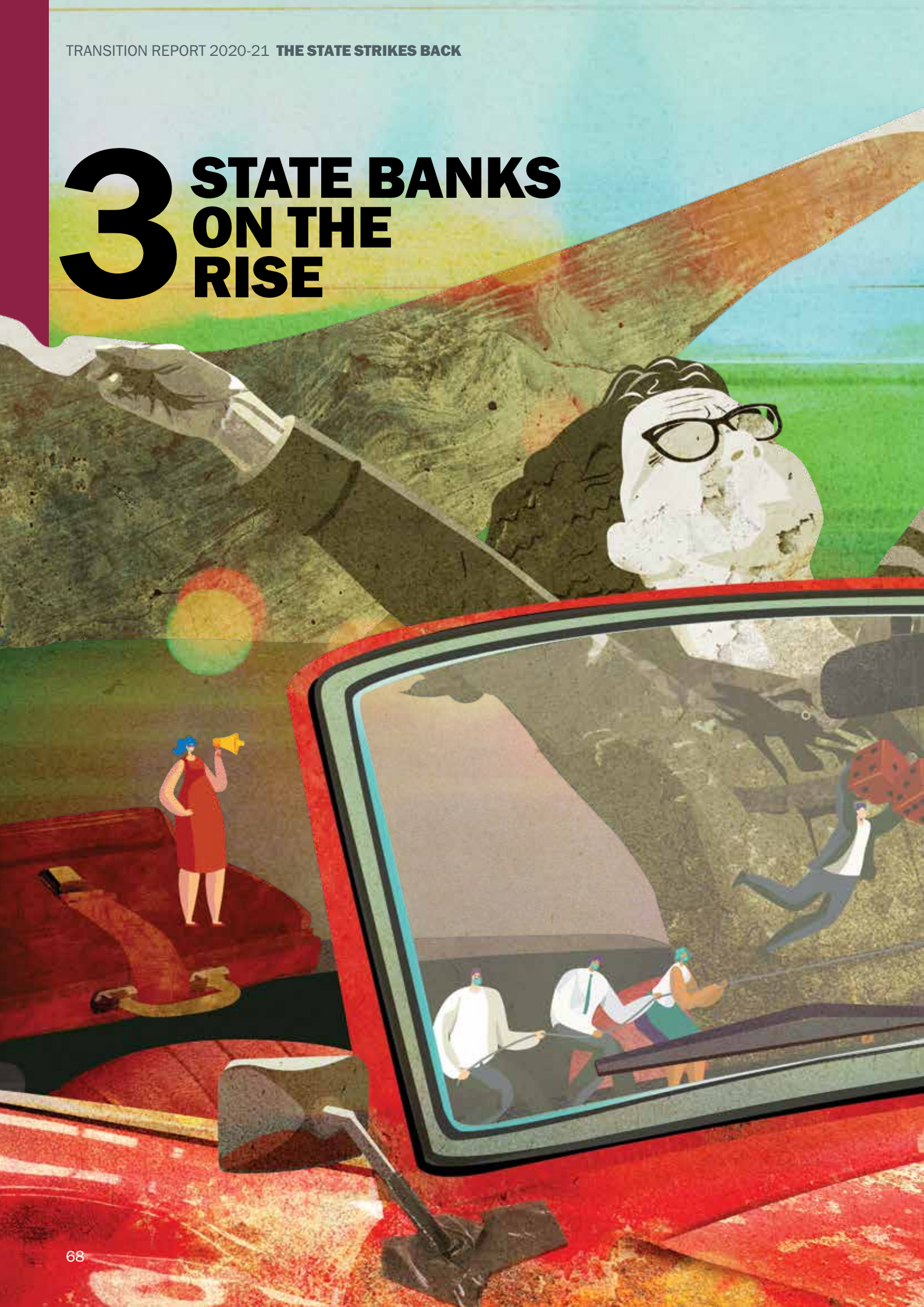
3 STATE BANKS ON THE RISE



State-owned banks have grown in importance across the EBRD regions over the last decade. They have become serious competitors for privately owned lenders, expanding both their assets and their branch networks. Many state banks apply less stringent lending standards, operate with smaller net interest margins and accept higher levels of non-performing loans. This greater appetite for risk allows them to soften the impact that economic shocks have on households, small businesses and entire regions. At the same time, while state banks may help to reduce economic fluctuations, their growing importance may come at a cost, resulting in a decline in firm-level innovation and lower aggregate productivity. This partly reflects state banks' susceptibility to political interference, which can result in credit flowing to less productive firms. Improving the corporate governance of state banks can reduce the risk of such distortions somewhat.

Introduction

The regions where the EBRD invests have traditionally had strong state-owned financial institutions.[1] Central Europe and the economies of the former Soviet Union began the 1990s with banking sectors that were dominated by state banks – a legacy of the large monobank systems that had been in place prior to the fall of the Berlin Wall. While many of those state lenders were soon privatised, often ending up in the hands of foreign strategic investors, a number of large banks have remained in state ownership (either in full or in part). Examples of such banks include Sberbank and VTB in Russia, NLB in Slovenia and PKO in Poland. Moreover, in the wake of the global financial crisis, some private banks were (at least temporarily) brought back into state hands, with such developments being observed in countries such as Poland, Hungary and Ukraine. At the same time, entrenched state banks such as National Bank of Egypt and Ziraat Bank have remained powerful players in the southern and eastern Mediterranean (SEMED) region and Turkey. Meanwhile, a number of state banks have recently expanded their operations abroad, with prominent examples including Russian-owned VTB's operations in Ukraine, Dubai-owned Denizbank in Turkey (which was previously owned by Russian state bank Sberbank), and Sberbank's ownership of Volksbank, which operates across much of central and eastern Europe.

In many of the economies of the former Soviet Union, state banks accounted for more than half of all banking assets in 2016 (the last year for which comprehensive data are available), with figures of 67 per cent in Belarus, 59 per cent in Russia and 53 per cent in Ukraine, for instance (see Chart 3.1). Levels of state ownership in the banking sector are also high in China (59 per cent), Ethiopia (61 per cent), India (67 per cent) and Syria (71 per cent). In some large Latin American countries, such as Brazil and Argentina, more than 40 per cent of banking assets remain in state hands. And in Turkey, three large state banks account for a third of the banking system. While state banks used to play a minimal role in most high-income countries, bailouts and nationalisations in the wake of the global financial crisis have also increased the level of state ownership in countries such as Iceland (66 per cent) and Portugal (37 per cent). In Germany, too, state banks account for 37 per cent of total banking assets, as regional *Landesbanken* continue to play a major and heavily debated role in the economy.[2]

This chapter describes the rise of state banks over the last decade and analyses the state's growing role in the area of financial intermediation. There are, broadly speaking, two main dominant views on the economic role of state banks. The first highlights the role that governments play in addressing credit market failures, fostering financial inclusion and industrial innovation, and maintaining financial stability. According to this positive perspective, state banks are able to fund projects that create beneficial externalities but are either too opaque, not profitable enough or too long-term in nature for private banks to finance.[3] Moreover, state banks can also act as economic shock absorbers, stepping in when information asymmetries widen in times of crisis and private banks increase their rationing of credit for riskier firms.[4]

The second, negative, perspective argues that politicians often pressure state banks to provide employment, subsidies and other benefits to their supporters, in the hope that they will return the favour in the form of votes, political contributions or bribes. To the extent that lending by state banks is indeed driven by political motivations, state banks will distort the allocation of capital, with adverse implications for the productivity of firms and the economy as a whole.[5] This chapter ends with a discussion about how countries can reduce the inherent risks that are associated with state banks (other than through privatisation).

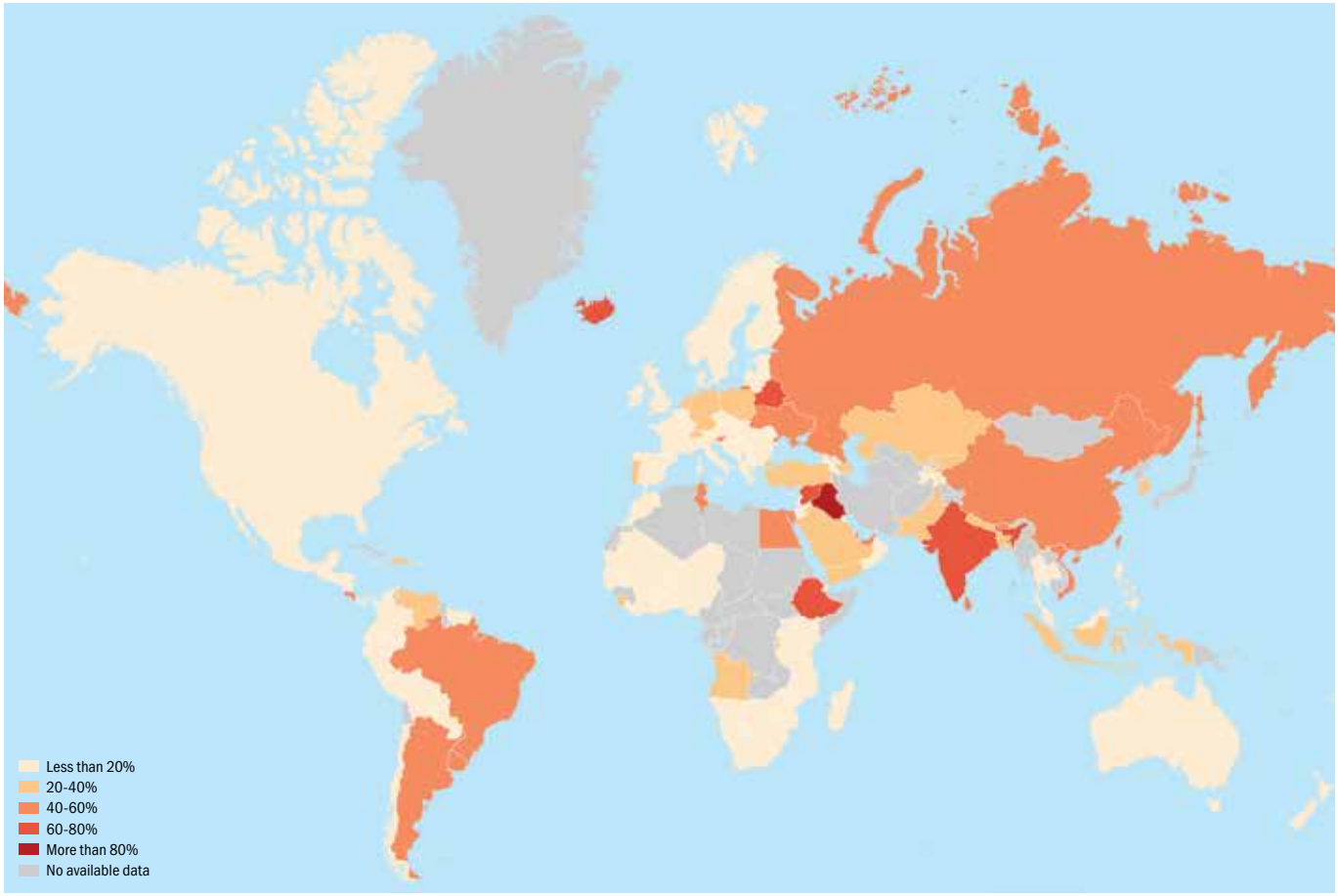
STATE BANKS OWN MORE THAN HALF OF ALL BANKING ASSETS IN BELARUS, CHINA, INDIA, RUSSIA AND UKRAINE

[1] State-owned banks are defined here as banks where the state owns at least 50 per cent of all shares. The empirical results set out in this chapter do not change significantly if state banks are defined instead as banks with at least 25 per cent state ownership.

[2] See, for instance, Englmaier and Stowasser (2017), and Koetter and Popov (2020).
[3] See Stiglitz (1993) and Mazzucato (2018).
[4] See Tirole (2012), and Brei and Schclarek (2013).
[5] See, for example, Shleifer and Vishny (1994), Shleifer (1998), La Porta et al. (2002), Sapienza (2004), Bonin et al. (2005), and Khwaja and Mian (2005).

CHART 3.1.

State banks continue to play a major role in many economies



Source: World Bank (Bank Regulation and Supervision Survey) and authors' calculations.
Note: This map shows the percentage of total banking assets that were owned by state banks in 2016. This map is used for data visualisation purposes only and does not imply any position on the legal status of any territory.

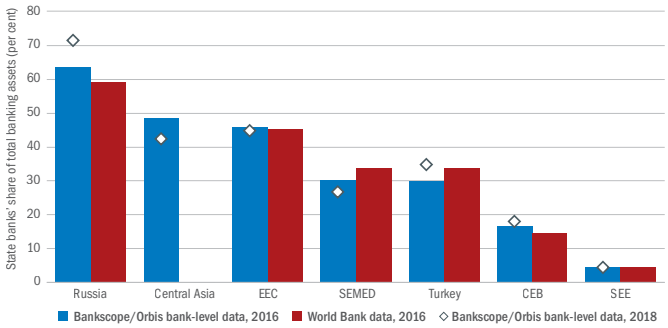
State banks as competitors

The growth of state banks

In Russia, state banks (especially Sberbank and VTB) owned more than 60 per cent of all banking assets in 2016-18 (see Chart 3.2, which combines estimates from the World Bank's Bank Regulation and Supervision Survey with estimates obtained by aggregating bank-level data from Bankscope and Orbis for 2016 and 2018), with somewhat lower levels being observed in eastern Europe and the Caucasus (EEC). In the SEMED region and Turkey, around a third of banking assets remain in state hands, with much lower percentages being observed in central Europe and the Baltic states (CEB) and south-eastern Europe (SEE). In central and south-eastern Europe, governments privatised most state banks in the early 1990s (with the exception of a handful of large banks in a few countries) and sold them to foreign strategic investors.

CHART 3.2.

State banks' role in the economy varies strongly across the EBRD regions



Source: World Bank (Bank Regulation and Supervision Survey and World Development Indicators), Bureau van Dijk (Bankscope and Orbis databases) and authors' calculations.
Note: This chart shows the percentage of total banking assets that are owned by domestic state banks, weighted by GDP. The bar showing 2016 World Bank data for Central Asia has been omitted owing to a lack of available information. The presence of state banks as captured by World Bank data and Bankscope/Orbis data may differ as a result of small differences in coverage and definitions.

The EBRD regions now have the second-highest percentage of state-owned banking assets in the world (after Asia), having overtaken Latin America following the global financial crisis (see Chart 3.3). This owes much to the high levels seen in some of the largest countries in the EBRD regions (such as Egypt, Russia, Turkey and Ukraine). While state-owned banks can also be found in Africa and western Europe, they play a less important role than private banks in those regions.

The assets of state-owned banks and private banks increased in tandem until the onset of the global financial crisis in 2008 (see Chart 3.4). In that year, private banks saw a sharp decline in their access to cross border wholesale funding, including syndicated borrowing.[6] At the same time, foreign-owned private banks' access to parent bank funding was also sharply curtailed, forcing them to start a decade long de-leveraging process.[7] In contrast, many state-owned banks had been less reliant on relatively volatile wholesale funding, instead funding more of their assets using more stable customer deposits. Moreover, various governments used state banks as vehicles for the swift distribution of public funds to the real economy. In Russia, for instance, the government gave state banks capital injections and preferential loans on favourable terms, as well as long-term deposits.[8] Thus, state banks at least partially filled the credit gap left by de-leveraging private banks and were able to increase their assets much faster than their private counterparts.

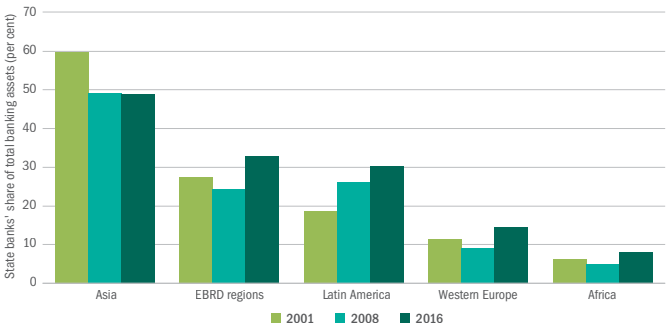
Academic evidence points to the importance of geographical proximity in lending relationships between banks and firms.[9] For instance, a recent study of relationship lending in Italy during the global financial crisis found that credit was cheaper and more stable for firms that were located closer to their banks.[10] Thus, banks' ability to lend to households and firms (especially smaller companies) remains strongly dependent on the geographical scope of their branch networks. Many state banks have expanded their branch networks over the last decade as their assets have grown, particularly in Turkey, Central Asia and the CEB and SEE regions (see Chart 3.5; note that 2020 data are not yet available for Russia or the SEMED region). In contrast, state banks' share of total branches shrank across the EBRD regions between 2000 and 2010, with the exception of the SEMED and SEE regions. The expansion of state banks' branch networks in the decade following the global financial crisis reflects both stronger organic growth in the branch networks of state banks relative to private banks and changes to the ownership of existing branches following nationalisations in countries such as Hungary, Poland and Ukraine.

Banks' perception of state banks as competitors

The rapid expansion of state banks' assets and branches in the wake of the global financial crisis has probably solidified their position as strong competitors in the credit market. In order to assess the extent to which state banks have indeed become stronger competitors, this chapter uses data derived from the second round of the EBRD's Banking Environment and Performance Survey (BEPS II). As part of BEPS II, face-to-face

CHART 3.3.

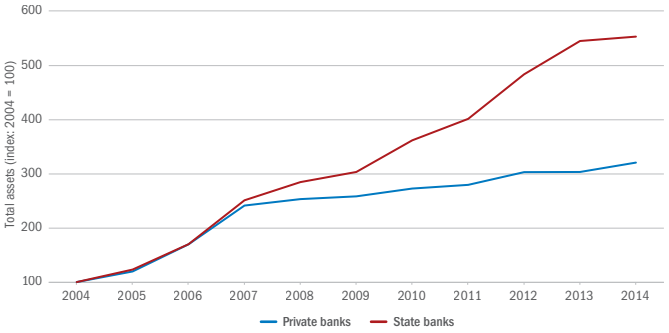
The EBRD regions now have the second-highest percentage of state-owned banking assets in the world, after Asia



Source: World Bank (Bank Regulation and Supervision Survey and World Development Indicators) and authors' calculations.
Note: This chart shows the percentage of total banking assets that are owned by domestic state banks, weighted by GDP. The sample is restricted to a set of countries for which data are available for 2001, 2008 and 2016.

CHART 3.4.

State banks' assets have grown more strongly than those of private banks since the global financial crisis



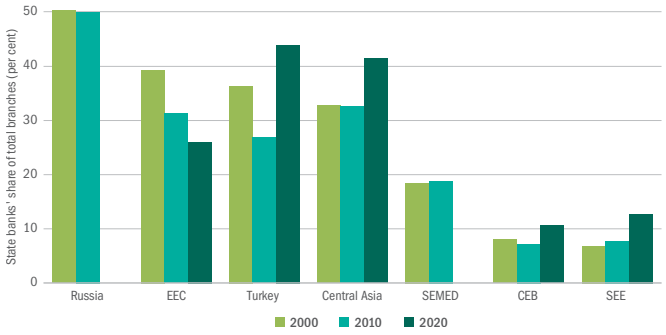
Source: Bureau van Dijk (Bankscope and Orbis databases) and authors' calculations.
Note: This sample is restricted to banks with at least 10 years of data on total assets over the period 2004-14.

IN 2020,
44%
OF ALL BANK BRANCHES IN TURKEY,
42%
OF BRANCHES IN CENTRAL ASIA, AND
26%
OF BRANCHES IN EASTERN EUROPE AND THE CAUCASUS BELONGED TO STATE BANKS

[6] See De Haas and Van Horen (2013).
[7] See De Haas and Van Lelyveld (2014), and De Haas et al. (2015). See also Box 3.3 for details of the challenges faced by correspondent banking and the role of state banks in that market segment.
[8] See Davydov (2018).
[9] See Degryse and Ongena (2005), and Qi et al. (2018).
[10] See Sette and Gobbi (2015).

CHART 3.5.

State banks' branch networks have grown in recent years

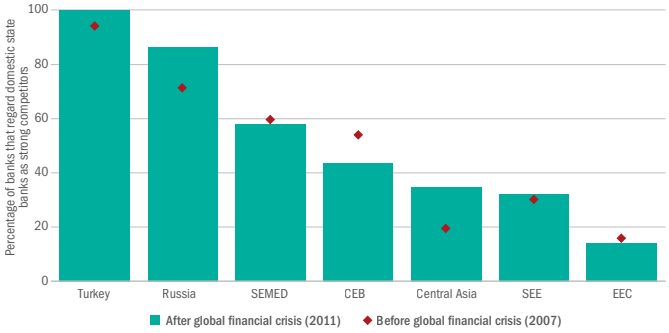


Source: BEPS II, BEPS III and authors' calculations.
Note: Data for 2020 are not yet available for Russia or the SEMED region. SEE data do not include Cyprus, Greece or Kosovo, and SEMED data do not include Lebanon or the West Bank and Gaza.

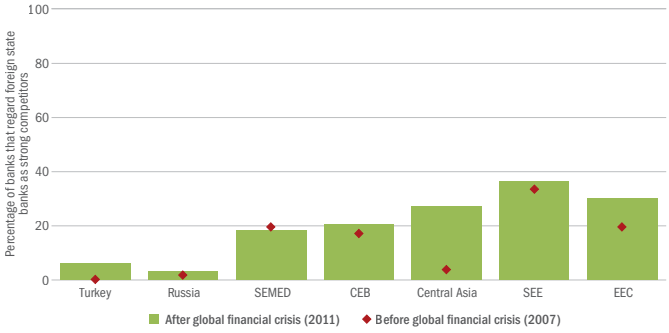
CHART 3.6.

State banks are regarded as strong competitors in the SME lending markets of certain economies

Panel A: Domestic state banks



Panel B: Foreign state banks



Source: BEPS II and authors' calculations.
Note: This chart shows the percentage of banks that regard state-owned banks as strong competitors in the SME lending market.

interviews were conducted with the chief executive officers (CEOs) of 611 banks in 32 countries across the EBRD regions in 2012. That second survey round included a special module looking at the competitive banking landscape in the bank's country of incorporation, which asked CEOs about the extent to which state banks were strong competitors in various segments of the credit market, both before the global financial crisis (in 2007) and afterwards (in 2011).[11]

The results of the survey indicate that, when it comes to lending to small and medium-sized enterprises (SMEs), domestic state banks are most likely to be regarded as serious and strong competitors in Turkey, Russia and the SEMED region (see Chart 3.6). Indeed, after the global financial crisis all participating CEOs in Turkey and more than 80 per cent of participating CEOs in Russia indicated that domestic state banks were strong competitors in the SME lending market. Banks' CEOs were also asked about their competitors in the retail and corporate lending markets, and the results for those questions were very similar to those shown in Chart 3.6.

Foreign state banks are generally regarded as less of a competitive threat (see Chart 3.6). In fact, foreign state banks are seen as posing the least threat in terms of competition in those economies and regions where domestic state banks are most dominant – notably Turkey, Russia and the SEMED region. This indicates that the two types of state bank are substitutes, possibly because governments that own state banks are less likely to allow foreign state-owned competitors to enter the domestic market.

State banks' strategies

How exactly did state banks step up their activities in the aftermath of the global financial crisis? BEPS II provides unique insight into the main perceived constraints that banks face when trying to acquire new clients, as well as the strategies used to attract new customers before and after the crisis.

[11] For more details regarding these questions and analysis of the causes and consequences of bilateral competition between banks in the EBRD regions, see De Haas et al. (2020c).

Before the global financial crisis, domestic state banks were significantly less likely than private banks to report that their corporate lending (defined as lending to firms with at least 250 employees) was held back by loan applicants having an inadequate credit history (that is to say, a poor credit history or no credit history at all; see top panel of Chart 3.7). This suggests that private banks may have been more demanding, or more conservative, in terms of the types of borrower that they lent to (see Box 3.2 for evidence from Turkey). That difference between state and private banks was also observed after the global financial crisis (see bottom panel of Chart 3.7). However, at that point, state banks were also significantly less likely to report that their lending was constrained because firms did not have sufficient cash flow or profits. And they were also less likely to worry about incomplete loan applications.

Thus, in the years that followed the global financial crisis, state banks felt less constrained by the poor quality of borrowers (in terms of their ability to generate cash flow, their credit history or the completeness of their loan applications). This helps to explain why state banks were more able to expand their activities in the decade after the crisis.

There are also important differences between state-owned and private banks in terms of the main strategies that they use to attract new clients (see Chart 3.8). Before the crisis, state banks were less likely than their private-sector peers to increase staff numbers, invest in the training of staff and other personnel, or introduce new and innovative banking services. In contrast, they were significantly more likely than private banks to attract new clients by participating in special lending programmes run by the government or international agencies. After the crisis, these differences in strategy disappeared, with the exception of state banks' participation in government lending programmes targeting certain groups of corporate or retail borrowers.

Taken together, the above results suggest that state banks tend, on average, to invest less in their staff's lending and customer acquisition skills. Partly as a result of that, their screening of potential clients may be less stringent than that of their privately owned peers. While this strategic difference allows state banks to scale up lending more quickly in times of crisis, it may of course come at a cost, potentially resulting in a decline in average loan quality in the medium to long term.

IN RECENT YEARS, STATE BANKS' ANNUAL RETURN ON ASSETS HAS, ON AVERAGE, BEEN

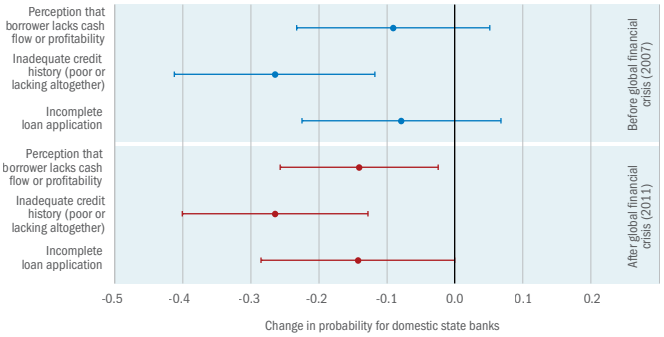
1.1

PERCENTAGE POINTS

LOWER THAN THAT OF SIMILAR PRIVATE BANKS

CHART 3.7.

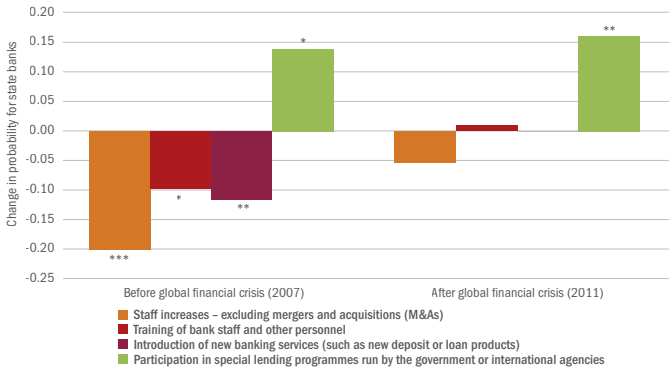
Lending by state banks is less constrained by borrowers' lack of credit history



Source: BEPS II and authors' calculations.
Note: These data represent estimated coefficients for a state bank dummy that are derived from bank-level linear probability models with region fixed effects. The dependent variable is a dummy variable that is equal to 1 if a particular client-related constraint is reported as being a frequent or very frequent reason for rejecting loan applications submitted by large firms (and 0 otherwise). 90 per cent confidence intervals are shown.

CHART 3.8.

State and private banks differ in terms of the main strategies used to attract new clients



Source: BEPS II and authors' calculations.
Note: These data represent estimated coefficients for a state bank dummy that are derived from bank-level linear probability models with region fixed effects. The dependent variable is a dummy variable that is equal to 1 if a particular strategy is reported as being important or very important for attracting new clients to the bank (and 0 otherwise). *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

The financial performance of state banks

How has state banks' stronger growth in the post-crisis period affected their financial performance, given that state banks expanded by applying less stringent screening mechanisms and participating more in government lending programmes? In order to answer that question, regression analysis can be used to relate various indicators of bank performance over the period 1999-2019 to the bank's performance in the previous year, the bank's ownership status (state-owned or private), country-year fixed effects taking into account changes in the economic outlook of the country where the bank operates, bank capitalisation in the previous year, the ratio of bank deposits to total liabilities, the ratio of net loans to assets, and the lagged dependent variable. Excluding various covariates, some of which may themselves be a result of state ownership, does not change the results in a material way. The sample includes commercial banks, cooperative banks, multilateral government banks, and specialist government credit institutions with assets of at least US$ 2.5 billion.

In both of the periods under consideration (that is to say, both before and after the global financial crisis), state banks generated lower returns than private banks on average assets (see Table 3.1). Indeed, over the period from 2010 to 2019, state banks' annual return on assets was, on average, 1.1 percentage points lower than that of equivalent private banks. That represents a substantial difference, given that the average return on assets was only 0.76 per cent during the period in question.

There are two underlying reasons for that substantial difference in profitability. First of all, state banks have been operating on the basis of lower net interest margins in the post crisis period. Relative to similar private banks in the same country and the same year, they have been charging borrowers lower interest rates and/or paying higher rates to depositors. Davydov (2018), for example, found that Russian state banks charged lower interest rates than their private-sector peers during the global financial crisis. Second, the non-performing loan (NPL) ratios of state banks were, on average, 1.6 percentage points higher than those of their private counterparts in the period 2010-19 – a substantial difference relative to the average NPL ratio of 11.6 per cent across all banks in that period. That greater tendency to accumulate bad loans on their balance sheets is consistent with state banks' greater propensity to lend to clients with weaker credit histories or cash flows. Earlier studies looking at the Middle East and North Africa confirm that state banks underperform relative to private lenders, with that weaker performance reflecting both operational inefficiencies (especially larger numbers of staff) and the negative impact that policy mandates have on loan quality.[12]

TABLE 3.1.

State banks achieve lower returns than private banks on average assets

Time period	1999-2007	2010-19	1999-2007	2010-19
Dependent variable:	Return on average assets (%)		Net interest margin (%)	
	(1)	(2)	(3)	(4)
State bank	-0.415***	-1.070***	0.135	-0.198***
	(0.156)	(0.383)	(0.145)	(0.073)
Lagged bank controls	Yes	Yes	Yes	Yes
Country-year fixed effects	Yes	Yes	Yes	Yes
R^2	0.313	0.228	0.720	0.755
Number of observations	1,929	2,952	1,925	2,946
Number of banks	275	349	275	348
Dependent variable:	Ratio of NPLs to gross loans (%)		Ratio of non-interest expenses to average assets (%)	
	(5)	(6)	(7)	(8)
State bank	0.291	1.558**	-0.073	0.030
	(0.408)	(0.605)	(0.268)	(0.387)
Lagged bank controls	Yes	Yes	Yes	Yes
Country-year fixed effects	Yes	Yes	Yes	Yes
R^2	0.727	0.738	0.524	0.399
Number of observations	853	2,616	1,925	2,952
Number of banks	202	337	275	349

Source: Bureau van Dijk (Bankscope and Orbis databases) and authors' calculations.
Note: These coefficients are derived from bank-level ordinary least squares models with standard errors clustered at bank level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

STATE BANKS' AVERAGE NPL RATIO IS

1.6

PERCENTAGE POINTS

HIGHER THAN THAT OF SIMILAR PRIVATE BANKS

[12] See, for instance, Farazi et al. (2011).

State banks and financial stability

The regression analysis also confirms that private banks' annual credit growth declined substantially during the global financial crisis relative to the pre-crisis period (see Chart 3.9). The sharpest decline was observed in 2009, when credit granted by domestic private banks declined by 32 per cent year on year. While foreign private banks' credit growth weakened in the midst of the crisis, persistent negative growth only occurred in the period 2010-11, when the euro area sovereign debt crisis intensified.

That de-leveraging by foreign private banks during the global financial crisis was slowed down by the Vienna Initiative and the related Joint IFI Action Plan – a cooperation platform involving multinational banking groups, home and host country supervisory and fiscal authorities, the EBRD, the IMF, the World Bank, the EU and the EIB, which sought to ensure macroeconomic stability in emerging Europe by preventing a large-scale withdrawal of foreign bank lending. As part of that initiative, parent banks signed commitment letters pledging to maintain exposures and support their subsidiaries in emerging Europe, with the subsidiaries of those parent institutions proving to be significantly more stable than other banks as a source of credit.[13]

In sharp contrast, state banks stepped up their lending as private banks were de-leveraging – especially in 2008 and 2009, at the height of the crisis. Evidence from Latin America and emerging Europe shows that state banks stepped up their lending activity during the global financial crisis and in the immediate aftermath, when private banks had to de-leverage because of funding difficulties, with lending by state banks being less affected by economic cycles.[14]

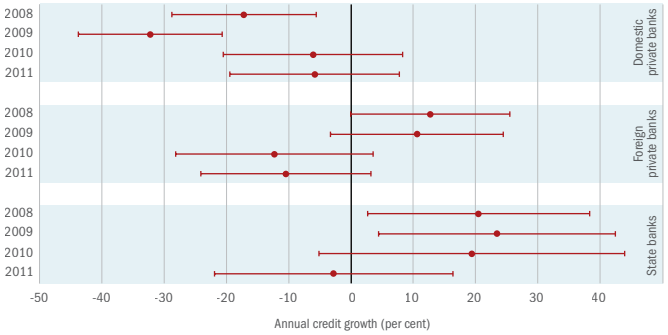
Evidence from Spain shows that state lending after 2009 had a positive impact in terms of supporting economic activity, but this came at a cost, resulting in an increase in defaults on loans issued by state banks.[15] In order to assess whether similar effects were observed in the EBRD regions, this chapter now turns its attention to a group of 291 subnational regions in central and eastern Europe, the Caucasus, Turkey and Ukraine. That analysis looks at differences in average income growth across regions (with state banks varying across those same regions in terms of the extent of their presence), controlling for average regional income prior to the crisis and country fixed effects.

The data confirm that there is a strong positive correlation (with a coefficient of 0.23) between the percentage of branches that are owned by state banks in a particular region and regional income growth in the period 2008-10 (see Chart 3.10). This suggests that the presence of state banks may have helped to soften the decline in economic activity during the global financial crisis.

Similarly, the results of the 2010 and 2016 rounds of the Life in Transition Survey, a large-scale representative household survey carried out across the EBRD regions (see Chapter 1),

CHART 3.9.

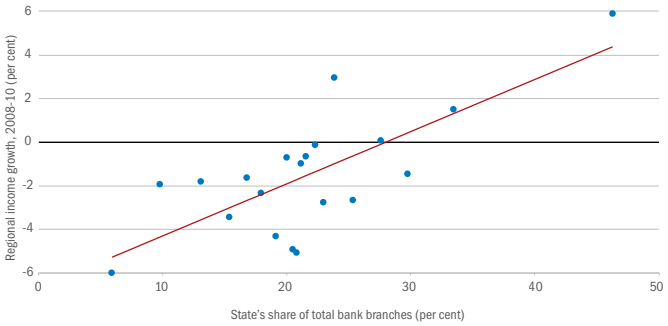
Unlike private banks, state banks increased their lending during the global financial crisis



Source: Bureau van Dijk (Bankscope and Orbis databases) and authors' calculations.
Note: These coefficients are derived from bank-level ordinary least squares models regressing annual credit growth on various controls, with standard errors clustered at bank level. The coefficients correspond to interaction terms combining private bank and state bank dummies with a crisis dummy. Controls include lagged total assets, lagged capitalisation, lagged ratio of deposits to liabilities, lagged ratio of net loans to assets, lagged return on average equity, lagged annual net loan growth, lagged GDP per capita growth and country fixed effects. 90 per cent confidence intervals are shown.

CHART 3.10.

Between 2008 and 2010, average income growth was stronger in regions with more state bank branches



Source: BEPS II, Eurostat, regional statistical offices and authors' calculations.
Note: This sample comprises subnational regions in 15 countries: Albania, Azerbaijan, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Montenegro, North Macedonia, Romania, the Slovak Republic, Slovenia, Turkey and Ukraine.

[13] See De Haas et al. (2015), and De Haas and Tabak (2019).
[14] See Cull and Martínez Pería (2013), De Haas et al. (2015), Micco and Panizza (2006), Fungáčová et al. (2013) and Bertay et al. (2015).
[15] See Jiménez et al. (2019).

suggest that state banks softened the impact of the financial crisis for households. An index variable (ranging from 0 to 1) can be used to summarise the extent to which each household was negatively affected by the global financial crisis, combining information on job losses in the household, the closure of family businesses, reductions in working hours or pay, wage arrears, declines in remittances received from abroad, family members returning home from abroad, the need to take a second job or additional work, increased working hours in an existing job, and a set of 19 possible consumption responses (including reduced consumption of staple goods such as milk, reduced use of one's own car and an inability to make utility payments on time).

Regression analysis shows that state banks having a presence near the household (that is to say, in the Life in Transition Survey primary sampling unit where the household lives) is associated with the crisis having a smaller impact at household level (see Table 3.2). When account is taken of the respondent's country of residence, age, employment status (employed or unemployed), level of education, income and location (rural or urban), as well as the distance to the country's capital city, a 1 standard deviation increase in the presence of state banks is associated with a reduction of 12 per cent of a standard deviation in the severity of the crisis's impact on the household. Overall, these findings suggest that state banks can soften the economic impact of financial crises at local level, for instance by making it easier for households and small businesses to access emergency credit lines to tide them over in difficult times. State banks may, therefore, have acted as bridging lenders or relationship lenders during the crisis.[16]

Earlier studies have shown that economic shocks caused by bank deleveraging can erode people's trust in and preferences for market economics and private ownership.[17] That is supported by the results of this regression analysis, which show that households which were worse affected by the global financial crisis were indeed much less likely to trust banks (see Table 3.2). Interestingly, trust in banks declined less in regions where state banks played a greater role. Moreover, the 2016 round of the Life in Transition Survey showed the lasting impact of that effect, revealing that eight years after the start of the global financial crisis, households living in areas where state banks had more of a presence still tended to trust banks more.

Overall, these findings support the notion that state banks can help firms and households to weather the impact of economic downturns through their role as counter-cyclical lenders.[18] However, the beneficial effects of state banks' presence in the short term should be weighed against the potential for distortionary effects in the longer term. A recent study looking at Brazil, for example, shows that areas where government banks had more of a presence received more loans and experienced better employment outcomes during the global financial crisis.[19] However, that lending was politically motivated and allocated inefficiently, and it reduced productivity growth in the longer term.

TABLE 3.2.

The global financial crisis had a smaller impact on households when a state bank had a presence nearby

	2010 survey round		2016 survey round
Dependent variable:	Crisis impact	Trust in banks	Trust in banks
	(1)	(2)	(3)
Presence of state banks	-0.049***	-0.085	0.909***
	(0.014)	(0.197)	(0.280)
Impact of crisis		-1.075***	
		(0.258)	
Presence of state banks X impact of crisis		1.396*	
		(0.698)	
Controls	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes
R^2	0.130	0.111	0.072
Number of observations	29,620	27,244	37,775

Source: BEPS II, Life in Transition Survey (2010 and 2016 rounds) and authors' calculations.
Note: These estimates are based on linear models that regress an index measuring the impact of the crisis on each household on various control variables using population weights. Standard errors (reported in parentheses) are clustered at country level. Control variables include age, employment status (employed or unemployed), education, income, gender, location (rural or urban), and distance to the capital. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

THE BENEFICIAL EFFECTS OF STATE BANKS' PRESENCE IN THE SHORT TERM SHOULD BE WEIGHED AGAINST THE POTENTIAL FOR DISTORTIONARY EFFECTS IN THE LONGER TERM

[16] See Beck et al. (2018) for a discussion of relationship lending as a stabilising force during the global financial crisis.
[17] See, for example, De Haas et al. (2016) for a discussion of the situation in Ukraine. See also Chapter 1.
[18] See Bertay et al. (2015).
[19] See Coleman and Feler (2015).

State banks and firm-level productivity

The increased role of state banks in the period since the global financial crisis can also be seen in their lending to firms across the EBRD regions. In particular, the results of the Enterprise Survey conducted by the EBRD, the EIB and the World Bank show a widespread increase in the proportion of firms that obtained their last loan from a state bank (as a percentage of all firms that have recently been granted a loan; see Charts 3.11 and 3.12). Those data are derived from the fifth and sixth rounds of the Enterprise Survey, which were conducted in 2011-14 and 2018-20 respectively. In 2018-20, the percentage of firms borrowing from state banks was particularly high in Belarus (70 per cent), Egypt (63 per cent), Russia (54 per cent), Uzbekistan (51 per cent), Ukraine (50 per cent) and Poland (44 per cent).

Firms' propensity to borrow from state banks has also increased in a group of comparator countries (Djibouti, Israel, Yemen, Italy, Malta and Portugal; see Chart 3.12), albeit the percentage of firms borrowing from state banks in such countries remains much lower than it is in the EBRD regions.

Next, this chapter examines the factors that influence a firm's decision to borrow from a state-owned or private bank, using a regression framework which explains the probability of a firm borrowing from a state bank rather than a private bank (conditional on it borrowing in the first place). All regressions include country-industry fixed effects, which take account of any industry-specific patterns in lending to firms in the country in question.

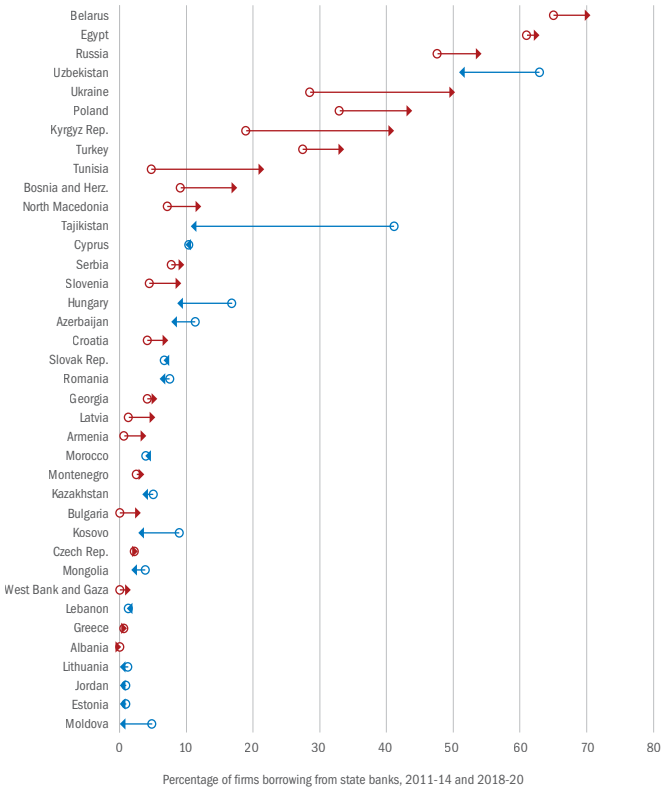
Four results stand out in this regard. First of all, firms in areas where state banks account for a higher percentage of branches are significantly more likely to borrow from a state bank (see Chart 3.13). This effect has strengthened in recent years, perhaps reflecting the expansion of state banks' branch networks and assets over the last decade. This also suggests that credit markets across the EBRD regions remain largely local in nature, as a result of both transport costs and the information advantages of local lenders.[20]

Second, firms in smaller localities (those with fewer than 50,000 inhabitants) are more likely to borrow from a state bank, while private banks tend to focus on larger cities. This could suggest that state banks care more about employment generation, especially in more remote parts of the country. Third, consistent with that, firms with lower sales relative to the size of their workforce are also more likely to borrow from a state bank. And fourth, foreign-owned firms and firms that export are less likely to borrow from a state bank, reflecting the fact that such firms tend to be run more professionally and find it easier to access other sources of credit (such as foreign-owned private banks and trade credit).

What are the implications of firms borrowing from state banks rather than private banks? Economic theory is ambivalent on the

CHART 3.11.

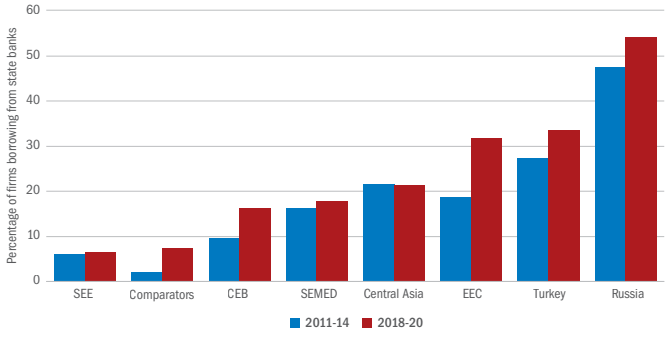
Economies vary strongly in terms of the percentage of firms borrowing from state banks in the periods 2011-14 and 2018-20



Source: Enterprise Survey and authors' calculations.
Note: The figures in this chart are calculated as a percentage of all firms that received a loan in the period in question. Red arrows indicate economies where the percentage was higher in 2018-20 than it had been in 2011-14; blue arrows indicate countries where it was lower in 2018-20 than it had been in 2011-14.

CHART 3.12.

There has been a widespread increase in the percentage of firms borrowing from state banks

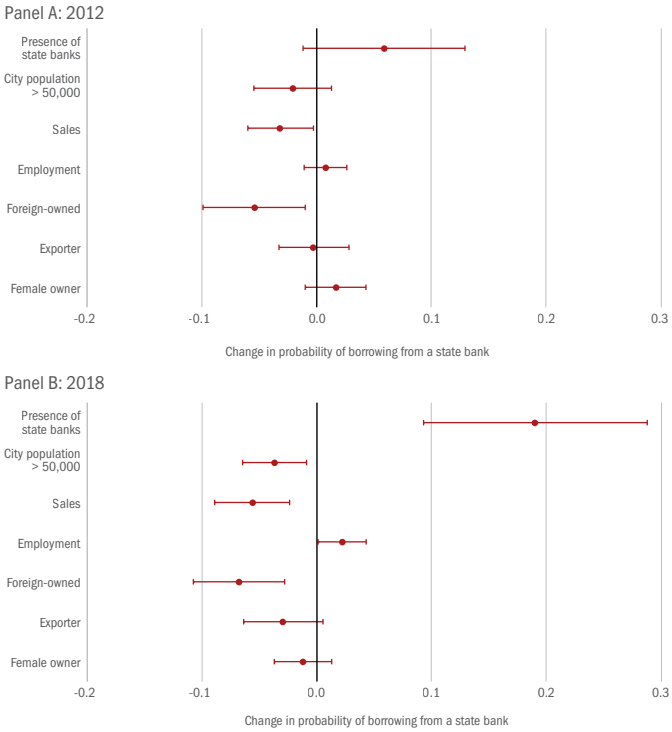


Source: Enterprise Survey and authors' calculations.
Note: The figures in this chart are calculated as a percentage of all firms that received a loan in the period in question.

[20] See also Qi et al. (2018).

CHART 3.13.

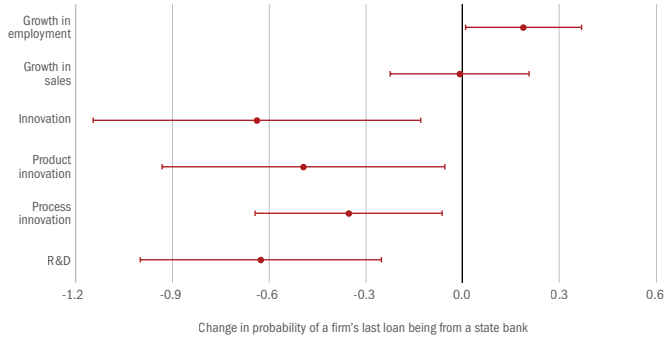
Firms in areas where state-owned banks have more of a presence are more likely to borrow from state banks



Source: Enterprise Survey, BEPS II and authors' calculations.
Note: These estimates are derived by regressing a dummy indicating whether a firm borrows from a state bank on various controls and country-industry fixed effects. Covariates that are not statistically significant are not shown. The 90 per cent confidence intervals shown are based on standard errors clustered at country level.

CHART 3.14.

Firms that borrow from state banks experience stronger employment growth, but innovate less



Source: Enterprise Survey, BEPS II and authors' calculations.
Note: These coefficients are derived from a two-stage least squares model regressing various measures of firm level performance (indicated on the vertical axis) on borrowing from a state bank. Borrowing from a state bank is instrumented using state banks' regional presence. Firm-level controls include country-industry fixed effects, the logarithm of firm age, the logarithm of sales three years previously, the logarithm of employment three years previously, and dummy variables indicating whether a firm is foreign-owned, an exporter, audited, female-owned, politically connected or located in a city with a population of more than 50,000. The 90 per cent confidence intervals shown are based on standard errors clustered at country level.

question of how government ownership of banks affects firm-level outcomes. On the one hand, state-owned banks could alleviate market failures in the funding of innovative and profitable projects, which arise as a result of the intangible nature of innovation related assets, making those assets difficult to collateralise.[21] On the other hand, however, political influence and/or non-commercial objectives could result in the misallocation of credit.

This question can be explored using instrumental variables regressions that seek to explain various firm-level outcomes on the basis of a number of firm-level characteristics, as well as a variable capturing whether a firm's last loan was granted by a state bank. One concern in this regard is that a firm's decision to borrow from a specific bank could potentially be based on firm-level characteristics that also have a direct impact on that firm's outcomes. For instance, foreign ownership may make a firm more likely to borrow from a private bank and, at the same time, increase that firm's propensity to innovate. In order to alleviate such concerns, the regressions in this analysis use state banks' share of local branches as an instrument for the likelihood of a firm borrowing from a state bank.[22] This allows us to study the impact on firm-level performance of variation in borrowing from state banks that arises as a result of differences in local credit markets. One necessary assumption in this regard is that the structure of local credit markets only has an impact on firm-level productivity through the firm's choice of banking relationship.

This analysis shows that firms which borrow from a state bank subsequently expand their workforce faster than similar firms which borrow from a private bank (although the same is not true of sales; see Chart 3.14). This suggests that the management of firms which borrow from state banks may be less inclined to invest in new labour-saving technologies that can boost firm-level productivity. Indeed, these results show that firms which borrow from a state bank are significantly less likely to engage in either product innovation or process innovation. They are also less likely to invest in R&D, an important input for subsequent innovation outcomes. Importantly, these differences are not attributed to a lack of access to bank credit, only to the ownership of the bank that the firm borrows from.[23] Thus, an increase in the presence of state banks may not necessarily eliminate market failures associated with the funding of innovation and growth-enhancing investment.

Economy-wide distortion by state banks

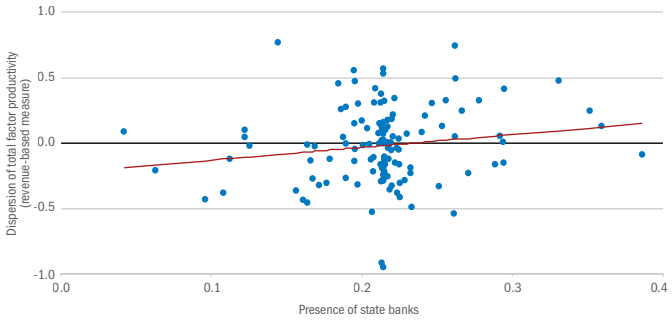
These results also suggest that an increase in state banks' presence in a region can impede the efficient reallocation of labour and physical capital across firms. This can, in turn, have a negative impact on the aggregate productivity growth of that region as employees and machinery become "trapped" in relatively unproductive firms.[24] When this happens, there tends to be a greater dispersion of productivity levels across firms within narrowly defined industries, as unproductive firms propped up by cheap bank credit neither catch up with their peers nor go out of business.

Indeed, regression analysis covering 130 subnational regions indicates that an increase in state banks' presence in a particular

[21] See Hall and Lerner (2010).
[22] See Bian et al. (2017).
[23] See Bircan and De Haas (2020).
[24] See Hsieh and Klenow (2009), and Gopinath et al. (2017).

CHART 3.15.

An increase in state banks' share of branches is associated with greater dispersion of productivity across firms



Source: Enterprise Survey, BEPS II and authors' calculations.
Note: This chart shows the results of analysis regressing the dispersion of a revenue-based measure of total factor productivity (for manufacturing firms) on a measure of the presence of state banks, controlling for country fixed effects. The line shows the corresponding linear relationship. Each dot represents a particular region. Regions with fewer than 10 manufacturing firms have been excluded.

region is associated with greater dispersion of a revenue-based measure of the total factor productivity of firms within that region (see Chart 3.15), taking into account country fixed effects and various regional characteristics. Indeed, a 5 percentage point increase in state banks' share of branches is associated with an increase in productivity dispersion that drags down aggregate regional productivity by 10.5 per cent. This finding is in line with the results of earlier cross-country studies, which found that an increase in the percentage of bank assets that are controlled by the state is associated with weaker growth and a more shallow financial system, especially in poorer countries.[25] However, privatising state banks' assets is not a panacea: it only leads to stronger growth when banks have fewer political connections and regional property rights are better protected.[26]

Such economic distortion is partly a reflection of state banks' susceptibility to political interference in their lending. For example, politicians may use state banks to provide employment and other benefits to supporters, in the expectation that these favours will lead to more votes. Box 3.1 takes a closer look at distortion caused by political interference using data on Turkey. Similarly, it has been shown that Brazilian firms which are eligible to receive loans from state banks on favourable terms tend to increase employment in politically attractive regions just before elections, especially when those elections are closely contested.[27]

State banks and state-owned enterprises

State banks may play a special role in the funding of other state-owned enterprises. For instance, a recent analysis of China's 2009-10 economic stimulus plan found that credit expansion had disproportionately favoured state-owned enterprises and firms with a lower marginal product of capital, reversing the reallocation of capital to private firms that had characterised China's strong growth prior to 2008.[28]

The analysis in this section looks at whether there is a special relationship between state banks and state enterprises, using data on 3.6 million enterprises (both privately owned and state-owned) across 102 countries over the period 2000-17. State enterprises are defined here as firms that are at least 20 per cent state-owned. Regression analysis is used to explain firm-level leverage (debt as a percentage of total assets) as a function of the firm's ownership (that is to say, whether it is privately owned or state owned) and an interaction term combining state ownership with the state's share of total banking assets in the economy. Those regressions take account of a firm's total assets, its profitability, the size of the non-debt tax shield and a measure of assets' tangibility, as well as country-industry-year fixed effects (which ensure that state enterprises are compared with similar privately owned enterprises in the same country, industry and year).

The results of the analysis show that while state enterprises tend, on average, to be less leveraged than similar private firms, they benefit considerably when state banks dominate the lending market (see Chart 3.16). In particular, in countries where state banks play a more prominent role, state enterprises have significantly higher debt-to-asset ratios than private firms. At the same time, higher levels of foreign ownership in the banking sector are associated with less leveraged state enterprises. This suggests that, relative to domestic private banks, foreign-owned banks and state-owned banks exercise more and less financial discipline respectively.

Improving the corporate governance of state banks

Improving the corporate governance of state banks and increasing their commercial focus may reduce the risk of distortion in the allocation of credit to firms. Indeed, cross-country evidence shows that state banks that are not subject to political interference tend to perform better than politicised state banks (although still worse than private banks).[29] Moreover, in economies with good governance, state banks have the potential to play an even greater role as providers of stable credit in the face of economic shocks.[30]

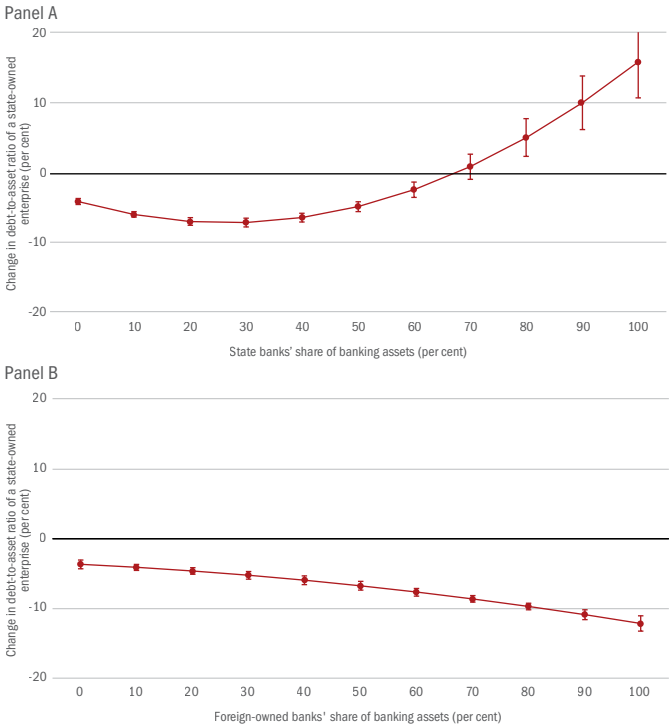
State banks' ability to successfully balance their commercial and non-commercial objectives depends on their corporate governance structure and the institutional environment in which they operate. A number of preconditions may need to be met in that regard if state banks are to contribute to long term economic growth.[31]

First of all, there should be no political interference in state banks' management or credit allocation. The appointment of banks' managers should not be guided by political considerations. More generally, state banks need to apply standard principles of sound banking (although the profitability objective may be traded off against explicit and well-articulated social and development objectives).

[25] See La Porta et al. (2002).
[26] See Berkowitz et al. (2014).
[27] See Carvalho (2014), Dinç (2005) and Micco et al. (2007).
[28] See De Haas et al. (2020a) and Cong et al. (2019).
[29] See Shen and Lin (2012), which measures political interference on the basis of instances where banks' CEOs are replaced shortly after elections.
[30] See Bertay et al. (2015).
[31] See Scott (2007).

CHART 3.16.

State-owned enterprises carry more debt when state banks play a more prominent role in the banking sector



Source: Bureau van Dijk (Orbis database), World Bank (Bank Regulation and Supervision Survey) and authors' calculations.
Note: These estimates are derived from an ordinary least squares model which regresses the debt-to-asset ratio on a dummy variable denoting state ownership of the firm and an interaction term combining that dummy with state banks' share of total banking assets, as well as various firm-level characteristics. The 95 per cent confidence intervals shown are based on standard errors clustered at firm level.

Second, state banks should publish annual reports (including full financial statements) and be transparent about their social objectives and mandates. Moreover, a clear monitoring system is required to assess whether a bank's performance is in line with its mandate. Making state banks' non commercial goals explicit and subject to public monitoring has the potential to enhance both transparency and accountability. More generally, the accounting, auditing, transparency and disclosure standards applicable to state banks need to be comparable to those governing publicly listed firms.

Third, there needs to be an appropriate legal framework and clarity about the entity that is acting as the banks' "owner" on behalf of the state. In addition to setting out clear disclosure requirements and accounting and auditing standards, the relevant laws and regulations also need to identify and delimit the objectives of state banks (including as regards any public policy objectives). Steps also need to be taken in order to make banks' boards more effective, such that they are better able to deliver on their mandates.[32]

Fourth, in order to guarantee financial sustainability, state banks should cover their own operational costs. The interest rates that they charge should cover their funding costs. Mandates that force state banks to offer credit at low interest rates – either to specific politically connected individuals or across the board – often hamper their recovery of costs.

More generally, policymakers need to encourage contestability in the banking system through the healthy entry of well-capitalised institutions and the timely exit of insolvent ones, including state banks. A strengthening of market competition in banking, coupled with improvements to the governance structure of state banks, is likely to be particularly beneficial in countries with weaker governance and limited state capacity to enforce regulations.[33]

Conclusion

State banks have grown in importance in many of the economies in the EBRD regions in recent years. As those state banks have expanded their assets and branch networks, they have become serious competitors for other banks. Their greater appetite for risk can help to soften the impact that adverse economic shocks have on households and firms, and it can also enable small young firms with little collateral to gain access to finance (especially in regions that are traditionally underserved by private banks). However, state banks' role as a stabilising and inclusive source of finance is likely to come at a cost, resulting in lower levels of innovation and total factor productivity in firms. The evidence presented in this chapter shows that these costs are partly a reflection of political interference in the lending decisions of state banks, particularly around the time of elections.

Reducing political actors' direct and indirect intervention in the lending decisions of state banks is of paramount importance in order to ensure that lenders pursue commercial objectives. Policymakers can increase the operational independence of state banks by appointing independent board members, selecting senior managers primarily on the basis of commercial criteria, and assessing performance on the basis of a transparent monitoring system. Staffing policies that are independent of civil service regulations can help to prevent the hoarding of labour for political ends, while periodic external audits based on international standards (with results made publicly available) can help to increase transparency. Moreover, where the state owns less than 100 per cent of the bank, it is essential that minority shareholders' rights are clearly defined and strongly protected.

In the absence of political frictions, policymakers may seek to use state banks' privileged access to government resources to distribute large funding packages to the real economy in response to a financial or health crisis. It is important that they do so in a way that preserves competition and limits distortion of the funding market, in order to reduce the risk of misallocating labour and capital across firms. Such lending practices can also help to ensure that state banks have a healthy portfolio of borrowers and limit operational losses, thereby continuing to make a profit (at least on a cyclically adjusted basis).

[32] See Nestor (2018).

[33] See World Bank (2013).

BOX 3.1.

The "dark side" of state banks

Critics of state banks often cite political interference in the timing and targeting of lending as the main source of distortions in credit markets. In line with that argument about the "dark side" of state banks, a number of studies have documented political credit cycles in specific countries, for instance in Brazil, Germany, India, Pakistan and Russia.[34] This box takes a closer look at political credit cycles in Turkey.

Over the last 15 years, state banks across Turkey have significantly increased their presence in government strongholds (defined as provinces that have been governed by the party controlling the central government throughout that period), expanding their operations far more strongly in those areas than in other regions (see Chart 3.1.1).[35] There is no such differential in terms of the opening and closing of branches for private banks. On the one hand, this pattern is consistent with politicians' patronage of core supporters, whereby elected officials seek to improve the welfare of citizens in provinces that have supported them strongly at the ballot box. On the other hand, however, it may also reflect the government's strategy of increasing financial inclusion in previously underserved segments of the Turkish population. For instance, the World Bank's Global Findex Survey shows that the percentage of Turkish women with formal bank accounts rose from 33 per cent in 2011 to 54 per cent in 2017. Similarly, state banks have been busy establishing Islamic participation banks as subsidiaries in order to reach out to more conservative segments of society. (Those banks operate on a non-interest basis and follow Islamic law. In practice, they make a profit through equity participation that requires a borrower to give the bank a share in their profits.)

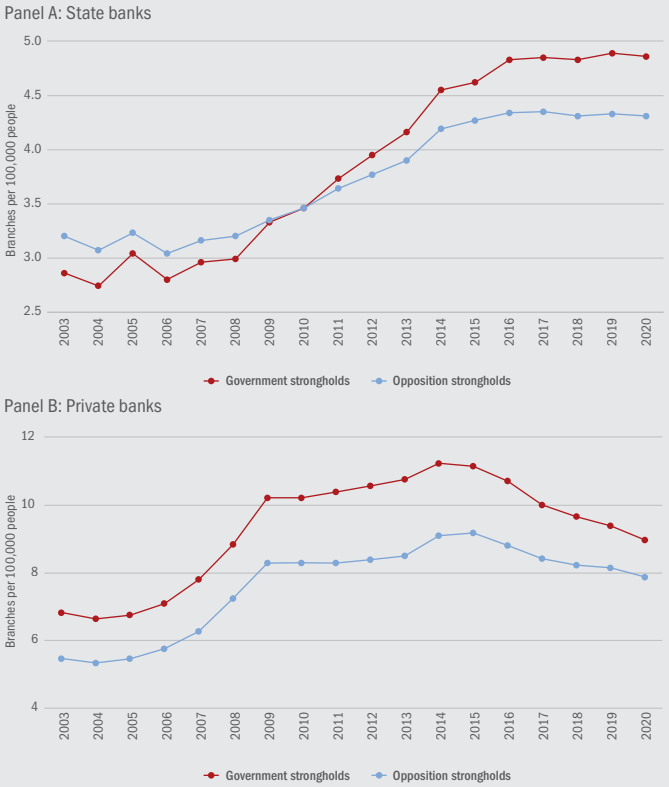
In order to shed more light on the drivers of those differential patterns for state and private banks, the analysis in this box draws on Turkish credit data, which are aggregated separately for state and private banks by province over the period 2003-17.[36] A single party had control of the central government throughout that period, exercising direct authority over the three state banks that operate nationally, which account for a combined total of around a third of all banking assets. If state banks are at least partly guided by political motivations, lending patterns in a particular province could be correlated with the political affiliation of the relevant mayor and the degree of electoral competition in that province. Analysis comparing lending by state banks and private banks in election and non-election years and across provinces with different political characteristics yields two main findings.

First, state banks engage in strategic lending around the time of local elections. In contrast with private banks, state banks lend more in provinces where the incumbent mayor is affiliated with the party controlling the central government and faces strong competition from political opponents in the run up to local elections. Similarly, state banks reduce their lending in competitive provinces where the incumbent mayor represents an opposition party (see Chart 3.1.2). This finding is in line with the notion of "tactical redistribution", whereby governments use public resources (in this case, lending by state-owned banks) as a strategic tool to improve their chances of re-election.[37] This pattern can be observed in state banks' lending to firms, but not in their lending to consumers, which is consistent with the view that local politicians are judged largely on local economic performance.

Further evidence of tactical redistribution can be seen in the responses of firms surveyed as part of the fifth round of the Enterprise Survey (see Table 3.1.1). In provinces where support for the party controlling the central government is traditionally strong, an average of around one in five businesses report having received a loan from a state bank. In contrast, that ratio is only one in ten in the provinces where opposition parties have their highest levels of support. Average interest rates on loans to firms are consistent both across regions and between state and private banks, implying that state banks price their loans on the basis of market rates. However, state banks are more likely to require collateral in provinces where support for opposition parties is higher. As a result, those provinces have higher

CHART 3.1.1.

State banks have opened more new branches in government strongholds than in other parts of the country

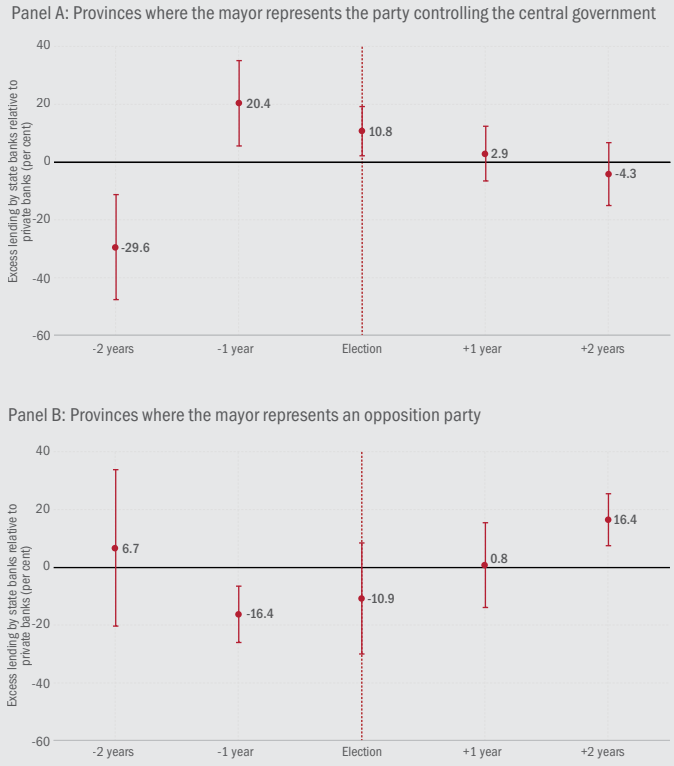


Source: Banks Association of Turkey and authors' calculations.
Note: "Government strongholds" denotes provinces where the party controlling the central government won all three local elections over the period 2004-14. "Opposition strongholds" refers to provinces where opposition parties won all three local elections. Averages are weighted on the basis of provinces' populations.

[34] See Dinç (2005) for evidence on 19 emerging markets, Cole (2009) on India, Carvalho (2014) on Brazil, Englmaier and Stowasser (2017) and Koetter and Popov (2020) on Germany, Khwaja and Mian (2005) on Pakistan and Fungáčová et al. (2020) for Russia.
[35] See Bircan and Saka (2019b).
[36] See Bircan and Saka (2019a).
[37] See Dixit and Londregan (1996).

CHART 3.1.2.

Tactical redistribution of state bank lending around the time of local elections



Source: Bircan and Saka (2019a) and authors' calculations.
Note: These estimates are derived from triple difference-in-differences regressions using data on annual bank credit broken down by bank type (state or private) and province. Each plotted coefficient is derived from a single regression; 90 per cent confidence intervals are shown.

TABLE 3.1.1.

Firms report better access to finance in provinces where support for the party controlling the central government is stronger

	Government stronghold	Opposition stronghold	Difference in means (p-value)
	(1)	(2)	(1)-(2)
Percentage of firms that received their last loan from a state bank	19.00	9.00	0.008***
Interest rate on last loan from a state bank in per cent	11.84	11.00	0.455
Percentage of firms that needed to provide collateral for last loan from a state bank	48.00	70.00	0.097*
Average perception as to whether access to finance is an obstacle to doing business on a scale of 0 (none) to 4 (severe)	0.67	0.85	0.009***

Source: Enterprise Survey and authors' calculations.
Note: "Government stronghold" denotes a province where the party controlling the central government won all three local elections over the period 2004-14. "Opposition stronghold" refers to a province where an opposition party won all three local elections. The last column reports the p-value for a two-tailed t-test of differences in the means reported in the first two columns. *, ** and *** denote statistical significance at the 10, 5 and 1 per cent levels respectively.

percentages of firms reporting that access to finance is a severe obstacle to doing business.

A second finding is that these systematic differences in firms' access to credit matter for the real economy. Industries with high levels of state bank lending that are located in politically contested provinces experience substantial reductions in employment, sales and assets in the run-up to local elections if the incumbent mayor represents an opposition party. Meanwhile, the opposite is true of closely contested provinces where the incumbent mayor represents the party controlling the central government. In opposition strongholds, credit growth declines particularly strongly in relatively efficient industries in the run-up to local elections.

As otherwise efficient industries respond to the tightening of financial constraints by shedding employment and assets, politically motivated bank lending may have long-lasting adverse effects on the allocation of capital, aggregate productivity and growth in regions that experience political lending cycles. It has been estimated that political lending may lower local aggregate productivity by nearly 2 per cent, which would explain a 10th of the overall productivity differential across firms in Turkey.[38]

The rapid expansion of lending by Turkish state banks over the last decade may have increased access to credit for previously underserved segments of the market. To the extent that productive enterprises benefited from this additional credit, state banks may have helped to improve the overall competitiveness of the economy. However, the existence of political lending cycles implies that the newly available credit was not always allocated to the most deserving companies. Overall, the evidence so far suggests that productivity losses stemming from the misallocation of credit outweigh potential gains from the increased availability of credit.

[38] See Bircan and Saka (2019a).

BOX 3.2.

Looking on the "bright side" of state banks

Small young firms are traditionally the most financially constrained businesses in an economy. They do not yet have a well-established track record with audited financial statements and often lack the collateral that is needed to take out a bank loan. At the same time, small young firms account for a large percentage of employment creation and often introduce the most innovative consumer products. What role can state banks play in helping this dynamic but financially constrained segment of the economy?

This box presents analysis of access to credit for start-ups and other young firms in Turkey. It draws on a credit registry that covers all loans issued in the country since 2006. That analysis is based on a sample of first-time borrowers spanning all sectors and regions of the country. These are typically newly registered firms with just a handful of employees, often referred to as "micro enterprises".

This analysis looks at private and state banks' appetite for lending to those first-time borrowers from a risk perspective, removing any common effects stemming from the year the loan was issued and the size of the firm. It then divides the universe of first-time borrowers into 20 equally sized bins by firm age and reports the average risk rating assigned to those borrowers by their banks, whereby a higher risk rating indicates a greater likelihood of default.

The vast majority of borrowers have been in operation for less than five years when they first take out a loan (see Chart 3.2.1). Regardless of their age, however, first-time borrowers that receive a loan from a state bank are perceived to be riskier than equivalent firms that borrow from a private bank. This suggests that state banks may have a greater willingness to lend to start-ups and other young firms that private banks deem less creditworthy. To the extent that state banks lend to young firms with profitable projects that would otherwise not come to fruition, they can improve the performance of small businesses and boost economic activity in a meaningful way.

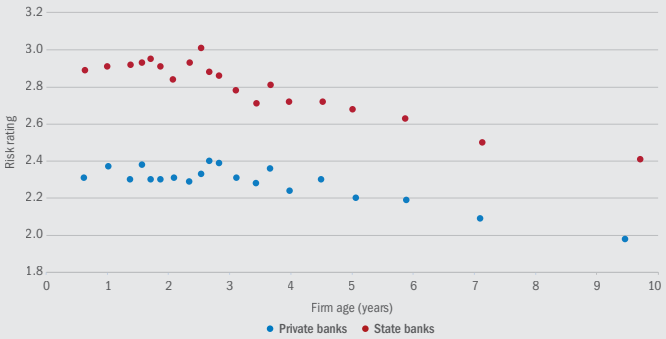
Even if they have a profitable project and a clear business plan, start-ups and other young firms are often unable to access credit for the simple reason that they lack the necessary collateral. In that kind of situation, state banks with a greater appetite for risk in respect of younger firms have the potential to play an important role. Indeed, the patterns in Turkish credit data would suggest that Turkey's state banks are playing that very role (see Chart 3.2.2). As before, this analysis accounts for the fact that banks may be more likely to require collateral in certain years or from firms with fewer employees.

Less than half of all loans issued by state banks to first-time borrowers in this sample required collateral to be provided up front. In contrast, around 80 per cent of all loans issued by private banks to equivalent first-time borrowers required collateral. For young firms with at least a year of financial statements, state banks required collateral only 60 per cent of the time, whereas private banks did so more than 75 per cent of the time. Thus, state banks would appear to have lower collateral requirements than private banks when it comes to firms that are less than two years old.

In the EBRD regions (as in most emerging markets), weaknesses in the registration of collateral, the enforcement of contracts, bankruptcy

CHART 3.2.1.

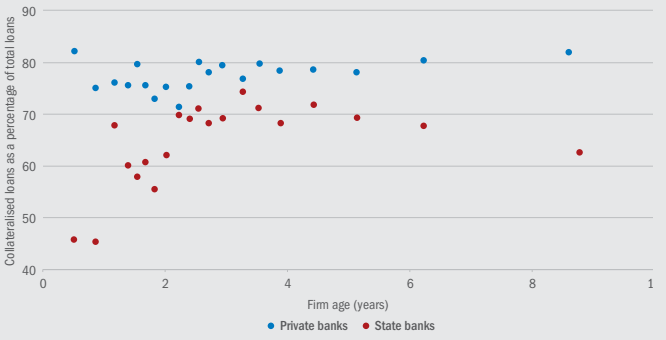
First-time borrowers given loans by Turkish state banks tend to be regarded as riskier



Source: Turkish credit registry and authors' calculations.
Note: This bin scatter plot controls for the year in which the loan was disbursed and the size of the firm.

CHART 3.2.2.

Turkish state banks are less likely than private banks to demand collateral from first time borrowers



Source: Turkish credit registry and authors' calculations.
Note: This bin scatter plot controls for the year in which the loan was disbursed and the size of the firm.

procedures and judicial processes all serve to discourage banks from lending to the youngest and smallest enterprises.[39] This box presents evidence showing that state banks can play an important role by bridging the financing gap faced by young firms, which represent an inherently dynamic (and risky) segment of the economy. Importantly, state banks' greater ability and willingness to lend to riskier clients should not come at the expense of lending by private banks. If private and state banks can achieve such complementarity, they can both boost the incomes of traditionally unbanked sections of the population and maintain low rates of delinquency.[40]

LESS THAN
50%
OF LOANS ISSUED BY TURKISH STATE BANKS TO SMALL YOUNG FIRMS BORROWING FOR THE FIRST TIME REQUIRE COLLATERAL, COMPARED WITH
80%
OF EQUIVALENT LOANS GRANTED BY PRIVATE BANKS

[39] See Beck et al. (2010).
[40] See Da Mata and Resende (2020).

BOX 3.3.

Correspondent banking under threat

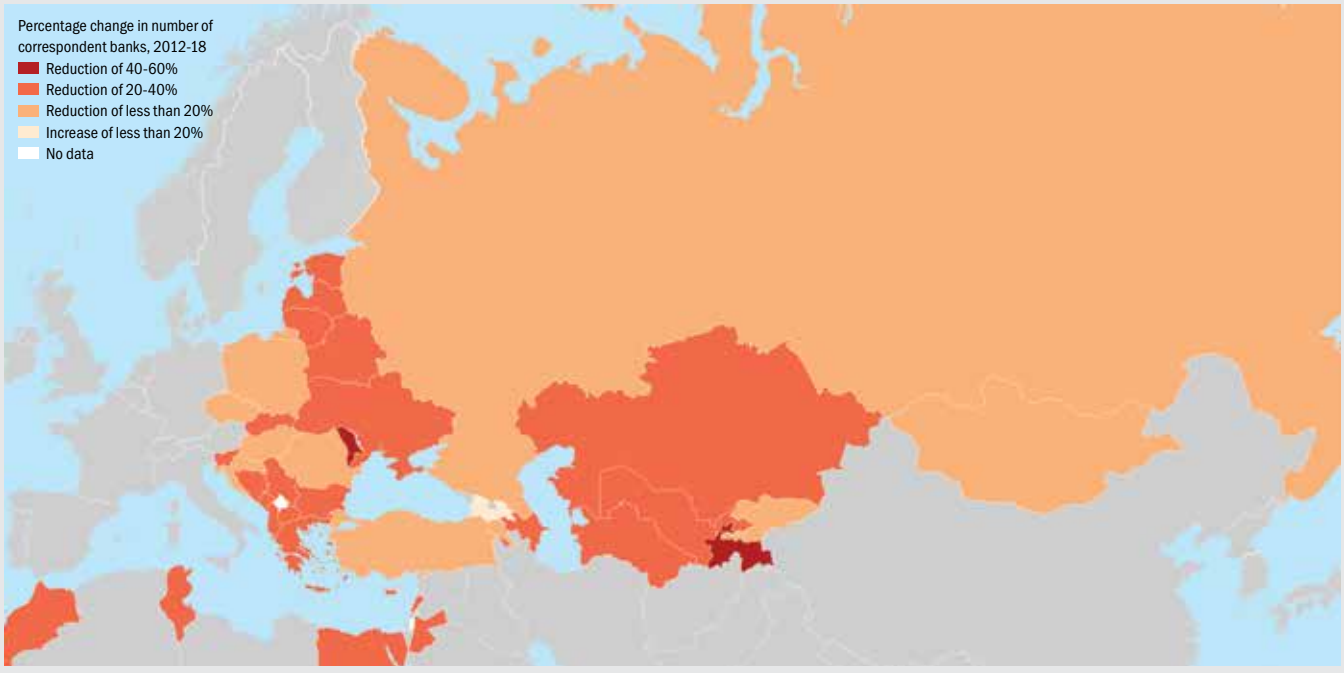
Correspondent banking is an arrangement whereby one bank (the correspondent bank) holds the deposits of other banks (respondent banks) and provides payment and other services to those banks. Correspondent banking is essential for international trade, as it allows importers to make cross-border payments to exporters. Specifically, correspondent banks facilitate payments between the local banks of the importer and the exporter, which do not usually hold accounts with each other. Correspondent banks also participate in bank-intermediated trade finance solutions, which facilitate trade in situations where there is a high probability of payment not being made or goods not being shipped and enforcement is expensive.[41]

Against this background, it is worrying that firms in many emerging markets have recently experienced a sharp decline in their access to correspondent banking services. Global banks have severely restricted the provision of correspondent banking services in response to the rapidly increasing cost of complying with financial crime regulations (abandoning those services entirely in some cases).[42] The resulting limitations on access to correspondent banking could potentially have serious consequences for international trade, growth and financial inclusion.[43] One key factor that has contributed to the withdrawal of correspondent banking services is the record US$ 8.9 billion fine that was imposed on the French correspondent bank BNP Paribas in June 2014 for violating sanctions against Sudan, Cuba and Iran, which was issued because the bank allowed international transfers to be made to banks in those countries. The ruling in that case made it clear that any bank which facilitates global transactions that threaten the integrity of the US financial system can, in principle, be tried in a US court. That penalty has led to a sharp reassessment of the cost of compliance – as regards both the required level of due diligence and the fines that could be expected – and contributed to correspondent banks' withdrawal from countries with a high risk of financial crime.[44]

The EBRD regions have not been immune to those developments, with the number of active correspondent banks in those economies declining by an average of 24 per cent between 2012 and 2018 (see Chart 3.3.1). There is, however, significant variation across countries. While the number of correspondent banks fell by less than 15 per cent in countries such as Croatia and Turkey (and even increased in Georgia), Latvia saw a 29 per cent decline, Tajikistan a 48 per cent decline and Moldova a 55 per cent decline. Some of those countries were the subject of significant money laundering concerns, which resulted in global banks terminating correspondent banking services. However, in a number of countries – including Egypt, Tunisia and Ukraine – major foreign correspondent banks switched their correspondent relationships from smaller private banks to state banks. Intelligence from market participants suggests that this reflects the fact that working with

CHART 3.3.1.

Correspondent banking services have been reduced across the EBRD regions



Source: Bank for International Settlements (BIS).
Note: This map shows the percentage change in the number of active correspondent banks in all economies in the EBRD regions between 2012 and 2018 (with the exception of Kosovo and the West Bank and Gaza, for which no data are available). The map is used for data visualisation purposes only and does not imply any position on the legal status of any territory.

[41] See Schmidt-Eisenlohr (2013).
[42] See World Bank (2015).
[43] See BIS (2016) and World Bank (2015).
[44] See BIS (2016).

state banks may involve simpler and less costly know-your-customer procedures – and, in some cases, lower levels of credit risk and reputational risk.

In order to assess the economic consequences of this sharp and sudden fall in the availability of correspondent banking, De Haas et al. (2020b) surveyed local respondent banks in the EBRD regions. That survey was conducted at the end of 2019, with questions covering the period between 2009 and 2019. Of the 131 banks that were invited to take part, 91 banks in 28 economies completed the entire questionnaire – a response rate of 69 per cent.[45] That survey yields three main insights.

First, correspondent banking networks have changed over time. In 2013, 75 per cent of all correspondent banks were located in the United States of America or Germany, but those two countries had a combined market share of only 54 per cent in 2019. Correspondent banks now hail from a wider range of countries, with Russian and Austrian banks now accounting for a larger percentage of the total. Replacing US correspondent banks with banks from other regions may increase costs as a result of longer intermediation chains.

Second, respondent banks report that accessing correspondent banking services has become more difficult and more costly. For example, local banks are finding it particularly difficult to access US dollars. In 2013, only 7 per cent of banks found it difficult or impossible to access US dollars, but by 2019 that figure had increased to 26 per cent. Accessing other cross-border services, such as payment services, currency clearing and trade finance, has also become more difficult. For instance, the percentage of banks reporting that they had difficulty accessing payment services (or no access at all) rose from 5 per cent in 2013 to 13 per cent in 2019, while the equivalent figure for currency clearing increased from 20 per cent in 2013 to 27 per cent in 2019, and the figure for trade finance rose from 11 to 19 per cent over the same period. Around 10 per cent of banks report that their access to the US export market has been severely limited (or even disappeared completely) as a result of the withdrawal of correspondent banks.

Third, local banks indicate that the most important reason for the decline in correspondent banking services is the fact that correspondent banking relationships do not generate sufficient business to justify the cost of carrying out additional due diligence on customers (with this being reported by 67 per cent of respondents). In addition, 51 per cent report that foreign correspondent banks have terminated relationships as a consequence of the stricter enforcement of regulations tackling money laundering and the financing of terrorism.

How has this sharp decline in access to correspondent banking affected exports across the EBRD regions? De Haas et al. (2020b) combine those survey data on the withdrawal of correspondent banks with bank-level data from Bankfocus, information on bank branches from BEPS II and firm-level export data from the Orbis database. They show that firms in towns and cities that have experienced a substantial loss of correspondent banking services are now less likely to export, and that exporters in those localities export less than firms in towns and cities that have not seen such a withdrawal of services. This suggests that the decline in active correspondent banking across the EBRD regions has had a substantial negative impact on both local banks and their exporting clients. Similarly, a recent study found that a decline in the availability of letters of credit in destination countries for exports during the 2008-09 financial crisis had a negative impact on Turkish exports to those destinations.[46]

Ensuring that firms regain access to correspondent banking is especially important in times of heightened uncertainty such as the Covid-19 pandemic.[47] Because of Covid-19-related disruptions to supply chains, many importers have had to source inputs from different suppliers, often from more remote countries. This has resulted in more complex transport routes, entailing longer financing periods for the trade cycle and a need to hold larger stocks, while foreign exporters have been more likely to request payment by documentary credit. These changes have significantly increased demand for trade credit. In the first seven months of 2020, for example, the EBRD's Trade Facilitation Programme (TFP) financed trade transactions with a total value of €1 billion, a 40 per cent increase relative to the same period in 2019.

In order to address the loss of correspondent banking relationships on account of the increased challenges of complying with financial crime legislation, the EBRD – in close cooperation with international compliance bodies – has set up a three-pronged programme to promote international standards in the area of compliance, which involves the following:

1. Compliance training and certification, whereby bank staff will have the opportunity to obtain professional certificates awarded by the International Compliance Association (ICA) in areas such as due diligence on customers, prevention of financial crime, and money laundering risks in correspondent banking

2. Policy dialogue with the relevant national central bank, focusing on efforts to bring best international practices to the country in question, including specialist training to improve banks' know your customer profiles

3. Individual advisory services for selected banks to help bring banks' compliance procedures up to the required international standard

[45] The economies in question were Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Egypt, Georgia, Greece, Jordan, Kazakhstan, Kosovo, the Kyrgyz Republic, Lebanon, Moldova, Mongolia, Montenegro, Morocco, North Macedonia, Romania, Serbia, Tajikistan, Tunisia, Turkey, Ukraine, Uzbekistan, and the West Bank and Gaza.

[46] See Crozet et al. (2020).

[47] See Demir and Javorcik (2020).

References

T. Beck, H. Degryse, R. De Haas and N. Van Horen (2018)
"When Arm's Length is Too Far: Relationship Banking over the Credit Cycle", *Journal of Financial Economics*, Vol. 127, pp. 174-196.

T. Beck, L. Klapper and J.C. Mendoza (2010)
"The typology of partial credit guarantee funds around the world", *Journal of Financial Stability*, Vol. 6, pp. 10-25.

D. Berkowitz, M. Hoekstra and K. Schoors (2014)
"Bank privatization, finance, and growth", *Journal of Development Economics*, Vol. 110, pp. 93-106.

A.C. Bertay, A. Demirgüç-Kunt and H. Huizinga (2015)
"Bank Ownership and Credit over the Business Cycle: Is Lending by State Banks Less Procyclical?", *Journal of Banking & Finance*, Vol. 50, pp. 326-339.

B. Bian, R. Haselmann, V. Vig and B. Weder di Mauro (2017)
"Government ownership of banks and corporate innovation", mimeo.

C. Bircan and R. De Haas (2020)
"The Limits of Lending? Banks and Technology Adoption across Russia", *The Review of Financial Studies*, Vol. 33, pp. 536-609.

C. Bircan and O. Saka (2019a)
"Lending cycles and real outcomes: Costs of political misalignment", EBRD Working Paper No. 225.

C. Bircan and O. Saka (2019b)
"Elections and economic cycles: What can we learn from the recent Turkish experience?", in I. Diwan, A. Malik and I. Atiyas (eds.), *Crony Capitalism in the Middle East: Business and Politics from Liberalization to the Arab Spring*, Oxford University Press.

BIS (2016)
Correspondent Banking, Basel.

J. Bonin, I. Hasan and P. Wachtel (2005)
"Privatization matters: Bank efficiency in transition countries", *Journal of Banking & Finance*, Vol. 29, pp. 2155-2178.

M. Brei and A. Schclarek (2013)
"Public bank lending in times of crisis", *Journal of Financial Stability*, Vol. 9, pp. 820-830.

D. Carvalho (2014)
"The Real Effects of Government-Owned Banks: Evidence from an Emerging Market", *The Journal of Finance*, Vol. 69, pp. 577-609.

S. Cole (2009)
"Fixing market failures or fixing elections? Agricultural credit in India", *American Economic Journal: Applied Economics*, Vol. 1, No. 1, pp. 219-250.

N. Coleman and L. Feler (2015)
"Bank ownership, lending, and local economic performance during the 2008-2009 financial crisis", *Journal of Monetary Economics*, Vol. 71, pp. 50-66.

L.W. Cong, H. Gao, J. Ponticelli and X. Yang (2019)
"Credit Allocation under Economic Stimulus: Evidence from China", *The Review of Financial Studies*, Vol. 32, pp. 3412-3460.

M. Crozet, B. Demir and B. Javorcik (2020)
"Does Trade Insurance Matter?", mimeo.

R. Cull and M.S. Martínez Pería (2013)
"Bank Ownership and Lending Patterns during the 2008-2009 Financial Crisis: Evidence from Latin America and Eastern Europe", *Journal of Banking & Finance*, Vol. 37, pp. 4861-4878.

D. Da Mata and G. Resende (2020)
"Changing the climate for banking: The economic effects of credit in a climate-vulnerable area", *Journal of Development Economics*, Vol. 146.

D. Davydov (2018)
"Does state ownership of banks matter? Russian evidence from the financial crisis", *Journal of Emerging Market Finance*, Vol. 17, pp. 250-285.

H. Degryse and S. Ongena (2005)
"Distance, Lending Relationships, and Competition", *The Journal of Finance*, Vol. 60, pp. 231-266.

R. De Haas, M. Djourelova and E. Nikolova (2016)
"The Great Recession and Social Preferences: Evidence from Ukraine", Journal of Comparative Economics, Vol. 44, pp. 92-107.

R. De Haas, S. Guriev and A. Stepanov (2020a)
"Government Ownership and Corporate Debt Across the World", EBRD working paper, forthcoming.

R. De Haas, K. Kirschenmann, A. Schultz and L. Steinruecke (2020b)
"Global payment disruptions and firm-level exports", mimeo.

R. De Haas, Y. Korniyenko, A. Pivovarsky and T. Tsankova (2015)
"Taming the Herd? Foreign Banks, the Vienna Initiative and Crisis Transmission", *Journal of Financial Intermediation*, Vol. 24, pp. 325-355.

R. De Haas, L. Lu and S. Ongena (2020c)
"Close Competitors? On the Causes and Consequences of Bilateral Bank Competition", CEPR Discussion Paper No. 15015.

R. De Haas and P. Tabak (2019)
"The Vienna Initiative: from short-term impact to long-term solutions", in Ten Years of the Vienna Initiative: 2009-2019: www.eib.org/attachments/efs/10years_vienna_initiative_en.pdf (last accessed on 27 September 2020).
R. De Haas and N. Van Horen (2013)
"Running for the Exit? International Bank Lending During a Financial Crisis", *The Review of Financial Studies*, Vol. 26, pp. 244-285.
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*, Supplement 1 to Vol. 46, pp. 333-364.
B. Demir and B. Javorcik (2020)
"Trade finance matters: Evidence from the COVID-19 crisis", *Oxford Review of Economic Policy*, forthcoming.
I.S. Dinç (2005)
"Politicians and Banks: Political Influences on Government-Owned Banks in Emerging Markets", *Journal of Financial Economics*, Vol. 77, pp. 453-479.
A. Dixit and J. Londregan (1996)
"The determinants of success of special interests in redistributive politics", *The Journal of Politics*, Vol. 58, pp. 1132-1155.
F. Englmaier and T. Stowasser (2017)
"Electoral Cycles in Savings Bank Lending", *Journal of the European Economic Association*, Vol. 15, pp. 296-354.
S. Farazi, E. Feyen and R. Rocha (2011)
"Bank Ownership and Performance in the Middle East and North Africa Region", World Bank Policy Research Working Paper No. 5620.
Z. Fungáčová, R. Herrala and L. Weill (2013)
"The influence of bank ownership on credit supply: Evidence from the recent financial crisis", *Emerging Markets Review*, Vol. 15, pp. 136-147.
Z. Fungáčová, K. Schoors, L. Solanko and L. Weill (2020)
"Political cycles and bank lending in Russia," BOFIT Discussion Papers 8/2020, Bank of Finland, Institute for Economies in Transition.
G. Gopinath, S. Kalemli-Ozcan, L. Karabarbounis and C. Villegas-Sanchez (2017)
"Capital Allocation and Productivity in South Europe", *The Quarterly Journal of Economics*, Vol. 132, pp. 1915-1967.
B.H. Hall and J. Lerner (2010)
"The Financing of R&D and Innovation", in B.H. Hall and N. Rosenberg (eds.), *Handbook of the Economics of Innovation*, Vol. 1, Elsevier.
C.-T. Hsieh and P.J. Klenow (2009)
"Misallocation and Manufacturing TFP in China and India", *The Quarterly Journal of Economics*, Vol. 124, pp. 1403-1448.
G. Jiménez, J.L. Peydró, R. Repullo and J. Saurina (2019)
"Burning Money? Government Lending in a Credit Crunch", Universitat Pompeu Fabra Working Paper No. 1577.
A. Khwaja and A. Mian (2005)
"Do lenders favor politically connected firms? Rent provision in an emerging financial market", *The Quarterly Journal of Economics*, Vol. 120, pp. 1371-1411.
M. Koetter and A. Popov (2020)
"Political Cycles in Bank Lending to the Government", *The Review of Financial Studies*, forthcoming.
R. La Porta, F. López-de-Silanes and A. Shleifer (2002)
"Government Ownership of Banks", *The Journal of Finance*, Vol. 57, pp. 265-301.
M. Mazzucato (2018)
The Entrepreneurial State: Debunking Public vs Private Sector Myths, Penguin Books.
A. Micco and U. Panizza (2006)
"Bank Ownership and Lending Behavior", *Economics Letters*, Vol. 93, pp. 248-254.
A. Micco, U. Panizza and M. Yañez (2007)
"Bank Ownership and Performance: Does Politics Matter?", *Journal of Banking & Finance*, Vol. 31, pp. 219-241.
S. Nestor (2018)
"Board Effectiveness in International Financial Institutions: A Comparative Perspective on the Effectiveness Drivers in Constituency Boards", in P. Quayle and X. Gao (eds.), *Good Governance and Modern International Financial Institutions: AIIB Yearbook of International Law*, Asian Infrastructure Investment Bank, Beijing.
S. Qi, R. De Haas, S. Ongena and S. Straetmans (2018)
"Move a Little Closer? Information Sharing and the Spatial Clustering of Bank Branches", EBRD Working Paper No. 223.
P. Sapienza (2004)
"The effects of government ownership on bank lending", *Journal of Financial Economics*, Vol. 72, pp. 357-384.
T. Schmidt-Eisenlohr (2013)
"Towards a theory of trade finance", *Journal of International Economics*, Vol. 91, pp. 96-112.
D.H. Scott (2007)
"Strengthening the governance and performance of state-owned financial institutions", World Bank Policy Research Working Paper No. 4321.
E. Sette and G. Gobbi (2015)
"Relationship Lending During a Financial Crisis", *Journal of the European Economic Association*, Vol. 13, pp. 453-481.
C.-H. Shen and C.-Y. Lin (2012)
"Why Government Banks Underperform: A Political Interference View", *Journal of Financial Intermediation*, Vol. 21, pp. 181-202.
A. Shleifer (1998)
"State versus private ownership", *Journal of Economic Perspectives*, Vol. 12, No. 4, pp. 133-150.
A. Shleifer and R.W. Vishny (1994)
"Politicians and firms", The *Quarterly Journal of Economics*, Vol. 109, pp. 995-1025.
J. Stiglitz (1993)
"The role of the state in financial markets", *The World Bank Economic Review*, supplement to Vol. 7, pp. 19-52.
J. Tirole (2012)
"Overcoming adverse selection: How public intervention can restore market functioning", *American Economic Review*, Vol. 102, pp. 29-59.
World Bank (2013)
Global Financial Development Report: Rethinking the Role of the State in Finance, Washington, DC.
World Bank (2015)
Withdrawal from correspondent banking: Where, why, and what to do about it, Washington, DC.