"Implications of the Financial Crisis and the New Regulations on the Banking Sector in CEE"
Statutory declaration

I hereby declare that this Master Thesis has been written by me without any external unauthorized help. Any parts, words or ideas, of this thesis, however limited, and including tables, graphs, maps etc., which are quoted from or based on other sources, have been acknowledge as such without exception.

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Abstract

The financial crisis of 2008-2009 has dramatically transformed the banking industry. Due to the new financial regulations that have been adopted and implemented since the financial crisis, the amount of risk taken by the banks and, consequently, their profitability have considerably decreased.

Central and Eastern Europe (CEE) is of special interest with regard to banking industry. This region has witnessed the fastest economic growth among all emerging markets since the fall of the Iron Curtain. Economic development in the 1990s was induced mostly by exports, whereas the key growth factor of the 2000s was rapid credit growth.

However, most of the time the capital inflows were unsustainable, creating economic imbalances and vulnerabilities. An excessive credit growth was the primary reason of the financial contagion that started in the USA and Western Europe and was facilitated by the internal imbalances. Only in 2010 did the CEE region manage to exit the crisis.

This paper examines the causes and the impact of the financial crisis in CEE and the role of international banking groups in transmitting negative shocks. It also looks into the new financial regulations and the impact they might bear on the developing banking industry of CEE. The last part analyzes the post-crisis conditions and the future outlook of the banking industry in CEE.
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<tr>
<td>AIRB</td>
<td>Advanced Internal Ratings-Based Approach</td>
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<td>CAD</td>
<td>Capital Adequacy Directive</td>
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Introduction

The collapse of the Soviet Union and the Eastern Bloc created plenty of opportunities for the western banking groups to expand eastwards. The banking industry of Central and Eastern Europe became dominated by the foreign banks that transferred a lot of capital into the region. This has stimulated a rapid credit growth that was the key factor of economic development in the pre-crisis period from early 2000s to the autumn of 2008. However, excessive capital inflows led to numerous imbalances in the economies of CEE countries which came to light during the financial crisis.

The purpose of this paper is to examine the impact of the financial crisis and the new financial regulations, developed in response to the exposed imbalances, on the banking industry, as well as the future prospects of this field.

The first chapter explores the reasons why CEE became contaminated by the financial crisis, and why its impact was so damaging for the banking industry of CEE. Then it examines the factors that helped the region to exit the crisis and the lessons to be learnt.

The new financial regulations are analyzed in the second chapter. The first two generations of Basel Accords – Basel I and II – can help to understand the shortcomings that caused the financial crisis. Basel III and Capital Requirements Directive are reviewed as the instruments that should prevent recurrence of the financial crisis. Implementation of the new financial regulations in CEE is analyzed in more detail.

The CEE banking sector is dominated by foreign banks. Western banking groups and their role in financial contagion are discussed in the third chapter.

The fourth chapter evaluates the conditions of the banking sector in CEE in the post-crisis period and its short-, medium- and long-term outlook.
1 Banking sector development in 2003-13

1.1 The boom years 2003-08 and the financial crisis 2008-09

Since early 1990s until the escalation of the financial crisis in 2008, the economies of Central and Eastern Europe grew at a rate much higher than other emerging markets. Between mid-1990s and 2007 the GDP increased by 4% on average in CEE.

“In 1989, when central and eastern EU countries (CEE) opened their markets to global capital for the first time since the beginning of the socialist era, a profound process of institutional, social and economic reforms, aimed at reconversion to market economies, was launched. The first European Union enlargement was a further step towards economic integration, followed by the second wave of accession in 2007. Each period was characterized by clear patterns of economic growth accompanying the institutional reforms: a severe recession after the fall of the Iron Curtain, followed by an economic recovery and steady expansion from the late 1990s until the recent economic crisis.”

The main driver of GDP growth until 2003 was export. In a short period after the onset of economic transition, CEE economies managed to become a part of Western European production chains owing to low labor costs and high-skilled workers. The market of the European Union became the main market outlet for the most CEE countries. A number of reforms that helped CEE countries to transform their economies into open market ones have been implemented. Low labor cost, financial and trade integration with Western European countries attracted abundant foreign investments. Favorable conditions on the financial markets in addition to low and declining interest rates also attracted foreign direct investments (FDI).

“FDI inflows accelerated with the liberalization of their financial and foreign exchange markets. Since the early 1990s, attracting high and steady FDI inflows has consistently been a key ingredient in the national policy framework of the CEE countries. These countries introduced new laws and regulations that grant foreign capital protection, profit repatriation guarantees and, in many cases, permit total ownership of domestic companies to foreign investors.”

Starting from 2003 domestic demand supported by credit growth became the main factor of the rapid growth. CEE witnessed a huge inflow of capital that began with the turn of the century.

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1 Capello and Perucca (2014), p.1
2 Darrat et al. (2005), p.7
The domestic demand rocketed, being stimulated by bank lending. In early 2000s financial and banking intermediation was at very low level. Thus, banking groups were attracted by high growth opportunities and profitability levels, unreachable in the developed markets. The CEE markets ceased to be considered risky, as some joined EU and others were on their way to the membership.

The credit boom in the CEE was based on capital inflows from abroad. “From the beginning of this decade until the first half of 2008, the economies of central and eastern Europe (CEE) experienced large capital inflows from the West, a credit boom and rapid expansions in both consumption and investment. The counterpart to this boom was a sharp increase in private sector external indebtedness.”

In order to secure a substantial market share, Western European banking groups implemented expansionary policy. They were granted this opportunity after the privatization of state banks. With remarkably low interest rate margins in home markets, they provided ample funding for much more profitable CEE markets.

“The involvement of western banks in CESEE was initially confined to equity investment in their local subsidiaries, but over time western banks provided more and more financing. Total funds provided to the region grew from around US$200 billion in 2002 to some US$1 trillion in 2008 or 25 percent of regional GDP. About half comprised funding for banks (in particular their CESEE subsidiaries), mostly in the forms of loans. The other half of the financing took the form of cross-border loans to non-banks. During 2003–08, most CESEE countries experienced a credit boom... There were few limits to financing because of abundant global liquidity and tight financial integration of CESEE with the West, not least through the presence of cross-border banks.”

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3 Berglöf et al. (2009), p.3
4 IMF (2013a), p.8
The capital cash flows from western banking groups varied substantially in the CEE region. More developed markets of Central Europe (CE) like Poland, Czech Republic, and Slovakia had similar interest rates as in Western Europe. Moreover, they had flexible exchange rates that reflected the growth of capital inflows. These circumstances moderated the flow of foreign capital. On the other hand, Southern and Eastern Europe (SEE) and Baltic countries had seen excessive capital flows. Economies of the CEE countries became overheated, especially those that had witnessed excessive capital inflows. Wages and inflation rocketed, assets and housing prices soared, and the countries started running current account deficits. However, at that time it was not evident that growth of domestic demand was not sustainable and depended largely on the foreign funding. The credit growth was expected to continue, because it was perceived as a new normal.

“The cause of the crisis in Eastern Europe, as in East Asia in 1997, was large current deficits in the private sector that had accumulated into large private foreign debt. The crisis was connected with pegged exchange rates, which attracted vast capital flows into these countries, leading to excessive monetary expansion and overheating, thus making them vulnerable to global disturbances.”

The CEE countries maintained the high ratings until the outbreak of the global financial crisis. Credit default swaps (CDS) of the sovereign bonds, which can be considered as a measure of

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5 Aslund (2010), p.103
riskiness, continued to decline. In response to a prolonged period of high economic growth, economists claimed that it was natural because of a catch-up of Eastern European economies to the levels of Western European ones. Only a huge adverse outside shock could have brought the CEE growth to a halt, but the capital inflows from the western banking groups were not recognized as a point of weakness.

“Financial markets seemed to support the ‘benign’ view of capital inflows—which for many policy makers made the more worried view less compelling. As public debt ratios in the region dropped, the perceived riskiness of the region continued to decline, and CDS spreads dropped to very low levels. Even when vulnerabilities were recognized, a crisis was seen as a tail risk. It was difficult to envisage a shock severe enough to trigger an actual crisis, and few recognized the risks that a shock to the region could originate from the financial system in Western Europe.”

With the benefit of hindsight, it can be said that economies of the countries with the least foreign capital cash inflows best survived the crisis. Had regulators recognized the risk of unsustainable credit growth based on foreign funding, the negative consequences could have been partly prevented.

There were considerable differences among the countries hit by the adverse shock in 2008. The countries with fixed interest rates were most seriously affected. Those with flexible exchange rates (Poland, Czech Republic, and Slovakia) saw their currencies appreciating. “In some cases, a flexible exchange regime provided an equalization mechanism, resulting in exchange rate devaluations that served as a safety valve protecting against output decline and recession. In others, an inflexible (or even hard) currency peg, in particular currency board arrangements, kept the currency stable at its pre-crisis level, yet resulted in painful two-digit rates of recession.”

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6 Bakker and Gulde (2010), p.28
7 Brezinski and Stephan (2011), p.22
Even though some countries had managed to recognize general economy overheating before the crisis hit, relatively little action was taken. First and foremost, the regulators intended to limit corporate and households indebtedness. “Overall, our findings reveal 82 policy measures used both separately and in combination. The group of most popular responses includes tightening reserve requirements, capital requirements, soft measures or specific measures targeting foreign-currency denominated loans.”

However, banks managed to avoid restraints by using cross-border lending from parent institutions. “The experience with using credit ceilings and related instruments that were tried to slow lending growth in individual institutions has, however, been disappointing. Rather than discouraging lending, given that home countries were not applying the same rule, it spurred circumvention in the form of direct borrowing by enterprises from foreign banks and the shift of lending to less regulated institutions, while not addressing the macroeconomic problem.”

Cooperation of home and hosts regulators in CEE was rather limited. Host regulators deemed subsidiaries to be monitored on the consolidated banking group level. However, business in the

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8 Geršl and Jašová (2014), p.22
9 Bakker and Gulde (2010), p.42
CEE is usually least important for most western banking groups, thus home regulators did not worry about the CEE subsidiaries.

Both host and home regulators failed to evaluate risk properly. The host countries did not recognize the risk of an abrupt stop of capital inflows and the consequences this can have on the real economy. The home country regulators underestimated the risk coming from the CEE subsidiaries.

“In retrospect, the mispricing of risk seems to arise from underestimating the adverse consequences of overheating as well as potential sudden stops of capital inflows. While convergence is supposed to occur, it should not be so fast that economies overheat, unit labor costs rise rapidly, the economies become less competitive, and production factors are from pulled from the tradable to non tradable sector. Similarly, while consumption should rise as a result of higher permanent income (provided the successful convergence occurs), one should not overestimate the level of permanent income, because the convergence process might not be rapid.”10

Figure 3: Loan-to-Deposit Ratios, 2003 and 2008

Source: IMF (2013)

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10 Bakker and Klinge (2012), p.28
Even though early signs of the crisis appeared in the developed countries in August 2007, contagion did not reach CEE until the collapse of Lehman Brother in September 2007. The projections for CEE were mostly positive, as emerging markets were believed to escape the trouble of developed countries. However, the economic slowdown had already started in 2007. “Deceleration of credit growth (and even a contraction of GDP in Estonia and Latvia) had already started even before the global financial crisis. But the crisis greatly amplified the correction and led to very sharp drop in GDP, especially in the three Baltic countries, with all the associated consequences.”

The exposure of western banking to CEE had been increasing between August 2007 and September 2008. In general, CDS of sovereign bonds rose insignificantly. Only countries with the most unsustainable credit growth had seen the prices of their sovereign bonds declining on the financial markets.

After Lehman’s collapse both trade and capital inflow plummeted. Trade on international markets fell hugely, hitting exports of the CEE countries. Capital markets collapsed, as the confidence disappeared. No one knew how many toxic securities the counterparty had, so banks stopped lending to each other. A number of banks became illiquid, as the interbank markets came to a halt.

The measure of countries riskiness CDS rose considerably. The equity markets of CEE were seriously affected. Some governments could not obtain any financing, because demand for CEE sovereign bonds ceased to exist.

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11 Darvas (2011), p.8
Banking groups in CEE were confronted with liquidity problems. The only remaining source of liquidity was deposit collection. The cross-border parent lending stopped completely. Western European banking groups started to withdraw their funds from CEE. This trend can be clearly seen from external positions of western banks in relation to CEE (see Table 1).

Table 1: External Positions of Western Banks vis-a-vis Emerging Europe, % of GDP, 2007-09

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Source: Bakker and Klingens (2012)

"Tightening funding constraints and potentially biased government interventions raised concerns about an uncoordinated rush of banks out of emerging Europe. Although most banks confirmed their commitment to the region during the early stage of the crisis, there was no formal policy framework or coordination mechanism in place to ensure these commitments were credible. The fear was that while it would be in the collective interest of banks to roll-over debt to emerging Europe, the absence of a coordination mechanism could lead individual banks to withdraw, ultimately causing a ‘run’ on the region.”

The deposit base in CIS and SEE started to decline (see Table 2). Some countries faced the risk of a bank run. Thus, parent banks were forced to transfer liquidity to these countries. Moreover,

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12 De Haas et al. (2012), p.3
the level of deposit insurance was raised in a number of states, which helped to prevent bank runs.

Table 2: Private Sector Domestic Currency Deposits, October 2008-March 2009 (Index September 2008=100)

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<td>95</td>
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<tr>
<td>Bulgaria</td>
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<td>95</td>
<td>104</td>
<td>100</td>
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<td>Romania</td>
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<td>96</td>
<td>102</td>
<td>101</td>
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<tr>
<td>Czech Republic</td>
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<td>104</td>
<td>103</td>
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<tr>
<td>Slovakia</td>
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<td>116</td>
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<tr>
<td>Hungary</td>
<td>104</td>
<td>107</td>
<td>112</td>
<td>111</td>
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<tr>
<td>Poland</td>
<td>101</td>
<td>103</td>
<td>108</td>
<td>112</td>
</tr>
</tbody>
</table>

Source: Bakker and Klingén (2012)

Global trade also came under pressure because of prevailing uncertainty. Commodity prices dropped, while export volumes were low. The downturn in global trade affected, among others, Ukraine as a steel producer and Russia as an oil exporter.

Since credit growth stopped, domestic demand has considerably shrunk. This was reinforced by the decline in consumption and investment. Hence, as early as in the last quarter of 2008, GDP deteriorated in almost all CEE countries. The only country that managed to develop was Poland. The GDP growth of about 2% was achieved primarily because of strong internal demand and floating exchange rates. “All of the other countries in question experienced significant GDP decline, with the exception of Poland, which has managed to maintain at least a moderate growth rate throughout the entire economic crisis. According to Gorzelak (2010b), the primary reasons for the exceptionally good relative position of Poland during the crisis include its diversified economic structure, its relatively extensive domestic market (that is, a relatively low dependence on exports), the relatively large share of agriculture in employment and GDP – demand for agricultural products was not significantly affected by the crisis – and,
finally, the significant decline in the exchange rate of Poland’s currency compared with the dollar and the euro.”

Local regulators undertook measures to restore confidence in financial markets in CEE and support banks. Their top priority was to increase liquidity in the banking sector. “Several countries also introduced new fixed-term domestic and foreign currency liquidity supply operations, some countries, such as Ukraine, also widened the range of collateral accepted for monetary operations. To contain the risk of bank runs, deposit coverage was increased. Strengthening banks’ capital positions was also a priority. Many supervisors also recommended a zero-dividend policy and sometimes requested preemptive recapitalization based on stress tests (as in Romania and Ukraine). Recapitalization funds were set up in Hungary and Russia, while other countries implemented a countercyclical relaxation of loan classification and provisioning requirements (Romania, Bulgaria) thus making it less costly for banks to renegotiate loan terms with their customers.”

The measures taken by national governments and regulators in addition to the financial support from international organizations such as IMF, which provided funding for troublesome countries, helped to stop contamination. In 2010 almost all CEE were out of recession.

1.2 Lessons learnt from the crisis

The crisis in 2008-2009 was the first one to be caused by intrusion into the global economic processes. The contagion spread to the region due to a great deal of imbalances and vulnerabilities. The fact that some economies like Poland were impaired less owing to a reasonable policy proves that economy would have sustained much less damage, had the policymakers recognized the threats, avoided excess, and implemented prudent policy. The decision makers should have recognized the risks coming from excessive credit growth, including lending in foreign currencies. Deep understanding of errors and miscalculations can help to avoid further crises.

The model of centralized banking is widely criticized. Western banking groups built up networks of subsidiaries in CEE and transferred huge amounts of funds into the region, which has led to unsustainable lending growth. Subsidiaries should have more independence and finance the lending growth primarily on the expense of deposits.

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13 Blažek and Netrdová (2012), p.49
14 Bakker and Kligen (2012), p.54
“During good times, the credit supply curve in host countries is very elastic, as parent banks shift funds to where credit growth is rapid, and profits are high. This means that credit growth can become much higher than in an economy where credit growth has to be funded from local deposit growth alone. Moreover, the pricing of such funding may also be lower than what could have been possible domestically or in international markets and may not fully capture risks. When parent banks are hit by shocks and the supply of foreign funding dries up, the end of the credit boom may trigger a sharp downturn in the host countries. As credit demand declines, lending rates may not fall (which would mitigate the downturn), but instead funds may be repatriated to the parent bank.”¹⁵

Another point is the type of foreign financing. Foreign direct investments are much more preferable for home countries, since they usually guarantee sustainable economic growth. It is recommended that policymakers should take measures to attract FDI.

“The source of financing matters. One of the least relevant pre-crisis indicators was foreign indebtedness. Even the current account deficit said surprisingly little about the risk of financial crisis. The case in point is Bulgaria, which had the biggest current account deficit of all of 25 percent of GDP in 2007 and a foreign debt exceeding its GDP. Even so, Bulgaria did not suffer more than other European countries during the crisis. The dominant explanation is that Bulgaria had huge net foreign direct investment that financed the whole current account deficit.”¹⁶

In Bakker and Gulde (2012) the authors underscore the importance of adequate supervision. Supervisors must understand the possible risks, such as low capital buffers and foreign exchange risk in the case of CEE before the financial crisis.

“Prudential rules need to be designed to adequately cover risks, which in the context of emerging markets may require higher capital buffers than in more mature markets. In addition, foreign exchange risk should be adequately priced and, at a minimum, incentives toward lending in foreign exchange should be avoided. Rules applicable to foreign exchange lending to unhedged consumers, and carry trades may need to be revised both to better protect individual consumers, but also avoid macroeconomic consequences of such lending practices. Finally, improved home-host cooperation among supervisors will be needed for a consistent implementation of an improved prudential framework.”¹⁷

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¹⁵ IMF (2013a), p. 26
¹⁶ Åslund (2011a), p.5
¹⁷ Bakker and Gulde (2010), p.42
In the time of rapid economic growth economists and policymakers are often tempted to call the current economic boom a new phenomenon that cannot be fully explained by traditional economic theory of cyclicality. In order to avoid costly excesses policymakers must understand the reasons of fast economic growth and know whether the prices of assets are rising in a reasonable manner, and the economy becomes more competitive. The cost of an economic bust can be enormous and might eliminate all previous pre-bust achievements.

The choice between fixed and floating exchange regime is an important issue. A floating exchange regime, usual for developed economies, is not always advantageous. However, in the case of CEE it became evident that countries with more flexible exchange rate coped better with excessive capital inflows. In fixed exchange regimes national banks were unwilling to appreciate their currencies in response to high capital inflows and deter unsustainable growth, thus preventing economy overheating.

“The exchange rate conundrum remains unresolved, and none of the three main exchange rate regimes—fixed rates with currency board, temporary peg, or floating rate with inflation targeting—is altogether disqualified. Each has specific advantages and shortcomings. Currency boards are better at maintaining fiscal discipline, and inflation targeting is more effective at controlling the threat of excessive capital inflows. Yet, the credit boom and its bust were largely beyond the control of officials in individual countries.”

Another lesson that can be learnt from the crisis is the importance of international aid from organizations like IMF and EBRD. “Large and early international assistance is vital. The scarcity of liquidity rendered early and big international financial assistance vital. Given the very low levels of public debt before the crisis in all countries but Hungary, the East European financial crisis was essentially a liquidity crisis and not a solvency crisis, and that was evident from the outset.”

In addition, policymakers should pay more attention to fiscal policy and unsustainable expenditure growth. The best tool that decision makers have to fight economy overheating and asset bubbles is countercyclical policy. However, political situation prompts them to increase expenditures at least to match the level of economic growth. Thus, in the time of recession policymakers do not have necessary resources for countercyclical fiscal policy.

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18 Åslund (2011b), p.386
19 Åslund (2011a), p.4
“A more sustainable approach to fiscal policy may need to focus less on targeting a fiscal balance and more on containing expenditure growth. Limiting expenditure would also imply that fiscal balances will need to improve rapidly during booms—even in surplus countries. While the above argument holds for all countries facing capital inflows, the role of fiscal policy in fixed exchange rate countries will need to be even more pronounced to reduce demand pressures in the economy.”

Restricting credit growth and restraining spending in the time of economic boom is a huge challenge for national policymakers. However, the financial crisis in CEE has demonstrated that economies of the countries that undertook such unpopular measures suffered much less.

1.3 Banking sector stabilization 2009-13. International support

The first sign of global recovery appeared in the first quarter of 2009. The prices on commodity markets started to rise, equity markets came to life, spreads of CEE sovereign bonds to developed countries sovereign bonds began to decline. Financial markets believed that policymakers can work together in order to take necessary actions. Federal Reserve and European Central Bank implemented monetary easing by cutting interest rates and buying sovereign bonds. Governments took fiscal countercyclical measures and carried out stimulus programs in order to boost impaired economies.

The recovery in CEE was slower than in other emerging markets. Nevertheless, after a huge drop in 2009, GDP started to climb again in 2010, reaching the pace of 4% in the second half of the year.

The more imbalanced was a CEE economy before the crisis, the more it was hit by it. Poland saw a positive GDP growth in 2009, reaching almost 2%. Other countries such as Macedonia, Albania, Moldova, and Belarus withstood the crisis with little losses, whereas Latvia, Romania, and Croatia suffered economic decline not only in 2009, but also in 2010.

“The differences in the strength of recovery were due to developments in domestic demand. Countries that had the largest domestic demand boom in the precrisis years now saw the sharpest declines in domestic demand, since the large capital inflows that had fueled and financed these demand booms had disappeared. Large drops in housing prices further contributed to the weakness of domestic demand. Domestic demand remained quite strong in

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20 Bakker and Gulde (2010), p.43
countries where imbalances in the precrisis years had been more contained and was further fueled by an early return of capital flows.”

Domestic demand had recovered by 2011, when all CEE countries witnessed positive GDP growth. However, there still existed differences between the countries. The cost of capital in CEE remained high, while the countries with most imbalances could not expect a rapid increase in FDI flows. In SEE, where domestic demand is limited, the growth was particularly low, at a single-digit rate.

“In a post-crisis economic recovery the cost of capital is expected to remain at high levels for at least a few years. At a higher cost of capital, FDI will be less than previously and bank capital flows will decline giving rise to lower GDP growth rates. This will challenge the existing growth model of the SEE countries. This may require an adjustment in external imbalances, supported by deeper structural reforms on labour and product markets.”

At the start of the crisis some experts issued pessimistic forecasts regarding withdrawal of western European banking groups from the CEE markets. Local currency depreciation and high level of defaulted credits could have disincentivized banks from staying committed to the region. “Very high levels of foreign bank ownership in central and eastern Europe (CEE) gave rise to fears that the region would be vulnerable to ‘cutting and running’ during a financial crisis, whereby western parent banks would repatriate capital and liquidity to their home markets and abandon their CEE clients.”

Nonetheless, expected long-term meltdown did not occur. Almost all currencies of the region depreciated, but the depreciation was soft. Only two CIS states currencies, Ukrainian hryvnia and Russian ruble, suffered a loss of almost 60%. Banking crisis did not materialize either. The collapsed banks in Baltic countries were rescued by their government with support of Scandinavian states that provided needed capital to the banks and managed to supply the banking system with enough liquidity. In contrast, the banking crisis severely affected Ukraine. A possibility of massive bank runs became a reality. Ukrainian policymakers provided necessary liquidity, relaxed reserve requirements, and increased the sum of deposit guarantee. The banking system of Ukraine managed to recover only in 2012-2013, with RoA and RoE still in low single-digit numbers.

21 Bakker and Klinge (2012), p.69
22 Sanfey (2011), p.54
23 Epstein (2013), p.847
However, it is not yet clear whether the CEE government could have been able to deal with the problems without support of international financial institutions, the European Central Bank, and their actions coordinated with the western banking groups and local regulators within the framework of the “Vienna Initiative”.

The International Monetary Fund, the World Bank, the European Investment Bank, and the European Bank for Reconstruction and Development introduced support programs. However, the strongest support came from IMF.

The volume of financial aid was impressive (see Table 3). The countries that benefited most were Latvia, Ukraine, Hungary, Moldova, and Romania. In addition, IMF understood the risk of procrastination and uncertainty on financial markets. For this reason a substantial share of the financial help was granted immediately. This fact demonstrates that international financial institutions are determined to take decisive measures in order to avoid financial meltdown.

The undertakings of international organizations were successful. In some cases the funds were not even drawn, since the commitment was enough to assure the markets.

Table 3: IMF Support for Countries in Emerging Europe Including Cofinancing, 2008:Q4-2010 (Billions of U.S. dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>IMF</th>
<th>EU</th>
<th>WB</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>15.7</td>
<td>8.4</td>
<td>1.3</td>
<td>0</td>
<td>25.4</td>
</tr>
<tr>
<td>Ukraine</td>
<td>25.5</td>
<td>1.3</td>
<td>2.8</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td>Latvia</td>
<td>2.3</td>
<td>4.4</td>
<td>0.6</td>
<td>3.3</td>
<td>10.5</td>
</tr>
<tr>
<td>Belarus</td>
<td>3.5</td>
<td>0.3</td>
<td>0.2</td>
<td>1</td>
<td>4.9</td>
</tr>
<tr>
<td>Serbia</td>
<td>3.9</td>
<td>0.2</td>
<td>0.4</td>
<td>0</td>
<td>4.5</td>
</tr>
<tr>
<td>Romania</td>
<td>17.2</td>
<td>6.6</td>
<td>1.3</td>
<td>1.3</td>
<td>26.3</td>
</tr>
<tr>
<td>Poland</td>
<td>20.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20.5</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1.6</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>2</td>
</tr>
<tr>
<td>Moldova</td>
<td>0.6</td>
<td>0.3</td>
<td>0.3</td>
<td>0.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Kosovo</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>91</td>
<td>21.7</td>
<td>7.1</td>
<td>6.7</td>
<td>126.4</td>
</tr>
</tbody>
</table>

Source: Bakker and Klingen (2012)

The distinguishing feature of CEE banking system is its dependence on the western banking groups. Foreign banks accelerated the credit boom and transferred the contagion from developed countries into emerging ones. However, foreign banking groups helped to stabilize the financial system after the crisis broke out. Parent banks provided the necessary liquidity to their CEE subsidiaries. No single subsidiary has failed. Banks managed to coordinate their
actions, preventing banking panic in CEE. Nevertheless, further lending growth was not feasible.

“True, no parent bank would have wanted to single-handedly destroy the franchise value of its own subsidiary by cutting credit lines. However, this thinking presupposes that the franchise value of local subsidiaries remained positive during the crisis. Whether this proposition was valid or not depended in turn on the reaction of other parent banks. Had they all cut credit lines, the resulting financial meltdown would have destroyed the franchise value of any local subsidiaries, and under those circumstances it would have been better for each parent bank to join the exodus rather than throw good money after bad in a vain effort to prop up local subsidiaries.”

In addition to IMF support programs, international financial organizations (IMF, EBRD, EIB, and WB), European institutions (European Commission, ECB), host and home country regulators, and large banking groups decided to pull together under the so-called Vienna Initiative.

“The Initiative has provided a forum for decision making and coordination that helped prevent a systemic banking crisis in the region and ensured that credit kept flowing to the real economies during the crisis. The Initiative specifically sought to limit the negative fallout from nation-based uncoordinated policy responses to the global crisis and to avoid a massive and sudden deleveraging by cross-border bank groups in emerging Europe.”

As the capital outflow had already started in the last quarter of 2008, the participants of the Vienna Initiative made it their goal to prevent uncoordinated withdrawals. The Vienna Initiative has turned out to be a successful undertaking.

“It has helped resolve the ‘prisoner’s dilemma’. For crisis cases, external sustainability could only be assured if foreign banks remained engaged in the countries in which their subsidiaries work… Commitments were upheld. Parent banks maintained the agreed exposure limits. This was critical particularly as the crisis proved to be worse and the recovery took longer than expected. Subsidiaries were also recapitalised according to stress-test results. Over time consultations allowed for ‘controlled’ deleveraging. During regular reviews exposure commitments were reduced on a country-by-country basis. This permitted banks to increase room to manage liquidity internationally while still supporting external sustainability. The

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24 Bakker and Klinge (2012), p.84
Vienna Initiative informed as well as supported policy decisions in both home and host countries.”

Within the framework of the Vienna Initiative, another financial support package was placed at the disposal of the region. In early 2009, EBRD, EIB, and WB initiated a Joint IFI Action Plan to support the banking system, having granted 33 billion EUR in addition to IMF support programs.

“In five countries – Bosnia and Herzegovina, Hungary, Latvia, Romania and Serbia – a total of 17 parent banks pledged, via so-called commitment letters, to maintain their overall exposures and to recapitalise subsidiaries for the duration of the IMF/EU programmes. Importantly, the banks that signed differed by country as did the exact nature of the commitments.”

“All stakeholders made critical commitments to bring about this cooperative outcome. Parent banks pledged to maintain their exposure to CESEE and recapitalize their local subsidiaries as needed. This was backed up by public commitment letters from banks’ CEOs in the case of five countries with IMF-supported programs (Bosnia-Herzegovina, Hungary, Latvia, Romania, and Serbia), monitoring of agreed quantitative targets by central banks, and follow-up in the context of IMF program review missions as needed. The IMF and the EU provided large-scale financial support in the context of programs. Other international financial institutions made direct financial assistance to banks available under the so-called Joint IFI Initiative.”

Development of the Vienna Initiative strengthened the confidence in financial markets. Banking groups remained committed to the CEE region. Only a few of them withdrew from their non-core markets in the post-crisis period, causing no panic on the markets. The overall cross-border exposure of foreign banks declined in the aftermath of the financial crisis. However, the downturn in CEE was much lower in comparison with other regions, owing to coordination between market participants.

While under Joint IFI Action Plan international banking groups pledged to remain committed to five countries, they could further withdraw from the others. In De Haas et al. (2012) the authors look into the possible negative spillover effect and analyze whether the banks that took part in the Vienna Initiative remained more committed than those that did not.

27 De Haas et al. (2012), p.10
28 IMF (2013a), p.36
“In particular, cross-sectional regressions for the crisis year 2009 indicate that subsidiaries of parent banks that signed commitment letters where significantly more stable sources of credit than subsidiaries of banks that did not sign such letters in the same country. We find no evidence of VI banks withdrawing from non-VI countries in order to maintain exposures to countries where they signed commitment letters... In all, we conclude that the Vienna Initiative, an ad hoc coordination mechanism, was a relatively successful example of catalytic funding where public funds provided by the IMF, EU and various development institutions were complemented by a coordinated (but non-coercive) bail-in of private-sector lenders.”

1.4 Eurozone crisis and its implications in Central and Eastern Europe

In 2010-2011 a new wave of financial crisis intensified in Europe. The main reason was the rise of government debt levels that made rating agencies downgrade sovereign bonds of many Western European countries. Huge fiscal imbalances and public indebtedness of Greece, Ireland, Portugal, Spain, and Italy reinforced this process.

“2011 was Europe’s annus horribilis, arguably the nadir of the eurozone crisis. It was the year after the crisis surfaced in what were initially dismissed as a handful of small countries with special problems, starting with Greece, Ireland and Portugal, before infecting the monetary union as a whole.”

The CEE region seemed to stand aside from the downturn of the Eurozone periphery. The sovereign bond spreads of a number of emerging countries in Eastern Europe turned to be lower than those of much advanced economies in the Eurozone. Until the end of 2011 CEE economies remained unaffected by the adverse shock of the Eurozone crisis. They managed to correct the imbalances that caused a deep downturn in CEE in the aftermath of Lehman Brothers collapse. The banks in CEE became considerably less dependent on the foreign capital inflows. Governments adopted much more moderate policy, and fiscal deficits shrank. All things considered, by 2010 CEE economies had managed to fix the vulnerabilities that were the source of the financial crisis.

“The main reason the region was so little affected by the current euro area crisis this time is the absence of large imbalances. In 2007 and 2008, the region was vulnerable to a sudden stop in capital inflows because countries were borrowing considerable amounts from abroad (mainly

29 De Haas et al. (2012), p.28
30 Eichengreen (2014), p.3
from banks in western Europe) to finance their large current account deficits. By 2011, a large portion of these imbalances had disappeared. Today, economies are not overheating, and growth is increasingly driven by exports rather than domestic demand booms fueled by inflows of foreign capital. Countries have also embarked on programs to reduce their fiscal deficits.”

Nevertheless, fiscal deficit is still high in some countries. The legacy of the financial crisis in 2008-2009 remains in the form of a large stock of non-performing loans.

However, trade and financial links between CEE and Eurozone did not weaken. Western Europe is the leading export destination for the vast majority of CEE countries. The western European banking groups are still present in CEE. Although most foreign banks adopted a new banking model, with lending growth now depending mostly on local deposit growth, cross-border funding remains substantial for the most CEE countries.

“The European economic downturn and the Eurozone crisis have created difficulties for many European companies. Banks have reduced their lending and consumers lessened their demand for goods and services. These circumstances have prompted rapid capital flight from the CEE region and decreased demand for the exports on which these countries’ economic growth models depended. Exports remain subdued at present amid the ongoing turmoil of the Eurozone crisis and FDI has failed to recover substantially as European companies continue to pursue cautious business strategies in an uncertain economic environment.”

The Eurozone crisis manifested itself in the second half of 2011, when the western banks came under stress because of their high stock of risky sovereign bonds of Greece and other European periphery countries. In response, they were forced to stop cross-border funding of CEE subsidiaries.

“The second wave of funding reductions started in mid-2011 when western European banks came under renewed pressure. During mid-2010 and mid-2011 western bank funding for CESEE had inched up as the region climbed out of its recession and the euro area crisis remained contained to three small peripheral countries. This changed when the euro area crisis escalated to engulf the larger European economies, and banks came under pressure, even in the ‘core’ countries. Pressures were compounded by regulatory tightening under Basel III and EBA

31 Bakker and Klingen (2012b), p.3
recommendations, which were necessary to get to a stronger and more resilient banking system over time but carry the risk that banks choose to reduce lending rather than raise capital.”

Those countries that managed to compensate the lack of cross-border funding by local deposits, namely Poland, Czech Republic, and Slovakia were affected less by the Eurozone crisis. On the other hand, Slovenia, Hungary, and Estonia were particularly severely struck.

In Avdijev et al. (2012) the authors claim that it is the cross-border lending that has to be blamed for the contagion of CEE with the Eurozone crisis. “Our results indicate that home country constraints linked to advanced economy banks drove virtually the entire late 2011 plunge in cross-border bank lending to EMEs. Moreover, our estimates suggest that euro area banks were responsible for around 70% of the decline attributed to home country factors. The impact of euro area banks was particularly large in emerging Europe, where they accounted for over 85% of the explained lending decline in the second half of 2011.”

In view of possible further contagion of the CEE region by Eurozone crisis, international financial institutions, home and host regulators, and the western banking groups decided to continue their collaboration within the framework of the Vienna Initiative 2.0

“However, as market pressures on the home countries of several Eurozone banks have intensified with the widening crisis in the single-currency area, some home and host authorities of these banks have undertaken a series of unilateral and seemingly ring-fencing measures, presumably reflecting the fact that the responsibility for resolution, and ultimate fiscal losses, remains national. Partly in response to these developments, the ‘Vienna Initiative’ – an informal cross-border coordination group created at the height of the 2008-9 crisis and involving international financial institutions, home and host country authorities, and representatives of the major multinational banks – has recently been revived.”

“As the new wave of the Eurozone crisis unfolded toward the end of 2011, signs of a severe credit crunch within the Eurozone, and of rapid deleveraging in emerging Europe, multiplied… Vienna 2.0 aims to ensure that: the deleveraging process is managed to minimise systemic risks in emerging Europe. Home countries coordinate more closely with host countries to take better account of potential systemic risks concerns in host countries. Fiscal authorities would also be involved more directly in home-host coordination.”

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33 IMF (2013a), p.18
34 Afdijev et al. (2012), p.46
35 Zettelmeyer et al. (2012), p.68
The international cooperation of market participants was successful. In 2012 and 2013 credit growth in CEE was still at a single-digit rate, but this seems to be positive compared to Eurozone, where credit growth was negative. Only in Hungary and Slovenia there was no credit growth. With extremely low credit growth and negligible profitability, the SEE region is also seemingly weak.

“The region is in better shape than in 2008, when it was an accident waiting to happen. Large imbalances had made the area very vulnerable to a sudden stop in capital inflows. This is no longer the case—the likelihood of home-grown crises is much reduced. But this does not mean that the region is fully sheltered — it could still be affected by what happens in the euro area. Despite its newfound resilience, the region could be quickly overwhelmed by a worsening of the euro area crisis. That underscores the continuing need to rebuild buffers and hone crisis preparedness.”37

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37 Bakker and Klinge (2012b), p.4
2 New banking regulations in the aftermath of the financial crisis

2.1 Basel accords

The fact that banking industry cannot regulate itself was generally acknowledged long ago, but only a series of banking failures in the 1980s urged the need of a unified banking regulation and adequate capital ratios. The minimum capital requirements, created by the bankers from around the world, were firstly issued in Basel Accord 1988, which was later called Basel I. However, it did not help to avert the financial crisis in 2007-2009 which was at least partly induced by inadequate and lacking banking capital.

Banking industry is based on the risk taken in lending and trading operations. Excessive risk can create excessive profit. Bankers are highly motivated to take excessive risk in order to be rewarded. “Undercapitalisation not only makes a bank vulnerable in a crisis, it could even trigger off the crisis by inducing excessive risk taking when the bank enjoys the privilege of limited liability as all corporations do. When the equity base is low, limited liability effectively truncates the probability distributions of income among which a bank can choose and thus creates an artificial type of risk loving behaviour.”

Another issue for regulators is systemic risk arising from the fact that banking system is highly interconnected, and failure of one bank can generate a domino effect. This issue was not widely recognized until the financial crisis in 2007-2009.

“The case of Lehman Brothers is only the latest case that has provided a vivid example on how an infected member can spread through the whole network and the web of connections and ultimately take down the vast majority of the system as a whole. The interconnections that exist among banking institutions make them all part of one unified system. Banks and their individual state of health are essential, and the lack of thereof will not only put the customers’ of that particular bank in jeopardy, but it is also contagious.”

Before the collapse of Lehman Brothers in 2008, no bank was considered big and interconnected enough to put the whole banking system in danger. A notion of ‘too big to fail’ became widely used by regulators in the US and Europe.

It is critical to have appropriate financial regulations covering capital requirements. This was the reasoning of putting in force the next generation of regulations – Basel II and Basel III.

Financial institutions usually have to comply with financial regulations of their national regulator. In the European Union there are cross-border requirements – Capital Requirements Directive that replaced Capital Adequacy Directive. As a rule, national regulatory requirements

38 Sinn (2001), p.4
39 Azadinamin (2012), p.3
are based on the regulatory requirements proposed by the Bank for International Settlements, an international organization of central banks whose main goal is to promote financial cooperation among them. The regulatory standards developed by BIS are merely a recommendation. It is in the interest of national regulators to implement these standards in order to demonstrate that their national banking system is healthy.

All generations of Basel Accords stipulate that all assets on- and off-balance have to be weighted according to risk, to determine how much bank capital these assets require. Bank capital has to absorb all the losses a bank had suffered. It consists of different capital instruments, allotted to Tier 1 and Tier 2 with a specific minimum level of each.

2.1.1 Basel I

Basel I was the first series of minimum capital requirements for banks. Understanding of Basel I will help us to comprehend the reasons of the financial crisis and the next generations of financial regulations Basel II and Basel III.

To calculate the capital needed to cover a specific asset, the risk weight of this asset, assigned to it according to the asset type, has to be multiplied by 8% minimum capital ratio, as introduced in the first generation of Basel regulations. The risk-weighting takes value 0%, 20%, 50%, 100% depending on the asset type. Such a rigid risk-weighting is widely criticized, since a downgrade of only one notch could mean a doubling of the needed capital.

The capital that compensates the loss through non-payment of dividend, such as equity or preference shares, is considered as Tier 1 capital. Tier 2 capital is thought to be less reliable. The ratio of Tier 1 capital had to be higher than 4%, and sum of Tier 1 and Tier 2 – higher than 8%.

“Tier 1 or core capital: common equity shares, disclosed reserves, non-cumulative preferred stock, other hybrid equity instruments, retained earnings, minority interests in consolidated subsidiaries, less goodwill and other deductions. Tier 2 or supplementary capital: consisting of all other capital but divided into (1) upper tier 2 – capital such as cumulative perpetual preferred stock, loan loss allowances, undisclosed reserves, revaluation reserves (discounted by 55%) such as equity or property where the value changes, general loan loss reserves, hybrid debt instruments (e.g. convertible bonds, cumulative preference shares) and (2) lower tier 2 – subordinated debt (e.g. convertible bonds, cumulative preference shares).”

Under Basel I rules, assets belong either to a banking book or a trading book. The banking book includes traditional banking practices such as deposits and loans. Assets belonging to the

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40 Heffernan (2005), p.182
trading book are more volatile and are marked-to-market every day. The trading book is risk-weighted in a different manner: account is taken not only of a credit risk that depends on the asset type, but also of the one calculated with a Value at Risk technique.

Since providing capital at the levels prescribed by Basel regulations was costly for the banks, they engaged in so-called securitization. “The banks show an innovative spirit in creating new financial instruments that allow them to lower their capital requirements even if they don’t really lower their risk. The regulators then adapt the 1988 rules to cover these new instruments, but always with some delay.”41 Banks created instruments which allowed them to remove their exposure from the balance sheet. Capital requirements for the off-balance sheet are more complicated, but in this way banks cut down their capital charges.

2.1.2 Basel II

Basel I became widely criticized by the banking industry after it was implemented. The main points of discontent were a fixed risk-weighting categorization and the fact that risk ratings of different corporations were not taken into account, as they all received the same risk-weighting. Having admitted the drawbacks of Basel I, in 1999 the BIS started to work on a new generation of financial regulations. The second generation of Basel Accords was published in 2004. Since there was a massive resistance to it before the financial crisis, it was not fully implemented until 2008. The idea of three pillars, now popular in all kinds of regulations, has been presented here for the first time.

Pillar I deals with the capital requirements. Basel III distinguishes credit, operational, and market risk. Pillar I requires banks to apply either the standardized or internal ratings-based approach (IRB) while calculating the regulatory capital. Within the latter banks have two alternatives: a foundation approach or an advanced approach. Following the advanced approach, banks are free to determine the regulatory capital under certain conditions.

In the standardized approach the risk-weightings are determined by credit ratings of the assets, nominated by the credit rating agencies. Then, in order to calculate the required capital, risk-weighted assets have to be multiplied by standard 8% ratio for the sum of Tier 1 and 2 capital. 8% ratio remained unchanged in the second generation of banking regulations.

However, Basel II adds additional categories for risk-weightings. This smoothes the rigid scale of Basel I. The risk weighting of 100% is applied to the borrowers that do not have a recognized rating. It is the task of national regulators to verify whether the 100% risk weight is adequate. Capital charges can be reduced when the financial institution receives a high-quality collateral

41 Balthazar (2006), p.34
in the form of cash and gold, government securities, etc. However, the haircut has to be subtracted from the market value.

Table 4: Basel II capital requirement risk weights, percentage weightings

<table>
<thead>
<tr>
<th>Asset</th>
<th>AAA to AA</th>
<th>A+ to A-</th>
<th>BBB+ to BBB-</th>
<th>BB+ to B-</th>
<th>B+ to B-</th>
<th>Below B-</th>
<th>Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sovereign Banks - option 1</td>
<td>0%</td>
<td>20%</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
<td>15000%</td>
<td>10000%</td>
</tr>
<tr>
<td>option 2 &lt;3 months</td>
<td>0%</td>
<td>20%</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
<td>150%</td>
<td>20%</td>
</tr>
<tr>
<td>&gt;3 months</td>
<td>20%</td>
<td>50%</td>
<td>100%</td>
<td>150%</td>
<td>150%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Corporates</td>
<td>20%</td>
<td>50%</td>
<td>100%</td>
<td>150%</td>
<td>150%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Choudhry (2012)

In the internal ratings-based approach (IRB) banks calculate the risk of assets with their internal risk models. These models have to be approved by the regulator before the implementation. For every loan that bank grants, it has to determine probability-to-default (PD) of the loan. To calculate the capital charge of the loan a bank needs additionally such indicators as loss-given-default (LGD), exposure-at-default (EAD) and maturity (M). LGD indicates the percentage of the expected loss to the total exposure and depends on the collateral value that underlies the loan. EAD indicates how much a bank is exposed in case of an asset default. For example, for a revolving credit it depends on the undrawn amount of loan. Maturity indicates time to expiry date. Longer assets are perceived more risky. Banks also use the Basel formula to calculate required capital that has to be allocated to the asset according to the PD, LGD, EAD and M parameters of the asset.

An important difference between foundation and advanced IRB approach is that under the foundation approach a bank must use values of LGD, EAD and M determined by the BIS. It is different under advanced approach. “…if a bank’s credit risk management system is approved for the advanced internal ratings based approach (AIRB), the bank supplies its own estimates for PD, LGD, EAD and maturity. There are no rules on what factors should be used for the purposes of risk mitigation. Furthermore, all physical collateral is recognised, unlike the limited recognition of property and equity under IRB.”42 Still, under this approach the required capital has to be at least 90% of what it would have been under the foundation approach.

42 Heffernan (2005), p.200
Basel II defines operational risk as follows: “the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events.” The operational risk must be covered by a capital charge. It has to protect a bank from the infrequent events that can inflict large losses for a bank.

Pillar II specifies the tools necessary to supervise the capital allocation covered by Pillar I. “This section discusses the key principles of supervisory review, risk management guidance and supervisory transparency and accountability produced by the Committee with respect to banking risks, including guidance relating to, among other things, the treatment of interest rate risk in the banking book, credit risk (stress testing, definition of default, residual risk, and credit concentration risk), operational risk, enhanced cross-border communication and cooperation, and securitisation.”

Banks are required to create risk-management departments to meet the capital requirements and to assess the risks coming from specific bank activities they engage in. In addition, Pillar II gives the national supervisors the power to increase the capital ratios beyond those stipulated by Basel II if there are signs that their economy is overheating.

The third pillar of Basel II contains regulation of the disclosure banks are required to do to the market participants. National supervisors have to enforce the disclosure. “Broadly, pillar 3 is a set of requirements regarding appropriate disclosures that will allow market participants to assess key information on the scope of application, capital, risk exposures, and risk assessment processes, and so the capital adequacy of the institution.”

The goal of the third pillar is to enforce market discipline and provide investors and other market participants with the needed information. This strengthens corporate governance. The capital disclosure should contain information about bank’s capital level and the specific instruments the Tier 1 and Tier 2 consist of. Bank has to disclose its credit, operational, and market risk. In addition, bank has to reveal information about the total capital and the capital set aside for credit, market, and operational risk.

Pillar III is of special importance for the CEE banks. They were characterized as nontransparent, so increased transparency might boost their market attractiveness. “Developing country financial sectors are typically characterized by 1) banks that are closely held, 2) opaque information regarding bank and associated economic groups and 3) thin and illiquid markets for non-insured bank debt. Assuming consolidation rules and materiality are appropriately applied (implying effective monitoring and enforcement), enhanced disclosure of bank capital

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43 Basel Committee (2001), p.6
44 Basel Committee (2005), p.162
45 Balthazar (2006), p.95
would indeed be useful in such environments. On these grounds and with these qualifications, Pillar 3 may then be considered to be relevant for many developing countries."

Basel I is very often accused in widening the process of securitization. Under this regulation assets of different quality required the same capital coverage, which incentivized banks to remove high-quality assets from their balance sheets through the process of securitization to save on capital. The most risky assets, however, remained on the bank’s books.

“Basel II attempted to address this issue, and even in the standardised approach it managed to produce less of a ‘shot-gun’ approach to risk capital calculations compared to Basel I. The IRB approach attempts to align regulatory capital with economic risk closer still. In addition, Basel II carries a high capital charge for securitised assets where the junior tranche is retained by the bank, so the deal economics in the securitisation will no longer be as attractive as before if the first-loss peace is retained. As we noted above, though, a significant influence on whether the securitisation should be undertaken depends on whether the standardised or IRB approach is used.”

However, probably the most important improvement in comparison with the previous generation of Basel Accords is that internal ratings-based and advanced approaches created enough flexibility for large banks to make right assessment on their own.

### 2.1.3 Basel III

A new set of banking regulations called Basel III was presented in 2010. However, because of the banking industry resistance it would not be fully implemented until 2018. The main goal of the new generation of Basel is to strengthen the stability of the banking industry by raising capital ratios and lowering leverage.

The Tier 1 capital ratio that was 4% under Basel II grows to 6% under Basel III. Nevertheless, the biggest challenge for the banking industry is the growth of Core Tier 1 capital, which now will comprise only equity, retained earnings, and undated preference shares. Instead of 2% it will grow to 4.5%, to which a capital conservation buffer of 2.5% will be added gradually. It should guarantee that in the times of rapid growth banks will create capital buffers that can be used once the banks incur losses. If the buffer is less than established 2.5%, some restrictions are imposed.

“Outside of periods of stress, banks should hold buffers of capital above the regulatory minimum. When buffers have been drawn down, one way banks should look to rebuild them is

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46 Powell (2004), p.14
47 Choudhry (2012), p.112
through reducing discretionary distributions of earnings. This could include reducing dividend payments, share-backs and staff bonus payments. Banks may also choose to raise new capital from the private sector as an alternative to conserving internally generated capital.\textsuperscript{48}

Another capital buffer created by the new regulations is a countercyclical capital buffer. National supervisor can introduce it in case of excessive credit provision that leads to a credit bubble. “Basel III requires national authorities ‘to monitor credit growth and other indicators that may signal a build-up of systemic-wide risk.’ Based on this assessment they will put in place a countercyclical capital buffer which will extend the capital conservation buffer (described in Section III of BCBS, 2010b), so banks will be subject to restrictions on capital distributions (dividends, share repurchases, and discretionary bonus payments to staff) if they do not meet the additional capital requirement. The countercyclical capital buffer will range from zero to 2.5% of risk-weighted assets.”\textsuperscript{49}

One of the reasons of the global financial crisis in 2007-2008 was that global banking groups were hyperactive on capital markets, and due to their size and interconnectedness, a failure of one of those institutions could have had an irreversible effect on the whole financial system. Thus, a special measure was devised under Basel III in order to limit negative externalities created by systemically important banks.

“A number of the policy measures will have a particular impact on global systemically important banks (G-SIBs), given their business models have generally placed greater emphasis on trading and capital markets related activities, which are most affected by the enhanced risk coverage of the capital framework. These policy measures are significant but are not sufficient to address the negative externalities posed by G-SIBs nor are they adequate to protect the system from the wider spillover risks of G-SIBs. The rationale for adopting additional policy measures for G-SIBs is based on the cross-border negative externalities created by systemically important banks which current regulatory policies do not fully address.”\textsuperscript{50} A capital buffer of up to 2.5% might be imposed on systemically important banks in order to avoid a failure that may trigger a ‘domino effect’ on the financial markets. Never applied before, a leverage ratio is introduced in Basel III. Extremely high leverage ratios were one of the reasons for the unrest on the financial markets. “In many cases, banks built up excessive leverage while still showing strong risk based capital ratios. During the most severe part of the crisis, the banking sector was forced by the market to reduce its leverage in a manner

\textsuperscript{48} Basel Committee (2010), p.55
\textsuperscript{49} Repullo and Salas (2011), p.5
\textsuperscript{50} BIS (2011), p.1
that amplified downward pressure on asset prices, further exacerbating the positive feedback
loop between losses, declines in bank capital, and contraction in credit availability."\textsuperscript{51}

Thus, under Basel III Tier 1 capital must be at least 3\% of total assets, not just of total risk-
weighted assets. As many banks tried to optimize their risk-weighted assets to cut down their
costs, they will be deprived of this option under Basel III, since banks cannot have more assets
than 33 times their Tier 1 capital.

An innovation introduced for the first time under Basel III is a liquidity buffer. It might be even
more challenging for a bank to keep the liquidity on the required level than to maintain the
capital ratios. Especially so for the CEE banks operating on the underdeveloped financial
markets. A short-term buffer called Liquidity Coverage Ratio (LCR) has to include high-quality
assets which can cover unexpected loses in the time of distress. “The regulation requires that a
bank’s stock of unencumbered high-quality liquid assets (HQLA) be larger than projected net
cash outflows over a 30-day horizon under a stress scenario specified by supervisors… Two
types (or ‘levels’) of assets can be applied toward the HQLA pool. Level 1 assets include cash,
central bank reserves and certain marketable securities backed by sovereigns and central banks.
Level 2 assets are divided into two subgroups: Level 2A assets include certain government
securities, corporate debt securities and covered bonds, while Level 2B assets include lower-
rated corporate bonds, residential mortgage backed securities and equities that meet certain
conditions.”\textsuperscript{52}

The long-term liquidity buffer is called Net Stable Funding Ratio. “The goal of the NSFR is to
promote structural resilience over a longer time horizon by encouraging banks to finance their
activities with more-stable (including longer-term) sources of funding. This framework is
complemented by a set of monitoring indicators for supervisors.”\textsuperscript{53} These will be one of the
main issues for the CEE banking, since banks will be obliged to rely on long-term funding in
rather short-term maturity environment in CEE.

\textbf{Table 5: Basel III capital ratios}

\begin{center}
\begin{tabular}{llll}
 & Core Tier 1 & Tier 1 capital & Total capital \\ & common equity & (\%) & (\%) \\ & (after deductions) & & \\
Minimum ratio & 4.5 & 6.0 & 8.0 \\
Capital conservation buffer & 2.5 & - & - \\
\end{tabular}
\end{center}

\textsuperscript{51} Basel Committee (2010), p.4
\textsuperscript{52} Bech and Keister (2012), p.4
\textsuperscript{53} Gomes and Wilkins (2013), p.37
Minimum plus capital conservation buffer | 7.0 | 8.5 | 10.5
Countercyclical capital buffer range | 0-2.5 | - | -
SIFI surcharge/buffer | to be determined | - | -

Source: Coudhry (2012)

“The revised rules allow banks to hold a wider range of assets in the liquidity buffer, including equities and mortgage-backed securities, as well as lower-rated sovereign and corporate bonds. They also assume a less drastic withdrawal of bank deposits and a slower loss of income over a hypothetical 30-day crisis period, which means the buffer can be smaller. Banks will now have another four years, extended from the initial deadline of 2015, to build their liquidity buffers to full strength. They will also be allowed to run them down in times of stress.”54

Introduction of liquidity buffers that have never existed before will drastically change the banking industry as we know it today.

Basel III and Capital Requirements Directive can have unintended outcomes for CEE countries, which are considerably exposed to cross-border banks. Since the aim of new regulations was to make banking industry in the developed countries more reliable, appropriate research has to be done in order to detect possible unpremeditated consequences for CEE banks.

“The specific nature of emerging financial markets – marked by the short duration of financial contracts, shallow local capital markets and information problems that feed wide swings in the credit cycle – was not central to the Basel Committee’s deliberations. Second, central and eastern Europe (CEE) stands out for its deep integration within the European Union’s single market for capital and financial services, which has been reflected in increasing integration of funding relationships within cross-national bank groups – so-called internal capital markets (ICMs). For these reasons the current banking model practised in the region may be uniquely vulnerable to stricter micro- and macroprudential requirements under Basel III, many of which may be applied on a national and consolidated level”55

Researchers from EBCI singled out three main issues with financial markets in CEE that have to be taken into consideration before implementing the new requirements. First, while subsidiaries of western banking groups own a substantial share of CEE market, CEE assets for these banking groups make up only a small part of the whole business. Thus, this draws little interest of home-country regulators. The solution to this issue can be more coordination between home- and host-country regulators. Second, deposits of CEE banks are of shorter

55 Lehmann et al. (2011), p.2
maturity than those in advanced countries. In addition, underdeveloped financial markets can stand in the way of liquidity requirements.

“Third, and in part as a corollary of the previous constraint, private capital market instruments are generally underdeveloped. EBRD research has emphasised the lack of development of both private sector bond markets and short term money markets. More than in most developed financial markets, credit provision to the private sector is dominated by banks and, in turn, banks have limited options to fund themselves through local bond markets. This presents a considerable constraint in meeting the liquidity standards established by the Basel III package.”

The problem of Basel III implementation in Central and Eastern Europe is dealt with in part 2.3.

2.1.4 Criticism of Basel regulations
As expected, Basel III got its portion of criticism. The main point of dissatisfaction were the increased capital requirements. On the one hand, financial institutions have to raise additional capital, on the other hand, they will probably be forced to reduce their asset base and loans granted. It is still being discussed, what capital instruments along with common equity and retained earnings should be considered eligible for Core Tier 1 capital.

One of the problems Basel I and II failed to distinguish and solve was systemic risk coming from the highly increased interconnectedness and complexity of unconventional banking practices that banks got involved into. Whether Basel III is able to address these issues is still a question. “The main tool which regulators use to do so, is capital adequacy requirements, but the current approach has been found wanting. It implicitly assumes that we can make the system as a whole safe by simply trying to make sure that individual banks are safe. This sounds like a truism, but in practice it represents a fallacy of composition. In trying to make themselves safer, banks, and other highly leveraged financial intermediaries, can behave in a way that collectively undermines the system.”

Another issue is that Basel III standard approach attaches higher risk-weights to small and medium enterprises. Thus, regardless of the fact that lending to SME is a usual banking business, new regulations discourage banks from providing finance to SME. The main target of Basel III are systemically important financial institutions, whose main business is usually not SME lending. Small banks, main lenders of SMEs, normally do not have their own risk

56 EBCI (2012a), p.5
57 Brunnermeier et al. (2009), p.i
management models. They will need more capital cover to apply the standardized approach. “Blanket application of the Basel III regulations to those traditionally financing SMEs could in the medium term jeopardise the stability of SME financing and thus economic recovery.”

International think-tanks, such as IMF, OECD and EBRD, that made a lot of research on Basel III implications, stress that new regulations might affect real economic growth in the developed countries as well as in the emerging markets at least in the short term. “The estimated medium-term impact of Basel III implementation on GDP growth is in the range of −0.05 to −0.15 percentage point per annum. Economic output is mainly affected by an increase in bank lending spreads as banks pass a rise in bank funding costs, due to higher capital requirements, to their customers.”

In Slovik and Coournede (2011) authors argue that Basel regulations might have been one of the reasons of the financial crisis in 2008-2009. The ratio of risk-weighted assets to total assets of systemically important banks was about 70% at the time of Basel I introduction. This ratio gradually dropped to the level of 35% in 2007. Thus, systemically important financial institutions needed much less capital to cover the assets. Moreover, non-traditional banking practices demand less capital, thus becoming more attractive. It is questionable whether Basel III would manage to turn this trend around.

“Bank regulation might have contributed to or even reinforced adverse systemic shocks that materialised during the financial crisis. Capital regulation based on risk-weighted assets encourages innovation designed to circumvent regulatory requirements and shifts banks’ focus away from their core economic functions. Tighter capital requirements based on risk-weighted assets may further contribute to these skewed incentives.”

The new liquidity regulation, presented for the first time in Basel III, might have born incentive to circumvent them. The paper also indicates that the macroeconomic effect of risk-weighted and non-risk-weighted regulation are very similar. However, the leverage ratio introduced in Basel III may help to address this issue successfully.

Due to the pressure from the banking industry implementation of the specific requirements of Basel III is constantly postponed. Opponents of the postponement claim that regulators will always surrender to pressure from the powerful financial industry. Supporters argue that financial institutions are not ready to fully implement Basel III, and the consequences of the new regulations have to be thoroughly researched. “In truth, the reason that regulators ultimately chose to relax the rules was simple practicality: many banks in Europe and some in

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58 Angelkort and Stuwe (2011), p.5
59 Slovik and Coournede (2011), p.2
60 Slovik (2011), p.2
the United States would have never been able to meet the requirements without significantly reducing the amount of credit they were to extend to Main Street over the next two years.”

2.2 Capital requirements directive

Capital Requirements Directive is a supervisory framework that makes Basel III rules compulsory within the EU and adds several rules to consider specific features of the European banking industry. Basel III is just a set of standards, not a law, so it had to be modified to be transferred into EU law. CRD IV is intended for all banking institutions across the single EU market, whereas Basel III applies only to active international banks.

CRD IV consists of two legal acts: Capital Requirements Directive (CRD) and Capital Requirements Regulation (CRR). CRD will be applied not only to banks but also to other financial institutions and investment firms as well as financing holding companies. This directive will be implemented gradually with all requirements full in force in 2019.

“The CRD IV builds upon the already implemented Basel II accord and subsequent changes and now also includes the European transposition of the Basel III accord. While the CRD IV is a one-to-one implementation of Basel III on many details, valid concerns have been raised on some ‘European specificities’, notably the definition of capital and capital deductions. The CRD continues to cover topics beyond BCBS publications in areas of supervisory cooperation, supervisory powers, sanctions, market access of credit institutions, as well as large exposures.”

Development of CRD IV is a continuous process, as it is necessary to tackle a lot of technical details and take into account recommendations from the market participants.

In addition to capital and liquidity ratios from Basel III, CRD IV adds some new regulatory features. Basel I and II were criticized for concentrating solely on capital ratios, not covering other important parts of the balance sheet – liquidity and leverage. This is corrected in Basel III regulation and specified in more detail for Europe in CRD IV. Furthermore, CRD IV prescribes that banks have to become more transparent. The directive limits remuneration of the executives, improves corporate governance and increases bank transparency. In addition, the directive tries to diversify boards’ composition.

“Enhanced governance: CRDIV strengthens the requirements with regard to corporate governance arrangements and processes and introduces new rules aimed at increasing the effectiveness of risk oversight by Boards, improving the status of the risk management function and ensuring effective monitoring by supervisors of risk governance. Diversity. Diversity in board composition should contribute to effective risk oversight by boards, providing for a broader range of views and opinion and therefore avoiding the phenomenon of group think. CRDIV therefore introduces a number of requirements, in particular as regards gender balance. Enhanced transparency. CRDIV improves transparency regarding the activities of banks and
investment funds in different countries, in particular as regards profits, taxes and subsidies in different jurisdictions.”

Another important change in the regulatory framework is introduction of such notions as other Systemically Important Institutions Buffer and Systemic Risk Buffer. In addition to globally systemic important institutions covered by Basel III, CRD IV enables to introduce capital buffers for domestically important institutions. The notion of Systemic Risk Buffer in CRD IV makes it possible for EU member states to introduce additional capital buffers in the form of common equity provided that macroprudential risks can be distinguished.

Furthermore, it is essential to lower the dependence on the credit rating agencies. Thus, banks are strongly recommended to base their decisions on their own credit opinion, and in case the exposure to specific investment is substantial, they must create internal ratings. “Finally, the new rules seek to reduce the extent of reliance by credit institutions on external credit ratings by: a) requiring that all banks' investment decisions are based not only on ratings but also on their own internal credit opinion and b) that banks with a material number of exposures in a given portfolio develop internal ratings for that portfolio instead of relying on external ratings for the calculation of their capital requirements.”

A notion of a Single Rule Book was developed in CRR. “The Single Rulebook aims to provide a single set of harmonised prudential rules which institutions throughout the EU must respect. The term Single Rulebook was coined in 2009 by the European Council in order to refer to the aim of a unified regulatory framework for the EU financial sector that would complete the single market in financial services. This will ensure uniform application of Basel III in all Member States. It will close regulatory loopholes and will thus contribute to a more effective functioning of the Single Market.”

CRD IV has two legislative instruments. The directive (CRD) has to be transferred into Member States law. The directive is enforced immediately and affects all Member States in the same way. Those areas of CRD IV that have to comply with the national law are presented in the directive. On the other hand, the requirements to be unified among the countries, such as capital requirements, have form of regulation. The following table indicates which areas are covered by the directive and the regulation.

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Figure 6: Directive and Regulation areas

<table>
<thead>
<tr>
<th>Directive (Strong links with national law, less prescriptive)</th>
<th>Regulation (Detailed and highly prescriptive provisions establishing a single rule book)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to taking up/pursuit of business</td>
<td>Capital</td>
</tr>
<tr>
<td>Exercise of freedom of establishment and free movement of services</td>
<td>Liquidity</td>
</tr>
<tr>
<td>Prudential supervision</td>
<td>Leverage</td>
</tr>
<tr>
<td>Capital buffers</td>
<td>Counterparty credit risk</td>
</tr>
<tr>
<td>Corporate governance</td>
<td></td>
</tr>
<tr>
<td>Sanctions</td>
<td></td>
</tr>
</tbody>
</table>


National regulators will retain some independence in defining capital requirements for the financial institutions. They can demand higher capital ratios in case of systemic risk and macroprudential concerns. For example, in the supervisory guidelines referred to as “Austrian finish” Austrian regulators introduced among other things a new funding ratio – loans to local stable funding ratio. “In November 2011, the Austrian central bank and the Austrian Financial Market Authority announced that subsidiaries of the three largest Austrian banks (Erste Group Bank, Raiffeisen Bank International and UniCredit Bank Austria) have to ensure that the loans to local stable funding ratio (LLSFR) of new loans to local refinancing does not exceed 100 percent.”66

2.3 Implementation in Central and Eastern Europe

The new financial regulations were developed in response to the weaknesses in the financial systems of advanced countries that became evident after 2007. Capital and financial markets, banking systems of emerging Europe differ significantly from those of the developed European countries.

“There are direct effects stemming from the local implementation of the international regulatory reforms as well as indirect effects stemming from the change in business models of international banks in advanced economies in response to the new regulatory landscape. The direct impact of the regulatory reforms is negligible. Banks in CESEE countries generally maintain capital levels in excess of internationally agreed regulatory minima both because of higher minimum ratios specified by local regulators and also because of the higher degree of macroeconomic volatility and overall risk in these jurisdictions. In addition, the capital of banks in CESEE

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66 Bisagni et al. (2013), p.234
countries have generally a higher loss absorption capacity due to the scarcity of hybrid instruments (the use of common equity is more widespread).”

Even on the peak of the financial crisis CEE remained strongly capitalized. Capital ratios of 14-24% are a normal. However, capital ratios of western banks’ subsidiaries are usually lower than those of local banks. Since the presence of foreign banking groups is significant, it is important to take into account the capitalization of these groups.

Authors of the paper EBCI (2012a), written under Vienna Initiative framework on Basel III implementation in CEE, determined the following main problems in regard to capital ratios: 1) treatment of minority interests; 2) foreign currency credit risk; 3) case of small and medium size enterprise financing; 4) definition of the systemic importance buffer.

It can be argued that a subsidiary wherein a foreign bank has only a minority stake might not get support from the parent institution in case of need. That is why under Basel III the minority stake is only partly acknowledged in the capital ratio calculations. The subsidiary’s capital in excess of minimum capital ratios will not be recognized on the banking group level in case of minority interest. “Banks in every country gain considerable benefit from at least one of the balance sheet items that will no longer count as capital and therefore put forth arguments as to why they should continue to count. The Europeans are particularly concerned, because many of their corporate structures include investments in insurers and minority interests in their banks to a much greater extent than is true in the US.”

Minority interests represent a lion’s share of total foreign bank capital in Europe. Collaboration of local banks with foreign banking groups, whereby foreign banks received a minor stake, proved to be successful in CEE. Foreign banking groups add their knowhow and capital resources to the expertise of local banks. The new financial regulation encourages western banking groups to sell their minority interest, acquire an additional share to become a major shareholder or transform subsidiaries into branches.

“While the new capital definitions will not expose a dramatic shortfall in capital coverage, they are likely to alter the nature of bank acquisitions in the region. In future, the regulatory capital definition by the Basel Committee will encourage strategic investors to seek full ownership, or acquire the remaining minority stakes in their existing subsidiaries in full. This will constrain liquidity in local equity markets, where some of these minorities may be freely traded, and may come at odds with host country attempts to encourage such a free float – or even restrict full foreign ownership in local banks.”

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67 Impavido et al. (2013), p.23
68 Elliott (2010), p.10
69 Lehmann et al. (2011), p.15
of minority stakes is necessary to avoid the sell-off of minority interests and transformation of subsidiaries into branches.

One of the key vulnerabilities that manifested itself during the financial crisis was excessive foreign currency lending of CEE banks. “Most CEE countries also recorded a substantial rise in foreign currency (FX) denominated credit, leading to concerns about the potential risks of asset deterioration in the domestic banking sector and of accusations about foreign banks ‘exporting’ risks.”⁷⁰ On the one hand, foreign currency lending creates incentives both for borrowers and for western banking groups. Borrowers pay lower interest rates, while subsidiaries of western banking groups are able to lend in home country currency. On the other hand, borrowers are exposed to exchange rate risks, above all in retail lending. In addition, financial institutions that lend excessively in foreign currencies bear a higher credit risk and are more vulnerable.

It is being discussed under which pillar exchange rate risks should be recognized. “An automatic mechanism in the first pillar might increase pro-cyclicality since deterioration in the macroeconomic outlook might lead to depreciation of the foreign currency, which in turn would increase capital requirements, ultimately cutting back credit supply. It is important to note that setting additional capital requirements just for this kind of exposure might come on top of specific regulatory requirements that are already in place and thus put further constraints on credit provision to the economy and to banking sector profitability. In contrast, a pillar 2 treatment would grant a higher degree of flexibility when setting the appropriate metrics to measure the foreign lending exposure.”⁷¹

Reduced foreign currency lending might slow down the credit growth, which may affect real economic growth. However, it will reduce vulnerability to exchange rate fluctuations.

The best way to address this issue is through the collaboration of home and host supervisors, since foreign banking groups can find a way to circumvent national regulations. “Several local authorities took measures to curb foreign currency lending already before the crisis. However, some foreign-owned banks managed to circumvent these regulations, especially via cross-border loans, and thus under-mined their effectiveness. International institutions and home supervisors teamed up with host supervisors only when the crisis was in full swing to avoid regulatory arbitrage, develop alternatives and reduce associated financial stability risks.”⁷²

Under the new financial regulation capital requirements for SME financing are substantially enhanced. Still, SME sector plays an important role in CEE. Not only the task of funds

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⁷⁰ Haiss et al. (2009), p.1
⁷¹ EBCI (2012a), p.17
⁷² Pann et al. (2010), p.78
procurement will become more challenging, but the interest rates of SME lending will rise, as the capital coverage for this type of lending will increase under Basel III. “Sector of SMEs plays a crucial role in national economies; it is a driving force of business, of growth, innovations and competitiveness. It plays a decisive role in job creation and, in general, is a factor of social stability and economic development. On the other hand, SMEs have often difficulties to obtain capital or credits which are caused by the continuing unwillingness of financial markets to take the risk and through insufficient guarantee which SMEs can offer to banks.”

The financial crisis was no fault of SME financing, and there is no evidence that SME financing is a source of systemic risk for banks. However, the cost of financing has grown due to larger capital requirements. Still, regulators can make some amends at least in internal ratings-based approach. In addition, the risk-weights for SME financing can be lowered.

The main reason for CEE banks vulnerability during the financial crisis were not low capital ratios (they were relatively high in comparison with Western European Banks), but inappropriate liquidity management. Overreliance on parent funding and deposits with short maturity was unreasonable. Additionally, banks were exposed to the divergence between funding in national currency and loans in foreign currencies.

The new generation of financial regulations introduces liquidity buffers. Liquidity requirements will be applied on the local level, not on the consolidated one. Currently banks cannot transfer liquidity excesses between subsidiaries. Some experts consider the new liquidity standards unfavorable for the CEE banking sector, since many banking instruments will not be eligible for LCR and NSFR. “The new requirements regarding liquidity coverage and net stable funding ratios, however, could present a major challenge for CEE banks. In view of the fact the new rules will force banks to reconsider their present funding policies and to substantially adjust their portfolios of funding products, the Basel Committee has since decided to postpone the implementation of these liquidity requirements until the end of 2018”

According to CRD IV, in case of macroprudential concerns national supervisors are allowed to introduce additional requirements. This might affect the growth of loans and assets if the guidelines are too stringent. In 2012 Austrian national financial supervisors issued new regulations for three biggest banking groups, where a new funding ratio - “Loan to Local Stable Funding Ratio” (LLSFR) – is introduced among other things. “Recently, Austrian regulators (FMA, OENB) have taken some specific steps in terms of macroprudential regulation

73 Strouhal (2011), p.1
74 Bisagni et al. (2013), p.238
(sometimes referred to as ‘Austrian Finish’), resulting in a release of supervisory guidelines on 14 March 2012. The regulation, which affects the large international banks headquartered in Austria, targets three aspects: (1) The capital position, (2) Funding structures and (3) Resolution plans.”

In the last decade most CEE banks had the loan-to-deposit ratios over 100%. The exception were Czech Republic and Slovakia, whose banking systems can be considered more developed, as they used predominantly traditional deposit funding. In other countries the difference between loans and deposits was very often covered by parent banks’ funding.

Under CRD IV the assets to be used for the calculation of LCR have to be of a very high rating. Sovereign bonds of CEE countries usually have lower rating. Thus, they are not eligible for LCR. Furthermore, the majority of banks in the CEE region cannot meet the NSFR requirements. While the long-term deposits are scarce, the chances to get long-term in the wholesale markets under the present market conditions in Europe are minor.

The other issue with the liquidity might be the fact that under CRD IV the exposure of home-bank to its subsidiary will be seen as liability to unaffiliated party. Thus, this exposure must be restrained. Deprived of parent banks funding, subsidiaries in the CEE region would be forced to attract new deposits with longer maturity, which could push the cost of funding.

“In sum, the impact of stricter liquidity requirements in the NMS region will likely lie in a fragmentation of funding relationships between parents and their subsidiaries, partly depending on the treatment of such funding as short-term unaffiliated liabilities under the CRD... Countries with a traditional funding surplus will be resilient to such changes while those with continued reliance on inter-bank and parent funding will be affected most.”

Another concern is currency denomination. Theoretically, currency denomination of the liquid assets in possession of banks should match to the currency domination of the probable outflows. However, if the bank institution hedges the currency risks with swap instruments, national regulators should be granted with a possibility to regulate this issue at their discretion.

“Specifically, there is a capital charge for FX risk, under Pillar I on Minimum Capital Requirements, so that banks which hold overall net open FX positions on their balance sheets will be subject to a capital charge of 8 percent of the overall net open positions. Thus, banks have significant incentive to close such exposures through hedge transactions, commonly using FX swaps. In other words, banks’ use of FX swaps for hedging purposes, despite incurring credit risk, could help to reduce capital charges for market risk.”

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75 Deuber et al. (2012), p.28
76 Lehmann et al. (2011), p.20
77 Barkbu and Ong (2010), p.11
Basel III introduced macroprudential instruments, necessity of which became evident after the onset of the financial crisis in 2008-2009. Prior to that complicated interconnectedness of financial institutions and real economy was not fully recognized. In the last decades the European financial system developed a huge number of interconnections that can put the system at risk in case of systemic bank crash. As regards CEE, one of the most important issues is the question of reciprocity between home and host country authorities concerning the countercyclical buffer.

Some macroprudential measures have already been taken in several CEE countries. However, not all of them were successful. For instance, too high loan-to-value ratios could have constrained dividend payout of subsidiaries. However, the host country requirements were weakened by direct lending from home country or lending through the bank branches, which are less controlled by supervisors than subsidiaries. One of the Basel III improvements deals with indirect exposure of foreign banks subsidiaries, trying to circumvent the local regulations. “Before Basel III, any tightening in capital required of locally incorporated banks would lead to the objection that foreign banks could lend to firms from offshore without being subject to the more rigorous capital requirements. With Basel III, however, internationally active banks would be required by their home regulators to calculate the countercyclical capital buffer add-on for exposures to the country whether booked in the local subsidiaries or offshore. This example highlights how Basel III hardwires home-host supervisory coordination into the rules in an unprecedented manner.”

Local regulators should adopt complete reciprocity of the countercyclical capital buffers in excess of 2.5%. Otherwise the failure can create a loophole, as banks would use cross-border lending and lending through branches to optimize the capital requirements.

Implementation of macroprudential instruments in Central and Eastern Europe should be highly coordinated by home and host financial market supervisors. Despite the fact that European financial markets are closely integrated, the regulation of bank activity is still limited.

“There should be an appropriate balance between flexibility for national supervisors responding to local risks on the one hand, and sufficient coordination within the single market at the European level on the other hand. In this respect, country-specific measures with cross-border effects, in particular in the macroprudential field, should be implemented based on a regime of tightly constrained discretion. Competent authorities should inform the ESRB, the EBA, the

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78 Caruana (2010), p.5
European Commission and relevant host country authorities ex ante of the measures they plan to implement, giving sufficient time to evaluate the proposed measures.”

In 2010 European Systemic Risk Board was established. The main goal of this organization is to oversee the European financial system and mitigate systemic risks. This authority could coordinate the adoption of macroprudential measures such as capital buffer. “The European Systemic Risk Board (ESRB) was established in January 2011. It comprises the ECB, the national central banks of the EU, the three new European authorities on banking, insurance and securities, the European Commission, and the Economic and Financial Committee (representing national treasuries). Its role will be to conduct macroprudential surveillance across the EU and to issue risk warnings and recommendations, so as to contribute to the prevention and mitigation of systemic risks. Recommendations can be issued to any national or supranational authority.”

The implementation of Basel III standards and the framework of Capital Requirements Directive may have some unintended and unforeseen consequences for individual countries. It is still being discussed whether national regulators should keep some flexibility in the decisions, especially regarding macroprudential tools. However, the indirect consequences of the new financial regulations might have greater impact on the banking sector of CEE. This is mainly because of the large presence of foreign banking groups in the region.

Rapid deleveraging, to which banks are forced under the new regulation, can negatively affect cross-border lending to CEE, which in spite of the increase of local deposit levels remains substantial. Those international banks that are market leaders in CEE are forced to build up capital buffers and cut down on risk-weighted, making deleveraging unavoidable. Consequently, the supply side will make the interest rates in CEE climb.

Furthermore, such kinds of finance as infrastructure and trade finance might sustain especially severe damage. Infrastructure finance has become unattractive for the banking industry because of its long maturities. “European lenders, which used to dominate infrastructure financing, are now busy repairing their dented balance-sheets. Meanwhile the new ‘Basel 3’ rules are steering banks away from the long-term loans (often stretching beyond 20 years) required by backers of infrastructure projects.” In CEE this effect is reinforced by higher riskiness of the projects and short maturities of the deposits. The risk weights for these kinds of finance increased to 100%, demanding more capitalization and prompting deleveraging.

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79 EBCI (2012a), p.11
80 Nier (2011), p.9
The changes in risk weights might also redirect foreign funding from private to public sector. “Elements of the regulatory agenda could promote rebalancing of claims towards the government sector, thus adversely affecting growth. The quest of western banks to reduce high risk weight exposures to contain risk weighted assets could skew the distribution of foreign claims on the region away from FDIs or loans towards government bonds. The shift from private sector to public sector funding could reduce the average productivity of the marginal foreign dollar invested in the region and through this channel, adversely affect economic growth.”^82

National supervisors in the emerging Europe are worried about losing control that will be gradually transferred to EU regulatory agencies such as European Banking Authority and European Systemic Risk Board. CEE countries, members of the EU, should play a greater role in these regulatory agencies in order to strengthen mutual confidence.

The new financial regulations and especially liquidity requirements will be a challenge for many banks in CEE region. In order to address this issue more coordination is needed. In the course of the two latest banking crises, Vienna Initiative proved to be an effective framework to deal with liquidity risks and coordination issues. It could be suggested that Vienna Initiative should further be a midpoint for coordination among market participants in CEE region.

^82 Impavido et al. (2013), p.28
3 Foreign-owned banks in CEE

3.1 Role of foreign-owned banks in transmitting adverse shocks

There has been a lot of discussion on the presence of foreign banks in the emerging economies and their role in the spreading of the financial crisis in 2007-2009. On the upside, CEE banks became more efficient and competitive. In addition, the presence of large international banking groups enhanced the capability of banks to cope with locally born crises. On the downside, international banks might also infect the banking system through their host-country subsidiaries with the crises born outside. The financial crisis in 2007-2009 and the so-called Eurozone sovereign debt crisis in 2011 were brought to CEE mainly through subsidiaries of the Western European banking groups.

Banks in the advanced economies came under liquidity pressure and had no choice but stop new lending to the subsidiaries. They in turn were forced to rely more on the local deposits. Additionally, parent banks started to withdraw funding from subsidiaries. The negative effect differs from country to country and largely depends on the level of development of the banking markets, the strategy and the expansionary policy deployed by the international bank.

It is still not clear whether the total net effect of such a high presence of foreign banks in CEE is positive for the region. In the period from 2002 to the onset of the financial crisis in 2008 the total external funding of the region grew tremendously, one half of it being provided as loans to banks and another – as cross-border non-bank loans. Rapid unsustainable growth of the foreign financing was the main reason why the crisis inflicted damage to the region.

In Cetorelli and Goldberg (2010), the authors claim that international banks played a key role in spreading the crisis that originated in developed countries into emerging markets. In their research they managed to distinguish between supply loan and demand loan effects on the banking systems.

The authors indicate that foreign banks entry and cross-border lending can bring institutional, regulatory, and supervisory improvements, which help to employ capital in the most productive way. “The opening of capital markets to allow foreign bank participation, either through expanded cross-border lending activity or via direct entry into local banking markets, produces significant benefits to emerging markets in terms of enhanced efficiency, liquidity provision, risk-sharing, and overall superior growth opportunities.”

Additionally, subsidiaries of foreign banks can effectively handle and curb the local shocks.

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83 Cetorelli and Goldberg (2011), p.72
However, banking activity can be affected by the adverse liquidity shock originated abroad. Global banks minimize cross-border lending and transfer the funding from subsidiaries in emerging countries back home. Local banks might also suffer if their foreign sources of funding dry up. Thus, a domestic bank should not necessarily be more stable and less vulnerable to shocks originated abroad if it depends substantially on foreign lending. Liquidity shocks can be transmitted to a banking system not originally affected through a contraction either in direct lending by foreign banks or in lending by subsidiaries or in loan supply by domestic banks borrowing funds on the international interbank markets. The authors found evidence that all these channels took part in transmitting the shocks to the host markets. The extent of the negative effect depends on how much a bank is exposed to cross-border lending and to internal lending inside of global banks. However, the dependence on cross-border lending does not per se transmit a foreign shock. Sustainability of the balance sheet prior to the crisis plays a huge role.

Figure 7: Global Balance Transmission through Different Channels

![Diagram of Global Balance Transmission through Different Channels]

Source: Cetorelli and Goldberg (2010)

The paper, however, concludes that international shocks are transmitted through bank subsidiaries and cross-border lending. It cannot be argued that contracting one’s banking system is a good thing. The issue that national regulators should address is that in case of high lending
activity banks should have stable and reliable sources of funding that can be drawn down even during the crisis.

In Jeon et al. (2012) authors concentrate on internal capital markets as a channel that might transmit positive shocks. The result of their research indicates that intra-bank capital markets do transmit shocks. The transmission is strongest during the crisis, as it was during the financial crisis in 2007-2009, and weaker during the calm periods. Moreover, they conclude that during the researched period of 1994-2008 the transmission mechanism got stronger in the end. The authors also found that subsidiaries in CEE were especially vulnerable to the adverse shocks originated in parent banks’ home countries, although the transmitting mechanism can be observed globally. They also discuss how market openness and dependence on parent bank funding and entry mode influence the transmission of shocks.

Dependence on parent funding rather than directly on deposits strengthens the transmission mechanism. A good indicator for parent dependence is loan-to-deposit ratio. “Parent banks seem to allocate more resources to the subsidiaries facing higher liquidity constraints. Second, those less independent subsidiaries will be more affected by the transmission of financial shocks via internal capital markets. When parent banks have a hard time to lend financial support, the subsidiaries with higher reliance on parent banks would find it difficult to promptly and effectively resort to alternative sources to finance their credit, being potentially forced to cut down their lending. A policy lesson for financial regulators in host countries is that they should be more cautious in the supervision of those foreign bank subsidiaries with a relatively higher loan-to-deposit ratio.”

Greenfield subsidiaries tend to be more vulnerable to external shocks than the host-banks acquired through merger and acquisitions. As the greenfield subsidiaries do not have a deposit base initially, their financing is more dependent on the parent institution. Subsidiaries acquired through M&A procedure are usually less integrated in parent banking group, thus they cannot obtain internal banking group funding as easily as greenfields do. Another source of susceptibility of greenfields is that they tend to lend more in foreign currency to multinational and exporting firms, which are the first to be affected by the economic downturn abroad. In addition, they lend at shorter maturity, which indicates that they are less committed to host market. Consequently, they rely more on parent funding.

A greater financial openness of the banking system can also reinforce the transmission of shock originated abroad. Subsidiaries of foreign banks in the countries with limits for capital inflows

\[^{84}\text{Jeon et al. (2013), p.32}\]
cannot make use of intra-group funding as easily as subsidiaries in the financially open countries. Thus, they have to rely more on deposits and local interbank market. The paper suggests that subsidiaries with higher loans-to-deposits ratios, greenfield subsidiaries, and subsidiaries operating in the economies more open financially for capital flow bear more risk.

In Ongena, Peydro, van Horen (2013) the authors examined the transmission of shocks from banking industry to real economy in CEE and Turkey during the financial crisis. The paper also concludes that subsidiaries of foreign banks and domestic banks borrowing abroad reduced the lending during the crisis more than the banks reliant on local funds.

Whereas other papers rely only on the aggregate bank-level or country-level data, the authors of this paper claim that conclusions about the impact on the real economy can be deceptive. Banks that are more dependent on foreign funding may credit different types of firms, so the aggregate numbers can be influenced by changes in lending to large firms. This can hide the fact that the credit crunch might affect mostly small and medium-sized enterprises. The dataset used in the paper differs from those used in similar researches and contains information on the relationship between banks and firms, indicating the size of a firm and whether a bank is locally or foreign-funded.

Upon analyzing firm characteristics, the paper finds that firms with a relationship to foreign-funded banks are affected by negative liquidity shocks more than those with a relationship to domestically-funded banks.

“This is our key result and implies that credit-dependent firms with a relationship with an internationally-borrowing domestic or with a foreign bank, i.e. the two types of banks that contract their credit growth more in 2009, experience a lower rate of growth in their short-term debt than credit-dependent firms with a relationship with a locally-funded domestic bank.”

The cross-border funding also transfers contagion into real economy. The paper argues that total assets, operational revenue growth, and profits of the firms with a relationship to foreign-funded banks decrease more. Furthermore, the paper states that small firms with a relationship to only one bank and firms with little tangible assets are more affected by negative shocks.

In Banincova (2012) the author analyzes whether the foreign ownership of the banking sector per se was the cause of the financial crisis. For this purpose the author compares three CE countries, Poland, Slovakia and Czech Republic, with three Baltic countries. In all countries the

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85 Ongena et al. (2013), p.24
level of foreign ownership is comparable, but the first group of countries was affected by the crisis much less than the second one.

“The financial crisis cannot be attributed to the foreign-bank dominated system which resulted from the financial FDI during the EU accession process. This was clearly shown by the case of three CEE states where West European banks based their lending on local deposits in local currency and therefore financial stability was not affected much by the crisis. In three Baltic states the over-dependence on easily accessible capital from Scandinavian parent banks fuelled credit booms, foreign currency denominated loans and real estate market bubbles. After 2007, these states faced the bubble collapse and currency mismatch; however, the paper showed several mitigating factors within the EU context regarding financial stability (such as foreign banks’ long-term commitment to the host country markets and various policy responses).”

In the report IMF (2013a), the authors take an in-depth look at the differences between foreign and domestic banks and their credit growth in the period before the crisis, during the crisis and afterwards. They conclude that subsidiaries behave differently, and the features of parent banks are important. The growth of domestic-owned banks depends significantly on the profitability and retained earnings, whereas this link is weak for foreign banks. They also became rather sensitive to the equity to total assets ratio and loan portfolio quality. The paper claims that adverse funding shocks and the increased cost of funding is transmitted to subsidiaries. In conclusion the authors suggest that a host country would benefit from foreign banks with low-risk profile, reasonable funding structure, and those coming from countries with high sovereign rating.

Figure 8: Average Annual Credit Growth by Banks, 2001-11

Source: IMF (2013a)

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86 Banincova (2012), p.49
As far as credit growth is concerned, it was higher for foreign banks before the onset of the crisis, while afterwards there was no difference. This can be explained for the most part by adverse liquidity shocks to the parent banks, lack of funding, and increase of its cost.

However, a simple fact that a bank is foreign played a negligible role in raising the credit growth cyclicality. “Foreign ownership per se, after controlling all other factors, seems associated with higher credit growth throughout and cyclicality similar to that of domestic banks. Foreign ownership has boosted the subsidiaries’ annual credit growth by 10 to 12 percentage points during the pre-crisis period, and by 7–9½ percentage points since 2008. This small reduction of the credit growth margin of foreign banks over domestic banks suggests that foreign ownership per-se has contributed only very moderately to the procyclicality of credit growth.”\(^{87}\)

In the CEE bank’s leverage ratio was not significant for lending decisions before 2008, but it started to play a huge role ever since. Regressions indicate that credit growth depends on it for 20%. As the leverage ratio dropped more for the banks with foreign funding, this might be considered as an argument in favor of the opinion that foreign banks contributed to the credit growth cyclicality.

### 3.2 Foreign-owned banking groups in CEE

Foreign ownership stands at level of 80-90% in SEE, 70-80% in CE and 15-25% in CIS, whereas it accounts for 5-15% in the developed Western European markets. However, high presence of foreign banks is a characteristic of all emerging markets. After the breakdown of Eastern bloc and opening of the markets, many Western European banks saw the chance of rapid banking sector growth in CEE region owing to the catch-up trend.

“The high foreign-ownership ratios in the CEE banking sectors should be seen in a broader global or Emerging Markets (EM) context. In fact, those high ratios are not a regional phenomenon, but rather reflect the trend in many other EM’s in which the share of foreign-ownership in their banking sectors increased from a longer-term perspective. As a result of this trend, the market share of foreign banks in many EM country groups averages around 30-40%, while it currently amounts to only 10% in many OECD economies.”\(^{88}\)

Even though the banking sector has been growing rapidly since 2001, it can be claimed that it remains modest once we compare balance sheets of CEE banks with those of top European banks. Total banking assets in CEE slightly exceeded 2 billion EUR in 2011.

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\(^{87}\) IMF (2013a), p.25  
\(^{88}\) Deuber et al. (2012), p.12
The CEE assets of Western European banks are not notable for these banks. Only for the Austrian banks, the CEE assets constitute more than 30% of their balance sheets. “Foreign groups in CESEE are very diverse. At one end of the spectrum, we find global systemically important financial institutions like Deutsche Bank, HSBC, BNP Paribas, RBS, and Crédit Agricole with total assets between USD2 and 3 trillion. At the other end, we find much smaller and often specialized groups like Home Credit, Hypo-Bank Burgenland, Kaerntner Sparkasse, and ProCredit, with consolidated assets between USD5 and 8 billion. With the exception of very small groups (like for instance the Dutch group Home Credit), we find only Austrian subsidiaries accounting for more than 30 percent of consolidated group assets. These are the Erste Group, Raiffeisen RZB, and Volksbank International.”

Sberbank and VTB – two major state-owned Russian banks, having 340 and 177 billion EUR respectively in total assets, are relatively small in comparison with top European banks (though in 2005 the total assets of these Russian banks were more than four times smaller).

Western banks in CEE demonstrated a significant growth in the last decade. Whereas the total assets of the seven western banks accounted for 215 billion EUR in 2005, this number reached 490 billion EUR in 2011. Erste Bank, RBI, Societe Generale, and Intesa Sanpaolo more than doubled their total assets during six years (Table 6). Even though the loan growth of banking groups in Western Europe was rapid at the rate of 5-15% before the financial crisis in 2008, foreign banks in CEE were growing two times faster at the rate of 10-30%.

Table 6: Assets and branches of banks active in the region, EIB (2013)

<table>
<thead>
<tr>
<th></th>
<th>CEE/CIS assets (EUR bn)</th>
<th>Regional asset allocation (% total, 2011)</th>
<th>CEE/CIS branches</th>
<th>Regional branch allocation (2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erste</td>
<td>33  84</td>
<td>65  32  3</td>
<td>1313  2149  2140</td>
<td>2009  131</td>
</tr>
<tr>
<td>Intesa</td>
<td>17  41</td>
<td>57  37  6</td>
<td>549  1585  1446</td>
<td>1029  417</td>
</tr>
<tr>
<td>KBC</td>
<td>32  55</td>
<td>61  22  17</td>
<td>792  1364  875</td>
<td>812  63</td>
</tr>
<tr>
<td>OTP</td>
<td>18  36</td>
<td>49  28  23</td>
<td>935  1496  1424</td>
<td>1124  300</td>
</tr>
<tr>
<td>RBI</td>
<td>31  85</td>
<td>48  28  24</td>
<td>887  2722  2663</td>
<td>1393  710</td>
</tr>
<tr>
<td>SocGen</td>
<td>21  74</td>
<td>50  29  21</td>
<td>2280  3031  2861</td>
<td>2266  595</td>
</tr>
<tr>
<td>UniCredit(^3)</td>
<td>63  116</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>215  491</td>
<td></td>
<td>9037  15364  14647</td>
<td>8964  3417</td>
</tr>
<tr>
<td>Sberbank</td>
<td>73  260</td>
<td>2  2  96</td>
<td></td>
<td>250  19484</td>
</tr>
<tr>
<td>VTB</td>
<td>31  163</td>
<td></td>
<td></td>
<td>983  - 983</td>
</tr>
</tbody>
</table>

Source: Klingens et al. (2013)

Foreign banks in CEE usually engage in traditional loan and deposit banking business, which demands a lot of employees and branches. The number of branches of seven major western

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\(^{89}\) Impavido et al. (2013), p.18
banks in CEE soared in the five years prior to the financial crisis. However, as banks had to reconsider their expansionary policy and take austerity measures after the financial crisis, the number of banks offices went down to 14600 in 2011.

Loan growth came almost to a halt in the post-crisis period. The regional leaders have also changed. Before 2008 loan growth was most noticeable in SEE and CIS owing to the catch-up potential, whereas now CE (excluding Hungary and Slovenia) and Russia are the biggest drivers of growth in the banking sector. “According to our definition, we consider the banking markets in Russia, Poland, the Czech Republic, Slovakia, Romania, Serbia and Albania as the ones with the highest potential for a significant deepening of financial intermediation over the next five years.”

Foreign banks with the presence in CEE are different from their Western European peers. Traditional banking constitutes a much higher share of their revenues. “WBs [Western Banks] present in CEE/CIS are in general less active on the capital markets than major European investment/universal banks, SocGen being the exception. As a result, trading income is less important than for the average major European universal/investment bank. Trading accounts for 2 to 8 per cent of the total income at leading WBs with a presence in CEE/CIS (1 to 5 per cent when excluding SocGen), while net interest income (NII) makes up some 60 per cent of total revenue (65 per cent when excluding SocGen). In CEE/CIS subsidiaries of WBs, NII usually represents around 70 to 80 per cent of revenue.”

Another interesting fact about foreign banks in CEE is that they did not manage to reduce their capital leverage ratio in the post-crisis as other western banks did. In 2008 the average capital leverage ratio of top European banks was higher than that of seven major CEE banks (Table 7).

Those banking groups that managed to lower their capital leverage ratio can more easily receive necessary funding on the capital markets. “If Europe’s banks met the leverage ratio, investors would trust them more. They could then finance themselves in capital markets and wean themselves off the support of the European Central Bank.”

However, European banks successfully shrunk their inflated balance sheets, as required under the new financial regulations. For CEE banks that are mainly involved in traditional loan-deposit business this task seems to be more difficult, since loan books cannot be easily reduced.

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90 Deuber et al. (2014), p.30
91 Klingen et al. (2013), p.49
Foreign banks in CEE are well capitalized. They managed to build up Core Tier 1 and Tier 1 capital ratio. Only Austrian banks can be considered relatively undercapitalized, because they have to return state aid that will not be considered as eligible instrument under Basel III.

General unsustainable lending activity in CEE was less supported by foreign banks. Even though it might have been excessive in some cases, the average loan-to-deposit ratio of major western banks was 1.22 in 2008, whereas for many domestic banks in CEE this ratio exceeded 1.5 (Table 7). For top European banks the loan-to-deposit ratio was also somewhat inflated – 1.17 in 2008 which they managed to reduce to 1.06 in 2012. In CEE banks started to encourage deposit collection, whereas loan growth remained subdued due to supply constraints as well as weak demand. Nevertheless, it is still arguable whether domestic funding based mostly on deposits would be sufficient in case rapid economic growth is restored in the region.

Non-performing loans ratio more than doubled for major western banks in CEE. In 2008 the ratio was only 5%, whereas in 2012 it rose to 12.7%. However, this is still a manageable level. The ratio is rather inflated by very high NPL ratios in Hungary, Slovenia, and Ukraine. “Moreover, despite the efforts from the banking sector and regulatory institutions, NPL levels still remain high, especially compared with the advanced economies in Western Europe… In

### Table 7: Western Banks operating in CEE/CIS and their European peers, EIB (2013)

<table>
<thead>
<tr>
<th></th>
<th>Top Western Banks present in CEE/CIS</th>
<th>European universal/investment banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading revenue</td>
<td>2.7  5.0  6.9  7.0  6.2</td>
<td>-192 -311 -22.9 14.9  15.2</td>
</tr>
<tr>
<td>Trading revenue adj.7</td>
<td>9.6  27.3 22.7 16.4  15.2</td>
<td>87.7 39.7 37.2 39.8  40.6</td>
</tr>
<tr>
<td>Net interest revenue</td>
<td>54.3 63.5 61.7 65.6 63.2</td>
<td>46.8 39.7 37.2 39.8  40.6</td>
</tr>
<tr>
<td>Net interest revenue adj.7</td>
<td>1,22 1,17 1,06</td>
<td>1,12 1,17 1,15 1,14 1,11</td>
</tr>
<tr>
<td>Cost-income-ratio</td>
<td>50.6 55.4 54.5 57.8 56.8</td>
<td>55.5 58.5 57.7 61.9  62.9</td>
</tr>
<tr>
<td>Capital leverage</td>
<td>14.7 14.2 12.1 11.7 10.8</td>
<td>16.6 16.2 10.4 13.1  10.2</td>
</tr>
<tr>
<td>Non-performing loans</td>
<td>5.0  8.7 10.1 11.4 12.7</td>
<td>3.3  5.5  6.0  6.2   6.2</td>
</tr>
<tr>
<td>Loan-to-deposit ratio</td>
<td>1.17 1.08 1.09 1.08 1.06</td>
<td>1.22 1.17 1.15 1.14 1.11</td>
</tr>
<tr>
<td>Tier-1 capital ratio</td>
<td>8.00 10.3 10.5 11.0 11.8</td>
<td>8.60 10.6 11.3 11.6  12.1</td>
</tr>
<tr>
<td>of which core Tier-1</td>
<td>7.2  8.7  8.9  9.5 10.3</td>
<td>6.6  8.4  9.2  9.9  10.6</td>
</tr>
</tbody>
</table>

Source: Klingen et al. (2013)
the CEE region, on the other hand, Bulgaria, Romania, Latvia and Croatia finished 2011 with NPL ratios of 16.87%, 14.3%, 17.23% and 12.27% respectively.”

It has to be acknowledged that NPLs rose in other markets as well. For top European banks the ratio almost doubled from 3.3% in 2008 to 6.2% in 2012. However, this number is much lower than CEE banks’ NPL ratio level, which indicates too excessive and risky lending behavior of the western banks in CEE. NPLs of the most developed CEE markets such as Poland, Czech Republic, and Slovakia are now at the Western European levels.

In contrast to subdued profitability of western banks, which was very low or even negative, their peers in CEE achieved a relatively high Return on equity (RoE) and Return on Assets (RoA) results. However, the RoE and RoA indicators in CEE banking sector do not match similar indicators in other industries. Because of this fact, valuation of banking sector remains low, and market value of most banks is lower than their balance value.

The foreign banks were forced to revise their strategies in response to the financial crisis and Eurozone crisis. The focus now lies on cutting costs and increasing effectiveness. “High-net-interest income and poor cost structures. Although they feel the pain of the credit crunch, banks in this category have a powerful tool at hand to ease the pain: costs. Many Central and Eastern European (CEE) and Russian banks fall into this category, as do those in Austria, Spain and Italy. For these banks, previous growth opportunities outweighed the need to keep costs low, and they can feasibly offset some of their risk by managing costs without affecting service or potential growth.”

The cost-income ratio of seven major banking groups in CEE declined slightly from 61% in 2008 to 57% in 2012. As the net interest margins are going to stay low in the next few years, banks must cut costs further in order to boost their profitability indicators.

In the post-crisis period, we had not seen any deleveraging trends from the Austrian, Italian, and French banks. Their cross-border exposure to CEE region even increased despite the fact that cross-border exposure to other markets was cut substantially. This affirms the strong commitment of leading banking group to further stay in the region. CEE still has development potential, whereas the growth of banking sector in Western Europe might just match the GDP growth.

The ability of CEE banks to find the necessary funding on capital markets worsened due to lower credit ratings. Bank’s credit rating depends more on its country sovereign rating rather than on its credit profile. Italian and French banks in particular had seen their credit ratings

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93 Škarica. (2014), p.38
deteriorating in the aftermath of Eurozone crisis. Therefore, refinancing costs of some foreign banking groups in CEE rose.

The new financial regulations present new challenges for the foreign banks in the region. Italian UniCredit and French Societe Generale will be probably recognized as Systemically Important Financial Institutions. Three Austrian banks – Erste Group Bank, Raiffeisen Bank International, and UniCredit Bank Austria – will be affected by the local Austrian regulations under so-called “Austrian Finish”. These banks will be required to further improve their capitalization, which might create some additional risks.

Another risk for the CEE banks is banking disintermediation. “CEE governments also have the economic incentive to disintermediate banks, and one way to do this is to build the bond markets. The difference from a just a decade ago is impressive, when CEE companies benefited from cheap bank funds, mainly from foreign lenders. Today, such lending has skidded to a halt as banks are squeezed by Basel rules and by weakening economic prospects in Western Europe.”95

As banks’ funding due to high capitalization requirements will become more costly, corporates will seek to obtain funds directly on the capital markets, which can lead to bank disintermediation. However, the effect will be weaker in CEE, because capital markets are underdeveloped here. Only stock exchanges in Warsaw and Moscow are to some extent comparable with Western European stock markets.

Furthermore, average loan maturity might develop unfavorably, since under Basel III banks have to finance long-term loans by long-term funding. The treatment of lending to small and medium-size enterprises under Basel III and CRD IV regulations will be different. Banks will have less incentives for SME lending because of increased capital requirements. SME sector almost entirely depends on bank financing, which might affect SME sector in CEE which is less developed than in Western Europe.

Another trend among foreign banks is to concentrate on the core markets. Before the crisis, many western banking groups tried to enter as many as possible countries in order to secure wide presence in CEE. This strategy proved to be wrong. In the last two years a few banking groups sold their subsidiaries (for instance, Erste Bank and Commerzbank left Ukraine), strengthening at the same time their market position in other countries, which they regard as core markets.

3.3 Largest banking groups

Unicredit Bank Austria. Unicredit is the biggest banking group in CEE. Bank Austria is responsible for overseeing all UniCredit’s banking network in Central and Eastern Europe (with exception for Poland which is directly subordinated to Unicredit Italy). In addition to CEE countries, Unicredit Bank Austria operates in Turkey and Azerbaijan that are usually not included in the scope of CEE. Bank Austria is present in 15 countries and has representative offices in two other states. 46 000 people are employed in 2500 offices all around CEE. Bank Austria is the biggest bank in Bosnia-Herzegovina, Bulgaria, and Croatia, among top five banks in Czech Republic, Poland, Serbia, Slovakia, Slovenia, Romania, Turkey, and Ukraine, among top ten in Hungary, Russia, and Latvia.

The need for deleveraging is now less acute, as bank managed to gradually decrease its leverage ratio to the number of 13 in 2012 and 12,3 in 2013. Also the bank succeeded in improving its capitalization. Tier 1 capital was at level of 9% in 2011, whereas it increased to 10,8% in 2012 and to 11,6% in 2013. Core Tier 1, being at the level of 8,4%, grew to 10,6% in 2012 and to 11,3% in 2013. The whole total capital ratio rose in 2013 from 12,5% to 13,5%.

In 2013 Bank Austria’s net operating profit was rather in line with the average figure achieved in 2012, the main challenges being weak demand with low interest rates, strict regulatory requirements, and fiscal burdens. The diverse trends still can be observed in CEE region. The largest chunk of profits comes from Turkey and Russia, the fastest growing markets in the last years.

In 2013 the non-performing loans ratio diminished slightly from 7,5% to 7%. The coverage ratio of NPL grew by 10%, reaching the level of 61%, which is still considered as somewhat low.

The bank withdrew completely from Kazakhstan, and its subsidiary was sold in April 2013. On the other hand, the banking group plans to expand in CEE region, since dismal market creates favorable environment for the devoted market players. Bank Austria UniCredit plans to make acquisition and increase its presence in Czech Republic, Russia, and Turkey and wants to buy Polish BGZ from Rabobank.

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Raiffeisen Bank International. The Raiffeisen Bank International is the second biggest banking group in the CEE region. It is present in 15 CEE countries and its home-country Austria. In Austria, Slovakia, Romania, Bosnia-Herzegovina, Albania, and Kosovo it is among three biggest banks. It also holds substantial position in Czech Republic, Ukraine, Bulgaria, Croatia, and Serbia. In Russia RBI is the second biggest foreign bank. 60 thousand of its employees service 14,2 million customers in 3100 offices.

Lately the profits of this banking group remained stagnating due to low net interest margins and high ratio of non-performing loans. The NPL ratio grew from 8.6% in 2011 to 9.8% in 2012, having reached 10.7% in 2013. The NPL coverage ratio is at the level of 63.1%, which is lower than in the previous year.

The main problem of the banking group is its low capitalization. Core Tier ratio increased from 9.0% in 2011 to 10.7% in 2012 and remained unchanged in 2013. Tier 1 ratio grew from 9.9% in 2011 to 11.2% in 2013. The capitalization ratio is lower than in the peer group. In addition, RBI received 1.75 billion of state aid after the financial crisis, which will not be counted as capital under Basel III regulation. However, the bank managed to issue new equity in early 2014, obtaining 2.9 billion EUR on capital markets.

The bank’s strategy has fundamentally changed after 2008. Before the financial crisis RBI tried to expand rapidly in all CEE markets by making acquisition, which later appeared unjustified. In the post-crisis period the bank concentrated on the balance sheet reduction, capitalization growth, and efficiency improvement. Now the bank focuses on six large CEE markets where it expects to develop in the next years – Russia, Poland, Czech Republic, Slovakia, Romania, and Poland. RBI intends to withdraw from Hungary, where it has been suffering heavy losses.

Slovenia is another market, where RBI does not plan to grow. A large chunk of RBI’s profits in the last three years comes from Russia, where assets and loan books of its Russian subsidiary increased enormously, especially in retail banking. The unsustainable growth in this market can be risky, because Russian economy still depends on oil and natural export, and the GDP is expected to be stagnant in the near future. In Poland RBI acquired Polbank, strengthening its market position and becoming the eighth biggest bank by loans granted. This is one of CEE core markets which is expected to develop rapidly.

Erste Group. 98

Erste Group is one of the biggest CEE banks with 2000 branches in six countries. It has a significant market position in Czech Republic, Slovakia, Hungary, and Romania. It is also present in SEE in Serbia and Croatia and has indirect presence in Slovenia, Bosnia-Herzegovina, Macedonia, and Moldova.

Bank’s net profits had been stagnating in the recent years. In 2011 the bank suffered 800 million EUR loss because of loan impairments in Romania and Hungary. It partly recovered in 2012, but in 2013, the bank’s profit totalled only about 60 million EUR due to further write-downs in Romania. In 2013 the bank finalized the sale of its Ukrainian subsidiary. It was sold far below its balance sheet value, because the bank’s strategy now is to concentrate on the core markets. The bank’s risk-weighted assets declined from 106 to 90 billion EUR 2013. Erste Bank managed to rise its Core Tier capital ratio from 9,2% in 2011 to 11,2% and in 2012 further to 11,4% in 2013. After the financial crisis in 2008 the bank received state financial aid in the form of participation capital, which had been fully paid back (1,76 billion EUR. This type of capital will not be considered eligible under Basel III. In 2013 Erste Bank managed to issue 630 million EUR equity.

In 2013 NPL ratio grew to 9,6% from its previous level of 9,2% in 2012. NPL coverage has not changed significantly, staying at about 63%. However, Erste Group markets differ greatly. In Romania NPL ratio rose to bewildering 30,6%, in Hungary – to 26,8%, and in Croatia – to 21,1%. However, it remained at low 5% in the core markets – in Czech Republic and Slovakia. Recently the bank has tried to improve asset quality, decrease NPL ratio, and increase NPL provisioning. The bank managed to succeed in such markets as Slovakia and Czech Republic, while the markets of Hungary and Romania remain problematic. In addition, the bank now focuses on lending in local currencies, since the foreign currency lending incurred big losses in the post-crisis period. Apart from that, Erste Bank introduced an “Operational Excellence Program” which should cut down operational costs.

Societe Generale. 99

Societe Generale is a French banking group, one of the biggest in CEE region. Even though the bank has 2900 branches in 14 countries in CEE, only 13% of its exposure (85 billion EUR) is

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based in CEE. Societe Generale is the biggest foreign bank in Russia, where it is represented by three subsidiaries. It also has a significant presence in Romania and Czech Republic. Unlike its CEE peers, Societe Generale obtains much higher revenues from investment banking operations. In the coming years bank has to deleverage, as its CRR leverage ratio was 3.5% in 2013. However, its capitalization ratio remains strong. Its Core Tier 1 and Tier 1 ratio strengthened from 10.5% and 12% in 2012 to 11.3% and 13.4% in 2013 respectively. The bank’s Common Equity Tier 1 under Basel III was at the level of 10% in 2013, higher than for its most CEE peers.

The bank concentrates on increasing deposit collection and reducing loan-to-deposit ratio in all CEE markets. In 2013 the bank suffered 99 million EUR losses in Romania, because its loan portfolio was of poor quality. The bank managed to increase NPL coverage to 69%. Czech Republic is a solid market for Societe Generale. The loan volume rose to 5% in 2013. In Russia the bank managed to augment its profit and reduce its loan-to-deposit ratio, even though both loans and deposits grew in 2013. Societe Generale built up its stake in its Russian subsidiary Rosbank and succeeded in raising 1.7 billion EUR in bonds. The banking group is going to focus on the retail banking in the region and on optimizing its subsidiaries in order to raise RoE and RoA.

OTP Bank. 

OTP Bank is a relatively small banking group with around 32 billion EUR in total assets. What makes this banking group important for the region is that it originates in CEE and operates only there. It services 12 million people in nine countries in 1400 branches. Its core market is Hungary with 381 branches. It also has significant presence in Bulgaria, Russia, and Ukraine. OTP Bank sustained the biggest damage in the recent years, because of weak economic growth in its core market, Hungary, and taxes imposed by the local government. Apart from that, OTP followed an unreasonable policy of lending in foreign currencies and incurred heavy losses, as the local currencies depreciated substantially in the wake of the financial crisis and the Eurozone crisis. The bank also has high NPL ratios in Bulgaria and even in Russia owing to consumer lending. However, NPL coverage ratio can be considered strong, as it exceeds 70%. OTP’s capitalization level is also strong, because it is perceived to be risky due to its only CEE presence. Its Core Tier 1 capital ratio under Basel II grew from 14.7% to 16%.

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Since the core market of Hungary will remain unstable in the years to come, OTP wants to compensate it by high-margin consumer lending in Russia and Ukraine.

Intesa Sanpaolo. 101
Intesa Sanpaolo is a global banking group with more than 1100 branches in CEE region. It is present in Albania, Bosnia-Herzegovina, Croatia, Czech Republic, Hungary, Romania, Russia, Serbia, Slovakia, and Slovenia. Although the bank has a wide geographical presence in CEE, exposure to this region accounts for only 6% of the total exposure. The bank is not among the leaders in CEE countries, but it is committed to grow in the region. However, the bank sold its Ukrainian subsidiary with 270 branches in the beginning of 2014 at a price far below its balance value.

The banking group was hit by the Eurozone crisis and the increased risks in its core market in Italy. Nevertheless, the bank managed to raise its capitalization level. Core Tier capital ratio crept up from 10.1% in 2011 to 11.2% in 2012 and remained unchanged in 2013.

The NPL ratio remains high, even though it dropped from 11.2% in 2012 to 10.8% in 2013. NPL coverage increased from 42% in 2012 to 45% in 2013. Nevertheless, it remains low comparing to other CEE peers.

KBC Group. 102
KBC is a Belgian banking group with more than 800 branches in seven CEE countries. In addition to Czech Republic, the second most important market for the banking group with 14% of capital allocated, the bank has presence in Hungary, Poland, Slovakia, Bulgaria, Serbia, and Slovenia.

The bank was affected by the financial crisis and needed state financial aid. It reconsidered its market strategy in CEE, deciding to concentrate on the core market with significant presence. In the recent years the bank has managed to improve its capitalization level. Its Core Tier 1 capital grew from 9.2% in 2009 to 13.5%, and its Tier 1 capital – from 10.8% to 15.6%. The bank’s NPLs were relatively low at 5.9%. However, there is a great heterogeneity among CEE countries. While in Czech Republic NPL ratio was only 3.2%, in Hungary it reached 19.2% in 2013.

Some banking groups are present only in sub-regions. Greek banks are regional leaders in some SEE countries, having up to a quarter of the market share. “Greek banks account for as much as 25 percent of the assets, deposits and loans in Macedonia, 23 percent in Albania, and between 15 and 20 percent in Serbia. Together with Italian banks they control little under half of the sector in the Western Balkans.”

Greek banks’ assets in SEE have dwindled only slightly despite the undercapitalization and huge problems in their home market. This can be explained by higher profitability of subsidiaries in comparison with the home market. Greek subsidiaries in CEE might not be targets of other banking groups, since SEE banking sector remains unattractive due to low expected GDP growth.

Because of increased capital ratios under the new financial regulations and low profitability, no other major market players are expected to arrive in CEE. “The picture for M&A in Europe is gloomier. In the first three quarters of 2012, the total value of completed global M&A in Europe went down by around 23 percent, if compared to the same period of the previous year (a 17 percent reduction in the number of deals). The picture for M&A in financial sector in Europe is even gloomier. This sharp deceleration of M&A activity stems from the extremely low growth rates in the EU in the last few years, the high cost of funding for most Euro area banks, the increasing pressure from regulators and investors on banks to maintain a high and solid degree of liquidity and capitalization, and parents’ initiatives to rebalance funding patterns of subsidiaries away from foreign funding.”

Nevertheless, there is a probability that Russian banks might expand in CEE. Two largest Russian banks, Sberbank and VTB, with 340 and 177 billion EUR in assets respectively, are already present in CEE. Having acquired Austrian Volksbank International and Turkish Denizbank, Sberbank has around 260 branches in the region.

Russian market is also of interest for foreign banks. However, the market is dominated by state banks. The presence of foreign banks is small in comparison with other CEE countries. “Foreign ownership in Russia is low and WBs (dominating in CEE) are defensively positioned. In the Russian market, subsidiaries of foreign players command a market share of 17 per cent in terms of total assets in 2011 – one of the lowest readings in CEE/CIS.” Moreover, Russian bank sector has recently experienced overheating, with excessive growth of retail lending. Thus, some correction and subdued loan growth can be expected in Russia in the near future.

The biggest changes are to be expected in Poland. In terms of assets Polish banking sector is to some extent comparable with the Russian one, but it is much more open to foreign banks.

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104 Impavido et al. (2013), p. 20
105 Klingen et al. (2013), p.60
“Poland has proved to be particularly attractive market thanks to its relatively strong economic performance and large internal market. Some two thirds of the banking assets in the country belong to foreign-owned banking groups, which have needed financial aid following the crisis and have been forced to dispose of foreign assets including well-performing Polish banks. Add to this the fact that Poland was already considered as an investment opportunity before the fall of Lehman Brothers, so further consolidation is expected.”

106 Deloitte (2012), p.10
4 Banking trends in CEE

4.1 Banking sector condition. Asset and loan growth

Since 2002 CEE region has grown enormously in economic terms owing to its undiscovered potential. Integration with Western Europe and strong internal demand resulted in the economic boom. Global capital markets were full of liquidity, which subsidiaries of western European banks managed to transfer into the region. The economies began to show usual signs of overheating - budget and current account deficits, increased private and corporate indebtedness, and rapid growth of asset prices. When the liquidity in global markets disappeared in 2008, the unsustainability of such growth became evident. Only a few countries such as Czech Republic, Slovakia, and Poland succeeded to protect their economies from overheating partly because of stricter financial regulations.

In the middle of the crisis, there arose great concerns that banking capital might leave CEE region, disrupting the local financial systems and causing substantial devaluation of local currencies. However, the banking system did not collapse. For the most part foreign banks remained loyal to the region. International organizations such as IMF provided considerable financial support and helped the local regulators and banking groups to coordinate their actions under the Vienna Initiative. With a few exceptions, CEE countries managed to avoid financial collapse and restored economic growth in 2010.

“The countries of Central, Eastern and Southeastern Europe (CESEE) have made great strikes in adjusting their economies following the crisis of 2008/2009. Large external imbalances have been corrected, deteriorating public finances have been turned around and respectable growth was achieved in 2010 and 2011. As a result, CESEE has held up well against the challenges posed by the euro area crisis. Nonetheless, the crisis has left unpleasant legacies, including high non-performing loans on banks’ books, deleted fiscal buffers and still too high unemployment.”

However, the region became much more heterogeneous, with some countries remaining high-growth markets (Poland, Russia) and others turning sluggish and unstable (Hungary, Slovenia). Sustainable growth is still at risk in case of unexpected global shocks.

In 2009 CEE economy undergone a recession, shrinking by 6%, with major regional differences (Poland managed to avoid the recession and grew by more than 2%, whereas Ukrainian economy contracted by 14%). CEE region successfully recovered owing to the political

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107 Klingen et al. (2013), p.13
measures and international help, having grown by 4% in the next two years. The policymakers learned a lesson from the financial crisis that exposed all the vulnerabilities. However, there are some weaknesses which should be taken into consideration in order to prevent further downturns.

The stock of foreign currency credits remains huge. In some countries, it is more than a half, which exceeds parent bank funding and deposits in foreign currencies. Since loans in foreign currencies usually have much lower interest rates, borrowers try to benefit from it, forgetting about the currency risk. “The previous empirical and theoretical literature has identified several determinants of foreign currency loans in CEECs. The determinants which are most often cited in the surveyed studies include the interest rate differential, the inflation rate, exchange rate changes, the volatilities of inflation and the exchange rate and their ratio (the so called minimum variance portfolio ratio), as well as the degree of bank funding in foreign currency.”

In Hungary, a lion’s share of loans was denominated in Swiss francs that appreciated substantially during the Eurozone crisis, whereas the local currency devalued, expanding a stock of non-performing loans. In Ukraine, the regulator prohibited foreign currency loans to borrowers with no foreign currency revenues. Still, if the local currencies in CEE depreciate, NPL might rise, building up indebtedness of firms and households.

The banking sector in CEE remains dependent on parent bank funding from western European banking structures. Even though foreign funding share had dropped considerably by now, there exists the risk of a sudden foreign funding cut-down in the event of an adverse shock to western European capital markets.

Current account deficits in CEE diminished notably from the pre-crisis level, making the region less dependent on foreign funding to cover the deficit. However, not all countries managed to make the current account positive. In CEE in particular the deficit levels remained steep. Nonetheless, there is no sign of overheating in the region now.

Fiscal deficits were high even during the boom before the crisis. CEE countries were forced to fiscally stimulate economy in the crisis period, so fiscal deficits became even more inflated. “The current economic and financial crisis has emphasized the significance of the fiscal policy’s anti-cyclical feature, under the terms in which the monetary policy transmission in the real economy is very limited (despite the fact that the interest rate has decreased). However, the margins for fiscal maneuver are quite low, as the budget deficits (which get automatically

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108 Crespo Cuaresma et al. (2014), p.27
increased during the recession periods) extended even in the expansion years, thus increasing the public debt’s stock in the GDP.”

Sovereign debt of CEE countries increased dramatically, reaching in some cases the level of Western European countries. However, it is not politically enforceable to reduce the fiscal deficits in the time when the financial crisis consequences are still noticeable. The GDP of some countries has yet to reach the pre-crisis level. Despite the job market flexibility, the unemployment rates in CEE are higher than in Western Europe. Exports picked up, whereas domestic demand remains subdued.

In 2010-2012 the banking sector in CEE expanded at the rate of GDP growth (Russia is an exception in this context). It can be argued that after the financial crisis it is only the real economy that affects the banking sector, in contrast to the period up to 2008, when bank assets and loans were growing at considerably higher rates than real economy.

However, the growth was rather heterogeneous among the countries. Core CEE countries – Poland, Slovakia, and Czech Republic – were growing at a pace of 5-9% in asset terms, which, however, might decrease in the next couple of years due to weak economic growth. SEE assets growth was almost negligible, whereas Russia, the strongest market over the last couple of years, grew by 17-24% in the period 2010-2012. “Moreover, Russia is an interesting example of an emerging market which has in recent years experienced impressive economic and banking-sector growth. The ratio of banking sector assets to GDP has doubled since the year 2000 and the same holds true for the ratio of bank credit to the private sector to GDP.”

These growth rates will probably cool off due to a gloomy outlook for Russian economy which has been developing unsustainably in the recent years supported by the export of oil and natural gas.

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109 Dinu and Marinas (2014), p.1
110 Fungacova and Weill (2013), p. 6
Growing at a remarkably high rate, Russian banking assets exceeded those of all other CEE countries, which makes up more than a half of total banking assets in CEE. CE share corresponds to a little less than a third, SEE share decreased to 10%, with the rest being market share of Ukraine and Belarus.

The relative growth of Russian banking market can be partly explained by stagnation of other markets such as Ukraine, Hungary, and Slovenia, where bank assets to GDP ratio has further declined despite the dismal GDP growth. It might be explained by the fact that banking intermediation (measured as asset- and loan-to GDP ratios) was already high and comparable to Western European countries. However, the comparability of asset-to-GDP ratios of CEE countries to Western countries must be treated with a dose of skepticism, because the shadow and therefore unaccountable share of economy is much larger in CEE. For instance, the share of shadow economy in Ukraine is higher than 50%, which is an extremely high figure making all ratios based on GDP unreliable.

The outperformance of CEE banking sector in the post-crisis period can be proved by the fact that the size, measured in total assets and loans, increased compared to Western Europe. This also proves that deleveraging affected Eurozone more than CEE.

Loan growth in CEE substantially depends on the business cycle, since a half of loan stock is corporate loans. Corporate lending is more cyclical, whereas retail lending is more resilient in the time of low economic growth. Shares of corporate and household lending differ among the sub-regions, with the largest share in CIS region being almost 80%.
Corporate lending declined more than retail lending. This can be interpreted as a sign of restraints from the demand side. However, high NPL ratios in some markets suggest that there are supply side constraints, as the debt overhang problem remains. “The strong increase in non-performing loans (NPL) compared to pre-crisis bank profitability suggests that debt overhang in the banking sector is a threat in Ukraine, Latvia, Lithuania, Hungary as well as in Georgia and Albania.”\textsuperscript{111} There is a divergence between two groups of countries in CEE. Countries with lower loan-to-GDP and NPL ratios seem to perform better than those with high ratios. This trend is likely to persist, unless the underperforming markets manage to reduce their NPL ratios.

\textbf{Figure 10: Long-term Return on Equity trend in the CEE sub-regions (\%)}

![Figure 10](image)

\textit{Source: Deuber et al. (2013)}

Despite the sharp decrease in the post-crisis period, CEE banking sector remained more profitable than banking sector globally and in Western Europe. Although RoE of banks in Eurozone climbed in 2013 to 4.5\%, it still cannot match the CEE profitability, which, however, declined in 2013. “The overall RoA in CEE decreased from 1.5\% (2012) to 1.2\% (2013) and the RoE slid from 13.3\% to 11.5\%.”\textsuperscript{112}

“While the banks have reacted to the worsening economic situation with a more risk-aware approach, through cost optimisation and (when possible) by deleveraging assets, their revenues have continued to rise. However, their profitability is ~40\% lower than in 2008. The reason for such a significant decline is explained by the very high level of impairment costs (the gap between an asset’s value on the balance sheet and its recoverable amount). In 2011 the volume

\textsuperscript{111} Brown and Lane (2011), p.3
\textsuperscript{112} Deuber et al (2014), p.26
of write-offs and other impairment costs equaled 24.4% of the revenues generated by the banking industry, as compared to 12.2% in 2008.”

“Although still in the grips of an uncertain global economic environment and EMU turbulences, the Central and Eastern Europe banking sector keeps showing good profitability. With an average Return on Equity expected at 10.9 per cent in the years 2012 – 2015, the region will reveal an attractive and more sustainable double-digit profitability ratio than Western Europe… Revenues margins are softening in CEE, nevertheless they are double of those seen in Western Europe. Cost efficiency and risk management will remain the distinctive factors for the banks’ performance in the region.”

Banking sector of Czech Republic was the most profitable in CEE in 2012-2013, followed by Polish banks. However, two other CE countries, Slovenia and Hungary, remained negative due to high NPL stock, spoiling CE overall picture (However, in 2013 after a long period of losses Hungarian banking sector managed to achieve positive profitability). Aggregate profitability in SEE, judging by RoE, was in low single-digit numbers. However, the big picture was marred by Romania, whose banking sector suffered considerable losses in 2011-2012. Nevertheless, this is lower than profitability of sovereign bonds of these countries, which puts under question the ability of banks to obtain funds on capital markets.

Ukrainian banking sector became profitable in 2012 after three negative years in a row. Profitability should improve, as NPL stock keeps decreasing. However, in 2014 local currency devalued by 50%, and deposit stock shrank substantially as a consequence of economic recession that started in 2013. In Russia and Belarus profitability remained sound in recent years. Nonetheless, some risk remains. Retail lending overheating and currency devaluation may damage bank sector profitability in Russia.

“Recent profitability trends in the CEE banking sectors also show that the very strong pre-crisis readings (with an average RoE above 20% in some years) are unlikely to be repeated in the foreseeable future. Growth opportunities on most markets are different to those in the years 2000-2007. Moreover, increasing regulation and higher operating costs are eating into the revenue generation capacity. This trend is unlikely to change and the pressure on the cost side will remain high. However, it is important to stress that the relative decrease in profitability

113 Deloitte (2012), p.9
within the CEE banking sector cannot be compared to the observed downfall on a global or Western European level.”

4.2 Deleverage and high NPL ratio issues

Since the onset of the financial crisis, the risk of western European banks reducing their presence in the CEE and cutting cross-border funding simultaneously in an uncontrollable way became evident. This was one of the reasons why the Vienna Initiative, a coordinated plan undertaken by home- and host-countries’ regulators and international think-tanks such as IMF, was thought of. Within the framework of the Vienna Initiative, a paper titled “Deleveraging Monitor”, observing the trends of cross-border funding in CEE, is published on a quarterly basis. Still, the fears that sudden deleveraging of western European banks can disrupt weak economies of CEE persist, reinforced by the European sovereign and banking crisis and the introduction of more severe banking regulations.

The banking sector in CEE is a part of the global banking system, thus it cannot avoid the reduction of cross-border exposure and deleveraging of western European banks on the global scale. Western banking groups reduced their exposure substantially towards the US and periphery states – Spain, Italy, and Portugal. The cross-border lending to CEE as a part of total cross-border lending even increased slightly in relative terms, but is still lower than it was before the crisis.

The dropdown of cross-border lending had also some positive outcomes. The local banks started to finance themselves in a sustainable and independent manner, relying more on deposits. The loan-to-deposit ratios dropped to western European levels. Moreover, the credit demand was muted, reflecting the fact that insignificant economic growth observed up to 2008 came to a halt. In addition, there was no clear bank assets deleveraging, except for Slovenia, Hungary, and Ukraine, as the most banks remain loyal to the region.

CEE region is often wrongly considered as fairly homogenous. However, different trends exist even inside of the sub-regions. For instance, in CE the cross-border inflows increased for Poland, Slovakia, and Czech Republic, whereas Hungary and Slovenia have seen bank assets deleveraging. In SEE outflow was modest, with Croatia and Bulgaria most affected. There was

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115 Deuber et al. (2013), p.22
no deleveraging in Russia, while Ukraine had been affected most, with some western European banks leaving the country.

“The withdrawal of Western bank funding from CEE is still ongoing, but the pace has slowed down considerably. CEE banks increasingly rely on domestic funding. It remains to be seen whether the mostly short-term domestic funding will be sufficient if credit demand picks up.”

Another problem of CEE banking is a large share of non-performing loans. Although NPLs can still be covered, a huge number of NPLs might be harmful for an economy, since the capital is tied in unproductive projects. It also became obvious that emerging Europe lacks legislation to cope with NPLs.

In a paper EBCI (2012b) the authors recommend addressing the problem immediately. “The key concern is now that a festering NPL problem could become a drag on economic growth. Experience from past financial crises suggests that lasting recovery requires a clean-up of the financial sector, including bringing down NPLs. Empirical evidence from CESEE countries confirms that NPLs on banks’ balance sheets indeed create uncertainty and weigh on their ability to resume lending, and thereby aggregate demand and investment. Moreover, unresolved NPLs suppress economic activity of currently overextended borrowers and trap resources in unproductive uses.”

117 EBCI (2012b), p.4
To solve the problem, the paper recommends improving NPL tax resolution, strengthening debt enforcement, simplifying collateral takeover by creditors, developing out-of-court restructuring frameworks, increasing the efficiency of insolvency systems, and letting the banking associations work out a collective plan to resolve NPLs. It is arguable whether local regulators must induce NPL restructuring, as it is for everyone’s benefit to reallocate the funds to more productive and profitable use.

A think-tank EIB also recommends the CEE policymakers to set the NPL resolution as a prime concern. “If unaddressed, the poor quality of banks’ loan portfolios in many CESEE countries could likewise become a drag on credit growth, inhibit economic activity of over-indebted firms and households, and trap resources in unproductive uses. This risk makes speedy non-performing loan resolution a policy priority. Numerous tax and regulatory obstacles currently stand in the way. Legal and judicial reform would be equally important, along with a concerted effort to go ahead with loan restructuring rather than holding out for an elusive recovery of loan quality and collateral values in the distant future.”

The problem of a large stock of non-performing loans is expected to be solved next year. 2013 might be considered a turning point in the NPL development. “In terms of the aggregated non-performing loan (NPL) ratio in CEE, 2013 was definitely the long-awaited year of stabilization.

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118 Klingen et al. (2013), p.23
After several years of increases in the NPL ratio by several percentage points, the overall NPL ratio did not move significantly in 2013 and stabilized at around 9%.”

4.3 Short- and medium-term outlook

After a slight decline in 2012 Europe’s GDP continued to recover in 2013, albeit at a modest pace. It is expected to grow at the rate of 1.2%, reaching a more stable level of 1.6-1.8% in years to come. In CEE GDP growth improved from 1.4% in 2012 to 2.3% in 2013 and is expected to amount to 3.2% in 2014.

“Policy actions have reduced some important tail risks in the euro area and stabilized financial markets. Growth is beginning to resume but is still very weak. Unemployment is very high, and social and political tensions are hurting the reform momentum in the euro area. Actions to restore financial sector health and strengthen its infrastructure are essential to ensure financial stability and support the recovery. Furthermore, continued near-term demand support and deeper structural reforms to raise competitiveness and potential output are essential for growth and job creation.”

Economic activity in the EU and the USA improved significantly owing to monetary easing, but it might slow down in case of tapering, which was announced by Federal Reserve in June 2013 and provoked turmoil in the markets.

Table 8: GDP Growth Forecast

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119 Deuber et al. (2014), p.24
121 IMF (2013b), p.56
Over the last couple of years CEE region has suffered from close links with Western Europe which went through a recession in 2012 and slightly recovered only in 2013. This has negative consequences for CEE outlook. On the one hand, exports to Western Europe, a destination for a large share of CEE exports, are expected to decline. On the other hand, western banking groups will probably continue to withdraw funding from CEE subsidiaries due to new capitalization requirements, risk diversification, and weak demand for loans in many CEE markets. The growth in CEE will to a great extent depend on the economic recovery in Euro area.

“Firstly, CEE companies are resilient: as a rapidly-developing region, economic and financial conditions have been changeable over the 20 years during which regional economies have been opened up. As a result, companies have learned that self-sufficiency and preparedness count for a lot when handling external shocks. CEE companies are also accustomed to adapting to changed conditions rapidly and taking opportunities when they are available – by refinancing when credit is available, for example. Secondly, similar lessons have also been learned by many governments across CEE. While there are notable challenges – both politically and economically – the region continues to move towards investment grade status and its average debt-to-GDP ratio is just a third of western Europe’s.”

Imbalances of public finances that have grown tremendously since the crisis have to be corrected. This bears some risk for the economic growth. Poland and Russia began fiscal tightening in 2011 and saw weak GDP growth in 2012 and 2013. Russia, the biggest CEE

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Source: IMF World Economic Outlook Database, October 2013

market, remains an especially risky destination for a number of CEE banking groups because of its dependence on oil and natural gas exports and unreasonable foreign policy.

The medium-term outlook for CEE banking sector is ambiguous. Two groups of countries can be defined inside of CEE according to loan-to-GDP ratio.

“High-growth CEE banking markets: These markets have a high medium-term growth potential and are characterized by a loan-to-GDP ratio that remains well below or at least at a fundamentally backed level compared to adequate long-term financial intermediation trends. According to this definition Russia, Poland, the Czech Republic, Slovakia, Romania, Albania and to a certain extent Serbia still tend to be significantly undersupplied in terms of bank services… Other CEE banking markets: These markets are characterized by fairly high loan-to-GDP ratios in relation to current income levels (either measured in comparison to the Eurozone or to longer term financial intermediation trends in Emerging Markets). Within such a setting banking sector growth is unlikely to strongly outpace GDP growth on a sustainable basis.”123

The rise of lending in the low-growth group of countries is not expected to exceed GDP growth. On the contrary, in some cases it will move at a slower pace. However, there still is an opportunity to stay profitable. Net interest margins are going to stay higher in the low-growth group of countries, as the risks are also considered higher. In addition, competition in the banking sector is going to decrease, as some banking groups leave these markets or have no expansionary plan.

The most promising markets, both in absolute and relative terms, are Poland and Russia. The loan growth of more than 10% in the next three years is feasible in these countries. Czech Republic, Slovakia, Romania, Serbia, and Albania will grow at a somewhat lower pace. These rates seem fairly high in contrast to the reduction of banking intermediation in Western European countries.

“As far as future strategic plans are concerned, companies are leaning more towards cost-cutting rather than to investment aimed at long-term growth. The areas for savings were mainly in marketing spending and employee headcounts. Outsourcing and the sale of non-core activities is often in their plans. If banks do invest, then the biggest investments go into risk management, compliance with regulations, employee development and ICT solutions. The next five years

123 Deuber et al. (2013), p.23
will be influenced mainly by increased regulation, new simple banking products and product optimisation.\textsuperscript{124}

4.4 Long-term outlook. Challenges and opportunities

Development of CEE banking in the near future will fundamentally differ from the pre-crisis unsustainable growth. One of the major challenges for the banking sector in CEE will be adoption of the new financial regulations. Under the Basel III and CRD IV norms, banks have to increase their capitalization levels substantially. This is foreseen in the first stages of Basel III implementation. On the other hand, banks also have to improve bank liquidity and secure long-term funding. It is a difficult task for banks to increase their capitalization, as profitability has fallen over the last couple of years, whereas retained earnings have significantly dropped. The equity valuation of banks is also unfavorable, as banks’ market value is usually much lower than the balance value.

According to Basel III framework, capital buffers will be introduced shortly, which will affect such players in CEE as UniCredit and SocGen on the global level and Raiffeisen and Erste Bank by local regulation. This can further decrease banks’ profitability. Restructuring of balance sheets in order to achieve lower risk-weights of assets will not be sufficient to conform to the new regulations.

Banks will be forced to issue equity, long-term bonds, and hybrid capital instruments on capital markets, which might be a challenge, as banks’ returns on equity (even those from CEE) have been subdued for years and might remain low in years to come. However, the full introduction would probably be postponed, as it happened with Basel III regulation in 2013. Thus banks would have more time at their hands to meet the newly adopted regulations.

It is arguable that the excessive credit growth in CEE in 2003-2007 was largely dependent on the capability of parent Western European banks to tap the capital markets. From this point of view, it can be clearly seen that the new banking model, where credit growth depends on deposit growth rather than on parent’s funding, is much more sustainable. Still it is questionable whether the deposit growth will be enough if the economic activity rises to the pre-crisis levels. However, a too quick rebalancing in the direction of domestic deposit funding carries certain risks.

\textsuperscript{124} KPMG (2012), p.6
“Plans of foreign banks to rebalance the funding of their CESEE subsidiaries toward domestic sources could entail a significant drag on credit growth in countries where reliance on parent bank funding is currently high. A two-pronged approach would help CESEE countries address this challenge: minimizing funding withdrawals, or at least spreading them out over time, by fostering home-host supervisory cooperation and creating conditions in host countries that make a good business case for foreign banks to remain highly engaged, and reducing the economic fallout from any remaining funding withdrawals. The latter could involve steps to better develop local capital markets as an alternative funding source for local banks and the non-financial sector alike.”

Local capital markets are, in fact, underdeveloped, with the exception of the biggest markets such as Poland and Russia. However, development of local capital markets to a degree, when banks will be able to easily obtain the needed funding there, is in a fairly long-term perspective.

CEE still has a lot of the catch-up potential. The GDP growth in CEE is expected to exceed the growth in EU. “For instance the real GDP growth of CIS countries and Turkey is forecasted to reach plus 4.4 per cent on average in the period 2013 – 2017 leaving the Middle East / North Africa region (plus 4.2 per cent) and Latin America (plus 4.0 per cent) behind. At the same time the Eurozone economy will expand by plus 1.2 per cent on average. The strengths of the CEE region are made up of its competitiveness, labour flexibility and labour costs. In the short-term stimulus is expected from low interest rates and low inflation as well as from run-down inventories and a stronger external demand.”

Bloated public finances still remain an issue in the region. If not decreased and repaired now, unsustainable fiscal deficits will negatively influence the cost of sovereign debt, which will consequently affect bank and corporate borrowing costs. “The impact of fiscal variables on bond yield spreads is receiving growing attention. Risk premia on govern- ment bonds, that had followed a secular downward trend over the past years, started to increase strongly in 2008. Differentiation of yields of developed coun- try bonds increased markedly, reflecting investor perceptions of macroeconomic and fiscal risks. Spreads on emerging market government bonds also reached levels not seen for many years.”

Since 1990 CEE economies have made a giant leap to catch up with Western European countries. GDP per capita in CEE region is almost comparable to that of EU states.

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125 Klingen et al. (2013), p.23
127 Nickel et al. (2011), p.1291
Nevertheless, not all necessary institutional reforms have been carried out. CEE states should further continue privatization process, develop infrastructure, and strengthen legal ownership rights.

A positive feature of most CEE economies is a flexible labor market, where wages can be adjusted downwards in case of adverse shock, keeping economies competitive. However, it can be clearly seen that in most countries labor participation remains much lower than in the developed Western European countries.

Further integration with Eurozone might be beneficial. Although the economic outlook of Western Europe is dismal, integration into export linkages may be advantageous, as it is in case of Germany. Nevertheless, CEE countries should also search other markets for their exports.

CEE banks engage mostly in the traditional banking business. Since net interest margins remain on a historically low level due to monetary easing, banking earnings are mediocre. Investment banking, however, has picked up noticeably over the last couple of years.

In the near future the banks in CEE will be forced to revise their business strategy in order to respond to the new challenges. “The banking market is becoming more and more challenging, and banks must take a series of key actions to build sustainable competitive advantage. The traditional sources of income for banks are becoming much more restricted than before the crisis. The availability of mortgages is limited due to problems with long-term financing. Consumer finance and SME lending are weak, due to the high risks involved that result from slow economic growth and growing unemployment. Revenues from deposits have significantly decreased as a result of the high cost of liquidity and intense competition for deposits in those markets with high loan-to-deposit ratios. Transactional fees are gradually decreasing as customers make the shift towards electronic banking, where services are much less costly.”

Lacking high growth opportunities, the banks in CEE have to look for other income sources. They began to concentrate on existing clients and are trying to build up customer loyalty. The number of non-traditional banking services increases, while the degree of innovation in the banking sector of CEE matches that of Western Europe.

The strategies of CEE banks have transformed since the financial crisis. “The changes relate to the whole range of factors: organizational structures, geographical scope of activities, strengthening key market presence, overall business mix, involvement into commercial and

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investment banking, structure and sources of funding and the overall risk appetite of banks (as this is also relevant for RWA issues).”¹²⁹

The idea of strengthening coordination among the banks within the Eurozone was born after the onset of the financial crises. The Single Supervisory Mechanism has been developed and will be implemented gradually, making the European Central Bank responsible for banking oversight. CEE banks from EU member and EU candidate states should be especially interested in stronger cross-border coordination.

“In CEE countries, where the banking system is dominated by foreign banks, fostering financial integration, getting supervisory information on parent banks and improving the supervision of cross-border banking groups could also be of major relevance. Also, a number of CEE countries went through unsustainable credit booms before the crisis, mostly accompanied by foreign currency lending, which has had major repercussions. Addressing national credit booms through national supervisory action only is difficult, since banks can exploit supervisory arbitrage. A single supervisory mechanism is more suitable for addressing such credit booms.”¹³⁰

However, CEE banks are already much more integrated than Western European banks because of high foreign ownership coming from several countries. The Vienna Initiative proved itself as a successful coordination project between regulators and banks that helped to prevent loan and asset deleveraging. As most of CEE markets are small, compliance with all local regulations is costly for the banks. The situation can be alleviated by a banking union which might be set up in the form of a single supervisory mechanism.

Even though some market players left CEE region altogether (e.g. Volksbank), most banks have merely rescaled their presence in particular business segments, targeting the most stable and profitable ones. This, however, enabled the market participants loyal to CEE region to acquire assets on favorable terms. “Large international cross-border banks pursuing a universal bank model are likely to have the best growth opportunities in CEE going forward. Because the attractiveness of different business segments varies substantially across the CEE markets and CEE sub-regions, well- diversified international cross-border banks are likely to profit most from the more heterogeneous character of the future banking sector expansion in the region.”¹³¹

¹²⁹ Deuber et al. (2013), p.29
¹³⁰ Darvas and Wolff (2013), p.157
¹³¹ Popovici (2013), p.570
Currently a large CEE banking group competes more actively in the profitable markets such as Poland, Russia, and Czech Republic. In the countries where profitability has been low for years (Hungary, Slovenia), the banks adopted a wait-and-see attitude, not willing to leave the market completely and suffer great losses, since there is little demand for their assets. Even though M&A activity boost in the CEE banking sector cannot be ruled out completely, large M&A deals are rather unlikely in the near future.

"Firstly, international players will continue to leave due to their strategic refocus and the limited opportunities for them to gain the scale needed to fulfil their potential in the region. Secondly, there are still too many universal banks in most CE countries. This will result in further sector consolidation as the leading players strengthen their positions. Thirdly, we expect a heavy wave of asset deleveraging by the larger players, involving NPL and non-core loan portfolios, which might take place as a direct sale, albeit one with a complex structure."¹³²

All things considered, neither expansion of banking groups already present in CEE, nor arrival of new ones is expected in years to come. The presence of existing groups in the region will become even stronger provided that the banks manage to increase their capitalization level, and economic conditions in Europe and CEE improve.

¹³² Deloitte (2012), p.11
Conclusion

Foreign banking groups pursued an expansionary strategy in order to gain a large market share in the profitable markets of Central and Eastern Europe. They provided a lot of funding that in many cases was used unproductively and reinforced the imbalances of CEE economies. Home and host regulators did not recognize the risk. It was assumed that CEE was a new economic phenomenon and would experience a long and stable growth owing to its catch-up potential. When the capital inflows stopped abruptly, the banking sector of CEE was unprepared to withstand the financial crisis on its own.

Only in 2010 did CEE manage to exit the recession. The financial support of international organizations in addition to national measures helped to avoid economic meltdown.

Some lessons must be learnt from the crisis. The importance of financial help from international organizations is not to be underestimated. National governments should implement a sustainable fiscal policy and restrain economic growth should it become too rapid. The role of coordination between host and home financial regulators became evident in the aftermath of the financial crisis. The subsidiaries of international banks must be more independent and reliant on the domestic deposit base.

The banking industry cannot regulate itself. Banks are motivated to take excessive risks in order to make extra profits. This jeopardizes the interconnected financial system and the real economy. For this reason the global banking regulations – Basel Accords – were developed. However, the first two generations failed to strengthen the stability of the banking system. The third generation of Basel Accords will have enormous influence on the banking system. However, banks in CEE differ from western banks, for whom Basel III was primarily designed. The main risks coming from Basel III to CEE banking industry are liquidity ratio, unfavorable treatment of minority interests and SME lending, regulation of foreign currency lending, and introduction of additional capital buffers.

The banking industry of CEE has changed significantly in the post-crisis period. The subsidiaries of foreign banks became more independent and reliant on local deposits. Although profitability of the banking sector decreased substantially, it is still much higher than that of western European banks. Foreign banks changed their strategy and instead of expansion, concentrate now on core markets. However, CEE region became fairly heterogeneous. The markets with low bank intermediation levels are expected to grow in loan and asset terms at much higher rates than those markets where loan-to-GDP ratio is already high.
German Summary


Diese Masterarbeit untersucht die Ursachen und die Auswirkungen der Finanzkrise in CEE bzw. die Rolle der internationalen Bankengruppen in Übermittlung von negativen Schocks. Die Arbeit überprüft auch die neuen Finanzvorschriften und deren Auswirkungen auf die Entwicklung des Bankensektors in CEE. Der letzte Teil analysiert die Bedingungen und die Zukunftsperspektiven des Bankensektors der Region nach der Krise.
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Curriculum vitae

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• Global Management Challenge – 1st place in the National Final
• Global Management Challenge – 1st place in the Student National Final

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| Languages                  | Ukrainian (native)                                       |
|                           | German (fluent)                                          |
|                           | English (fluent)                                         |
|                           | Polish (proficient)                                      |
|                           | Dutch (proficient)                                       |

| Activities & Interests    | Enjoy travel, the outdoors, camping and hiking.         |
|                          | Jogging, playing soccer and generally staying fit.      |
|                          | An avid reader.                                         |

| Technical Skills          | Software: Windows, Microsoft Office, Bloomberg          |