borrowers' credit quality and the capital market finances the borrowers, thereby lowering financing frictions. In turn, capital market development lowers the cost of bank equity capital, and thus enables banks to raise the capital needed to take on riskier loans that they would otherwise reject.

The relative advantages of bank or market-based finance depend on the underlying economic structures. The shift towards more market-based elements of the financial system can be

² Among other things, these markets include financial instruments such as asset-backed securities (ABS), mortgage-backed securities (MBS), collateralised debt obligations (CDOs), collateralised loan obligations (CLOs), collateralised mortgage obligations (CMOs) and whole business securitisation (WBS). Bank lending, if not securitised, is typically not classified as capital market transactions.

³ The saver invests the proceeds in a financial market instrument issued by the entity (e.g. a corporate or government) that wishes to obtain funds. In the case of common equity, the transfer results in an ownership stake. In the case of debt, typically there is a contractual obligation to pay interest on the debt and ultimately to repay the debt on a well-defined schedule.

⁴ Banks hold significant amounts of bonds and shares issued by EU residents and are themselves significant issuers in the market. Banks play a role in supporting IPOs and other placements of securities through underwriting and book-building and make markets in these instruments. Depending on the country, most small investors that buy financial instruments do so through their retail banks.

expected to bring advantages for the EU economy by diversifying the funding sources available to the economy⁵.

Although banks through their traditional role in relationship banking are instrumental in overcoming problems of asymmetric information, in market-based financial systems, other intermediaries can play a role in information provision about potential borrowers and investment projects. For example, they include credit rating agencies and financial analysts and advisors that help the ultimate savers to evaluate and select investment projects. The ultimate savers may also put their wealth into non-bank intermediaries that evaluate and select investments for them. Credit insurance may also be an effective mechanism to delegate monitoring activities to specialised intermediaries. Credit insurers would also have an incentive to work out distressed assets when it comes to the ultimate borrowers' failure. The existence of a market for distressed assets allows risk-taking financial intermediaries such as private equity or hedge funds to step in. The emergence of these intermediaries is likely to be endogenous to the development of a market-based financial system – i.e. they would develop as markets develop.

2.2. Private vs. public markets

Capital markets can be subdivided into private and public markets. The private equity market, for example, is an important source of funds for start-ups, middle-market (so-called midcap) companies, firms in financial distress and public firms seeking buyout financing. Other typical examples include public equity and bond markets and the market for private placement debt, as depicted in Table 1 below:

Table 1: Typology of capital markets

| | Public markets | Private markets |
|----------------|----------------|-------------------|
| Debt markets | Bond markets | Private placement |
| Equity markets | Stock markets | Private equity |

The main difference lies in the greater regulatory and disclosure requirements associated with public markets (in terms of covenants, pricing, etc.), while private markets are subject to much less onerous disclosure obligations. Public markets are also typically characterised by a multitude of investors in each transaction, and hence deeper liquidity, while private debt placements or private equity deals often involve just a single or a small group of investors (with covenants and pricing tailor-made to suit their requirements) and rarely trade in secondary markets. Thus, companies that finance themselves in the public markets face much closer scrutiny. While regulation and disclosure requirements are meant to guarantee a higher level of investor safety, it can sometimes act as a deterrent and keep companies in the private domain.

2.3. Primary vs. secondary markets

Another key division within capital markets is between primary and secondary markets. In primary markets, new stock or bond issues are sold to investors, often via a mechanism known as underwriting (typically performed by investment banks). The main entities seeking to raise funds on the primary capital markets are governments (which may be municipal, local or national) and companies. Governments tend to issue only bonds, whereas companies can issue either equity or bonds.

⁵ See for example Langfield, S., and Pagano, M., "Bank bias in Europe: Effects on systemic risk and growth", December 2014.

In the secondary markets, existing securities are sold and bought among investors or traders, usually on an exchange or over-the-counter (OTC). Transactions on the secondary market do not directly help raise finance, but they make it easier for companies and governments to raise finance on the primary market, as investors know they are likely to be able to swiftly cash out (exit) their investments if the need arises. The availability of a liquid secondary market for securities also sets incentives to monitor investment projects as new information about debtors' fortunes opens profit opportunities from selling or buying securities.⁶ All in all, a liquid and transparent primary market for raising capital is predicated upon a secondary market with the same qualities.

2.4. Main functions of capital markets

Capital markets serve the following main functions:

- *Capital raising and investing*: the primary debt and equity markets provide an alternative way (to banks) to allocate capital within an economy. For example, they allow corporates to raise the funds required to expand their business and help governments fund their budgets or refinance existing debt. Capital markets also allow households to smooth their consumption over time and to perform intergenerational resource transfers. For investors, capital markets provide an opportunity to earn a return on funds that are not needed immediately and to accumulate assets that will provide an income in future.
- *Risk management and diversification*: the derivatives market helps investors and borrowers to manage (hedge) the risks inherent in their portfolios and asset/liability exposures. Risks can be tranching, packaged and traded in financial markets.
- *Price discovery and asset valuation*: secondary markets facilitate the trading and pricing of financial instruments and their risks.

2.5. Investor groups

There are different types of investor, with different preferences for risk and return and the types of investment/assets preferred. Some financial market products are deliberately designed to offer only capital gains and no yield, or vice versa, to satisfy these preferences. Investors can be broadly divided into two categories:

- **Households** (retail investors) own a small proportion of financial assets. Individual investing has become increasingly popular and most households in wealthier countries own some financial assets, often in the form of retirement savings⁷. Nonetheless, the great majority of individual investment in financial assets is controlled by a comparatively small number of wealthy households.
- **Institutional investors**⁸ are responsible for most of the trading in financial markets. Asset managers play a very important role in capital raising and investing by

⁶ Secondary capital market transactions can also have a negative effect on primary borrowers. For example, if many investors try to sell their bonds simultaneously, this can push up the yields for future issues from the same entity.

⁷ Most such holdings, however, are quite small, and their composition varies greatly from one country to another. In 2010, equities accounted for 9% of households' financial assets in Germany, but 34% in Finland. Although the 2008–09 stock market crash caused households to reduce their equities' holding, the extremely low yields on bond investments and bank deposits drove individual investors back towards equities in 2013.

⁸ Institutional investors include banks, insurance companies, pension funds, collective investment vehicles including mutual funds, exchange-traded funds (ETFs), private equity funds and hedge funds, high-frequency traders (HFTs), among others.

accumulating significant amounts of resources and investing them in the real economy. The size and composition of institutional investors varies greatly from country to country and their investment practices vary accordingly⁹.

2.6. Important market attributes

For capital markets to function efficiently and competitively, they need to attract capital and the critical mass of investor base. The following important (interlinked) attributes matter in achieving this:

- **Liquidity**, i.e. the ease with which trading can be conducted (or the cost of converting assets into full liquid assets). In an illiquid market an investor may have difficulty to find a counterparty ready to make the desired trade, and the difference, or “spread”, between the price at which a security can be bought (bid) and the price, for which it can be sold (offer), may be high. Trading is easier and bid-offer spreads are narrower in more liquid markets.
- **Transparency**, i.e. the availability of prompt and complete information about trades, prices and past market behaviour. The knowledge about the performance of a company, issuing stocks or the likelihood of a debt security issuer repaying the money as promised are also elements of market transparency. Generally, the less transparent the market the lower the level of trading or at least the higher the level of risk assumed because of the lack of information.
- **Integrity and accountability**, for example when it comes to ensuring that trades are completed according to the terms agreed and preventing insider trading and other forms market abuse.
- **Adequate legal procedures** to settle disputes and enforce contracts.
- **Suitable investor protection and regulation**: trading will be deterred if investors lack confidence in the available information about the securities they may wish to trade, the procedures for trading, the ability of trading partners and intermediaries to meet their commitments, and the treatment they will receive as owners of a security or commodity once a trade has been completed.
- **Low transaction costs**: many financial-market transactions are not tied to a specific geographic location, and the participants will strive to complete them in places where trading costs, regulatory costs and taxes are reasonable.
- **Adequate infrastructures and digitalisation**: modern capital markets depend on adequate market infrastructures for trading, clearing and settlement of transactions and information provision. Capital markets are almost invariably hosted on computer-based electronic trading systems. Although most can be accessed only by entities within the financial sector or the treasury departments of governments and corporations, some can be accessed directly by the public. One of the recent developments is the rise of the Fintech sector, which can be defined as a breed of new companies that combine traditional financial services with the use of new digital technologies. Fintech is facilitating access to finance especially for those firms not able to obtain capital via banks

⁹ At the end of 2011, for example, US institutional investors kept roughly identical proportions of their assets in the form of shares and in bonds. Until recently, British institutional investors tended to hold a greater proportion of assets in shares, whereas institutional investors in Japan have tended to favour bonds and loans over shares.

or (traditional) capital markets. A good example is crowdfunding where non-traditional investors get access to investment opportunities for the first time and where start-ups and SMEs can obtain funding for their investments and operations through the internet¹⁰.

2.7. Economic benefits of capital markets

The development of capital markets generates numerous economic benefits:

- First, capital markets provide financing for the economy, in addition to bank financing, and enlarge the investor base. They encourage a broader ownership of productive assets by small savers to enable them benefit from growth and wealth distribution. Better developed capital markets may also offer better credit terms and conditions for some borrowers, potentially making capital more mobile and cheaper. This can be particularly relevant in times of financial turmoil, allowing companies to arbitrage between the various potential sources of financing. Overdependence on bank lending makes the economy more vulnerable when bank lending tightens, as happened in the recent crisis. **Diversification of funding sources** implies less reliance on bank lending and therefore makes the financial system more flexible in crisis situations. Next to systemic benefits, diversification benefits also apply from the perspective of investors who benefit from an increased set of investment opportunities in deeper and more liquid capital markets.
- Second, capital markets **improve the allocation of capital**. Because the prices of corporate debt and equity respond immediately to shifts in demand and supply, changes in the outlook for a company are quickly embodied in current asset prices. The signal created by such a price change encourages or discourages further capital inflows. The ability of companies in their early stages of development to raise funds in the capital markets is also beneficial because it allows them to grow very quickly, which speeds the dissemination of new technologies throughout the economy. Furthermore, by raising the returns available from pursuing new ideas, technologies, or ways of doing business, the capital markets facilitate entrepreneurial and other risk-taking activities.
- Third, well-functioning capital markets have the potential to **distribute risk more efficiently**. Part of the efficient allocation of capital is the transfer of risk to those best able to bear it — either because they are less risk averse or because the new risk is uncorrelated or even negatively correlated with other risks in a portfolio. This ability to transfer risk facilitates greater risk-taking, but this increased risk-taking does not destabilise the economy. Capital markets can act as shock-absorbers when an economy hits difficulties. Whilst losses are incurred throughout the financial system, certain investors may be better placed to absorb losses than banks. The shock absorbing capacity of capital markets is particularly high when funding is provided in the form of equity.

In addition, whereas banking intermediation is primarily debt-based, capital market financing comprises equity funding. More equity funding allows more investment without increasing the indebtedness of the economy.

According to the economic literature, there does not seem to be a uniformly positive effect on economic growth at all levels of financial intermediation. A number of studies identify thresholds beyond which additional financial expansion no longer yields positive changes in

¹⁰ Global investments in FinTech have increased from \$930 million in 2008 to nearly \$3 billion in 2013. In the UK and Ireland alone, FinTech companies received over \$700 million from investors between 2008 and 2013. See "The Boom in Global Fintech Investment. A new growth opportunity for London" by Accenture.

growth.¹¹ In particular, empirical evidence shows that banking sector expansion exerts a positive influence on economic growth especially at earlier economic development stages. This may be linked to the fact that banks provide different services to the economy than those provided by capital markets: banks have a comparative advantage in financing standardised, shorter-term, lower-risk and well-collateralised transactions. However, as the economy develops, its relative sensitivity to capital markets increases.

Recent empirical evidence shows that capital market size is positively correlated with economic development: the positive impact of stock and bond markets on economic development is related to their superior capacity to reallocate capital cost-efficiently across industries and to finance investments by acquiring capital from many sources, including asset managers (i.e. pension funds, mutual funds, hedge funds, private equity funds etc.).¹²

2.8. Obstacles to efficient capital markets

Obstacles to the adequate functioning of capital markets fall under the following categories:

- i. **Underdeveloped or fragmented markets**, due to regulatory and legal barriers, institutional shortcomings and other reasons;
- ii. **Barriers on the demand** side of the market in terms of access to finance, in particular as regards SMEs;
- iii. **Constraints on the supply** (i.e. investor) side of the market that limit the flow of savings into capital market instruments;
- iv. **Market distortions or regulatory failures** that limit or impede direct financing of investments with a long-term horizon.

Modern capital markets are closely interconnected. It is thus no surprise that the four categories of problems identified share many underlying causes. However, for ease of exposition each of these set of problems is addressed separately.

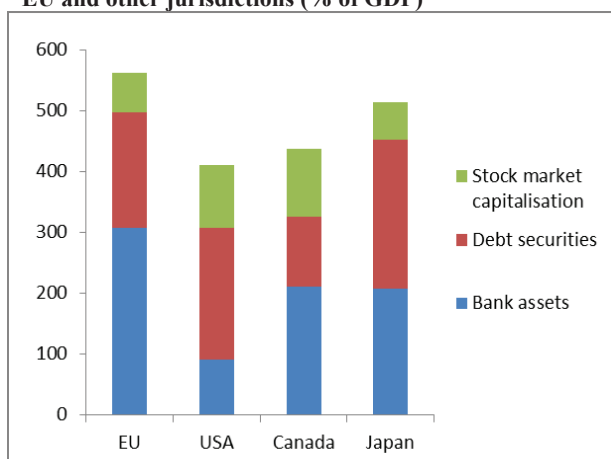
3. UNDERDEVELOPMENT AND FRAGMENTATION

Capital market activity has increased significantly in the EU over the last two decades. Between 1992 and 2013, the total EU stock market capitalisation has progressed from €1.3 trillion (21.7% of GDP) to €8.4 trillion (64.5% of GDP), whilst the total value of outstanding debt securities has grown from €4.7 trillion (74.4% of GDP) to €22.3 trillion (171.3% of GDP). Nonetheless, a number of EU capital markets remain underdeveloped, at least in comparison to the US markets.

¹¹ For example, see OECD (2014), BIS (2014), Cecchetti et al (2012) and Arcand et al (2012). BIS (2014) identify a threshold of 95% for the turnover ratio, expressed as the value of total shares traded to average market capitalisation.

¹² See for example Kaserer, C. and Rapp, M.S., Capital Markets and Economic Growth – Long-Term Trends and Policy Challenge, Research Report, March 2014.

Chart 1: Size of the banking sector and capital markets in EU and other jurisdictions (% of GDP)



Source: IMF

Europe has traditionally relied more on bank finance, with total bank sector assets far exceeding those of the US (see Chart 1). Although a number of technical reasons can explain some of the observed differences, (e.g. differences in the mortgage market and accounting practices), a corollary of this overreliance on bank finance is that certain capital markets are relatively less developed.

Simple cross-country comparisons need to be interpreted with care, but differences in capital market development between Europe and the US are nonetheless telling.

While Europe's economy is slightly larger than the US economy,¹³ in the US, markets for:

- public equity are almost double in size (138% of GDP vs. 64.5% in EU),¹⁴ and so are private equity markets
- private placement are up to three times bigger (\$50 billion vs. €15 billion in EU)¹⁵
- corporate (non-financial) debt securities are three times as large (40.7% of GDP vs. 12.9% in EU)¹⁶
- corporate high-yield securities (in terms of issuance volumes) are more than 2.5 times as high (€187 billion vs. €68 billion in EU).¹⁷

However, there is wide variation in capital market development across EU Member States. For example, domestic stock market capitalisation exceeded 121% of GDP in the UK, compared to less than 10% in Latvia, Cyprus and Lithuania¹⁸. Moreover, while the post-crisis downscaling of gross capital flows affected all regions, the EU (and the euro area, in particular) has undergone the most sizeable decline in the magnitude of gross capital inflows and outflows as a percentage of GDP. All components of gross capital inflows (portfolio investment, foreign direct investment, and bank intermediated claims) were lower in 2013 than in 2007¹⁹.

3.1. Regulatory and institutional reasons

Capital market development in the US was in part spurred by the development of a private pension system. The growth of large corporate pension plans created a large group of

¹³ In 2013, the EU GDP was around €13.03 trillion and that of the United States €12.65 trillion, although on a per capita base, the EU reached only two thirds of the US level.

¹⁴ ECMI statistical package 2014.

¹⁵ However, mid-sized European companies have also been accessing the US private placement market, e.g. raising \$15.3 billion in 2013. See ICMA Quarterly Report No.3 2014.

¹⁶ ECMI statistical package 2014.

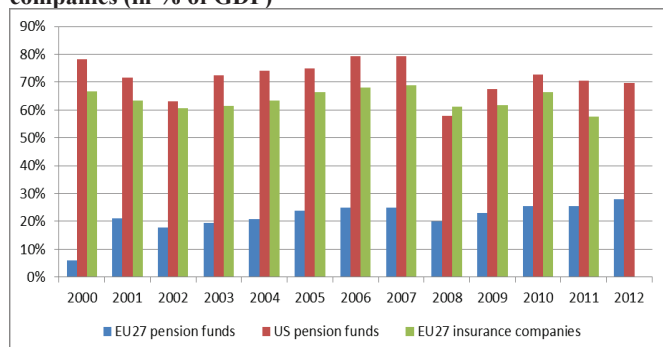
¹⁷ AFME (2013), "Unlocking funding for European investment and growth".

¹⁸ ECMI statistical package 2014.

¹⁹ According to IMF data, the total stock of cross-border portfolio investments globally stood at €25 trillion at the end of 2013. The total stock of cross-border portfolio investments between EU Member States was €9.6 trillion, whereas portfolio investments coming from outside the EU amounted to €5 trillion. At the same time, according to UNCTAD World Investment Report 2014, total inflows of foreign direct investment (FDI) into the EU amounted to \$246 billion, constituting 17% of the world total in 2013, which is 30% less than the pre-crisis peak in 2007.

institutional investors who had strong incentives to operate directly in the capital markets in order to increase the returns on their plans' assets.

Chart 2: Total assets of pension funds and insurance companies (in % of GDP)



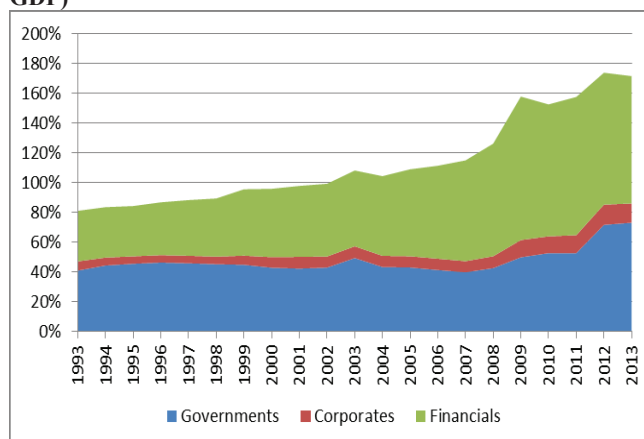
Source: ECMI

US private pension funds hold more than double the assets of EU pension funds, eclipsing even the EU insurance industry which also provides pension products (see Chart 2). There is however considerable variation across EU Member States, with some (e.g. the UK and the Netherlands) having highly developed private pension markets. Taken together, the EU insurance and pension fund industries manage assets worth over 80% of EU GDP.

3.2. Size vs. composition

Notwithstanding the benefits associated with well-developed and functioning capital markets, size alone is not necessarily the only important factor – composition matters too. Larger capital markets do not necessarily deliver positive effects for the real economy - nor does size guarantee market liquidity when it is most crucial, that is, in times of stress.

Chart 3: EU debt securities outstanding by issuer (in % of GDP)



Source: ECMI

Chart 3 shows that corporates account only for some 7.5% of the total EU debt securities outstanding, whilst governments account for some 42.5% and financial firms account for almost 50%.

In fact, the growth in debt capital markets over the last two decades is largely driven by financial entities, essentially, selling and trading debt with each other. Indeed, bonds issued by financial firms are bought by other financial firms. Not all of this intra-financial trading may contribute to improved financial services to end-users but instead may simply reflect a lengthened intermediation chain and greater

interconnectedness, thereby enhancing contagion and systemic risk. Similarly, only a fraction of the large volume of total derivatives transactions involves non-financial firms as counterparties.

3.3. Fragmented market structure

Despite the considerable progress achieved with integration so far, EU capital markets still too often tend to be fragmented along national lines. This fragmentation hinders the development of deep and liquid markets, impeding the flow of finance within the EU and with the rest of the world. Even the best designed national markets in the EU could lack critical size, leading to a smaller investor base and fewer financial instruments to choose from. This lack of market size and depth inhibits investors' interest in acquiring financial assets and the realisation of scale advantages. For example, venture capital investment can be profitable only by diversifying across many investments, such that one successful firm in the portfolio more than compensates

for the losses of many others. Diversification, which benefits from pooling uncorrelated risks, is generally not possible in small national markets, where market players face similar (and hence correlated) conditions and risks. It follows that measures to deepen EU capital markets need to go hand in hand with measures to promote further market integration, giving investors the ability to invest their funds across the EU and enabling companies to access funds irrespective of their location.

Financial markets in the EU had become more integrated pre-crisis in terms of cross-border holdings of financial instruments. As the crisis revealed, however, this integration was driven by debt-based wholesale banking flows (e.g. cross-border (inter-)bank lending), which are pro-cyclical, typically prone to sudden reversals and vulnerable to liquidity and confidence shocks. More integrated equity markets, instead, may have allowed market participants to better absorb shocks. At this time, however, equity markets in the EU remain characterised by a marked home bias, limiting the extent to which potential losses (and hence risk) can be shared across borders.²⁰ Similarly, cross-border holdings of corporate debt remain low.

Although significant progress has been made in dismantling barriers to post-trading, the European financial market infrastructure for post-trade services is still characterised by fragmentation and by large values of bilateral over-the-counter (OTC) transactions. Post-trade services refer to the activities after a trade has been concluded, which are clearing and settlement. If the trade has been executed on a stock exchange, it is typically cleared by a central counterparty (CCP). Thus, market participants can effectively carry out a cross-border transaction only if they have access to the same trading platform and the same CCP. Furthermore, when buyers and sellers settle their obligations following a trade that has been cleared, assets (cash or securities) are exchanged. Securities are settled in central securities depositories (CSDs), whilst cash settlement takes place in central bank accounts for CSDs (except for the international CSDs (ICSDs) where it is done in the books of the ICSD itself).

As another example,²¹ almost every European country has one (or several) CSD(s), generally serving their local market. This is in contrast with the US, where securities markets are underpinned by only two CSDs. In addition, market practices often differ across European countries. As European securities are not held in any one CSD, but in a range of CSDs in different countries, investors may need to rely on additional intermediaries to access European markets. Since it is often neither practical nor possible to open accounts in each European CSD, investors will go through ICSDs, global custodians or local custodians that have the necessary expertise about local market practices. These additional intermediaries can make the instruction chain longer and thus increase operational risks and costs. Moreover, they often preclude shareholders from directly exercising their voting rights.

The EU has taken important steps to ensure that financial market infrastructures (such as CCPs and CSDs) are robust by imposing additional regulatory requirements in the CSD Regulation and European Markets Infrastructure Regulation (EMIR), as well as expects the fragmentation problem to be tackled by means of the CSD Regulation and the Target2Securities project run by the Eurosystem.

²⁰ For example, intra-euro area cross-border equity holdings (i.e. equity issued in the euro area and held by residents of other euro area countries) amount to just over 40% of total holdings (source: ECB), which has steadily increased over the last decades but is still less than would be expected in fully integrated markets.

²¹ The discussion here only touches on CSDs and CCPs, although there is a wider set of relevant market infrastructures and issues to consider.

3.4. Specific impediments to capital markets

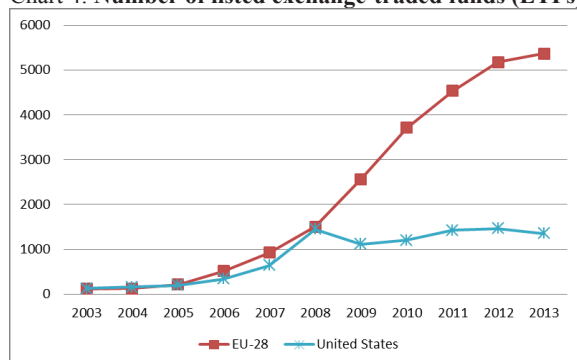
The main impediments to the development and adequate integration of capital include the following.

3.4.1. Endogenous constraints in reaching critical size

Capital markets cannot function effectively or efficiently if there is a small investor base and a limited flow of savings to capital markets. Conversely, fund raisers (representing demand) and investors (representing supply) will not be drawn to capital markets that lack depth and remain fragmented.

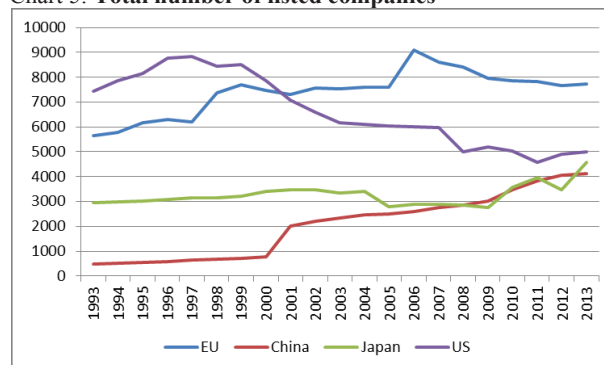
The EU has almost four times as many exchange-traded funds (ETFs) as the US (see Chart 4) and more listed companies (see Chart 5) despite the fact that EU market capitalisation is only half of that in the US. The high number of asset managers could make it difficult for them to achieve a minimum critical size and to realise economies of scale. In the EU asset management industry, the top 5 players have only 17% of the overall assets under management, which helps competition but can also indicate a fragmented market.

Chart 4: Number of listed exchange-traded funds (ETFs)



Source: ECMI

Chart 5: Total number of listed companies



Source: ECMI

3.4.2. Impaired market data availability

Another important problem that could be holding back further development and indeed the integration of European capital markets is data availability. The production and consumption of market data is part of a larger value chain that includes the trading of financial instruments. Financial markets need reliable and relatively high frequency data to be efficient and liquid. Where there are no data, there are no markets. Market data provision services in Europe are fragmented, reinforcing the home bias in those markets that exist.

Technological advances in the IT sector have enabled easy processing of vast data volumes. Nevertheless, these data have to be gathered and systematised first to enable this process. Moreover, even where data may be available across EU member states, it may not correspond to the same standards and definitions, making aggregation challenging. In addition, there is evidence that market data services can cost up to 7 times more in the EU than in the US.²² Seven years after the EU opened up European stock exchanges to competition it is still not possible to get a full picture of price information across the EU market despite repeated industry efforts to consolidate the data stream from Europe's markets into a 'consolidated tape'. One obstacle to progress has been standards, since each European exchange produces data in its own way and merging them has proved difficult.

²² Pricing of market data services. An economic analysis, Oxera, February 2014.

The industry has been given two years to come up with a solution. Otherwise, under the revised Markets in Financial Instruments Directive (MiFIDII), the regulator can appoint a consolidated tape provider.

3.4.3. Differences in regulation and supervisory enforcement

Significant progress has been made in strengthening the regulation and supervision of capital markets across the EU. Developing a single rulebook and the increasing adoption of directly applicable EU Regulations in recent years has been an important element in the creation of a more harmonised framework for capital markets. However, the success of the reforms still depends on the detailed implementation and enforcement of the rules.

Although regulatory frameworks have largely been harmonised, we still lack convergence in the application of these frameworks. Also, national measures in areas which are not harmonised at EU level may create barriers to capital movement which prevents EU financial reform from realising its full potential. Such barriers may take the form of divergent/additional requirements imposed by host authorities on financial market operators using their passport. For instance, supervisory fees or other additional requirements imposed by host authorities on European funds may discourage these funds from operating beyond their home Member State.

The reform programme is not yet complete. For example, while the regulatory framework that applies to the infrastructures that support trading and post-trading in financial markets is now more harmonised, no common frameworks exist for their recovery and resolution. This is of particular concern for central counterparties that carry systemic risk and presents barriers to market integration if these infrastructures are "cross-border in life, but national in death". Work on resolution for non-banks is under preparation.

While there has been considerable progress in harmonising rules needed for the transparency and integrity of securities markets, legislation relating to investors' rights in securities is not yet harmonised. Different Member States define securities in different ways. Some stakeholders argue that this hampers the integration of EU capital markets because investors in one Member State cannot correctly assess the investment risk in another Member State.

Discussions on a 'pan-European securities law' date back more than a decade. This is a politically sensitive and complex subject as it touches on property, contract, corporate and insolvency law, as well as the laws on holding of securities and conflict-of-laws. Furthermore, it is argued that the launch of Target2Securities (T2S) initiative in mid-2015 will remove the legal and operational risks associated with the transfer and holding of securities across jurisdictions, reduce costs and significantly increase cross-border investment.

3.4.4. Diverse and fragmented legal frameworks for specific financial instruments

The legal framework for certain financial instruments remains fragmented across the EU and in some cases absent. In particular, there is limited standardisation, for example, as regards information requirements and investor protection.

Some markets may not be able to start without a common set of market rules, transparency on product features and consistent supervision and enforcement. For example, it is widely believed that the market for securitised financial instruments has been subdued by the crisis experience to a suboptimal size. In 2014 (2013), securitisation issuance in Europe amounted to some €216 billion (€180 billion), of which more than half was retained rather than placed, compared to €594

billion in 2007.²³ A certain degree of standardisation as well as transparency and simplicity may allow for the development of a deep secondary market, striking the right balance between the benefits and the risks of securitisation. Work has already started to ensure a comprehensive and consistent approach for highly transparent, simple and sound quality securitisation (i.e. Solvency II and Liquidity Coverage Ratio delegated acts). These initiatives on securitisation represent a good starting point, but are considered insufficient. A large amount of stakeholders including central banks, regulators, national authorities and private sector representatives have expressed the need to bring forward a more comprehensive approach to (re)launch these markets. For investors, this needs to increase safety, legal certainty and comparability across securitisation instruments.

Similar reasoning could also apply to covered bonds, which have become an increasingly important funding instrument for European credit institutions.²⁴ Although covered bond markets have remained relatively resilient in recent years, the crisis revealed fragmentation in European secondary markets, as pricing of covered bonds varied significantly depending on the Member State of issuance. Access to new issuance became difficult in particular for smaller issuers. In the EU, 26 Member States have passed covered bond legislation, but harmonisation has been limited to the prudential aspects of these instruments. The presence of well-developed national frameworks did not stop European markets from fragmenting along jurisdictional lines during the crisis. A lack of clarity for investors over the legal requirements in different Member States or actual differences between national covered bond regimes may have actually contributed to this trend.

Similarly, as regards markets for private placements, many European companies currently tap the US markets because of an insufficient European investor base. While the current regulatory framework allows private placements and some Member States have already developed these markets, an EU framework for private placement does not exist to date²⁵. The Commission has commenced a mapping exercise of national private placement regimes and notes that barriers to the development on a pan-European basis include lack of standardised processes and documentation, lack of information on the credit worthiness of issuers²⁶ and lack of liquidity in the secondary market.²⁷ To attempt to overcome the problem of lack of standardisation of documents and processes, the Pan-European Private Placement Working Group coordinated by the International Capital Markets Association (ICMA) has published a guide to best practice to facilitate the emergence of common market practices, principles and standardised documentation. The constituents of this group have also recently launched template documents for use in European private placement transactions.

Another problem area that deserves further analysis is that of financial collateral, which is a vital part of the financial system as it provides a safety net in certain transactions in case of unexpected problems. Since the financial crisis, the demand for collateral has increased, driven

²³ SIFMA/AFME Structured Finance Data Tables, Fourth Quarter 2014

²⁴ Total outstanding covered bonds amounted to €2.8 trillion in 2012 globally, of which more than 80% is accounted for by six EU Member States (Germany, Spain, Denmark, France, Sweden and the UK).

²⁵ The largest and longest established of these is the German "Schuldschein" market, whereas the "Euro PP" market in France and the UK market are described as successful emerging markets for these instruments, although from a low base.

²⁶ In the US, insurance State-level regulators have organised a centralised risk-scoring body for privately placed (unrated) loans. The credit rating designations are assigned to privately placed bonds by the Securities Valuation Office (SVO) of the National Association of Insurance Commissioners (NAIC) or are self-assigned by the insurance company if the bond is publicly rated by an approved credit rating provider. The US NAIC reviews the papers after closing of an issue and issues a stamp on the transaction grading it on a scale of 1 to 6.

²⁷ Since information on recovery is particularly important for investors in these products, the differences in European insolvency laws have also been cited as barriers to the development of a wider cross-border private placement market and explain at least partly the lack of standardisation.

by market demand for more secured funding as well as new regulatory requirements. The flow of collateral throughout the EU is restricted, preventing markets from operating efficiently. While the Financial Collateral Directive created a harmonised regime for the taking and enforcing of financial collateral and also introduces important protection of close-out netting in collateral arrangements, it has been argued that - due to the narrow scope as well as divergent implementations in the Member States - significant disparities remain, leading to legal uncertainty (e.g. as regards close-out netting rules and the reporting of collateral under different legislations).

At the basis of many financial operations such as securitisation, financial collateral arrangements or factoring lies a basic legal operation: assignment - essentially a transfer of claim between two parties. However, differences between the national conflict-of-law rules in respect of the third party effects of assignment and the order of priority between an assignment over the rights of other persons, as well as between certain substantive rules such as the conditions for the effectiveness of an assignment hamper the development of cross-border financing instruments. These differences have been estimated to create additional legal costs of between £350,000 and £1 million per transaction. Furthermore, 47% of stakeholders encounter problems in securing the effectiveness of an assignment against third parties.²⁸

A final example is the market for crowdfunding, where some Member States have already introduced ad-hoc legislation but where one is far from a common market where investors can fund projects across borders and entrepreneurs can tap capital across borders. At the same time, standardisation or a common regulatory response may interfere with the natural development of a nascent market and the discovery of best business models, given the idiosyncratic and diverse circumstances of potential users at both sides of the platform.

3.4.5. Insufficiently harmonised or inadequate company law and corporate governance rules

Company law and corporate governance is mainly regulated at national level, and EU legislation focuses on harmonising certain key requirements to ensure a level playing field for the protection of shareholders and creditors of European companies²⁹. National traditions in the area of company law and models of corporate governance vary greatly between Member States. While this diversity of approaches allows to best respond to the specific needs of different national markets, it can also make cross-border operations of companies and cross-border investment more difficult and more costly.

From the perspective of the founders of companies, differences in company law rules make it more difficult to establish companies in many Member States. Once established, companies still often face barriers to their mobility from one Member State to another or to cross-border restructurings³⁰. As a consequence, the SME participation in the Internal Market is low. For instance, only around 2% of SMEs establish companies abroad (in the form of a subsidiary, branch or joint-venture)³¹. Similarly, companies seem to establish a limited number of branches

²⁸ http://ec.europa.eu/justice/civil/files/report_assignment_en.pdf

²⁹ Several company law directives provide for harmonisation on matters such as disclosures, formation and maintenance of capital, disclosure for branches, takeover bids, mergers and divisions or shareholders' rights.

³⁰ For example, due to a lack of relevant rules at EU level, companies wishing to undertake a cross-border division currently have to perform several operations, such as a national division and a cross-border merger or the creation of a subsidiary and a subsequent transfer of assets, which could lead to more burdens on companies in terms of costs and time.

³¹ Final Report on the Opportunities for the Internationalisation of European SMEs (2011), p. 21, available at: http://ec.europa.eu/enterprise/policies/sme/marketaccess/files/web_internationalisation_opportunities_for_smes_final_report_aug_2011_en.pdf

in another EU country³². Further harmonisation might therefore be useful as regards rules on cross-border establishment and operation of companies as well as rules on cross-border company mobility, including transfer of seat³³.

From the perspective of cross-border and foreign investors, two sets of rules are particularly relevant. Efficient minority protection improves corporate governance and the attractiveness of companies for foreign investors, as these are typically minority investors. There are only limited rules at EU level on minority shareholder protection. The ongoing revision of the Shareholder Rights Directive aims at introducing more safeguards for the interests of minority shareholders in the context of transactions with related parties. Other ways of protecting minority rights may also have merits. For example, previous consultations have shown support for a right of minority shareholders to appoint or nominate certain company directors. Furthermore, the efficiency of company boards in controlling company managers is subject to debate, especially since the financial crisis. Criticism points in particular to inactivity and insufficient expertise of certain board, and also to lack of real independence of mind. As they protect the interests of the investors, efficient and well- functioning company boards are also key to attract investment.

In general, European and national company law and corporate governance rules do not sufficiently integrate the benefits of modern technologies. Exchanges of information between companies, shareholders and public authorities are to a large extent paper-based. For example, in many companies shareholders still cannot vote electronically and, especially in case of cross-border voting, are faced with complex rules and lengthy procedures for the establishment of voting entitlements, resulting in substantial costs. Similarly, on-line registration of companies is not yet available in all Member States, only handwritten signatures are accepted by the registers, and often paper versions of documents still must be stored by companies. While the new regulation on electronic identification³⁴ should now make it easier to overcome technical barriers, company law provisions may need revisiting in order to better align to the opportunities offered by the use of e-identification³⁵. Concerning cross-border access to company data, several steps have been taken already, such as the requirement to provide access at EU level to information on limited liability companies (Business Registers Interconnection System (BRIS) project) or to information on issuers on regulated markets (revised Transparency Directive). However, the scope of these initiatives remains limited, as BRIS will cover only approximately 45% of legal entities in the Member States³⁶.

Use of modern technologies in the area of company law and corporate governance could help reduce costs and burden, but also ensure more efficient communication, in particular in a cross-border context.³⁷

³² According to a survey conducted by the Commission with the EU business registers, less than 1% of limited liability companies in the Member States represent branches of companies registered in another EU country

³³ See recent public consultation on cross-border mergers and divisions.

³⁴ Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (eIDAS Regulation)

³⁵ In this context, the proposal for Directive on Single-Member limited liability companies has a potential of pioneering the cross-border registrations and identifications.

³⁶ In addition, there is a lack of information on relationships between companies (branches, subsidiaries), information which would be extremely valuable to investors.

³⁷ This could take different forms, such as: i) the submission of statutory information and other documents required from companies in a standardised electronic format, on-line registration and storage of documents, improved information on group structure and relationships between legal entities in general; ii) electronic secured circulation of documents between authorities, to avoid many filings (one stop shop/ once only reporting principle); or iii) electronic voting systems, electronic platforms for voting, exchange of information between companies and shareholders, but also between different shareholders, in standardised electronic format

3.4.6. Non-harmonised conflict-of-law rules in the area of company law

At present, conflict-of-law rules in the area of company law are regulated by Member States and the content of these rules differs substantially. In particular, the connecting factor determining the applicable law varies significantly among Member States. Some Member States follow the real seat theory, i.e. the law governing a company is determined by the place where the central administration of that company is located. Other Member States follow the incorporation theory, i.e. the law governing a company is determined by the place of its incorporation (where the registered office is located).

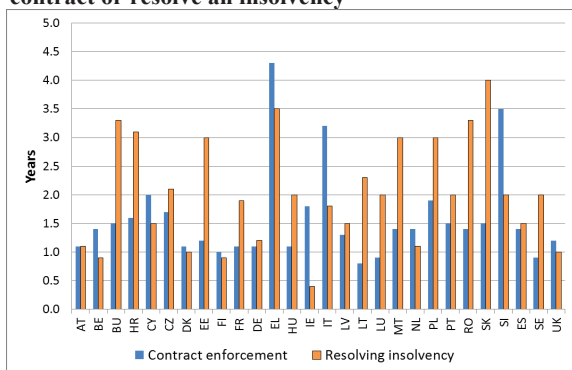
The divergence of national private international law regarding companies causes legal uncertainty for economic actors operating within the internal market. Today, nearly half of companies in the EU, in particular SMEs, regularly use the internal market freedoms. Legal certainty as to which is the law governing their operations is of the essence for them. The divergence of conflict rules leads to a situation where a company may be subject to the laws of various Member States at the same time. This means that on important matters regarding the internal functioning of the company, such as its incorporation, shareholding, management, diverging or even conflicting laws may be applicable.

A harmonisation of conflict rules would ensure that companies operating in the internal market and beyond know which legal regime is applicable to their creation, functioning, and dissolution, avoiding that conflicting regimes apply to them when they operate abroad.

3.4.7. Insolvency laws and enforcement of contracts

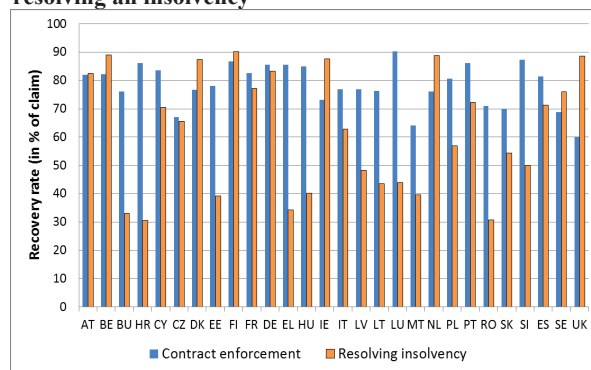
As can be seen in Charts 6 and 7 below, insolvency frameworks and the effectiveness and enforcement of contract law continue to differ significantly across EU Member States, despite ongoing efforts to improve the efficiency of European insolvency and restructuring procedures.

Chart 6: The number of years required to enforce a contract or resolve an insolvency



Source: World Bank Doing Business 2014

Chart 7: The recovery rate in enforcing a contract or resolving an insolvency



Source: World Bank Doing Business 2014

The considerable differences in the insolvency laws of Member States create additional costs for foreign investors to assess the risk properly and thus hamper the emergence of pan-European credit markets. In particular, the lack or inadequacy of rules enabling early debt restructuring in many Member States, the absence of provisions to give a second chance for entrepreneurs and the length and costs of formal insolvency proceedings in many Member States lead to low recovery rates for creditors and discourage investors who either hold back from investing or do so only at a higher premium.³⁸

³⁸ Commission Staff Working Document "Impact Assessment accompanying the Commission Recommendation on a new approach to business failure and insolvency", SWD (2014) 61 final.

The Commission Recommendation of 12 March 2014 on a new approach to business failure and insolvency³⁹ set out certain minimum standards with the aim of modernising the insolvency laws. The Recommendation requests Member States put in place debt restructuring proceedings which would enable viable debtors in financial difficulty to restructure and thus prevent their insolvency. If correctly implemented, these measures would ensure that every Member State has in place reasonably fast, cost-effective and transparent debt restructuring procedures which yield higher returns to creditors than liquidation procedures.

The Recommendation also requests Member States to ensure that honest bankrupt entrepreneurs can have a second start after a maximum of three years from a first failure. This will ensure that young entrepreneurs are not discouraged from innovating by the risk of failure, and that they can return to the productive economy with the experience they have gained from a first failure. Evidence shows that second starters are 40% more successful than first starters.⁴⁰

The implementation of the Commission Recommendation is only a first step. While the Recommendation addressed the two ends of the insolvency cycle in an attempt to change the culture of stigma associated with failure in many Member States, it does not touch upon the main bulk of the insolvency law, namely formal insolvency proceedings which end in the liquidation of the debtor and the distribution of the proceeds to creditors. Yet for most debtors formal insolvency proceedings are the only and best solution, and investors need to have confidence that, in the event of an insolvency, they will recover their claims or at least a high percentage of those claims. However, the differences between the Member States' laws and practices in the field of insolvency – which have developed so far outside any Union involvement - are significant. Minimum standards in this area would ensure that investors have greater clarity and predictability when it comes to the substantive insolvency rules affecting their claims. As a measure of the effectiveness of insolvency laws, proceedings should also be relatively short (e.g. maximum 2 years), cost-effective and transparent, and thereby capable of yielding higher returns to creditors.

As long as insolvency law remains national in character, it will be difficult for investors to assess the risks they assume when investing in securities issued in other jurisdictions. This is harmful as regards cross-border investments in secured securities, but also detrimental when it comes to unsecured debt (e.g. high yield bonds), which carries as a result a much higher risk in case of default. A more harmonised and efficient insolvency law would increase the recovery rates for creditors (bad debt loss in the EU was estimated at €350 billion in 2013) and thus encourage investment.⁴¹

An evaluation of the implementation by the Member States of the Commission Recommendation of 2014 on a new approach to business failure and insolvency is planned for 2015.

3.4.8. *Tax barriers*

The power to raise taxes and set rates lies predominantly with national governments. However, differences in tax regimes across Member States can have a significant impact on capital market activity and the location of market participants. These differences in taxation can lead to location decisions biased by tax considerations instead of economic ones, leading to misallocations of capital. Given the free mobility of capital within the EU, taxes can be effective instruments in promoting deeper and more liquid capital markets, leading to positive spillovers and related

³⁹ C(2014) 1500 final.

⁴⁰ http://ec.europa.eu/enterprise/policies/sme/business-environment/files/second_chance_final_report_en.pdf

⁴¹ Intrum Justitia (2014), "European Payment Index 2013".

economic benefits. Conversely, taxes can be used to discourage excess risk taking, unproductive capital market activity, or market distorting conduct.

A prominent example is the tax bias in favour of debt in corporate taxation, due to the deductibility of interest payments on debt without a similar treatment for equity-financing.⁴² Similarly, the deductibility of mortgage interest payments coupled with a relatively light recurrent taxation of housing creates a bias against equity and an overinvestment in real estate, as opposed to channelling funds into potentially more productive investments. This systematic tax bias in favour of debt discourages the development of loss and shock-absorbing equity markets across the EU.

Tax systems can enhance access to finance and be designed in such a way as to better support productive investment benefitting the real economy. Another area where tax incentives matter and diverge across the EU is the national tax reliefs granted to specific investments such as research and development (R&D). It is important to ensure that R&D tax incentives are regularly evaluated and that young innovative companies are able to benefit from them.⁴³

One practical difficulty in investing across borders within the EU is that of obtaining refunds of high source country withholding taxes, even where this tax relief is due under double taxation treaties. A Commission Recommendation of 2009⁴⁴ outlined how EU Member States could make it easier for investors resident in one Member State to claim entitlements to relief from withholding tax on securities income (mainly dividends and interest) received from another Member State. The Recommendation also suggested measures to enable financial institutions to make the claim for withholding tax relief on behalf of investors. In 2009, the costs related to the reclaim procedures were estimated to be approximately €1 billion annually, while the amount of foregone tax relief is estimated at approximately €5.50 billion annually.

Following the Recommendation⁴⁵ a Commission expert group (the Tax Barriers Business Advisory Group) presented its report entitled “Workable solutions for efficient and simplified fiscal compliance procedures related to post-trading” in 2013. One problem identified was the lack of standardised documentation. More than 56 different paper documents can be necessary today to claim tax relief in the EU. This results in complicated, costly and time consuming procedures not just for investors and intermediaries but also for tax authorities. The Group proposed the standardisation of the present documentation into one single electronic document and comprehensive solutions based on a system of relief at source (i.e. at the time of payment of the securities income) and the use of Taxpayer Identification Numbers (TINs).

⁴² This problem is particularly acute for the financial sector. It also goes in the opposite direction than the regulatory efforts to make financial institutions hold more capital. Recent studies have found that eliminating this bias would result in substantial reductions in systemic risks and costs of financial crises. See for example De Mooij , Keen and Orihara (2014), "Taxation, Bank Leverage, and Financial Crises", in De Mooij and Nicodeme eds., *Taxation and Regulation of the Financial Sector*, MIT Press and Similarly, Langedijk, Nicodeme, Pagano and Rossi (2014), "Debt Bias in Corporate Taxation and the Costs of Banking Crises in the EU", *Taxation papers*, N.50, DG TAXUD.

⁴³ CPB (2014) 'Study on R&D tax incentives'. Commissioned by the European Commission. *Taxation papers* No 52.

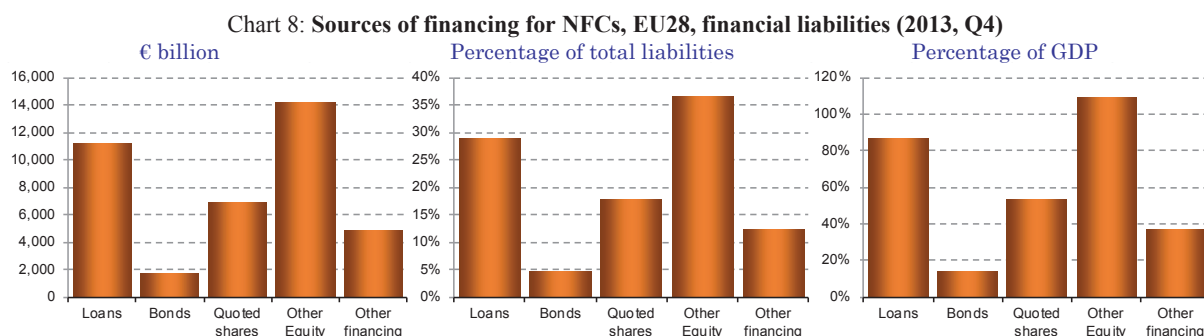
⁴⁴ Recommendation on Withholding Tax Relief Procedures, COM (2009) 7924 final.

⁴⁵ The OECD Committee on Fiscal Affairs successfully approved the Treaty Relief and Compliance Enhancement (TRACE) implementation package 2013. This package is to some extent in line with the principles of the EC Recommendation. With the OECD approval, the work on this dossier has now, not only successfully resulted in a European, but also a global, impact.

4. BARRIERS TO DEMAND AND ACCESS TO CAPITAL MARKETS FINANCING

Access to finance is a crucial pre-requisite for economic growth. Funding choices of the non-financial corporations (NFCs) have an impact on the variation of financial instruments available in an economy, since the corporate sector is the only one that combines a persistent net-debtor position with room to choose among different financial liabilities, i.e. funding via debt or equity in public or private financial instruments from other institutional sectors.⁴⁶

To put things into perspective, it is useful to have a brief look at the way European NFCs raise financing. Chart 8 below shows that equity financing accounts for roughly 55% of the total, of which 1/3 (i.e. 18% of the total) is in public equity.



Note: Loans include bank loans and other loans, the latter being mainly intercompany loans. Other financing mainly includes trade credit and advances.

Source: ECB, Eurostat and own calculations

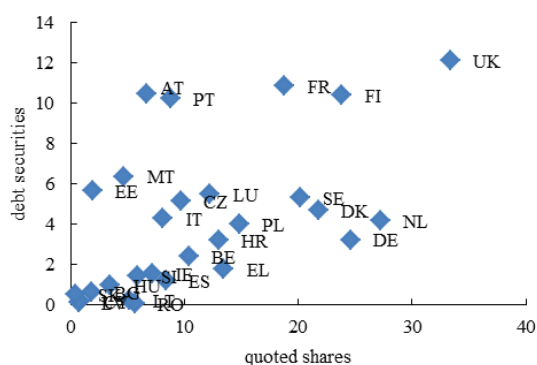
Loans represent some 29% percent of the total NFC financing, about half of which is actually intercompany loans and similar. In other words, bank loans represent roughly 15% of the total financing. Bonds account for over 4% of total liabilities, whilst the remaining 12% are represented by other financing (consisting mainly of trade credit and advances).

Compared to the US corporates, EU companies rely much more on intercompany loans than US companies (15% vs. 2%, respectively). The EU companies' share of bank loan and bond financing differs from that in the US by roughly 5 percentage points (15% vs. 10% for bank loans and 4% vs. 9% for bonds, respectively)

Industry structure may provide some explanation to the observed differences between the EU and the US: e.g. there is a higher share of large firms in the US, which tend to rely on public markets more than smaller companies. Such structural differences deserve further analysis as they may explain some of the differences between EU and US NFC financing structures.

⁴⁶ While the public sector is also a sector with a continuous deficit position, its funding is dominated by the issuance of debt securities. Only a small part is funded via loans, while equity issuance is not feasible.

Chart 9: Use of marketable financial instruments by NFCs in the EU (in % of total liabilities, 2012)



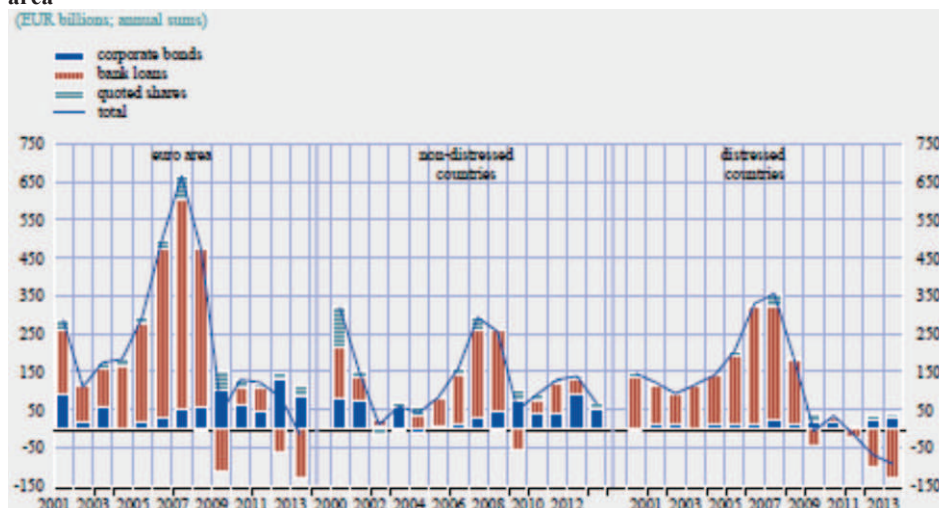
Source: Eurostat

The cross-country variation in the use of market instruments among EU Member States also points to structural determinants. Member States in which NFCs rely more strongly on quoted shares than on other forms of equity tend to be the same in which NFCs use fewer bank loans and more debt securities (see Chart 9). The UK, in particular, stands out in its use of marketable instruments (bonds and quoted shares), consistent with its larger capital markets. More generally, market instruments tend to be used more intensively in larger countries or where per capita GDP is higher.

Over the last years, NFCs financial flows have shifted on the debt side towards market instruments and on the equity side towards non-market instruments. With bank loans declining since the onset of the crisis, there has been a notable increase in the issuance of corporate bonds by NFCs, in particular in the high-yield segment. In fact, on aggregate, this increase in net issuance has been sufficient to offset the decline in the net flow of bank loans at aggregate level (see Chart 10).

However, this development masks significant differences across countries. Focusing on the euro area, the positive net issuance of corporate bonds is concentrated in the non-distressed countries, where there has been no decrease in the net flow of bank loans. In contrast, there has been a strong decrease in the net flow of bank loans in distressed countries, where the net issuance of corporate bonds is only moderately positive. Put differently, capital market access differs across the EU, also reflecting market fragmentation.

Chart 10: Non-financial corporates issuance of debt securities, bank loans and quoted shares in the euro area



Source: ECB

Access to capital markets also differs across firms. Capital markets work best for large firms, which have sufficient size to warrant the fixed costs of using capital market instruments (e.g. commissioning an external rating, disclosing information required by investors and regulators) and which are big enough so that each individual issuance is sufficiently large to attract the attention of underwriters, investors and analysts.

While there is no conclusive evidence of a general funding gap in the EU economy (also because of currently low levels of demand), there are important frictions in the flow of finance, in particular to SMEs⁴⁷ and in distressed countries.⁴⁸ These problems have increased significantly since the crisis, given the high dependence on bank finance and banks' pressures to deleverage. Where such financing constraints apply, this can impede productive investment from being undertaken, with consequences for growth and jobs.

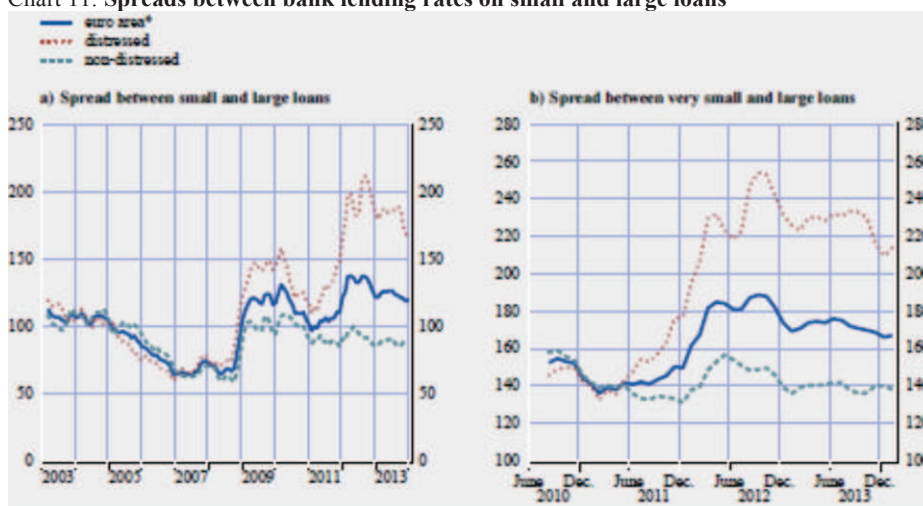
Focusing on SME financing, there are a number of underlying problems that limit their access to finance in general and to capital market finance in particular:

4.1. Overdependence on bank finance

SMEs' balance sheets and performance are typically more opaque from an investor's perspective, also as a result of less informative financial statements.⁴⁹ This in turn translates into greater informational asymmetries and higher transaction costs for potential investors. These disadvantages can be partly overcome within longer bank lending relationships, where banks accumulate a rich history of information on their borrower that allows them to more efficiently assess their creditworthiness. Among other factors, this explains the dependence of SMEs on bank financing.

In the crisis, bank lending decisions inevitably became more selective, on the grounds of both banks' own balance sheet constraints and the rising default probabilities of their borrowers. As SMEs are typically perceived to have a higher probability of default than larger firms and are more opaque, they are more likely than larger firms to be penalised by tightening credit standards⁵⁰ in times of heightened bank risk aversion. As shown in Chart 11, European banks have increasingly differentiated the lending rates between small and large loans, in particular in the distressed countries of the euro area.

Chart 11: Spreads between bank lending rates on small and large loans



⁴⁷ To be defined broadly to capture also small / mid-cap companies that do not meet the current SME definition.

⁴⁸ There is also a lack of finance for long-term projects, including infrastructure investments. Short-termism, regulatory barriers and other factors restrict the flow of long-term (institutional) investment to long-term projects (see section 6 below). Many infrastructure projects display characteristics of public goods, implying that private financing alone may not deliver the optimal level of investment.

⁴⁹ An additional factor explaining the overdependence of companies on bank finance is the corporate debt bias mentioned above, as the deductibility of interest paid on debt makes it a more interesting financing tool than the remuneration of own equity for which there is no tax deductibility.

⁵⁰ Lack of demand for finance stems from generally weak economic conditions and growth expectations following the crisis as well as already high levels of indebtedness of many firms in Europe.

Larger companies can tap capital markets and issue debt to substitute for the decline in bank loans. Indeed, as shown in Chart 10 above, debt security issuance by EU corporates increased during the crisis, partly also reflecting a market environment that has been favourable for bond issuers (i.e. low interest rates). However, debt issuance is not an option for most SMEs. For SMEs, trade credit, leasing and factoring are closer substitutes for bank loans. As these latter alternative financing sources are, however, closely related to SMEs' business activity, the potential for substitution is constrained if there is a decline in turnover levels, as was the case specifically for SMEs located in distressed countries.

4.2. Lack of (credit) information for potential investors

Credit information is essential to access finance. But the information on SMEs is usually held by banks, so the SMEs struggle to disseminate credit information to non-bank investors. As noted above, this structural hurdle is one reason why SMEs are so dependent on bank financing. The analysis conducted to date suggests that the information problem is severe. Around 25% of all companies and around 75% of owner-managed companies do not have a credit score.⁵¹ There are differences in national laws that hinder the collection of information. Moreover, there is a lack of positive data sharing (e.g. on payment records) in many Member States.

More generally, there is inadequate business information on SMEs that have a listing or seek a listing. One of the reasons is that equity research analysts and business information providers are far less likely to cover SMEs with their research than large enterprises. The lack of investment research and analysis on SMEs partly explains the limited interest of investors. It is expensive to provide good quality independent research, which is necessary to provide added value over the provision of raw data.

As regards SME credit information, a mapping of the actual landscape of data used for the credit assessment of SMEs in each Member State is ongoing. A survey of EU Member States recently identified the following general principles for future policy in this area: (i) to make use of current initiatives taking place EU-wide, such as the Business Registers Interconnection System; (ii) to identify the minimum set of variables needed to assess creditworthiness of SMEs; (iii) to encourage Member States to facilitate access to data via the reciprocity model which is already business practice in some countries; (iv) to facilitate access to positive and negative information; and (v) to address potentially complex data protection issues. The mapping exercise also examines, which underlying data about SMEs is needed for developing credit scores.

As regards the provision of financial information to investors more generally, the financial statements prepared by companies vary greatly from one Member State to another, except for listed companies on regulated markets in which case consolidated financial statements are prepared under International Financial Reporting Standards (IFRS). There may also be variations within a Member State, depending on the company type, situation or size. This fragmentation is *de facto* imported on Multilateral Trading Facilities (MTFs). In order to avoid this, some MTFs require companies to prepare their financial statements in accordance with IFRS. However, IFRS are widely seen as a source of significant additional cost for some issuers, in particular smaller companies, and thus preparation of IFRS accounts could present a significant hurdle for SMEs seeking capital.

⁵¹ In some Member States, individual entrepreneurs remain very long with a negative score once they enter bankruptcy. The entrepreneur does not have a second chance.

Furthermore, while issuers of financial instruments are required to disclose information to investors at the moment of issuance in the prospectus, there is no such obligation in force⁵² for disclosing information on a permanent basis. Consequently, investors lack the data to monitor their investments in financial instruments over time, limiting investor appetite in particular when investing in a cross-border context.

ESMA recommends that an SME growth market, as provided for under MiFID, should not be required to have rules prescribing the use of IFRS. However, no alternative standard is available yet, except for national standards derived from the Accounting Directive. The International Accounting Standards Board (IASB) has developed a set of simplified standards, the so-called IFRS for SMEs, but the IASB has made the availability of this standard subject to the condition that it is not used by listed companies (either on a Regulated Market or an MTF) or financial institutions. There is therefore the question of whether there is a need to develop a common, high quality and simplified accounting standard for smaller companies, tailored in particular to the needs of companies listed on MTFs. Such a standard could deliver greater transparency and comparability for investors, while at the same time minimising unnecessary administrative burdens for issuers.

4.3. Underdeveloped market for risk capital

While capital markets can complement the role of bank lending for SMEs, their diversity and scant credit information as well as the fixed-cost nature of sourcing and monitoring rather small and mostly local firms imply an important role for banks. Thus, relationship-lending through banks will continue to be important in SME financing, and for many SMEs that are comfortable in their local niche, however small, it would be neither feasible nor necessary to tap capital markets.

However, capital market funding sources have an important role, in particular for smaller but rapidly growing firms. These firms typically display low levels of cash flows and are dependent on external finance to grow their business. Bank finance as well as other financing tools, such as leasing and factoring, are often inaccessible or insufficient for companies with significant intangible assets that can less easily be used as collateral to obtain bank loans.

The economic literature identifies the so-called ‘financial growth circle’ that most companies go through. At the beginning of an entrepreneurial activity, when the product or service distinguishing the company is still in a development phase, insider investments are the most common source of finance. In this phase, information asymmetries towards external investors are particularly acute and create important obstacles to attract outside finance. Business angels typically play a role in a more advanced phase of the development of a firm based on formal business plans, which are not available at the earliest stages. After the necessary resources for structured product development have been gathered in this way, venture capital funds are likely to step in, targeting successfully test-marketed businesses.

Markets for such risk capital remain relatively underdeveloped in most EU Member States. As noted above, many national markets lack scale, and the current fragmentation holds back the development of sufficiently large pools of potential risk capital.

Focusing on venture capital as an example, the financing role of venture capital for SMEs is still very small in most EU Member States. The lack of an equity investment culture, informational problems and high costs are among the main reasons. Market fragmentation along national lines

⁵² As of the 1st of January 2017, article 8b of Regulation 1060/2009 will require issuers of structured finance instruments to disclose information on the performance of the underlying pool of assets.

seriously limits the overall supply of this financing for SMEs, as venture capital funds in some Member States face problems reaching the critical mass they need to spread their portfolio risk.

In 2013, the Regulations on European Venture Capital (EuVECA) and European, Social Entrepreneur funds (EuSEF) were adopted with the view to bring together investors and SMEs and other mid-range, small or 'start-up' companies. The Regulations create a capital raising passport, along with the EuVECA and EuSEF labels for the relevant funds. The passport and the right to market funds under these labels currently apply to smaller fund operators - defined as those managing a portfolio of assets inferior to €500 million. The Regulations were limited to smaller operators because this group do not usually have access to the fund raising passport provided for in the Alternative Investment Fund Managers Directive (AIFMD). Since entry into force of the EuVECA Regulation, national authorities have registered 17 EuVECA funds that aim to raise approximately €1.3 billion in capital. There are two EuSEFs with a target size of €6 million⁵³.

The Commission's Impact Assessment estimates that, over time, roughly €4 billion in additional venture capital funding could result from EuVECA. One of many other reasons preventing wider take-up of both EuVECA and EuSEF is that managers whose portfolio (at the moment they wish to set up a EuVECA or EuSEF fund) exceeds €500 million cannot apply to set up and operate a fund using the EuVECA or EuSEF labels, nor can they use the EuVECA/EuSEF designations to market these funds in the Union. Widening the range of market participants could significantly increase the number of EuVECA and EuSEF funds available.

With the development of new technologies, crowdfunding (including crowdlending and equity crowdfunding)⁵⁴ is becoming another source of risk capital for smaller companies and projects, as already noted above. The online nature of crowdfunding would suggest a good cross-border potential for this industry. The crowdfunding market has been growing substantially over the last few years, from an annual growth of 64% in 2011 to 81% in 2012 globally. In 2013 some 600 crowd funding platforms are forecasted to raise € 3.8 billion in total globally, a projection in growth of 88%. Only for the European market, €735 million was available representing a growth of 65%.⁵⁵

However, the development of the markets has been quite different across the EU. Some Member States have taken legislative measures to enhance the potential of crowdfunding while protecting investors.⁵⁶ These national approaches might encourage crowdfunding activity locally, but may not be necessarily compatible with each other in a cross-border context. As a result of the legal landscape, cultural and linguistic differences, and also some local bias, there is very little cross-border or pan-European activity in investment-based crowdfunding, including peer-to-peer lending.

⁵³Figures from ESMA, the European Securities and markets Authority at: <http://www.esma.europa.eu/page/Venture-Capital-and-Social-Entrepreneurship-Funds>.

⁵⁴ In crowd-lending the public lends money to companies through a platform in return for a higher interest they would obtain if a bank was in between. Equity crowdfunding is the other form of crowd funding where an investment company takes equity in a start-up or SME and sells this equity in small coupures to the public.

⁵⁵ Within crowd funding, the lending model takes the better part of the annual growth with an increase of 111% globally in 2013. The equity model is more modest with an annual global growth of 30% in 2012.

⁵⁶ For example, Italy, the UK and France have introduced specific regulations, and other Member States (Spain, Germany, Austria, the Netherlands and Finland) are envisaging legislative changes in the near future. Belgium and Austria amended their prospectus rules to better fit this business model.

4.4. Regulatory and other barriers to SME listing

Access to public capital markets is costly. Initial public offerings (IPOs) and debt underwriting are characterised by substantial fixed costs generated by due diligence and regulatory requirements, which may present a disproportionate burden for smaller firms. This includes the costs of disclosing information required by investors or regulators and meeting other corporate governance requirements. In the case of debt underwriting, there are the costs of commissioning an external rating. In addition, companies may be at an early stage of development and may have a commercial interest in not disclosing detailed information about their business plan. They may be reluctant to give up control or face greater external scrutiny. These features often preclude SMEs from obtaining access to more standardised public equity and debt markets and gives access mainly to private debt and equity markets that are generally less standardised, more complex, and often more selective and expensive.

The prospectus is usually the gateway to capital markets for entities wishing to offer transferable securities to the public or to have them admitted to trading on a regulated market. Through the single passport mechanism, it facilitates the widest possible access to investment capital on an EU-wide basis. In practice, the process of drawing up a prospectus and getting it approved by the national competent authority can be expensive, complex and time-consuming, especially for smaller companies. Proportionate disclosure regimes were introduced following the last revision of the Prospectus Directive for companies with lower market capitalisation and SMEs, but they have not delivered their intended effect and are not used in practice by issuers in most Member States. Besides, over time, prospectuses have become long documents (sometimes in excess of 1000 pages). A review clause in Directive 2010/73/EU amending the Prospectus Directive requests the Commission to report by 1 January 2016 on the application and the effects of the Prospectus Directive, as subsequently amended.

5. BARRIERS TO HOUSEHOLD INVESTMENT IN CAPITAL MARKETS

The size of capital markets depends on the volume of funds being channelled. Ultimately, this depends on the willingness of ultimate savers to turn to other forms of financial asset holdings than bank liabilities. Households are the principal net savers in the economy, whilst both the public sector and non-financial corporations (NFCs) are the ultimate debtors.

Most households either deposit their savings at a bank or invest them in real estate, or they may save via a pension or insurance contract. As a result, there is limited direct household investment in capital market instruments. Taking euro area as an example, 96% of households have deposits with a bank, but only 5% have direct investments in bonds and 10% in shares.⁵⁷ Mutual fund ownership applies to 11% of households, whilst 33% are invested in a pension plan or life insurance. The data shows that participation in capital market instruments increases with net wealth and education levels.

Looking at asset allocation, the largest share of EU households' financial assets (35% in 2012) is invested through insurance and pension funds. Currency and deposits with banks represent the second biggest allocation item (33%), whilst direct holdings of bonds and quoted shares make up for a much lower share (slightly under 10%). Financial assets invested in mutual funds account for yet a smaller share (7%). Holdings of quoted shares by households reached their peak in 2000

⁵⁷ Based on the Eurosystem household wealth and consumption survey (results of the first wave)

in a number of countries, but then fell when the dotcom bubble burst.⁵⁸ See Appendix for more details on asset allocation by households in various countries.

While the price mechanism and the principle of maximisation suggest that households are price sensitive, social norms and convictions seem to have also a strong impact on actual savings behaviour. One could expect that receding low deposit rates, risk aversion, rising prices (e.g. in equity markets) and rebounding growth would create incentives for households to shift part of their financial wealth from banks into market securities. However, evidence suggests that households are fairly reluctant to redirect financial assets from banks to market instruments, especially in the short term. The sizeable part of their financial wealth stored in insurance firms and pension funds may therefore be a more promising venue to stimulate market financing if these intermediaries had advantages from reducing the share of the portfolio they administer that is invested in banks (via deposits, bank debt securities or bank shares)⁵⁹ to financial instruments issued by the non-bank sector. This will, inter alia, depend on the non-financial sector's interest in redirecting liabilities from bank loans to other financial instruments such as debt securities and shares.

A number of different reasons explain the investment patterns of EU households:

5.1. Lack of trust in financial markets and intermediaries

The limited investment in capital market instruments may reflect the lack of trust of retail investors in financial markets and intermediaries. The lack of an "equity culture" and risk aversion on the part of households mean that these traditions are slow to change, and have been further entrenched by the crisis experience. More than 60% of EU citizens surveyed in 2013 stated that they had lost confidence in the financial sector as a result of the financial crisis. Recent scandals of non-competitive and abusive market practices further contributed to this. In 2013, only 35% of retail investors trusted investment services providers to respect consumer protection rules. The low levels of confidence hinder the flow of savings into capital market instruments.

One could be tempted to conclude that households prefer bank deposits to capital market investment because deposits are insured up to €100,000. Although this could be relevant to some extent, it is important to note that deposits are also insured in the US (and to a higher level), yet US households allocate a much lower proportion of assets to bank deposits, preferring quoted shares instead.

Another reason could be that EU capital markets are far less integrated when it comes to investor protection rules (see section 3 above). Better investor protection promotes the development of capital markets, ultimately improving resource allocation and so increasing economic growth. At a more micro level, public intervention in financial markets to protect investors is justified by a number of factors:

- i. Information asymmetries between originators, distributors and investors reduce the competitive functioning of the market and shift the relative market power to financial intermediaries. There are conflicts of interest, and investors are exposed to a range of risks, e.g. fraud and other misuses of funds.

⁵⁸ As a comparison, the US households hold a much smaller share of financial assets in bank deposits (13%) to the benefit of much higher shares of corporate equity (31%), investment funds (11%) and bonds (9%).

⁵⁹ The financial accounts data reveals that insurance and pension funds hold around 8% of their assets in deposits. EIOPA data gives a share of around 5% for insurance firms and indicates that around 18% are held in bonds issued by financial institutions.

- ii. Behavioural biases present among investors affect their ability to process information provided by the more informed party (e.g. distributors).
- iii. Investors' financial capability, and the advice they might receive, shape key investment decisions for the financial security of investors.

There may also be a problem of investor choice and the visibility of available products. For example, the EU now has a vibrant cross-border market in Undertakings for Collective Investments in Transferable Securities (UCITS). These are standardised mutual fund products that can reach investors across the EU. UCITS funds started to appear in the market in 1988 and by 1992 had accumulated around €800 billion in assets under management. By 2013, UCITS had grown to more than €6.86 trillion of funds under management.⁶⁰ By 2012, cross-border sales within the internal market accounted for 45% of European assets under management, compared to only 21% at the end of 2001.⁶¹ The rate of retail participation in UCITS remains relatively low. Private households account for about 26% of investment fund ownership in the euro area in 2013⁶².

5.2. Lack of adequate financial expertise

Investment in capital markets requires specialist knowledge that most households do not possess, which is why many retail investors prefer to invest indirectly via pooled vehicles (investment funds, pension funds, life insurance contracts) that are managed by institutional investors. The preference of retail investors to invest indirectly could also be facilitated by the fact that the Key Information Document is consumer friendly, which is not the case for information on direct investment in shares or bonds. This preference could be further reinforced by the Packaged Retail and Insurance-Based Investment Products (PRIIPs) Regulation, which requires that all packaged retail investment products provide a Key Information Document. Another explanation of this preference by retail investors could be the fact that financial advisers are no longer marketing direct investment products (e.g. company shares and bonds) to retail investors.

A number of factors make it difficult for investors to understand the full set of risks involved in investment products, including the nature of the investment process. According to surveys, some 40% of individuals in Europe actually do not understand that their capital is at risk when investing. Poor numerical skills also reduce the ability of investors to understand even simple pricing and payoff structures. Moreover, clients do not frequently purchase financial services, and it is precisely the rarity of such purchases that impedes the build-up of useful experience.

Due to their superior information, originators (i.e. manufacturers or issuers of financial instruments and products) and distributors may have an incentive to exploit any existing asymmetries of information. For example, intermediaries may 'churn' clients' accounts with transactions that are not necessarily in their best interest.

5.3. Household preference for investment in real estate

Real assets constitute 85% of the gross total assets of households in the euro area, the majority of which is represented by the value of the households' main residence. Only 15% of total assets are represented by financial assets, split between bank deposits and capital market instruments as

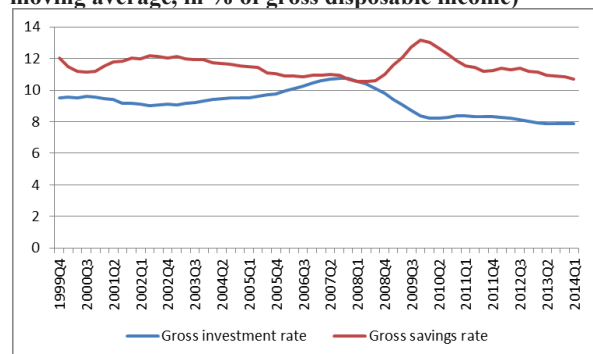
⁶⁰ Non-UCITS funds accounted for an additional €2.9 trillion under management. Total assets under management of the European asset management industry (including funds and discretionary mandates) amount to some €17 trillion. Source: European Fund and Asset Management Industry, Key Facts and Figures 2003-2013.

⁶¹ Lipper 2013 European Fund Market Review

⁶² Fact Book 2014, European Fund and Asset Management Association.

described above. There is however significant variation across the EU as home ownership levels differ markedly between Member States.

Chart 12: EU household saving behaviour (four quarter moving average, in % of gross disposable income)



Source: Eurostat

As can be seen from Chart 12 on the left, EU households have been dedicating more than 9% of their gross disposable income to real estate investment (i.e. the gross investment rate) throughout most of the 2000s, which has diminished to slightly below 8% in light of the crisis. At the same time, their savings rate declined from 12% to 10.5% in mid-2008, equalising with the investment rate. This means that in mid-2008, households dedicated as much funds to real estate investment as to all the financial assets combined, including bank deposits. Although

the savings rate jumped when the crisis hit, it is now back to its 2008 levels.

The preference for real estate can be explained by a number of different factors and varies across countries. Tax incentives (deductibility of interest payments, coupled with low recurrent taxation of housing) may have a key role to play in many countries. General lack of financial education and expertise could also serve as an explanation, because understanding real estate transactions may appear relatively easier, also because real estate investment is tangible. The lack of suitable retail financial investment products may have been another factor. As a specific example, UCITS funds can be marketed cross-border to retail investors but these funds are not adequate to longer-term investment given their liquidity constraints. In this context, the European long-term investment funds (ELTIF) Regulation is expected to fill the gap in the offer of long-term products as a good alternative or complementary solution for EU citizens.

5.4. Language and other technical barriers resulting in strong home bias

Household financial investment is characterised by home bias. The linguistic barriers are self-explanatory. Cross-border investment also suffers from fragmented legal frameworks in many areas, as laid out in Section 3.4.4. This includes the insolvency rules, judicial systems, corporate governance and takeover codes, consumer and investor protection and employment rules. Every national financial system is unique, and the 28 EU Member States all have their own peculiarities. How people save, how they fund their investments, which institutions they trust and which markets are most liquid are shaped by past experience and current incentives.

Competition in the execution-only brokerage market in many countries is rather limited, with the access to non-domestic securities being often more difficult and expensive. Direct market access in Europe still needs to improve further. Standardisation of products may also play an important role in retail investor access. At the same time, efforts to increase greater direct retail participation have to be balanced against the need of investor protection. There needs to be caution against exposing retail investors to risks which they are not well-placed to assess.

6. BARRIERS TO INSTITUTIONAL INVESTMENT

Most EU citizens are eligible for public pay-as-you-go (PAYG) pensions and other social safety nets. Thus, their social security contributions go directly to the state budget. This results in a smaller savings pool at EU level that is devoted to capital market investment.

European households are direct owners or indirect beneficiaries of 60% of financial assets. Amidst growing longevity and fiscal pressures at individual country level, they face a need to save efficiently for their retirement and other future consumption needs, implying long-term investment horizons. The EU single market holds the potential to maximise scale economies while increasing the level of competition in the marketplace, delivering high-quality and low-cost savings solutions to beneficiaries. In addition, from a long-term investing perspective, high scale is needed to access less-liquid asset classes. Scale eases access to less-liquid asset classes, by spreading related costs among a larger number of participants and facilitating diversification within a larger pool of managed assets. Less-liquid assets have longer-term life-cycles and offer higher potential returns. Yet, direct investments in these are unlikely to lead to net positive returns, unless undertaken by schemes with sufficient scale.

The growth in institutional investment, including growing private pension provision in Europe, would generally increase investment flows into capital market instruments and facilitate a move towards market-based financing. At the same time, as noted above, there are particular challenges for SMEs to tap capital markets directly (though they can benefit from them indirectly via bank-intermediated products such as securitisation), mainly relating to informational problems on the part of potential investors and costs. There are also specific impediments to the financing of long-term projects, including infrastructure investment.

6.1. Constrained scale of occupational and personal pension funds

Public and private pension schemes exist alongside one another in the EU. As mentioned above, public pension plans are typically set up as PAYG schemes, meaning that current employees pay for the pensions distributed to current pensioners. Thus, there is no capital stock that guarantees the funding of the future pension claims of current contributors. Depending on the size of the pension payments covered by PAYG schemes, a given fraction of national savings bypass the capital market, which might negatively impact its size. Pension fund assets in the EU make up only about 40% of those in the US⁶³.

Further development of funded pensions, either in occupational or personal plans, would have a positive impact on the size of EU capital markets. Empirical evidence shows that there is a significant positive relationship between the size of such pension funds and capital market depth (as measured by the ratio of the market capitalisation of outstanding domestic stocks and bonds to GDP)⁶⁴. Private pension plans are administered by private institutions. In almost all cases these are funded pension plans, which means that dedicated assets cover the plan's liabilities, albeit the extent of this also depends on the underlying assumptions (e.g. the discount rate applied to liabilities). To the extent that these liabilities are covered by dedicated and legally separated assets, the underlying savings are allocated via the capital market. This, in turn, tends to support the diversity of participants in capital markets, particularly given the propensity of pension funds to allocate capital to a range of investment strategies.

On **occupational pensions**, the Commission's Institutions for Occupational Retirement Provisions (IORP) 2 proposal of March 2014 supports the development of occupational retirement provision across the EU, with a view to unlocking efficiency gains in this market through scale economies, greater risk diversification and innovation. The proposal also aims at strengthening the governance of IORPs and disclose information more effectively to scheme

⁶³ In 2012, EU occupational and personal pension funds had €3.6 trillion (28% of GDP) in assets under management, compared to €8.8 trillion (70% of GDP) in the US.

⁶⁴ The same research shows that increasing the size of pension funds by 10 percentage points of GDP would lead to an increase in stock market size of 7 percentage points of GDP. See Kaserer, C. and Rapp, M.S., Capital Markets and Economic Growth – Long-Term Trends and Policy Challenge, Research Report, March 2014.

members. A safer and more efficient IORP market will encourage take-up of occupational pensions, particularly in Member States where they are currently underdeveloped. IORPs could hereby better fulfil their natural role as major institutional investors in European capital markets.

On **personal pensions**, the array of providers (banks, insurers, asset managers) is subject to a number of different pieces of EU legislation or to no particular EU legislation at all. The question therefore arises whether the patchwork of prudential regulation and consumer protection rules constitutes an obstacle to the full development of a large and competitive market for personal pensions. Another problem is to incentivise personal pension providers to offer products across borders and thus offer consumers the benefits of more competition and more choice. The introduction of a standardised product or removing the existing obstacles to cross-border access would strengthen the single market in pension provision and lead to efficiency gains stemming from standardisation across geographic regions. To address these issues, the Commission mandated the European Insurance and Occupational Pensions Authority (EIOPA) to work on a Call for Advice on personal pensions in July 2014, which is expected in February 2016. Based on this input, the Commission expressed its intention to consider how best to promote the development of personal pension products across the EU, thereby mobilising untapped resources and strengthening the institutional investor base in a capital market union.

6.2. Short-termism and regulatory features drive inefficient asset allocation

An apparent problem in the EU is that institutional investors, such as pension funds, which have long-term liabilities and have the capacity to be "patient" investors, often do not allocate sufficient amount of funds to long-term investment. This can predominantly be explained by their short-term investment horizon, and sometimes also by flaws in the regulatory framework⁶⁵. For example, the short-term outlook for financial reporting may focus investors' minds disproportionately on short-term investment performance. Incentive schemes and compensation structures for asset managers may tend to exacerbate this short-termism (for an extended analysis see, for example, the Kay report on equity markets, published end 2012). In addition, cross and self-referential performance measures result in market instability and severe distortions.

One example, certainly not the only one, is that private EU pension schemes lack a clear retirement objective (e.g. in terms of replacement rates) and bear too much resemblance to other (shorter-term) investment solutions readily available on the market. Notably, the use of long-term investment targets to benchmark performance is rare. The use of relative benchmarks is commonplace, even though absolute return objectives are more in line with retirement savings. The reform of governance appears more difficult for small providers, given a relative lack of skills and resources.

Pension schemes also tend to emphasise relatively high liquidity for investors, regarding the frequency and length of redemption windows and the immediacy of execution of redemption orders. High liquidity in this sense is, however, incoherent with long-term investment for retirement. It does not allow long-term assets to be held to maturity, to build and maintain strategic equity stakes or investment in less-liquid asset classes. Pension solutions need to be fairly illiquid until retirement to maximise the potential risk-adjusted return over the long term.⁶⁶ Moreover, taxation may deter redemptions before retirement anyway, making the actual liquidity profile of pension solutions in some markets far less liquid than advertised.

⁶⁵ E.g. constraints in the investment mandates of pension funds in some member states, requiring that over 50% of assets under management is invested in sovereign bonds.

⁶⁶ Regulation and supervision can also have a significant impact on capital markets, generally by promoting or discouraging, sometimes unintentionally, the market activity of affected financial institutions. For instance

As a result of the above, funds tend to hold a disproportionate amount of liquid assets, including cash. Similarly, investment practices are conditioned by the pursuit of short-term relative performance rather than long-term absolute return objectives. The available evidence indicates that most defined-contribution pension plans do not consider asset liability management (ALM) practices. They do not distinguish between return-seeking and liability-hedging portfolios either. Pension funds often buy a significant amount of sovereign debt, which may crowd out investment in public equity and public corporate debt. Also, some Member States have rules which *de facto* limit pension funds from investing in infrastructure⁶⁷.

In addition to the negative impact on the availability of long-term financing, the focus on short-term relative performance benchmarks incentivises investors and asset managers to evaluate companies' performance on a short-term horizon. A myopic focus of investors results in a reduced interest in the long-term prospects of investee companies. It often also results in short-term pressure on corporations and management, which can create a barrier to productive investments, future competitiveness and growth⁶⁸.

The ongoing revision of the Shareholder rights Directive aims at incentivising a better alignment of the long-term interests of institutional investors, their asset managers and companies through transparency and public accountability.

6.3. Challenges associated with long-term and large-scale infrastructure investments

The 2014 Commission Communication on long-term finance in Europe already discussed the challenges and possible policy options for incentivising long-term savings to flow into long-term projects via capital markets. For example, the European Long-Term Investment Funds (ELTIFs) are aimed at investment fund managers that want to offer long-term investment opportunities to institutional and private investors across Europe. ELTIFs are expected to have particular appeal to investors such as insurance companies and pension funds which need stable, steady income streams or long term capital growth.

The EU requires a significant amount of new infrastructure investment to maintain its competitiveness (and diffusion of technology and ideas). In some areas such as energy provision and the digital economy there may be cross border benefits. However, some market participants, notably banks, argue that there is a lack of appropriate financing vehicles as high fees and extensive leverage mean only the largest investors can participate. Also, the lack of objective high quality data and agreed benchmarks implies it is difficult to assess risk and understand correlations with other assets.

insurance companies have long-term liabilities. Hence they are particularly well suited to make long-term investments and satisfy long-term financing needs, even in the absence of liquid secondary markets. It has been argued that strengthening capital requirements as part of Solvency II to capture all quantifiable risks and the introduction of market-consistent valuation may distort insurers' investment behaviour and long-term asset allocation decisions. However, this concern may be misplaced in light of recent implementing rules of Solvency II.

⁶⁷ In early 2014, the Commission proposed a directive which, among other things, would stop member states banning occupational pension funds from investing in assets with a long-term profile such as infrastructure, unless the restrictions are justified on prudential grounds.

⁶⁸ A more long-term investment horizon is seen as a key enabler of responsible shareholder engagement. Responsible shareholder engagement implies monitoring of companies on matters such as strategy, performance, risk, corporate governance, environmental and social performance, etc. and having a dialogue with companies on these matters with a view to improve the long-term efficiency, performance, competitiveness and sustainability of the company.

A stable framework with legal certainty and common rules would help to ensure projects are possible and commercially viable. For example, schemes like the Europe 2020 Project Bond Initiative, credit guarantees and syndicated project finance loans can promote funding at different stages of infrastructure projects.

Where adequate sources of private funding are not available, the joint initiative by the European Commission and the European Investment Bank to attract additional long term financing for large scale infrastructure projects can help stimulate markets. Credit quality is increased via the provision of a subordinated tranche of debt to a level where institutional investors are comfortable investing long term. The project is in pilot phase pending a final decision in 2015.

Some stakeholders have also called for a tailored treatment of infrastructure investments in the context of prudential regulation, in particular the calibration of capital requirements of banks and insurers. However, the diversity in infrastructure investment makes it difficult to come to a definition and a corresponding history of appropriate data that would allow calibration for prudential regulatory purposes.⁶⁹ Moreover, infrastructure investment is prone to specific risks that indeed merit particular attention from the prudential point of view.

The latest technical advice requested by the Commission on this matter is a report by EIOPA about the calibration of the Solvency II regime for insurers.⁷⁰ EIOPA highlighted promising findings that could support the creation of a tailored, more favourable treatment for certain infrastructure niches. For example, unlisted infrastructure funds have little correlation listed equities. EIOPA also pointed to decreasing default risk over time and higher recovery rates in certain types of project loans which appear more creditworthy than investment-grade corporate debt. However, EIOPA stopped short of recommending a tailored calibration for the relevant infrastructure sub-classes, because of data-related factors.⁷¹

In its 2014 Communication, the Commission already announced that it would evaluate the feasibility of collecting and, where possible, making available comprehensive and standardised credit statistics on infrastructure. There may also be a case for taking a fresh look at other asset subclasses, such as unlisted infrastructure equity, using the accumulated data and experience with those funds.

⁶⁹ From the investors' perspective, risk is not only driven by the nature of the project in which they invest. It is also driven by the types of financial instruments used for such investment, which are extremely diverse, ranging from equity investment (listed or private, held directly or using funds) to debt (listed or unlisted bonds, and loans, directly or using funds). Even within the two classes of equity and debt investment, separating out infrastructure and other investments is not straightforward.

⁷⁰ *Technical report on standard formula design and calibration for certain long-term investments*, EIOPA (2013)

⁷¹ For example, methodological inconsistencies and doubts over market-consistency in the various sources of performance measurements, data sets spanning too short a period, difficult access to banks' or rating agencies' proprietary data sets, etc.

APPENDIX

Financial asset allocation by households in OECD countries (in % of total financial assets)

| | Currency and deposits | | Securities other than shares | | Shares and other equity | | Mutual funds shares | | Life insurance reserves | | Pension funds | |
|-----------------|-----------------------|------|------------------------------|------|-------------------------|------|---------------------|------|-------------------------|------|---------------|------|
| | 2007 | 2012 | 2007 | 2012 | 2007 | 2012 | 2007 | 2012 | 2007 | 2012 | 2007 | 2012 |
| Australia | 16.5 | 22.5 | 0.6 | 0.2 | 24.4 | 14.8 | 2.8 | 1.3 | 2.3 | 1.7 | 48.4 | 56.2 |
| Austria | 44.4 | 44.9 | 8.4 | 9.5 | 16.5 | 16.1 | 10.9 | 8.7 | 13.3 | 13.4 | 3.2 | 3.4 |
| Belgium | 29.0 | 31.7 | 8.2 | 9.5 | 22.1 | 21.8 | 16.6 | 10.9 | 19.5 | 21.8 | 1.2 | 1.4 |
| Canada | 22.0 | 25.0 | 2.7 | 1.9 | 18.4 | 19.8 | 16.6 | 15.8 | -- | -- | -- | -- |
| Chile | 12.2 | 14.2 | 1.1 | 0.0 | 23.9 | 20.9 | 4.4 | 4.6 | 11.1 | 12.3 | 47.1 | 47.4 |
| Czech Republic | 54.5 | 55.6 | 0.3 | 2.3 | 22.4 | 18.1 | 7.7 | 4.4 | 6.4 | 7.0 | 5.2 | 6.1 |
| Denmark | 20.4 | 18.7 | 4.8 | 2.8 | 23.4 | 17.1 | 7.4 | 7.4 | 22.6 | 28.3 | 17.8 | 22.8 |
| Estonia | 17.5 | 37.7 | 2.0 | 0.2 | 67.7 | 37.6 | 1.2 | 1.1 | 1.8 | 2.5 | 4.0 | 10.5 |
| Finland | 31.6 | 37.7 | 1.9 | 2.8 | 34.6 | 29.7 | 10.0 | 7.6 | 7.4 | 7.0 | 8.7 | 9.6 |
| France | 28.5 | 30.1 | 1.7 | 1.6 | 21.1 | 16.7 | 8.7 | 7.1 | 27.8 | 30.9 | 3.8 | 3.9 |
| Germany | 36.2 | 40.8 | 6.6 | 4.8 | 13.4 | 9.2 | 10.4 | 8.5 | -- | -- | -- | -- |
| Greece | 50.9 | 73.3 | 9.1 | 7.0 | 27.2 | 7.0 | 5.0 | 0.9 | 2.1 | 2.2 | 0.3 | 0.9 |
| Hungary | 35.3 | 38.0 | 4.9 | 7.6 | 26.3 | 30.5 | 9.8 | 8.4 | 6.0 | 5.6 | 11.5 | 4.1 |
| Iceland | 18.1 | 16.8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Ireland | 38.6 | 39.6 | 0.0 | 0.1 | 18.5 | 14.3 | 0.0 | 0.0 | 17.5 | 19.3 | 23.8 | 24.1 |
| Israel | 21.9 | -- | 14.2 | -- | 22.9 | -- | 0.0 | -- | 8.2 | -- | 27.8 | -- |
| Italy | 27.3 | 31.7 | 20.0 | 18.7 | 23.7 | 20.5 | 9.5 | 7.2 | 9.7 | 11.5 | 5.5 | 6.1 |
| Japan | 51.2 | -- | 4.3 | -- | 8.8 | -- | 4.1 | -- | 14.4 | -- | 13.0 | -- |
| Korea | 42.5 | 45.4 | 12.7 | 9.3 | 20.9 | 16.9 | 0.5 | 0.3 | 18.0 | 20.6 | 2.0 | 2.1 |
| Luxembourg | 49.1 | 53.4 | 10.1 | 9.8 | 17.4 | 12.6 | 13.7 | 9.2 | 6.1 | 10.8 | 2.0 | 2.0 |
| Mexico | 14.3 | -- | 32.1 | -- | 44.6 | -- | 5.6 | -- | 1.9 | -- | 0.9 | -- |
| Netherlands | 21.3 | 22.2 | 3.0 | 1.8 | 11.4 | 9.4 | 3.3 | 2.5 | 10.3 | 10.9 | 47.6 | 51.2 |
| New Zealand | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Norway | 29.5 | 32.1 | 1.3 | 0.6 | 12.2 | 9.7 | 5.4 | 4.0 | 5.8 | 4.1 | 27.2 | 31.8 |
| Poland | 33.7 | 45.3 | 0.8 | 0.7 | 30.7 | 18.2 | 10.6 | 6.1 | 6.0 | 5.4 | 14.1 | 20.3 |
| Portugal | 34.5 | 39.3 | 5.2 | 6.7 | 25.4 | 23.2 | 7.3 | 3.2 | 10.7 | 10.3 | 6.1 | 4.4 |
| Slovak Republic | 62.9 | 63.7 | 0.4 | 1.8 | 0.3 | 0.3 | 10.9 | 5.8 | 8.0 | 7.6 | 7.6 | 13.7 |
| Slovenia | 43.6 | 52.1 | 1.2 | 1.0 | 28.6 | 20.9 | 9.1 | 6.6 | 4.5 | 6.7 | 2.2 | 3.2 |
| Spain | 37.9 | 48.1 | 2.6 | 3.5 | 31.9 | 23.7 | 10.7 | 6.3 | 6.2 | 7.5 | 5.8 | 6.1 |
| Sweden | 14.7 | 16.7 | 2.5 | 1.4 | 35.7 | 33.9 | 9.7 | 8.0 | 10.4 | 9.6 | 21.0 | 26.3 |
| Switzerland | 26.5 | 31.9 | 8.7 | 6.2 | 12.7 | 10.8 | 11.3 | 8.6 | 5.3 | 4.8 | 32.6 | 34.6 |
| Turkey | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| United Kingdom | 27.3 | 28.7 | 0.8 | 0.8 | 10.9 | 10.5 | 4.2 | 3.0 | 52.7 | 52.7 | 0.0 | 0.0 |
| United States | 11.4 | 13.5 | 8.9 | 9.1 | 35.6 | 31.2 | 11.1 | 10.7 | 2.0 | 2.0 | 27.7 | 30.5 |

Source: OECD Factbook 2014