

The profitability of Austrian banks' subsidiaries in Croatia, Hungary and Romania and how the financial crisis affected their business models

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Croatia, Hungary and Romania are core host markets for Austrian banking groups. While Austrian banks' subsidiaries in these countries were facing similar challenges at the onset of the financial crisis, their profitability has been very heterogeneous since then. In this study we analyze the reasons for these diverging paths, starting off with a brief overview of banks' competitive environment and cost structures and then examining the particular pressure on banks' net interest income and its margin since 2010–11. Finally, we analyze credit quality and provisioning levels. We find that operational cost efficiency at the subsidiaries under review did not differ substantially from that of the peer group, but that net interest income, which is by far the most important profit source, has been under particular pressure and that high volumes of nonperforming loans (including those in foreign currency) continue to weigh on balance sheets. Moreover, we see that striking changes in the funding models of these subsidiaries have taken place, as they steered away from intragroup funding and increasingly turned toward local funding sources. In several of these aspects, Austrian subsidiaries in Hungary and Romania faced higher pressures to adapt their business models than their peers in Croatia, where subsidiaries still have not increased provisioning to higher regional coverage levels.

JEL classification: G01, G21

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When the financial crisis reached Central, Eastern and Southeastern Europe (CESEE) in 2009, Austrian banks' subsidiaries in Croatia, Hungary and Romania had total assets of more than EUR 93 billion (at end-2008), which represented more than one-third of all Austrian banking assets in the region.² At this time, these subsidiaries were faced with common challenges: In all three host countries, lending had been

mostly in foreign currencies, orderly deleveraging set in, subsidiaries changed their funding models by reducing their dependence on liquidity transfers by parent banks, and the low interest rate environment started to affect asset yields and funding costs.³ However, despite the similarities, it turned out that these subsidiaries fared rather differently until the end of 2014: While their aggregate total assets declined by 8% to

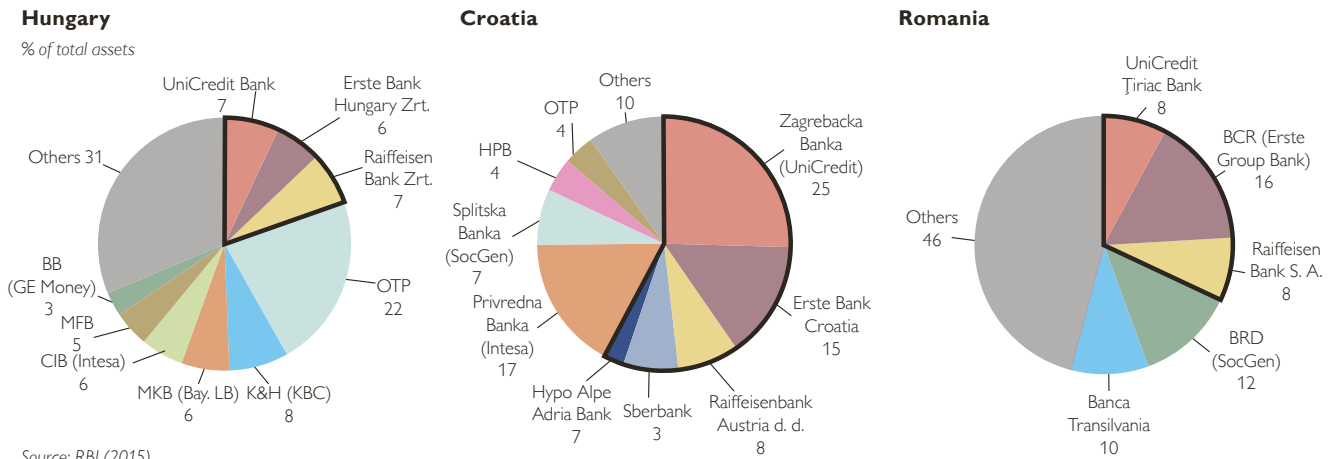
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² The CESEE peer group used in this study comprises Austrian banks' subsidiaries in Albania, Belarus, Bosnia and Herzegovina, Bulgaria, the Czech Republic, the former Yugoslav Republic of Macedonia, Montenegro, Poland, Russia, Serbia, Slovakia, Slovenia and Ukraine; it does not include Austrian subsidiaries in Kazakhstan, Kyrgyzstan, Latvia, Kosovo and Turkey, for which no continuous time series exist over the entire time period under consideration. Given its dynamic nature (e.g. banks exiting certain markets), this peer group had a changing composition over time.

³ Given that no single bank data are published in this study, the analysis is based on aggregate data for Austrian subsidiaries in the countries discussed and it is therefore not necessarily indicative of figures and trends at the individual bank level. Also, it has to be noted that while the bank sample in the three countries remained stable, Hypo Alpe-Adria-Bank International AG was not active in Hungary and Romania and its restructuring therefore only affected data for Croatian subsidiaries.

Chart 1

Banks' market shares by the end of 2014



Source: RBI (2015).

EUR 86 billion since the end of 2008 (other Austrian CESEE subsidiaries: +2%), it is the subsidiaries in Hungary (−25%) and in Romania (−6%) that shrank in size, while growth continued in Croatia (+7%). Also, profitability levels diverged considerably: While Croatia remained a profitable host market throughout the crisis, substantial losses occurred in Romania and Hungary. At first glance, one might therefore wonder why Croatia has been included in this study. The reason is that all three countries belong to Austrian banks' core markets and nonperforming loan ratios there are still high (around 20%); but while subsidiaries in Hungary and Romania have been addressing this issue aggressively over the last few years (which resulted in substantial losses) and the economic situation is finally improving in these countries, in Croatia coverage levels lag their peers' and the macroeconomic environment remains challenging. Notwithstanding their differences, we therefore chose to analyze Austrian subsidiaries' profitability in these countries together in this study. We first

focus briefly on the competitive environment and cost structures, then take a close look at net interest income and margins, to finish with thoughts on credit quality and provisioning. This study also concludes a recent series on Austrian subsidiaries that covered those in Russia, Turkey and Ukraine as well as the Czech Republic and Slovakia.⁴

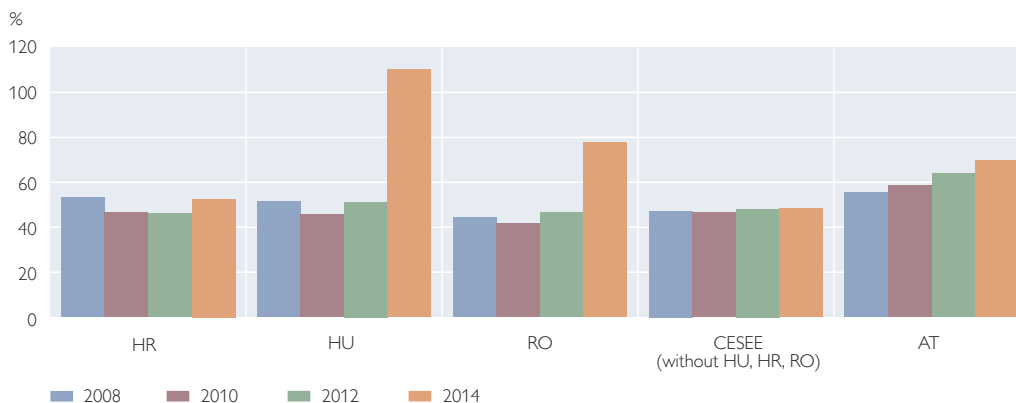
1 Competitive environment and cost structures

At the end of 2014, Austrian banks' subsidiaries had a combined market share of 58% in Croatia, 20% in Hungary and 32% in Romania. A comparison of the competitive environment reveals that market structures are quite heterogeneous in these three countries. In Croatia and Romania, subsidiaries of UniCredit Bank Austria and Erste Group Bank, respectively, are the market leaders, while the Hungarian banking market is dominated by locally-owned OTP Bank (see chart 1). The comparably high degree of concentration of the Croatian banking market is highlighted by the top three banks' market share of 57%, which is signifi-

⁴ For further information, please refer to Wittenberger et al. (2014) and Kavan and Widhalm (2014).

Chart 2

Cost-income ratios of Austrian banks and their subsidiaries



Source: OeNB.

cantly higher than Hungary's and Romania's values of 37% and 38%. From a historical perspective, the Hungarian and Croatian banking sectors are getting increasingly concentrated, while the Romanian market is trending toward greater dispersion.

Contrary to economic theory, operational efficiency did not benefit from higher market concentration: The cost-income ratio (CIR) was broadly stable from 2008 to 2014 and did not diverge substantially from the CESEE average. The situation clearly worsened, however, in 2014, as Hungarian legislative measures resulted in Austrian subsidiaries in Hungary reporting an aggregate operating loss, and operating income in Romania was negatively affected by restructuring measures. In Croatia, the CIR did not change significantly and remained close to that of the CESEE peer group (see chart 2).

So although market structures are diverse in the three observed countries and Austrian banks' subsidiaries take up varying market shares, their operational efficiency (excluding one-off effects) did not differ substantially from that of their CESEE peer group; at close to 50%, the CIR of Croatian, Hungarian and Romanian subsidiaries has re-

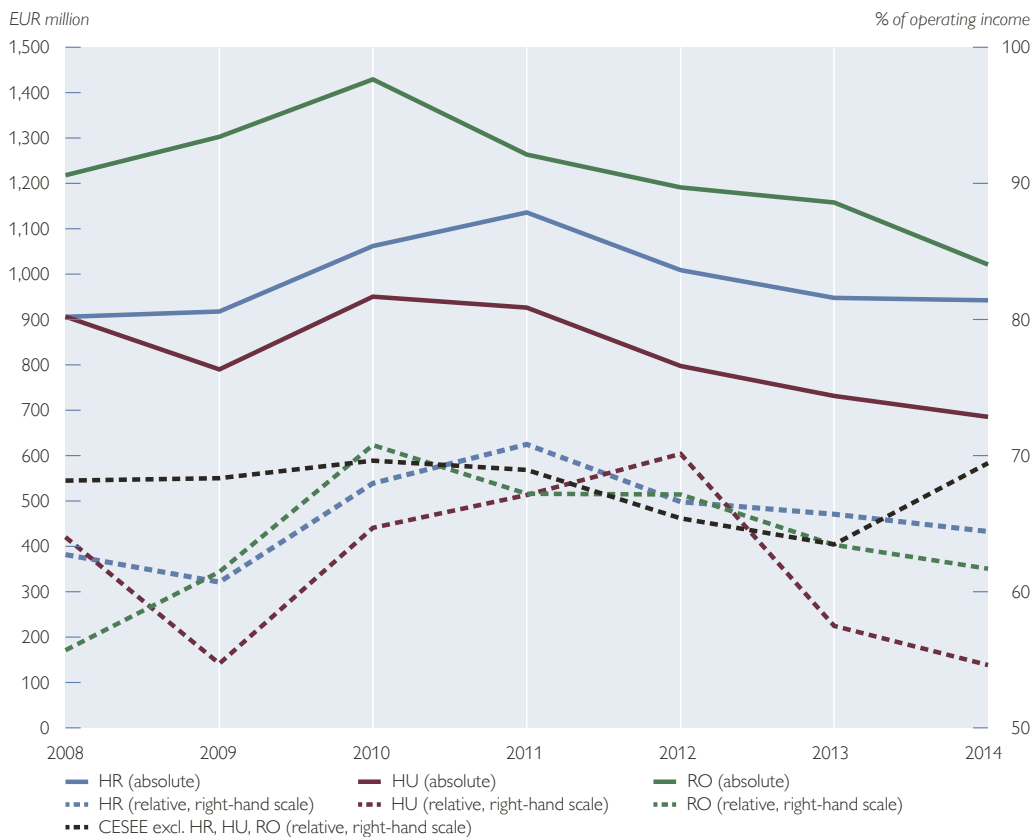
mained broadly stable and substantially below the level recorded in the banks' Austrian home market.

2 Operating income and net interest margin

Taking a closer look at the operating income of Austrian subsidiaries in Croatia, Hungary and Romania from 2008 to 2014, we see that it was clearly dominated by net interest income, whose average share was 66% in Croatia, 62% in Hungary and 64% in Romania. While the income split of Austrian subsidiaries in Croatia – with fee income accounting for 21% and (volatile) trading income for 2% – was fairly similar to the one in other CESEE host countries, subsidiaries in Hungary and Romania had a substantially higher share of trading income (8% and 7%, respectively). In absolute terms, the subsidiaries saw their net interest income peak in 2010 (2011 in Croatia) and decline strongly since then: the decrease until 2014 was –17% in Croatia, –28% in Hungary and –29% in Romania, a trend that was accompanied by a decreasing share of net interest income in overall operating income, pointing to particular pressure on this income item (see chart 3).

Chart 3

Net interest income in absolute and relative terms



Source: OeNB.

2.1 Adverse margin and volume pressures affect net interest income

In order to explain this adverse pressure, we analyze the drivers of net interest income in two ways: first, by simple income decomposition, and second, by using a more granular approach to understand the interplay between the asset and liability pricing of subsidiaries' balance sheets. To start, we look at net interest income as the product of the net interest margin before risk (NIM, defined as net interest income over average total assets)⁵ and average total assets (given that the vast majority

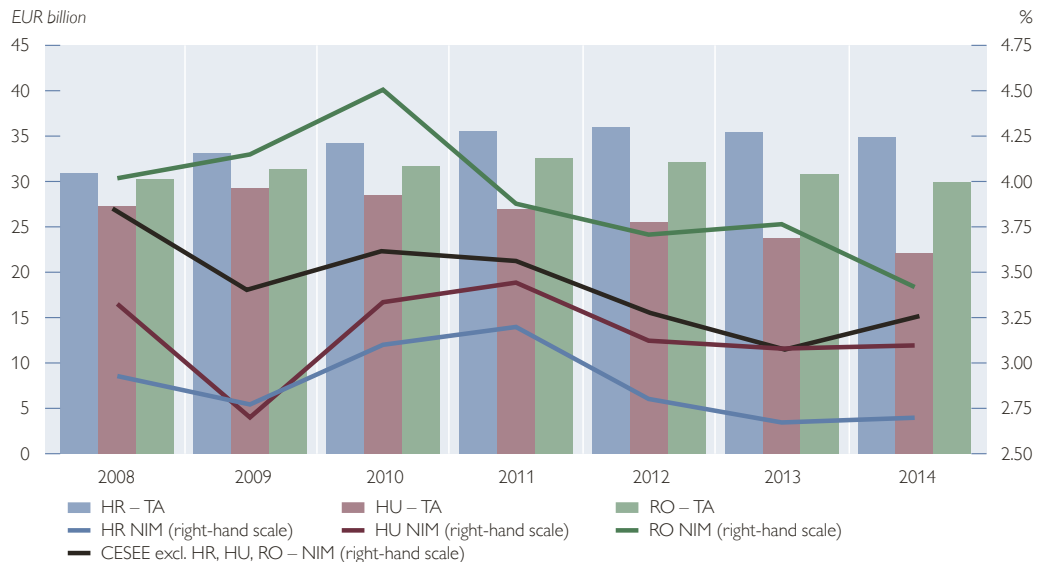
of assets are interest bearing for banks, see footnote 8). At the latest since 2011, we have been able to observe that Austrian subsidiaries in Croatia, Hungary and Romania saw their NIM shrink, while average total assets in Croatia and Romania levelled out and then started falling (deleveraging in Hungary had already set in earlier). This implies simultaneous and adverse margin and volume pressures (see chart 4). While reductions in balance sheet size can be explained by a combination of various factors, including weak credit demand as well as orderly deleveraging,⁶ this first net interest margin definition does not

⁵ Average total assets for any given year are calculated as the simple average of consecutive year-end values.

⁶ For further details, especially on changes in the asset composition, please refer to information provided in section 2.3.

Chart 4

Average total assets (TA) and net interest margins (NIM)



Source: OeNB.

Note: Due to data availability issues, data for the former Yugoslav Republic of Macedonia have been excluded from the CESEE peer group.

allow analyzing key drivers much further, as it depends itself on total assets, which comes close to a circular reasoning.

2.2 Total spread of subsidiaries under pressure since 2010–11

Given the above-mentioned caveats of the first approach, we continue with a more granular analysis to explain the substantial fall in net interest income observed since 2010–11: We break down the (stock-based) total spread

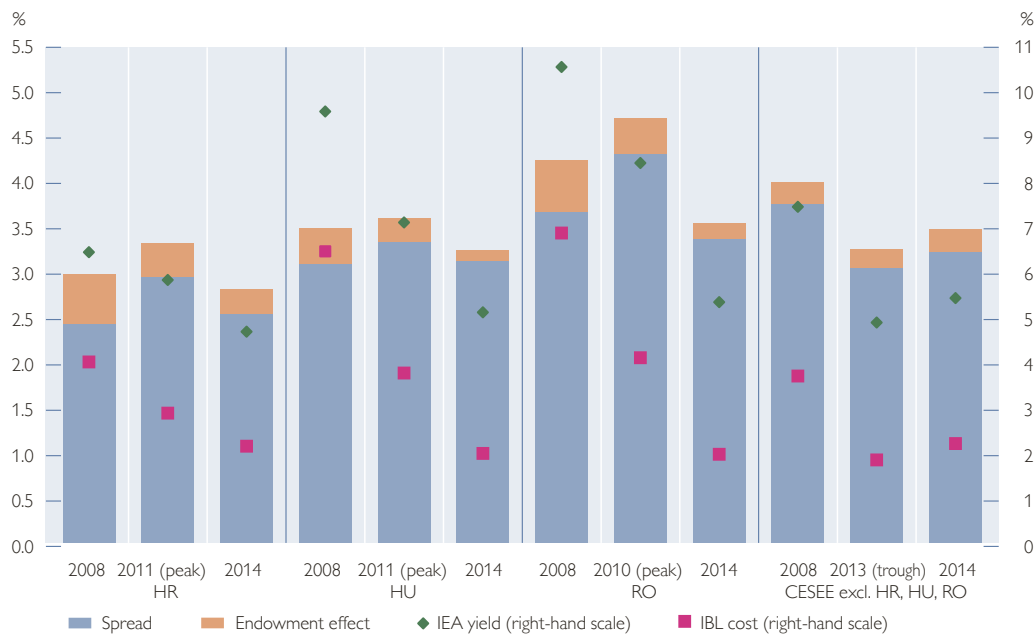
earned into interest revenue on interest-earning assets and interest expense on interest-bearing liabilities, which allows greater insights and the identification of key drivers weakening operating profitability. In order to do this, we use the formula for the total spread on interest-earning assets and interest-bearing liabilities proposed in a study by the ECB (2000; p. 27), which defines the total spread as the combination of a spread and endowment effect.

$$\begin{aligned}
 \text{total spread} &= \text{spread} + \text{endowment effect} \\
 &= \left[\frac{\text{interest revenues}}{IEA} - \frac{\text{interest expenses}}{IBL} \right] \\
 &+ \left[\frac{IEA - IBL}{IEA} \right] \cdot \frac{\text{interest expenses}}{IBL}
 \end{aligned}$$

where IEA are interest-earning assets, IBL are interest-bearing liabilities, and the endowment effect is “the gain from the fact that some part of IEA” – i.e. the part that exceeds the volume of IBL – “does not have an interest cost” – given that it is financed by non-interest bearing items, such as equity. “This calculation disregards the cost of equity capital.” (ECB, 2000).

Chart 5

Decomposing the total spread of Austrian banking subsidiaries in CESEE



Source: OeNB.

Note: The difference between the IEA yield and the IBL cost is the spread, while the spread and the endowment effect add up to the total spread.

This analysis allows a more precise explanation of factors that affected net interest income in Croatia, Hungary and Romania and also sheds light on the different developments in other host markets of Austrian banks. Over the entire period from 2008⁷ to 2014, the first finding is that growth in average interest-earning assets (IEA) and interest-bearing liabilities (IBL) has been very heterogeneous:⁸ While the aggregate volumes increased in other CESEE host countries (by 10% and 4%, respectively), Austrian subsidiaries in Croatia also witnessed an increase (by 10% and 11%), but they stayed flat in Romania and saw a strong decline in

Hungary (–19% in both). Secondly, while in other CESEE markets the total spread seems to have hit bottom in 2013, it rose in the first years of the crisis in the three analyzed countries and fell to lower levels thereafter. Over the entire observed period, it fell slightly in Hungary and Croatia and decreased strongly in Romania, with the latter being the only host market of the three with a total spread still slightly above that seen in other CESEE host markets (see chart 5). In 2014, the total spread stabilized in Croatia and Hungary, while taking another dip in Romania.

In order to explain these developments in more detail, we subdivide the

⁷ Average IEA and IBL for any given year are calculated as the simple average of consecutive year-end values. Due to data availability issues, average IEA and IBL for 2008 have been calculated for the period from March 2008 to December 2008, and data for the former Yugoslav Republic of Macedonia have been excluded from the CESEE peer group.

⁸ In this study we define IEA as loans to nonbanks and credit institutions, debt instruments held, cash and balances with central banks (that made up more than 90% of total assets), while IBL include deposits from nonbanks and credit institutions as well as other debt instruments (that made up more than 80% of total assets).

time period in years before and after the peak in the total spread for each country:

- Croatia is the host market with the lowest total spread for Austrian subsidiaries (when compared to Hungary and Romania); it reached a peak of 333 basis points (bp) in 2011: This meant a gain of 34bp since 2008, which was caused by a spread increase of 52bp (to 295bp) and a change in the endowment effect of -17bp (to 37bp). The former was the result of the average cost paid on IBL (-113bp to 288bp) falling more quickly than the average yield earned on IEA (-62bp to 583bp), while the latter was mostly the result of the substantial reduction in the average cost of IBL. From its peak to 2014, the total spread dropped by 51bp and thereby overcompensated for the gain made since 2008: While the endowment effect only contributed -10bp to this fall, it was mostly due to a spread reduction of 41bp, which was caused by the average yield on IEA (-115bp) falling faster than the average cost on IBL (-73bp).
- At Austrian subsidiaries in Hungary, the maximum total spread was also reached in 2011 (at 360bp): The increase of 11bp since 2008 had been caused by a spread gain of 24bp (to 334bp) and a decrease of the endowment effect (-13bp to 26bp). The former resulted from a slightly faster fall in the average cost on IBL (-270bp to 377bp) than in the average yield on IEA (-246bp to 711bp) and the latter from the strong fall in IBL costs. From 2011 to 2014, however, the total spread lost more than those gains, as it fell by 35bp, caused by the average yield on IEA decreasing faster

(-199bp) than the cost of IBL (-178bp) and the endowment effect declined further to 12bp.

- Austrian subsidiaries in Romania reached the highest total spread of the three analyzed host countries in 2010 (472bp), caused by the highest spread (432bp), which again resulted from IBL costs falling faster (-277bp to 411bp) than the IEA yield (-213bp to 843bp), and an endowment effect of 39bp. Since then, the total spread fell substantially (-117bp) and reached 354bp. This was caused by a substantial reduction in the yield on IEA (-309bp), which could not be compensated for by the fall in IBL costs (-214bp), and a further reduction in the endowment effect to 17bp. It can thus be concluded that in all three countries, the first years of the crisis until 2010-11 were characterized by an increase in the spread, as asset yield losses were overcompensated for by cheaper funding, while this trend went into reverse over the past few years, when the fall in funding costs seemed to have bottomed out (at around 200bp). The (much smaller) endowment effect fell substantially over the years due to the strong decline in IBL costs.

In comparison to these developments, the total spread of the – varying sample of – Austrian banking subsidiaries in other CESEE countries behaved rather differently: It fell until 2013 by 75bp to 326bp, almost entirely caused by the IEA yield falling faster (-257bp to 489bp) than the average IBL costs (-186bp to 184bp). In 2014, it recovered by 22bp, as IBL costs rose by 36bp, but IEA yields rose by 54bp, which points to a potential recovery in profitability in the rest of CESEE.

2.3 Interest-earning assets affected by provisioning, deleveraging and a substantial fall in yields

In the previous sections, we discussed downward pressures on total assets (IEA and IBL followed the same trend) as well as the pressure on margins since 2010–11. In the next two sections, we conclude the analysis of operating profitability by turning to the most important shifts in the structure of IEA and IBL of Austrian subsidiaries in Croatia, Hungary and Romania since end-2008 and highlight the dramatic fall of yields across various asset and liability classes. It is important to note upfront that two exogenous circumstances have affected asset composition: The share of debt instruments in total assets has been positively affected by the low yield environment (see the right-hand panel of chart

6) raising valuations, while the share of (net) lending was negatively affected by provisioning requirements during the crisis (see section 3 for more information on credit quality and coverage ratios).

- Austrian subsidiaries in Croatia exhibited the most stable asset portfolio, as loans to nonbanks consistently accounted for around two-thirds of total assets, while the share of inter-bank lending decreased from 17% at end-2008 to 11% at end-2014, which was compensated for by higher shares of debt instruments held (rising from 9% to 12%) and cash and balances with central banks (rising from 4% to 6%).
- Hungarian subsidiaries, on the other hand, saw the share of loans to nonbanks in their total assets decrease substantially from 72% to 53%; this

Chart 6

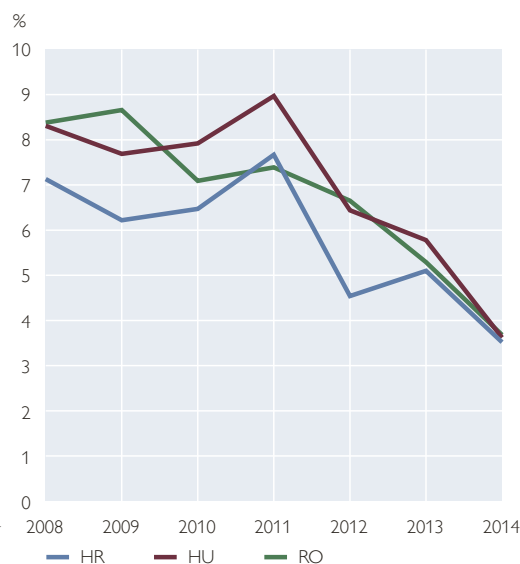
Annual percentage rate of charge for house purchase loans (new business)



Source: ECB.

Note: Loans exclude revolving loans and overdrafts, convenience and extended credit card debt. Croatian data only available since December 2011.

Long-term government bond yields



Source: Eurostat.

Note: All data as of December of the respective year. Long-term government bond yields are calculated as monthly averages and refer to central government bond yields on the secondary market, gross of tax, with a residual maturity of around 10 years. The bond or the bonds of the basket have to be replaced regularly to avoid any maturity drift.

decline was compensated for first by a sharp increase in debt securities held (from 15% to 27% until end-2013), which was then turned into an increase in interbank lending during 2014 (its share increased from 8% at end-2013 to 25% at end-2014, while the share of debt securities fell back to 13%).⁹ Turning to changes in the gross loan volume between end-2008 and end-2014 (before provisioning, not adjusted for exchange rate fluctuations), it is noteworthy that Austrian subsidiaries in Hungary reduced their loan volume to nonbanks much faster in the corporate (−40%) than in the household sector (−24%), while the decrease was more evenly distributed in Romania (−13% and −14%, respectively) and Croatian subsidiaries witnessed a different trend (+1% and −8%, respectively).

- In Romania, the share of lending to nonbanks also declined (from 64% to 56% of total assets), accompanied by a decline in the share of cash and balances with central banks (from 22% to 15%), while the share of debt securities increased strongly (from 3% to 22%).
- In comparison, aggregate figures of Austrian subsidiaries in other CESEE markets point to a stable share of loans to nonbanks (at slightly above 60%), falling interbank lending (13% to 8%) and a rising share of debt instruments held (12% to 17%).

These substantial changes in asset composition, especially in Hungary and Romania, were accompanied by a noticeable reduction in various asset yields due to the general low interest rate en-

vironment: For example, the annual percentage rate of charge for new local currency house purchase loans and long-term government bond yields fell by more than half in these two countries, negatively affecting the IEA yields of new lending and bought securities (chart 6).¹⁰ Consequently, subsidiaries faced dwindling yields on the asset side, whose effects were more acute in Hungary and Romania than in Croatia.

2.4 Dramatic fall in deposit rates eases transition to more sustainable locally funded business model

On the funding side, changes were even more pronounced. Deposits (from banks and nonbanks) make up more than 90% of IBL at Austrian banking subsidiaries in Croatia, Hungary and Romania, and in all three countries the share of nonbank deposits rose between end-2008 and end-2014, while the share of bank deposits fell. This development was most pronounced in Romania, followed by Hungary, and was much less marked in Croatia, where nonbank deposits already made up close to 60% of total assets at end-2008, which was also the level in all three countries at end-2014 (see the left-hand panel of chart 7).

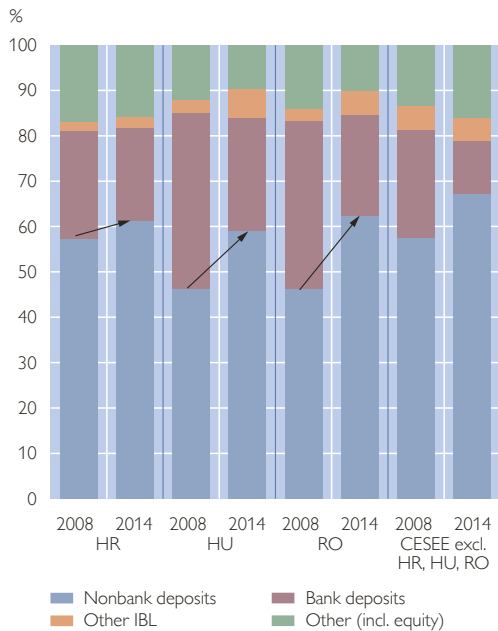
Over the same period and in an environment of very low interest rates, the interest rate paid on deposits (e.g. to households) fell very quickly at the beginning of the crisis (until 2010) and at a slower pace thereafter (see the right-hand panel of chart 7), which confirms the above findings that the initial rapid fall in funding costs com-

⁹ The change in asset composition during 2014 might have been linked to the effects of the local central bank providing parts of its foreign currency reserves for easing the conversion process of households' foreign currency mortgages into local currency loans.

¹⁰ Unfortunately, there are no harmonized data available for Croatia from end-2008 to end-2011, and Hungarian data are not available for foreign currency loans. Therefore, the comparison centers on local currency loans, even though foreign currency lending has played a dominant role in all three markets (see section 3).

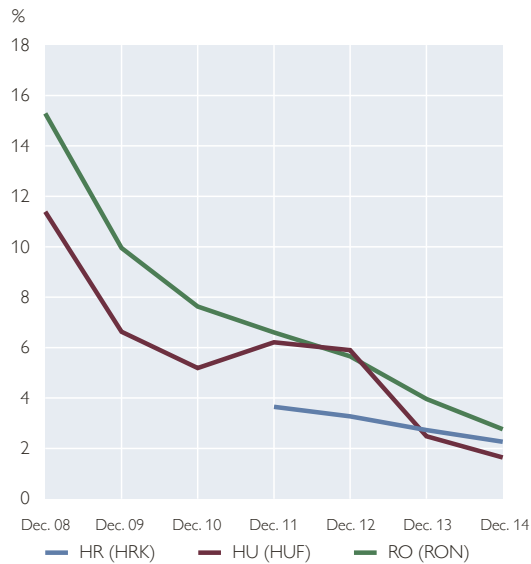
Chart 7

Rising share of deposits from nonbanks in total liabilities (including equity)



Source: OeNB.

Interest rate on deposits of households' (new business)



Source: ECB.

Note: Annualized agreed rate / narrowly defined effective rate on deposits with agreed maturity (original maturity: up to 1 year).

¹ Also includes nonprofit institutions serving households.

compensated for reduced IEA yields at first, but the approaching zero lower bound for funding costs has led to a substantial compression of net interest margins since 2010–11.

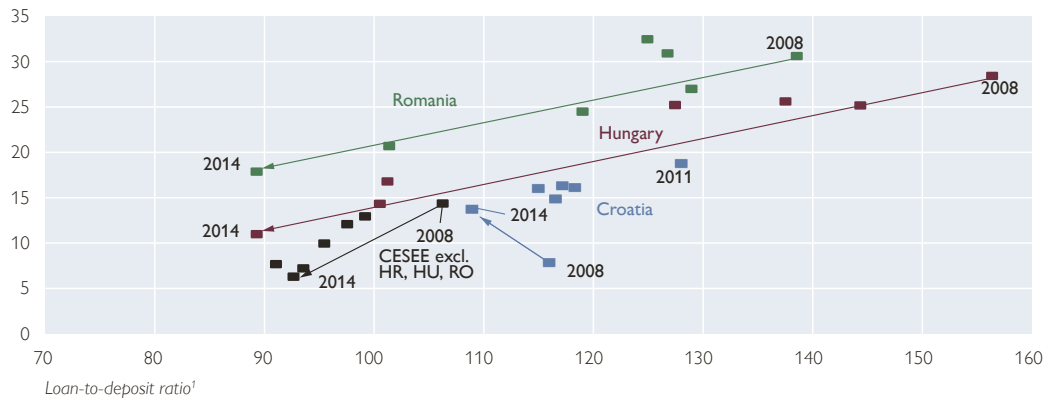
The shift in funding sources also reflects lessons learned from the financial crisis – both by banks as well as supervisors and regulators. Until end-2011, weak local funding had translated into relatively substantial intragroup liquidity transfers from parent banks. This funding dependency of foreign subsidiaries – measured by the share of intragroup funding in their total assets – has been substantially reduced since its

peak (see chart 8), in particular since 2012, when an Austrian supervisory guidance was published that explicitly addresses subsidiaries with unsustainable funding positions and that pushes for an increased reliance on local stable funding, such as deposits from nonbanks.¹¹ Overall (gross) intragroup liquidity transfers to Austrian subsidiaries in Croatia, Hungary and Romania fell from EUR 20.6 billion at end-2008 to EUR 12.4 billion at end-2014 (–40%), but their share in total Austrian intragroup liquidity transfers to CESEE rose from 46% to 54% over the same time period.

¹¹ For more details on this supervisory guidance, please visit <http://www.oenb.at/en/Financial-Stability/Systemic-Risk-Analysis/Sustainability-of-Large-Austrian-Banks--Business-Models.html>.

Falling dependence on intragroup liquidity transfers due to lower loan-to-deposit ratios¹

Share of intragroup liquidity transfers in % of total assets



Source: OeNB.

Note: All points represent aggregate Austrian subsidiaries' data in the respective countries from end-2008 to end-2014. Arrows indicate changes from end-2008 to end-2014.

¹ In relation to nonbanks only, loans after provisioning.

2.5 Concluding remarks on operating profitability

Net interest income is by far the most important source of income for Austrian subsidiaries in Croatia, Hungary and Romania, which testifies to their important role as financial intermediaries that finance the real economy in these countries. But – especially since 2010–11 – net interest income has come under pressure, both in terms of volumes and margins.

- As regards volumes, the smallest changes took place in Croatia. Asset deleveraging was strongest in Hungary, followed by Romania; the composition of assets and liabilities also changed substantially. The share of (net) loans to nonbanks in total assets fell in Hungary and Romania and debt securities gained in importance. On the funding side, changes in business models led subsidiaries to steer away from intragroup funding and turn toward local funding sources, with Austrian subsidiaries in Romania and Hungary having seen the most dramatic changes, but they had

entered the financial crisis at substantially higher levels (see chart 8).

- As regards margins, all three countries saw total spreads peak in 2010–11. The reason was that the fall in IBL costs at first more than compensated for reduced IEA yields, while the approaching zero lower bound for IBL costs and a continued IEA yield contraction led to a considerable decline in total spreads, particularly in Romania.
- Consequently, Hungarian and Romanian subsidiaries saw the largest swings in their net interest income, while changes in Croatia were less pronounced. The open questions for Austrian banks' subsidiaries from an operational profitability point of view are therefore:
 - Especially for Hungarian subsidiaries: has deleveraging come to an end?
 - Especially for Romanian subsidiaries: will IEA yields start to improve in the near future (as they recently did in other CESEE host markets) or will IEA yields continue falling

and push the spread down further, now that IBL costs seem to have found a region-wide floor?

- Especially for Croatian subsidiaries: will the funding model continue its transition to the “new normal” of more locally raised funding? (Even though the high loan-to-deposit ratio is also partly a reflection of lower provisioning levels; see section 3.)

Finally, an important aspect to keep in mind is that this analysis so far has not included risk costs (see section 3) and that the cost of equity was omitted. This last aspect should be seen in relation with the positive endowment effect assumed in this study and merits further analysis in the future.

3 Credit risk and provisioning levels

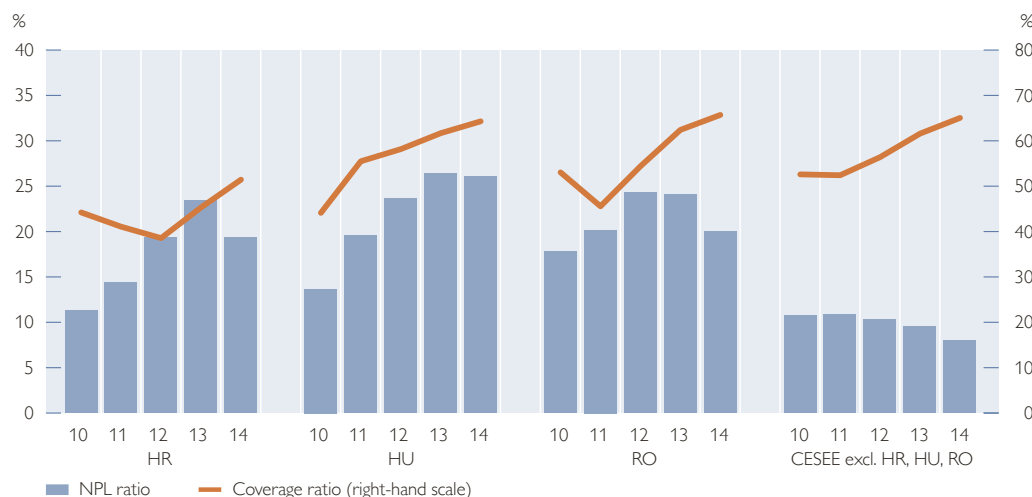
While credit quality at subsidiaries in other CESEE countries has improved continuously since 2011, in Croatia, Hungary and Romania, the deterioration in asset quality continued until 2013, when nonperforming loan (NPL) ratios in all three countries were in the

mid-20s (see chart 9). In 2014, these ratios improved or at least leveled out, while the risks stemming from high NPL volumes are now much better provisioned for than in the past, which is reflected in substantially improved coverage ratios. But while the coverage ratio of Hungarian subsidiaries has caught up and developments at Romanian subsidiaries were broadly in line with those at other Austrian CESEE subsidiaries, coverage ratios at Croatian subsidiaries are still significantly below their peers' average. In order to reach the coverage level of their CESEE peers, Croatian subsidiaries would have to build up more than EUR 0.5 billion in allowances. Additionally, the reduction in NPL levels in Croatia in 2014 stems to a large extent from the restructuring of Hypo Alpe-Adria-Bank International AG and the related shift of a major part of its NPL portfolio to its bad bank (HETA Asset Resolution AG).

In relation to credit quality, one major characteristic of the banking market in all three countries is the high incidence of foreign currency (FX) loans, a credit segment that is marked

Chart 9

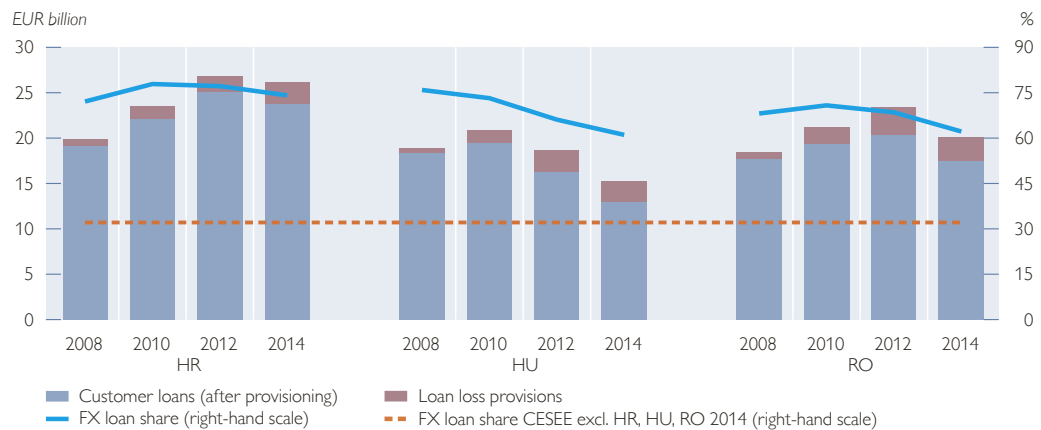
NPL and coverage ratios



Source: OeNB.

Chart 10

Loan exposure and share of foreign currency loans in customer loans



Source: OeNB.

by moderately higher NPL ratios. The share of FX loans in Austrian banks' Romanian and Hungarian subsidiaries' total customer loans is around 60% at end-2014; at Croatian subsidiaries, this share is even higher at 75%. In all three countries, the majority of FX loans are denominated in euro, with shares of 85% in Croatia and Romania, where euro-denominated borrowing was considered less risky by customers, as both the Romanian and Croatian currencies are tied to the euro under a managed float currency regime; in Hungary, where Swiss franc lending also played an important role, the share of euro-denominated loans in FX loans was 55%. The various Austrian and local supervisory initiatives, most notably the Austrian Guiding Principles on FX lending in CESEE (2010), have proven to be effective, as FX loans, especially those denominated in Swiss francs, have gradually and markedly decreased. Since end-2008, the outstanding volume of loans denominated in foreign currency has dropped by about 5% on a FX-adjusted basis in Croatia, by 20% in Romania and by an even more significant 50% in Hungary. Although Hungary and Croatia have taken action

to address the FX loan problem – by way of legal acts in Hungary and a temporary exchange rate fixing for Swiss franc mortgage loans in Croatia – it should be noted that most of Austrian banks' FX exposure in those countries had already been reduced beforehand.

4 Conclusion

Although the competitive situation of Austrian banking subsidiaries in Croatia, Hungary and Romania is heterogeneous, their operational efficiency as measured by the cost-income ratio shows no particular peculiarities when one-off effects are excluded. As with other CESEE subsidiaries, net interest income is by far their most important profit source, but contrary to the situation at their regional peers, it has not started to recover – from pressures on volumes (in particular in Hungary) and margins (in particular in Romania). Steering away from intragroup funding and turning toward local funding sources changed subsidiaries' funding models, with Hungarian and Romanian subsidiaries having had to change theirs to a greater extent than peers in Croatia, where the shift was less pronounced. In terms of operating profit-

ability and its future trend, it remains to be seen whether deleveraging and margin compressions have come to an end in Hungary and Romania now that the local economies are picking up and funding costs seem to have found a floor at around 2%. High loan-to-deposit ratios can still be observed at Austrian subsidiaries in Croatia. Raising the provisioning level to the regional average would help close this gap and raise the coverage ratio, which would allow speedier NPL resolution via write-offs or direct sales.

Austrian banking subsidiaries in Croatia, Hungary and Romania have come a long way since the beginning of the financial crisis: They had to adapt their business models to new realities as did other Austrian CESEE subsidiaries, and several indicators are now more in line with regional averages (e.g. IEA yields, IBL costs, loan-to-deposit and coverage ratios). But while subsidiaries in Hungary and Romania saw more

dramatic changes – often due to higher starting points, e.g. with respect to margins or intragroup liquidity transfers – changes at Croatian subsidiaries were more subdued and they have not yet increased provisioning to higher regional coverage levels. All in all, restructuring efforts at Austrian subsidiaries in Croatia, Hungary and Romania do not appear to be complete yet: Issues related to nonperforming and foreign currency loans still need to be addressed, subsidiaries' dependence on intragroup liquidity transfers is still elevated and questions are still open regarding further deleveraging needs and how to improve asset yields now that funding costs seem to have reached a floor across the region. With a potential macroeconomic recovery beginning to take shape in Europe and restructuring efforts well underway, the path for these three core Austrian banking host markets remains rocky, but not without upsides.

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