

# The profitability of Austrian banking subsidiaries in CESEE: driving forces, current challenges and opportunities

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*This study analyzes the driving forces behind the profitability of Austrian banking subsidiaries in Central, Eastern and Southeastern Europe (CESEE) from 2003 to 2015, with a particular focus on the aftermath of the global financial crisis, which marked a turning point for their risk-return characteristics. We start off with an analysis of operating income and expense trends and delve into an analysis of credit risk costs. Then we look at large extraordinary one-off cost items before summing up with a long-term revenue bridge and an analysis of the most recent risk-return metrics. Overall, we find that the subsidiaries generated substantial profits, which have to be seen in the light of significant writedowns of their book values at the parent level. Regarding current challenges, operating profits are under pressure from falling net interest margins and fading organic growth, while remaining foreign currency loans might lead to further one-off costs, which in the past offset efficiency improvements. Credit risk also remains high in some countries, but a positive trend has emerged over the past years and provisioning levels have improved. One lesson learned in this respect is that rapid credit growth before the crisis typically led to high nonperforming loan (NPL) ratios, which now weigh on some subsidiaries' ability to lend. Looking forward, banks continue to face a challenging environment in the CESEE region with little low-hanging fruit, as the speed of macroeconomic catching-up has slowed and low interest rates have taken hold. Therefore, Austrian banks' subsidiaries should diversify their income base, maintain their operating cost discipline and continue to strive for risk-adequately priced products in order to keep their profitability on a sustainable footing.*

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Austrian banking subsidiaries in CESEE<sup>2</sup> generated more than EUR 25 billion in profits between 2003 and 2015, contributing significantly to the overall profitability of the Austrian banking system. In absolute numbers, the Czech Republic, Russia, Slovakia and Croatia were the most profitable markets (see chart 1), accounting for nearly 80% of total profits over the entire period of 13 years. Yet, not all host markets have been profitable; some subsidiaries, especially in countries with higher macro-

economic and/or political uncertainty, recorded overall losses, with activities in e.g. Hungary, Ukraine and Slovenia weighing on Austrian banks' CESEE profitability.

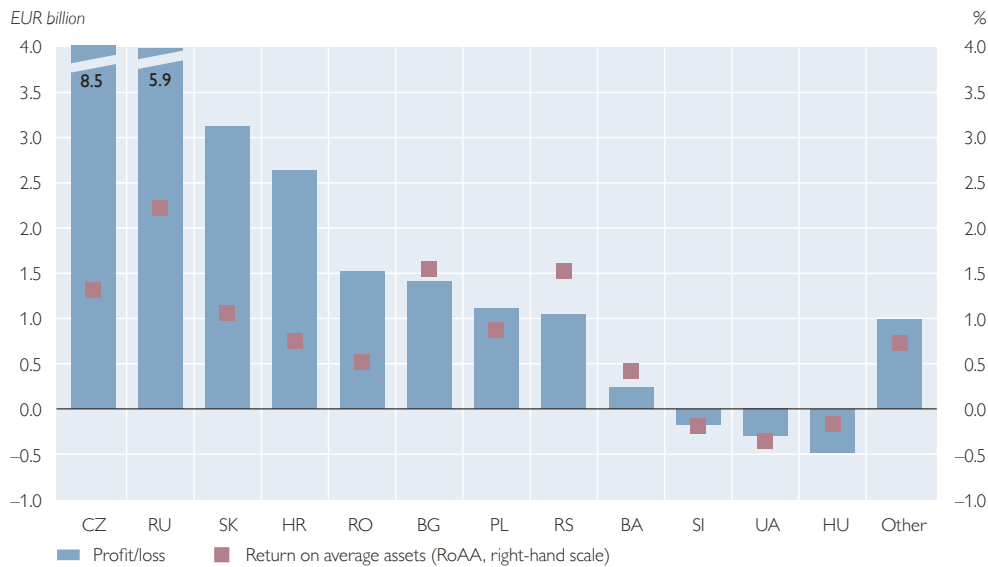
Absolute profit figures are obviously influenced by the size of subsidiaries' balance sheets. Therefore, a look at their relative profitability is equally important. The return on average assets (RoAA) eliminates size disparities, thereby allowing a more meaningful comparison of different markets. The RoAA of all

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<sup>2</sup> We analyze data of all Austrian banking subsidiaries in CESEE for the period from end-2003 to end-2015, irrespective of the subsidiaries' ownership structure. In this paper, CESEE includes the EU Member States Bulgaria, Croatia, the Czech Republic, Hungary, Latvia, Poland, Romania, Slovakia, and Slovenia as well as Albania, Belarus, Bosnia and Herzegovina, Kazakhstan, Kosovo, Kyrgyzstan, the former Yugoslav Republic of Macedonia, Montenegro, Russia, Serbia, Tajikistan, Turkey and Ukraine.

Chart 1

### Accumulated profit/loss and RoAA of Austrian banks' subsidiaries in CESEE between 2003 and 2015



Source: OeNB.

Austrian subsidiaries in CESEE between 2003 and 2015 was 0.9%. Countries with large absolute profits were not always the most profitable in this respect, as some of these markets display a higher level of economic and financial development and generate lower margins due to increased competition.

In this study, we analyze the driving forces behind this profitability – especially after the global financial crisis (GFC)<sup>3</sup> – by dissecting the profit and loss statements of Austrian banking subsidiaries in CESEE. Given that the period covered (2003–2015) was characterized by two very different subperiods, we often distinguish between the period before the GFC (2003–2008, the expansion phase) and its aftermath (2009–2015, the consolidation phase). These two periods differ not only in terms of the prevailing business environment and growth dynamics, but

also in terms of the sample of banks analyzed and their business models, given that the expansion phase was characterized by a succession of acquisitions, while the consolidation phase saw several subsidiary divestments and fundamental changes to some business models.

Section 1 provides an analysis of operating income with a special focus on net interest income and the net interest margin, and section 2 examines trends in operating expenses and the cost-income ratio. We then delve into an analysis of credit risk and its associated costs (section 3) and look at large as well as potential one-off cost items, i.e. consolidated writedowns of the subsidiaries' book values and the (remaining) foreign currency loan exposure (section 4). The study concludes with a profitability overview in the form of a revenue bridge and a brief cluster analysis of 2015 data (section 5).

<sup>3</sup> We use the term GFC for the bank crisis that followed the collapse of the U.S. investment bank Lehman Brothers in 2008.

## 1 Operating income under pressure despite continued increase in total assets

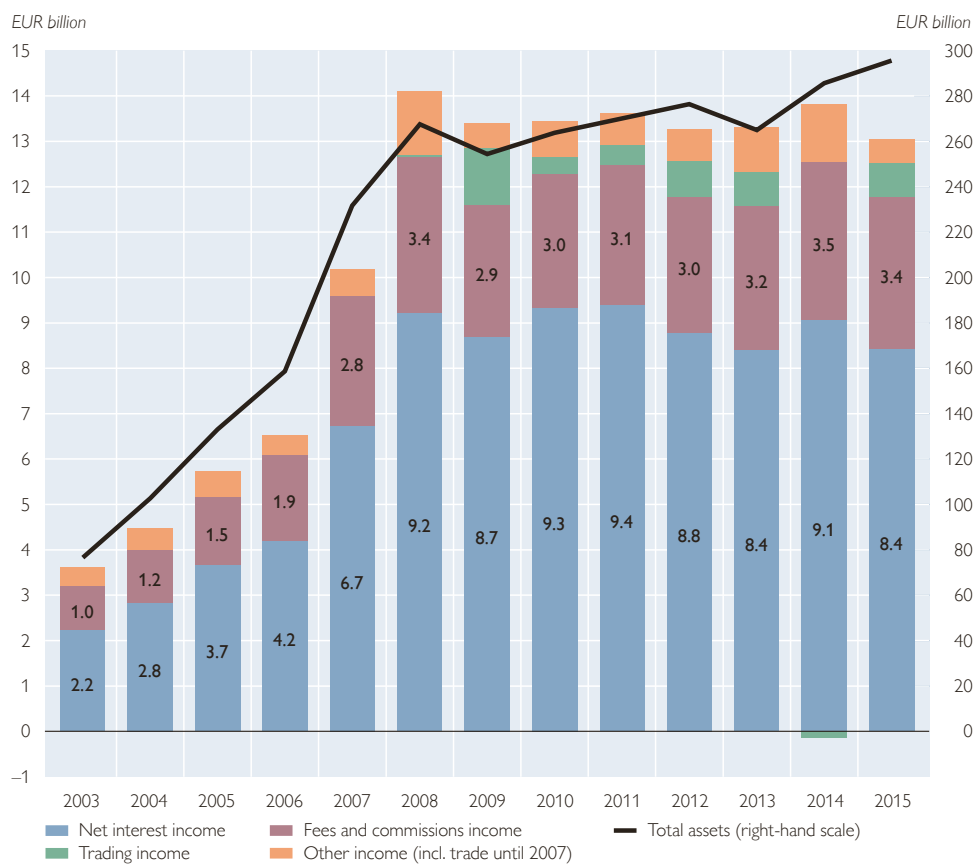
Before the GFC started to affect business activities in CESEE, the operating income of Austrian subsidiaries showed rapid growth in the early 2000s and especially in 2007 and 2008, when the CESEE economies were catching up rapidly and Austrian banks acquired new subsidiaries abroad, resulting in a quadrupling of income from 2003 to 2008. This growth was in line with and even outpaced the general expansion of Austrian banks' exposure to the region, which was marked by a 3.5-fold

increase of total assets. In the aftermath of the GFC, operating income came under pressure despite a continued – albeit markedly slowed down – increase in the aggregate balance sheet size: While total assets expanded by 10% from end-2008 to end-2015, operating income contracted by 7% (see chart 2).<sup>4</sup>

The following subsections explain this divergence that have adversely affected Austrian CESEE subsidiaries' profitability since 2009, focusing on the main income drivers: (1) net interest income, which throughout the entire time period made up around two-thirds

Chart 2

### Breakdown and growth of operating income



Source: OeNB.

Note: Data for all Austrian CESEE subsidiaries at year-end.

<sup>4</sup> In this section, data are not adjusted for exchange rate movements, so their impact on the growth rates is not accounted for.

of operating income and reflects the subsidiaries' retail business models, and (2) fees and commissions income, which contributed about one-quarter and has been cited as a potential new avenue for profit generation.

### **Net interest income negatively affected by strong margin pressure**

Net interest income (NII) is by far the most important component of operating income and has come under pressure over the past few years. This trend was only interrupted in 2014 (when data of a subsidiary in Turkey were reported for the first time<sup>5</sup>), but became clearly visible again in 2015. In order to analyze this source of income, we dissect its changes into a volume and a price effect, using the total spread (i.e. a margin/price) on interest-earning assets and interest-bearing liabilities (i.e. volumes) according to a formula proposed by the ECB. This formula defines the total spread as the combination of a spread – i.e. interest revenue per interest-earning asset (IEA) minus interest expense per interest-bearing liability (IBL) – and an endowment effect, which “measures the gain from the fact that some part of IEA does not have an interest cost. [...] This calculation disregards the cost of equity capital.” (ECB, 2000, p. 27).

As described above, the aggregate balance sheet of Austrian CESEE subsidiaries has continued expanding after 2008, but its composition has changed substantially (see chart 3). While the share of loans to nonbanks (after provisioning) in total assets decreased from 64% to 60% from end-2008 to end-

2015 and the absolute loan level barely increased, the share of debt securities (mostly sovereign bonds) rose from 11% to 17%. During the same period, changes on the liability side were even more significant: The share of deposits from credit institutions (including parent banks) in total assets declined from 27% at end-2008 to 13% at end-2015, and this decrease was compensated for by a strong rise in deposits from non-banks (54% to 68%). At first sight, these changes in the asset and liability mix point to a shift to relatively lower-yielding assets (sovereign bonds vs. loans to the real economy) and potentially more costly funding sources (local deposits from nonbanks vs. intra-group liquidity transfers by parent banks). Whether and how this affected the average yield on IEAs and the costs of IBLs is analyzed below. Prior to this, it is worth noting that volume growth in aggregate (average) IEAs and IBLs over the past years has mostly been related to the subsidiary in Turkey,<sup>6</sup> while growth also occurred in the Czech Republic and Russia, among others, whereas (average) IEAs and IBLs declined e.g. in Hungary, Romania and Ukraine.<sup>7</sup>

The CESEE subsidiaries' total spread, which stood at close to 4% before the GFC, declined to barely above 3% (especially since 2011–12), marking an overall decline by 78 basis points from 2008 to 2015 (see chart 4). More than three-quarters of this deterioration were caused by a falling spread, i.e. the margin between the average yield on IEAs and the average cost of IBLs. With the exception of 2014, when develop-

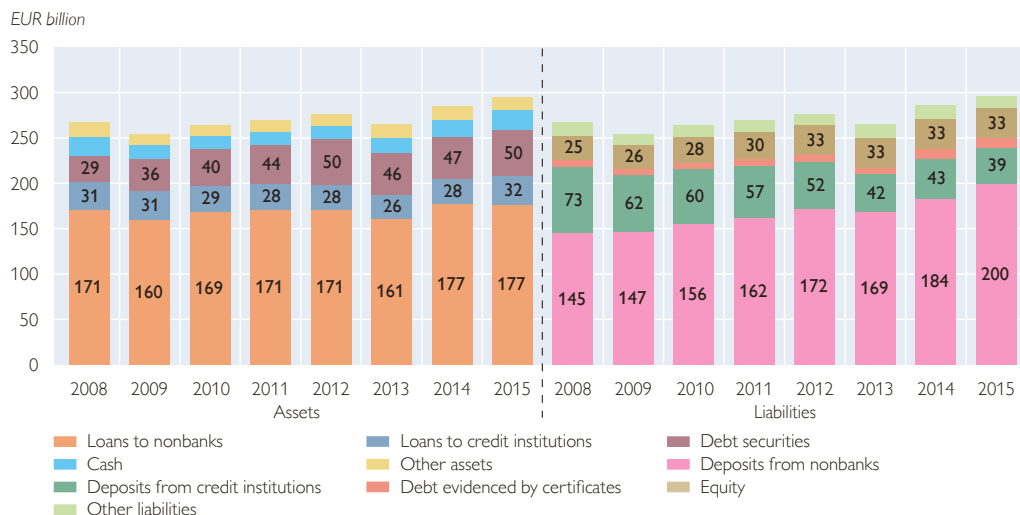
<sup>5</sup> In 2005, Koç Financial Services (a 50/50 joint venture between UniCredit and Koç Group) agreed to acquire a stake in the Turkish bank Yapı ve Kredi Bankası A.S. As of August 2016, 81.8% of the bank's shares were owned by Koç Financial Services (Yapı Kredi, 2016). Standardized supervisory reporting data for this joint venture were first submitted in the first quarter of 2014 and had a large impact on all CESEE aggregates.

<sup>6</sup> Please refer to footnote 5 for more details.

<sup>7</sup> Due to data limitations, the calculation of average IEAs and IBLs for 2008 relies on data from March 2008 as a proxy for end-2007 data for certain types of IEAs and IBLs (e.g. debt securities).

Chart 3

### Breakdown and growth of the aggregate balance sheet



Source: OeNB.

Note: Data for all Austrian CESEE subsidiaries at year-end.

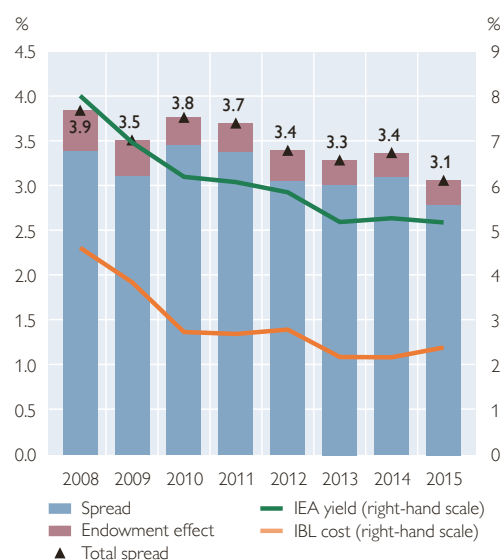
ments were subdued on all fronts, 2010 was the only year in which Austrian CESEE subsidiaries saw their spread expanding (+35 basis points), which was due to their funding costs falling faster (−111 basis points) than their yield on IEAs (−77 basis points). In all other years, the spread narrowed, leading to an overall decline by 60 basis points as the yields on IEAs fell more sharply than the refinancing costs (−283 basis points vs. −223 basis points). To cut a long story short, cheaper funding in a lower interest rate environment was not able to fully compensate for the receding profitability of banks' assets.

The bottom line of our analysis of NII drivers in the aftermath of the GFC is that an adverse price effect (i.e. margin pressure) was the main reason for the decline in NII, while organic volume growth faded and no longer contributed positively to NII over the past three years (see chart 5).<sup>8</sup> Due to a combination of slower economic catch-

ing-up of CESEE host markets after the GFC (with substantially smaller gaps to Western European peers for some),

Chart 4

### Breakdown of the total spread



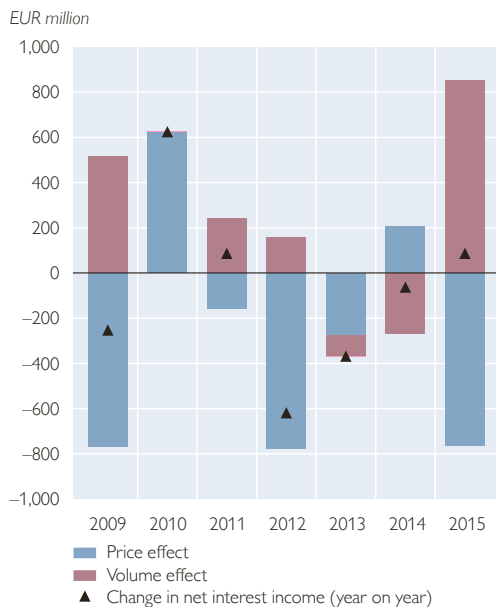
Source: OeNB.

Note: For the sake of consistency, the sample of banks was adjusted to include only those subsidiaries in each year that reported data from the beginning to the end of that year.

<sup>8</sup> The volume effect shown in chart 5 for 2015 is primarily due to the fact that the subsidiary in Turkey reported its first full year of data. Please refer to footnote 5 for more details.

Chart 5

### Effects on net interest income



Source: OeNB.

Note: For the sake of consistency, the sample of banks was adjusted to include only those subsidiaries in each year that reported data from the beginning to the end of that year.

selective withdrawal plans of some Austrian parent banks and an ongoing low interest rate environment, pressures on NII are likely to persist over the coming years, but the heterogeneity of the region might provide for pockets of growth in less competitive and/or more dynamic markets. Given the importance of NII for the profitability of Austrian banking subsidiaries in CESEE, trends in their interest margins will be of utmost importance for the sustainability of their business models.

### Fees and commissions income could not offset the decline in net interest income after 2008

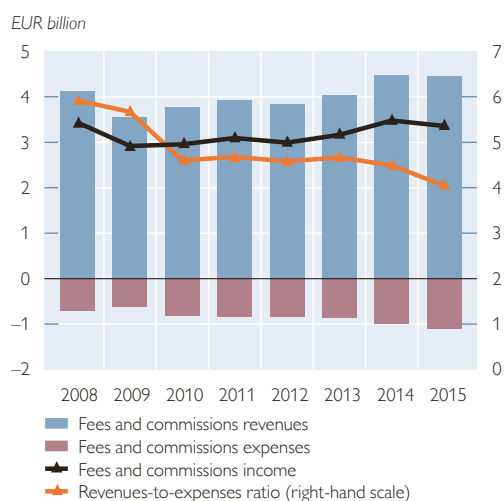
Fees and commissions income (FCI) has been the second-most important source of operating income for Austrian CESEE subsidiaries. It declined

significantly in the immediate aftermath of the GFC (–15% in 2009) as the related business activities (e.g. investment banking and asset management) dropped substantially in a risk-averse and uncertain economic environment, but grew slightly again thereafter (see chart 6). By 2015, FCI had nearly returned to its pre-crisis level of 2008.<sup>9</sup> Consequently, FCI was unable to offset the decline in NII, which tallied up to –EUR 800 million from 2009 to 2015. This narrative changes, however, when switching the perspective to the recovery phase: From 2009 to 2013, the rise in FCI nearly balanced out the fall in NII, and from 2009 to 2015 (i.e. including the subsidiary in Turkey), FCI increased by more than EUR 440 million, thus more than offsetting the NII decline of over EUR 260 million.

To analyze the relative profitability of the fees and commissions business over the entire time period, we examine the ratio of fees and commissions revenue to its associated (direct) expenses.

Chart 6

### Fees and commissions income



Source: OeNB.

Note: Data for all Austrian CESEE subsidiaries at year-end.

<sup>9</sup> This development was helped by the reporting start of the subsidiary in Turkey in 2014. Please refer to footnote 5 for more details.

From this viewpoint, the costs incurred have resulted in less and less revenues over the past years: While the ratio stood at 5.9 in 2008, it declined to 4.0 in 2015 (with a particularly steep decline in Russia). Given that the associated rise in expenses (more than EUR 400 million) outpaced the increase in revenues (about EUR 330 million), the additional expenses were not put to profitable use. The picture changes again when excluding the exceptional crisis year of 2009 and studying the subsequent time period until 2015: Additional revenues of more than EUR 900 million and additional expenses of almost EUR 500 million again generated income, but the relative profitability of this incremental business – with a ratio of 1.9 – lay below that of the previous period.

It is difficult to predict whether the CESEE subsidiaries' future FCI would be able to compensate for a potential further decline in NII. On the one hand, FCI is a much smaller income

component than NII and faces threats from increased competition, especially if many banks were to crowd into this business line, and if commoditization and digitalization were to lead to margin pressures. On the other hand, banks that face profitability challenges in a low interest rate environment may be tempted to boost their income through a mix of raising fees and cross-selling new products to their clients, which may include an expansion of their product range to more FCI-based lines of business.

We now turn to operating expenses and the changes seen in their composition after the GFC, which will help us bring together the income and the cost side to analyze the operating profitability of Austrian banking subsidiaries in CESEE.

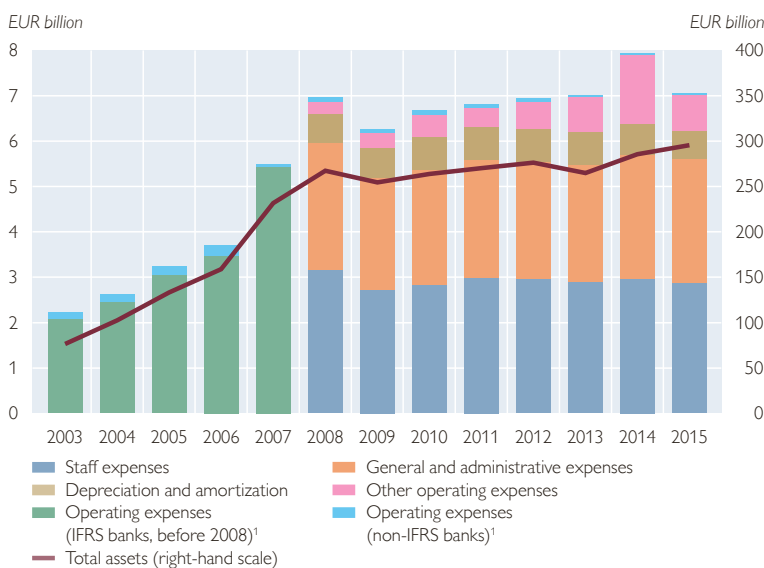
## 2 Operating expenses remained stable after the crisis, with one-off costs offsetting other efficiency improvements

Austrian banking subsidiaries' operating expenses in CESEE mainly consist of staff and other administrative expenses, which had a share of 41% and 39%, respectively, in 2015. When comparing 2008 and 2015 data, operating expenses increased only modestly (+EUR 90 million) as all components decreased except for other operating expenses, which rose sharply (see chart 7).

The strongest decline was registered for staff expenses (–EUR 288 million), which reflects reductions in personnel. After a strong expansion of Austrian banks in CESEE and a headcount peak at 143,000 in 2009, the number of employees was reduced to 129,000, with the largest declines registered in Ukraine (caused by the sale of a subsidiary and the geopolitical situation, among other things), followed by Romania (i.a. due to the sale of a sub-

Chart 7

### Operating expenses of Austrian banks' subsidiaries in CESEE



<sup>1</sup> For the period 2003-2007 a decomposition of operating expenses is not possible. The same applies to data for non-IFRS banks for the whole period under review (i.e. 2003-2015).

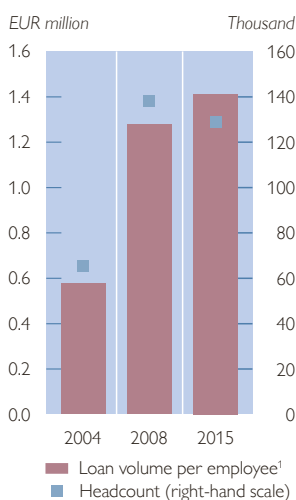
Source: OeNB.

sidiary) and Hungary. This reduction in staff numbers also helped raise the loan volume per employee between 2008 and 2015, which indicates an efficiency improvement (see chart 8).<sup>10</sup>

Unfortunately, the positive influence of enhanced staff efficiency at Austrian banking subsidiaries in CESEE was more than outweighed by an increase in other operating expenses (+ EUR 531 million or +207%) in the period from 2008 to 2015. Part of this sharp rise in other operating expenses, which peaked at EUR 1.5 billion in 2014, was due to legislative measures in several CESEE countries, e.g. measures to curb foreign currency loans in Hungary (2014) and in Croatia (2015), local bank levies as well as changes in business structure (e.g. sales of subsidiaries).<sup>11</sup>

Chart 8

#### Staff-related figures at CESEE subsidiaries



<sup>1</sup> Loan volume before risk provisioning.

Source: OeNB

#### Declining operating income was responsible for (slightly) weaker operating efficiency

The cost-income ratio (CIR) is an indicator to gauge operating efficiency. The CIR of Austrian banking subsidiaries in CESEE improved from 62% in 2003 to 47% in 2009 (its lowest and thus best value over the period under review) before climbing back to 54% in 2015. The main factor behind this slight efficiency loss in the aftermath of the GFC was a decline in operating income and a modest increase in operating expenses (as described above and in chart 9). This suggests that it was the comparatively lower revenue generation – rather than ineffective operating cost control – that negatively affected operating profits in recent years. Compared to Austrian banks' domestic business or the EU average (CIR at 66% and 63%<sup>12</sup>, respectively in 2015), this cost-income ratio is still rather favorable. It has to continuously prove its sustainability, though, as Austrian CESEE subsidiaries are still facing a challenging operating environment that is often characterized by heightened economic and macrofinancial risks. Furthermore, a certain number of tasks (headquarters functions) are performed by the parent banks for their foreign subsidiaries, which leads to a downward bias in operating costs at the subsidiary level. Therefore, further efficiency enhancements may be needed to contain costs at the currently moderate level.

Operating expenses are by far not the only cost item on banks' profit and

<sup>10</sup> It should be noted that the number of employees as well as the loan volume per employee also depend on the subsidiaries' business model, i.e. those with a stronger focus on corporate business typically employ less personnel (as they have fewer retail branches) and display larger loan volumes per employee (also due to higher single loan volumes).

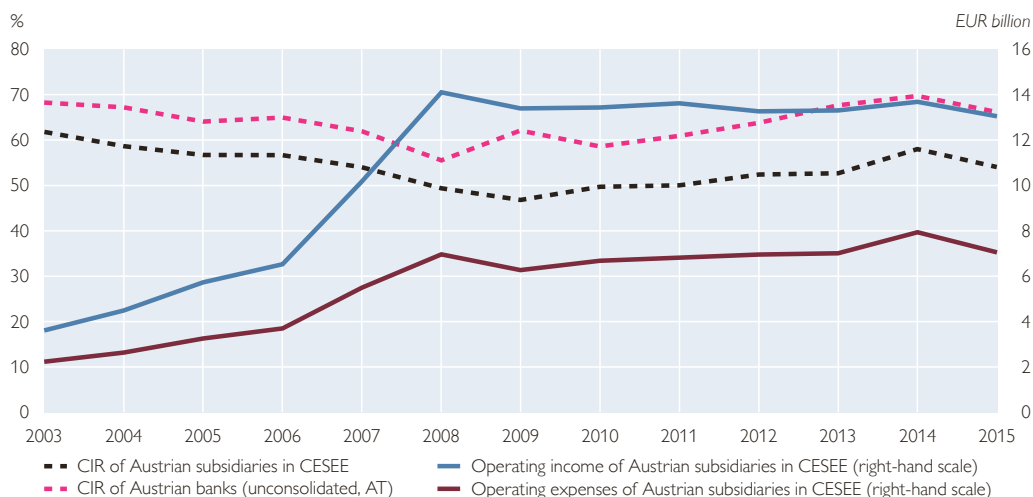
<sup>11</sup> No general statement can be made regarding the influence of legislative measures on other operating expenses or the categorization of these expenses in the supervisory reporting data, as some banks assign these costs to other operating expenses, whereas others book them as credit risk provisions.

<sup>12</sup> Source: ECB.



Chart 9

### Cost-income ratio (CIR)



Source: OeNB.

loss statement. Therefore, the following two sections will address costs related to credit risk, writedowns on book value and (potential further) losses due to legislation on foreign currency loans, which will allow us to analyze the entire cost structure of the Austrian banking subsidiaries' CESEE activities.

### 3 Credit risk remains high in several countries, but its coverage has improved

Before the GFC, the loan loss provision ratio at Austrian banking subsidiaries in CESEE had decreased to 3% (end-2008). Due to the considerable deterioration of credit quality over the crisis years, this ratio rose sharply and peaked at 8% in September 2013, exerting strong negative pressure on the subsidiaries' profitability. Since then, aggregate credit risks have abated, and the ratio improved steadily to 7% in 2015. As a mitigating factor, the coverage ra-

tio for nonperforming loans (NPLs) has also improved over recent years. Nevertheless, the still elevated level of NPLs at some Austrian CESEE subsidiaries continues to be a major challenge, with adverse effects on their lending behavior.

In terms of the impact that heightened provisioning levels have had on profitability, the ratio of risk provisioning to operating profit stood at an elevated 68% in 2009, and slightly more than one-half of operating profits were still consumed by provisioning needs in 2015.<sup>13</sup> The following paragraphs are dedicated to a more granular analysis of the underlying development of NPLs, their influencing factors and their coverage, which will allow us to gain a more detailed picture of the credit risk situation at Austrian banking subsidiaries in CESEE.

The NPL ratios of the CESEE subsidiaries of Austria's major credit institutions<sup>14</sup> have shown a similar pattern

<sup>13</sup> The year 2014 was exceptional in this respect, as the ratio reached 71% due to high risk provisioning needs as well as low operating profits in some countries (e.g. Romania, Hungary, Russia and Ukraine).

<sup>14</sup> The Austrian credit institutions active in CESEE in the period under observation are UniCredit Bank Austria AG, Erste Group Bank AG, Raiffeisen Bank International AG, Hypo Alpe-Adria-Bank International AG, Volksbank Wien AG, Sberbank Europe AG and BAWAG P.S.K. The total assets of these credit institutions' subsidiaries correspond to nearly all total assets of Austrian banking subsidiaries in CESEE.

since 2009: They increased markedly in the first years of the GFC, peaked in June 2012 at an overall NPL ratio of 15% and then declined.<sup>15</sup> This recent decline can be attributed to various measures taken by the banks, including efforts to restructure or sell NPLs<sup>16</sup> as well as the disposal of entire subsidiaries. Also, local governments, supervisors and international stakeholders (e.g. in the Vienna Initiative<sup>17</sup>) have supported the orderly resolution of NPLs in CESEE. These recent improvements, however, did not compensate for the deterioration in overall credit quality, as NPL ratios in many host countries are still markedly higher than at the beginning of the GFC (see chart 10).

Cross-country differences in NPL ratios are high, reflecting heterogeneous economic and foreign exchange devel-

opments in the aftermath of the GFC: While the aggregate NPL ratio of Austrian subsidiaries remained below 10% in the Czech Republic, Slovakia and Russia, it was close to 20% in Hungary, Croatia and Serbia and reached nearly 70% in Ukraine at end-2015. Also, in most CESEE countries, loans to non-financial corporations performed worse than loans to households, with NPL ratios of 13% and 9%, respectively, at end-2015. The highest NPL ratios were observed in the building and construction industry (29% at end-2015), followed by accommodation and food service activities (18%), construction (17%) and wholesale and retail trade (14%).<sup>18</sup>

The currency composition of the subsidiaries' loan portfolio is another important factor influencing credit quality, and the NPL ratio of foreign

Chart 10

**NPL ratios have declined recently, but levels are still elevated in several countries**



Source: OeNB.

Note: Data for selected countries. The indicated date shows the peak NPL ratio.

<sup>15</sup> Data are only available from 2009. Therefore the NPL analysis only covers the period 2009 to 2015. Only countries with at least two subsidiaries of Austrian credit institutions are shown in the charts.

<sup>16</sup> For instance, the ratio improved when the majority of the NPL portfolio of Hypo Alpe Adria was shifted to the bad bank, HETA Asset Resolution AG.

<sup>17</sup> The Vienna Initiative was launched in January 2009 as a framework for safeguarding the financial stability of emerging Europe and brought together all relevant public and private sector stakeholders of EU-based cross-border banks active in the region. For more details, please refer to [npl.vienna-initiative.com](http://npl.vienna-initiative.com).

<sup>18</sup> These figures also include direct cross-border lending by Austrian banks to CESEE.

currency (FX) loans is higher than that of loans extended in a domestic currency (16% and 12%, respectively, at end-2015). Given that this issue has gained systemic importance in some host countries, it has been aggressively tackled, leading to increased operating expenses (see above) but also to a significant reduction in the volume of nonperforming FX loans, especially in Croatia and Hungary.

While the NPL stock often remains high, the associated risk has been mitigated via higher provisioning: The coverage ratio<sup>19</sup> has increased considerably in most countries since end-2009 when it stood at 44%. With an average of 59% as of end-2015, it also compares favorably to the EU average of 44%.<sup>20</sup> It is also worth noting that the coverage of nonperforming FX loans has im-

proved recently due to measures in some host countries (see above) and the respective gap to the coverage of domestic currency loans has nearly been closed since mid-2014.

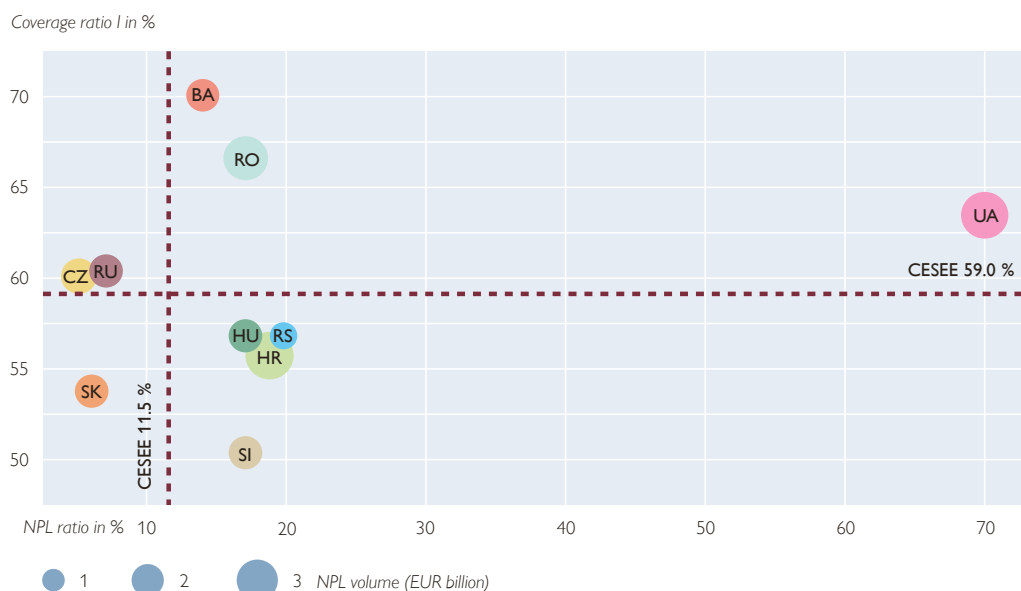
Nevertheless, coverage ratios in some countries with high NPL volumes and ratios are still below average. This is the case in Croatia (56%), Serbia (57%) and Hungary (57%) (see chart 11), which calls for particular attention to NPL resolution and/or provisioning in these countries.

### Rapid credit growth led to high NPL ratios, which now weigh on the ability to lend

Rapid credit growth is often considered to be a driver of subsequent (high) NPL ratios.<sup>21</sup> Data of Austrian banking subsidiaries in CESEE confirm this posi-

Chart 11

## NPL and coverage ratio of Austrian banking subsidiaries in CESEE (end-2015)



Source: OeNB.

Note: The size of the bubbles corresponds to the NPL volume in EUR billion.

<sup>19</sup> Loan loss provisions for NPLs relative to NPL volumes.

<sup>20</sup> Source: EBA (2015). The risk dashboard is based on a sample of risk indicators from 194 European banks.

<sup>21</sup> "The effect of past excess lending is also captured by the lagged lending growth, which results in higher NPLs as well." (Klein, 2013, p. 12) and "excessive risk-taking (measured by loans-to-assets ratio and the growth rate of bank's loans) was found to contribute to higher NPLs in the subsequent periods." (Klein, 2013, p. 20).

tive relationship: As shown in the left-hand panel of chart 12, banking subsidiaries with currently high NPL ratios reported higher annual loan growth in the pre-crisis period (2005–2008) than banks with lower NPL ratios.<sup>22</sup>

Furthermore, the still elevated level of NPLs reported by some subsidiaries seems to adversely affect their lending behavior: The right-hand panel of chart 12 shows that NPL ratios exhibit a negative correlation with lending growth, i.e. subsidiaries with higher NPL ratios tend to lend less.<sup>23</sup> While subsidiaries with NPL ratios below 5% (as of end-2014) posted weighted average loan growth rates of +6% in 2015, those with NPL ratios above 20% reported negative rates (–11%). This highlights the macroeconomic importance of reducing the stock of NPLs to support

credit growth and thereby the recovery in CESEE countries.

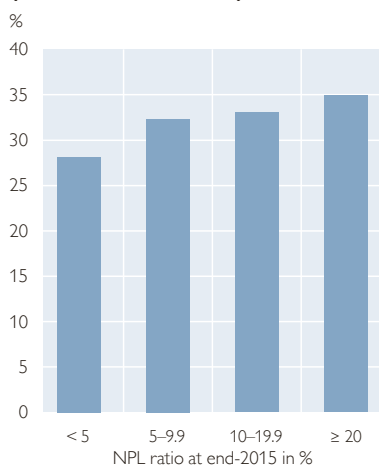
#### 4 Writedowns of subsidiaries' book values and forced conversion of foreign currency loans led to substantial costs

So far we have analyzed Austrian banks' profitability in CESEE solely on the basis of income and expense data for their CESEE subsidiaries (at the sub-consolidated level) and in terms of standardized profit and loss positions. In this section, we aim to complement and extend this analysis by first taking into account writedowns of the subsidiaries' book values and then highlighting (potential) losses due to forced FX loan conversions, which will provide a more comprehensive view of the overall profitability of the Austrian banking business in CESEE.

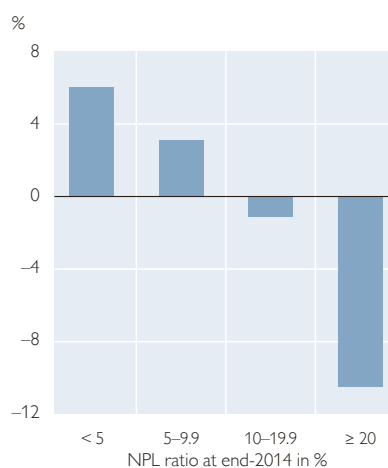
Chart 12

#### NPL ratios and lending growth<sup>1</sup>

Average annual net lending growth (end-2004 to end-2008)



Gross lending growth in 2015



Source: OeNB.

<sup>1</sup> Lending to nonbanks.

<sup>22</sup> A positive correlation (significant at the 5% level) was found between loan growth during the pre-crisis period and the subsequent NPL ratios at end-2015.

<sup>23</sup> Loan growth can be attributed to both supply and demand factors, and while this analysis focuses on supply effects, loan demand can also be assumed to be negatively affected by high NPL ratios (weak creditworthiness of borrowers and/or difficult general economic conditions). Note that a correlation (significant at the 1% level) was found between high NPL ratios and weak loan growth.

Between 2004 and 2015, Austrian banks held direct and indirect stakes in 90 banking subsidiaries domiciled in CESEE, with the highest number of holdings reported in 2007 (73 banks) and stakes in 59 subsidiaries at the end of 2015.<sup>24</sup> The book value of these CESEE subsidiaries peaked at EUR 32 billion between 2008 and 2010; EUR 8 billion – or one-quarter – was written down by the end of 2015 (see chart 13). High book values and writedowns mainly resulted from acquisitions in just a few countries (Croatia, the Czech Republic, Kazakhstan, Romania and Russia), and banks mostly kept these subsidiaries (with the exception of Kazakhstan). Given that these writedowns were made on the consolidated balance

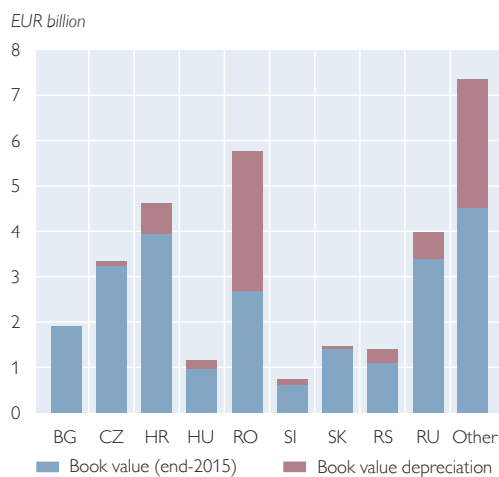
sheets of the Austrian parent banks and not on the balance sheets of the foreign subsidiaries, the profitability of activities in CESEE is usually overestimated considerably (especially with regard to the EUR 25 billion in subsidiaries' profits noted in the introduction for the period 2003–2015).<sup>25</sup>

We now turn to the calculation of the costs arising from national legal measures regarding the forced conversion of FX loans, which has been another important (extraordinary) cost factor in recent years. Additionally, we attempt to estimate the remaining future cost potential. It is worth noting that these calculations only include the cost of mandatory FX loans conversions and do not take into consideration the standard risks usually linked to FX loans, e.g. exchange rate volatility or the (often related) ability of borrowers to service their debt.

Up until now, mandatory conversions of FX loans in CESEE were limited to FX loans to households, which peaked in mid-2012 and have declined substantially since then (by nearly 40% until end-2015), even though the reduction

Chart 13

### Austrian banks' book value of CESEE subsidiaries



Source: OeNB.

Note: Book value depreciation refers to the difference between the maximum book value and the book value at end-2015. "Other" includes Albania, Belarus, Bosnia and Herzegovina, Kazakhstan, Kosovo, Kyrgyzstan, Latvia, the former Yugoslav Republic of Macedonia, Montenegro, Poland, Turkey and Ukraine.

Table 1

### Foreign currency loans to households

	FX loans total	FX loans denominated in		
		EUR	CHF	USD
EUR billion				
June 2012	33.3	16.5	13.4	3.4
Share		50%	40%	10%
Dec. 2015	20.1	12.1	6.3	1.7
Share		60%	31%	8%

Source: OeNB.

<sup>24</sup> The quoted number of stakes relates solely to the analysis of the subsidiaries' book values in this section. In all other parts of the study, the analyzed data refer to the 93 Austrian banking subsidiaries in CESEE that existed at various points in time over the period under review. The number of subsidiaries was highest in the fourth quarter of 2007 and the first quarter of 2008 (73) and stood at 61 at the end of 2015. With the transfer of subsidiaries from UniCredit Bank Austria AG to its parent bank, UniCredit, this number shrank considerably in 2016.

<sup>25</sup> As mentioned above, another cost item not booked through the subsidiaries' profit and loss accounts are the expenses relating to headquarters functions executed by the holding.

was distributed unevenly across currencies (see table 1).

The actual costs Austrian banking subsidiaries incurred in the past as a result of mandatory FX loan conversions varied substantially: While they were negligible in Hungary (2014–15) with conversion rates at or close to market rates, they amounted to roughly EUR 0.6 billion or 30% of the affected amount outstanding in Croatia (2015). The action taken in Croatia was particularly interesting in that it affected only loans denominated in or linked to Swiss francs (CHF), and the loans were converted into euro and not into Croatia’s legal tender, the Croatian kuna.

It has to be noted that mandatory FX loan conversions are often motivated by reasons other than purely financial stability considerations and raise crucial questions concerning legal certainty and the principle of legitimate expectations. Therefore, any estimate of the terms of future FX loan conversions and the related costs for lenders is subject to a high level of uncertainty and therefore, frankly, close to impossible.

## 5 Summary: sustainability of net interest income remains crucial while various risk costs are being digested

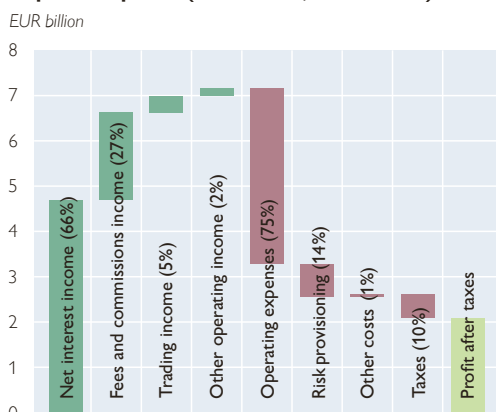
To conclude our study of the profitability of Austrian banking subsidiaries in CESEE and bring together all items analyzed, we use a revenue bridge to visualize the overall composition of income and costs over the entire time period from 2003 to 2015 (chart 14). Additionally, we look at the most recent full-year data for 2015 in a risk-return cluster analysis.

On the income side, the share of NII in total operating income increased slightly from an average of 66% (2003–2008) to 70% (2009–2015). In light of the pressure on interest margins in most CESEE countries and the lack of local organic growth, this large share raises questions regarding the sustainability of future profits at Austrian CESEE subsidiaries. This then highlights the importance of generating additional fees and commissions income, which is the other important source of operat-

Chart 14

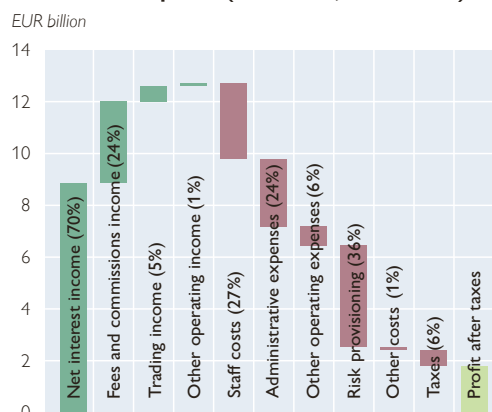
### Accumulated profit and loss account of Austrian subsidiaries in CESEE

#### Expansion phase (2003–2008, annualized)



Source: OeNB.

#### Consolidation phase (2009–2015, annualized)



Note: Figures in brackets indicate the respective share in total income or total expenses/costs. No breakdown of operating expenses is available before 2009.

ing income: Due to the continuous financial integration and deepening of CESEE banking markets, banks could try to strengthen their noninterest-related business, e.g. by offering additional services, which would not only diversify their income base, but also help offset the negative effects of adverse interest margin developments. The next years will show whether this strategy will prove sufficiently profitable, especially if competition in this area was to increase and compress margins.

On the cost side, risk provisioning was of minor importance during the expansion phase, accounting on average for only 14% of all expenses. This share more than doubled to 36% in the consolidation phase. Risk provisioning has become the largest cost item in the profit and loss account of Austrian

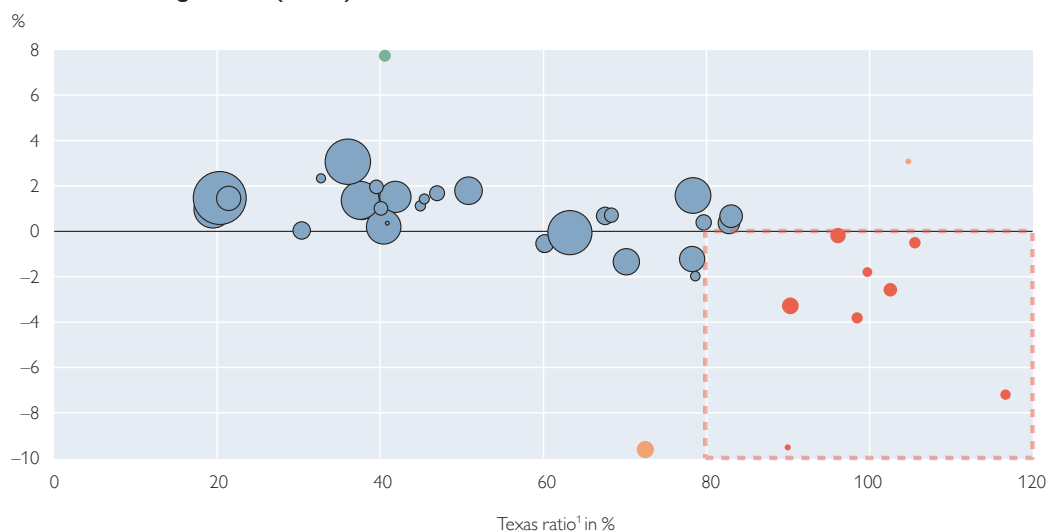
banking subsidiaries in CESEE. Although provisions started to decrease from their 2013 peak, the subsidiaries should continue to strive for risk-adequately priced products and maintain their operating cost discipline to be able to absorb renewed credit losses should they occur.

At the end of this study, we extend our profitability focus to a brief risk-return analysis in order to cluster Austrian banking subsidiaries in CESEE according to their most recent profitability data (RoAA in 2015) and their credit risk-bearing capacity (Texas ratio<sup>26</sup> at end-2015). The data plotted in chart 15 show a significant relationship between both metrics, with less profitable subsidiaries also displaying weaker credit risk-bearing capacities (i.e. higher Texas ratios). It is also worth noting that larger subsidiaries tended to be

Chart 15

### 2015: Profitability (RoAA) versus credit risk-bearing capacity (Texas ratio)

#### Return on average assets (RoAA)



Source: OeNB.

<sup>1</sup> The Texas ratio is defined as gross NPLs to (T1-capital plus NPL risk provisions).

Note: Each bubble represents an Austrian banking subsidiary active in CESEE in 2015, with its size corresponding to its average total assets in 2015. Due to data limitations, not all Austrian CESEE subsidiaries are included.

<sup>26</sup> The Texas ratio allows to compare banks' realized credit risks (gross NPLs) to their provisions and capital, thereby providing a risk-bearing measure for nonperforming loans.

profitable and have better Texas ratios, while a few smaller subsidiaries posted losses and also displayed high Texas ratios above 80% (these subsidiaries' bubbles are marked in red). This latter group of subsidiaries calls for heightened attention: They would need to lower their net NPL volumes (e.g. by selling NPLs and/or increasing provisioning) and/or improve their capital levels in order to lower their Texas ratio to a more sustainable level. But at the same time, they were not profitable in 2015 and could therefore not easily afford further short-term costs or the organic generation of capital by retaining earnings.

This highlights that profitability is the first line of defense for Austrian banking subsidiaries in CESEE and that its sustainability is of utmost importance to the host markets' and Austria's financial stability. Substantial past prof-

its often went hand in hand with higher credit risk costs, book value write-downs and legal uncertainties. Future research regarding the adequacy of these profits – e.g. in terms of a comparison between the cost of and the return on equity – and a profitability decomposition in an adapted DuPont analysis could further complement this analysis.

Looking forward, net interest margins are likely to remain under pressure, organic growth is unlikely to play a sufficiently compensating role and an – albeit lowered – potential for extraordinary costs still remains. In this challenging environment, the improvement in credit quality and provisioning levels is a welcome trend. While banks should continue to proactively address the remaining legacy issues, strengthening the sustainability of the subsidiaries' profitability also requires persistent efforts.

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