

Corporate and household sectors in Austria: financing volumes start to rebound

Nonfinancial corporations' debt service capacity slightly improved

Economic growth in Austria is gaining momentum

In the second half of 2015, real GDP growth accelerated modestly from 0.2% (quarter on quarter) in the third quarter to 0.3% in the fourth quarter. Economic growth picked up further in the first quarter of 2016 (0.5%). The demand-side composition of GDP growth reflects a muted economic recovery in Austria which is driven by domestic demand. Investment was comparatively strong with quarter-on-quarter growth of about 0.5% since the second quarter of 2015 and 0.6% in the first quarter of 2016. Investment activity was driven by cyclically sensitive investment in equipment, while construction investment shrank. Consumption expenditure gained some momentum at the end of 2015 and further increased in the first quarter of 2016 (0.3%). Expenditures related to the

increased arrival of asylum seekers are likely to have fueled public and partly private consumption growth in the second half of 2015. The contribution of net exports to economic growth was negative during all quarters of 2015 and zero in the first quarter of 2016 – not least due to the high import content of investment in equipment. In line with its June 2016 economic outlook, the OeNB expects the Austrian economy to pick up moderately. GDP growth will accelerate to 1.6% in 2016.¹

Economic recovery after four years of weak growth

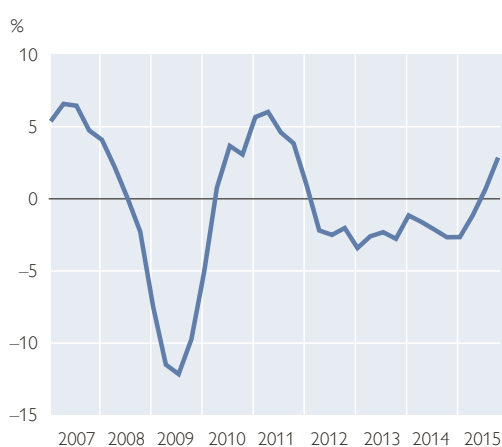
Corporate profits recovered in 2015

The moderate pick-up in economic growth last year and the resulting increase in demand supported the profitability of the corporate sector. After three years of decline, the gross operating surplus of nonfinancial corporations recovered in 2015, posting an increase of 2.9% in real terms (see chart 6). In nominal terms, gross operating surplus was even up 4.5% year on

Chart 6

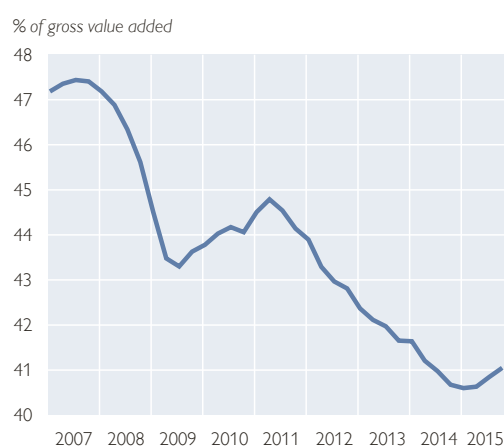
Gross operating surplus of nonfinancial corporations

Real annual change



Source: Statistics Austria.

Profit ratio



¹ The forecast will be published in English in *Monetary Policy & the Economy Q2/16*: <https://www.oenb.at/en/Publications/Economics/Monetary-Policy-and-the-Economy.html>.

Chart 7

year. On top of the support provided by economic activity, the cost side of firms was relieved by moderate wage growth as well as lower oil and other commodity prices, even if at the same time selling prices declined in an environment of weak demand. Accordingly, the downward trend of profitability (as measured by gross operating surplus divided by gross value added) that had been observed since 2011 came to a halt. By the fourth quarter of 2015, the gross profit ratio had risen to 41.0%, up 0.3 percentage points compared to end-2014 – the first increase since 2011. But this slight increase notwithstanding, profitability is still well below pre-crisis levels, despite the fact that the low interest rate environment has reduced the interest rate burden of indebted nonfinancial corporations (see below). Nevertheless, increased profitability has augmented the internal financing potential of the corporate sector.

External financing of nonfinancial corporations increased in 2015²

The recovery of investment in machinery and equipment was accompanied by an increase of corporate demand for external financing. After three years of muted development, nonfinancial corporations' recourse to external financing picked up in 2015 and, at EUR 15.7 billion, amounted to more than twice the 2014 figure. However, despite this upturn, financing volumes still remained well below pre-crisis figures, possibly reflecting ample liquidity on the asset side of firms' balance sheets.

Equity and debt contributed to total external financing in roughly equal measure in 2015. Their dynamics, how-

Equity financing of nonfinancial corporations



Source: OeNB.

¹ Preliminary figures.

ever, were different. At EUR 7.6 billion, equity financing (issuance of both quoted and unquoted shares) was about 7% lower in 2015 than in the year before. This slowdown was accounted for by the net issuance of listed shares, which – after some signs of expansion in 2014 – fell by more than three-quarters to EUR 0.8 billion (see chart 7). In 2015, there was only one new listing on the Vienna stock exchange, and there has been none this year so far. Other equity instruments (mainly sales to foreign strategic investors) amounted to EUR 6.8 billion in 2015, up by more than one-third compared to the year before, and thus accounted for the lion's share of equity financing.

Equity accounts for close to half of external financing

² For an overview of corporate financing aspects of capital markets union, see: *Elsinger, H., R. Köck, M. Kropp and W. Waschiczek. 2016. Corporate financing in the run-up to capital markets union. In this issue of the Financial Stability Report.*

Debt financing started to recover

Almost all of the increase in total external financing in 2015 was accounted for by debt financing, in line with what the pecking order theory of corporate finance would suggest. Debt financing, which had been negative in the previous year, amounted to EUR 8.1 billion, thus returning to the volumes registered in 2012 and 2013.

The primary source of debt financing of the Austrian corporate sector in 2015 were other nonfinancial corporations (both domestic and foreign), which thus proved to be a very stable source of funding – as in the previous periods. On the one hand, this financing took the form of trade credit, which accounted for almost half of total debt financing – despite the fact that in a low interest rate environment, this form of finance becomes comparatively

more expensive. One reason for the large share of trade credit might be that as a key element of firms' working capital, trade credit develops broadly in line with the business cycle. On the other hand, one-quarter of debt financing came from loans from other enterprises, mostly transactions within corporate groups. Overall, almost two-thirds of debt financing in 2015 came from domestic sources, which had made a negative contribution last year. Looking at maturities, debt financing continued to be primarily long-term (with a maturity of more than one year).

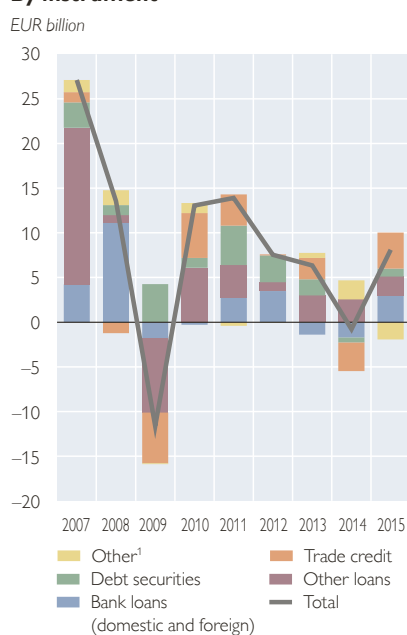
In total, bank loans contributed more than one-third to debt financing in 2015. More than 90% of net new bank loans were made up of borrowings from foreign banks.³ However, these borrowings were largely com-

Debt dominated by long-term financing

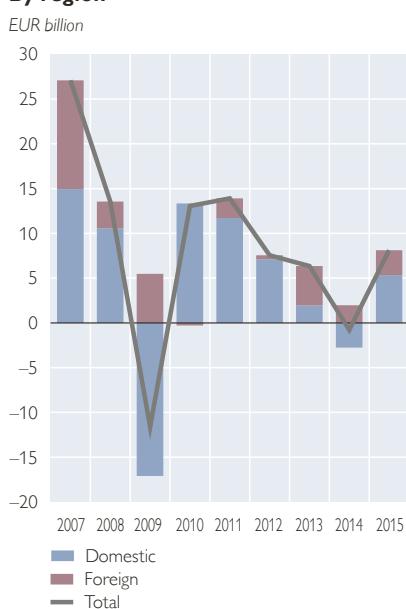
Chart 8

Debt financing of nonfinancial corporations

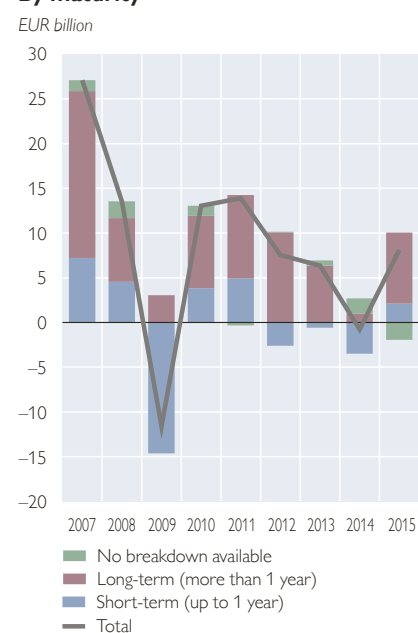
By instrument



By region



By maturity



Source: OeNB, ECB.

¹ Pension entitlements and other accounts payable.

Note: 2015 data are preliminary.

³ Not adjusted for reclassifications, valuation changes and exchange rate effects.

Growth of bank loans remains frail

posed of a few high-volume transactions, and accordingly a significant part of this increase can be attributed to a limited number of very large transactions. In terms of outstanding amounts, loans from foreign banks contributed some 9% to total bank lending to the corporate sector at end-2015.

Lending by Austrian banks to domestic nonfinancial corporations remained muted. In April 2016, the annual growth rate (adjusted for reclassifications, valuation changes and exchange rate effects) amounted to 1.2% in nominal terms (see left-hand panel of chart 9). However, in real terms, the growth of bank loans remained negative, as it had already done for more than three years. (Nominal) loan growth stemmed from loans with medium-term and longer maturities (over one year), which have accounted for most of the loan growth in the past years, while short-term loans (with maturities of up to one year) have decreased since early 2015.

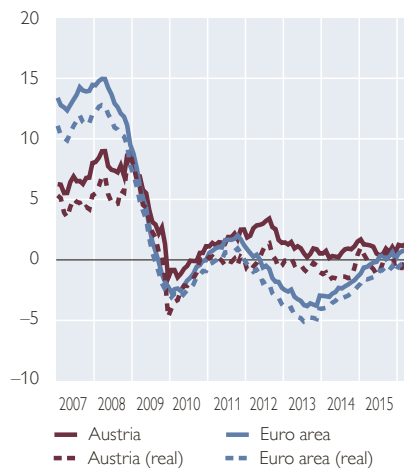
In 2015, as well as in 2016 so far, Austrian banks continued their cautious lending policies and tightened their credit standards for loans to enterprises somewhat, according to the euro area bank lending survey (BLS; see right-hand panel of chart 9). In the survey, banks attributed this tightening primarily to a reduced risk tolerance. Moreover, banks indicated factors reflecting their risk perception, such as their assessment of the general economic situation and of borrowers' creditworthiness. In contrast, cost of funds and balance sheet constraints, which had been named frequently in the past, played a minor role in recent survey rounds. Large firms were affected more strongly by tightened credit standards than small and medium-sized enterprises. Banks also stated that the share of (completely) rejected applications for loans to enterprises rose slightly in 2015 and the first quarter of 2016. Especially firms with poor credit ratings and higher insolvency probabilities may have experienced increased difficulties in obtaining a bank loan.

Chart 9

MFI loans to nonfinancial corporations

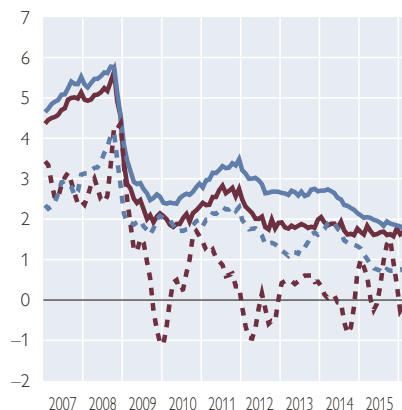
Volumes

Annual change in %¹



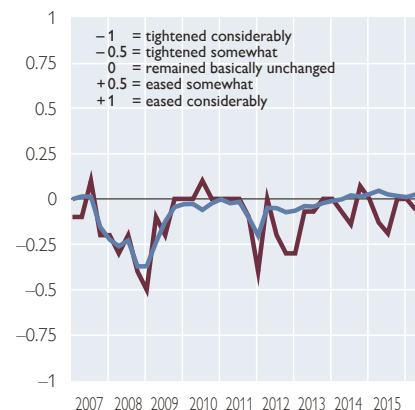
Interest rates

%



Credit standards

Change over last quarter, diffusion index

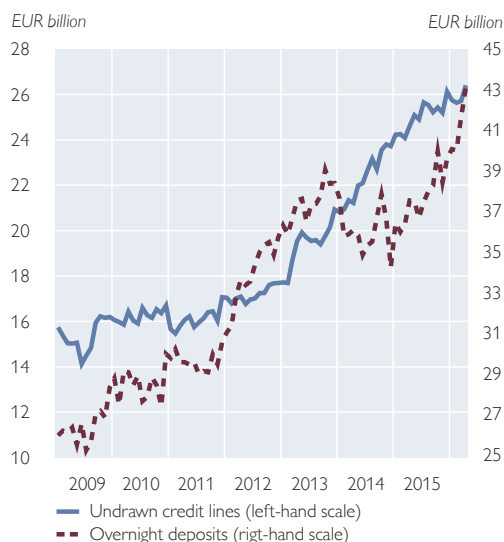


Source: OeNB, ECB.

¹ Adjusted for reclassifications, changes in valuation and exchange rate effects.

Chart 10

Indicators of nonfinancial corporations' liquidity



Source: Statistics Austria.

At the same time, loan demand by enterprises remained weak, reflecting the current cyclical environment. In the first quarter of 2016, banks surveyed in the BLS reported a slight decrease in corporate loan demand – as they have done in 22 out of 33 quarters since 2008. Whereas banks used to cite lower funding requirements for fixed investment as the main factor behind weak loan demand, they started to highlight the impact of internal financing as the major driver instead from the third quarter of 2015, thus corroborating the pick-up in investments and corporate profits.

Moreover, firms have built up substantial liquidity in recent years (see chart 10). According to the OeNB's statistics on new lending business, the total amount of undrawn credit lines available to enterprises rose by roughly EUR 8 billion, or 45%, from end-2012 to April 2016, much more strongly than the overall volume of credit lines, implying a significant drop in the rate of credit line utilization. Additionally,

firms' overnight deposits, which had already increased markedly in 2012 and 2013, began to rise again in 2015. These liquidity buffers may reflect both precautionary motives and a lack of investment opportunities. Thus, at least in the current environment of weak demand for loans, the more restrictive policies of Austrian banks probably did not constitute an effective constraint for the financing of Austrian enterprises.

The tighter credit standards were reflected in the terms and conditions of bank loans. Thus, wider margins, especially on riskier loans, as well as higher non-interest rate charges, as reported by banks in the BLS, partially dampened the effects of monetary policy easing on financing costs. Yet, interest rates on loans to nonfinancial corporations declined somewhat further. Between end-2014 and April 2016, corporate lending rates sank by 19 basis points (see middle panel of chart 9). The decrease was more marked for loans with an interest rate fixation period of more than five years than for shorter periods. The spread between interest rates on larger loans and those on loans of lesser amounts, which – given the lack of other data – is commonly used as an indicator of the relative cost of financing for SMEs, averaged 43 basis points in the first four months of 2016, one of the lowest levels recorded in the euro area. Because of their very low level, bank lending rates on new business are likely to have supported domestic lending to the corporate sector.

The upturn in debt financing was also mirrored in a slight increase in debt securities issuance, which contributed close to 6% to total external financing. While the exceptionally low levels of corporate bond yields may have been supportive for this form of finance, the recovery in bank lending may have re-

Favorable interest rates for bank loans

Growing liquidity buffers

Slight increase in corporate bond issuance

duced the recourse to corporate bond issuance somewhat. According to financial accounts data, corporate bond issuance rose by 6% in the second half of 2015 in net terms (measured against the outstanding volume one year earlier), after a drop by 3.9% in the first half of the year. In the first months of 2016, this pace was maintained, as indicated by data from securities issues statistics.⁴ In April 2016, corporate bond issuance was up 6.0% year on year in nominal terms.

Although mainly available to larger companies, bonds play a relatively important role in Austrian corporate finance. In the first quarter of 2016, the outstanding amount of long-term bonds issued by the corporate sector amounted to 11.6% of GDP, roughly on a par with the euro area.⁵ The share of floating rate issues rose to 14.8% in April 2016, thus reversing the decrease of the year before. At 1.5%, the foreign currency share in the outstanding volume of corporate bonds was considerably lower in Austria than in the whole euro area, in contrast to the foreign currency share in bank loans. Commercial paper only plays a minor role in corporate finance. The share of short-term debt securities issued (with a maturity of less than one year) amounted to 1.2% of the total outstanding volume of securities issued by the Austrian enterprise sector.

Interest rate risk of the corporate sector remains elevated

While corporate debt rebounded in 2015, its growth rate (1.8% compared

to the year before, measured in terms of total loans raised and bonds issued) remained below the nominal expansion rate of the gross operating surplus. As a result, the debt-to-income ratio of the corporate sector decreased by more than 10 percentage points to 418% in 2015 (see upper-left hand panel of chart 11). However, while this improvement contributed to debt sustainability, the debt-to-income ratio remained considerably above pre-crisis levels, implying that the increase in the corporate sector's vulnerability that occurred in the period from 2007 to 2009 has not yet been reversed. Whereas the debt-to-income ratio is lower in Austria than in the euro area as a whole, the debt-to-equity ratio, in spite of a small improvement last year, is currently higher in Austria than in the euro area, reflecting the importance of debt financing in Austria.

The low interest rate environment continued to support firms' debt-servicing capacity. In 2015, the proportion of gross operating surplus spent on interest payments for (domestic) bank loans continued to decline slightly. This reflected the still very high share of variable rate loans in total new loans, which has come down only 4 percentage points to 92% over the past three years. While Austrian companies therefore currently face lower interest expenses than their euro area peers, their exposure to interest rate risk is higher. A rebound of interest rates could become a burden, especially for highly indebted companies, even if rising debt servicing costs may eventually

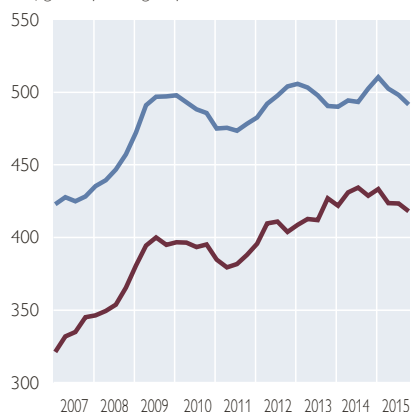
Share of variable
rate loans remains
high

⁴ At the cutoff date, financial accounts data were available up to the fourth quarter of 2015. More recent developments of financing flows are discussed on the basis of data from the MFI balance sheet statistics and the securities issues statistics.

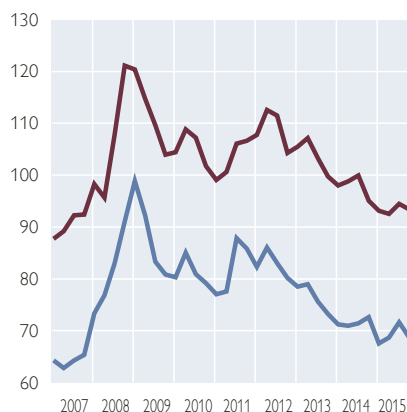
⁵ Due to the implementation of ESA 2010 in the securities issues statistics as of end-2012, there is a considerable break in the time series (mainly reflecting the fact that a considerable part of the enterprises that issue bonds have been reclassified to the government sector).

Risk indicators for nonfinancial corporations**Debt**

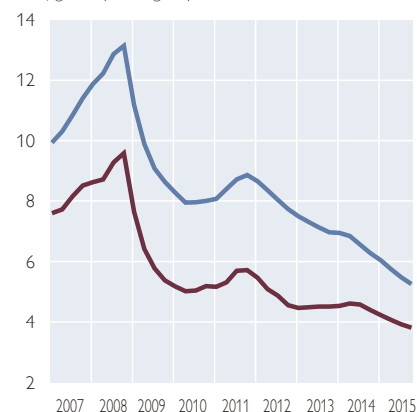
% of gross operating surplus

**Debt-to-equity ratio**

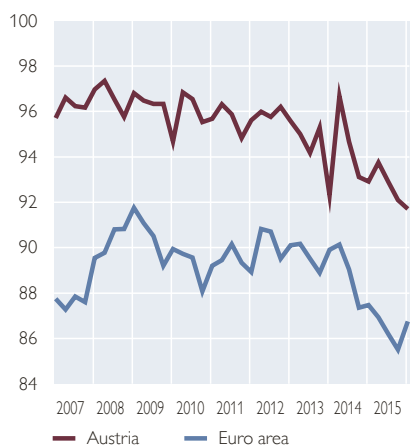
%

**Interest expenses¹**

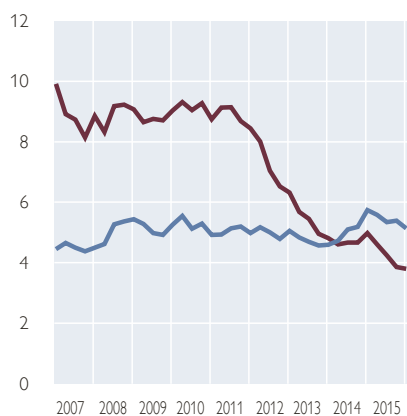
% of gross operating surplus

**Variable rate loans**

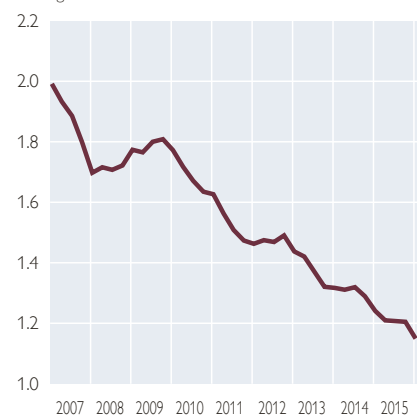
% of total new lending

**Foreign currency loans**

% of total loans

**Insolvencies**

Number of insolvencies in % of companies, four-quarter moving sum



Source: OeNB, ECB, Eurostat, KSV 1870.

¹ Euro area: euro loans only.

be partially offset by the positive impact an economic recovery would have on firms' earnings.

The corporate sector's exposure to foreign exchange risk has continued to decrease, amounting to 3.8% in the first quarter of 2016. Since the second quarter of 2014, the share of foreign currency loans in Austria has been below the figure for the euro area as a whole.

The insolvency ratio (number of corporate insolvencies in relation to the number of existing companies) continued to decline until the first quarter of 2016 (based on a moving four-quarter sum to account for seasonality). On the one hand, this development may be attributed to the moderate increase of debt financing and the low interest rate level, which makes debt servicing easier even for highly indebted companies.

Dipping number of insolvencies

On the other hand, insolvencies usually are a lagging indicator so that the moderate dynamics of economic activity in the past years may not yet have fed through to insolvencies.

Household indebtedness still low

Austrian households' savings rate will temporarily increase in 2016

After a strong decline in 2013 (−2.0%) and a very moderate increase in 2014 (0.5%), real disposable household income shrank again in the year 2015 (−0.7%). In 2015, both the private consumption deflator and the growth rate of nominal disposable household income lost momentum, with the slowdown being stronger for nominal disposable household income. Looking at the structure of disposable income, the rise in nominal compensation per employee at 1.6% was slightly weaker in 2015 than in 2014 due to the fact that the growth of property income clearly lost momentum (0.2% after 4.7% in 2014), and that self-employment income and operation surpluses (net) shrank (−0.5%). Despite the economy's persistent weakness, employment continued to expand. At the same time, unemployment continued to climb as well. Private consumption grew only slightly.

The savings rate of the household sector has exhibited a decreasing trend since 2007 (when it stood at 12.1%), which was prolonged in 2015 (6.9%). As a result of sinking real disposable income, an increasing share of private consumption has been financed out of savings. Furthermore, the composition of disposable household income also may have reduced households' propensity to save as property income usually has a higher marginal saving ratio than earned income. Moreover, the currently low interest rates may have reduced the attractiveness of saving. In its

June 2016 economic outlook, the OeNB predicts an increase of the savings rate in the year 2016. This reflects a strong increase of disposable household income on the back of the tax reform that entered into force in 2016.

Strong preference for liquid assets

Financial investments by households remained flat in 2015. At EUR 10.6 billion, they were 2% below the previous year's level, and amounted to less than half of the values seen before the onset of the crisis (see upper left-hand panel of chart 12). The structure of households' financial investments showed roughly the same pattern as in the years before. Given the low opportunity costs resulting from the low nominal interest rate environment, households continued to display a strong preference for highly liquid assets and shifted almost EUR 15 billion into cash holdings and overnight deposits with banks, while bank deposits with agreed maturity continued to decline. Between 2009 and 2015, households' overnight deposits increased by EUR 58 billion, while deposits with agreed maturity fell by almost EUR 29 billion. As a result, the share of overnight deposits in total financial assets rose from 10.1% to 17.4% since end-2008 while the share of deposits with agreed maturity fell from 31.6% to 19.7%.

Similarly, households reduced their direct holdings of long-term debt securities by EUR 3.4 billion, shunning investments with longer interest rate fixation, but also cut back their direct holdings of quoted stocks by EUR 45 million. Mutual funds were the only other category of financial assets that showed an increase in 2015, with households investing EUR 3.9 billion (in roughly equal measure in domestic and foreign funds); over the past three years, they invested almost EUR 10 bil-

Slight reduction of financial investment

Disposable household income set to rise in 2016

Households continue to invest in mutual funds

Chart 12

Financial investments of households

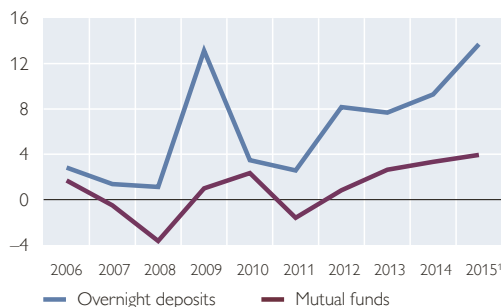
Total

EUR billion



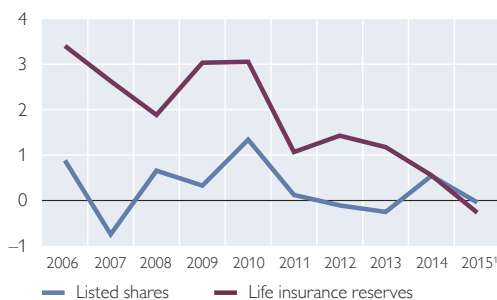
Positive net investments in 2015

EUR billion



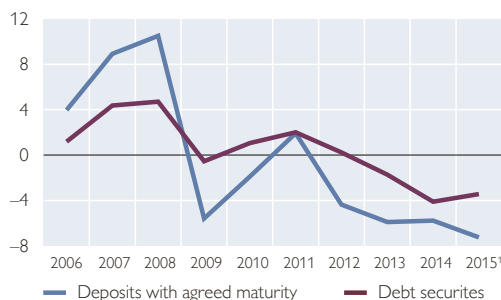
Stable net investments in 2015

EUR billion



Negative net investments in 2015

EUR billion



Source: OeKB.

¹ Preliminary figures.

lion in total. Again, the same picture emerged: Households reduced their holdings of bond funds, as the biggest share of investment into mutual funds in 2015 went into mixed funds. In total, households' net financial investment in capital market instruments, which had been negative in the year before, amounted to less than EUR 0.5 billion in 2015 or a mere 4.3% of total financial investments. Looking at outstanding amounts, capital market investments accounted for 17.8% of total financial investments by end-2015. Thus, there are few indications that households made up for low interest rates by investing in riskier assets.

As a result of rising share prices, the Austrian household sector, on aggregate, recorded unrealized valuation gains of EUR 0.4 billion on its securi-

ties portfolios in 2015; this amount was equivalent to 0.4% of households' securities holdings one year earlier. While quoted stocks registered valuation gains, holdings of both debt securities and mutual fund shares registered (equally unrealized) losses. On balance, households benefited from a notional increase in financial wealth from securities holdings for the fourth consecutive year.

Investment in life insurance and pension entitlements continued to slow down in 2015, and at EUR 0.7 billion, did not even reach one-third of the previous year's value. Based on outstanding amounts, they accounted for 20.5% of total financial assets. This decrease was driven mainly by life insurance policies, where net investments turned negative in 2015, amounting to

Net investments in life insurance policies negative in 2015

–EUR 0.2 billion against +EUR 0.6 billion a year earlier. This reduction is all the more remarkable as a large proportion of the gross inflows into these instruments were not an outcome of current investment decisions, but rather reflected past decisions – given the long maturities and commitment periods involved; moreover, life insurance policies often serve as repayment vehicles for foreign currency bullet loans (even if these are converted into euro loans). Investments in pension entitlements (including both claims on pension funds and direct pension benefits granted by private employers) by contrast expanded briskly in 2015 (by two-thirds).

Growth of household loans increased

More than 85% of the financial liabilities of Austria's households are made up of loans by (domestic) banks. The expansion of bank lending to households has gained some momentum since late 2015. In April 2016, bank loans to households (adjusted for reclassifications, valuation changes and exchange rate effects) increased by 2.7% year on year in nominal terms. A breakdown by currency shows that euro-denominated loans continued to grow briskly (by 5.9%), while foreign currency loans continued to contract at double-digit rates – by April 2016, they had fallen by 11.3% year on year. Broken down by loan purpose (see chart 13), consumer loans and other loans shrank by 1.9% and 0.9% year on year, respectively, whereas housing loans grew by 4.9% year on year. Despite this most recent acceleration, housing loan growth remained rather moderate if compared e.g. to property price developments or to pre-crisis growth rates (see top-left panel of chart 13).

Housing loans are the most important loan category for households: they

accounted for almost two-thirds (65.1%) of all their bank loans in 2015. Their growth was driven primarily by long-term loans (with a maturity of more than 5 years), which were up 5.0% in the 12 months to April 2016. Housing loans with a maturity between 1 and 5 years expanded at an even faster pace (+10.2%), but as they account for only a small share in terms of volume, their contribution to overall housing loan growth was low.

New housing loans exhibited even greater dynamics than net transactions, implying rising redemptions of outstanding loans. On the one hand, the relevant regulatory and contractual arrangements in Austria probably do not conflict with an early redemption of loans. On the other hand, the falling interest rates offered an incentive for prepaying an existing loan. The benefits of early redemptions depend on the difference between historical and current interest rates (which is of course higher for fixed rate loans). While the share of variable rate loans (with a rate fixation period of up to one year) in new loans has risen considerably (from about 60% in 2007 to close to 90% in 2014) there is still a sizable amount of loans for which early repayment may yield benefits.

The conditions for taking out housing loans remained favorable. According to the results of the euro area bank lending survey, banks' credit standards for housing loans to households were stable in the first quarter of 2016, after some tightening in the previous quarter. Overall, there has been little change in lending standards in this segment over the past three years.

Credit terms have also remained favorable. At 1.94%, average interest rates on euro-denominated housing loans to households were virtually unchanged in April 2016 compared to one

Loan growth driven
by housing loans

year earlier (+1 basis point), when the lowest value since the start of the MIR statistics in 2003 had been recorded. The interest rate on variable rate loans (with a rate fixation period of up to one year) decreased by 3 basis points to 1.83%. The effective annual rate of interest on housing loans, which reflects total borrowing costs (interest rate component and related charges) dropped by 2 basis points year on year to reach 2.38% in April 2016.

At the same time, banks have been reporting a slight increase in the demand by households for housing loans since last year in the BLS. Since the first quarter of 2015 (when this factor was included in the BLS questionnaire), they have attributed this to a large part to the general level of interest rates. Another factor that consistently has affected the increasing demand for housing loans has been housing market prospects, including expectations of rising

Chart 13

MFI loans to households: volumes and interest rates

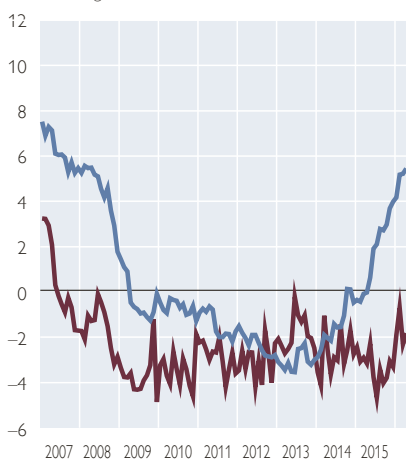
Housing loans: volumes

Annual change in %¹



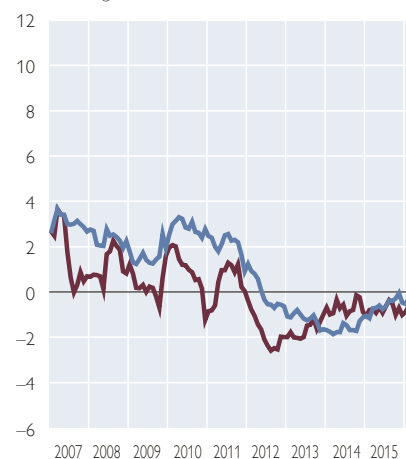
Consumer loans: volumes

Annual change in %¹



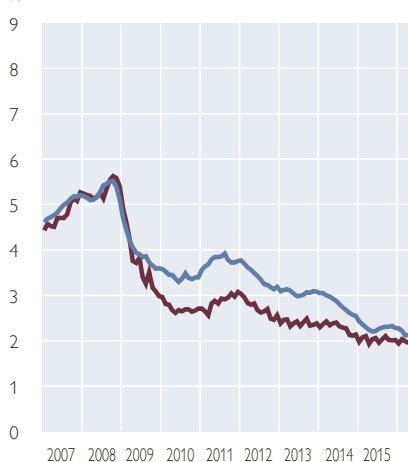
Other loans: volumes

Annual change in %¹



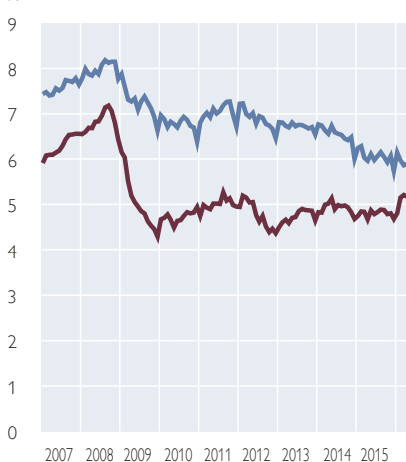
Housing loans: interest rates

%



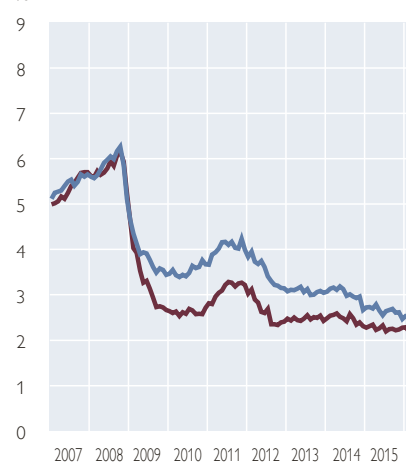
Consumer loans: interest rates

%



Other loans: interest rates

%



— Austria — Euro area

Source: OeNB, ECB.

¹ Adjusted for reclassifications, valuation changes and exchange rate effects.

Share of variable rate loans begins to recede

house prices. The strong increase in house prices registered over the past years (see below) may have boosted the funding needs for real estate investment. In 2015, the transaction volume on the residential property market in Austria increased by roughly 20% year on year in nominal terms, according to data published by RE/MAX and compiled from the land register by IMMOUnited, which also implied an increase in financing needs. However, to a large extent this increase in real estate transactions is likely to reflect a frontloading of transactions, especially of transfers in kind that do not require financing, as property tax increases took effect in 2016. Thus, despite the recent increase, housing loan growth most likely still does not surpass the rate of expansion of the volume of residential property transactions in Austria.

Households' currency and interest rate risks

Household indebtedness low despite slight increase

By the end of 2015, the household sector's total liabilities amounted to EUR 175.3 billion, according to financial accounts data, 3.3% up in nominal terms on the previous year's figure. Expressed as a percentage of net disposable income, household debt rose by 2.6 percentage points to 91.6% during 2015 (see chart 14). Despite this increase, the debt ratio of households in Austria thus remained lower than in the euro area as a whole. Moreover, it should be taken into account that, according to data from the Household Finance and Consumption Survey (HFCS), only about one-third (34%) of Austrian households have an outstanding loan, one of the lowest shares observed in all

Foreign currency loans remain a concern

euro area countries. Thus, it is not the absolute level of Austrian households' indebtedness that is the primary concern, but rather the high shares of variable rate and foreign currency loans.

In the first quarter of 2016, loans with an initial rate fixation period of up to one year accounted for 77% of new lending (in euro) to households compared to almost 85% in the same period of the previous year. This reduction can be associated with the fact that interest rates no longer fell in 2015 and that the spread between the interest rates on long and short interest rate fixation periods continued to contract. But even if the share of variable rate loans has been falling recently, it is still very high by international comparison. Households' interest expenses equaled 1.8% of aggregate disposable income in the fourth quarter of 2015, about 2 percentage points less than in 2008, the year before interest rates had begun to fall. Lower current interest expenses result from the fact that the pass-through of the ECB's lower key interest rates to lending rates was faster in Austria than in the euro area as a whole. Loan quality may have also played a role in view of the comparatively low level of indebtedness of Austrian households. However, the high share of variable rate loans in total lending implies considerable interest rate risks in the household sector.

The still very high share of foreign currency loans in total lending remains a major risk factor for households, despite a noticeable decrease in past years.⁶ In the first quarter of 2016, the share of foreign currency loans fell to 16.0%, almost half the maximum value reached about ten years ago. The for-

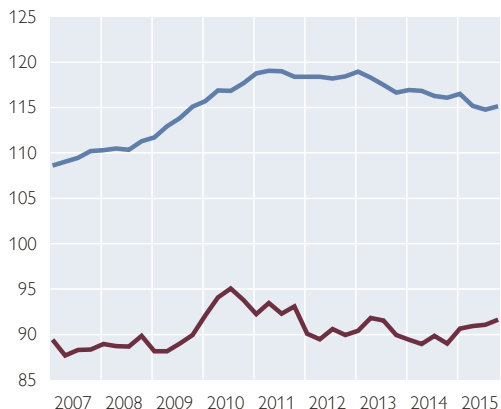
⁶ This risk had been highlighted in January 2015 when, as a result of the strong appreciation of the Swiss franc following the decision of the Swiss National Bank to discontinue the minimum exchange rate of CHF 1.20 per euro, the foreign currency share rose from 18.0% to 19.5% within one month.

Chart 14

Indicators of household indebtedness

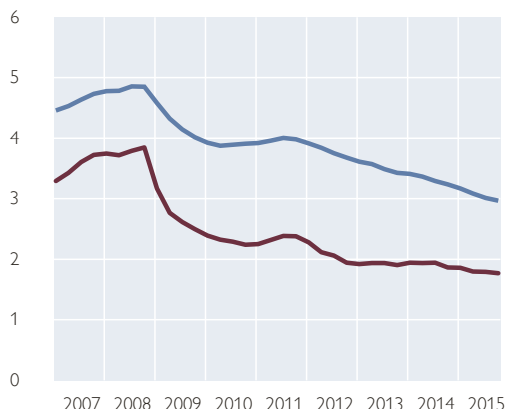
Liabilities

% of disposable income



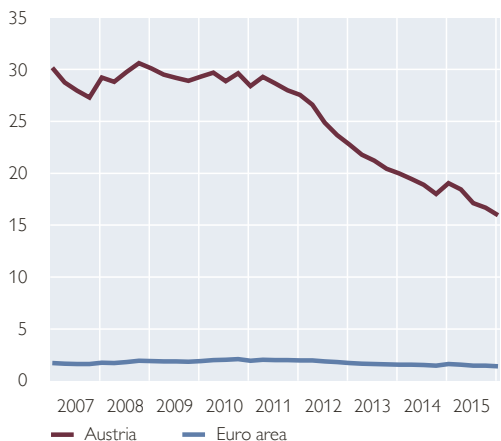
Interest expenses

% of disposable income



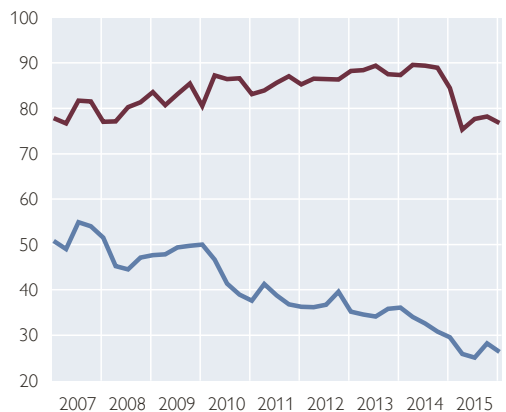
Foreign currency loans

% of total loans



Variable rate loans

% of total loans



Source: OeNB, Statistics Austria, ECB, Eurostat.

Note: Figures for the euro area represent only interest rate expenses on euro-denominated loans.

foreign currency share varies considerably depending on loan purpose: For housing loans, it was 19.5%, for consumer loans 5.4% and for other loans 11.7%. Almost all outstanding foreign currency-denominated loans are denominated in Swiss francs (close to 97%). In those cases where households have not hedged their foreign currency exposures, shifts in exchange rates affect both the euro-denominated value of the foreign currency liabilities and the

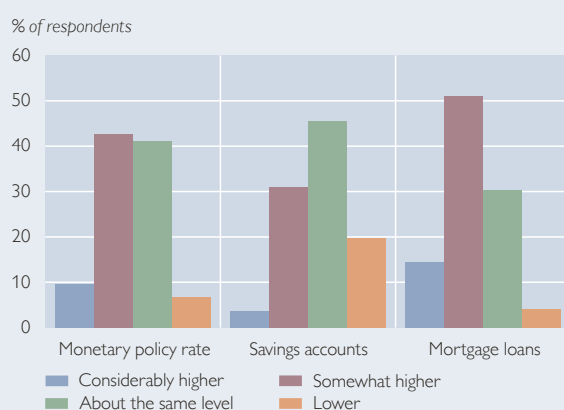
interest to be paid on the outstanding loans. Exchange rate movements not only feed through to interest expenses but also affect the euro equivalent of the principal at maturity – even if they may be considered unrealized valuation changes in bullet loans; they may well affect current payments into a repayment vehicle intended to ensure repayment when the exchange rate risk eventually materializes at maturity date.

How do Austrian households perceive the current ultra-low interest rate environment and how do they react?

Are Austrians fully aware of the prevailing ultra-low interest rates? Do they expect these low interest rates to persist for a protracted period? Are Austrian households adapting their savings and loan decisions to ultra-low interest rates? To answer these questions, the OeNB conducted a survey on the interest rate perceptions and expectations of Austrian households and on the impact of recent and expected interest rate developments on households' savings, portfolio allocation and borrowing decisions. The survey was conducted in spring 2015 and included questions about interest rate perceptions at the time of the survey as well as interest rate expectations for the year 2020. Regarding changes in households' portfolios, participants were asked to compare their current savings and investment products as well as their outstanding loans with the status three years before the survey and to state their plans in this area for the year following the survey. As the survey explores decisions at the household level, survey results complement findings from financial accounts data, which are regularly analyzed in the OeNB's Financial Stability Report.

With regard to interest rate perceptions at the time of the survey, we find that people are largely aware that interest rates are extremely low. But we also find that the knowledge of interest rates is limited, as a large share of respondents do not know the levels of various types of interest rates and as people tend to overestimate interest rates both on savings accounts and mortgage loans. The majority of respondents expect interest rates to stay at about the same level or rise somewhat by the year 2020. Only few respondents expect lower monetary policy rates or lower interest rates on mortgage loans, while one-fifth of respondents expect interest rates on savings accounts to be even lower in five years. By contrast, almost two-thirds expect somewhat or considerably higher mortgage rates. Quite a large fraction of survey participants have not formed any expectations about interest rates in 2020. Whereas awareness of interest rate developments is correlated with socioeconomic factors and the personal relevance of information, these factors appear to only weakly affect perceptions and expectations concerning the level of interest rates.

Interest rate expectations for the year 2020



Source: Authors' calculations based on the OeNB barometer survey.

Note: The respondents who gave no answer have been excluded. Their fraction corresponds to about 22% for both the monetary policy rate and the interest rate on mortgages and to 15% for the interest rate on savings accounts.

We find that low interest rates were only one of several determinants guiding savings decisions, and that they had only a small effect. Almost 60% of households did not change their savings behavior in the three years before the survey. 26% of households stated that they were saving less than three years before, with 45% among them stating that they were doing so because of low interest rates. By contrast, 9% of households reported that they were saving more than three years earlier; 14% of these households cited low interest rates as a reason for this. Overall, 11% of households stated that they preferred other savings and invest-

ment products because of low interest rates. High-income households were more likely to adjust their portfolios.¹ Households that adapted their portfolios often showed a stronger preference for savings with savings and loan associations than for other options. Furthermore, we observe a shift to real assets. By contrast, portfolio rebalancing into riskier assets is not widespread. Furthermore, only 8% of households confirmed that the low current interest rates would prompt them to change savings and investment products in the 12 months following the survey.

Many households at the time of the survey considered circumstances relatively favorable for taking out loans. However, this does not imply that loan demand increased strongly, as borrowing decisions are also affected by other, potentially more important determinants. If they were to be faced with higher loan installments, most loan holders would rather cut consumption expenditures.

The survey results suggest that policymakers cannot simply take for granted that people are well-informed about actual interest rates. One needs to take into account perception limitations and biases. The modest impact of recent interest rate levels on savings and portfolio rebalancing into riskier assets suggests that ultra-low interest rates have a limited ability to stimulate aggregate demand through the risk-taking and portfolio rebalancing channels, at least in the case of households in Austria. People's limited knowledge of interest rates may be seen as yet another argument for central banks to pursue an active communication policy and financial literacy activities.

For detailed survey results see the studies "Interest rate perceptions and expectations when interest rates are low – survey evidence on Austrian households" and "Saving, portfolio and loan decisions of households when interest rates are very low – survey evidence for Austrian households" that were published in *Monetary Policy & the Economy Q4/2015* and *Q1/2016*, respectively (<https://www.oenb.at/en/Publications/Economics/Monetary-Policy-and-the-Economy.html>).

¹ A similar result was obtained by the Deutsche Bundesbank (see *Monthly Report*, October 2015) for German households. Additionally, data from the German Panel on Household Finances (PHF) show that wealthy households (i.e. households that tend to own diversified portfolios and have a greater appetite for risk) have been more likely to change their portfolio allocation because of the low interest rate environment.

Residential property price growth in Austria gathered pace in 2015

The growth of residential property prices in Austria accelerated notably in the second half of 2015, reaching 7.6% year on year in the fourth quarter, which ended a period of falling growth rates as witnessed since 2013. Moreover, contrary to the years before, when price increases had been significantly more pronounced in Vienna than in the rest of Austria, it had been the "Austria excluding Vienna" aggregate which displayed particularly strong residential property price growth, reaching 9.6% year on year in the fourth quarter of 2015. Since the first quarter of 2010, residential property prices in

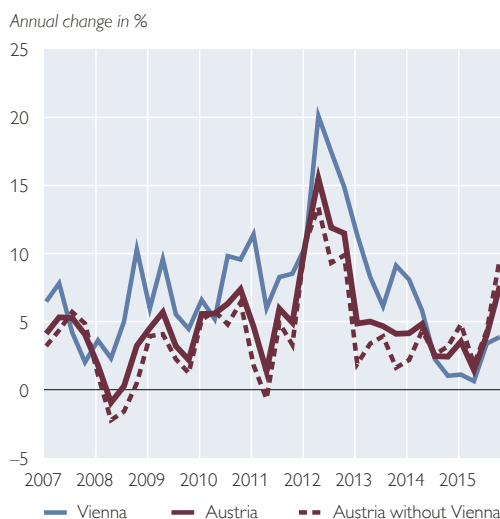
Vienna have advanced by a total of 54%, whereas prices outside Vienna have increased by 30%.

According to the OeNB fundamentals indicator for residential property prices, residential property in Vienna was overvalued by 21% in the fourth quarter of 2015. For Austria as a whole, the indicator shows a slight increase in the level of overvaluation to 3.5%, which was attributable primarily to residential property price growth clearly outpacing the growth rates of household income, rents, construction costs and consumer prices. Despite these recent upticks, this value can be seen as still signaling that residential property prices are justified by funda-

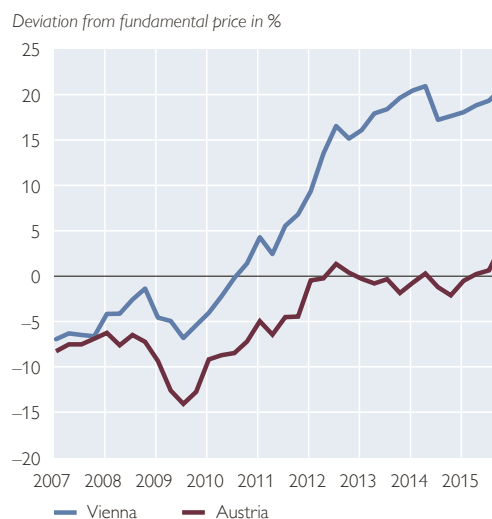
Price dynamics differ across regions

Austrian residential property market

Residential property prices in Austria



OeNB fundamentals indicator for residential property prices



Source: TU Wien (Wolfgang Feilmayr, Department of Spatial Planning), OeNB.

mentals, in view of the uncertainties inherent in the method of calculation. However, a renewed increase in the in-

dicator could be considered a warning sign of a potential overheating of the Austrian residential property market.⁷

Box 2

Household indebtedness in Austria¹

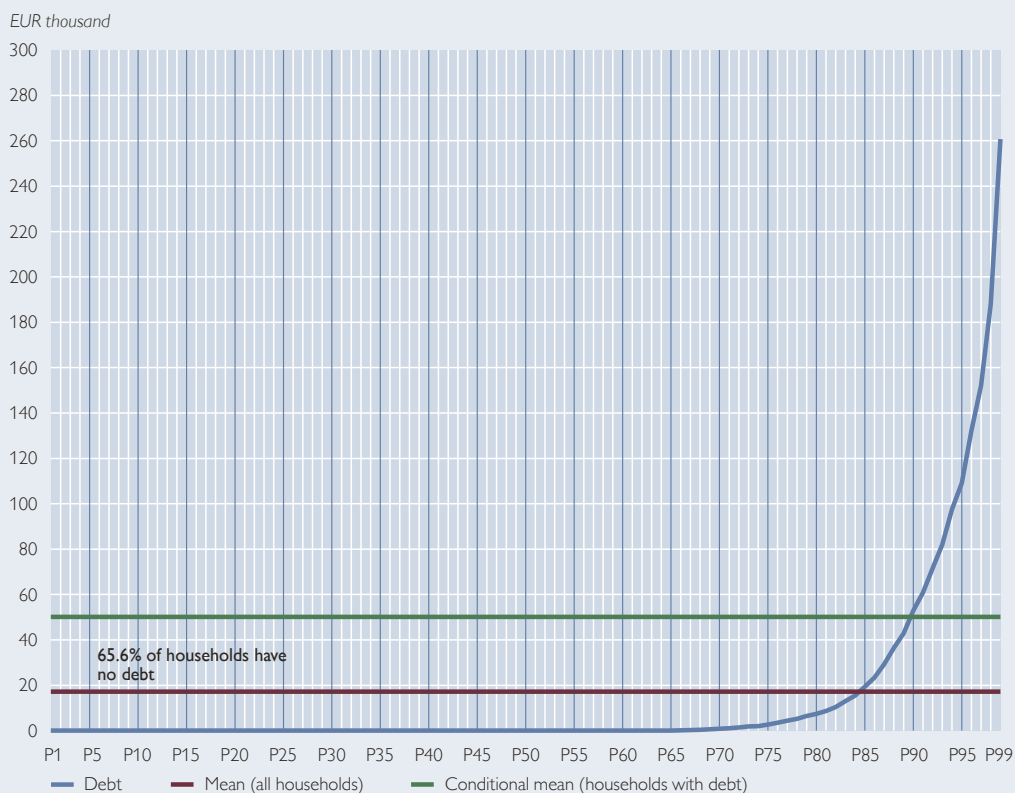
In this box we present some descriptive statistics on household indebtedness in Austria based on newly available data of the Eurosystem Household Finance and Consumption Survey (HFCS). The chart below shows the distribution of debt across Austrian households represented by its quantile function. Approximately two-thirds of Austrian households (65.6%) have no debt. The unconditional average of debt is roughly EUR 17,000. The conditional mean, calculated for those households with positive debt, lies at roughly EUR 50,000. Smaller debt amounts primarily represent uncollateralized loans as well as collateralized ones, which are close to being paid off. The larger amounts reflect different levels of mortgage debt at different stages of repayment.

All in all, few Austrian households hold debt, and even fewer hold substantial amounts of debt. This is mainly due to the large share of tenants (about half of all households) and the relatively low share of mortgage holders (roughly one-third of all owner occupiers). Most low-income, low-wealth households (actually almost all below median wealth levels) resort to the highly subsidized and regulated rental market, which prevents these households from engaging in highly leveraged real estate investments and allows them to consume more. Rental housing, which is especially widespread in Vienna, also leads to a large number of single households among young persons who could not afford to buy a home at such an early stage in life.

¹ See also Albacete, N., P. Fessler and P. Lindner. The distribution of residential property price changes across homeowners and its implications for financial stability in Austria. In this issue of the Financial Stability Report.

⁷ For more analyses and data on the Austrian real estate market see <https://www.oenb.at/en/Monetary-Policy/real-estate-market-analysis.html>.

Distribution of debt from the 1st to the 99th percentile



Source: HFCS Austria 2014, OeNB.

Approximately 16% of households have debt collateralized by the household's main residence. The median of debt collateralized by a household's main residence lies at around EUR 60,000 and the mean at around EUR 90,000; this difference reflects not only differences in initial loan amounts but also the current state in the repayment of the loan. Only about 2% of households hold debt collateralized with other real estate properties.

Approximately 21% of households have uncollateralized debt. The outstanding volume is by far smaller than that of collateralized debt. About 12% of households have overdraft debt (median value: EUR 1,000). With a mean amount of EUR 17,000, unsecured loans are the most relevant category of uncollateralized debt. Debt on credit cards is fairly irrelevant in Austria. Credit cards are still mostly used like debit cards and accumulated debt is fully paid every month.

Between 2010 and 2014 the proportion of households with collateralized as well as uncollateralized debt decreased slightly although the debt participation pattern as a whole has been very stable. However, while the outstanding values in collateralized debt and its subcomponents in 2014 were significantly higher than in 2010, uncollateralized debt and its subcomponents have remained largely stable in terms of their median values.

Note that the increases in collateralized debt not only arise because new and higher loans are taken out but also because of the phenomenon of bullet loans, which usually are foreign currency loans. On the one hand, outstanding amounts for bullet loans are fully outstanding until the point of repayment, which in most cases is still to come, as such loans were hardly in place 20 years ago. On the other hand, because of the unfavorable development of the Swiss franc, the outstanding amount in euro also increased between 2010 and 2014.

Table 1

Extensive and intensive margins of debt

	2010			2014		
	Have item	Conditio- nal median	Conditio- nal mean	Have item	Conditio- nal median	Conditio- nal mean
	%	EUR thousand		%	EUR thousand	
Collateralized debt	18.4	37.5	76.3	16.7	60.4	89.5
main residence	16.6	37.3	72.7	15.5	59.9	89.0
other real estate property	2.4	36.4	80.2	1.5	53.0	75.7
Uncollateralized debt	21.4	3.0	12.7	20.6	2.9	11.1
overdrafts	13.6	1.2	2.3	12.3	1.0	2.3
uncollateralized loan	11.1	8.0	21.5	11.7	6.2	16.8
granted by family or friends	0.9	3.2	10.1	4.8	2.9	7.8
outstanding balance on credit cards	1.5	0.5	1.0	1.4	1.3	2.7

Source: HFCS Austria 2010, HFCS Austria 2014, OeNB.

Looking at the coverage of debt at the household level helps us understand the potential risk associated with the outstanding debt (see below). Once financial assets are subtracted from debt, the share in total debt is down to 65.6%. Almost 35% of the debt is therefore covered by relatively liquid assets. Many households hold substantial financial assets alongside their debt. If real estate and other tangible assets are deducted, only 5.6% of all households have positive debt that is not covered by some assets. This debt makes up 6.9% of total debt. This means a priori risks stemming from households defaulting on their debt are rather limited. And most likely only a small share of these households might even be vulnerable under adverse economic developments.

Table 2

Debt covered by assets

	Have debt (not covered)	Share in total debt
	%	
Debt	34.4	100.0
Debt minus current accounts	31.5	96.6
Debt minus current and savings accounts	21.4	73.4
Debt minus financial wealth	19.0	65.6
Debt minus financial wealth and other real estate	17.2	55.3
Debt minus financial wealth, other real estate and main residence	7.4	8.9
Debt minus all wealth	5.6	6.9

Source: HFCS Austria 2014, OeNB.

Results from the second wave of the HFCS are also presented in the study on “The distribution of residential property price changes across homeowners and its implications for financial stability in Austria” (Albacete et al., 2016) in this Financial Stability Report. An overview of first results of the second wave of the HFCS in Austria can be found in Fessler et al. (2016). An accompanying methodological report is provided by Albacete et al. (2016).²

² Albacete, N., P. Lindner and K. Wagner. 2016. Eurosystem Household Finance and Consumption Survey 2014: methodological notes for Austria (second wave). Addendum to Monetary Policy & the Economy Q2/16. Fessler, P., P. Lindner and M. Schürz. 2016. Eurosystem Household Finance and Consumption Survey 2014: first results for Austria (second wave). In: Monetary Policy & the Economy Q2/16.