Austrian financial intermediaries: structural reforms gain momentum in a challenging environment

Operating profitability of Austrian banks under pressure

In 2016, the European financial sector has still faced subdued economic growth and low interest rates. In this challenging environment, legacies of nonperforming loans and increasing pressure on interest margins continue to dampen the profitability outlook. Austrian financial intermediaries are continuing their adaptation process, as structural reforms designed to improve efficiency gain momentum.

In the first six months of 2016, the consolidated net profit of Austrian banks came to EUR 2.9 billion, nearly 10% above the corresponding figure of the previous year. On an annualized basis, this would translate into a return on average assets of 0.6%. However, this improvement was mainly attributable to a significant reduction in credit risk provisioning rather than improvements in operating business.

Owing to the transfer of ownership in UniCredit Bank Austria's CESEE subsidiaries to the Italian UniCredit Group in October 2016, the comparability of most aggregate balance sheet and profit and loss account positions of Austrian banks is limited. Thus, the year-on-year changes mentioned in the following paragraphs are based on figures that have been adjusted for this one-off effect.

Austrian banks' consolidated operating profit decreased by around one-quarter in the first half of 2016, due to weakened operating income and slightly rising operating expenses. As a consequence of the low interest rate environment, net interest income remained under pressure. Fee and commis-

sion income was burdened by sluggish securities business, and other operating income was negative again. On the positive side, trading income increased markedly compared to the previous year.

Operating expenses increased, driven by higher write-downs on non-financial assets and slightly rising administrative expenses, including staff costs (partly attributable to a one-off effect). Moreover, since 2015, banks have had to pay contributions to funds for deposit insurance and bank resolution. A considerable positive impact on banks' profits came from lower credit risk provisioning, which is well below pre-crisis levels.

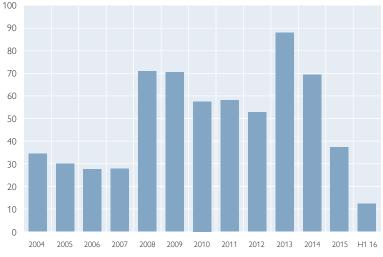
As a consequence of declining operating income and increasing operating costs, the consolidated cost-income ratio of the Austrian banking sector worsened to 72% (up from 60% a year ago) and was markedly above the

Profitability improved due to further reductions in risk provisioning

Chart 17

Risk provisioning of Austrian banks

Credit risk provisioning in % of net operating profit



Source: OeNB

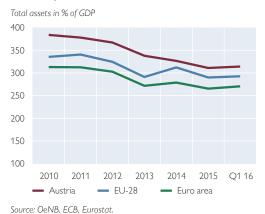
European average of 63%.1 This increase was also driven by the previously mentioned restructuring of UniCredit, as (the now reduced) CESEE activities are generally characterized by lower cost-income ratios. This highlights the need for strengthening operational efficiency. There have already been some efforts to address structural issues; these will have to show their long-term effects over time. Noteworthy examples are UniCredit's restructuring and the agreement of the boards of Raiffeisen Zentralbank Osterreich and Raiffeisen Bank International on a merger, which should have a positive impact on the cost structure and capitalization of the group.

Consolidation process continues

The ongoing consolidation process in the Austrian banking system is important in terms of international competitiveness. This equally applies to euro area banks as the IMF pointed out in its latest Global Financial Stability Report; the IMF recommends enhancing operational efficiency through rationalizing branch networks. For the

Chart 18

Total assets of Austrian banking sector in comparison to EU-28 and euro area



Austrian banking system, the adaptation process continued in the first half of 2016. The total number of credit institutions decreased to 723 in June 2016, down from 739 as at end-2015 and 867 in 2008. At the same time, the consolidated total assets of the Austrian banking sector, which had totaled EUR 1,176 billion in 2008, decreased to EUR 1,062 billion at end-June 2016, corresponding to 314% of GDP. In terms of this percentage, the Austrian banking sector is still larger than the average European banking sector (euro area: 270%; EU-28: 293%)². However, Austrian banks have gradually been coming closer to these averages in recent years, which mirrors first consolidation effects.

Profitability of Austrian subsidiaries in CESEE improved

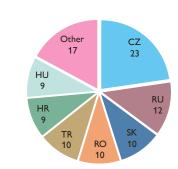
The profitability of Austrian banks' subsidiaries in CESEE improved considerably in the first half of 2016 as their aggregated net profit increased to EUR 2.1 billion. Therefore, operations in CESEE remain a key source of overall profitability for Austrian banks and continue to offset the relatively weak profitability in the domestic market. Moreover, in the current low interest rate environment in western European countries, CESEE operations may act as a buffer for overall lower interest income, as yields in this region are still higher. Altogether, the restructuring within the UniCredit Group has led to a material decline in the Austrian banking system's exposure to the region. This also means a decrease of total assets by around 40% for the Austrian subsidiaries in CESEE, and a decline in

Note: Total assets as of March 2016, GDP as of 2015

¹ Source: EBA Risk Dashboard (Q2 2016).

Compare e.g.: United Kingdom: 434%, the Netherlands: 385%, Spain: 337%, Germany: 233%, Italy: 167%, the Czech Republic: 128%, Hungary: 94%.

Composition of Austrian banks' profits in CESEE



Total: EUR 2.1 billion

Source: OeNB.

Note: Data as of June 2016

net profit from the region by more than one-third.

In the first half of 2016, the highest profits continued to come from subsidiaries in the Czech Republic and Russia. Whereas in the Czech Republic profits have remained fairly stable in recent years, Austrian banks' subsidiaries in Russia have registered a decrease in profitability since 2014. However, Russia is still a key market for Austrian banks, as profits are still considerable.

Adjusted for the restructuring of UniCredit Group, the remaining Austrian CESEE subsidiaries faced a reduction in net interest income of nearly 8% in the first half of 2016. The contractions in this (most important) source of income were most pronounced in Russia, Croatia and Hungary.

Trading income recovered sharply, because the result in the first half of the previous year had been burdened by noticeable losses in several countries. Fee and commission income weakened by close to 6%; this is especially worrying in times of increasing pressure on interest income.

The total operating income of Austrian subsidiaries in CESEE decreased by 1% compared to the previous year. At the same time, operating expenses shrank by 2%. As a result, net operating profit remained relatively stable.

In an environment of improving credit quality, Austrian subsidiaries in CESEE significantly reduced credit risk provisioning in the first half of 2016. In this regard, the largest impact came from Hungary, followed by the Ukraine and Croatia. In Hungary and Croatia, the improvement in credit quality was helped by a decline of foreign currency (FX) loan volumes, while lower provisioning in Ukraine was attributable to the country's economic stabilization.

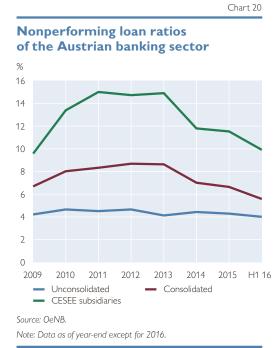
With respect to economic, macrofinancial and political risks, however, the outlook for Austrian banks' profitability in the region remains subdued. Therefore, banks are aiming for selective growth in promising markets such as the Czech Republic and Slovakia, while activities in Russia and Ukraine, for example, have been further reduced.

Credit quality improved further

The process of European banks' balance sheet repair has continued in the course of 2016, but credit quality remains weak by historical standards. For the European Union, the nonperforming loan (NPL) ratio came to 5.5% in June 2016³. However, NPL ratios differ markedly across countries, with the highest ratios in financially stressed Member States, which were hit most strongly by the global financial crisis. The increase in the coverage ratio in most countries is probably the result of greater regulatory scrutiny in asset quality reviews, as well as negative developments of collateral values leading to an increase in impairments.

Subsidiaries in CESEE further reduced risk provisioning

³ Source: European Banking Authority.



Austrian banks' NPL ratios continue to improve

The consolidated NPL ratio of the Austrian banking system improved in the first half of 2016, declining by nearly 110 basis points to 5.6% compared to year-end 2015, mainly due to the restructuring of UniCredit Bank Austria's CESEE subsidiaries. Adjusted

for this effect, the remaining improvement can be explained by the better credit quality of corporate loans; loans to households, on the other hand, have seen a slight deterioration. The NPL ratio of the domestic loan portfolio in Austria continued to improve from an already low level.

Austrian banking subsidiaries in CESEE recorded an average NPL ratio of 9.9% at the end of June 2016, which is well below the figure reported a year before (12.0%), continuing an improving trend that has been evident since 2014. The ratio for FX loans is worse than for domestic currency loans (15.3% versus 7.5%), but due to higher loan loss provisioning over the past years, the NPL coverage ratio for FX loans has improved and at 67% is now higher than that for domestic loans (62%), which provides for a certain risk mitigation effect. At the country level, differences in NPL ratios remain high, reflecting heterogeneous economic and foreign exchange developments: In host countries such as the Czech Republic and Slovakia, the ratios remained close

Box 4

Reducing NPLs in the banking system - a key priority of the SSM

Facing the prevailing asset quality problems in the European banking sector, the Single Supervisory Mechanism (SSM) issued guidance on the qualitative treatment of NPLs in fall 2016. For the first time, the published documents define the SSM's supervisory expectations and best practices regarding the treatment of NPLs. In principle, this guidance applies to all significant institutions. However, depending on the level of NPLs at a bank, certain requirements can be waived. The document covers in particular the NPL strategy, NPL governance and operations, forbearance, NPL recognition, NPL impairment measurement and write-offs as well as collateral valuation for immovable property. Moreover, the SSM took stock of selected countries' national frameworks, identifying impediments to NPL reduction.

After the implementation of the qualitative guidance and the stocktaking of the remaining national frameworks not included in the first round, the SSM will continue its work on NPLs. As already announced by the SSM, banks are expected to develop credible and ambitious plans for reducing the NPL stock over time and will also be asked to collect certain key information. In addition, they are expected to adjust their internal organizational structures (if they have not already done so) to deal specifically with the problem of high NPLs.

There are also legal impediments to NPL reduction (e.g. insolvency or tax laws) that are outside regulatory and supervisory competences. Thus, solving the NPL issue will require a coordinated approach involving various legislators and regulatory agencies.

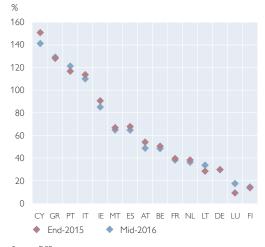
to Austrian levels (4% and 5%, respectively), whereas other countries (e.g. Hungary, Croatia, Serbia) — although having recorded declines during the past year — still show elevated levels close to 17%.

The argument for tackling asset quality issues is compelling for policy-makers, especially in light of the multiple adverse effects of high NPL levels: On the microprudential side, high NPL stocks are associated with lower bank profitability, which, on the macroeconomic side, contributes to stagnant growth in the real economy, as capital is tied up by NPLs and not available for new lending.

European banks' capital levels continue to strengthen, but very high Texas ratios still point to weak asset quality in some countries

European banks' balance sheets are substantially stronger and more resilient than they were before the global financial crisis – they show higher and better-quality capital levels. In the first half of 2016, banks' common equity tier 1 (CET1) ratio improved further to 13.5%. Nonetheless, investors remain concerned about banks' medium-term profitability in a low growth and low interest rate environment. Furthermore, legacy NPL issues at some banks - particularly in the countries most affected by the financial crisis – together with limited provisioning and/or capital levels (as indicated by still high Texas ratios⁵) hamper the resolution of NPLs. The aggregated Texas ratio of European SSM banks improved (i.e. decreased) to 62% in the first half of 2016 but Texas ratios vary greatly from country to country, with some financial systems displayChart 21

Texas ratios of European banking systems¹



Source: ECB.

1 SSM banks only.

ing ratios above 100%. Coupled with a coverage ratio of 44%, this means that a complete default of all these banks' NPLs would erase nearly half of their (fully loaded) tier 1 capital.

In the first half of 2016, the Austrian banking sector markedly increased its consolidated capitalization due to retained earnings and an increased eligibility of valuation reserves, with its CET1 ratio rising by nearly 40 basis points to 13.2%. In line with this improvement, the leverage ratio of Austrian banks climbed to 6.5%. Given that the banks in the European and CE-SEE peer groups held their capital ratios broadly stable, the top 3 Austrian banks substantially caught up with these groups, although the gap was not fully closed.

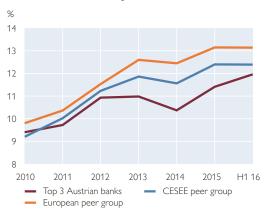
Regarding the above-mentioned credit risk-bearing capacity, the Austrian SSM banks are in a better position than the SSM banks on average, given

CET1 ratio of Austrian banks improved markedly

⁴ Source: European Banking Authority.

Source: ECB. The Texas ratio is defined as gross NPLs divided by the sum of provisions for NPLs and (fully loaded) tier 1 capital.

CET1 ratios in an international comparison



Source: OeNB, S&P Global Market Intelligence Note: Data as of year-end except for 2016.

that their aggregated Texas ratio is at 49%, which combined with a well-above average coverage ratio of 55% (SSM average 44%) means that a complete default of all Austrian SSM banks' NPLs would erase less than 30% of their (fully loaded) tier 1 capital.

The regulatory responses to the financial crisis have not yet been completed. However, substantial progress has been made since 2008. In connection with the orderly resolution of banks, the Financial Stability Board has designed a total loss-absorbing capacity standard to improve the resolvability of banks. This standard is applicable to global systemically important banks and will come into force in 2019. On the European level, the Single Resolution Board and national resolution authorities determine the minimum requirement for own funds and eligible liabilities (MREL) for banks on the basis of a case-by-case analysis. This Financial Stability Report includes a study with a first analysis of the buyers of MREL-eligible securities. The analysis assesses potential contagion channels, if a bail-in were to occur.

Evaluation of the O-SII buffer and the anticyclical capital buffer

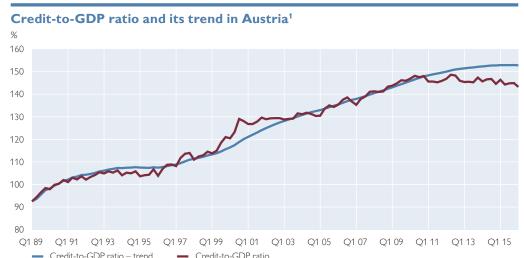
The annual evaluation of the capital buffer for other systemically important institutions (O-SII buffer) is based on the ten main indicators defined in the EBA Guidelines (EBA/GL/2014/10). The analysis identified seven banks as O-SIIs (at the consolidated or the sub-consolidated level). For four banks (Erste Group Bank, Raiffeisen Zentralbank Osterreich, Raiffeisen Bank International and UniCredit Bank Austria) the analysis implied a 2% O-SII buffer. For the other three banks (BAWAG P.S.K, Raiffeisenlandesbank Oberösterreich, and Raiffeisen-Holding Niederösterreich-Wien), the buffer has been set at 1%. The effective O-SII buffer for UniCredit Bank Austria remained capped at 1% due to the 1% buffer imposed on UniCredit by the Italian authorities. As a consequence, the O-SII buffers and the regime for their phasing-in remained unchanged compared to the FMA regulation of 2015 (Federal Law Gazette II No. 435/2015).

The Financial Market Stability Board (FMSB) recommended that the Financial Market Authority (FMA) should keep the countercyclical capital buffer rate at 0% of risk-weighted assets from January 1, 2017, onward. Results from the recent quantitative and qualitative analyses do not point to excessive credit growth in Austria. Furthermore, total outstanding loans relative to GDP continue to considerably lag behind their long-term trend.

The Austrian supervisory Sustainability Package adopted by the OeNB and the FMA in 2012⁶ stipulates that

CESEE subsidiaries increasingly focus on local stable sources in their funding

⁶ For more details, see https://www.oenb.at/en/Financial-Stability/Systemic-Risk-Analysis/Sustainability-of-Large-Austrian-Banks--Business-Models.html.



Source: OeNB and Bank for International Settlements (BIS).

the stock and flow loan-to-local stable funding ratios (LLSFRs) of the foreign subsidiaries of Austria's three largest banks be monitored. With the transfer of UniCredit Bank Austria's CESEE subsidiaries to its Italian parent bank, the monitoring requirement now only applies to Erste Group Bank's and Raiffeisen's subsidiaries. At mid-2016, all 23 monitored subsidiaries had a sustainable business model (compliant with the supervisory guidance).

Lower LLSFRs have been accompanied by a substantial decrease in the (gross) intra-group liquidity transfers from Austrian parent banks (including UniCredit Bank Austria) to their CE-SEE banking subsidiaries (by EUR 25 billion or –58% from end-2011 to mid-2016), as these were replaced by local funding. The largest contributors to this broad-based decline were transfers to subsidiaries in Romania (EUR 7 billion), Hungary (EUR 5 billion), Croatia and Ukraine (EUR 4 billion each). Very few countries saw intra-group liquidity transfers increase, with the situation

of Austrian subsidiaries in the Czech Republic particularly noteworthy: In their case, this volume increased from

Chart 24

Intra-group liquidity transfers to CESEE subsidiaries



Note: Liquidity transfers to credit institutions only

¹ The credit-to-GDP gap is the main indicator for assessing excessive credit growth. The gap is defined as the difference between the credit-to-GDP time series (purple line) and credit-to-GDP trend (blue line). A negative gap indicates that the current credit-to-GDP value is lower than its trend.

less than EUR 0.7 billion in 2011 to more than EUR 4.6 billion in mid-2016. Residential real estate-related systemic risk contained in Austria

The assessment of systemic risk in Austria related to residential real estate (RRE) is based on a comprehensive approach. It takes into account data on (1) real estate price developments, (2) the resilience of borrowers with regard to shocks to income, interest rates, and RRE prices as well as (3) the risk-bearing capacity of credit institutions with respect to increases of mortgage defaults in combination with RRE price decreases. The analysis includes estimates of the systemic effects of contagion and common exposure to RRE in case of market-wide shocks. Finally, it places the results in the context of the Austrian housing market.

potential systemic risk for the financial sector is relatively limited: The share of

mortgage loans in Austria is low rela-

Residential real estate price growth mitigated by various factors

Since 2010, RRE prices have increased in Austria, especially in Vienna. In addition to the mitigating factors discussed in the section on corporate and household sectors in Austria, the

systems like Belgium, Finland, Sweden and the Netherlands record values between 44% and 67%.7 In Austria, the average risk weight in the IRB approach is among the highest in Europe (25%). In Belgium, Finland, Sweden and the Netherlands, average risk weight values range from below 10% to 22%. Similarly, banks' Austrian risk-bearing capacity regarding their mortgage loan exposure is relatively high. The ratio of total mortgage loans to CET1 stands at 165%. The respective ratios in the four comparable countries range from 410% to 640%. The Austrian authorities regard RRE-

tive to GDP (28%). Comparable small

open economies with mature financial

The Austrian authorities regard RRE-related systemic risk in Austria as contained as they are confident that they have taken appropriate and effective measures to address the potential buildup of RRE-related systemic risk as highlighted in the warning issued by the European Systemic Risk Board (ESRB) regarding medium-term vulnerabilities in Austria's residential real estate sector.

 7 For international comparisons see: ESRB Report, Vulnerabilities in the EU residential real estate sector.

Box 5

ESRB issues warning against vulnerabilities in Austria's residential real estate sector

The European Systemic Risk Board (ESRB) has issued a warning regarding medium-term vulnerabilities in Austria's residential real estate sector. The ESRB considers the main vulnerabilities to be the robust growth in residential real estate prices and mortgage loans, and warns against the risk of loosening lending standards. The OeNB welcomes the efforts the ESRB has put into analyzing the Austrian residential real estate market and shares many of the findings of the ESRB.

However, the ESRB has insufficiently taken into account crucial factors that mitigate the vulnerabilities of Austria's residential real estate market as identified in its assessment: Though considerable price increases have indeed occurred in Austria recently, it is important to emphasize that residential real estate price increases in Austria started from a comparatively low level. Moreover, in Vienna, where house price increases have been particularly strong in recent years, only about 18% of households are owner occupiers and only 6% of households have mortgage debt according to microdata evidence (Household Finance and Consumption Survey, HFCS; for further details please refer to boxes 1 and 3 in this report). These low homeownership rates, in conjunction with a well-developed rental market with a high share of subsidized housing, limit the incentive and need for vulnerable households to become homeowners and thus limit associated systemic risks. The aggregate indebtedness of the household sector is comparably low and has not increased in recent years. Also, the share of mortgage loans in Austria is comparatively low relative to GDP and relative to banks' tier 1 capital.

In addition, the ESRB warning does not take into account additional measures by the Financial Market Stability Board (FMSB), which were introduced in September in order to prevent the emergence of residential real estate-related systemic risks.¹ These new measures encompass sustainability requirements on loan-to-value, debt service-to-income, and debt-to-income ratios as well as on risk management practices and risk pricing. The FMSB will continue to closely monitor the sustainability of lending standards and specify the criteria for the aforementioned limits in greater detail. The FMSB has also advised the Federal Minister of Finance to take preventive action and expand the macroprudential toolbox by providing the legal instruments for imposing limits on the loan-to-value ratio, the debt-to-income ratio or the debt service-to-income ratio in new lending.² The Austrian authorities are currently preparing a draft law in order to establish the legal basis for the aforementioned instruments.

Taking a comprehensive view of real estate developments, i.e. also taking into account mitigating factors as well as recent policy actions, the OeNB deems the current policy stance sufficient in view of the current real estate cycle. Nevertheless, the OeNB places high priority on monitoring developments in the domestic real estate market, and the Austrian authorities stand ready to act if necessary.

On September 23, 2016, the Austrian authorities introduced additional measures to prevent the emergence of residential real estate-related systemic risks in Austria. These include sustainability requirements on three ratios (loan-to-value, debt service-to-income and debt-to-income ratios) as well as on

risk management practices and risk pricing.

The Financial Market Stability Board (FMSB) calls for conservative loan-to-value (LTV) ratios to ensure that there is sufficient buffer to avoid collateral stretch in case of falling real estate prices. Furthermore, the FMSB Sustainable lending standards crucial for maintaining stability and growth

 $^{^{1}\,}https://www.fmsg.at/en/publications/press-releases/Ninth-meeting.html.$

² https://www.fmsg.at/en/publications/warnings-and-recommendations/advice-2-2016.html.

Borrower-related macroprudential instruments necessary requires banks to consider debt service-to-income (DSTI) and debt-to-income (DTI) ratios in their risk management to address a potential household stretch: Households must be able to service debt even under stress scenarios such as reductions of household income and unexpected payment obligations. The debt service capacity of households must also be resilient to plausible interest rate shocks, leading to a sharp increase in debt service obligations. Finally, the pricing of mortgage loans must be risk adequate, reflecting credit risk as well as the costs of liquidity and capital.

The FMSB announced that it will continue to closely monitor the sustainability of lending standards in real estate lending. In Austria, LTV ratios already play a key role in the eligibility of mortgages for Pfandbrief (i.e. covered bond) issuances (maximum LTV

ratio of 60%) and in the regulation of building societies (maximum LTV ratio of 80%). Analysis by the SSM and comparisons across European countries that have already introduced sustainability initiatives suggest that LTV ratios above 80% point toward high risk. At the same time, DSTI ratios of up to 30% are considered low risk, and DTI ratios of up to about six times net income are seen as medium-low risk. On the basis of improved reporting, the FMSB may specify in greater detail the criteria of sustainability and issue recommendations if the need arises.

On June 1, 2016, the FMSB advised the Federal Minister of Finance to take preventive action and expand the macroprudential toolbox by providing the legal instruments for imposing limits on LTV, DTI and DSTI ratios in new lending.⁸

Box 6

Variable interest rate loans in Austria

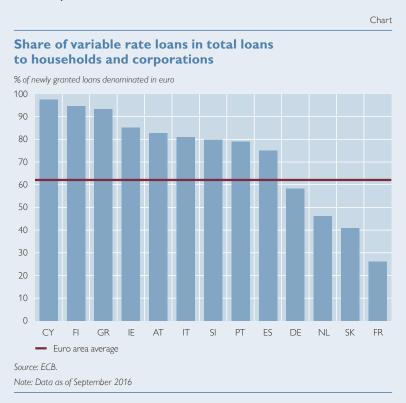
The majority of loans to customers in Austria are loans with a variable interest rate, i.e. with a floating rate or an initial rate fixed for a period of up to 1 year. In September 2016, the share of variable rate loans in total loans to households and nonfinancial corporations (for new business, denominated in euro) was 83%, well above the euro area average of 62%. Although the ratio in Austria was even higher until recently and although the low interest rate environment has led to some rethinking among consumers, Austrian borrowers still bear considerable interest rate risks.

The high popularity of variable rate loans in Austria is due to factors on both the supply and the demand side. Borrowers with variable interest rate loans benefit if market interest rates go down. In this case interest expenses decline and disposable income increases. On the other hand, if interest rates rise, borrowers face additional interest expenses. Borrowers with a fixed rate loan avoid this kind of risk. However, the interest rates on fixed rate loans are typically higher than for variable interest rate loans, as banks usually hedge against interest rate risk and add those hedging costs to the cost of borrowing. Another disadvantage for borrowers with fixed interest rate loans is that banks can charge a contractual penalty if the loan is redeemed prematurely.

For banks, there are mainly two risks in connection with variable rate loans. When interest rates rise, interest expenses increase for the borrowers. If this has not sufficiently been taken into account by the borrowers, their repayment capacity declines, which can subsequently lead to a deterioration in credit quality. Another risk for banks is that an environment of very low or even negative interest rates also affects banks with a high share of variable rate loans (see "From low to negative rates: an asymmetric dilemma" in the special topics section of this Financial Stability Report).

⁸ https://www.fmsg.at/en/publications/warnings-and-recommendations/advice-2-2016.html.

In such a case, an asymmetric dilemma creates additional pressure on banks' net interest margins: For deposits, there is a legally stipulated zero lower bound on the rate. On the asset side of banks, however, variable rate loans are linked to a reference rate like the EURIBOR (stipulated in the loan contract) and a negative reference rate has to be passed on to interest charged on loans (until the total rate of the loan, i.e. reference rate plus add-on, reaches zero).¹ As a consequence, a squeezing of banks' margins is expected, should rates drop further into negative territory.



But there are also risks for banks in case of fixed rate loans. Here, the interest rate risk shifts from the borrower to the bank. As noted above, the bank usually tries to hedge against this risk via interest rate swaps. However, some party in the system — typically a bank — has to bear that risk.

One possibility to reduce the risks associated with variable rate loans for borrowers is to raise awareness for financing costs in case of higher interest rates. As an example, banks should discuss calculations showing monthly payment rates in hypothetical interest rate scenarios with the borrower. Austrian mortgage and property loan law prescribes that banks have to run a scenario in which they simulate the interest expenses borrowers would have to bear if the most adverse interest rate development of the last 20 years were to occur. The results have to be declared in writing and handed to borrowers at the time a loan is granted.

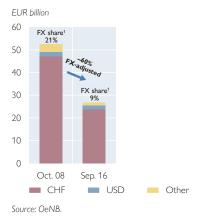
¹This sentence reflects the outcome of several court cases. While a total negative interest on customer loans is ruled out, negative reference rates need to be passed on until the total rate reaches zero (Oberlandesgericht Innsbruck, 4 R 58/16k, July 14, 2016, AK vs. Hypo Tirol). See also court case decisions dealing with Swiss-franc foreign currency loans where the reference rate, CHF LIBOR, moved into negative territory already at year-end 2014: Landesgericht Feldkirch (5 Cg 18/15z, August 28, 2015, VKI vs. Raiffeisenbank am Bodensee), Handelsgericht Wien (57 Cg 10/15v, September 24, 2015, VKI vs. UniCredit BA) and Landesgericht Eisenstadt (27 Cg 32/15x, November 15, 2015, VKI vs. HYPO-BANK Burgenland).

Foreign currency loans in Austria show a remarkable decline

In September 2016, FX loans to domestic nonbank borrowers amounted to EUR 31.6 billion, of which around EUR 22.3 billion are FX loans to households and EUR 4.7 billion are attributable to nonfinancial corporations.9 FX loans to domestic nonfinancial borrowers have declined continuously since October 2008, when the FMA strongly recommended that banks refrain from granting new FX loans to households (see chart 25). Between then and September 2016, FX loans to households and nonfinancial corporations shrank by 58% and 68%, respectively (adjusted for exchange rate effects). Consequently, the share of FX loans in Austria has fallen sharply: In September 2016, 9% of all loans to households and nonfinancial corporations were denominated in a foreign currency, a level more than 11 percentage points below that of October

Chart 25

Austria: change in foreign currency loans to households and nonfinancial corporations since supervisory measures have been taken



¹ Foreign currency loans in total loans.

Total funding gap: EUR 6.2 billion (end-2015) 2008, with the Swiss franc the dominant currency for FX loans to households (accounting for 96%).

Foreign currency loans linked to repayment vehicles: multi-fold risks

In June 2016, the outstanding amount of repayment vehicle (RPV) loans in Austria denominated in foreign currency was EUR 17 billion, with RPV loans denominated in euro playing a minor role (EUR 3 billion). Both values have declined since end-2008, by 44% and 45%, respectively (not adjusted for exchange rate effects).

About three-quarters of FX loans to households are designed as RPV loans, which means the borrower pays regular contributions into an RPV, usually a life insurance policy or other capital market product, to repay the loan at the end of its term. This implies that borrowers are exposed to two main risks: first, the risk that the amount to be repaid at maturity increases as a result of foreign currency appreciation (exchange rate risk) and second, the risk that the originally assumed performance of the RPV is not reached and the amount saved in the RPV does not cover the entire loan repayment due at maturity (performance risk). Both risks may lead to funding gaps between the repayment vehicle's final value and the amount outstanding at loan maturity.

To monitor the development of RPV loans (especially those denominated in foreign currency) and to gain an overview of borrowers' funding gaps, the OeNB, in cooperation with the FMA, conducted a survey in mid-2016 among a representative sample of Austrian

The remaining FX loans were extended to the government sector (EUR 2.7 billion) and nonbank financial intermediaries (EUR 1.9 billion).

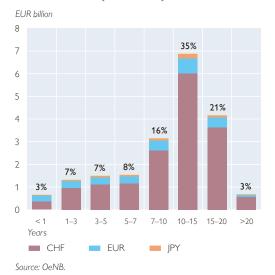
More details on the latest version of the "FMA-Minimum Standards for the Risk Management and Granting of Foreign Currency Loans and Loans with Repayment Vehicles" (2013) can be found at https://www.fma.gv.at/ download.php?d=1400.

banks.¹¹ The results show that, at the end of 2015, the total funding gap was approximately EUR 6.2 billion. However, this is a volatile figure due to currency movements and the performance of RPVs. On average, borrowers' RPVs were underfunded by 29%.

Based on the remaining maturity profile of RPV loans, there is still some time to close borrowers' funding gaps, as more than 75% of all RPV loans have remaining maturities of more than 7 years and a large share (35%) will mature in 10 to 15 years (see chart 26). Those funding gaps may, however, pose problems for Austrian banks and their customers in the medium to long term, and could widen even further, if downside risks were to materialize (especially adverse financial market and/or Swiss franc movements). Consequently, the OeNB and FMA are intensifying their efforts to encourage banks and borrowers to engage in bilateral negotiations over measures to enable sustain-

Chart 26

Residual maturity profile of repayment vehicle loans (mid-2016)



Note: Percentage values indicate the share of each segment in the total volume of ouststanding repayment vehicle loans.

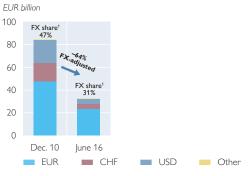
able, tailor-made solutions and reduce the risks stemming from RPV loans.

Austrian CESEE subsidiaries reduce their exposure to foreign currency loans

By mid-2016, the total volume of FX loans of Austrian banking subsidiaries in CESEE had decreased by more than half year-on-year to EUR 33 billion (-55% adjusted for exchange rate effects), with the share of FX loans in total loans dropping from 39% to 31%. These substantial short-term declines are mainly due to UniCredit Group's restructuring of its CESEE operations. But they also highlight continued longterm efforts by banks and regulators to reduce FX loans in the region over past years, as the foreign exchange-adjusted decline was -38% from end-2010 to mid-2016 for all remaining Austrian subsidiaries (i.e. excluding those of UniCredit Bank Austria). Nonetheless, political uncertainties with regard to legal initiatives directed at FX loans remain high in the region (e.g. in Poland) and could result in a further financial burden for Austrian banks.

Chart 27

CESEE: change in foreign currency loans to households and nonfinancial corporations since supervisory measures have been taken



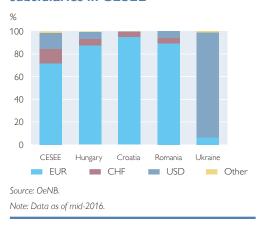
Source: OeNE

¹ Foreign currency loans in total loans

More than one-third of all repayment vehicle loans mature in 10 to 15 years

 $^{^{11}}$ The sample covered about 90% of outstanding domestic RPV loans. Similar surveys were carried out in 2009, 2011 and 2015.

Currency composition of foreign currency loans of Austrian banking subsidiaries in CESEE



Currency composition differs across countries

FX loans extended to households and nonfinancial corporations, respectively, make up 39% and 61% of the outstanding volume of FX loans, with the euro

being the dominant currency (about two-thirds in the former and three-quarters in the latter category). As displayed in chart 28, 72% of all FX loans are denominated in euro, about 14% in U.S. dollars and 13% in Swiss francs, but the currency split is heterogeneous across countries: In Hungary, Romania and Croatia the vast majority of FX loans are denominated in euro, while Russia and Ukraine display high levels of U.S. dollar FX loans.

The FX leasing volume of Austrian subsidiaries in CESEE also experienced a steep decline (-61% year on year) and amounted to roughly EUR 1.5 billion at mid-2016, while Austrian banks' direct FX lending to CESEE decreased (-8% year on year), coming to EUR 32 billion, of which three-quarters were denominated in euro and nearly a quarter in U.S. dollars.

Box 7

Strengthening the cyber resilience of financial market infrastructures – a new framework

Following several major incidents, cyber resilience is currently on everyone's lips and considered as one of the most important challenges in the oversight of financial market infrastructures (FMIs, i.e. payment systems, central securities depositories and central counterparties). Whereas operators of FMIs have been dealing with cyber threats for a long time, this topic is quite new for regulators and overseers.

Against this background, the Committee on Payments and Market Infrastructures (CPMI) and the Board of the International Organization of Securities Commissions (IOSCO) released a first "Guidance on cyber resilience for financial market infrastructures" in June 2016. The cornerstones of this guidance are sound cyber governance with senior management attention and a culture of cyber risk awareness throughout each institution. A further key element is cooperation within the FMI's environment (which primarily consists of the various stakeholders and similar FMIs) regarding information-sharing practices, high-quality threat intelligence and risk assessments. Other chapters of the guidance deal with best practices regarding incident identification and monitoring, the ability to quickly resume operations in case of successful cyber attacks, institutionalized change management and testing procedures as well as an ongoing re-evaluation and improvement of the cyber resilience framework to learn from previous attacks and adapt to possible new threats. The guidance is directed at FMIs. However, relevant authorities are also expected to comply when carrying out their regulatory responsibilities. In this context, the oversight function of the ESCB is currently developing a consistent European approach regarding the implementation of the guidance.

The OeNB, too, is closely following these developments and regularly conferring with banking supervisors in an effort to adapt the existing framework for its oversight activities. Specific audits of FMIs' cyber resilience have been initiated and will be intensified in the future.

Prolonged period of low interest rates challenges the profitability of the insurance sector

Low profitability caused by a prolonged period of low interest rates and weak macroeconomic growth remains the key risk for the insurance sector. Not all institutions are equally affected by this challenging environment depending on product or business lines, maturities of liabilities and levels of guaranteed interest rates on the outstanding stock. As chart 29 shows, premium growth has been rather stable for property/casualty and health insurance, while a sharp decline of more than 10% can be observed for the life insurance business in 2016. The latter was driven by a fall in single-premium life insurance policies, which witnessed a dramatic decline of new business (-41%). This challenging environment (i.e. what has been dubbed the "new normal") needs to be addressed, and the insurYearly growth of insurance premiums

Chart 29

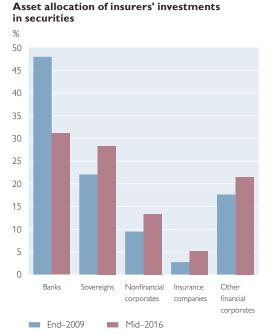


ance sector continues to react by shifting its business mix toward products that are directly linked to market performance and where the investment risk is borne by the policyholder.

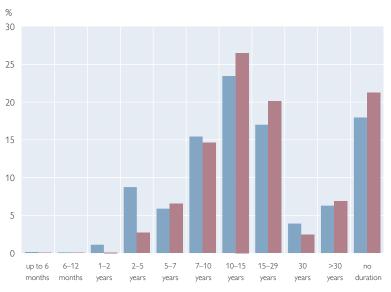
Besides the macroeconomic environment, insurance companies also face regulatory challenges, as Solvency II

Chart 30

Considerable changes in investment behavior of Austrian insurance companies







Source: OeNB.

entered into force in 2016. Chart 30 shows how Austrian insurance companies have modified their investment behavior to adapt to these new rules. From end-2009 to mid-2016, the securities investments of Austrian insurance companies show a notable shift away from investments in bank securities (-17 percentage points) toward government bonds (+6 percentage points), nonfinancial corporations (+4 percentage points) and insurers (+2 percentage points). There has also been a shift in terms of securities' duration, from short durations (2 to 5 years) toward the 10- to 15- and 15- to 29-year duration band, as the low yield environment makes short-term securities particularly unattractive.

Currently, the European Insurance and Occupational Pensions Authority (EIOPA) is conducting a stress test for the European insurance sector. This regular exercise is aimed at assessing the resilience of the sector to severe adverse market developments. In 2016, it focuses on two major market risks: the prolonged low yield environment and the so-called "double hit" scenario, which combines low interest rates with a negative shock to asset prices. The results will be published in December 2016.