Austrian financial intermediaries: strong profits, but banks need to further improve structural efficiency

Profits of Austrian banks at post-crisis high in 2017

Ten years after the collapse of the U.S. investment bank Lehman Brothers in 2008 and the height of the global financial crisis, the Austrian banking sector recorded its highest consolidated post-crisis profitability, both in absolute and relative terms. Austrian banks earned EUR 6.6 billion in 2017, which is nearly one-third more than in the previous year (see chart 3.1). This translated into a return on average assets of 0.8% (2016: 0.6%), which is well above EU levels (0.4%).

Analyzing the aggregated profit and loss statement in more detail, operating income was only slightly higher than in 2016 (+2% year on year), as net interest income (NII) was flat and fees and commissions income (FCI) expanded by 5% year on year. These growth rates prolonged a multi-year trend in earnings generation, with the importance of FCI continuing to slowly expand at the expense of NII, which primarily reflects the fall in the net interest margin since 2015 as a consequence of the low interest rate environment. The interest margin of Austrian banks' consolidated operations stood at 1.5% in 2017, unchanged from 2016. On the cost side, both staff and administrative expenses fell in 2017 (-4% year on year). Combined with a strong fall in other

Chart 3.1 Indicators of Austrian banks' consolidated profitability EUR billion 20 100 15 75 10 50 25 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 Operating profit Credit risk costs Profit after taxes and minority interests Cost-income ratio (right-hand scale) Source: OeNB

operating expenses, this led to a noticeable reduction in operating expenses year on year (-11%). These positive cost-income trends improved the cost-income ratio (CIR) of the Austrian banking sector by 10 percentage points (to a still elevated 65%) and lifted the operating profit by 41% to EUR 8.1 billion. Credit risk costs remained low (EUR 0.9 billion in 2017), as the macroeconomic backdrop continued to be highly supportive and nonperforming loans (NPLs) were being tackled, which lent further support to the strong profitability of Austrian banks in 2017.

In retrospect, several conclusions can be drawn with regard to Austrian banks' profitability over the last decade and in particular the substantial expansion of their consolidated profitability seen over the last few years. First, banks reduced their size from 2013 on, with average total assets down by one-fifth compared to their peak in 2012;³ at the same time, their absolute profits recovered to their pre-crisis level (2007: EUR 6.8 billion). And second, this recovery was not driven

In 2016, the profitability of the Austrian banking sector was burdened by one-off bank levy payments.

² Source: EBA Risk Dashboard, data as of Q4 2017.

When comparing the average total assets in 2008 and 2017, the decline comes to 16%. The transfer of UniCredit Bank Austria's CESEE subsidiaries to its Italian parent bank in 2016 played a large role in this downsizing.

by operating profits, as their level in 2017 was barely above that seen in 2008 and still subject to a high CIR, but stemmed from a drastic reduction of credit risk costs.

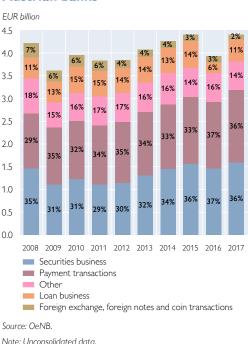
Now banks should use the currently benign environment of buoyant economic activity in Austria and their host markets (especially in CESEE) to address structural cost issues in order to foster the sustainability of their profits, improve their prospects (e.g. by investing in digitalization) and ensure that they have enough room for maneuver in potential future downturns.

Unconsolidated profits reach record high

Austrian banks' unconsolidated profits increased significantly already in 2016 and climbed even more rapidly in 2017 (by 10% year on year to EUR 4.9 billion). Operating profits increased to EUR 6.6 billion, driven by a surge in securities and investment earnings, net fees and commissions income and reduced operating expenses.

Chart 3.2

Fees and commissions income of Austrian banks



Fees and commissions income was propelled by an increase in the loans business in 2017, which more than doubled compared to the previous year. The comparatively low figure in 2016 was driven by a one-off effect, however, due to a change in accounting treatment (see chart 3.2).

An adverse effect emanated from unconsolidated net interest income, which continued its fall in 2017 (by EUR 310 million). This was a decline of 3.6% compared to the previous year and driven by markedly lower net income from cross-border business but also slightly lower results from domestic activities. The overall net interest margin declined to around 105 basis points (3 basis points below the 2016 figure).

Austrian banks reduced their operating expenses in 2017 by 6.5% and their cost-income ratio by more than 5 percentage points to an improved 66%.⁴ Risk provisioning continued to

be low, as the share in total operating profits amounted to only 14% in 2017, compared to an average 45% over the last twenty years.

CESEE profits increase significantly

Austrian banks also benefited from the economic upswing in CESEE in terms of loan growth, credit quality and profitability. The net result after taxes of Austrian subsidiaries in CESEE increased by 12% in 2017 and amounted to EUR 2.6 billion, almost reaching the level of 2008 (EUR 2.9 billion). The largest contribution to profitability in absolute terms came from the Czech Republic, and, for the first time since 2005, all results on a single country basis had been positive.

⁴ However, this strong improvement was also caused by a negative one-off effect that burdened provisioning requirements in 2016.

⁵ The figure for 2008 also excludes UniCredit Bank Austria's CESEE subsidiaries.

The main driver of profitability in 2017 was the historically low level of credit risk provisioning. Loan loss provisioning was half of previous years' value and only one-fifth of its 2008 level. To put this decline into perspective: while the ratio of credit risk provisioning to operating profit amounted to 33% in 2008, it was only 8% in 2017. However, these low levels have to be seen in context with the currently prevailing macroeconomic environment as credit risk provisions are very cyclical.

The second most important driver of profitability – albeit with a less pronounced impact than credit risk provisioning – was the increase in net interest income. With a share of 67%, net interest income (NII) is by far the most important component of operating income. While NII was under pressure between 2008 and 2016, it started to increase in 2017, rising by 3% year on year. The net interest margin (NIM), i.e. NII to total assets, shrank by 1 percentage point to 2.6% between 2008 and 2017. Fees and commissions income is the second most important income source, accounting for a share of 29% in operating profit. It rose by 6% from EUR 2.2 billion to EUR 2.3 billion in

2017.

Profitability of Austrian subsidiaries in CESEE



Source: OeNB.

Note: Time series without UniCredit Bank Austria AG's subsidiaries.

Although total assets of Austrian subsidiaries in CESEE increased by 8%⁶ from 2008 to 2017, net loans to nonbanks almost stagnated in this period.⁷ Loan growth picked up in 2017, however, mainly in the Czech Republic, Slovakia and Hungary (with yearly growth rates of 15%, 13% and 11%, respectively). In the Czech Republic and Slovakia, growth rates were comparatively high for corporate loans, housing loans and consumer loans. In Romania, credit growth was mainly registered in corporate and consumer lending, whereas in Russia, housing loans expanded particularly strongly. Austrian banks' subsidiaries in Hungary registered credit growth exclusively in the consumer loan segment. Overall, household loans in the loan book outpaced corporate loans in 2017, with lending in local currency prevailing. Furthermore, interbank claims rose substantially in 2017, accounting for 9% of total assets.

Turning to liabilities, customer deposits rose by 26% from 2008 to 2016 and by 10% in 2017. The share of deposits in total assets rose from 56% in 2008 to 73% in 2017, while at the same time interbank liquidity transfers were substantially reduced. This developments were supported by the Austrian supervisory Sustainability Package (for further details, please refer to page 39 of this report).

⁶ Adjusted for the transfer of ownership of UniCredit Bank Austria's CESEE subsidiaries to its Italian parent bank in 2016

One of the reasons was that holdings of debt securities (e.g. government bonds) had been rising since 2008 and temporarily peaked in early 2013. After a subsequent decline until 2014, Austrian subsidiaries have been increasing their debt securities holdings again.

Credit quality of Austrian banks improved further – nonfinancial corporations account for two-thirds of remaining NPLs

NPLs at Austrian banks continue to drop Austrian banks have further reduced their total NPLs: at end-2017, they totaled EUR 21 billion, of which 46% were originated in CESEE and 40% in Austria. Nearly two-thirds of total NPLs were claims on nonfinancial corporations and approximately one-third were claims on households (see chart 3.4). The consolidated NPL ratio of the Austrian banking system came to 3.4%, which compares with an NPL ratio of 2.5% for the domestic business alone. General provisions amounted to 2.2% of consolidated loans, with the coverage ratio at 63%. (If only provisions explicitly made for NPLs were considered, this ratio would decrease to 52%.)

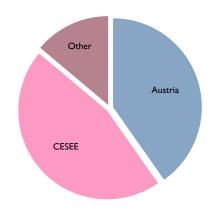
According to the European Banking Authority (EBA), the NPL ratio of Austrian banks has fallen below the European average. Austrian banks that report to the EBA had an NPL ratio of 3.7% at the end of 2017, while the average stood at 4.0%, which was mostly driven by countries like Greece, Italy or Portugal.

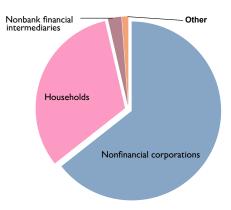
Chart 3.4

NPLs of the Austrian banking sector as of end-2017

NPLs broken down by residence

NPLs broken down by borrower





Source: OeNB

Note: Data include domestic and cross-border business as well as subsidiaries

Austrian CESEE subsidiaries improve their NPL ratio to below 5% Austrian banking subsidiaries in CESEE have further improved their loan quality, as their NPL ratio for all loans and advances came to 4.5% at the end of 2017.¹⁰

The aggregate NPL ratio of loans to households and nonfinancial corporations stood at 6.3%, and the coverage ratio was 72%. 11 At the country level, NPL ratios at Austrian subsidiaries in this segment continue to be highly heterogeneous: While the ratio remained low in the Czech Republic and Slovakia (at 2.6% and 3.5%, respectively), it still ranged from 8% to 14% in Hungary, Romania and

Nearly half of all NPLs of Austrian banks are not overdue, but deemed unlikely to be repaid and therefore classified as NPLs. 12% of NPLs are overdue between 90 days and one year and approximately 40% are overdue more than one year. At the borrower level, NPLs to households are less often categorized as unlikely to be repaid, but rather "more than one year overdue".

This ratio represents the share of nonperforming loans in total loans of Austrian banks.

¹⁰ Regarding the NPL ratios at the CESEE country level, please refer to chart 1.3.

¹¹ When only considering provisions explicitly built for NPLs, this ratio would decrease to 61%.

Croatia. At the end of 2017, foreign currency loans exhibited weaker credit quality than local currency loans, as the former's NPL ratio was still high at 8.5% (but down from 13.5% at end-2016), while the NPL ratio for domestic currency loans was 4.8%.

A number of initiatives on how to deal with NPLs were launched at the European level during 2017. The European Council set out an action plan to tackle NPLs in July 2017, which stressed that a comprehensive approach combining a mix of complementing policy actions at national and at the European level is the most effective way to address the existing stock of NPLs as well as the emergence and accumulation of new NPLs on banks' balance sheets.

In March 2018, the ECB published an addendum to its 2017 guidance to banks on NPLs. It describes supervisory expectations regarding the timely provisioning for loans classified as nonperforming from April 2018 onward. The addendum is not legally binding but serves as a basis for the supervisory dialogue between significant institutions and the ECB in its capacity as the competent supervisory authority.

Also in March 2018, the European Commission presented a comprehensive package of measures to reduce NPLs. The Commission's proposals must now go through the European legislative process before becoming binding for banks.

Capitalization of Austrian banks improved slightly, but momentum is fading

Until the third quarter of 2017,¹² EU banks continued to strengthen their capital ratios and their common equity tier 1 (CET1) ratio increased to 14.6%. This growth was driven by both an increase in capital and a decrease in the total risk exposure (mostly credit risk).

In 2017 as a whole, Austrian banks increased their CET1 capital by more than 4% to EUR 68 billion, which corresponds to 15.1% of their total consolidated risk-weighted assets (see chart 3.5). This is only a minor year-onyear improvement, however, given profits at a post-crisis high and a substantially reduced banking levy, showing that Austrian banks have lost some momentum in improving their capitalization compared to previous years. As a consequence, the CET1 ratio of Austrian significant institutions (SIs) fell further behind the SSM average in 2017 (13.3% versus 14.6%). Therefore, the OeNB encourages banks – especially SIs – to reinvigorate their efforts to improve their capitalization.

Consolidated CET1 ratio of Austrian banks

%

16

14

12

10

8

6

4

2

Chart 3.5

Note: Ratios before 2014 are an approximation of the current Basel III regime.

2015

2012

2013

Progress in European initiatives to tackle NPLs

¹² Full-year figures were not available at the cutoff date.

Further improvements in regulation of capital requirements

Austrian subsidiaries in CESEE increased their CET1 capital by 5.5% in 2017, with pronounced improvements in the Czech Republic, Poland and Romania. As a result, their overall CET1 ratio went up to 15.4%.

December 2017 saw the finalization of the Basel III capital framework. This global standard applies to banks with different business models, and it takes this into account by seeking to strike a balance between risk sensitivity and simplicity: While on the one hand, banks are allowed to take into account their specific risk experience and use internal models to calculate capital requirements, Basel III also establishes safeguards, such as input and output floors, that will prevent capital requirements from falling below a certain level. The recommendations of the Basel Committee on Banking Supervision are yet to be implemented in European law.

Given that a sound risk-based capital framework is an essential part of a stable banking system, internal models used by banks have to yield adequate risk weights for assets. In this context, the ECB made further progress in its targeted review of internal models (TRIM). It aims to assess the current adequacy and appropriateness of approved Pillar 1 internal models used by significant institutions. The first phase of the project started in April 2017. Furthermore, the ECB is also working on an update of its guide to internal models.

Box 2

Dividend policies of Austrian banks

In the aftermath of the global financial crisis, when the banking industry was faced with a difficult environment, Austrian credit institutions pursued a constrained dividend policy. After a period with strained economic conditions, five Austrian banking groups first concentrated on paying back the participation capital issued in 2009 (amounting to EUR 5.4 billion).¹ Related to that, the payment of dividends was subject to a number of restrictions. After the redemption of the aforementioned capital injections, Austrian supervisors expressed their expectations that banks should focus on earnings retention in order to bolster their capital base. As a result, the regulatory capital ratios of Austrian banks improved gradually over time.

As profitability returned to decent levels recently, profit-sharing demands from capital markets and investors gained momentum. In response, Austrian institutions have increased their dividend payments, and board members of credit institutions are also getting more expansive on their future guidance for dividend payments and increasing payout ratios.

However, all dividend payment proposals of Austrian credit institutions are periodically monitored by the supervisory authority and compared with the ECB's recommendation on dividend distribution policies. The recommendation includes, inter alia, the commitment of establishing internal dividend policies using conservative and prudent assumptions in order to satisfy the applicable capital requirements and outcomes of the supervisory review and evaluation process on a consolidated and an individual basis (including combined buffer requirements). The aim is to ensure an adequate balance between earnings retention and dividend payments.

¹ In October 2008, the Austrian government adopted a set of measures aimed at stabilizing the financial system. The support scheme was extended in June and December 2009 with the European Commission's approval under EU state aid rules.

Austrian banks and their subsidiaries continue to have strong liquidity positions

The liquidity coverage ratio (LCR) is defined as the ratio of high-quality liquid assets (HQLA) relative to stressed net outflows arising over a period of 30 days. It aims to ensure that institutions have a sufficient amount of highly liquid assets at their disposal to withstand conditions of severe funding stress for at least 30 days

at all times. The LCR as a minimum requirement was gradually phased in and reached its final value of 100% at the beginning of 2018.

As of end-2017, all Austrian institutions reported LCRs above the regulatory minimum. The weighted average LCR amounts to 145% at the unconsolidated level and 151% at the consolidated level. The constantly high LCR figures reflect the overall solid short-term liquidity position of the Austrian banking system.

The distribution of the liquidity buffer remains unchanged and is concentrated in the highest category of eligible level 1 assets, which accounts for 94%, while the share of level 1 covered bonds remains at 5%. Level 2a and level2b assets account for less than 1% each. Within the classification of level 1 assets, government bonds and central bank assets account for more than 80%.

However, the liquidity risk exposure in Swiss francs is relatively high at the aggregate level. The cumulated liquidity shortfall after one month and after three months amounts to EUR 4.2 billion and EUR 6.6 billion, respectively. This shows that while most banks seem to have heeded the lessons of the crisis, very few outliers have not. The Austrian banking system's U.S. dollar liquidity is ample at the aggregate level.

The Austrian supervisory guidance on strengthening the sustainability of the business models of large internationally active Austrian banks ("Sustainability

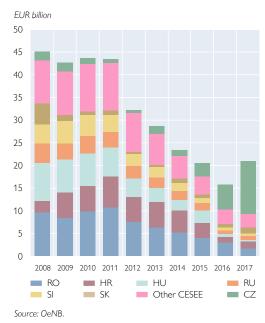
Package") stipulates that the supervisory authorities monitor the stock and flow loan-to-local stable funding ratios (LLSFRs) of the foreign subsidiaries of Austria's largest banks. As of end-2017, all 23 monitored subsidiaries of Erste Group Bank and Raiffeisen Bank International had a sustainable local refinancing structure (compliant with the guidance). Year on year, the aggregated stock LLSFR remained stable at 75% and two-thirds of all subsidiaries displayed a ratio below 80%, which is well below the early warning threshold of 110%.

An important consequence of the subsidiaries' stronger reliance on local funding is the substantial decrease in (gross) intra-group liquidity transfers from Austrian banks to CESEE credit institutions, which have more than halved since end-2011 and stood at

Large Austrian banks' local refinancing structure in CESEE remains sustainable

Chart 3.6

Intra-group liquidity transfers to CESEE credit institutions



The supervisory guidance was adopted by the OeNB and the FMA in 2012 and reviewed at the end of 2017. During this review, two of the three pillars of the original guidance — relating to capitalization and recovery and resolution planning — were withdrawn. For further details, please refer to https://www.oenb.at/en/financial-market/financial-stability/sustainability-of-large-austrian-banks-business-models.html . Please note that due to the transfer of the CESEE subsidiaries of UniCredit Bank Austria to its Italian parent bank in 2016, this bank is no longer an addressee of the supervisory guidance.

EUR 21 billion at end-2017 (see chart 3.6).¹⁴ Notwithstanding the overall improvement in the balance of the refinancing structure of Austrian banks' CESEE subsidiaries, supervisors must continue to monitor the LLSFR in order to avoid potential future boom-bust-cycles in local lending.

Box 3

The capacity of banks in CESEE to issue MREL-eligible debt

Sensible minimum requirements for own funds and eligible liabilities (MREL) for European banks which reflect actual banking structures and statutory resolution objectives are a key prerequisite for successful resolution processes in crisis situations.

As regards the issuance of MREL-eligible liabilities (i.e. debt instruments), banks are facing local European capital markets that show a wide variation in size and level of development. While access to international capital markets does not pose much of an impediment for significant institutions (SIs), the situation for banks in CESEE is ambiguous. Therefore, in 2017, the FMA together with the OeNB conducted a survey to assess the capability of credit institutions operating in CESEE to issue MREL-eligible debt, both locally and also in international markets. The results show that not only are local CESEE markets currently at an early stage of development compared with the euro area but also heterogeneous in this respect (see table 1).

Table 1

Comparison of national bond markets in the EU										
	EA-19	AT	CZ	SK	HU	PL	RO	HR	BG	
	% of GDP									
Total outstanding stock (in local currency)	122.4	115.0	40.9	52.4	40.0	36.2	14.3	11.3	6.2	
thereof										
government bonds corporate bonds	66.3 29.6	71.1 14.3	28.9 2.7	40.6 6.2	35.7 1.0	29.7 3.8	14.0 0.1	10.7 0.4	6.0 0.2	
bank bonds	26.3	29.7	9.3	5.6	3.4	2.7	0.3	0.1	0.04	

Source: ECB, Eurostat, OeNB.

Note: Data as of end-2016 (euro area countries) and end-2015 (non-euro area countries).

These differences may also impact on the ability of banks in CESEE to raise sufficient MREL-eligible funds. The observed figures suggest that two different groups can be identified: The debt markets in the Czech Republic, Slovakia, Hungary and Poland may be still significantly less deep in terms of volumes than the average euro area debt market but show a sufficient degree of development and profit from positive market sentiment; this suggests that issues ranging from covered bonds to additional tier 1 capital are feasible. In Romania, Croatia and Bulgaria, however, market participants only have very limited access to international markets and are therefore more limited in terms of instruments they can issue.

For the first group of countries, the survey results suggest that the potential annual issuance volume in local markets ranges from EUR 200 million to 300 million and that in international markets ranges from EUR 100 million to 750 million (depending on the type of instrument). For the second group, the ranges are EUR 100 million to 200 million (local issuances) and up to EUR 500 million (international markets).

¹⁴ Bucking the general declining trend, transfers to the Czech Republic skyrocketed over the last years and now make up more than half of all transfers, although the affected subsidiaries' refinancing position is typically strong.

In preparation of a capital market transaction, banks should fulfill some crucial prerequisites in the first place:

- obtaining at least one rating from a renowned rating agency,
- establishing a debt issuance program,
- building up investor appetite and confidence (for instance by roadshows, investor calls and press conferences) and
- (optionally) developing a secondary market curve by starting to issue covered bonds.

In case of cross-border banking groups operating with a subsidiary in CESEE, the entity to access capital markets is determined by the resolution approach: While a single point of entry (SPE) implies that the parent company handles the fulfillment of all external MREL, in a multiple point of entry (MPE) approach, the subsidiary needs to fulfill its targets on its own. To overcome potential issuance constraints in the latter case, one solution could be transitional periods that give the concerned subsidiaries sufficient time to build up enough MREL-eligible debt instruments.

Macroprudential policy in Austria: OeNB calls for caution regarding real estate lending standards

Residential real estate lending of Austrian banks continues to involve limited systemic risks, which is mainly due to the high risk-bearing capacity of both lenders and borrowers. Furthermore, loan growth rates and prices of residential real estate have stabilized. Yet, given the possibility of weakening lending standards against the backdrop of record low interest rates, the OeNB reiterates its call for prudent lending in real estate loans.

The volume of loans granted by Austrian banks to domestic households for the purpose of funding residential real estate increased by 4.7% between end-2016 and end-2017. Growth had hovered around similar levels since the end of 2015, but recent growth rates remained substantially below those seen before the global financial crisis. Growth in residential real estate prices stabilized in 2017, albeit early 2018 saw some uptick (see section "Corporate and household sectors in Austria" for more details). It is worth noting that the growth rates of residential real estate loan volumes and prices have not correlated over the past decade, indicating that price surges of the past were not funded by excessive borrowing by real estate buyers.

Against the backdrop of (mostly) sustainable lending standards in the past, record low interest rates and strong economic growth, NPL ratios have remained low. At the end of 2017, the NPL ratio of loans collateralized by residential real estate granted to domestic borrowers by IFRS banking groups¹⁵ was 1.6%, which is the same level recorded a year ago. Furthermore, Austrian banks' residential real estate loans made up about 150% of their aggregate CET1 capital at end-2017. This ratio is well below the EU average but has edged upward in the recent quarters, as has the share of residential real estate loans in banks' balance sheets over the past decade (yet, their weight – under 15% at end-2017 – still remains rather limited).

Data at the borrower level – i.e. micro data regarding households' risk-bearing capacity – from the Eurosystem's Household Finance and Consumption Survey

Systemic risk from real estate lending remains limited

¹⁵ This information is available for IFRS banking groups only; they account for more than two-thirds of the market.

(HFCS)¹⁶ show that Austrian households that borrow in order to buy residential real estate typically display income and wealth levels far above the median, while households with lower income and wealth benefit from subsidized and social housing as well as Austria's highly regulated rental market.¹⁷ The evolution of macroeconomic indicators shows stable (if not decreasing) levels of household indebtedness in Austria: Both households' overall debt in relation to GDP and their mortgage loan volumes in relation to all households' disposable income stood at about 50% as of end-2017. In addition, given that the shares of foreign currency and variable rate loans have declined, borrowers' exposure to exchange rate and interest rate risks has also decreased.

OeNB calls on banks to exercise caution in real estate lending The systemic risks for the Austrian banking sector from residential real estate lending remain rather limited. Nonetheless, the OeNB sees some challenges for financial stability ahead: the share of housing loans in banks' balance sheets is increasing and lending standards show indications of unsustainability for a non-negligible share of newly granted loans. Against the backdrop of record low interest rates, strong increases in property prices over the past decade and positive macroeconomic sentiment, the OeNB calls on Austrian banks to exercise caution with regard to lending standards. The OeNB will also intensify its supervisory dialogue with banks regarding their risk stance toward real estate lending.

Countercyclical capital buffer rate remains at 0%

However, there are no signs of excessive growth of total credit, given that its main indicator, the credit-to-GDP gap, remains negative for Austria. Therefore, the Austrian Financial Market Stability Board recommends that the FMA leave the countercyclical capital buffer rate at 0% of risk-weighted assets from July 2018.¹⁸

Volume of foreign currency loans continues its year-long downward trend

The measures taken by the Austrian supervisory authorities to curb foreign currency lending still have a positive impact: the outstanding volume of foreign currency (FX) loans to domestic nonfinancial borrowers continued its



Chart 3.7



¹⁶ HFCS data are only available at a time interval of three to four years and the latest results stem from the 2014 wave.

¹⁷ See, e.g., Albacete, N., P. Fessler and P. Lindner (2016). The distribution of residential property price changes across homeowners and its implications for financial stability in Austria. In: Financial Stability Report 31. Vienna: OeNB. 62–81.

The credit-to-GDP gap is defined as the difference between the credit-to-GDP ratio and its trend. A positive gap indicates that the current credit-to-GDP ratio is higher than its trend, which, according to the methodology proposed by the Basel Committee on Banking Supervision (BCBS), indicates excessive credit growth. For further details regarding the countercyclical capital buffer in Austria, please refer to https://fmsg.at/dam/jcr:70d08b35-4158-499d-acca-24a952a2c9ae/Indicators_CCyB_FMSG_1_2018.pdf

downward trend in 2017, declining by 18.6% on an exchange rate-adjusted basis. At the end of 2017, these loans made up EUR 22 billion, with loans to households accounting for about three-quarters of this volume. The Swiss franc is the dominant loan currency by far, representing 96% of total FX loans to households.

Since October 2008, when the FMA strongly recommended that banks refrain from granting new FX loans to households, their exchange rate-adjusted volume declined by 67% (for Swiss franc denominated loans, see chart 3.7). Owing to the steady decline, the share of FX loans in total loans to households fell sharply, coming to 10.5% at end-2017, well below its all-time high of 31.7% in spring 2006. Based on their substantial decline and the size of the remaining portfolio, FX loans do not represent systemic risks for the Austrian financial system.

Notwithstanding positive developments, legacy issues continue to be a concern and warrant close monitoring. Around three-quarters of FX loans are bullet loans coupled with repayment vehicles. Due to unfavorable exchange rate movements¹⁹ and the underperformance of repayment vehicles, these loans may face a funding shortfall between the expected final value of repayment vehicles and the amount outstanding at loan maturity. In order to monitor the repayment vehicles' performance with a special view to assessing potential funding shortfalls at maturity, the OeNB, in cooperation with the FMA, conducts a yearly survey among a representative sample of Austrian banks. This year's survey showed that at the end of 2017, the estimated total shortfall stood at EUR 4.4 billion or 29% of the outstanding loan volume.²⁰ As three-quarters of all repayment vehicle loans have a remaining maturity of more than seven years, it is imperative to use the remaining time to address any issues. Therefore, the OeNB strongly recommends that banks and borrowers intensify their bilateral negotiations to find sustainable, tailor-made solutions and thereby mitigate risks stemming from these loans.

Austrian banks' CESEE subsidiaries further reduced their FX loan volumes. In 2017, the volume of FX loans fell by 2.1% (exchange rate adjusted) to EUR 31 billion and the share of FX loans in total loans dropped by 3.4 percentage points year on year (to 27% at the end of 2017). The FX share in loans to households declined particularly sharply, from 21% to 17%. The major currency in the FX loan segment is the euro, accounting for 78% of total FX loans, with the Swiss franc and U.S. dollar accounting for the remainder (11% and 10%, respectively).

Foreign currency loans are not a systemic risk

Funding shortfall remains a risk associated with loans linked to repayment vehicles

Austrian banks'
CESEE subsidiaries
continue to reduce
foreign currency
loan volumes

¹⁹ Such as the sharp appreciation of the Swiss franc against the euro since the extension of loans.

Please note that due to currency movements and the performance of repayment vehicles, these are volatile figures.

Crypto coins: current risks and future perspectives

Crypto coins are private digital tokens, sometimes referred to as "currencies;" ownership of such tokens can be transferred and recorded through a decentralized mechanism, sometimes referred to as "payment system." After the emergence of bitcoin in 2009, more than one thousand crypto coins have emerged over the last decade.

A number of crypto coins can be traded on private platforms among private users against official currency. In contrast to official currencies, most crypto coins are not the liability of an issuer that holds assets and manages the resulting balance sheet in order to stabilize the coins' value. As a result, their market value, depending on supply and demand, can be very unstable. While this instability makes them unattractive for monetary purposes (i.e. making payments, comparing prices and storing value) as long as stable official currencies are available, it invites speculative activity.

No major financial stability risk while the market is still small ...

2017 saw an extraordinary rise of market activity and prices for many crypto coins. In the first quarter of 2018 however, market activity dropped significantly from a high reached in the previous quarter, while exhibiting persistent volatility.¹

Close to 200 coin trading platforms are known across the globe. Due to the small size of these markets, they currently do not pose a significant risk for financial stability. The global market value of all crypto coins combined was EUR 233 billion as of mid-April 2018, corresponding only to one-third of the gross financial assets owned by households in Austria (EUR 646 billion).²

... but regulation is warranted due to risks to investors

Most crypto coins are deliberately designed to avoid government involvement. Therefore many coin-related activities are not subject to regulation and supervision in most jurisdictions. This results in significant risks for individual investors. The European supervisory agencies have issued a number of warnings in order to raise awareness for consumer protection issues related to significant price risks, lack of robust and transparent markets, cyber risks etc. In addition to echoing these warnings, the FMA has published on its website some guidance regarding the current regulatory and supervisory treatment of crypto-related activities in Austria.³ The OeNB has also warned about the risks associated with crypto coins and continually aims to contribute to a proper understanding of these phenomena through various public communication efforts.

Continued supervisory monitoring is aimed at preventing any spillover of risks from crypto markets to the regulated and supervised financial sector. In order to prevent the use of crypto coins for money laundering purposes, the EU updated its Anti-Money Laundering Directive in December 2017. As a result, providers of electronic wallets for storing crypto coins and of platforms for trading will be required to check the identity of their customers. It has also been observed that banks seek to fulfill their existing obligations under these laws by requiring customers that intend to transfer proceeds from selling crypto coins to their bank accounts to provide documentation on the origin of such proceeds.

With regard to tax obligations, authorities in Austria and other countries have clarified that existing tax laws apply to various crypto-related activities.⁴ Austria's Ministry of Finance has recently set up an advisory panel to explore possible regulatory measures with respect to crypto coins and other financial technologies with a view to promoting the beneficial use of innovation, including the use of coins to raise funds for business projects (so called "initial coin offerings").⁵

- $^2 \ Sources: \ https://www.oenb.at/isaweb/report.do? lang=DE\&report=801.1.2; \ https://coinmarketcap.com/coins/views/all/sources/doi/notes/doi/$
- ³ https://www.fma.gv.at/en/cross-sectoral-topics/fintech/fintech-navigator/
- ⁴ https://bmf.gv.at/steuern/kryptowaehrung_besteuerung.html (available in German only).
- $^{5}\ https://www.bmf.gv.at/presse/LoegerKryptowaehrungen.html\ (available\ in\ German\ only).$

On an international level, the G 20 have called for continued monitoring of these markets, whereas the EU has started to explore the potential areas for regulation in the context of its "Fintech Action Plan."

Blockchain: a future world without intermediation?

Blockchain, the payment system used in bitcoin and some other crypto coins, is often referred to as the "Internet of value." Whereas the Internet uses a decentralized mechanism to store, publish and transfer digital information that can be easily copied, blockchain is a decentralized mechanism to store, publish and transfer digital information that cannot be copied, e.g. unique tokens in limited quantity ("coins").

While both new and established participants in many industries, including the financial sector, currently investigate the possibility of employing blockchain and various other technical innovations for various purposes (e.g. cost saving, introducing new products etc.), there is no reason to expect that blockchain will eliminate the function of intermediaries like banks. To a large extent, financial intermediation and processing payments is more than just the transfer of cash between persons (e.g. between payer and payee, saver and debtor, etc.); it also implies that financial intermediaries take over risks on behalf of customers. Blockchain might provide a secure way for transferring and recording digital tokens, but neither does it eliminate nor absorb risks regarding the token's accessibility, value, liquidity etc. Unless these risks are borne by an intermediary, they will remain with the individual customer.

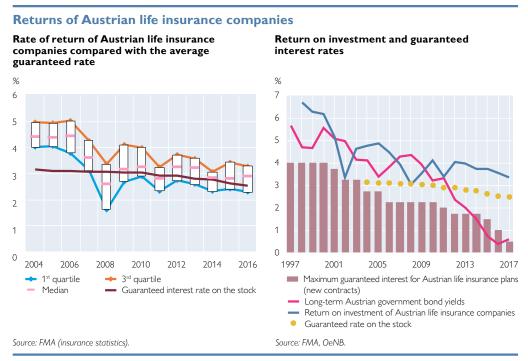
Prolonged period of low interest rates as a challenge for the insurance sector

Despite improved economic conditions for insurance companies, the persistent low yield environment and the risk of a sudden rise in interest rates remain a challenge.

Especially life insurance companies have been suffering under these market conditions. In view of the prevailing low interest rates, the FMA lowered the maximum guaranteed rate in life insurance plans from 1% to 0.5% as from January 1, 2017 (for new contracts only). Life insurers continue to adapt to this challenging environment by shifting their business mix toward products that are directly linked to market performance, in which the investment risk is borne by the policy holder. As a result of these developments, life insurance products have become less attractive and premiums decreased by about 5% in 2017. This was strongly driven by a fall in single premiums (–21% year on year), but regular premiums also declined, continuing their negative growth for the seventh consecutive quarter.

The right-hand panel of chart 3.8 shows that in spite of all adversities, investment returns (i.e. the share of profits from investments in average total investments) of life insurance companies (blue line) are about 1 percentage point higher than the average guaranteed rate on the stock (yellow dots). The left-hand panel shows a similar result in more detail: for most life insurance companies the return on assets is higher than the guaranteed interest rate on the stock.

Life insurers' average return of investment is higher than average guaranteed interest rate



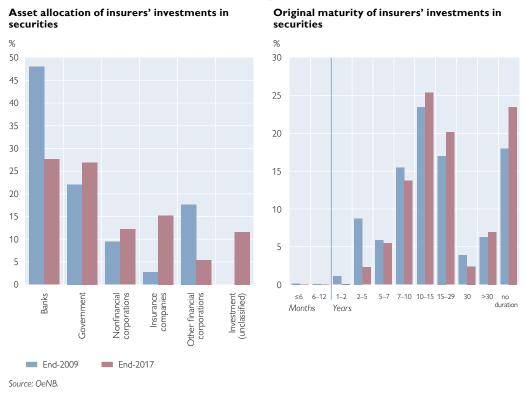
Regulatory and economic environment leads to significant change in investment behavior The Austrian insurance sector has been adapting to the macroeconomic environment as well as to regulatory challenges such as Solvency II. Both the adaptations to these new rules and the low interest rate environment have been driving the investment behavior of insurance companies to a certain extent. From 2009 to 2017, the exposure to bank securities was significantly reduced (by 20 percentage points) while investments in government bonds increased by 5 percentage points. Also, compared to insurance companies in other European countries, Austrian insurers hold a smaller proportion of their assets in government bonds (median of 14% versus 30% at large European insurers with total assets above EUR 12 billion as of December 31, 2016). However, the Austrian insurance market is very heterogeneous, and a small number of large insurance undertakings account for the majority of assets (e.g. the top 5 account for more than 70% of total assets).

As the Solvency II-induced capital requirements and asset-liability management activities address the duration gaps of life insurers and make short-term securities particularly unattractive, given the long duration of life insurers' liabilities, there has also been a shift in the terms of securities' durations from short durations (2 to 5 years) toward the 10-to-15 and 15-to-29 year bands. Insurers apparently anticipated the new rules before they came into effect, because the shifting took place already before the introduction of Solvency II; as a consequence, between 2014 and 2016 no significant shifts could be observed.

²¹ Source: EIOPA.

Chart 3.9





Adapted framework for payment services continues to pose challenges

The revised European Payment Services Directive (PSD2) is expected to be transposed into Austrian law through the adoption of the new Austrian Payment Services Act (Zahlungsdienstegesetz, ZaDiG), which will take place with a delay of around half a year in June 2018. The main innovations include the introduction of a new category of regulated payment services (i.e. payment initiation and account information services offered by so-called third party providers) as well as substantially increased security requirements, such as strong customer authentication.

However, there are essential practical issues that are still unresolved due to delays in the implementation of the accompanying European regulatory technical standard (RTS). In particular, this concerns the specifications for common and secure open communication standards, which are the basis for the obligatory communication between the different payment service providers (banks, payment institutions and the new third party providers). The relevant RTS will not be applicable before September 2019, which causes serious challenges for market participants that are currently developing solutions for mutually compatible application programming interfaces (APIs). Besides, crucial current developments in electronic payments, such as the distributed ledger technology and virtual currencies (see box 4 on crypto coins in this report), are currently covered neither by the PSD2 nor by the new ZaDiG. In this environment, it remains to be seen to what extent (new) market participants will apply for licensing or registration as payment institutions in Austria under the new regime.