

Austrian financial intermediaries: reaping the benefits of improving market conditions

Banking sector enters calmer waters after major restructuring

Over the past years, the Austrian banking system has undergone some major adjustments and a de-risking process, which was driven by two needs: the need to respond to cyclical factors, such as the low-growth and low-yield environment, and the need to address factors that are more of a structural nature, such as capacity, competitiveness, efficiency and capitalization – in other words, weaknesses in domestic operations masked earlier by profit contributions from CESEE markets.

In this process, the size of the Austrian banking sector declined by 18% as measured by consolidated total assets from its peak in 2012, stabilizing at levels around EUR 960 billion in mid-2017. Expressed as a percentage of GDP, the changes are even more pronounced: this ratio declined from 370% in 2012 to around 265%. The decline was driven by restructuring at individual banks (such as UniCredit Bank Austria AG) as well as in particular segments of the banking industry (Raiffeisen and Volksbanken cooperatives), and the orderly wind-down of failed banks. The total number of credit institutions in Austria decreased to 669 at end-2016, down 23% from 2008. The pace of consolidation was highest in 2016 (driven by the cooperative banks) and markedly slowed down in the course of 2017. The ongoing rationalization within the banking system is most apparent in the downsized branch networks. Since 2013, the number of branches has fallen steadily at an increasing speed, reaching 3,820 in mid-2017, i.e. the lowest level since 1995. In the first half of 2017, 106 branches were

closed, compared to 170 in the entire year of 2016.

While remaining committed to doing business in CESEE, Austrian banks have reorganized their business in that region by withdrawing from noncore markets and by rightsizing and repositioning their operations in selected markets. In one instance, CESEE business operations were moreover transferred to the foreign parent bank. These measures had significant effects on Austrian banks' exposure and risk profile in CESEE. The largest exposures of Austrian banks to CESEE are now linked to higher-rated countries such as the Czech Republic and Slovakia, while operations have shrunk in more volatile banking markets like Russia and Ukraine. The total assets of Austrian CESEE subsidiaries decreased by almost one-third over the past five years, to close to EUR 200 billion. They now account for about one-fifth of consolidated total assets.

The Raiffeisen und Volksbanken group structures have been made less complex, accompanied by measures to improve capital market access. Loan portfolio de-risking has made significant progress. At the same time Austrian banks have remained a solid source of credit to the real economy in Austria and the CESEE region. In Austria, the growth rate of loans to households did not fall into negative territory even during the global financial crisis and remained between 2.5% and 3.5% over the last 18 months. Growth in loans to nonfinancial companies accelerated to about 3% over the last year.

Despite these developments, there is no room for complacency. Austrian banks still need to improve their risk-bearing capacity by further increasing

efficiency through various measures including rationalization, digitalization and consolidation, in particular in the

domestic market. All in all, they have to remain prudent in terms of their lending policies.

Box 1

The market share of Austrian banks in CESEE is declining

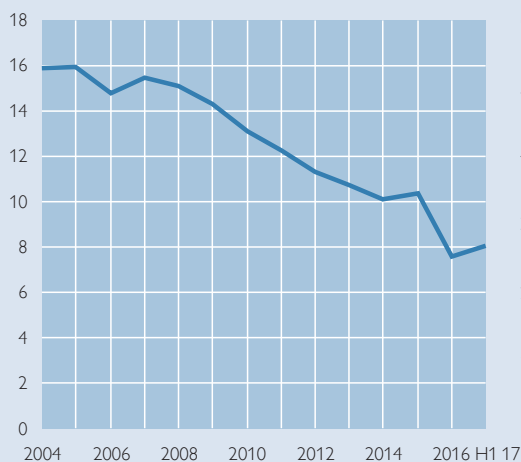
Having moved into the CESEE market at an early stage, Austrian banks were able to gain significant market shares in local banking sectors. However, over the years, the importance of domestic banks increased and other European competitors entered these markets. After the financial crisis, Austrian banks realigned their activities, refocusing on core markets. As a consequence, the market share of Austrian banks in CESEE decreased slowly but steadily to around 10% as at end-2015 and has since decreased further, to around 8% following the restructuring at UniCredit Bank Austria AG in late 2016.

Since the exposure of Austrian banks in CESEE is not evenly distributed and the size of local markets differs substantially, the market shares of Austrian banks are very heterogeneous across the region: In major host countries such as Slovakia, Croatia, the Czech Republic and Romania, market shares are close to or above one-quarter. In half of the countries in which Austrian banks are active through subsidiaries, market shares are below 15%.

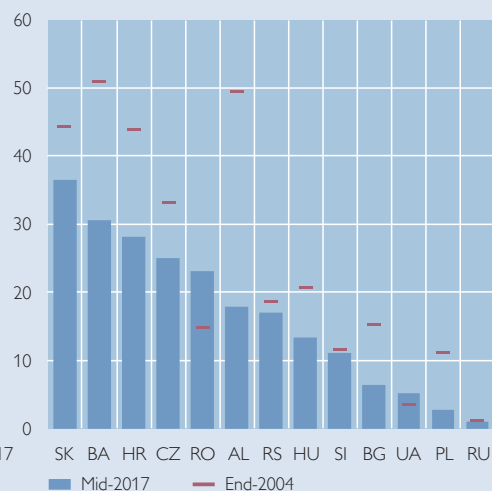
Chart 18

Market shares of Austrian subsidiaries in CESEE

Total market share in CESEE in %



Market shares in selected countries in %



Source: OeNB, national central banks, S&P Global Market Intelligence.

In Bosnia, the Czech Republic, Romania and Slovakia, Austrian subsidiaries have the highest market shares. Especially in the Czech Republic and Slovakia, but also in the Baltic countries and several countries in the Western Balkans, their major foreign competitors are Dutch, Spanish, Italian or French banks. In general, banking groups from other European countries have scaled back their exposure to CESEE, but some of these banks still hold considerable market shares. Besides, banks from Arabic and Asian countries also compete with Austrian banks for market share in several CESEE countries, even though their local activities are still limited.

Strong half-year results for Austrian banks

In the European Union, banks' return on (average) assets (ROA) was 0.4% as at mid-2017 (compared to 0.3% a year before). Higher profits, together with a reduction in administrative and depreciation expenses, contributed to an improvement of the cost-to-income ratio to 62%.¹

In Austria, banking operations continued to be characterized by a positive trend in the first half of 2017, as banks' consolidated profit rose to EUR 3.4 billion (+EUR 0.5 billion year on year) and their annualized ROA stood at 0.8%. On an adjusted basis,² higher profits were the result of several effects. Consolidated operating income rose by 4%, driven primarily by increases in fees and commissions and other income, while net interest income remained flat year on year. Adjusted operating profits grew even stronger (+17% year on year), as operating costs fell. This was, however, not caused by falling staff expenses or general administrative expenses, which account for the bulk of all operating costs and actually rose slightly, but by a significant reduction in asset write-downs, namely by one quarter. Finally, another 25% reduction in credit risk provisioning as well as higher profits from direct investments contributed to the rise in adjusted profits after taxes and minority interests (+32%). These strong results point

to the continuation of a positive recent trend. It should be noted, however, that the key income and cost factors did not contribute to this development and that some improvements (e.g. in risk provisioning) are a reflection of the benign state of the macrofinancial cycle.

To put these developments in a medium-term perspective, chart 19 (left-hand panel) displays the Austrian banking system's adjusted profit and loss items for 2014 and 2017, based on annualized mid-2017 figures. Although operating income declined slightly as net interest income fell, banks did not manage to cut staff and administrative expenses, but instead profited from lower asset write-downs, which improved their operating profits. Furthermore, the much lower credit risk costs proved to be the biggest profit driver and helped turn the loss incurred in 2014 into a substantial profit in the first half of 2017. The right-hand panel of the chart completes the picture by highlighting the corresponding trends in the main drivers of Austrian banks' consolidated ROA. It shows that over the past two and a half years, the operating income margin was flat at roughly 2.5%,³ while the volatile cost-income ratio and especially credit risk costs declined (the latter from close to 90% of operating profits to less than 10%), which led to a significant improvement in Austrian banks' ROA.

Austrian banks' consolidated profitability continues its upward trend

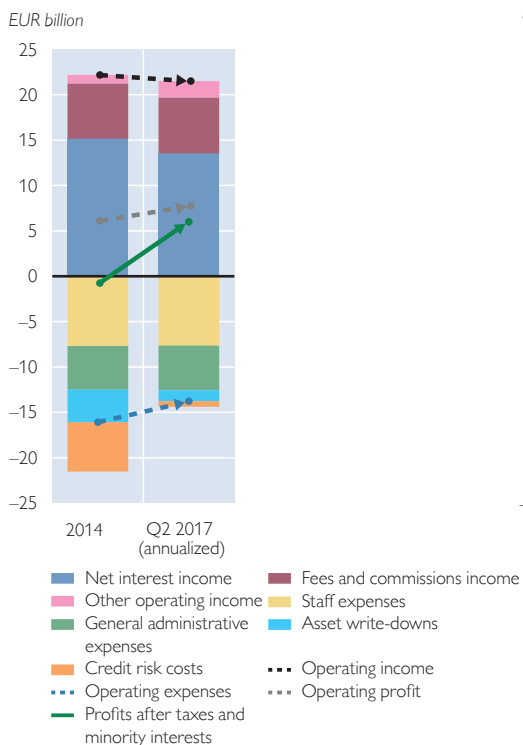
¹ Source: ECB consolidated banking data, data as of Q2 2017.

² The restructuring at UniCredit Bank Austria AG, during which the ownership of CESEE subsidiaries was transferred to the Italian parent bank, has a substantial impact on the profit and loss figures of the entire Austrian banking system. The information in the following section has therefore been adjusted for this one-off effect, to exclude UniCredit Bank Austria AG.

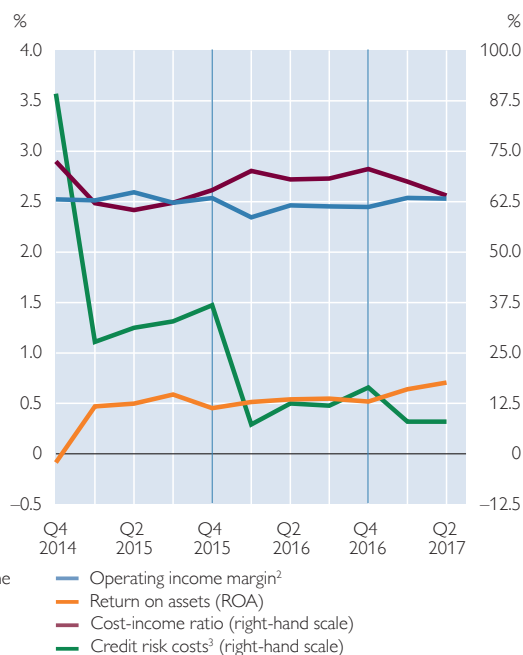
³ The operating income margin is defined as operating income over average total assets. For further details regarding the dissection of banks' return on assets or equity based on an adapted DuPont analysis, please refer to Gruber, M., S. Kavan and P. Stockert. 2017. What drives Austrian banking subsidiaries' return on equity in CESEE and how does it compare to their cost of equity? In: OeNB. Financial Stability Report 33. 78–87. The same period saw a decline in the adjusted consolidated net interest margin of Austrian banks, measured by their net interest income over average total assets.

Consolidated profitability of Austrian banks

The main items of Austrian banks' consolidated P&L statement¹



Austrian banks' consolidated ROA and its main drivers¹



Source: OeNB.

¹ Both panels exclude data for UniCredit Bank Austria AG.

² Operating income divided by average total assets.

³ Credit risk costs divided by operating profit.

Unconsolidated results show an improvement in operating efficiency

In the first half of 2017, Austrian banks generated operating profits of EUR 3.8 billion on an unconsolidated basis, i.e. from their domestic business, including direct cross-border activities. This corresponds to an increase of nearly 32% year on year and was supported by a slight increase in operating income and declining expenses. It should be noted that the magnitude of this increase was strongly influenced by a one-off effect. Adjusted, the increase shrinks to around 11% year on year.

Higher operating income resulted from lower net interest income being compensated by fees and commissions income, trading income and securities and investment earnings, which grew compared to the previous year. A fur-

ther breakdown of the data reveals that the continued decline of net interest income was due to markedly lower results from cross-border activities, whereas domestic results increased slightly. Fees and commissions income improved due to higher profits from the securities business as banks profited from positive financial market developments, while securities and investment earnings went up as income from affiliated companies rose. On the cost side, the strong decrease in staff expenses was driven by a one-off effect, but a slight decrease remains even following adjustment for the one-off effect – and all other expense categories declined as well.

As a result of the above-mentioned trends, overall operating efficiency –

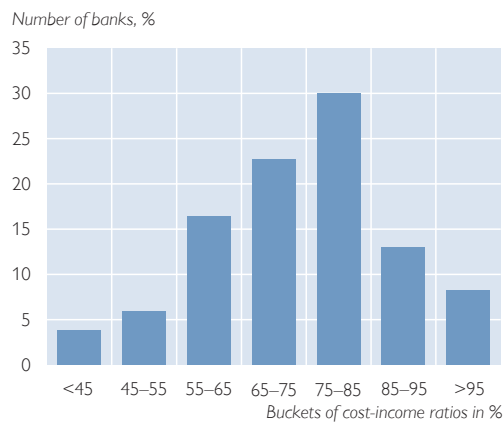
measured by the cost-income ratio – improved from 71% to 62% year on year. When comparing this ratio on a bank-by-bank basis, however, more than three quarters of Austrian banks exhibit above-average ratios, pointing to weaker efficiency. This is due to the fact that the biggest institutions are more cost efficient than smaller local banks.

Regarding the current outlook for 2017, based on the results of the third quarter, Austrian banks expect net new risk provisioning amounting to EUR 1.1 billion. Although up on last year's provisioning, this amount is only around one-third of the average provisioning recorded over the past ten years. Overall, Austrian banks expect an unconsolidated ROA of around 0.6% in 2017, which would be slightly above the figure for 2016 and well above the average for the post-crisis years.

More information on the profitability and efficiency of banks in Austria can be found in a dedicated study further on in this Financial Stability Report, which differentiates between various business models and draws on data from 1995 to 2016 (see p. 52).

Against the backdrop of ongoing economic recovery in several key CESEE host markets, the first half of 2017 was characterized by solid growth in loan volumes and stabilizing or improving asset quality at Austrian banking subsidiaries. Their half-year profit came to EUR 1.5 billion, which translates into an ROA of 1.6%. The highest profits were earned by subsidiaries in the Czech Republic, Russia, Hungary and Slovakia. Adjusted for the restructuring at UniCredit Bank Austria AG, net profits went up by about 8% year on year (see chart 21). Since adjusted operating profits decreased by 6% year on year, to EUR 1.8 billion, this rise was mainly attributable to a further and massive reduction in loan loss provi-

Chart 20
Distribution of cost-income ratios of Austrian banks (unconsolidated data)

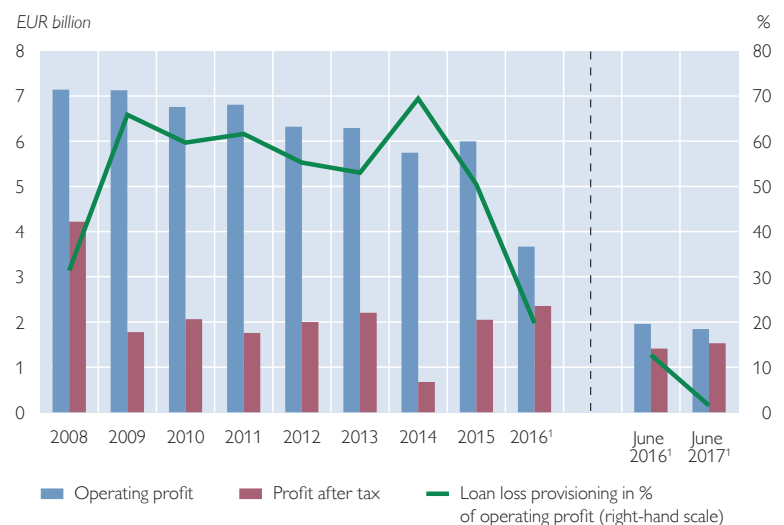


Source: OeNB.

sioning by almost 90% year on year, to a historically low level of EUR 27 million, driven in particular by subsidiaries in Russia and the Czech Republic. In some countries loan loss provisions were released, causing net provisioning to turn negative (Hungary, Ukraine, Czech Republic). Loan loss provisioning accounts for a mere 1% of aggregated operating profits, which is clearly

Profits of Austrian banking subsidiaries in CESEE boosted by very low risk provisioning

Chart 21
Austrian banks' CESEE subsidiaries: profitability and loan loss provisioning



Source: OeNB.

¹ Data excluding the subsidiaries of UniCredit Bank Austria AG.

beneficial for banks' profitability. At the same time, these very low risk costs have yet to prove their sustainability over the medium term.

Regarding the subsidiaries' operating profitability in the first half of 2017, adjusted net interest income edged up (+1.6% year on year) due to an increase in loan volumes (+15% year on year), and fees and commissions income increased as well. This could not offset the decrease in trading income (–63% year on year), however, so that the half-year operating income of Austrian banking subsidiaries in CESEE fell by 1.3% year on year. As staff expenses increased by 4.5% year on year and depreciations also went up, overall operating expenses rose by 3% and led to a worsening of the subsidiaries' cost-income ratio from 51% (mid-2016) to 53% (mid-2017).

A sectoral breakdown of the Austrian NPL portfolio

Credit quality and capitalization are improving further

The quality of European banks' loan portfolios continued to improve in the first half of 2017, but the slow progress and wide dispersion among countries remain a concern. Even though the overall nonperforming loans (NPL) ratio continued its downward trend and reached its lowest level since end-2014, current levels remain elevated in several European markets and continue to hamper banks' profitability and new lending. Banks' efforts to reduce their NPLs are still being hampered by structural impediments. For example, although there has been an increase in NPL transactions, secondary market activity is not yet sufficient to materially contribute to NPL reductions in the banking sector. The EU Council's 2017 action plan to tackle nonperforming loans in

European NPL volumes continue their downward trend, but NPL ratios remain high in several countries

Europe,⁴ which encourages banks to further shrink their NPL portfolios and supports them in this process, is a significant and welcome step forward in this context, alongside ongoing initiatives by the ECB, the European Systemic Risk Board (ESRB) and the Vienna Initiative.

In line with the European trend, Austrian banks improved their loan quality in the first half of 2017. NPL ratios for the domestic business and consolidated NPL ratios further declined to 3.3% and 4.6%, respectively. This improvement was especially pronounced for corporate loans, but NPL ratios for retail loans also declined. Within the SSM, Austrian SIs have managed to reduce their NPL ratio to below-average.

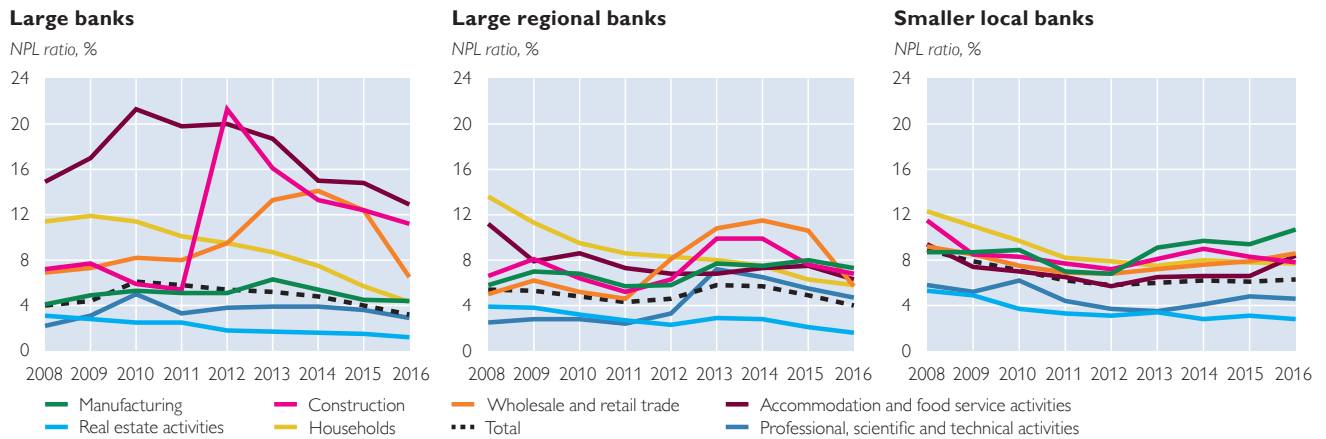
A sectoral decomposition of the loan portfolio with a focus on NPLs provides insight into the soundness of loans extended to different economic sectors in Austria. Based on data from the Austrian central credit register (CCR), the loan portfolio is concentrated in seven sectors accounting for nearly 80% of the total⁵ and including real estate activities, manufacturing, construction, wholesale and retail trade, households, professional, scientific and technical activities, and accommodation and food service activities. At the end of 2016, NPL ratios were especially elevated in the construction (8.4%) and accommodation and food services sectors (7.7%), and in the trade, households and manufacturing sectors (6.2% each), compared to an average NPL ratio of 4.0%. Loans to the real estate activities sector, which accounts for the largest proportion of total lending in the CCR, showed a substantially below-average NPL ratio of 1.6% in 2016.

⁴ www.consilium.europa.eu/en/press/press-releases/2017/07/11/conclusions-non-performing-loans/.

⁵ Note: Only loans above a threshold of EUR 350,000 are reported to the central credit register. Due to this reporting limit, the sample is not entirely representative, especially with regard to loans to the household sector and small and medium-sized enterprises. In addition, the sample only covers domestic activities.

Chart 22

NPLs: a sectoral breakdown of the Austrian loan portfolio



Source: OeNB.

As at end-2016, large banks exhibit elevated but declining NPL ratios in the accommodation and food services (13%), construction (11%) and wholesale and retail trade sectors (7%). At the same time, large regional banks showed above-average NPL ratios in the manufacturing and construction sectors (each 7%). The highest NPL ratios at smaller local banks were observed in the manufacturing (11%), wholesale and retail trade (9%) and food and accommodation sectors (8%). In contrast to large and large regional banks, which recorded a downward trend in their NPL ratios to below the 5% threshold in recent years, smaller local banks recorded a flat trend at more than 5%.⁶

The average NPL ratios of Austrian banking subsidiaries in CESEE have declined over the past twelve months, but some countries are still experiencing elevated levels. At the end of June 2017, the ratio stood at 7.5% for the total loan portfolio (June 2016: 8.6%)

and 11.7% for foreign currency loans (June 2016: 15.3%). Notwithstanding this improvement, the heterogeneity in credit quality across countries remains high. In the Czech Republic and Slovakia, the NPL ratios of Austrian banking subsidiaries are already close to or even below Austrian levels, at 2.8% and 4.1%, respectively, while in other important host markets, such as Romania, Hungary and Croatia, NPL ratios still range between 10% and 17%.

While the overall NPL stock is therefore still elevated, the associated risk has been partly mitigated by high provisioning, with the NPL coverage ratio⁷ of Austrian banking subsidiaries in CESEE standing at 65% in mid-2017. The NPL coverage ratio for foreign currency loans is higher at 68%, reflecting intensified risk provisioning in recent years.

In the European Union, banks' common equity tier 1 (CET1) ratio reached 14.5% as at mid-2017.⁸ By comparison, the Austrian banking system's

NPL ratios of Austrian banks' subsidiaries in CESEE improved further

CET1 ratio reaches all-time high beyond 15%, surpassing the EU average

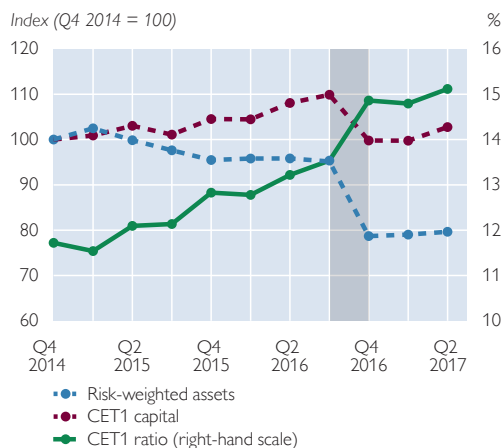
⁶ For a definition of banks' business models, please refer to the study "The profitability of Austrian banks' domestic business from 1995 to 2016: driving forces, current challenges and future opportunities" in this Financial Stability Report (p. 52).

⁷ Defined as the ratio of risk provisions for NPLs to total gross NPLs.

⁸ Source: ECB consolidated banking data.

Chart 23

Development of the CET1 ratio and its components



Source: OeNB.

Note: As from Q4 2016, the CESEE subsidiaries of UniCredit Bank Austria AG are no longer included in these figures (gray highlight).

consolidated CET1 ratio rose to a record high of 15.1%, which is 190 basis points higher than a year ago; and its fully phased-in leverage ratio stood at 7.8%. This marked improvement, which strengthens the Austrian financial system's loss absorbing capacity and stability, is the result of a successful catching-up process to close a historical

capitalization gap, following up on repeated recommendations by the OeNB.

From the end of 2014 until mid-2017, the Austrian banking system saw its CET1 capital increase by nearly 3%, while its risk-weighted assets (RWAs) declined by 20% (see chart 23). The restructuring at UniCredit Bank Austria AG in late 2016 clearly affected these aggregated figures, but the overall trend remains. In the last two and a half years, Austrian banks have continuously strengthened their capital base, while their RWAs fell in 2015 and stabilized thereafter.

This report contains a study on the comparability of Basel risk weights in the EU banking sector, which concludes that “a good portion of [risk weight] variability can be explained by portfolio- and destination-specific risk indicators such as macroeconomic indicators and NPL ratios. [...] However, [the authors] find statistically significant and economically important differences with regard to the country where a bank is headquartered [supported by] evidence that implementation standards differ from jurisdiction to jurisdiction.”

Box 2

Results of the OeNB's 2017 stress tests

This box presents the main results of the OeNB's annual stress tests in 2017 and briefly discusses methodological improvements in the ARNIE stress testing framework.¹

Motivation

The OeNB conducts annual tests for all Austrian banks under its mandate for banking supervision and financial stability assessment. Being focused on less significant institutions (LSIs), the OeNB's top-down stress tests are a meaningful complement to the EU-wide semi-annual stress tests for significant institutions (SIs).² These stress tests not only support supervision but also provide a systemic perspective, which is why the OeNB makes an effort to continually enhance its micro-founded stress test framework for solvency and liquidity.

¹ The OeNB started running top-down stress tests for the Austrian banking system more than a decade ago, see Boss et al. (2004). For a discussion of the current software framework, please refer to Feldkircher et al. (2013).

² For further details, please refer to the EBA website www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing.

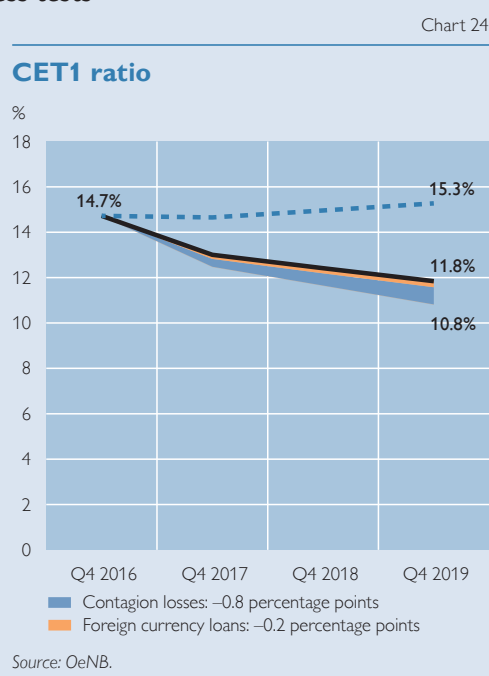
The OeNB's 2017 top-down solvency stress tests were designed to analyze two macro-economic scenarios: a baseline scenario (representing the current macroeconomic outlook) and an adverse scenario (assuming a severe downturn of the global economy accompanied by geopolitical threats and increased risk aversion across financial markets). Moreover, the tests addressed risks that are specific to the Austrian financial system, such as foreign currency loans, a large and interconnected banking sector and the exposures to the CESEE region. In the adverse scenario, Austrian GDP decreased by 6.3 percentage points relative to the baseline, and the GDPs of CEE, SEE and CIS countries decreased by 8.7, 10.5 and 12.5 percentage points, respectively, over a time horizon of three years.

The liquidity stress tests are based on five scenarios, including a macroeconomic scenario, scenarios with different layers of idiosyncratic stress and a combined scenario simulating the most severe run-downs.

Main results of solvency and liquidity stress tests

In the solvency stress tests, the aggregate Austrian banking sector started from a common equity tier 1 ratio (CET1R) of 14.7% at end-2016. This ratio improved to 15.3% in the baseline scenario by end-2019, while it decreased by 3.9 percentage points to a level of 11.8% in the adverse scenario. The impact of further stress factors was simulated with two sensitivity analyses: (i) additional losses from foreign currency lending led to a further decline of the CET1R by 20 basis points; (ii) an analysis of contagion effects revealed a further downward potential of 80 basis points.

As in previous years, the OeNB also conducted liquidity stress tests for a sample of banks based on a stressed maturity ladder of cash flows and liquidity buffers. On balance, i.e. across all currencies, the Austrian banking system was found to be sufficiently resilient against multiple stress scenarios for the liquidity and funding structure.



Low-interest rate environment puts pressure on banks' profitability

In 2017, the OeNB started to develop a new approach for projecting net interest income under stress. The module follows a micro-founded approach taking into account banks' individual balance sheet structures. For each modeled balance sheet item, an average effective interest rate is calculated based on economic considerations. The approach explicitly takes into account interest rate floors for assets and liabilities, asset repricing characteristics and future yield curve developments.

Stress test results show that even in the baseline scenario, i.e. under normal economic conditions, banks' net interest income suffers from the currently low interest rates. The main driver of this result are banks' long-term fixed rate assets (earning relatively high interest rates), which will mature over the stress testing horizon and will be replaced by lower rate assets. This leads to a decrease of operating profits within the next three years of 7%. A rise in interest rates, however, will not necessarily improve banks' profitability because higher credit risk costs are likely to at least partially outweigh increased net interest income.

Methodological improvements

Recent changes in the OeNB's top-down ARNIE stress testing framework are disclosed for improved transparency. Highlights since the last publicly available description – see Feldkircher et al. (2013) – include: (i) a new micro-founded approach based on changes of prices and volumes was developed to project banks' net interest income; (ii) bank and industry participations are now subject to a shock to the book value of at-equity ownership stakes in other entities; and (iii) liquidity stress tests now incorporate a large amount of recently available standardized liquidity risk reporting data.³

Conclusion

The 2017 OeNB stress tests confirm that – against the backdrop of the low interest rate environment, technological change and increased competition – Austrian banks need to make lasting improvements to their operating efficiency and further strengthen their capitalization.

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- Feldkircher, M. et al. 2013.** ARNIE in Action: The 2013 FSAP stress tests for the Austrian banking system. In: OeNB. *Financial Stability Report* 26. 100–118.
- Schmieder, C., H. Hesse, B. Neudorfer, C. Pühr and S. W. Schmitz. 2012.** Next generation system-wide liquidity stress testing. *IMF Working Paper* 12/03.

³ For the EBA ITS on reporting, please refer to <https://www.eba.europa.eu/regulation-and-policy/supervisory-reporting>.

Stable liquidity
situation of Austrian
banks

The liquidity coverage ratio (LCR) was introduced as a regulatory minimum requirement for all institutions at the individual and consolidated level in October 2015. It aims to ensure that institutions have sufficient amounts of highly liquid assets that will enable them to withstand conditions of a pre-defined funding stress for at least 30 days at all times. The LCR minimum requirement is defined as the ratio of high-quality liquid assets (HQLA) relative to stressed net outflows arising over a period of 30 days. Having amounted to 80% in 2017, this ratio will be fully phased in by 2018 to a minimum of 100%.

The weighted average LCR for all Austrian institutions has been stable and well above minimum requirements. As at August 2017, all Austrian institutions reported ratios above the regulatory minimum, with the weighted average

LCR amounting to 138% at the unconsolidated level. The composition of the HQLA has also largely been constant over time. As at August 2017, the buffer is concentrated in the highest category of eligible Level 1 assets with 93%, while the share of Level 1 covered bonds remains at 5%. Level 2a and Level 2b assets account for 1% each. Within the classification of Level 1 assets, government bonds and central bank asset reserves account for more than 80%.

Macroprudential supervision in Austria

One of the three pillars of the Austrian Sustainability Package⁹ adopted by the OeNB and the FMA in 2012 required Austria's three largest banks to monitor the stock and flow loan-to-local stable funding ratios (LLSFRs) of their foreign subsidiaries. With ownership of Uni-Credit Bank Austria's CESEE subsidiaries

The Austrian
Sustainability
Package improved
the funding balance
in CESEE

⁹ <https://www.oenb.at/en/Financial-Stability/Systemic-Risk-Analysis/Sustainability-of-Large-Austrian-Banks--Business-Models.html>

having been transferred to its Italian parent bank, this monitoring requirement now only applies to the subsidiaries of Erste Group Bank and Raiffeisen Bank International. As at mid-2017, all 23 monitored subsidiaries had a sustainable business model (compliant with the supervisory guidance). Year on year, the aggregated stock-LLSFR remained stable at around 75% and the majority of subsidiaries display a ratio below 80%, which is well below the early warning threshold set at 110%. An important side effect of the strengthened reliance on local funding is the substantial decrease in gross intra-group liquidity transfers from Austrian banks to CESEE credit institutions, which have halved since end-2011, coming to EUR 23 billion in mid-2017.¹⁰ Notwithstanding the overall improvement in the balance of Austrian CESEE subsidiaries' refinancing structure, the LLSFR pillar requires continued supervisory monitoring in order to avoid potential future boom-bust cycles in local lending.

The other two pillars of the Sustainability Package required the three parent banks to increase their capital base and to ensure that they had adequate recovery and resolution plans in place to face potential crisis situations. From the viewpoint of the Sustainability Package, the banks concerned – which all qualify as significant institutions under Europe's Single Supervisory Mechanism (SSM) – complied with these two requirements in the past. The related supervisory objectives have since been cast into new legal and institutional frameworks: Significant institutions' capitalization requirements are

now defined by the SSM's microprudential supervisory review and evaluation process (SREP), and the macroprudential capital buffers are set by the Austrian authorities.¹¹ Furthermore, the ongoing work on recovery and resolution plans is now governed by the European Bank Recovery and Resolution Directive under the aegis of the ECB and the European Single Resolution Board, respectively.

In sum, the Austrian Sustainability Package has successfully strengthened financial stability both in Austria and in the subsidiaries' host countries over the past five years and may therefore be considered a supervisory success. While the objectives relating to banks' capitalization and to recovery and resolution planning are now being pursued by other means, the funding situation of foreign subsidiaries requires continued supervisory monitoring along the lines of the Sustainability Package.

The OeNB's assessment of real estate-induced systemic risks is based on a comprehensive approach taking into account developments in real estate prices, the resilience of borrowers, the risk-bearing capacities of lenders, and the market structure and institutional factors influencing the real estate market in Austria.

Real estate-induced systemic risks remain subdued in Austria, largely due to the fact that Austrian households have low and decreasing indebtedness on an aggregate level, while mortgage borrowers feature income and wealth levels well above those of the median household. Property price growth has come down considerably, as described in the chapter on the Austrian corpo-

Systemic risks from
the domestic real
estate market
remain subdued

¹⁰ Note: Bucking the general trend of decline, transfers to the Czech Republic skyrocketed over the past two years and now make up just over half of all transfers, although the relevant subsidiaries' refinancing position is typically strong.

¹¹ For further details regarding macroprudential capital buffers, please refer to www.fmsg.at/en.

Macprudential instruments to address systemic risks in the real estate market

rate and household sectors, and annual mortgage loan growth remained stable below 5% as at mid-2017.

Austrian banks' exposure to residential real estate, measured by loans to households collateralized by real estate in relation to their capitalization, is low (182% of consolidated CET1 capital) compared to other EU economies. The stock of mortgage loans remains of high quality as the proportion of non-performing real estate loans to domestic borrowers in total loans remains low (1.6% as at mid-2017).

With regard to new mortgage lending, the OeNB has, together with the Financial Market Stability Board (FMSB) and the Financial Market Authority (FMA), launched a sustainability initiative aimed at reducing the emergence of real estate-induced risks to financial stability. In this regard, the FMSB recommends that lenders, when

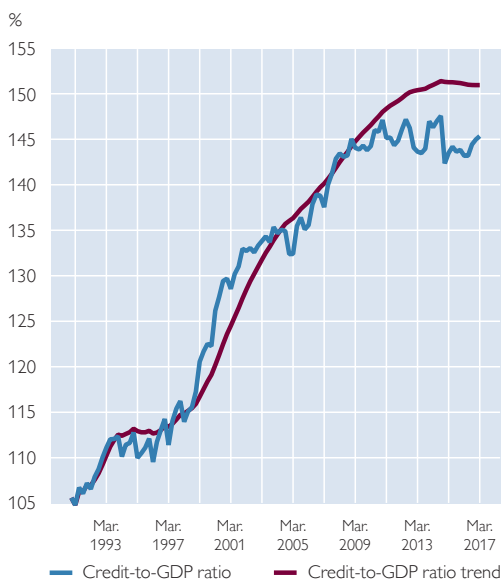
granting residential real estate loans, ensure that borrowers provide a minimum down payment and have sufficient buffers of disposable income.

In August 2017, paragraph 22b of the Austrian Banking Act entered into force, defining a set of macroprudential instruments¹² designed to contain systemic risks stemming from real estate financing. This legislation empowers the FMA to issue a regulation specifying upper limits to loan-to-value (LTV), debt-to-income (DTI) and debt-service-to-income (DSTI) ratios or mortgage loan maturities, subject to assessment by the OeNB and approval by the Austrian Ministry of Finance. Further, the FMA can specify minimum amortization requirements or rules regarding reciprocation on measures. The law is flexible in nature, allowing the FMA to differentiate measures according to type and amount of funding (e.g. de

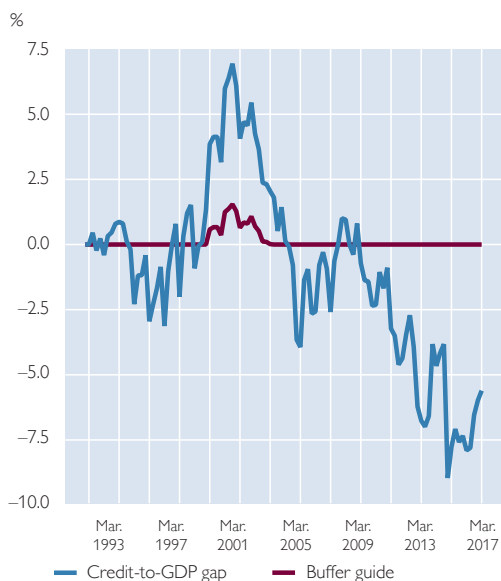
Chart 25

Credit-to-GDP

Ratio and trend



Gap and CCB buffer guide



Source: ECB, national central banks, Eurostat.

¹² Published in Austria's Federal Law Gazette on September 15, 2017: (original text in German) https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2017_I_136/BGBLA_2017_I_136.html. Opinion of the ECB in English: https://www.ecb.europa.eu/ecb/legal/pdf/en_con_2017_21_signed.pdf.

minimis quotas). Finally, as of July 2018, the FMSB can issue a recommendation to the FMA to activate macroprudential instruments when it detects systemic risk stemming from real estate financing.

Lenders have broadly adhered to sustainable lending standards so far, however. Nevertheless, some developments warrant heightened supervisory vigilance: The OeNB's mortgage lending survey indicates a recent spike in the share of new mortgage lending with relatively high LTV, DSTI and DTI ratios. These developments confirm the importance of the FMSB's recommendation on sustainable lending standards in real estate.

Given that the main indicator (credit-to-GDP gap) for all credit aggregates used remains negative (as in previous quarters), there are no signs of excessive credit growth in Austria. Therefore, the FMSB recommends that the FMA leave the countercyclical capital buffer rate at 0% of risk-weighted assets as at January 1, 2018.

Another tool, the systemic risk buffer (SRB), is necessary to mitigate long-term noncyclical systemic risks. It aims to increase the risk-bearing capacity of the Austrian banking system and, in a medium- and long-term perspective, to minimize the risks to the Austrian banking system. The SRB was activated in Austria in January 2016 for 12 identified institutions.¹³ The SRB's re-evaluation showed that the implementation of the SRB has been effective and that

risks have been reduced without any unintended consequences such as a reduction in bank lending. This relates above all to the decrease in structural systemic risks, as Austrian banks both improved their capitalization and downsized their foreign business.

Risk-mitigating factors notwithstanding, the structural systemic risk in the Austrian banking sector continues to be elevated. Key risks for the Austrian banking system emanate above all from the still substantial exposures to emerging markets in Europe and from banks' specific ownership structures. Based on these risk-enhancing characteristics, the OeNB identified two main risk channels for the Austrian banking system in 2015 (systemic vulnerability¹⁴ and systemic cluster risk¹⁵), which have since been confirmed.

Based on a comprehensive assessment, the OeNB finds that the SRB should be maintained yet reduced (compared with the original assessment in June 2015¹⁶) to a maximum of 2% in common equity tier 1 (CET1) of risk-weighted assets. The reduction is warranted because Austrian banks' foreign exposure to emerging markets has been scaled back considerably, the remaining exposure has been reallocated towards less risky countries, and the risk situation in those countries is characterized by positive, if heterogeneous developments. With regard to the calibration of the SRB for the two risk components, the SRB for addressing systemic vulnerability should be maintained at 1%

Countercyclical
capital buffer stays
at 0%

Better capitalization
and downsizing of
the foreign expo-
sures

Systemic risk buffer
has no negative
consequences

¹³ <https://www.fmsg.at/en/publications/press-releases/2015/fifth-meeting.html>.

¹⁴ Systemic vulnerability arises due to increased vulnerability of one or more credit institutions resulting from disruptions in the financial system or parts thereof because of the interconnectedness of the credit institution(s) with other market participants or the financial system in general.

¹⁵ Systemic cluster risk results from substantial similar risk positions in the banking industry, which can lead to disruptions that may have serious negative effects on the financial system and the real economy.

¹⁶ In its fourth meeting, on June 1, 2015, the FMSB had originally decided to recommend activation of the systemic risk buffer up to a total of 3% to strengthen the Austrian banking sector. However, since SREP ratios were markedly higher than those on which the original recommendation was based, the recommendation was limited to up to 2% in the fifth meeting, on September 7, 2015.

and the SRB for addressing systemic cluster risk should be reduced from a maximum of 2% to 1%.

These systemic risks may manifest themselves both at the consolidated and the unconsolidated level. Moreover, within cross-border banking groups, capital allocation in crisis situations may not be flexible. Therefore, the FMSB recommends that the SRB should also be applied at the unconsolidated level for seven credit institutions.¹⁷ The overall SRB evaluation on the consolidated level will be completed by the end of the first half of 2018.

In line with the EBA's recommendation, the OeNB identified six "other systemically important institutions" (O-SII). Accordingly, the systemic importance of institutions was assessed using ten mandatory indicators referring to the four following criteria: size, importance (including substitutability/financial system infrastructure), complexity/cross-border activity and interconnectedness. The following table shows the identified institutions, their respective systemic importance in 2016 and in 2017 (measured by a score) and the resulting capital buffers.¹⁸

Report explaining the OeNB's role in banking supervision

Regarding microprudential supervision, the OeNB deems transparency to be a key factor of effective banking supervision, in particular within the context of the SSM, where many institutions are involved. Therefore, the OeNB recently published a report regarding its role as an integral part of banking supervision, focusing on the key aspects and results of its work.¹⁹

Foreign currency loan volumes continue to decline, but repayment risks remain

Stepped-up supervisory efforts aimed at curbing foreign currency lending have proven to be effective, as the outstanding volume of foreign currency loans (FCLs) continued its year-long downward trend in 2017. Over the last twelve months alone, FCLs to domestic nonfinancial borrowers declined by 14.1% on an exchange rate-adjusted basis. At the end of June 2017, these loans accounted for around EUR 27.3 billion, with the majority relating to households, and with the Swiss franc being the predominating currency. The share of FCLs in total loans to households dropped to 12.5% as at June 2017 (from 15.4% a year before).

Even though the volume of domestic FCLs has been declining steadily, they still entail potential redemption risks at maturity, especially since around three-quarters of these loans are bullet loans linked to repayment vehicles (RPVs, usually a life insurance policy). In this case, the borrower pays regular contributions into an RPV to make a

Identification of systemically important institutions

Total funding shortfall of repayment vehicles at EUR 6 billion

Table 1

Other systemically important Austrian institutions

Bank	2016 score	2017 score	Capital buffer
Erste Group Bank AG	1,856	2,231	2%
Raiffeisen Bank International AG	1,495	1,795	2%
UniCredit Bank Austria AG	2,056	1,223	2%
Raiffeisenlandesbank OÖ AG	412	466	1%
BAWAG P.S.K. AG	404	421	1%
RAIFFEISEN-Holding NÖ-Wien reg. Gen.m.b.H.	282	325	1%

Source: OeNB.

¹⁷ <https://www.fmsg.at/en/publications/warnings-and-recommendations/2017/recommendation-fmsg-4-2017.html>.

¹⁸ <https://www.fmsg.at/en/publications/press-releases/2017.html>.

¹⁹ The report is only available in German (https://www.oenb.at/dam/jcr:0397afa4-ea9b-436a-9ae0-13005d7e32f7/bankenaufsicht_sept_2017.pdf).

single bullet repayment at the end of the loan term. Thus, these 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 RPV fails to reach the originally assumed performance, causing the amount saved to fall short of the entire loan repayment due at maturity (performance risk). Both risks may lead to a funding shortfall between the expected final value of the RPV and the amount outstanding at loan maturity. Monitoring the development of RPVs with a view to assessing the potential funding shortfalls, the OeNB in cooperation with the FMA, conducts a yearly survey among a representative sample of Austrian banks.²⁰ The results of this year's survey show that at the end of 2016, the estimated total shortfall stood at EUR 6.0 billion or 32% of the outstanding volume (see chart 26).²¹ This shortfall is primarily a result of the strong appreciation of the Swiss franc against the euro in the period during which these loans have been outstanding. As at mid-2017, Austrian banks and their borrowers still have some time to address the issue, as three-quarters of all RPV loans are loans with a remaining maturity of more than seven years. Especially against the background of the revised version of the FMA Minimum Standards,²² which are aimed at increasing transparency and strengthening risk awareness, the OeNB strongly recommends that banks and borrowers intensify their bilateral negotiations on measures that enable sustainable, tailor-made solutions and thereby mitigate risks stemming from these loans.

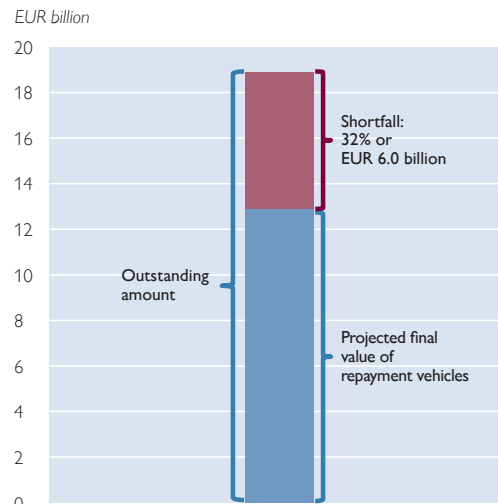
²⁰ The survey sample covers about 90% of outstanding domestic RPV loans.

²¹ Please note that due to future currency movements and the performance of RPVs, both are volatile figures.

²² A revised version of the "FMA's Minimum Standards for the Risk Management and Granting of Foreign Currency Loans and Loans with Repayment Vehicles" entered into force on June 1, 2017. For more details on the latest version see <https://www.fma.gv.at/download.php?d=2885>.

Chart 26

Shortfall of repayment vehicles (as of end-2016)¹

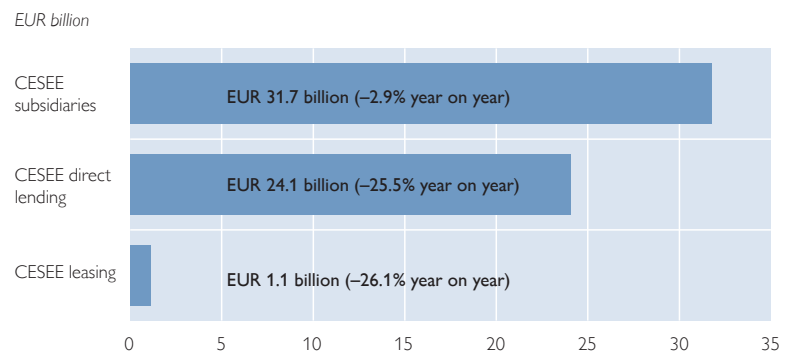


Source: OeNB.

¹ Most recent survey was conducted in spring 2017.

Chart 27

Foreign currency loans of Austrian banks to CESEE borrowers (growth rates from Q2 2016 to Q2 2017)



Source: OeNB.

Note: Growth rates are not adjusted for exchange rate effects.

In line with the ongoing downward trend of foreign currency lending in Austria, Austrian banks also continue to reduce their FCLs in CESEE. As at June 2017, their total FCL exposure including lending via banking subsidiaries, cross-border lending as well as leasing had decreased by 14.4% year on

Austrian banks
continue to reduce
their FCLs in CESEE

year to EUR 57 billion (see chart 27), with the main contributor to the decline being cross-border lending, which dropped by 25.5% to EUR 24 billion. Foreign currency lending via subsidiaries declined to EUR 32 billion (–2.9% year on year) and foreign currency leasing came down to EUR 1.1 billion.

In recent years, the currency composition of FCLs at subsidiaries has become more and more dominated by the euro, as three-quarters of all FCLs are euro-denominated (versus 56% at the end-2010), while the rest is denominated in Swiss franc (12%) and U.S. dollar (11%).

Box 3

Crisis management for less significant institutions (LSIs): objectives, a new framework and the role of the OeNB

Recent crisis experience at European LSIs has shown that there is a need to enhance the processes for LSI crisis management and related information exchanges between the Single Supervisory Mechanism (SSM) and the national competent authorities (NCAs) and, where appropriate, other stakeholders, e.g. the national resolution authorities (NRAs), the Single Resolution Board (SRB) or the European Commission. The SSM's efforts to improve this process will lead to closer cooperation and communication between the ECB and national authorities (including central banks) in crisis situations. In case a need should arise for SSM involvement, the ECB will be informed by the respective national direct supervisors before an LSI reaches a point of nonviability, prompting the ECB to assume a coordinating role when the LSI's situation becomes critical, in particular once the withdrawal of its authorization is on the horizon. However, not all financial adversity necessarily leads to cases of an LSI being in crisis. Against this backdrop, the following criteria have to be defined:

- a definition of an LSI in crisis (including the determination process and the elements to be taken into account);
 - the required collaboration and information exchange, including the supervisory history, the submission of information to the ECB and communication with other stakeholders.
- Accordingly, a common understanding for LSI crisis management has to be reached focusing on:
- NCAs' internal procedures for dealing with LSIs in crisis;
 - cooperation with the NRAs or the SRB for LSIs under the SRB's remit (also in relation to LSI common procedures);
 - cooperation with other relevant external stakeholders that are to be involved in LSI crisis management procedures;
 - communications with the public.

Apart from crisis management for LSIs, there are several other international activities aimed at further detailing and harmonizing aspects of crisis management. First, the European Banking Authority (EBA) has provided a recommendation regarding the coverage of material entities in group recovery plans, which encourages banks to combine relevant information for all material entities into a single integrated group recovery plan. Moreover, the EBA specified the level of detail at which material entities should be covered, based on the relevance of their critical functions. Second, there are intense discussions at the SSM and the EBA on the correct calibration of recovery indicators, in particular for capital and liquidity. While calibration will always depend on the specifics of an institution, general guidelines should help to ensure a harmonized approach throughout the banking sector.

These efforts to improve the planning and execution of crisis management undertaken at the European level enhance the European and Austrian authorities' readiness to act in case a bank were to face a crisis.

Low interest rates and new regulatory environment prompt other financial intermediaries to adjust portfolios

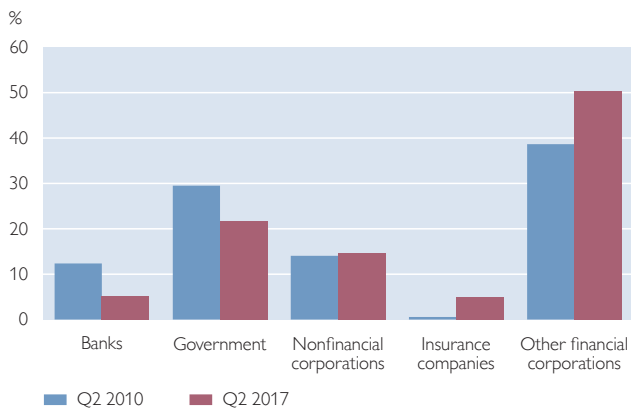
The low interest rate environment has resulted in a considerable change in the asset allocation decisions of insurance companies, pension funds and severance

funds. All three categories of institutional investors moved out of bank bonds in an abrupt shift into securities of nonfinancial corporations and other financial corporations. This can be interpreted as an indication of search-for-yield behavior, which is typically associated with higher risks.

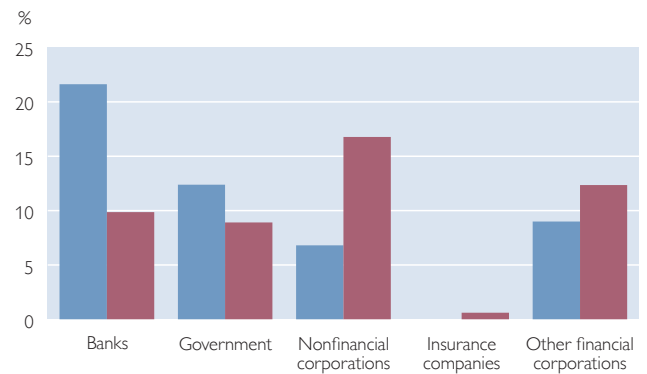
Chart 28

Considerable changes in the investment behavior of Austrian pensions funds and severance funds

Asset allocation of pension funds' investments in securities



Asset allocation of severance funds' investments in securities

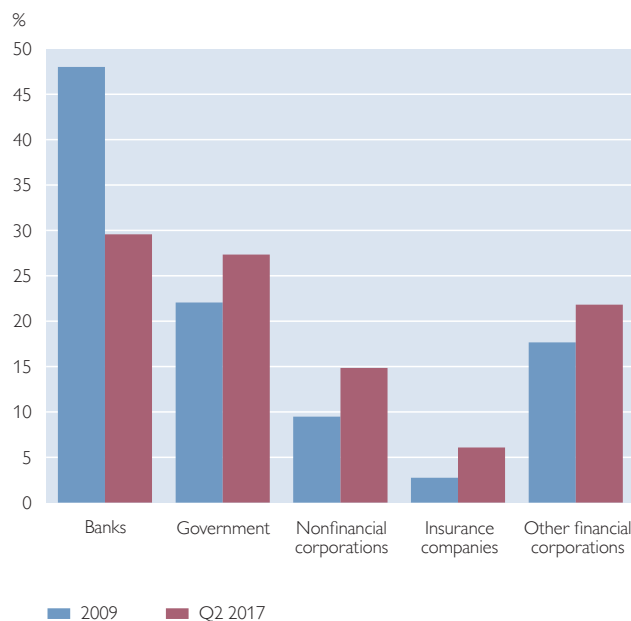


Source: OeNB.

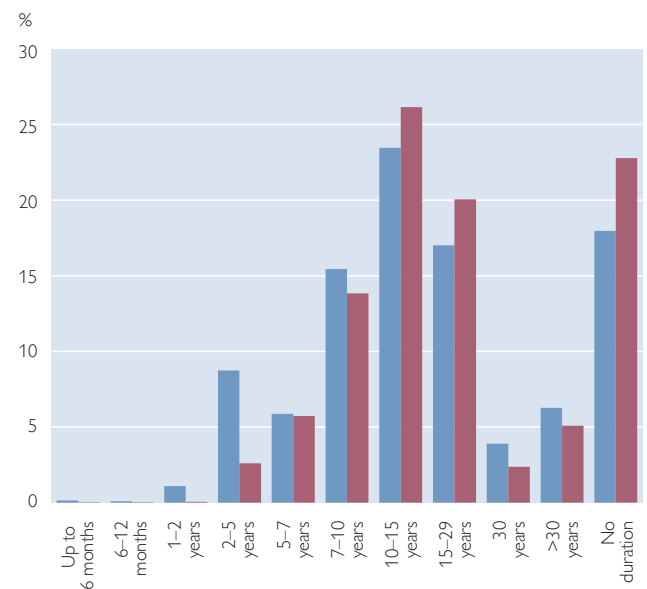
Chart 29

Considerable changes in the investment behavior of Austrian insurance companies

Asset allocation of insurers' investments in securities



Original maturity of insurers' investments in securities



Source: OeNB.

The Austrian insurance sector is adapting to the macroeconomic environment as well as to regulatory challenges such as Solvency II. The implementation of these new rules and the low interest rate environment are factors driving the investment behavior of insurance companies. From 2009 to mid-2017, they significantly reduced their aggregated exposure to financial sector securities (–11 percentage points), although no clear market trend across all insurance companies has been detected. This is due to the fact that the Austrian insurance market is very heterogeneous, with a small number of large insurance undertakings accounting for the majority of assets (e.g. the top 5 undertakings account for more than 70% of total assets). The companies for which search-for-yield behavior was observed shifted assets within fixed income portfolios towards higher-yielding securities (e.g. corporate bonds)

with lower credit quality and longer durations.

This is reflected in the charts above, which show aggregated numbers for the total market. There has also been a shift in asset duration, from short durations (2 to 5 years) towards the 10-to-15-year and 15-to-29-year duration bands, as the low-yield environment makes short-term securities particularly unattractive.

The new market conditions have been particularly significant for life insurance companies, with premiums having decreased by approximately 7% or more per annum as at mid-2017. This decrease was mainly driven by a fall in single premiums. The insurance sector continues to respond to this challenging environment by shifting its business mix toward products that are directly linked to market performance, whose investment risk is borne by policyholders.