# Financing the Austrian economy – a bird's eye view based on the financial accounts from 1995 to 2014 and a look at the road ahead

"I believe we should complement the new European rules for banks with a *Capital Markets Union*. To improve the financing of our economy, we should further develop and integrate capital markets. This would cut the cost of raising capital, notably for SMEs, and help reduce our very high dependence on bank funding."

Jean-Claude Juncker (2014)

As a well functioning financing system is essential for an economy, the EU has launched a Capital Markets Union initiative to ensure stronger integration of European capital markets and to reduce the dependence of enterprises on banks. Especially since the beginning of the financial and economic crisis, much discussion has centered on ways to foster financing channels aside from classical bank lending. A precondition for boosting alternative sources of finance is to check the absolute values and the sources available for financing. We find that while financing through classical bank lending has lost its overwhelming importance in the past 20 years, it remains the major financing channel. There is still potential for the household sector's role in direct business financing to increase, as holdings in savings accounts and real estate of private foundations are comparatively large. Unlocking 1% of sight and savings accounts of the household sector would imply an increase of 2.8% (direct business participations), 3.3% (other stocks) and 3.2% (listed stocks) in direct business financing. New SME bond markets could be another investment channel through which to allocate unlocked capital. Improving debt securitization might help increase credit supply.

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Financing in Europe is heavily based on the banking system. Especially small and medium-sized enterprises (SMEs) rely on bank lending. However, bank lending gaps have opened up since the crisis. The current economic and financial crisis has reduced bank lending and has affected SMEs in particular because credit sources tend to dry up more rapidly for small firms than for large companies during economic downturns. SMEs play a significant role in generating employment and driving innovation and growth, so it is of utmost importance to restore their financing resources. Fostering SME financing implies restoring banks' health to improve bank lending and

supporting the development of a broad range of nonbank financing for SMEs in debt and equity markets, as the latter are especially well-suited for innovation-oriented SMEs (OECD, 2015).

The financing of SMEs requires a variety of instruments. A major policy challenge in Europe is to establish a broad range of complementary nonbank financing especially suited for SMEs. If companies rely solely on bank loans, their opportunities to grow are limited. Better diversified funding sources – including venture capital, private equity and private placement opportunities – are important vehicles to allow smaller companies to expand and achieve the scale and financing nec-

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Michael Andreasch, Pirmin Fessler Martin Schürz<sup>1</sup> essary to gain access to publicly traded markets. The Capital Markets Union (CMU) aims at establishing an adequate framework and conditions for more and better diversified finance in the EU. To this end, it proposes to foster a shift in capital held by households away from the classical investment channel via deposits transformed into loans by banks toward more direct business investments.

The European Commission identifies unlocking "the capital around Europe which is currently frozen and put[ting] it to work for the economy, giving savers more investment choices and offering businesses a greater choice of funding at lower costs" as a major objective of the CMU (European Commission, 2015c).

In this study, we perform a stocktaking exercise of financing in Austria using financial accounts data from 1995 to 2014. We redefine specific aggregates of the financial accounts to draw a clearer picture of direct business financing and attempt to identify what the European Commission calls "frozen" capital – a rather unclear term. As we understand it, "frozen" capital refers to all forms of savings that can lead only to indirect investment via banks, such as savings and sight accounts, versus direct business investments, such as equity capital, stocks or corporate bonds.

We find that in the past 20 years, the overwhelming importance of financing through classical bank lending has already diminished, but it remains the major financing channel. The CMU is not the first attempt to foster capital markets (in Austria). Besides the so-called "Zukunftsvorsorge" (2014: EUR 8.1 billion, see OeNB, 2015b), an attempt to establish a state-subsidized private pension system in 2003, the minister of finance also installed a so-called "Kapitalmarktbeauftragter," a government office with the task of fostering capital markets, which was abolished again in 2014. Although direct financing by households and private foundations has already risen, there is still room for growth, as holdings in savings accounts and real estate of private foundations – usually counted as business participations of households – are rather large.

We provide a back-of-the-envelope calculation to illustrate the possible effects of "unlocking" the household sector's "frozen" capital and shifting it to the main existing direct financing channels while holding constant the allocation of types of financers (investors) to different forms of direct business financing. For each percentage point of such a shift from the real estate of private foundations to business financing, overall direct business participations would increase by 0.26%, other stocks by 0.15% and listed stocks by 0.14% of their current volume. Given a 1 percentage point shift from insurance claims, these numbers increase to 1.3%, 1.6% and 1.6%, respectively. Unlocking 1 percentage point of sight and savings accounts would even imply an increase of 2.8% in direct business participations, 3.3% in other stocks and 3.2% in listed stocks. These figures depend on the amount of unlockable capital held by households, nonprofit institutions serving households as well as private foundations. All their claims together comprise the household sector. Furthermore, these figures depend on the sector's portfolio allocation to different types of business participations, i.e. direct business participations, listed stocks and other stocks.

One main goal of the CMU is to create integrated European bond markets for SMEs as a possible alternative channel through which capital currently locked in real estate of private foundations, sight and savings accounts or insurance claims (also including private pension entitlements) could be allocated to businesses once functioning markets have been established.

Even though debt securitizations of mortgages were one of the main ingredients which started the financial crisis in the U.S.A., various improved forms of debt securitization might help banks to sell claims off their balance sheets and allow them to lend more to SMEs, particularly to enterprises that are too small to participate in bond markets.

The rest of this paper is structured as follows. Section 1 introduces the data and highlights their main particularities. Specifically, we explain how they differ from the usual display of financial accounts data. In section 2, we discuss the types of financers and the types of investment in the current financing structure. Section 3 deals with changes in the composition of financers as well as investment types from 1995 to 2014. In section 4, we take a closer look at the direct financing of enterprises, focusing on the main existing forms of direct business financing. In section 5, we discuss new financing approaches, such as an SME bond market and simplified European debt securitization, and their possible impact on credit supply and banks' profitability, and we point out related caveats. Section 6 concludes.

## 1 Data from the Austrian financial accounts from 1995 to 2014

We use yearly data from the Austrian financial accounts from 1995 to 2014.<sup>2</sup> Within the framework of sector accounts as defined by the European system of accounts (ESA 2010), the financial accounts provide stock and flow information on the financial investment and financing activities of each sector. In the case of Austria, the financial accounts are compiled on a "from whom to whom" basis, i.e. the data illustrate the debtor-creditor relationships that emerge between the sectors based on the underlying financial instruments. The financial accounts are calculated from a wide variety of sources, including the balance of payments, money and banking statistics, the asset, income and risk statements of banks, securities statistics, balance sheet data, and many more. Details on the basis for the data can be found in the OeNB's financial accounts manual (OeNB, 2014). The data themselves can be found on the OeNB website (OeNB, 2015a).

#### **1.1 Financers**

In the following section, we specify the situation of financing in Austria. We start by taking the perspective of financers. Financers have claims based on invested capital or granted credits. In a second step, we examine all types of domestic financers and their financial claims managed in Austria. These claims also include claims abroad provided they are managed in Austria. Additionally, we separately examine all claims abroad on domestic entities.

We regroup the financial accounts to make them more useful for our analysis. For the enterprise sector, we look at the financial corporations (financial accounts sector S.12) minus the central bank (the Oesterreichische Nationalbank; S.121) and nonfinancial enterprises (S.11) separately. To prevent double counting, we exclude all claims of investment funds (S.123, S.124) from our analysis.

The claims of the household sector are split up into three segments: First, we have the claims of households (S.14), excluding claims of nonprofit institutions serving households (NPISHs, S.15)

<sup>&</sup>lt;sup>2</sup> We use financial accounts data as of August 2015.

and of private foundations (usually part of S.14), as well as claims of those usually classified under households. Typically, financial asset holdings as well as real estate of private foundations are recorded as financial claims of households, as these are usually the beneficiaries of private foundations. Also, the real estate holdings of private foundations are considered financial claims in the form of direct business participations of households. Note that households include sole proprietorships with up to 50 employees and a turnover of less than EUR 10 million, farmers, employers (including own-account workers), groups of own-account workers (such as group physician practices). However, all limited liability companies, regardless of their size, are accounted for via direct business participations. As most business participations of households are participations in such small limited liability companies, we still cover the most important share in small enterprises. The fact that sole proprietorships are counted as households still leads to an overestimation of the possible exchange of "frozen" capital into equity components of the household sector. This proportion of sole proprietorships should however not be overestimated due to the fact that the number of companies in this area is rather limited. Additionally, such small enterprises are financed neither via the stock or bond markets nor via direct investment in limited liability companies, i.e. direct business participations. Rather, they rely mostly on credits from banks, a financing channel that is not likely to change in the near future (see section 5). Other forms of financing such as crowd funding or lending clubs are on the rise but for now remain of too limited scope to substitute classical bank loans.

Second, we have the claims of private foundations, which are usually also reported as household or NPISH financial claims and are usually double counted when additional information on private foundations is presented. We also include the real estate holdings of private foundations to remain consistent with financial accounts totals, as those holdings are usually reported as financial claims of households.<sup>3</sup>

Third, we have the claims of NPISHs, again excluding the financial claims of private foundations to prevent double counting and to stay consistent with the totals of financial accounts.

In the public sector (usually only S.13), we distinguish between the claims of the Austrian central bank (OeNB; usually financial sector S.121), and the claims of all other public entities (S.13), i.e. general government.

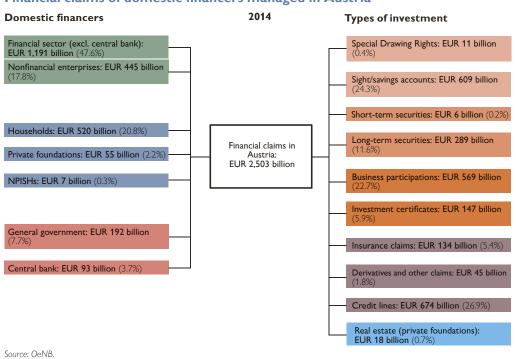
We cannot distinguish between different types of financers holding claims abroad. Of course, in the end all claims are held by a natural person or the general government. For detailed definitions of the sectors, see OeNB (2014).

### **1.2 Types of investment**

To characterize the situation of financing in Austria, we distinguish between different types of investment. This investment – the claims that financers hold – consists of gold and Special Drawing Rights (ESA code F.1), currency and deposits (F.2), short-term debt securities (F.31), long-term debt securities (F.32), business participations (equity, F.51), investment certificates (mutual fund shares, F.52), insurance claims (F.6), derivatives and other claims (F.7 and F.89) as well as credit

<sup>&</sup>lt;sup>3</sup> See annex table A1 for an illustration of the differences between our classification and standard financial accounts reporting in the household sector.

Chart 1



Financial claims of domestic financers managed in Austria

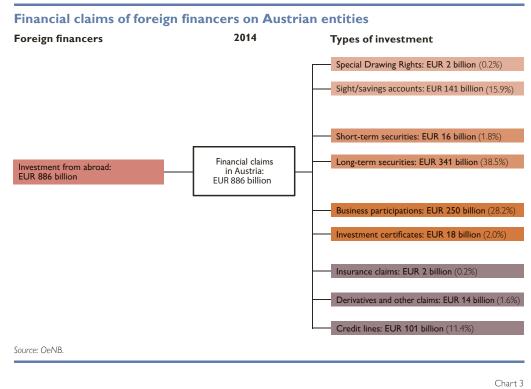
lines (F.4 and F.81). We additionally report the real estate holdings of private foundations, which are usually reported as business participations (F.51) of households and NPISHs.

In section 4, we split up business participations into greater detail, i.e. into listed shares (F.511), unlisted shares (F.512) and direct business participations (other equity, F.519).

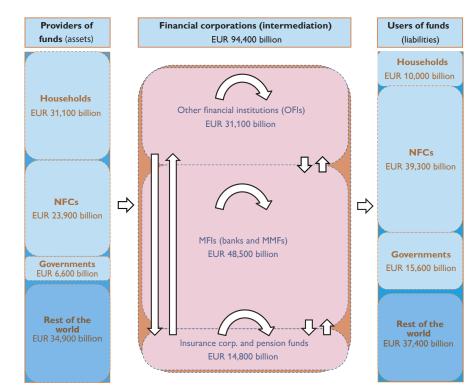
### 2 Financing in Austria in 2014

Chart 1 shows the financing patterns for 2014 of financial claims of domestic financers managed in Austria. Overall, domestic financers hold about EUR 2,500 billion of financial claims. The bulk of financing is channeled through the financial sector, which holds about EUR 1,200 billion of these claims. Households are the second-largest financer, holding about EUR 520 billion, closely followed by nonfinancial enterprises with EUR 445 billion. General government financial claims amount to about EUR 190 billion, the central banks' claims to EUR 93 billion. The amount of financial claims held by private foundations (including their real estate holdings) comes to about EUR 55 billion. The financial claims of NPISHs total EUR 7 billion.

Most of these investments, namely EUR 674 billion, are directly granted credit lines. A rather large amount of financial assets, EUR 609 billion, take the form of sight and savings accounts. About EUR 570 billion are direct business participations, either via the stock market or via direct ownership in limited liability companies. Long-term securities total EUR 289 billion, insurance claims EUR 134 billion. Claims in the form of derivatives are comparatively small at about EUR 45 billion. Real estate of private foundations accounts for EUR 18 billion, Special Drawing Rights for EUR 11 billion and



#### Financing of the economy: size of institutional sectors in the EU-28 in 2014 EUR billion



#### Source: European Commission (2015b).

Note: The height of each box is proportional to the actual size of the sector. Assets and liabilities of the real economy and rest of the world include funds channeled both through intermediation and direct financing.

short-term securities for EUR 6 billion of investments.

Chart 2 shows the financial claims of financers abroad on Austrian entities. These do not include claims on entities outside of Austria that are purely managed in Austria. Total claims of foreign financers in Austria come to about EUR 890 billion.

Foreign financers mainly invest in long-term securities, which sum up to about EUR 340 billion, and business participations, which come to about EUR 250 billion. Some EUR 140 billion take the form of sight and savings accounts, whereas credit lines account for around EUR 100 billion. All other investment types are of lesser importance (investment certificates: EUR 18 billion; short-term securities: EUR 16 billion; derivatives: EUR 14 billion; Special Drawing Rights and insurance claims: EUR 2 billion each).

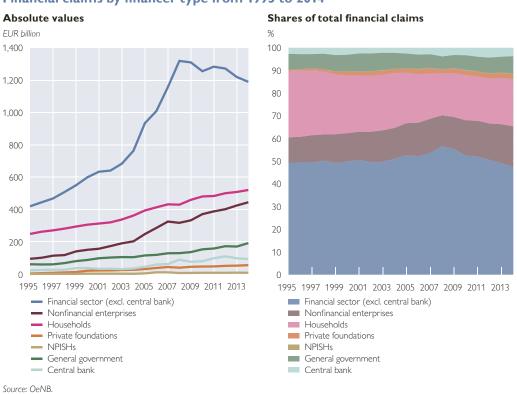
Holding over 60% of all financial claims, the banking system and foreign investors are therefore by far the largest financers. Households (15%) and nonfinancial enterprises (13%) are also rather large investors. Again, in the end all claims are held by a natural person or the general government. The relationships displayed here show only the first-order financing channels, namely the relations between the operating entity and its first known counterpart. Furthermore, because we exclude investment funds to prevent double counting, we mask the fact that households hold about EUR 5 billion in businesses indirectly via investment funds; in our case, these holdings show up as holdings of banks. A more detailed analysis of the household sector based on data underlying the financial accounts can be found in a recent publication of the Oesterreichische Nationalbank (OeNB, 2015b).

A similar illustration (chart 3) for the EU-28 is given in the Supplement Economic Analysis to the Action Plan on Building a Capital Markets Union (European Commission, 2015b).

### 3 Financing in Austria from 1995 to 2014

The financial claims (in nominal terms) of domestic financers almost tripled from about EUR 850 billion in 1995 to about EUR 2,500 billion in 2014. Claims of foreign financers on domestic entities, however, increased nearly sixfold from about EUR 150 billion to almost EUR 900 billion. During the same period, domestic financers increased their capital claims abroad from about EUR 125 billion to almost EUR 900 billion. Therefore, the share of foreign capital in Austria increased significantly.

While we had to exclude holdings of domestic investment funds to prevent double counting, holdings of special purpose entities (SPEs) are included in the financial sector. Their importance sharply increased from 2005 and is partly responsible for the steep increase in absolute values of the financial claims of the financial sector (see chart 4). SPEs' holdings came to below EUR 5 billion in 2004 and already amounted to roughly EUR 115 billion in 2014. However, as a share of total financial claims, the share of the financial sector did not increase over the 20 years to 2014, remaining relatively stable at around 50%. Also, the share of the general government remained rather stable at about 7%. Nonfinancial enterprises, however, increased their share from about 11% to roughly 18% of domestic financers' total financial claims. The central bank also increased its share of total financial claims from 2.7% to about 3.7%. Private foundations played a minor role in 1995, holding about 0.4% of total financial claims, whereas in 2014, their share had in-



Financial claims by financer type from 1995 to 2014

creased fivefold to more than 2% of all claims. NPISHs remain fairly unimportant, holding less than 1% of all financial claims.

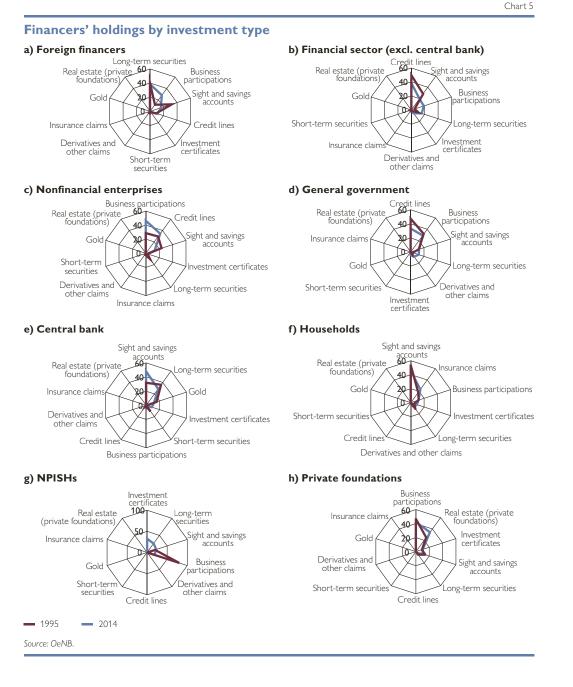
Let us now examine how financers' portfolios changed from 1995 to 2014. This analysis aims at highlighting portfolio changes over time as well as identifying possible sources of more direct business financing via business participations or possible future SME bond markets (see section 5). We show the absolute and relative importance of different types of financing.

Spider charts, which display multivariate data in the form of a two-dimensional chart with quantitative variables represented on axes starting from the same point, are useful for looking at several different factors all related to one item. Each panel of spider charts 5a to 5h is sorted clockwise, starting at 12

o'clock and descending by the share a financer held in a certain investment type in 2014. Each panel shows the share of different portfolio items in percent of the respective financer's total financial claims, so that all items always sum up to 100%.

Foreign financers (chart 5a) hold mainly long-term securities, business participations and sight and savings accounts. Between 1995 and 2014, they increased their holdings in business participations and decreased them in sight and savings accounts. Of course, this change might be partly due to a change in the composition of foreign investors: fewer households versus more banks, insurance companies and enterprises.

As the main provider of credit to the economy, the financial sector (chart 5b) holds claims mainly in the form of



credit lines/loans. Sight and savings accounts as well as business participations and long-term securities also represent important holdings. One explanation for the rise in the share of business participations as well as long-term securities from 1995 to 2014 is the growing importance of domestic SPEs, which are part of the financial sector. Their financial claims amounted to about EUR 115 billion in 2014. Many SPEs are founded for tax reasons, are owned by foreign investors, and consist mainly of business participations outside of Austria.

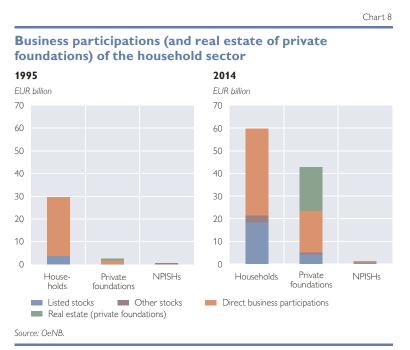
Nonfinancial enterprises (chart 5c) raised their share of business participations and credit lines and decreased liquid assets in sight and savings accounts, which were still almost as large in 1995 as business participations and credit lines.

The portfolio of the general government (chart 5d) also changed, to a lesser degree, away from credit lines and business participations and toward long term securities.

The central bank's portfolio (chart 5e) changed away from securities and gold (Special Drawing Rights) toward liquid assets in sight and savings accounts (transferable and nontransferable deposits).

The portfolios of households (chart 5f) hardly changed. By far the most important assets (close to 60% of all financial claims) are sight and savings accounts, followed by insurance claims and business participations. For an analysis of savings accounts in Austria, see Andreasch et al. (2012).

NPISHs shifted their portfolio strongly toward business participations, which might have to do with a change in the structure, number and increasing variety of NPISHs.



Private foundations' share of business participations declined whereas their real estate holdings increased.

#### **4 Direct financing of enterprises**

To identify possible channels that serve to increase the direct financing of enterprises thereby decreasing their dependence on the banking system, we analyze the financial claims directly linking the household sector to enterprises: the listed stocks, other stocks and direct business participations of households, private foundations and NPISHs. Direct business participations are mostly direct shares in limited liability companies and therefore include smaller enterprises.

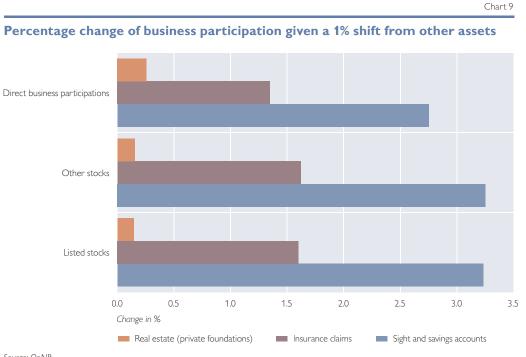
For the sake of consistency, we report the real estate holdings of private foundations, which are usually counted as direct business participations of households. This is important also for interpretation purposes, as for the question of direct business financing it makes no sense to count the real estate wealth of private foundations as investment in business (held by households), which would be the usual procedure in the financial accounts. Chart 8 shows the absolute values of these claims for 1995 and 2014.

As a next step, we examine the possible impact of the CMU on direct business financing by "unlocking frozen capital." We calculate the percentage change in three types of business participation (direct business participation, listed stocks, other stocks) given a 1% shift in different "frozen" capital types. These "frozen" capital types are: sight and savings accounts, insurance claims and real estate of private foundations.

Chart 9 shows the resulting values of this back-of-the-envelope calculation to assess the size of possible shifts to direct business financing.

The largest amounts are held in sight and savings accounts (roughly EUR 250 billion), the second-largest in insurance claims (roughly EUR 121 billion) and the third-largest in real estate of private foundations (roughly EUR 19 billion), totaling roughly EUR 385 billion of "frozen" capital. Even though the values in different types of business participations differ quite substantially, with about EUR 58 billion being held in direct business participations, roughly EUR 23 billion in listed stocks and about EUR 4 billion in other stocks, the relative effects of a shift to these assets are still quite similar among financers. We assume that financers allocate their "unlocked" assets along the same partitioning lines they use for their existing business participation assets. For example, households hold about 64% of their business assets in direct business participations and only 5% in other stocks, while private foundations hold almost 80% in direct business participations. Turning to the distribution of the "frozen" capital among household sector entities, most of the savings accounts as well as all insurance claims are held by households, while all real estate of private foundations is held only by private foundations.

The resulting relative effects are a combination of all these factors. For each 1% shift from real estate of private foundations to business financing, we see an increase in overall direct business participations, other stocks and listed stocks by 0.26%, 0.15% and 0.14%, respectively. Given a 1% shift from insurance claims, these numbers increase to 1.3% (direct business participations), 1.6% (other stocks), and 1.6% (listed stocks). Unlocking 1% of sight and savings accounts would even imply an increase of 2.8% (direct busiparticipations), 3.3% ness (other stocks), and 3.2% (listed stocks). Note



Source: OeNB.

Note: This back-of-the-envelope calculation illustrates a 1% shift from certain asset types of households, NPISHs and private foundations toward business participations, given these entities' current structure of different types of business participations.

that smaller enterprises benefit relatively more from unlocking the real estate of private foundations, as they invest the highest relative share in such assets compared to investments in listed stocks and other stocks.

Once a successful CMU has established SME bond markets, these markets would be another possible target to which unlocked capital would shift (see section 5).

Note that the choice of assets designated as "frozen" capital remains rather arbitrary. For example, one could also define bonds held by households, especially sovereign and banking sector bonds, as "frozen" capital. Insurance claims, on the other hand, also include private pension insurance entitlements that might be not the best policy choice for such a portfolio shift. Even though real estate might in general not be a good candidate for "frozen" capital, we include it not only for reasons of completeness and because it is usually counted as a business asset and has to be removed from that asset class in such an analysis, but also because in the case of private foundations, it is rather to be seen as an "investment" controlled by few households that might well qualify as "frozen" capital. However, the point of this exercise is rather to illustrate the relative potential dimension of such a portfolio reallocation given the current asset volumes and portfolio allocations of the different agents.

It is quite important to also consider the mechanism of control of these assets. As Atkinson underlines, "in considering the role of capital it is necessary to keep distinct the beneficial ownership of wealth and the control conveyed by capital over economic decisions' (Atkinson, 2015, p. 155). While there are about 3.8 million households in Austria, financial wealth is relatively concentrated, so that only a very small share of households holds a large fraction of financial claims.

We showed that savings accounts are strongly concentrated (see table 1). More than 30% of total savings are concentrated in the top 1.8% of savings accounts above EUR 50,000. From data collected in the Household Finance and Consumption Survey, we also know that even the wealthiest households hold substantial amounts of wealth in sight and savings accounts.

This concentration of savings implies that a CMU could succeed if it

Table 1

Account category	Number of accounts	Share in total number of accounts		Aggregate balances	Share in aggregate balances		Balance per account					
		%	Cumulated in %	EUR million	%	Cumulated in %	EUR					
Up to EUR 10,000	18,760,739	80.939	80.939	40,820	26.003	26.003	2,176					
EUR 10,000 to EUR 20,000	3,200,669	13.809	94.747	43,350	27.615	53.618	13,544					
EUR 20,000 to EUR 50,000	807,007	3.482	98.229	25,056	15.961	69.579	31,049					
EUR 50,000 to EUR 100,000	281,698	1.215	99.444	19,147	12.197	81.777	67,971					
EUR 100,000 to EUR 500,000	121,761	0.525	99.970	20,221	12.881	94.658	166,070					
EUR 500,000 to EUR 1 million	4,833	0.021	99.990	3,190	2.032	96.690	660,115					
EUR 1 million to EUR 3 million	1,856	0.008	99.998	2,805	1.787	98.477	1,511,120					
Above EUR 3 million	366	0.002	100.000	2,391	1.523	100.000	6,533,617					
Total	23,178,929			156,981			6,773					

#### Savings account data for 2011

Source: Savings account data compiled by the OeNB.

gives households in the upper part of the wealth distribution more incentives to move liquid assets from sight and savings accounts into direct investment. These are also likely to be the households that can easily bear the additional risks associated with higher returns and that are more willing to react to such incentives, as their portfolios display a high degree of risk diversification. Already now, riskier assets and riskier financing behavior is more likely to be observed among wealthier households. They have a higher probability to hold stocks, mutual funds but also foreign currency loans. By comparison, the large group of low-wealth individuals mostly have sight and savings accounts as their one and only financial asset (see Fessler and Schürz, 2008).

By the same token, Austria has around 3,200 private foundations that are controlled by about the same (or smaller) number of households. This raises the issue of so-called business angels and other high-wealth individuals who could become business angels by shifting e.g. real estate wealth (of their private foundations) or wealth in sight and savings accounts to direct business participations. An analysis of private foundations' equity stakes in direct business participations (limited liability corporations, see table 2) shows that wealth in private foundations is also rather concentrated even inside the group of private foundations (see table 2), indicating that only very few private foundations hold large amounts of real estate wealth, assuming that real estate wealth is similarly unequally distributed among private foundations.

## 5 SME bonds and debt securitization

Two of the arguably most important goals of the CMU are to create new tools, such as integrated European bond Shares of top groups in private foundations' total equity stakes

	Total equity stakes per private foundation		Share in total equity stakes				
	EUR billion		%				
Top 10% Top 5% Top 1% Total		7.4 6.3 3.8 9.2	80.35 68.34 41.05 100.00				

markets for SMEs, and to develop im-

Source: OeNB (as of 2010).

proved forms of debt securitization. European bond markets for SMEs have to be considered an alternative channel through which capital currently locked in real estate of private foundations, sight and savings accounts or insurance claims could be allocated to business once functioning markets have been established.

Additionally, various improved forms of debt securitization might help banks to sell claims off their balance sheets and allow them to lend more to SMEs, particularly to enterprises that are too small to participate in bond markets.

## 5.1 SME bond markets

The Prospectus Directive regulates what information a company needs to provide in a so-called prospectus to gain access to regulated markets in the EU. Its main purpose is to provide investors with an equivalent level of protection and comparable information across the EU.

The administrative burden of producing such a prospectus is quite large, and one objective of the CMU is to reduce that burden to enable more and especially smaller SMEs to gain access to capital markets. The Action Plan of the European Commission states that the Commission will:

"Modernise the Prospectus Directive to make it less costly for businesses to raise funds publicly, review regulatory barriers to small firms listing on equity and debt markets and support the listing activities of small firms through European advisory structures" (European Commission, 2015a).

The object is to enable more SMEs to place bonds. Currently, large companies are the main beneficiaries of this type of financing, which generally plays a minor role in overall company financing. In Austria, the amount the household sector invests in company bonds is quite small (EUR 5 billion of about EUR 585 billion, see OeNB, 2015b). Several preconditions are required to implement such an SME bond market:

First of all, as the Commission states, the Prospectus Directive would need to be overhauled to enable smaller companies to seek capital on the capital markets. Second, a harmonized way to rate European SMEs would need to be in place. Third, to make such bonds attractive for households that usually opt for sight and savings accounts, they would need to be sold in small amounts. Otherwise, they might mainly attract institutional investors. Fourth, a sufficiently liquid secondary market would need to be in place to allow investors to actually sell bonds in an acceptable amount of time. Compared to the few traditional corporate bonds of large companies traded in Austria, such SME bonds would come with rather large risks. Investing in single SME bonds might therefore be rather risky for most households, as they do not have the resources to diversify in the SME bond market, but might be interesting for institutional investors. A likely result would be that households would invest

in other structured products, such as certificates or mutual funds linked to such SME bonds.

It should also be mentioned that to make such a market work transnationally, changes in insolvency laws, tax laws, and corporation laws might be necessary. Harmonization would be very important before markets are established. Otherwise, these new markets might again be nationally segmented.

Important players in this context are the SMEs themselves, banks, rating agencies, households (private foundations), institutional investors in the private sector, and legislative and supervisory institutions in the general government sector.

For SMEs, placing bonds might be an attractive alternative to financing via loans. While loans are mostly subject to balance sheet reviews and are often renegotiated accordingly, a bond with a three- or five-year or an even longer maturity might allow SMEs to plan better. However, if more savings were diverted to such bonds, banks would have fewer deposits to grant loans, which might be a disadvantage – at least at first sight – for enterprises that are too small to participate in these new markets. Thus, enhancing investment opportunities for larger companies might result in relative disadvantages for companies that are too small to participate.

For banks, such bond markets might be attractive, as they might boost their commission business. As relationship banking in Austria means that banks are closely involved in households' savings decisions, banks are likely to help SMEs place their bonds and to inform households and institutional investors about related savings and investment possibilities. Therefore, banks could profit from commissions from issuers and investors alike without taking any risks themselves. Such a situation might on the one hand call for more consumer potection regarding such products, but might on the other hand also reduce rating burdens for banks. What is more, this business would reduce banks' balance sheets, as part of the bank lending channel based on deposits would be moved toward this more direct bond channel.

For European rating agencies, such bond markets are very attractive, as the need for ratings of a greatly increased number of SMEs harmonized across Europe would boost their business model. On the other hand, ratings might be relatively costly for smaller placements.

For households, the opportunities to directly invest in companies would increase. However, given the extremely skewed distribution of financial wealth, it could also imply that too many households might be tempted to take the risk of a direct business investment. About 90% of Austrian households have less than EUR 100,000 in financial wealth. Most of this wealth is held in sight and savings accounts, which have a deposit guarantee of EUR 100,000, per bank and person. Given Austrians' traditional preferences for savings passbooks, building and loan contracts and life insurance contracts, which are held by the majority of Austrian households, large investments in bond markets, which are currently made by less than 4% of Austrian households (investments include the predominant sovereign bonds), would definitely require a paradigm change in Austrian households' saving behavior. Such a change would need to be accompanied by massive changes in financial literacy. Recent research shows that only about 20% of the population understands simple relationships between interest rates and bond prices (Silgoner and Weber, 2015, and Silgoner et al., 2015).

For institutional investors like insurance companies, such an SME bond market is likely to be very welcome, as they suffer in the low-interest environment and might profit from increased investment options likely to generate higher yields. As investment in corporate bonds is subject to regulatory limits, SME bonds might also allow insurance companies to increase the diversification of their portfolio.

For legislative and supervisory institutions in the EU Member States, such an SME bond market is a challenge for several reasons. While companies and banks usually renegotiate debt when repayment problems arise, such negotiations are hardly possible with regard to SME bonds and households. Even though SME bonds allow SMEs to plan better, there is no renegotiation option for times when things are not going as expected but the business is still profitable overall in the longer term. Moreover, if no overall profitable business is expected anymore in the case of insolvency, there are dramatic differences between a system mainly based on many household bondholders or mainly based on large investors. While a liquidator usually negotiates the terms of an insolvency and in the end has the power to make deals with the large parties involved, in case of financing via bonds held by many bondholders, such procedures are much more difficult. The delegation of negotiating rights to large investors might also be more problematic in the case of SME bonds, because overall volumes are smaller and possibly because no large institutional investor is affected. Insolvency legislation needs to be adapted and harmonized across Europe as a precondition for creating a liquid European SME bond market.

Supervisory institutions need to control ratings and market makers and

must make sure that procedures are harmonized and that risk measurement works properly. Like in many European countries, the capital market is rather underdeveloped in Austria. The Vienna Stock Exchange has just recently changed from a single daily auction for corporate bonds (in total only 39 Austrian companies) to allowing continuous trade (Wiener Börse, 2015). It is not clear how such an SME bond market would look like in practice and how the primary and secondary market would be organized.

#### 5.2 Improved debt securitization

Debt securitization products became infamous in the financial crisis, when many of them broke down. U.S. debt securitization products sold by U.S. banks to U.S., European and other banks around the world turned out to be filled with massive amounts of unsustainable debt. Since then, the debt securitization market has lost some of its importance in Europe as well. In the meantime, legislation has been put in place to improve the securitization market. Put simply, originators have to hold at least 5% of the net economic interest instead of being allowed to sell the full volume. So if there are losses, the originator is also hit by them ("skin in the game"). In addition, transparency regulation has been improved by stipulating detailed investor reports.

The Action Plan of the European Commission states that the Commission will "revitalise simple, transparent and standardised European securitisations to free up capacity on banks' balance sheets and provide access to investment opportunities for long term investors" (European Commission, 2015a).

The main idea is that debt securitization can increase the availability of credit and reduce the cost of funding. Banks grant loans, put them together in larger packages and partly sell them, which in turn reduces the amount of loans on their balance sheets and allows them to grant new loans.

On the other side, long-term investors, such as other banks, pension funds or insurance companies, can buy such long-term, and hopefully well-diversified, investment products.

As such debt securitization products allow banks to free up capacity to grant loans, they could also help particularly smaller SMEs unable to place bonds in a newly developed SME bond market, as they could offset resulting decreases in deposits that reduce credit supply via the classical bank lending channel.

### 5.3 Possible caveats

#### Volume versus allocation

In the end, savings result from income and consist of postponed future consumption. How much is saved, how much income is accumulated, and therefore how large the volume of total savings and capital investment is has to be distinguished from where and through which channels such savings are invested.

Even though reducing barriers to allocation across countries as well as across channels and types of investment might induce more growth (higher income) in the future, the result is primarily a reallocation of existing savings. In that sense, reducing these barriers might primarily shift investment from one country to another, from one investment type (e.g. insurance or savings) to another (e.g. SME bonds), or from one channel (e.g. bank deposits and lending) to another (e.g. direct equity capital). Depending on the current situation of financing in different countries, such policies will produce (net) winners and losers – countries, service providers (e.g. banks, insurance companies, other financial intermediaries, rating agencies) and firms (e.g. large versus small, listed versus unlisted).

Especially banks' refinancing structure might suffer from a reduction of deposits, which might reduce their capacity to lend to companies too small to participate in newly created SME bond markets.

### Specialization

Creating a more integrated financial market is likely to lead to stronger specialization inside the formally less integrated market. Again, there will be winners and losers of such a policy, and they are likely to be segregated across country borders and branches. Not every country in Europe can have a successful stock exchange once capital markets have been fully integrated given economies of scale and scope in financial services. Some national financial systems will be winners, some losers compared to their current degree of capitalization.

## Transparency

Cross-country SME bond markets and debt securitization vehicles are the main ingredients of a CMU. However, the assessment of risks as well as legal and institutional settings is often linked to specific know-how at national levels. It might be rather difficult to create complex financial products that include different types of assets and that are subject to different laws and institutional settings but that are transparent enough at the same time to prove practical for households as direct investors. Especially questions of insolvency have to be tackled.

## Historical differences

The degree of banking-based financing systems as well as the importance of

the stock market varies considerably across Europe. While in some countries, pensions - old age provision is one of the most important savings motives – are to a substantial part organized privately via the capital markets, in other countries they are organized mostly publicly via pay-as-you-go statefunded systems, so that very few households are active in the stock market in these countries (in Austria about 10% hold mutual funds and fewer than 6% hold stocks directly). Therefore, households have hardly any experience with such investment forms. For some countries, introducing such investment forms would need large changes in saving patterns that have grown historically along related supply-side institutions like life insurance providers or building and loan associations. These historical differences might lead to different costs of adopting CMU policies and might again create winners and losers, also by affecting the supply side.

## 6 Conclusions

We take a flow-of-funds perspective on financing and illustrate the broad range of links between the financial side and the real side of the economy. We underline the usefulness of financial flow data in the analysis of the CMU project in Europe. The flow-of-funds data offer a framework to identify the potential for reaching the aims of the CMU.

It is important to analyze financers separately because of remarkable differences in the size and characteristics of their investments. We find that while financing through classical bank lending has lost its overwhelming importance in the past 20 years, it remains the major financing channel. There is still potential for the household sector's role in direct business financing to increase, as holdings in savings accounts and real estate of private foundations are comparatively large. Unlocking 1% of sight and (and keeping everything else constant) savings accounts of the house-hold sector would imply an increase of 2.8% (direct business participations), 3.3% (other stocks), and 3.2% (listed stocks) in direct business financing.

The largest amounts of financial claims of the household sector are held in sight and savings accounts (roughly EUR 250 billion), the second-largest in insurance claims (roughly EUR 121 billion) and the third-largest in real estate of private foundations (roughly EUR 19 billion), totaling roughly EUR 385 billion of "frozen" capital. Unlocking just 1% of these claims would therefore have a potential of EUR 3.85 billion to be invested through other (more direct) channels than the already existing direct business participations and stocks, but also through new channels, such as an SME bond market.

European bond markets for SMEs have to be considered an alternative channel through which capital currently locked in real estate of private foundations, sight and savings accounts or insurance claims could be allocated to businesses once functioning markets have been established.

Additionally, various improved forms of debt securitization might help banks to sell claims off their balance sheets and allow them to lend more to SMEs, particularly to enterprises that are too small to participate in bond markets.

All in all, the Action Plan of the European Commission (European Commission, 2015a and b) remains rather vague, and some goals seem to be contradictory. For example, while larger SMEs might benefit from the access to new bond markets, it remains unclear how the liquidity of such markets would be guaranteed and why the created flow from deposits to bonds would not lead to tightening conditions for the small SMEs that remain dependent on bank loans. Many preconditions, such as harmonized insolvency laws adapted to such new markets, have yet to be created.

Finally, it is difficult to assess how other developments fostered by the CMU will impact the banking industry. Increasing the role of nonbanks in general, but also crowdfunding, peerto-peer lending and other financial innovations might have a further adverse impact on the banking sector, whose profitability has been affected anyway. Financial supervisors might also find it harder to gather the necessary data to analyze financial stability issues with growing volumes of relevant assets, liabilities and transactions taking place outside banks.

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### Annex

#### Holdings of private foundations in EUR million

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Financial claims Real estate Usually counted under entity Households NPISHs	2,571 855	4,038 1,311	5,591 1,818	7,421 2,410	9,545 3,100	15,448 5,040	16,389 5,297	17,087 5,616	18,516 6,551	19,320 6,895	21,123 9,035	30,418 7,043	29,380 13,969
	3,192 39	5,050 62	7,023 86	9,345 114	147	19,541 238	20,740 253	21,702 265	23,976 292	25,069 306	28,336 339	35,203 390	40,744 460
Nonfinancial corporations	195	237	301	372	457	709	694	736	799	840	1,483	1,868	2,145
	2008	2009	2010	2011	2012	2013	2014						
Financial claims Real estate	27,613 11,454	31,430 13,090	32,456 13,809	31,976 15,165	33,452 16,854	34,649 17,344	35,478 19,368						
Usually counted under entity	36.709	41,820	43,922	44,340	47400	48,934	50,996						
Households NPISHs	486	41,820	43,922	44,340 542	47,402 580	48,934	550						
Nonfinancial corporations	1,872	2,206	1,807	2,258	2,324	2,461	3,300						
Courses Oo N/D													

Source: OeNB.

Note: The real estate of private foundations is the net value after deduction of the liabilities of private foundations. August 2015.

Table A1