

# SMALL BUSINESSES AND THE CREDIT CRUNCH

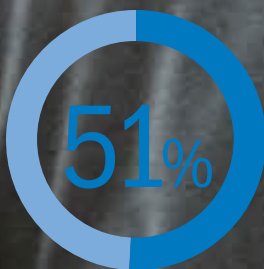
THE AVERAGE RATIO OF  
TOTAL BANK LOANS TO  
CUSTOMER DEPOSITS  
DECLINED FROM

**120%**  
IN 2008 TO 97% IN 2013

THE PERCENTAGE OF  
CREDIT-CONSTRAINED  
FIRMS RANGES FROM JUST  
13% IN TURKEY TO

**85%**  
IN EGYPT

**Credit conditions for small businesses have tightened significantly in recent years, both during and after the global financial crisis. Structural adjustments in banking systems – particularly reduced reliance on cross-border and wholesale funding – explain a large part of this tightening. The composition of local banking markets also plays a role since small businesses are more likely to borrow from banks that have less hierarchical lending procedures, a greater focus on building relationships with clients and more confidence in local courts. Access to credit may therefore benefit from both stronger legal enforcement and more effective and efficient bank lending techniques.**



OF FIRMS REPORTING A NEED FOR CREDIT IN THE 2013-14 BEEPS SURVEY WERE UNABLE TO OBTAIN IT – UP FROM 34% IN 2005

## Introduction

The global financial crisis of 2008-09 marked the end of a long period of rapid credit expansion, with annual nominal credit growth of between 20 and 40 per cent across much of the transition region. Nominal credit growth has since stabilised at a far lower level (see Chart 2.1). As Chapter 1 explained, this has even occurred in some countries that – perhaps somewhat paradoxically – have seen increases in their aggregate debt-to-GDP ratios.

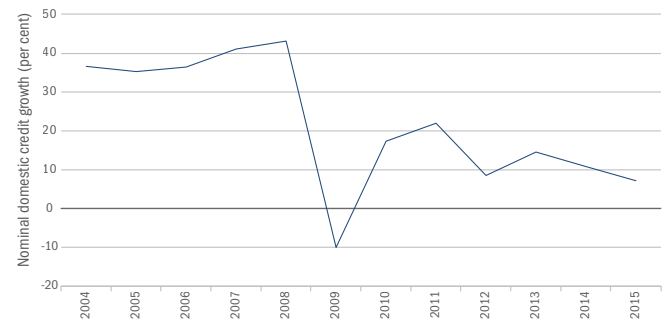
Should policy-makers worry about this sharp contraction in credit growth? Perhaps not. The reduction in bank lending may predominantly be a demand-driven phenomenon that reflects the lacklustre growth currently observed in the region. After all, when economic uncertainty makes households consume less and firms invest less, there is little reason to apply for additional credit. To the extent that the reduction in bank lending does indeed reflect a lack of demand, there is no need to worry that the inability or unwillingness of banks to lend is smothering the long-awaited economic recovery.

However, the emerging academic consensus is that supply-side factors can – and in many countries *do* – play a decisive role in causing reductions in output (rather than merely reflecting such declines).<sup>1</sup> In other words, credit shortages may be partly to blame for the underwhelming growth performance of many countries. If that is the case, policy-makers are right to worry about reduced bank lending, particularly if certain borrowers turn out to be disproportionately affected by a squeeze on credit.

This chapter of the *Transition Report* revisits this debate through the lens of the transition region. Using a combination of macroeconomic, firm-level and bank-level data, it gauges whether firms have become more credit-constrained in the seven years since the start of the global financial crisis. This analysis explicitly distinguishes between demand-side and supply-side drivers of the reduction in bank lending. The second half of the chapter then looks more closely at individual towns and cities across the transition region to see how variation in local banking landscapes can help or hinder access to credit. The chapter concludes with a number of policy recommendations.

Throughout this chapter, the focus is on credit to small and medium-sized enterprises (SMEs), which are defined as firms that employ no more than 250 people. Evidence suggests that there is a strong positive correlation between a firm's size and its ability to access bank credit. As a result, SMEs, which make up the vast majority of firms in most emerging markets and advanced economies, have a greater tendency to be credit-constrained. Smaller firms tend to be less transparent to lenders and typically have less collateral to post. Moreover, SMEs tend to be younger and therefore less experienced than larger firms. For all of these reasons, the supply of SME finance – both credit and equity – continues to fall short of the total estimated demand in many countries.<sup>2</sup>

CHART 2.1. Slowing credit growth across the transition region



Source: IMF, national authorities via CEIC Data, BIS and authors' calculations.

Note: This chart shows the annual growth rate of nominal domestic credit to the private sector for the transition region as a whole. Credit growth is adjusted for foreign exchange effects and weighted by the GDP of the individual countries. The figure for 2015 is forecast.

## Credit constraints: what firms and banks say

### Credit constraints: firms' view

To gauge the extent to which firms in the transition region have experienced a decline in their ability to access new bank credit, this chapter draws on the Business Environment and Enterprise Performance Survey (BEEPS) conducted by the EBRD and the World Bank. The BEEPS survey involves face-to-face interviews with the owners or main managers of a representative sample of firms and seeks to determine the extent to which various features of the business environment (including access to finance) represent obstacles to firms' operations. The survey also elicits information on a large number of other firm-level characteristics. This chapter uses three rounds of the BEEPS survey – BEEPS III, which was conducted in 2005 during the credit boom that preceded the global financial crisis (involving 7,053 firms); BEEPS IV, which was carried out in 2008-09 at the time of the crisis (involving 7,047 firms); and BEEPS V, which was conducted in 2013-14 in the aftermath of the crisis (involving 20,321 firms).<sup>3</sup>

In order to gain an understanding of SMEs' ability to access bank loans, it is important to properly disentangle the demand for and the supply of bank credit. Both can cause bank lending to fall, so a decline in lending does not necessarily mean that a lack of bank credit is hindering firms' growth. By combining answers to various survey questions, we can distinguish between firms with and without demand for credit, before dividing the first group into firms that are credit-constrained and those that are not. Credit-constrained firms are those that are in need of (additional) credit, but are either discouraged from applying for a bank loan or are rejected when they do.<sup>4</sup> Aggregating individual firms' responses to these questions can yield useful insights into whether a decline in lending in a given country at a particular point in time mainly reflects reduced demand for credit or a fall in the supply of new lending.

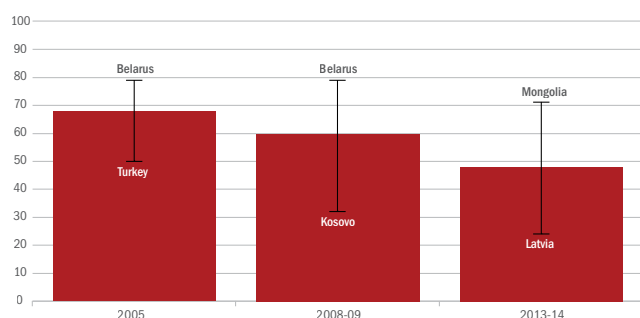
Chart 2.2 shows that demand for bank credit has waned among SMEs over the last 10 years. The percentage of interviewed SMEs that needed additional bank credit declined

<sup>1</sup> See, for instance, Duchin et al. (2010) and Chodorow-Reich (2014). Kahle and Stulz (2013) provide a dissenting voice.

<sup>2</sup> See Lopez de Silanes et al. (2015).

<sup>3</sup> Field work for the latest BEEPS survey – which included the four countries in the southern and eastern Mediterranean (SEMED) for the first time and surveyed a larger sample of Russian firms – took place in 2011-12 in Russia and 2013-14 in all other countries. Over 95 percent of all BEEPS firms have fewer than 250 employees and can therefore be classified as SMEs.

<sup>4</sup> See, for instance, Cox and Jappelli (1993). BEEPS question K16 asks: "Did the establishment apply for any loans or lines of credit in the last fiscal year?" For firms that answer "No", question K17 asks: "What

**CHART 2.2. Percentage of firms that need a loan**

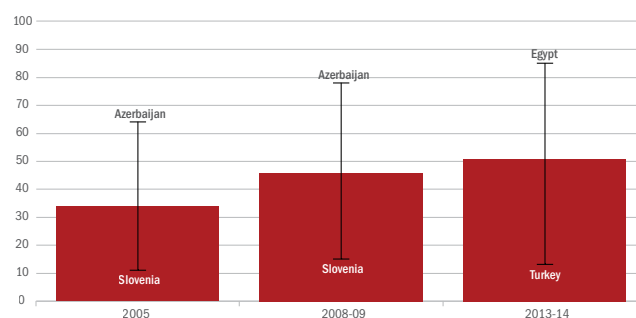
Source: BEEPS III, IV and V.

Note: BEEPS III values are based on simple intra-country means while values for BEEPS IV and V are weighted averages.

from 68 per cent in 2005 to 60 per cent in 2008-09 and to just 48 per cent in 2013-14.<sup>5</sup> This decline reflects the fact that, in the presence of slow economic growth, fewer firms need loans to expand their production capacity. This reduced demand has been only partially and temporarily offset by increased demand for working capital and other bridge financing on the part of firms whose cash flows have been negatively affected by the financial crisis. In the most recent survey round, demand for credit was lowest among firms in Latvia and highest among Mongolian firms. Chart 2.2 also shows that cross-country variation in firms' average demand for credit has increased over time, reflecting the fact that countries differ greatly in terms of the extent to which they have been affected by the global financial crisis and the subsequent eurozone debt crisis.

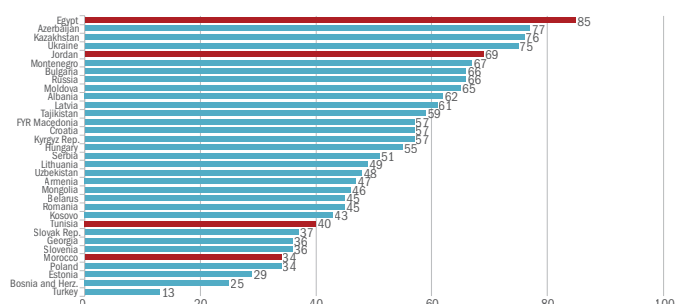
Chart 2.3 shows that there has also been a marked increase in the percentage of credit-constrained firms – that is to say, firms that need additional credit but are either rejected when they apply for a bank loan or feel discouraged from applying for such a loan. In the most recent survey, 51 per cent of all firms that needed credit reported that they had trouble accessing it. This figure was significantly lower in 2005 (34 per cent) and 2008-09 (46 per cent), indicating that credit conditions for SMEs have tightened further in the wake of the global financial crisis. This probably reflects the more or less seamless transition from the global financial crisis to the eurozone debt crisis, which had a further negative impact on the balance sheets of many European banks operating affiliate networks across the EBRD region.

There is substantial cross-country variation in firms' ability to access bank loans and, as with credit demand, this variation has increased over time. Chart 2.3 shows that Slovenian firms experienced the easiest access to credit in both the 2005 and the 2008-09 surveys, but Turkey holds this distinction in the most recent survey. Slovenian banks have become much more restrictive owing to the recent turmoil in the country's banking sector and the increasing level of non-performing loans. As a result, the percentage of credit-constrained firms in Slovenia more than doubled between the last two surveys, rising from

**CHART 2.3. Credit-constrained firms as a percentage of firms that need a loan**

Source: BEEPS III, IV and V.

Note: BEEPS III values are based on simple intra-country means while values for BEEPS IV and V are weighted averages.

**CHART 2.4. Percentage of credit-constrained firms in 2013-14**

Source: BEEPS V.

Note: Values are weighted averages.

15 per cent in 2008-09 to 36 per cent in 2013-14. In Turkey, on the other hand, continued accommodating monetary conditions resulted in the percentage of credit-constrained firms declining further in that period, falling from 28 per cent to a record low of just 13 per cent.<sup>6</sup> Other countries with relatively loose credit conditions include Bosnia and Herzegovina (where only 25 per cent of firms that need a loan are credit-constrained), Estonia (29 per cent) and Morocco and Poland (both 34 per cent).

At the other end of the spectrum, there are countries like Azerbaijan and Egypt where the large majority of firms that need a loan are credit-constrained. In the latest survey round, which also included the four SEMED countries, this percentage was as high as 77 and 85 per cent in Azerbaijan and Egypt respectively. As Chart 2.4 shows, Kazakhstan (76 per cent) and Ukraine (75 per

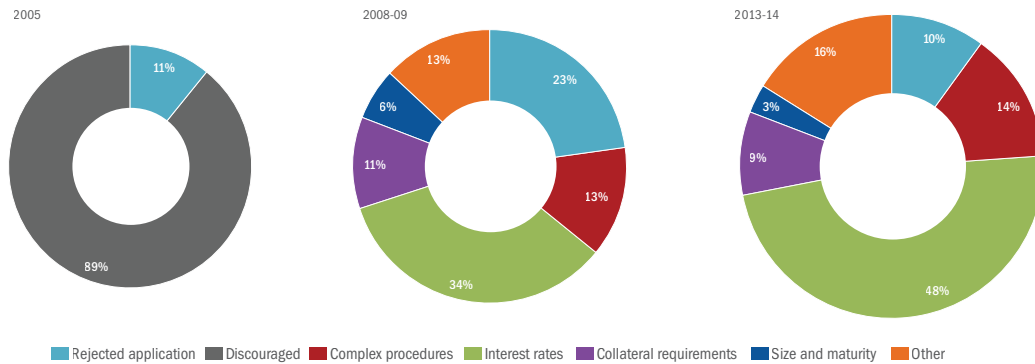
was the main reason the establishment did not apply for any line of credit or loan in the last fiscal year?" For firms that answer "Yes" to K16, question K18a asks: "In the last fiscal year, did this establishment apply for any new loans or new credit lines that were rejected?" Firms that answer "Yes" to K16 and "No" to K18a are considered to be unconstrained, as they were approved for a loan, while firms are credit-constrained if they answer "Yes" to K18a (that is to say, they were rejected) or they answer "Interest rates are not favourable", "Collateral requirements are too high", "Size of loan and maturity are insufficient" or

"Did not think it would be approved" to K17.

<sup>5</sup> A very similar trend is observed when the sample of countries is kept constant across the three survey rounds.

<sup>6</sup> The annual growth rate of nominal credit has averaged almost 30 per cent in Turkey over the last decade.

CHART 2.5. Reasons why SMEs are credit-constrained



Source: BEEPS III, IV and V, and authors' calculations.

Note: BEEPS III values are simple intra-country means. Other values are weighted averages. The size of each circle is proportionate to the percentage of credit-constrained firms in the relevant survey round.

cent) also had relatively high percentages of credit-constrained firms. Banks in both of these countries have been hit hard by the global financial crisis and a rapid decline in the availability of external bank funding.

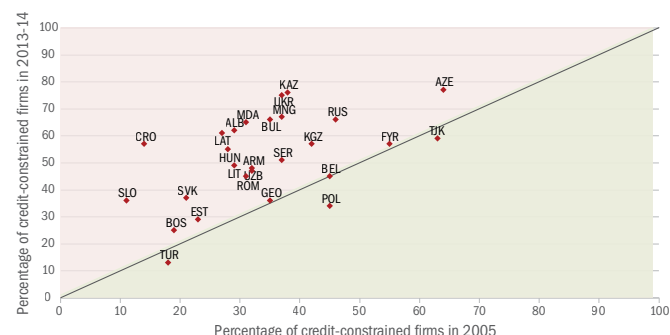
Chart 2.5 provides more information about *why* firms are credit-constrained (with the increases in the size of the circles reflecting the growing percentage of credit-constrained firms). The light blue segment shows that both before and after the financial crisis around 10 per cent of all credit-constrained firms had been rejected by a bank. In contrast, at the height of the crisis this percentage was more than twice as high (standing at 23 per cent). A further breakdown available in the last two survey rounds shows various different reasons why firms are discouraged from applying for bank credit. This breakdown shows that in 2013-14 around half of credit-constrained firms indicated that the interest rates charged by banks were prohibitively high. In addition, 14 per cent were discouraged from applying because they thought the application procedures were too complex, while 9 per cent did not apply because they thought the collateral requirements were too stringent.

While firms in the region have, on average, become more credit-constrained over the last 10 years, there is considerable cross-country heterogeneity. As Chart 2.6 shows, only three countries – Poland, Tajikistan and Turkey – have seen an improvement in firms' ability to access credit over the last decade (and even that improvement has been only slight). In another small group of countries – a group including Belarus, FYR Macedonia and Georgia – there has been virtually no change (these are the countries on the 45-degree line). The chart also shows that there is substantial cross-country variation in the tightening of credit constraints, even among countries that displayed very similar levels in 2005. Look, for example, at Georgia (35 per cent of firms constrained in 2005), Bulgaria

(also 35 per cent) and Kazakhstan (38 per cent). In 2013-14 the situation in Georgia was unchanged, the percentage of credit-constrained firms had increased to 66 per cent in Bulgaria, and it had more than doubled to 76 per cent in Kazakhstan. This chapter will look at how these large differences in the tightening of credit constraints can be explained by the extent to which banking systems had to rebalance in the wake of the global financial crisis.

Are there also differences *within* countries in firms' ability to access credit? To answer this question, a regression analysis has been carried out in order to systematically relate firm-level characteristics to the probability of being credit-constrained (while keeping all country-level characteristics constant). This shows that a number of firm-level characteristics are robust predictors of credit constraints across all three survey rounds. In particular, Chart 2.7 shows – using the most recent survey data (that is to say, data for 2013-14) – that small firms, non-exporting firms and firms without audited financial statements are all more likely to be credit-constrained. This suggests that less transparent firms have more difficulty accessing credit. Reassuringly, growing firms (that is to say, those that have recorded positive growth in the number of employees over the last three years) have a higher probability of accessing credit than stagnating firms. Interestingly, various other firm-level characteristics – including foreign ownership and female ownership – are *not* significantly correlated with the probability of being credit-constrained.

**CHART 2.6. Changes in the percentage of credit-constrained firms: pre-crisis versus post-crisis**



Source: BEEPS III and V.

Note: BEEPS III values are based on simple intra-country means while BEEPS V values are weighted averages.

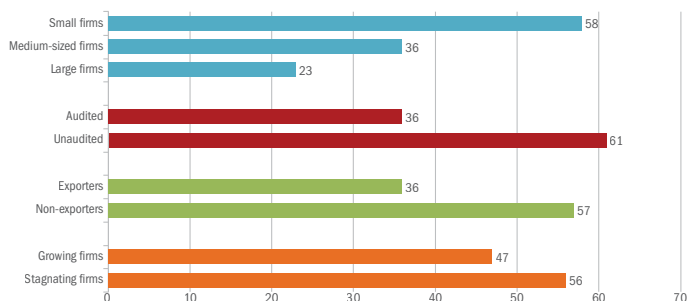
### Credit constraints: banks' view

The firm-level surveys used thus far show that more and more firms are feeling constrained in their ability to access bank credit, not just because they are rejected when they apply for loans, but also – primarily, in fact – because they are discouraged from applying in the first place. This suggests that supply-side considerations have played an important role in the reduction of bank credit since 2008. Do banks in the region agree with this reading of the evidence? To assess this question, this chapter uses another survey: the EBRD's second Banking Environment and Performance Survey (BEPS II). As part of BEPS II, structured face-to-face interviews were held with the CEOs of banks across the transition region. Among other things, those CEOs were asked a series of questions about their banks' lending activities before and after the global financial crisis.

Chart 2.8 shows the percentages of banks that mentioned a particular reason as a key constraint (that is to say, one of the top three) preventing them from lending more to SMEs. Interestingly, banks seem to pin the blame squarely on firms. In their view, the main reason for not lending more at the moment is the lack of demand for loans in general and the lack of creditworthy customers in particular. This is especially true in the post-crisis period. Moreover, very few banks indicate that their own liquidity or solvency position is a relevant factor in their ability to lend. In fact, balance sheet constraints have even become somewhat less important in the wake of the crisis.

In short, the BEEPS surveys suggest that while fewer firms need credit in the post-crisis environment, those firms that do are finding it much more difficult to obtain a bank loan. Banks, on the other hand, argue that there is simply not enough demand for credit. Moreover, those firms that do apply for a loan are not deemed sufficiently creditworthy. Accordingly, banks have increased the percentage of assets that are held in the form of

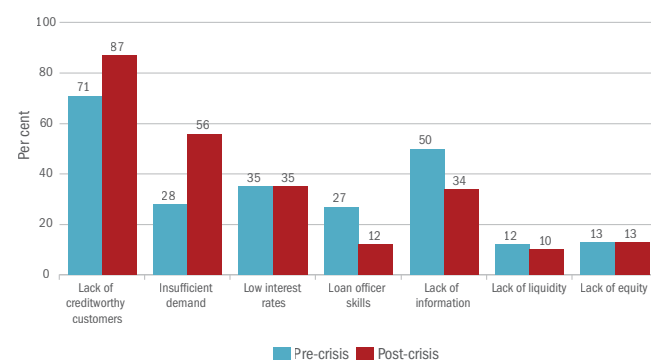
**CHART 2.7. Credit constraints: variation across different types of firm**



Source: BEEPS V, excluding SEMED countries.

Note: Small firms have 2-49 employees, medium-sized firms 50-250 employees and large firms over 250 employees. Growing firms have seen growth in the number of employees in the last three years. The chart shows the percentage of firms in each category that are credit-constrained.

**CHART 2.8. Main constraints on banks' ability to increase lending to SMEs**



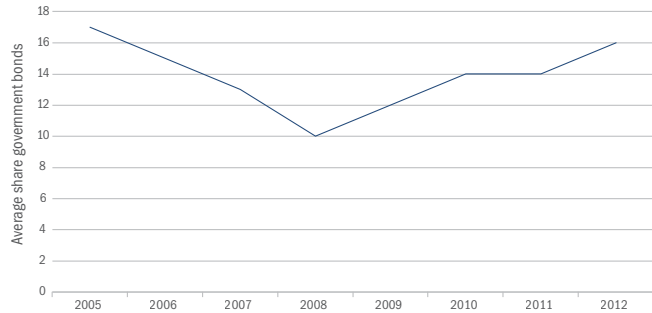
Source: BEPS II.

Note: The bars show the percentage of banks indicating that the factor on the x-axis is one of the three main constraints preventing increases in credit to SMEs.

# 87%

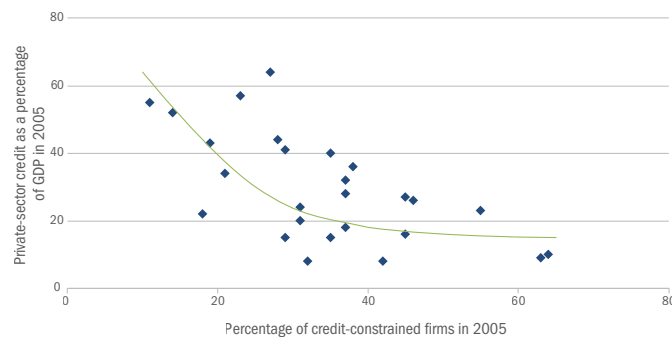
**OF INTERVIEWED BANK CEOs INDICATED THAT A LACK OF CREDITWORTHY CUSTOMERS IS A KEY CONSTRAINT ON THEIR LENDING TO SMES**

**CHART 2.9. Banks' holdings of government bonds (as a percentage of government bonds plus total loans)**



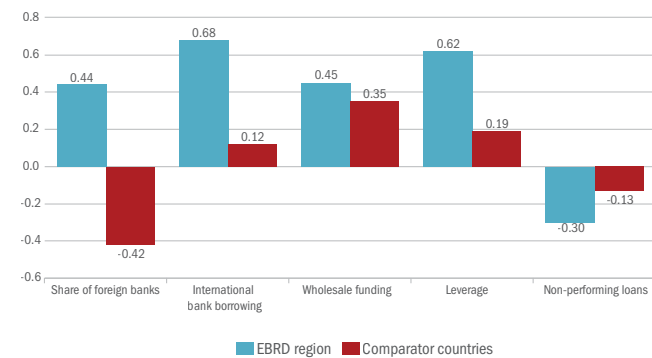
**Source:** Bankscope.  
**Note:** Average government bond holdings as a percentage of government bonds plus total loans for a sample of 108 banks that are active in the EBRD region. The sample only comprises banks that have information available on their holdings of government bonds and total loans for each year between 2005 and 2012.

**CHART 2.10. Size of banking sector and percentage of credit-constrained firms**



**Source:** BEEPS III and World Development Indicators.  
**Note:** BEEPS III values are based on simple intra-country means.

**CHART 2.11. Banking integration, bank funding and the size of the banking system**



**Source:** Claessens and Van Horen (2015), Bankscope, BIS Consolidated Banking Statistics, World Development Indicators, CEIC Data and authors' calculations.  
**Note:** This chart shows the correlation between the size of the banking sector (measured as the ratio of private-sector credit to GDP) and the respective variables. "Share of foreign banks" means assets held by foreign banks as a percentage of total bank assets; "international bank borrowing" means the ratio of cross-border borrowing to private-sector credit; "wholesale funding" means the ratio of total loans to total deposits held by banks; "leverage" is the ratio of total assets to total equity held by banks. Non-performing loans are measured as a percentage of total loans (albeit national definitions of non-performing loans may vary). Data for all variables relate to 2005. "EBRD region" means all countries in which the EBRD invests, while the "comparator countries" are a group of 65 countries that have banking sectors between the minimum and maximum sizes observed in the EBRD region.

government bonds, at the expense of loans to the private sector (see Chart 2.9). And very few banks consider their own balance sheet structure to be a constraint on the supply of fresh credit to private-sector borrowers. Who is right? The remainder of this chapter seeks to answer this question by analysing the impact that the rebalancing of banking systems across various countries has had on the ability and/or willingness of banks to lend in recent years.

**Financial rebalancing and SMEs' access to credit**

It is useful to begin our discussion of the relationship between banking-sector rebalancing and changes in the percentage of credit-constrained firms by assessing the cross-sectional relationship between the size of the banking system (as measured by total private-sector credit as a percentage of GDP) and firms' ability to access credit. As expected, Chart 2.10 shows, for a sample of transition countries, that before the global financial crisis there was a strong negative correlation between the size of a country's banking system and the percentage of firms reporting that they were credit-constrained. More credit is available in larger banking systems, so fewer firms complain of limited access to credit.<sup>7</sup>

If larger banking systems reduce the probability of firms being credit-constrained, a logical next question is: which transition countries have managed to develop such large banking sectors? Chart 2.11 shows a set of correlation coefficients (see blue bars) indicating the strength of the relationship between, on the one hand, various characteristics of banking systems and, on the other hand, the size of such banking systems across the EBRD region. It shows that before the crisis, countries with a higher percentage of foreign banks, greater dependence on cross-border bank funding (excluding funding from parent banks), greater use of wholesale funding (as opposed to deposit funding) and fewer non-performing loans had the largest banking sectors.

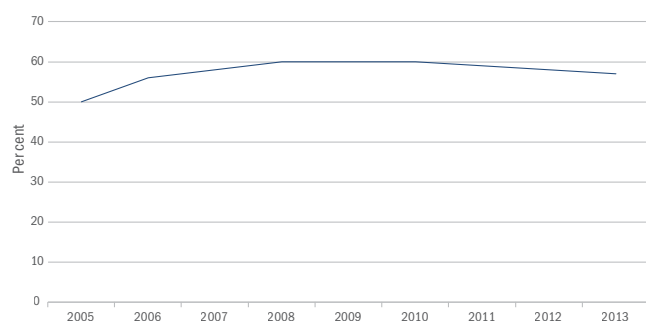
Together, these characteristics describe the economic model that emerging Europe used prior to the financial crisis to rapidly develop its banking sectors. But was this model unique to emerging Europe? Chart 2.11 also shows the same correlations (see red bars) for a group of comparator countries with banking systems of a similar size. In these comparator countries, the link between banking-sector development on the one hand and international financial integration and wholesale funding on the other is less strong. The correlation with bank leverage is also much weaker. Thus, the growth model employed in emerging Europe's banking sectors appears to have been fairly distinctive. Much more than in other regions, transition countries managed to reduce the percentage of credit-constrained firms through cross-border banking integration, greater reliance on wholesale funding and by increasing leverage. These were, unfortunately, the very areas in which the banking systems were forced to make changes during the recent financial and eurozone debt crises (see Chart 2.12).

The first panel of Chart 2.12 indicates that, in terms of foreign bank ownership, adjustments during the recent crisis period have

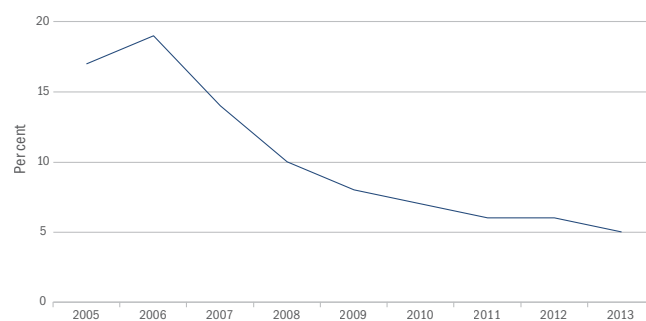
<sup>7</sup> Post-crisis data paint a very similar picture.

**CHART 2.12. Banking-sector adjustment across the transition region**

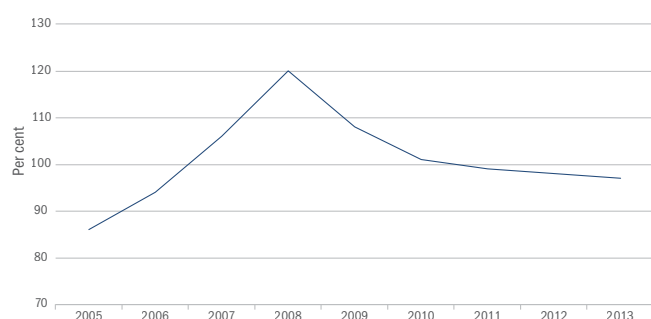
A. Share of foreign banks



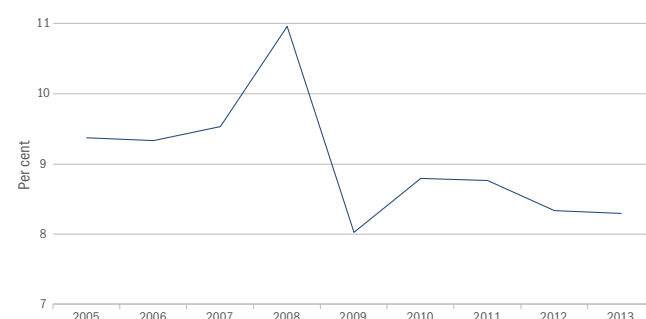
B. International bank borrowing



C. Wholesale funding



D. Leverage



**Source:** Bankscope, Claessens and Van Horen (2015), BIS Consolidated Banking Statistics, World Development Indicators, CEIC Data and authors' calculations.

**Note:** Panel A shows assets held by foreign banks as a percentage of total bank assets in each country, averaged over the countries of the EBRD region. Panel B shows cross-border borrowing by banks as a percentage of private-sector credit in each country, averaged over the countries of the EBRD region. Panel C shows total loans as a percentage of total deposits held by banks in each country, averaged over the countries of the EBRD region. Panel D shows total assets as a percentage of total equity held by banks in each country, averaged over the countries of the EBRD region.

been relatively limited. This is in line with evidence in Chapter 1 showing that foreign direct investment is a relatively stable source of cross-border investment. Foreign bank ownership peaked in 2010, after which a gradual decline set in as some foreign banks exited specific countries by selling to domestic investors (see also Box 2.2). Prominent examples include UniCredit's sale of its Kazakh subsidiary ATF Bank to a local businessman in 2013, German bank Commerzbank's sale of its Ukrainian subsidiary Bank Forum to a domestic investor in 2012 and the sale of Swedish bank Swedbank's Ukrainian subsidiary to a Ukrainian businessman in 2013.

The second panel of Chart 2.12 shows a very rapid decline in cross-border lending by BIS-reporting banks to banks in the transition region. This cross-border deleveraging began as early as 2006 in countries such as Bulgaria, Croatia, Hungary and the Baltic states, accelerated after the collapse of Lehman Brothers

**48%**  
OF CREDIT-CONSTRAINED FIRMS ARE DISCOURAGED FROM APPLYING FOR LOANS BECAUSE INTEREST RATES ARE TOO HIGH



and continues today in the wake of the eurozone debt crisis.

The third panel shows that, after peaking in 2008, banks' reliance on wholesale funding (as opposed to deposit funding) has fallen significantly. The average ratio of total loans to customer deposits declined from 120 per cent in 2008 to 97 per cent in 2013. In particular, banks that had rapidly expanded their loan portfolios on the basis of very small deposit bases had to reduce their lending quickly, thereby contributing to the increase in the percentage of credit-constrained firms.

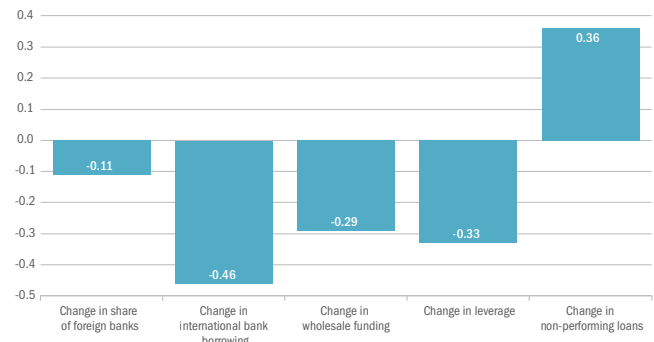
The fourth panel shows that banks have also been adjusting their leverage. Before the crisis many banks operated with high asset-to-equity ratios (termed "leverage multiples"). The panel shows the procyclical behaviour of this leverage multiple across the transition region. It peaked just before the collapse of Lehman Brothers and has been declining ever since as banks have strengthened their equity bases while shedding or writing off non-performing assets.

Chart 2.13 shows that the increase in credit constraints across countries is strongly correlated with the various ways in which the region's banking systems have had to adjust. The increase in credit constraints – aggregated at the country level – has been most pronounced in countries that have experienced a decline in cross-border borrowing by banks, a decline in banks' use of wholesale funding (as opposed to deposit funding), a decline in bank leverage and an increase in the percentage of non-performing loans on banks' balance sheets.

Table 2.1 analyses the impact that such rebalancing has on credit constraints at the firm level. In the reported regression estimates, the dependent variable is the probability that a firm was credit-constrained in 2013-14. The explanatory variables are the country-level variables shown in Chart 2.12, plus the percentage of credit-constrained firms in 2005 (which is calculated at the country level). That last variable absorbs unobserved cross-country variation affecting firms' ability to access credit. The regression framework also controls for a battery of (unreported) firm-level characteristics.

The results in columns 2 to 5 of Table 2.1 indicate that the probability of a firm being credit-constrained in 2013-14 was substantially higher in countries where, in the previous five years, banks had to adjust their international and wholesale borrowing more, where they had to deleverage more, and where non-performing loans increased the most. A direct comparison of these variables indicates that changes in cross-border and wholesale funding are particularly strongly associated with increases in credit constraints (see column 6). These results, which have plenty of support in academic literature,<sup>8</sup> can help to explain why Chart 2.6 shows such strong cross-country variation in the tightening of credit conditions for SMEs. For example, while in 2005 the percentage of credit-constrained firms was about 35 per cent in Georgia, Bulgaria and Kazakhstan, it remained unchanged in Georgia but increased sharply in the other two countries. In line with the results in Table 2.1, cross-border bank lending to Georgia declined by only 15 per cent while cross-border lending to Bulgaria and Kazakhstan fell by 70 and 80 per cent respectively.

CHART 2.13. Banking-sector adjustment and aggregate credit constraints



Source: BEEPS III, IV and V, Claessens and Van Horen (2015), Bankscope, BIS Consolidated Banking Statistics, World Development Indicators, CEIC Data and authors' calculations.

Note: The chart shows the correlation coefficients between changes in the percentage of firms that are credit-constrained and changes in the respective variables. "Share of foreign banks" means assets held by foreign banks as a percentage of total bank assets; "international bank borrowing" means the ratio of cross-border borrowing to private-sector credit; "wholesale funding" means the ratio of total loans to total deposits held by banks; "leverage" is the ratio of total assets to total equity held by banks. Non-performing loans are measured as a percentage of total loans (albeit national definitions of non-performing loans may vary). Changes are calculated over the period from 2005 to 2013.

### SMEs' access to credit: a local view

The analysis thus far indicates that financial adjustment in banking systems across the transition region goes a long way towards explaining why SMEs in some countries have seen their funding conditions deteriorate much more than their counterparts in other countries. However, there are three reasons why it is unlikely that the rebalancing of banking systems can explain all of the variation in credit constraints across and within countries.

First, the BEEPS surveys indicate that a significant percentage of firms complain about cumbersome loan application procedures and collateral requirements. These are structural issues that are largely unrelated to bank funding. Second, almost all bank CEOs who were interviewed as part of the BEPS II survey voiced serious concerns about the creditworthiness of SMEs applying for loans. This, too, suggests that banks' own funding problems, while important, do not tell the full story. Third, BEEPS data reveal persistent large differences between opaque and relatively transparent firms in terms of the probability of being credit-constrained. All three of these observations suggest that structural causes, over and beyond adjustments in banking systems, continue to prevent the efficient matching of firms to banks in many transition countries.

<sup>8</sup> See Popov and Udell (2012), De Haas and Van Lelyveld (2014) and Ongena et al. (2015).

**TABLE 2.1. Banking-sector adjustment and firm-level constraints in 2013-14**

Dependent variable: credit-constrained dummy (2013-14)	(1)	(2)	(3)	(4)	(5)	(6)
Change in share of foreign banks (2007-12)	0.038 (0.300)					0.018 (0.599)
Change in international bank borrowing (2007-12)		-0.255* (0.090)				-0.313** (0.029)
Change in wholesale funding (2007-12)			-0.475*** (0.003)			-0.439* (0.063)
Change in leverage (2007-12)				-0.549** (0.049)		-0.125 (0.714)
Change in non-performing loans (2007-12)					0.031** (0.050)	0.004 (0.884)
Percentage of credit-constrained firms in 2005	1.806** (0.020)	1.816*** (0.000)	1.533*** (0.003)	2.271*** (0.003)	1.662*** (0.004)	1.992*** (0.001)
Number of observations	6,285	6,285	6,285	6,285	6,296	6,177
Firm-level covariates	Yes	Yes	Yes	Yes	Yes	Yes
Locality-level covariates	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.076	0.080	0.083	0.080	0.076	0.088

Source: BEEPS, BIS, Claessens and Van Horen (2015), Bankscope and EBRD (data on non-performing loans).

Note: This table reports the results of probit regressions explaining the probability of a firm surveyed as part of the 2013-14 BEEPS survey indicating that it was credit-constrained. Observations are weighted on the basis of the number of firms in the country that participated in the survey. Standard errors are clustered by country. P-values are reported in parentheses: \* =  $p < 0.10$ ; \*\* =  $p < 0.05$ ; \*\*\* =  $p < 0.01$ .

Indeed, it is likely that such structural causes – while already present prior to the crisis – have only gained in importance in the last couple of years. In the wake of the crisis, firms' default risk has increased considerably, with the result that collecting reliable information on loan applicants has become both more important and more difficult. For instance, a recent report by the Institute of International Finance (IIF)<sup>9</sup> suggests that screening loan applicants has become more challenging following the shift in the global credit cycle. One reason for this is that banks cannot now rely as much on collateral and hard information and need to look more closely at firms' prospects. This requires more subtle judgements, including judgements about the ability and commitment of firms' owners and management.<sup>10</sup> Some banks may be better equipped to produce such judgements during downturns than others.

In order to analyse which factors determine successful "matches" (that is to say, new lending relationships) between firms that are in need of a loan and banks that are able and willing to lend to them, this section uses detailed micro data on individual firms and surrounding bank branches. When a firm needs a loan, it usually has various banks to choose from in the locality where it is based. What factors contribute to the choice of a particular bank?

This assessment of the matching of banks and firms uses data from the 2013-14 BEEPS survey. For each borrowing firm, this survey round provides information on the identity of the most recent lender. Moreover, the BEPS II survey provides detailed information on the various branches that are present in the town or city where each interviewed firm is located. This produces a dataset in which each firm can be linked to all potential lenders in its immediate vicinity. The question is then why a firm borrows from bank A, rather than from bank B, C or D?

Table 2.2 shows the results of regression analysis exploring this question. The first column of the table shows that, given a certain population of bank branches in a locality, a firm is more likely to borrow from a foreign bank and less likely to borrow from a small bank (defined here as a bank with assets totalling less than €1 billion). This indicates that, all else being equal, firms prefer to borrow from foreign banks rather than domestic banks where both types of bank are available. Likewise, larger banks appear to be preferred to smaller ones.

Second, the regression framework assesses the role of bank-lending techniques, particularly the difference between "relationship lenders" and "transaction lenders", as well as the efficiency of banks' lending procedures. On the basis of BEPS II interview data, it is possible to classify banks in the

<sup>9</sup> See Institute of International Finance (2013).

<sup>10</sup> See Beck et al. (2014).

transition region as either relationship or transaction lenders. Relationship lenders usually provide several consecutive loans to the same borrower, thereby building up extensive proprietary information about that borrower. This in-depth knowledge may help relationship lenders to continue to lend to firms (particularly smaller and more opaque firms) when economic uncertainty increases – for example, during a crisis or a recession. In contrast, transaction lenders usually only lend once or twice to a borrower, doing so mainly on the basis of publicly available information on that borrower (which is often processed automatically using a credit-scoring model) or simply relying on collateral. This can be effective during boom periods but may become problematic when screening loan applicants becomes more difficult during a cyclical downturn, as the aforementioned IIF report suggests.

The results in column 2 show that SMEs are more likely to match with a relationship lender rather than a transaction lender. This suggests that relationship lenders have a competitive advantage in a difficult lending environment as they are better able to screen new borrowers and distinguish between good and bad risks.<sup>11</sup> The results in column 2 also show that SMEs are more likely to borrow from banks with fewer layers of decision-making in their loan application procedures. This means that a firm will prefer to borrow from a bank where a loan decision only involves one or two decision-making stages rather than a competitor where each loan application has to be approved by, say, three or four departments or managers. The importance of such efficiency as a determinant of the matching of firms to banks is in line with the earlier evidence from the BEEPS survey showing that a large number of firms needing credit complain about cumbersome loan application procedures.

Column 3 looks at the impact of the perceived quality of the legal system, particularly the ability of courts to enforce legislation on pledges. Indeed, evidence suggests that banks which perceive pledge and mortgage legislation to be of a high quality focus more on mortgage lending and lending to private-sector clients more generally, rather than lending to state-owned enterprises.<sup>12</sup> The results in Table 2.2 show that firms are more likely to end up borrowing from banks that are more confident in the ability of local courts to enforce pledge legislation. This is in line with recent cross-country evidence showing that effective collateral legislation for movable assets can have a significant impact on the volume and sectoral allocation of bank lending.<sup>13</sup>

Lastly, as expected, the data show that firms are less likely to end up borrowing from a bank that indicated during the BEPS II survey that limited liquidity was one of the top three obstacles preventing it from lending (see column 4). This makes sense, as banks that are financially sound will compete more aggressively for market share.

TABLE 2.2. Determinants of the matching of firms and banks

Dependent variable: match dummy (0/1)	(1)	(2)	(3)	(4)	(5)
Foreign bank	0.013*** (0.000)				0.010* (0.050)
Small bank	-0.078*** (0.000)				-0.088*** (0.000)
Relationship bank		0.014*** (0.001)			0.010** (0.031)
No. of hierarchical layers		-0.015*** (0.000)			-0.007*** (0.001)
Court enforcement			0.012** (0.017)		0.009* (0.082)
Liquidity is constraint				-0.024*** (0.009)	-0.032*** (0.003)
Firm-level fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	38,385	29,693	30,768	29,595	26,541
R <sup>2</sup>	0.061	0.052	0.049	0.052	0.079

Source: BEEPS V, BEPS II, Claessens and Van Horen (2015) and Bankscope.

Note: This table reports the results of probit regressions explaining the probability of a firm surveyed as part of the 2013-14 BEEPS survey borrowing from a particular bank in its locality. P-values are reported in parentheses: \* = p<0.10; \*\* = p<0.05; \*\*\* = p<0.01.

<sup>11</sup> In line with this, Beck et al. (2014) show that while relationship lending does not affect credit constraints during a credit boom, it alleviates such constraints considerably during a credit crunch. This accommodative effect of local relationship lending is especially strong for relatively opaque borrowers such as small firms and firms without audited financial statements.

<sup>12</sup> See De Haas et al. (2010).

<sup>13</sup> See Calomiris et al. (2015).

## Conclusion

Credit conditions for small businesses have tightened significantly in recent years, both during and after the global financial crisis. Structural adjustments in banking systems – particularly reduced reliance on cross-border and wholesale funding – explain a large percentage of this tightening. The composition of national banking markets also plays an important role. Indeed, this chapter has shown that when SMEs choose between various banks in their local town or city, they tend to borrow from financially sound banks that have less hierarchical lending procedures, greater faith in the courts and a focus on longer-term lending relationships. This suggests that financial, organisational and institutional issues all have a key role to play in determining firms' ability to access credit.

The first important implication of the findings in this chapter is that it matters how banks reach out to prospective SME borrowers. Surveys of firms reveal that many small businesses that are in need of a loan are discouraged from applying for credit by cumbersome and lengthy application procedures. This happens relatively often in countries such as Armenia, Egypt, Kazakhstan and Tajikistan. Moreover, banks that have lengthy loan application procedures involving many hierarchical layers tend to be less successful at competing for business. Countries where loan application procedures for SMEs tend to be relatively hierarchical (and further streamlining may be useful) include Albania, Croatia and Tajikistan. Importantly, the streamlining of loan application procedures is within the remit of banks themselves and does not require changes to the institutional or legal environment.

Second, the results in this chapter (and a growing body of academic literature) suggest that relationship banks have a special role to play as a source of finance for SMEs. This is particularly true during periods of economic uncertainty when loan officers cannot rely as much on collateral and hard

information and need to look more closely at firms' prospects. The results in this chapter are therefore a warning to banks and their shareholders against adopting an excessively short-termist approach and reducing costs by laying off loan officers and other frontline staff who deal directly with borrowers. In the medium term, such cuts may negatively affect banks' ability to determine whether SMEs have adequate growth prospects.

Third, effective and efficient lending to SMEs can also be stimulated by institutional improvements at the country level. Well-functioning credit registries – through which banks and other lenders are required to share information about the quality of borrowers – have been shown to improve SMEs' access to credit over time. Banks that can easily access trustworthy "hard" data on borrowers will also be incentivised to invest more in building up proprietary "inside" information about borrowers.<sup>14</sup> Thus, the introduction of credit registries and the use of relationship lending need not be mutually exclusive and may instead complement each other.

Fourth, high levels of non-performing loans continue to weigh on the balance sheets of many banks (see Macroeconomic Overview). Not only have authorities in various countries been slow to act, recapitalisations of banks have in some cases also been too limited in scope. Poorly designed recapitalisations may prevent banks from fully tackling their non-performing loan problems, such that they keep "evergreening" bad loans instead.<sup>15</sup> In such cases, lending to SMEs will fail to recover.

WELL-FUNCTIONING  
**CREDIT  
 REGISTRIES**  
 HAVE BEEN SHOWN TO IMPROVE  
**SME ACCESS  
 TO CREDIT**

<sup>14</sup> See, for instance, Karapetyan and Stacescu (2014).

<sup>15</sup> See Giannetti and Simonov (2013) for evidence from Japan.

### BOX 2.1. BEYOND BANKS: ALTERNATIVE SOURCES OF CREDIT IN THE TRANSITION REGION

Non-bank financial intermediation can help companies to access finance when traditional bank lending is not available, either because a firm has limited collateral or because there is a general tightening of lending conditions in the aftermath of a financial crisis. Financial intermediation outside of the regular (and regulated) banking system is sometimes referred to as “shadow banking”, a catch-all term that often covers securitisation, as well as lending by unregulated finance companies, money market funds, hedge funds and securities lenders.

While the increasing importance of shadow banking has been identified as a financial stability issue in the United States and Europe, its scale and impact have been relatively limited thus far in emerging markets (with the exception of China). In Bulgaria, Croatia and Romania such intermediaries are estimated to account for between 18 and 20 per cent of financial sector assets while in Turkey and Russia they hold 10 and 3 per cent of financial sector assets respectively.<sup>16</sup> The bank-dominated transition region could therefore benefit from the further diversification and rebalancing of its financial sector, provided that such alternative funding sources are embedded in a proper legal and institutional framework (see Annex 2.1). Leasing and factoring, in particular, are two promising alternative sources of credit for SMEs in the region.

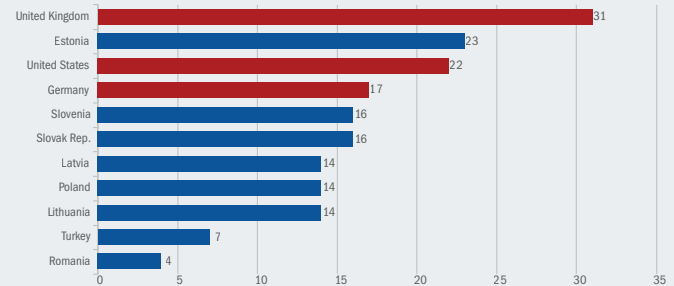
#### Leasing

Leasing is an important source of alternative finance, especially for firms that need to finance new equipment. Leasing services are provided by banks and their subsidiaries, independent companies and “captive” firms linked to manufacturing companies. While the leasing sector is not directly regulated in some countries, it often falls under the purview of banking supervisors (which look at consolidated bank balance sheets) to the extent that leasing companies are linked to banks. In the EU, the CRD IV banking directive allows individual member states to decide how leasing and factoring companies should be supervised.

Leasing’s penetration (that is to say, the extent to which it is used to finance fixed investment in plant and equipment) tends to be lower across central Europe and the Baltic states (CEB) than it is in more mature leasing markets such as the United States, Germany and the United Kingdom, although there is a considerable degree of variation (see Chart 2.1.1). In most other EBRD countries of operations, leasing markets remain even shallower.

The central European leasing sector is characterised by a high degree of concentration, foreign ownership and a strong focus on the leasing of cars and other road transport vehicles. Machinery and industrial equipment account for only around a quarter of leased assets. SMEs that prefer leasing to traditional bank funding tend to do so not only because it allows them to access finance without additional collateral over and above the financed asset but also because they appreciate the favourable tax treatment that it enjoys in many countries, as well as the speed with which leasing contracts are typically approved.

CHART 2.1.1. Percentage of investment in plants and equipment that is financed through leasing



Source: White Clarke Group Global Leasing Report 2014 (based on Leaseurope and national leasing associations).

Note: Data are for 2013.

#### Factoring

Factoring – the sale of accounts receivable – remains a relatively modest part of the financial sector in the EBRD region when compared with most advanced economies. It can nevertheless play an important role in providing short-term liquidity for SMEs supplying goods and services. One advantage of factoring is that it is feasible even in challenging institutional environments where the enforcement of contracts leaves something to be desired and claims on security are not always upheld. Even in such environments, however, effective factoring still requires reliable credit bureau information so that the factor can adequately assess the creditworthiness of buyers.<sup>17</sup> Reverse factoring, whereby a factor only purchases accounts receivable that are linked to high-quality buyers, can reduce the cost of assessing the creditworthiness of large numbers of buyers, especially where credit information is limited.

The development of the factoring sector in the EBRD region hinges on further legal measures to increase the efficiency and reduce the legal uncertainty of factoring transactions, as is outlined in more detail in Annex 2.1. Turkey is a good example of how better legislation can boost the factoring sector, with factoring assets there increasing by around 20 per cent per year since 2006 (albeit from a very low base). This development has been supported by the fact that factoring companies have been regulated by the country’s Banking Regulatory and Supervisory Agency since 2006. In 2012 new legislation brought further credibility and transparency to the sector. Another recent example is the adoption of a new law in Croatia in 2014 which established a well-calibrated legal framework to increase the efficiency and legal certainty of factoring.

<sup>16</sup> See Ghosh et al. (2012) and Financial Stability Board (2014).

<sup>17</sup> See Klapper (2006).

## BOX 2.2. FOREIGN BANKS: “EAST-EAST” BANKING ON THE RISE

The decade preceding the 2008–09 global financial crisis saw a steady increase in the number of banks with affiliates – either subsidiaries or branches – in other countries. The EBRD region was a particularly attractive area to invest in, especially for banks in western Europe. As a result of this trend, a large percentage of total bank assets (36 per cent across the EBRD region as a whole) were in the hands of foreign-owned banks by the end of 2007.<sup>18</sup> Has the global financial crisis reversed this trend as multinational banks have gone back to focusing on their core markets? The answer is “yes”, but with some important caveats.

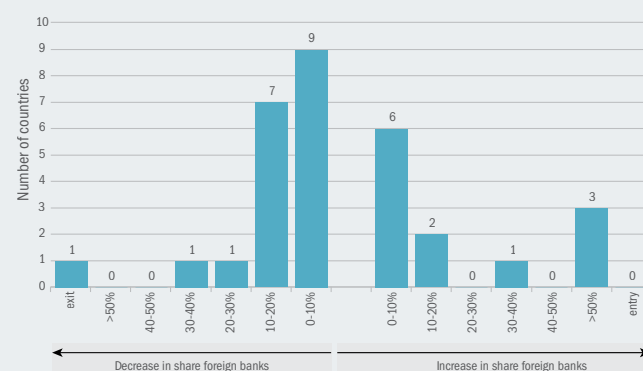
The percentage of total assets held by foreign banks has declined substantially, standing at just 26 per cent – 10 percentage points lower – in 2013. This decline in foreign bank activity has been much stronger than that observed in other parts of the world. Indeed, the global share of bank assets controlled by foreign banks declined only slightly between 2007 and 2013, falling from 13 per cent to 11 per cent. This difference reflects the fact that western European parent banks have had a particular need to strengthen their balance sheets, restore profitability and comply with more stringent capital requirements in the wake of the crisis. One way of doing that has been to reduce their international operations.

Interestingly, Chart 2.2.1 shows that this rebalancing of multinational banks’ foreign and domestic operations has not affected all destination countries equally. In 19 countries in the EBRD region, the market share of foreign banks has decreased over the last five years. Ukraine, where a number of foreign banks have left the country altogether, has experienced the sharpest declines. These developments are driven partly by changes in the perceived attractiveness of the banking markets in the relevant countries and partly by the desire of crisis-affected parent banks to consolidate their foreign operations by selling smaller, more recent and more distant acquisitions.<sup>19</sup> Meanwhile, Chart 2.2.1 also shows that foreign banks have actually increased their presence in 12 countries, with the strongest increases being observed in Azerbaijan and Belarus.

Foreign bank ownership in the EBRD region has, to some extent, also shifted from western European parent banks to strategic owners from the region. When a number of western European parent banks were weakened by the global financial crisis, well-capitalised banks from the region were willing and able to seize these investment opportunities. As Chart 2.2.2 shows, the number of foreign banks from OECD countries increased steadily until 2008, before declining sharply. At the same time, the number of foreign banks based in non-OECD countries has continued to grow. Perhaps the most notable example of this trend was the sale of Austrian bank Volksbank’s central and eastern European subsidiary network to Russia’s Sberbank. Other examples include the sale of Turkey’s Denizbank to (again) Sberbank and Optima Bank (formerly ATF Bank) in Kyrgyzstan (which was Italian-owned but became Kazakh-owned). This trend of increased banking regionalisation is by no means unique to the EBRD region, being prevalent in other parts of the world as well. For instance, Chile’s Corpbanca recently bought Santander’s Colombian operations, while British bank HSBC has sold its operations in Costa Rica, El Salvador and Honduras to Banco Davivienda of Colombia.

What are the possible consequences of this change in the pattern of ownership? Academic literature suggests that the benefits and risks presented by foreign banks can differ substantially depending on where the parent bank is based and what business model it employs. On the one hand, strategic investors from nearby countries may bring with them techniques that are better suited to the specific needs of the countries in which they invest. They may also be better placed to collect and process “soft” information and thus in a better position to lend to more opaque borrowers. On the other hand, there may be less scope for the transfer of state-of-the-art lending and risk-management techniques and know-how. How these effects will play out overall remains unclear. What is evident, however, is that the increased prominence of “east-east” banking is probably here to stay, as it reflects the growing role of emerging markets in the global economy.

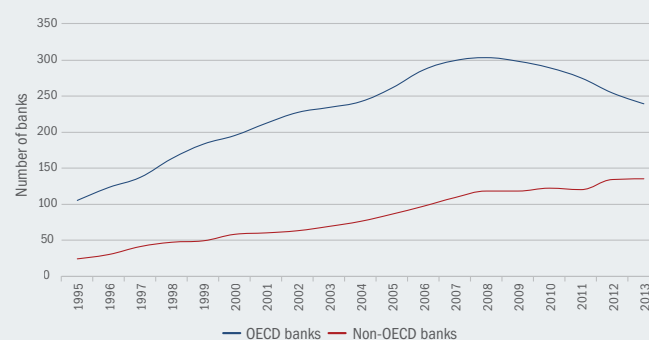
CHART 2.2.1. Cross-country variation in banking disintegration



Source: Claessens and Van Horen (2015).

Note: This chart shows percentage point changes in the market share of foreign banks (the percentage of a country’s total bank assets that are held by foreign banks) between 2007 and 2013 for all EBRD countries of operations. Each bar shows the number of countries that experienced a given percentage point change. For instance, seven countries saw declines of between 10 and 20 percentage points in the market shares of foreign banks. Calculations are based on banks that have asset information available for both years.

CHART 2.2.2. Changes in bank ownership across the EBRD region (1995-2013)



Source: Claessens and Van Horen (2015).

Note: “OECD banks” are foreign banks owned by parent banks registered in countries that became an OECD member in the year 2000 or earlier. “Non-OECD banks” are foreign banks owned by parent banks registered in countries that are not an OECD member or that only became an OECD member after 2000. Note that the Czech Republic, Hungary, Poland, the Slovak Republic, Slovenia and South Korea are included in the non-OECD group.

<sup>18</sup> “Foreign banks” refers only to subsidiaries. Branches of foreign banks are not taken into account in this analysis.

<sup>19</sup> See Claessens and Van Horen (2015).



A participant in the Mongolian field experiment

### **BOX 2.3. MICRO CREDIT: NEITHER MIRACLE NOR MIRAGE**

There has been an intense debate in recent years between the proponents and opponents of microfinance on whether micro credit can lift people out of poverty. However, what this heated debate has lacked is solid evidence. To fill this gap, a number of research teams around the world have conducted randomised evaluations (in the form of large field experiments) aimed at rigorously measuring the impact that access to micro credit has on borrowers and their households. Studies have been conducted in Bosnia and Herzegovina, Ethiopia, India, Mexico, Mongolia, Morocco and the Philippines. Research has taken place in both urban and rural areas and evaluated both individual-liability and joint-liability (group) loans.

#### **Four main lessons**

Together, these studies have produced a rigorous body of evidence on the impact that micro credit has in a wide variety of settings.<sup>20</sup> They paint a remarkably consistent picture and contain four main lessons:

1. In all seven studies, micro credit failed to produce substantial increases in borrowers' income, so it did little to help poor households escape poverty. This is true both in the short term (over an 18-month period) and in the longer term (over a three to six-year period). One possible explanation for this finding is the fact that while micro credit clients overwhelmingly report using loans at least partially for business purposes, many of them also report having used part of their loans for consumption.

Another possible explanation is that not all borrowers are natural entrepreneurs. Net business ownership increased in only two of those countries (see Chart 2.3.1). Of those that used micro credit to establish or expand a small business, some borrowers were more successful than others. Although business investment and expenses increased in several countries, researchers did not find any overall impact on borrowers' profits in Bosnia and Herzegovina, Ethiopia,

<sup>20</sup> See Banerjee et al. (2015) for an overview and a discussion of this issue.

India, Mexico or Mongolia. In some countries, however, increased profits were observed for small subsectors of borrowers.

- Moreover, access to micro credit did not appear to have a tangible impact on borrowers' well-being or the well-being of others in their households. For instance, in three of the four studies looking at this issue, there was no impact on women's decision-making power or independence. In Mexico, where the microfinance institution focused on empowerment, women did enjoy a small but significant increase in decision-making power. In six of the studies, access to micro credit did not increase children's schooling.
- On the upside, the data collected by the research teams showed that households with access to micro credit enjoyed greater freedom in terms of deciding how they earned and spent money. In Bosnia and Herzegovina and Morocco micro credit allowed people to change the mix of employment activities by reducing earnings from wage labour and increasing income from self-employment activities. In the Philippines it also helped households to insure themselves against income shocks and manage risk. In Mexico households with access to micro credit did not need to sell off assets when they were hit by an income shock.
- Importantly, there is also no evidence that access to micro credit is systematically harmful. For instance, overall stress levels among borrowers were no different from those of the control group in Bosnia and Herzegovina and the Philippines (albeit male borrowers experienced significantly higher levels of stress in the Philippines).

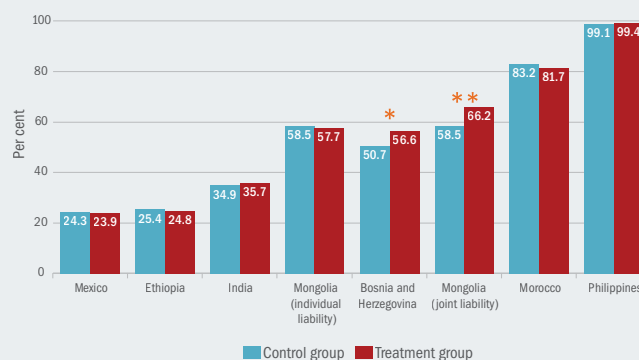
### Implications for the microfinance industry

Small changes to product design may have a big influence on how people use and benefit from micro credit. For instance, repayment typically begins two weeks after the loan has been disbursed and usually follows an inflexible weekly schedule. This can be an effective way of limiting defaults but it may also limit borrowers' income growth. In India, granting some borrowers a grace period – allowing them to build their businesses up before starting to repay loans – increased business investment in the short term and profits in the long term, but also increased default rates.<sup>21</sup> In addition, monthly or seasonal repayment schedules that better reflect borrowers' income flows can help borrowers to make better use of their loans. Further research is needed to evaluate the impact of such flexible loan products in terms of repayment rates and poverty levels.

Accordingly, both microfinance institutions and borrowers could benefit from improved segmentation of the market and the offering of larger, more flexible products to clients who are more likely to perform well and smaller, less flexible loans to less promising borrowers. However, improving this initial differentiation is not straightforward and will require better screening methods.

In addition, financial institutions could pilot better ways of helping high-performing micro entrepreneurs to become eligible for SME lending. At the moment, there is a risk of successful and growing clients that need more funding becoming stuck – that is to say, reaching a point where they are too large for microfinance but not yet a viable client in the eyes of traditional lenders. Microfinance institutions could establish arrangements with local banks whereby they transfer such successful

**CHART 2.3.1. Micro credit and business ownership**



Source: Banerjee et al. (2015).

Note: This chart shows, for eight randomised field experiments across seven countries, the percentage of households that operate a small-scale business at the end of the study, comparing the treatment group (which received access to micro credit) with the control group (which had no access to micro credit). \*\* and \* denote statistical significance at the 5 and 10 per cent levels respectively. In Ethiopia, ownership is measured for non-farm businesses. The Indian results are from the first endline survey (after 18 months), and there is no statistically significant difference after 3.5 years.

clients to those banks (for a fee) so that they can continue on their growth trajectories. Likewise, banks with both microfinance and SME departments should ensure that fast-growing micro clients can easily graduate to SME status.

Lastly, the strong increase seen in competition among lenders may result in some clients being tempted to borrow from various lenders ("double dipping"), which may result in over-borrowing and repayment problems.<sup>22</sup> One possible way of preventing such problems is to allow lenders to share information on borrowers via a credit registry. This issue is particularly pressing for countries (such as Tunisia) that are currently opening up their microfinance sector to increased competition.

<sup>21</sup> See Field et al. (2013).

<sup>22</sup> See Bos et al. (2015) for evidence from Bosnia and Herzegovina.



## BOX 2.4. FINANCIAL INCLUSION OF REMITTANCE RECIPIENTS

In many low-income countries, remittances from abroad are a major source of household income. In Tajikistan, for instance, annual remittances (which are mostly from Russia) total US\$ 3 billion, accounting for almost 50 per cent of the country's GDP. Approximately one in four Tajik families has at least one family member working abroad and most of them regularly send money home to support their families.

Most countries that rely heavily on remittances are unfortunately also characterised by limited use of formal banking services (see Chart 2.4.1). In Tajikistan, only 12 per cent of the adult population had a current account at a bank in 2014, according to World Bank estimates. Even fewer Tajiks keep their savings in a bank or another type of financial institution. As a result, annual remittance inflows are larger than the deposit base of Tajikistan's entire banking system.

The fact that so little remittance income is channelled through the banking system is a missed opportunity not only for the recipients of remittances themselves but also for local banks and the wider economy. For individuals, access to formal banking services can reduce the cost of financial transactions and make savings easier and safer. This can help people to smooth out consumption, particularly when faced with adverse economic shocks. Moreover, recent evidence suggests that when households have access to a trustworthy savings product, this can help them to save larger amounts of money and eventually use those sums to invest in a small-scale business.<sup>23</sup> For the economy as a whole, having a larger percentage of remittances channelled through the banking sector would make it easier to channel those unused savings to other firms and individuals that need finance for their projects.

### Increasing financial inclusion of recipients of remittances

In order to increase the percentage of remittances that are placed in safe savings accounts, a regional initiative supported by the EBRD aims to introduce recipients of remittances to banking services and provide them with financial literacy training. The initiative has been rolled out across Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova and Tajikistan. This financial inclusion project, which is financed by the EBRD's multi-donor Early Transition Countries Fund, helps to encourage saving via the formal banking system and teaches potential bank customers how to plan their budgets.

One of the participants in the financial inclusion project is Oyniso Kholikova, a new customer of Eshkata Bank in Tajikistan. She admits that she did not trust banks much in the past. Consequently, when she received her monthly payment from her husband, who works in Russia, she used to keep it at home. A lack of awareness about banking

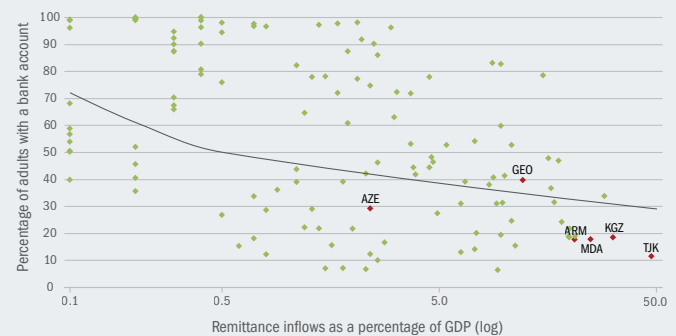
products and financial management is one of the main reasons for people keeping their savings under the mattress. What convinced Oyniso that she and her family could benefit from opening a bank account was the one-on-one training session that she had with a financial adviser who approached her as she was collecting her monthly payment.

"After the consultation, I decided to open a deposit account," Oyniso explains. She is one of 2,700 Tajik participants in the training project who opened an account right after the training session. "I want to save 100 somoni (around US\$ 20) a week to buy furniture for our house," she says. Others told the advisers that they wanted to start saving in order to pay for their children's university education, to finally buy a car or to renovate their flat.

Staff of participating banks have also been made aware of the importance of providing financial education to recipients of remittances. They have been advised on how to make their banks' products more attractive. As a result, banks have managed to attract new customers. "The main benefit is that ordinary people can make informed decisions about their savings and gain access to modern, high-quality banking services," says Nasim Abduloev, a financial adviser at Eshkata Bank in Khujand.

Thanks to targeted efforts to promote financial inclusion among recipients of remittances, over US\$ 5 million has been deposited in new bank accounts in Tajikistan alone (with an average deposit size of approximately US\$ 1,800) and many more participants have indicated that they plan to open a bank account in the near future. Across the six countries covered by the initiative, a total of 160,000 recipients of remittances have participated in training sessions and a total of US\$ 25 million has been deposited in their newly opened accounts.

CHART 2.4.1. Remittances and bank account penetration



Source: Global Findex database and World Development Indicators.

Note: Labelled countries are those participating in the financial inclusion project.

<sup>23</sup> See, for instance, Dupas and Robinson (2013).

## References

- A. Banerjee, D. Karlan and J. Zinman (2015)**  
 “Six randomized evaluations of microcredit: Introduction and further steps”, *American Economic Journal: Applied Economics*, Vol. 7(1), pp. 1-21.
- T. Beck, H. Degryse, R. De Haas and N. Van Horen (2014)**  
 “When arm’s length is too far: relationship banking over the business cycle”, EBRD Working Paper No. 169.
- J. Bos, R. De Haas and M. Millone (2015)**  
 “Sharing borrower information in a competitive credit market”, EBRD Working Paper No. 180.
- C.W. Calomiris, M. Larrain, J. Liberti and J. Sturgess (2015)**  
 “How Collateral Laws Shape Lending and Sectoral Activity”, mimeo.
- G. Chodorow-Reich (2014)**  
 “The employment effects of credit market disruptions: Firm-level evidence from the 2008-09 financial crisis”, *Quarterly Journal of Economics*, Vol. 129(1), pp. 1-59.
- S. Claessens and N. Van Horen (2015)**  
 “The impact of the global financial crisis on banking globalization”, *IMF Economic Review*, forthcoming.
- D. Cox and T. Jappelli (1993)**  
 “The effect of borrowing constraints on consumer liabilities”, *Journal of Money, Credit and Banking*, Vol. 25(2), pp. 197-213.
- R. De Haas, D. Ferreira and A. Taci (2010)**  
 “What determines the composition of banks’ loan portfolios? Evidence from transition countries”, *Journal of Banking & Finance*, Vol. 34, pp. 388-398.
- R. De Haas and I. Van Lelyveld (2014)**  
 “Multinational banks and the global financial crisis: Weathering the perfect storm?”, *Journal of Money, Credit and Banking*, Vol. 46, pp. 333-364.
- R. Duchin, O. Ozbas and B.A. Sensoy (2010)**  
 “Costly external finance, corporate investment, and the subprime mortgage credit crisis”, *Journal of Financial Economics*, Vol. 97, pp. 418-435.
- P. Dupas and J. Robinson (2013)**  
 “Savings constraints and microenterprise development: Evidence from a field experiment in Kenya”, *American Economic Journal: Applied Economics*, Vol. 5(1), pp. 163-192.
- E. Field, R. Pande, J. Papp and N. Rigol (2013)**  
 “Does the classic microfinance model discourage entrepreneurship among the poor? Experimental evidence from India”, *American Economic Review*, Vol. 103(6), pp. 2196-2226.
- Financial Stability Board (2014)**  
*Global Shadow Banking Monitoring Report 2014*, October, Basel.
- S. Ghosh, I. Gonzalez del Mazo and I. Ötker-Robe (2012)**  
 “Chasing the shadows: How significant is shadow banking in Emerging Markets?”, *Economic Premise*, No. 88, World Bank.
- M. Giannetti and A. Simonov (2013)**  
 “On the real effects of bank bailouts: Micro evidence from Japan”, *American Economic Journal: Macroeconomics*, Vol. 5(1), pp. 135-167.
- Institute of International Finance (2013)**  
*Restoring Financing and Growth to Europe’s SMEs*, mimeo, Washington, DC.
- K.M. Kahle and R.M. Stulz (2013)**  
 “Access to capital, investment and the financial crisis”, *Journal of Financial Economics*, Vol. 110, pp. 280-299.
- A. Karapetyan and L.B. Stacescu (2014)**  
 “Information sharing and information acquisition in credit markets”, *Review of Finance*, Vol. 18(4), pp. 1583-1615.
- L. Klapper (2006)**  
 “The role of factoring for financing small and medium enterprises”, *Journal of Banking & Finance*, Vol. 30(11), pp. 3111-3130.
- F. Lopez de Silanes, J. McCahery, D. Schoenmaker and D. Stanišić (2015)**  
 “The European capital markets study: Estimating the financing gap of SMEs”, Duisenberg School of Finance.
- S. Ongena, J.-L. Peydró and N. Van Horen (2015)**  
 “Shocks abroad, pain at home? Bank-firm level evidence on the international transmission of financial shocks”, *IMF Economic Review*, forthcoming.
- A. Popov and G. Udell (2012)**  
 “Cross-border banking, credit access, and the financial crisis”, *Journal of International Economics*, Vol. 87, pp. 147-161.

## ANNEX 2.1. ENHANCING LEGAL FRAMEWORKS TO FACILITATE ACCESS TO FINANCE

### Introduction

Access to finance is directly influenced by the efficiency of laws on the creation and implementation of financial instruments.<sup>1</sup> Whether it is a supplier who needs working capital to overcome liquidity problems and make a payment, a farmer who needs to finance a forthcoming harvest or the owners of a power plant who need to finance a major new project, inefficiencies in the legal system that increase the perceived riskiness of lending may discourage potential providers of credit.

Financial instruments which reduce the riskiness of lending can increase the availability of credit and improve the terms on which it is offered. The EBRD's Secured Transactions Project, which was established in 1992 to encourage countries to modernise their legislation on collateral, offers assistance at all stages of the reform process. In 1992 most countries in which the EBRD operated either had no rules on secured transactions or had outdated or inadequate rules which failed to give creditors sufficient protection.

In 2014, as part of its regular assessment of transition challenges, the EBRD's Legal Transition Team undertook an extensive assessment of the relevant legal framework, examining the nature and effectiveness of the collateralisation process in the EBRD's countries of operations.

This assessment sought to gauge two things: first, the extent to which these legal regimes allowed the collateralisation of various types of asset with a view to giving secured creditors preferential rights in respect of that collateral which could be enforced in the event of default; and second, whether the solutions adopted were simple, fast and inexpensive, provided certainty to the various parties and were well suited to the economic, social and legal context of the relevant countries.

The assessment examined the potential for collateralising various types of asset. In addition to standard security interests (such as pledges and mortgages), the assessment also covered typical forms of quasi-security, including sale-and-lease-back transactions (financial leasing), as well as the assignment of receivables and financial collateral. It also covered related issues such as enforcement and syndicated lending.

The results of this assessment, which were published on the EBRD's website, show the remarkable progress that transition

countries have made with the establishment of secured transaction infrastructure over the last 25 years. Demanding reforms have been implemented, involving both local and international businesses and legal communities. Effective tools, such as central collateral registries, more accurate land registries, and clearer and more reliable contractual rules, have been put in place to increase the legal certainty surrounding financial activities.

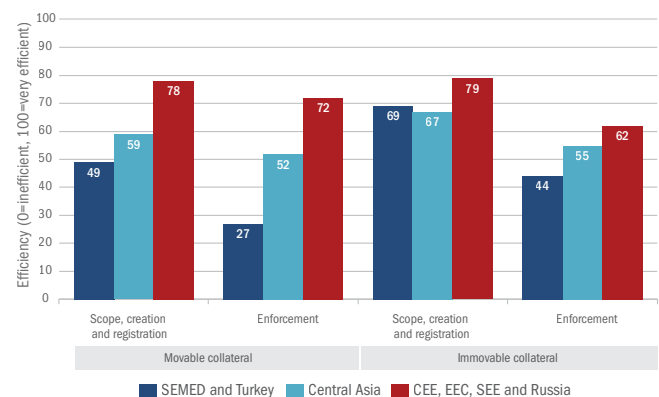
However, it is also clear that some solutions have proved to be more efficient and/or better implemented than others and even the best performing systems could benefit from further improvements. These could involve, for example, the facilitation of modern financing methods such as security over bank accounts, syndication or pre/post-harvest agricultural finance.

Most transition countries are now in the second phase of the legal development process which involves a focus on granular improvements, filling in the gaps in their legal systems.

### Current situation

Countries can be divided into three main regional groups in terms of the development of such legal infrastructure. Fairly sophisticated levels of development (with modern secured transaction systems in practice) can be found in central Europe and the Baltic states (CEB), eastern Europe and the Caucasus (EEC), south-eastern Europe (SEE) and Russia. The second group of countries (which includes countries in Central Asia) have implemented reforms but their systems have not lived up to expectations (especially as regards security over movable assets) on account of a lack of proper implementation, poorly drafted or incomplete legal provisions, or a lack of economic activity (which has limited the development of established practices). The third group are countries where collateralisation systems for movable property are based on variations of the French *fonds de commerce* – that is to say, they involve the pledging of business assets. This group includes countries in the southern and eastern

CHART A.2.1.1. Efficiency of secured transaction regimes



Source: EBRD Secured Transactions Assessment 2014.

<sup>1</sup> See, for instance, Armour et al. (2015).

Mediterranean (SEMED) and Turkey. Chart A.2.1.1 shows how these groups of countries compare in terms of the legal efficiency of their secured transaction regimes.

In contrast with the other countries examined, legal frameworks governing collateralisation have been in place in SEMED countries and Turkey since the beginning of the 20th century without interruption. However, these systems have not changed with the shifting business and economic landscape and are currently perceived to be highly inefficient. Land and buildings are often not registered or the relevant property rights are unclear or subject to complex and overlapping sets of rules, and none of the SEMED countries or Turkey has a modern all-encompassing law governing the provision of non-possessory security over movable property. Such a system would allow parties to establish security interests in respect of any type of movable property by simply registering a collateral agreement or adding a note in a central online register. Since certain frameworks have historic significance, it seems that decision-makers in these countries are faced with a choice between undertaking a general overhaul of the system and amending or fine-tuning the existing frameworks. These decisions will have to be made on a case-by-case basis. In this context, it is worth mentioning that Morocco has decided to carry out a general overhaul of its secured transaction system. Reviewing secured transaction systems and supporting other financing instruments (such as factoring) should be considered a priority for this group of countries.

Most of the countries in the first group now have modern central mortgage and pledge registries operating at a satisfactory level from a user's perspective. This means that financial institutions and investors have a public data source to rely on when making business decisions. By way of example, 16 of the 23 countries in this group offer direct or indirect online access to their land registries, with 14 countries doing so for pledge registries. The areas where countries differ most – and where major efforts should be made in the future – concern specific sophisticated products or transactions. These include the ability to use collateral managers in syndicated lending, the pledging of bank accounts, the provision of security in respect of accounts receivable (in particular, the requirement that all accounts receivable be specifically identified at the time of the creation of the security, which makes it impractical) and the extension of mortgage rights to cover developments in construction projects.

## Second phase of the legal development process

In contrast with the first stage of the legal transition process, where the legal landscape for secured credit and other financial instruments was relatively uncharted territory, markets now require the improvement of existing systems, taking account of lessons learned from the financial crisis and general drafting or implementation flaws that have come to light through the use of existing instruments. There is also a need for the introduction and/or development of sophisticated legal instruments meeting various financial needs (as regards working capital, investment

and capital expenditure, for example) or specific sectoral needs (in the case of agribusiness, for instance). This is true of all three groups of countries, whether it involves supporting the development of pre-harvest financing instruments in Russia, revising the post-harvest financing system (that is to say, grain warehouse financing) in Turkey or improving conditions for leasing services in Georgia or Mongolia.

The next few paragraphs look at local legislative initiatives aimed at facilitating the financing of particular sectors or introducing innovative instruments spanning the entire financial system.

## Innovations in agricultural finance

Farmers in transition countries often have difficulty obtaining financing owing to their inability to provide creditors with acceptable collateral. Most common types of collateral, such as land or machinery, cannot normally be used for short-term finance. At the pre-harvest stage, this makes it difficult for farmers to secure affordable financing, exposing them to expensive and usually uncompetitive financing schemes offered by input suppliers or forcing them to make difficult choices as to what investment they can afford. Thus, insufficient liquidity causes under-investment in the agricultural sector, leading to lower levels of productivity and profit (as a result, for example, of a lack of high-quality inputs fostering productivity). At the post-harvest stage, only a robust public warehousing system for harvested crops would allow farmers to use stored crops as collateral.

Various countries have been exploring ways of overcoming these problems. One such initiative involves an innovative pre-harvest instrument colloquially called “crop receipts”, which originated in Brazil and encourages the commercial financing of agricultural activities by the private sector. It currently supports financing operations with a total value of approximately US\$ 20 billion a year.

A crop receipt system, which is structured around a dedicated law, establishes a standardised obligation to supply agricultural products or make future payments (to the holder of the receipt) in return for pre-harvest finance (either monetary or a payment in kind). This obligation cannot be altered or revoked under any circumstances (including *force majeure*) and can be incorporated in a tradeable paper, further increasing its market value. The obligation is also secured by collateral, particularly in the form of future agricultural products.

Serbia and Ukraine have recently been working on introducing crop receipt systems. A fully functional national system has been introduced in Serbia and a regional system has been developed in the Poltava region of Ukraine as a pilot for a national system. Under this pilot programme, crop receipts with a total value of around UAH 19 million were issued in the Poltava region in the first half of 2015. The two countries' authorities needed to ensure that the relevant legislation was drafted in a way that reflected international best practices but also corresponded well to the idiosyncrasies of the local legal systems. All major stakeholders (that is to say, banks, insurance companies and

agribusiness firms) provided input during the drafting of the legislation, which served as a starting point for the development of certain solutions. This legislation governs agricultural pre-harvest financing contracts, as well as the registration of such agreements, the settlement of creditors' claims (using future agricultural products as a form of non-possessory security) and special rights and obligations of the contracting parties (for example, rights and obligations relating to specific financing and enforcement mechanisms tailored to the Serbian and Ukrainian markets).

Warehouse receipts are another useful instrument, particularly for hedging against volatility in agricultural commodity prices after the harvest. Warehouse receipt financing requires a specific legal framework establishing the instrument and providing for quick and easy enforcement (typically out of court) for the crops. It should also clearly set out the rights and obligations of all parties and provide for the issuance and registration of the warehouse receipts, as well as adequate licensing, inspection and insurance for the warehouses. The licensed warehouses must meet certain minimum standards and need to be properly inspected on a regular basis, which enables participants to treat all warehouse receipts equally, regardless of which warehouse issued them. There also needs to be a performance guarantee system (in the form of an indemnity fund, for instance) to cover any losses, fraud or negligent behaviour by licensed warehouses. Since 2010 Bulgaria, Kazakhstan, Lithuania, Moldova, Poland, Romania and the Slovak Republic – and, more recently, Russia and Serbia – have all moved towards the implementation of warehouse receipt systems.

However, more still needs to be done to improve farmers' access to finance in the region. The passing of effective laws and regulations and the implementation of the required technology needs to be complemented by policy dialogue aimed at raising awareness of key issues among major stakeholders. This should help to reduce the risk of arbitrary interventions and policy changes, which could undermine trust in crop and warehouse receipt systems.

### Financing working capital by selling receivables

Cash is vital for businesses, being used to pay staff wages, purchase stock and raw materials, fulfil tax obligations and pay other operating costs. Securing the working capital needed to finance regular business cycles is one of the most pressing issues facing businesses around the world. Recent banking crises and the resulting regulatory responses (which have made capital requirements more stringent) have severely limited the availability of working capital via bank credit. This has, in turn, exacerbated the late payment of accounts receivable, creating a vicious circle in the supply chain. Banks now require substantial guarantees as they have to comply with a number of new regulations, such as the capital and liquidity provisions in Basel III.

Small and medium-sized enterprises (SMEs) find it difficult to provide the required guarantees as they rarely have assets available for collateralisation (with long-term assets often being procured via leasing arrangements or already being used to

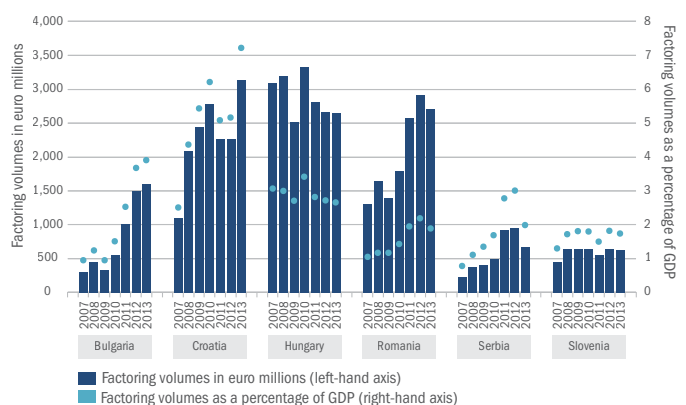
secure existing bank loans). All of this has increased the need for alternative financing methods (such as factoring, which has steadily been increasing in transition countries; see Chart A.2.1.2).

Factoring – a financial service based on the sale of accounts receivable – is a useful financing tool giving SMEs (off-balance sheet) access to working capital. Its pricing is usually based on the creditworthiness (that is to say, the riskiness) of the relevant SME's major customers and is thus insulated from the usual problems associated with SME finance (namely, the asymmetry of information and the lack of appropriate security). As the use of factoring has increased in the EBRD's countries of operations, certain legal issues have become more prominent. These require special legislative attention in order to increase the efficiency and reduce the legal uncertainty of factoring transactions.

Exploration of the legal structures underpinning the factoring industry has intensified in the last couple of years. Several transition projects have been conducted in this area, including projects on the regulation of factoring in Croatia, Montenegro, Serbia and Tunisia (with projects being announced in other transition countries as well). Work on legal frameworks involves introducing clear and reliable rules to encourage the development of factoring services by increasing the legal certainty surrounding factoring transactions and improving regulation. Such work needs to ensure the stability and legitimacy of the industry but also avoid over-regulation, reflecting the low levels of systemic risk associated with factoring operations.

Typical legal issues include the treatment of recourse factoring in the event of the insolvency of the assigner, the impact on factoring of a ban on assignment clauses, the possibility of assigning future receivables and the effectiveness of electronic assignment. There are also a number of additional tax and regulatory challenges that are worth addressing. The lack of appropriate solutions to these issues has the potential to impair the development of factoring as it could make factoring technically impossible (for example, if the assignment

CHART A.2.1.2. Factoring volumes in selected countries



Source: Factors Chain International Annual Review 2014 and Eurostat.

TABLE A.2.1.1. Loans versus leasing

Bank loan	Financial leasing
Customer chooses asset	Customer chooses asset
Customer repays asset cost plus interest	Customer repays asset cost plus interest
Loan may be repaid early	Lease may be repaid early
Collateral recovered in event of default	Asset repossessed in event of default
Complicated process	Simple process
Extensive contract	Simple contract
Slower decision on risk	Faster decision on risk
Customer has ownership rights	Customer has usage rights

Source: EBRD.

of a future claim is not allowed), prevent the development of factoring companies (for example, if there is a lack of institutional support) or raise the cost of factoring transactions on account of the increased legal risks (for example, because courts have recategorised transactions owing to a lack of clear legal definitions).

### Revisiting and fine-tuning established instruments

In addition to the exploration of innovative new legal instruments, the second phase of the legal transition process is also characterised by the revisiting and examination of legal solutions introduced in the past. Recent examples of such initiatives include a review of leasing legislation in Mongolia and the refinement of mortgage legislation in Serbia.

Leasing is a key source of investment finance for SMEs. The advantages of leasing for SMEs include:

- the opportunity to conserve cash for other purposes while increasing revenues (by acquiring assets without cash expenditure)
- potential tax benefits (owing to the depreciation of assets in line with outgoing payments)
- a reduction in – or absence of – collateral requirements (as existing company assets do not need to be encumbered)
- the technical support that accompanies leasing services, such as access to maintenance services, spare parts and technical advice (see also Table A.2.1.1).

The concept of financial leasing was introduced into the Mongolian legal system in 2006. However, by 2013, after seven years of practice, certain technical issues had emerged, with providers of financial leasing services in Mongolia taking the view that the law did not allow the full benefits of leasing to be reaped. The efficiency and legal certainty of leasing transactions were being undermined by ambiguous and incomplete drafting (which did not, for example, facilitate standard sale-and-lease-back transactions and made the repossession process fairly onerous for lessors). The legislation also lacked clear provisions regulating

the transfer of risk. Following objections raised by market participants, with the support of international organisations, the Mongolian government launched a legislative reform in 2015 in cooperation with market participants with the aim of amending the legislation and resolving these issues.

A similar project – albeit in a slightly different area – has recently been concluded in Serbia. The country's Law on Mortgages, which was adopted in 2005, sought to establish a legal framework for mortgages on the basis of international best practices. The law introduced several new features, including an increase in the number of different types of object that could be mortgaged, the creation of a fast-track out-of-court enforcement procedure and the establishment of a central mortgage registry. However, by 2013, after eight years of practice, the law had proved to have a number of weaknesses. These ambiguities made it possible for mortgage debtors to obstruct the enforcement of their creditors' rights, which reduced lenders' confidence in the system and increased transaction costs. The Association of Serbian Banks had been arguing for a reform of that mortgage legislation since 2009 but without any success. Thanks to vocal support from international financial institutions, local banks eventually managed, in 2014, to get the authorities to reform the legislation with a view to tackling the problems which had arisen in the implementation of the law. Following extensive negotiations and dialogue with stakeholders, the Serbian parliament adopted amendments to the Law on Mortgages in June 2015. These amendments will increase the legal certainty surrounding mortgages and improve the efficiency of out-of-court enforcement mechanisms.

### Conclusion

Legal transition is a continuously evolving process – changing and developing (and sometimes even regressing) in line with the shifting landscape in local markets. In many transition countries, markets and legislators are now ready to build on the systems that have been introduced in the past and focus on more sophisticated financial products. It seems that following the initial top-down transposition of basic internationally accepted lending techniques, a more organic bottom-up approach responding to the specific needs of particular countries will characterise legal technical assistance in the transition region in the coming years.

## References

- J. Armour, A. Menezes, M. Uttamchandani and K. van Zwieten (2015)**  
 "How do creditor rights matter for debt finance? A review of empirical evidence", in F. Dahan (ed.), *Research Handbook on Secured Financing in Commercial Transactions*, pp. 3-25.