

4 CORPORATE DEBT AND BUSINESS DYNAMISM



After years of rising indebtedness, financially weak firms are constraining business dynamism across parts of the EBRD regions. Zombie lending – the evergreening of cheap loans to unviable firms – is especially prevalent when banks are undercapitalised or state-owned and when insolvency frameworks are weak. Zombie firms then create negative spillovers for healthy companies: strong firms see weaker growth in investment, revenue and employment when they operate in sectors with more zombie firms. Such negative spillovers are particularly pronounced along the value chain. On the upside, the large-scale government support provided during the Covid-19 pandemic is unlikely to have exacerbated the zombification of firms in the EBRD regions.

Introduction

The Covid-19 pandemic has been a major shock to the global economy, triggering an extraordinary fall in economic activity and high levels of uncertainty for businesses. Policymakers have responded by taking far-reaching steps to help businesses navigate the pandemic successfully. Thanks to the scale of those measures and their swift implementation, corporate defaults currently stand at record lows – a situation that is uncharacteristic of recessions in general. However, there is a significant risk that this will result in the proliferation of “zombie firms” – indebted companies that are in distress but avoid default thanks to their continued access to cheap funding and forbearance from their lenders.¹

This chapter begins by documenting the existence of zombie lending across the EBRD regions just before the Covid-19 pandemic, doing so against the background of rising debt levels over the last decade. It then takes a detailed look at what happened at the onset of the pandemic. The vast majority of businesses across the EBRD regions suffered substantial

¹ See Acharya et al. (2022).



negative cash flow shocks. Day-to-day banking operations were disrupted, too, making it difficult for lenders to assess the viability of businesses. Despite these severe shocks to both the real economy and the financial sector, a wave of insolvencies and non-performing loans (NPLs) has not yet materialised. This reflects the large-scale policy support provided by governments, which will need to be withdrawn now that Covid-19 is beginning to move towards endemic status.

Many worry that policy measures aimed at supporting businesses and the economy during the pandemic may mainly have supported zombie firms. This, in turn, has raised concerns about accelerated zombification, which has the potential to constrain the post-pandemic recovery. The evidence in this chapter suggests that the feared zombification has not taken place – or at least, not yet.

This chapter then looks at why zombie lending has proven to be so persistent over the last decade and how weak firms – and zombie firms in particular – affect economic activity. Two main findings emerge. First, healthy businesses that operate in sectors and countries with relatively high percentages of zombie firms experience subdued investment rates, revenue growth and employment creation. Second, those negative spillovers are more pronounced along the value chain, adding to the global supply chain disruption that was discussed in the previous chapter. The chapter ends with a discussion of the options available to policymakers who want to ensure that the zombification that was feared at the start of the pandemic does not materialise.

THE AVERAGE DEBT-TO
GDP RATIO ACROSS THE
EBRD REGIONS, WEIGHTED
BY COUNTRIES' INCOME
LEVELS, IS ESTIMATED
TO HAVE EXCEEDED
150%
FOR THE FIRST TIME
IN 2021

Firms' vulnerability in the run-up to the Covid-19 pandemic

When the Covid-19 pandemic pushed the global economy into a sharp slowdown in 2020, it exposed a key underlying financial vulnerability: record levels of debt. At more than 322 per cent of GDP, global debt in 2019 was 40 percentage points (or US\$ 87 trillion) higher than it had been in 2008 at the onset of the global financial crisis.² The rise in the debt of non-financial firms had been especially pronounced in emerging markets, where it had increased from 56 per cent of GDP in 2008 to 96 per cent of GDP in 2018 (while the equivalent ratio had remained stable in developed economies).³

The main policy response to the economic fallout from the global financial crisis was a long period of exceptionally loose monetary policy around the world, resulting in extremely low interest rates and ample provision of liquidity. The growth in non-financial corporate debt in emerging markets can largely be attributed to that accommodative monetary policy, which was spearheaded by developed economies.⁴ When credit conditions are highly accommodative, productive firms are not the only ones that are likely to benefit from lower rates; the same is also true of zombie firms – companies that are unable to make future debt repayments but are artificially kept alive as a result of forbearance by lenders in the form of repayment holidays (temporary deferral of payments), negotiated reductions in outstanding amounts, temporary interest-only loans and even new lending. Research suggests that declines in interest rates following economic downturns have, since the 1980s, reduced financial pressure on distressed firms to restructure or exit the market.⁵

In emerging Europe and the rest of the EBRD regions, the immediate aftermath of the global financial crisis was characterised by rapid deleveraging on the part of foreign banks and the eurozone sovereign debt crisis. That deleveraging led to a drying-up of cross-border funding, as well as a credit crunch – especially for small businesses. As a result of a combination of economic contractions and unfavourable exchange rate developments, the total domestic and external debt of households, firms and governments rose higher and higher.⁶

At an aggregate level, debt-to-GDP ratios in the EBRD regions reached a historical high in 2016, with government debt and non-financial corporate debt (defined as the stock of all loans and debt securities issued by non-financial corporations) making up the bulk of the debt stock. Indebtedness then started to decline somewhat in the second half of the decade, with governments and firms taking advantage of favourable economic and financial conditions around the world and beginning to deleverage.

² See IIF (2020).

³ See Abraham et al. (2020).

⁴ See Abraham et al. (2020).

⁵ See Banerjee and Hofmann (2018).

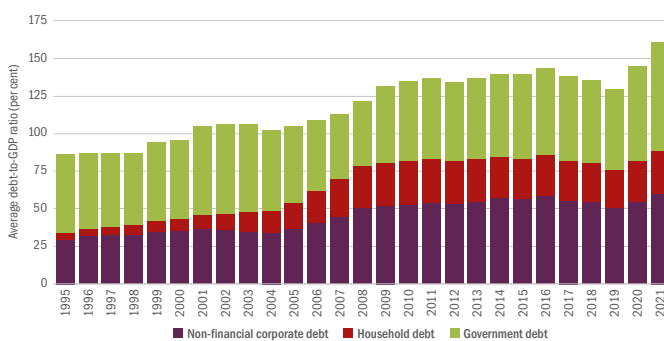
⁶ See EBRD (2015).

However, the Covid-19 pandemic has reversed that trend (see Chart 4.1). Driven by government borrowing, debt levels have jumped back up again, exceeding the levels observed around 2016. The average debt-to-GDP ratio in the EBRD regions, weighted by GDP, is estimated to have exceeded 150 per cent for the first time in 2021.

What does this record level of debt mean for businesses across the EBRD regions? On the one hand, there are numerous firms that continue to have difficulty accessing bank loans. In the most recent round of Enterprise Surveys, which was conducted by the EBRD, the EIB and the World Bank in 2018 and 2019 for a representative sample of firms with at least five employees, 22 per cent of all respondent firms across the EBRD regions reported that access to finance was a moderate obstacle to doing business, while a further 19 per cent said that it was a major or very severe obstacle.

On the other hand, there are also firms that have become overleveraged or gained access to credit that is too “easy” or “cheap” – zombie firms. The proliferation of such firms across the EBRD regions remains an understudied aspect of the global rise in corporate debt. It is important to note that credit-constrained firms and zombie firms can co-exist at the same time. Since bank lending is often constrained by the availability of bank capital, the more banks roll over debt to zombie firms, the more they may need to starve healthy firms of credit.⁷

CHART 4.1. Debt levels in the EBRD regions have reached historical highs



SOURCE: IMF Global Debt Database, *IMF World Economic Outlook 2021* and authors' calculations.

NOTE: Average debt-to-GDP ratios are weighted by GDP at market exchange rates. Non-financial corporate debt is the stock of all loans and debt securities issued by non-financial corporations. For Armenia, Azerbaijan, Jordan, Lebanon, Morocco, Tunisia, Türkiye and the West Bank and Gaza, government debt excludes central government debt. Estimates of private debt for 2021 assume that half of an economy's current account deficit was financed by private debt, and that non-financial corporate debt accounted for the same percentage of total private debt as in 2020.

Vulnerable and zombie firms

In a well-functioning market economy, banks lend to viable firms but reject loan applications from firms that are not expected to be able to make repayments. Firms which accumulate too much debt cannot service that debt using future revenues and will default at some point when they run out of cash flow. Well-capitalised banks which realise that a firm has become overindebted can either try to restructure the company's debt burden (so that it matches the firm's capacity to generate revenue) or liquidate collateralised assets when the firm stops making repayments. Depending on the value of those assets, the bank may realise a loss. In practice, however, banks – especially those with a thin capital buffer – may be tempted to roll over (or “evergreen”) loans to overindebted firms or offer repayment holidays, so as to avoid writing off bad debts and preserve the limited capital they have. Thus, underperforming and vulnerable firms continue to have access to – often cheap – credit.

This chapter distinguishes between healthy businesses and financially vulnerable firms (some of which are categorised as zombie firms). Financially vulnerable firms are defined as those that, in a given year, have both (i) a leverage ratio (debt over assets) that is above the median for the country and sector where they operate and (ii) an average interest coverage ratio (earnings before interest and taxes (EBIT) over interest expenses) that is below the median for the country and sector where they operate over the last two years.⁸ This definition captures the firms that are at the greatest risk of being unable to meet their obligations to creditors when faced with an adverse economic shock, while abstracting from economic shocks or technological shifts that affect most firms in an industry (such as a shift from hard copies to digital publications in the case of book sales). If a company does not satisfy both conditions, it is defined as a financially healthy firm.

A financially vulnerable firm that, in addition, has access to subsidised credit is classified as a zombie firm. A firm is assumed to have access to subsidised credit if its average interest expenses (relative to its stock of debt) are below those of the most creditworthy firms in the economy, which are proxied by firms with an interest coverage ratio in excess of 9.5 (the median interest coverage ratio for publicly listed US firms that are rated AA by Standard & Poor's).⁹

⁷ See Berglöf and Roland (1998).

⁸ This definition is based on Acharya et al. (2020).

⁹ This methodology is based on Acharya et al. (2019).

THE INTEREST RATE PAID
BY THE TYPICAL FIRM
IN THE EBRD REGIONS
DROPPED FROM NEARLY
10%
IN 2009 TO LESS THAN
4%
IN 2020

Access to cheap credit is what sets zombie firms apart from other financially vulnerable firms, as implicit subsidisation lies at the core of the credit misallocation caused by zombie lending. It is that subsidisation that weakens the relationship between the firm's level of risk and its borrowing costs.¹⁰

In order to classify firms as healthy, financially vulnerable or zombies, this chapter uses a cross-country sample of firms from Bureau van Dijk's Orbis database spanning the period 2009-20. That sample covers 12 countries in the EBRD regions for which Orbis provides reliable information on leverage and interest expenses over the last decade (Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Hungary, Latvia, Poland, Romania, Serbia, the Slovak Republic, Slovenia and Ukraine). Business activity in those EBRD countries is benchmarked against four comparators: Austria, France, Germany and Portugal. The average interest rate paid by a firm is inferred from the ratio of its interest expenses to the sum of its outstanding loans, credit and bonds in a given year.

First of all, the data show that firms in the EBRD economies in question have obtained loans at ever cheaper rates over the last decade or so, with the median interest rate dropping from nearly 10 per cent in 2009 to less than 4 per cent in 2020. However, whereas financially vulnerable firms often obtain credit at higher rates than healthy firms, zombie firms – by definition – obtain credit at much lower rates than both of those other groups (see Chart 4.2). It is noticeable that firms maintained their leverage and continued to access debt at low interest rates in 2020 – the first year of the Covid-19 pandemic. However, their revenue flows declined considerably. The median ratio of EBIT to interest expenses in the EBRD sample dropped from 3.2 in 2019 to 2.2 in 2020.

Over the last decade, around 20 to 25 per cent of the firms in the EBRD sample could be classified as financially vulnerable (see Chart 4.3). Just over a quarter of those vulnerable firms – or around 5 per cent of all firms by total assets – could be classified as zombie firms. While the percentage of vulnerable firms declined between 2011 and 2016, it has crept back up again since 2018. In contrast, the percentage of zombie firms has been relatively stable throughout the last decade.

The prevalence of zombie firms varies substantially across sectors and countries. In 2019, around one in three country-sector pairs had no zombie firms, while a few had as much as 20 per cent of their total assets in the hands of zombie companies. Zombie firms were relatively prevalent in the extraction of oil and gas, coal mining and water supply, suggesting that banks may tolerate lending to zombie firms in certain sectors on account of their strategic importance.

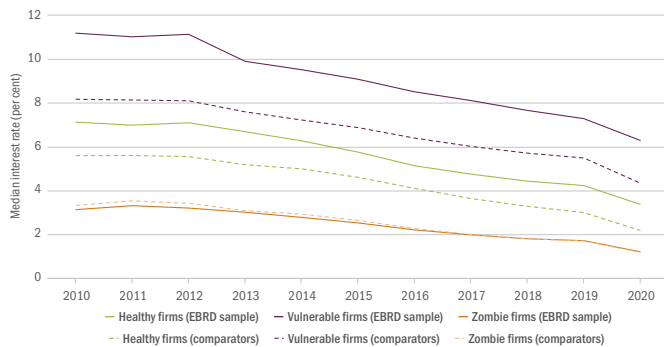
Zombie companies are also more common among state-owned firms. In the EBRD regions, large state-owned enterprises (SOEs) often manage to access more funding from state banks.¹¹ At the same time, standard insolvency regimes sometimes do not fully apply to state-owned banks and enterprises. For instance, SOEs in Ukraine are exempt from debt enforcement, while some SOEs (particularly those operating in the energy, defence and transport sectors) are subject to sector-specific moratoria on insolvency. On the basis of the Orbis dataset used for this chapter, 13 per cent of SOEs in the EBRD sample and comparator economies can be classified as zombie firms, compared with 9 per cent for privately owned firms. In many economies around the world, state-owned banks have a tendency to allocate credit to large favoured SOEs (often referred to as “national champions”), although not necessarily at subsidised interest rates.¹²

¹⁰ See Acharya et al. (2022).

¹¹ See EBRD (2020).

¹² See De Haas et al. (2022).

CHART 4.2. Zombie firms access loans at cheaper rates than other companies



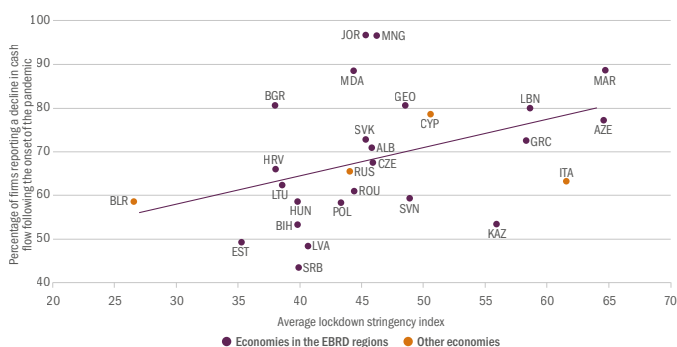
SOURCE: Bureau van Dijk's Orbis database and authors' calculations.
NOTE: Median interest rates are weighted by total assets.

CHART 4.3. Nearly a quarter of the firms in the EBRD sample are financially vulnerable



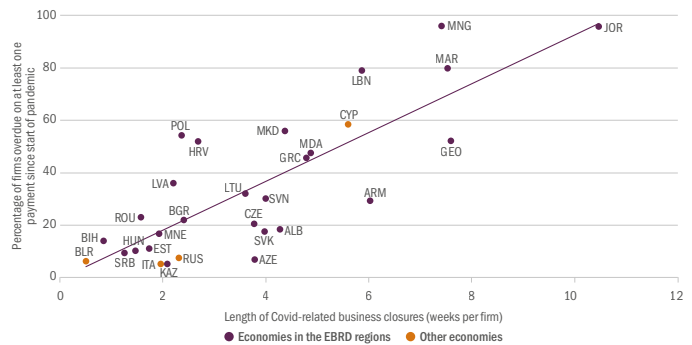
SOURCE: Bureau van Dijk's Orbis database and authors' calculations.
NOTE: The EBRD sample comprises firms in Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Hungary, Latvia, Poland, Romania, Serbia, the Slovak Republic, Slovenia and Ukraine. The comparators are Austria, France, Germany and Portugal.

CHART 4.4. Lockdowns hit firms' cash flows hard



SOURCE: Enterprise Surveys, Oxford University Covid-19 Government Response Tracker and authors' calculations.
NOTE: The average lockdown stringency index is based on policies that primarily restrict people's movements and public information campaigns.

CHART 4.5. There were more overdue payments in economies with longer business closures



SOURCE: Enterprise Surveys and authors' calculations.

Firms and banks during the pandemic

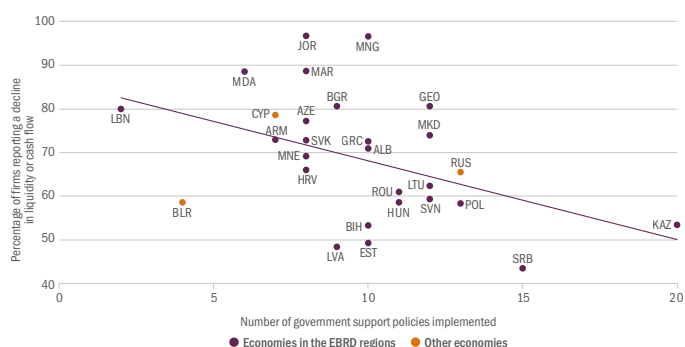
The first part of this chapter set the stage by describing firms' indebtedness and vulnerabilities in the run-up to the Covid-19 pandemic. This next section discusses the ways in which the Covid-19 pandemic has affected this financial landscape and how governments have responded.

Covid-19 and firms across the EBRD regions: business unusual

The onset of the Covid-19 pandemic was an unprecedented liquidity shock for many businesses across the EBRD regions, particularly for firms that were directly affected by lockdowns. In late 2020 and 2021, the World Bank re-surveyed many of the firms that had participated in the most recent round of Enterprise Surveys to see how businesses had fared during the Covid-19 crisis. The percentage of firms that reported suffering a negative cash flow shock at the start of the pandemic ranged from 43 per cent in Serbia to 95 per cent in Jordan and Mongolia. Percentages were higher in countries with more stringent social distancing measures, as captured by Oxford University's Covid-19 Government Response Tracker (see Chart 4.4).

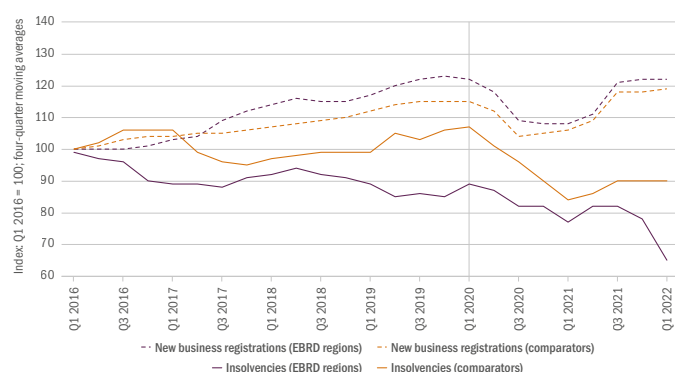
The most common response to that cash flow shock was to delay payments to suppliers, tax authorities and landlords, with the World Bank's follow-up Enterprise Surveys indicating that pandemic-related closures had caused a large percentage of businesses to become overdue on at least some of their payment obligations (see Chart 4.5).

CHART 4.6. Extensive government support helped to keep businesses afloat



SOURCE: Enterprise Surveys, EBRD Regional Economic Prospects (April 2020) and authors' calculations.

CHART 4.7. While new business registrations have recovered, firm exit rates remain subdued



SOURCE: Eurostat and authors' calculations.

NOTE: Data for the EBRD regions cover Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia. Data for comparators cover Belgium, Denmark, France, Germany, Iceland, Ireland, Italy, Luxembourg, Malta, The Netherlands, Norway, Portugal and Spain.

In addition to repayment holidays, governments and central banks put in place emergency measures to inject liquidity into the corporate sector, while providing extra support for individuals and households. In countries where larger numbers of these economic policies were introduced early in the pandemic, smaller percentages of businesses reported a decline in their cash flow in the World Bank's follow-up survey (see Chart 4.6).

Almost half of all economies in the EBRD regions introduced emergency insolvency legislation in response to Covid-19 (see Box 4.1). Many countries also suspended – at least temporarily – the obligation to file for insolvency, which gave affected companies more time to carry out fundamental restructuring (whether in or out of court) or delay their dissolution in the case of de facto insolvency. Thanks to the scale of countries' policy responses and the speed of their implementation, firms' default rates are now at all-time lows.

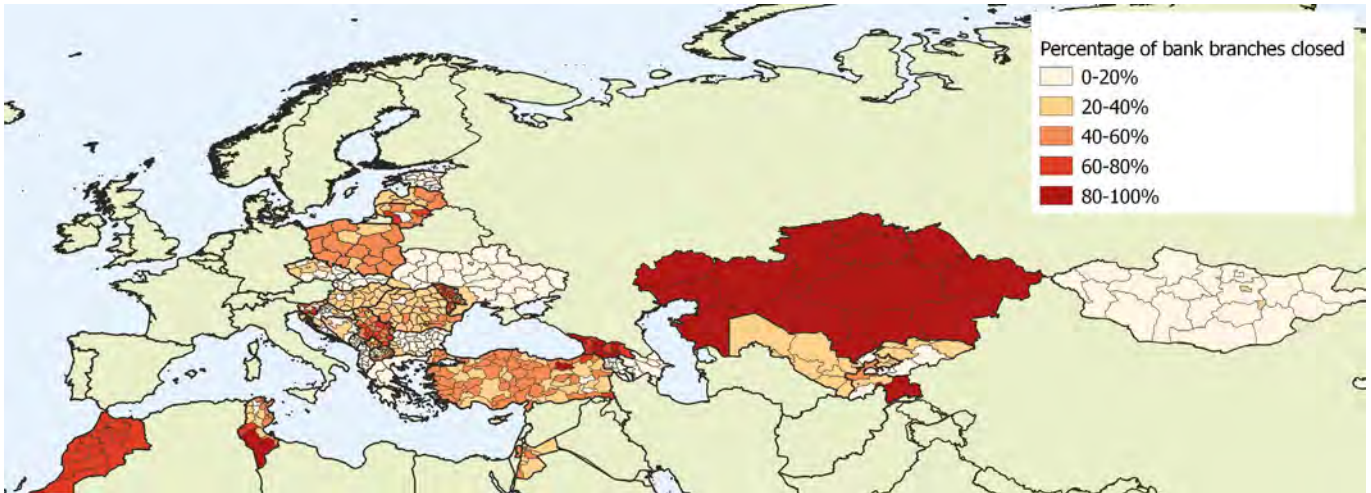
As a result, however, the creative destruction process that is typically observed in a recession, cleansing the economy of poorly performing businesses and helping to reallocate resources to better-performing ones, has not – or not yet – materialised this time around. In the EBRD regions, insolvencies and the registration of new businesses both saw sharp falls following the onset of the pandemic. While new business registrations have since returned to pre-pandemic levels, insolvencies seem to have fallen even further (see Chart 4.7). The risk here is that too much human and physical capital remains locked up in unviable – potentially zombie – firms, thereby contributing, for example, to staff shortages in more dynamic parts of those economies (among start-ups, for instance).

Banks' experience of the Covid-19 pandemic

This section looks at banks' experience of the pandemic across the EBRD regions using evidence from the third round of the EBRD's Banking Environment and Performance Survey (BEPS III) – a survey of bank CEOs in all EBRD economies, plus Belarus and Russia, that was conducted between December 2020 and March 2021. There were three main types of disruption to banks' activities at the start of the pandemic. First, banks were often unable to serve customers in person at branches. In May 2020, when lockdowns were at their most severe, many bank branches remained closed (see Chart 4.8). Around 33 per cent of all bank branches were closed for up to one month, another 30 per cent were closed for two months, 15 per cent were closed for three months, and a further 5 per cent were closed for four months or longer.

Second, banks were unable to monitor some of their clients, as on-site visits were not possible for an extended period of time. Around 80 per cent of the CEOs interviewed reported that their banks had been negatively affected by their loan officers' inability to monitor clients during the pandemic (see Chart 4.9).

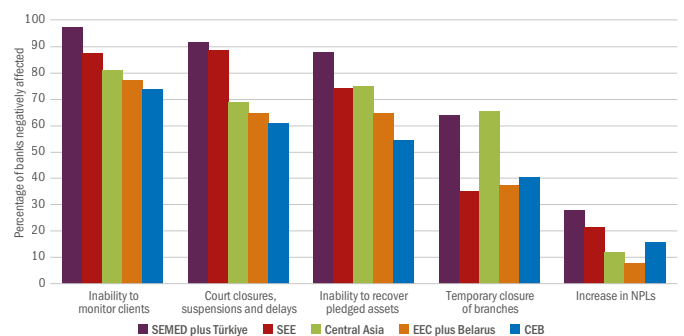
CHART 4.8. Bank branch closures were widespread in May 2020



SOURCE: BEPS III.

**AROUND
80%**
PERCENTAGE OF INTERVIEWED
CEOs WHOSE BANKS HAD
BEEN NEGATIVELY AFFECTED
BECAUSE THEY COULD NOT
PROPERLY MONITOR CLIENTS
DURING THE PANDEMIC

CHART 4.9. Banks were impacted by the pandemic in multiple ways



SOURCE: BEPS III.

Third, banks were often unable to recover pledged assets, mostly owing to the temporary closure of courts during the pandemic and delays to court proceedings. Although there were 14 countries where courts did not close and 20 countries where remote hearings were an option (see Box 4.1), between 60 and 90 per cent of bank CEOs across the EBRD regions reported that their banks had been negatively affected by delays to court proceedings.

An important point in this regard is that banks were in a significantly healthier position at the onset of the pandemic than they had been at the start of the global financial crisis in 2008. The various policy interventions that had followed the financial crisis had helped to clean up banks' balance sheets, with the

result that banks were able to continue meeting firms' funding needs when the pandemic hit.¹³ The fact that most banks had relatively strong capital positions at the onset of the pandemic might also have mitigated the risk of excessively lenient lending to zombie firms.

Relatively few CEOs were worried about increases in NPLs, reflecting the swift adoption of extensive policy support packages, as well as regulatory forbearance. Nearly half of all CEOs reported that their banks had voluntarily deferred loan repayments in anticipation of this measure being imposed by their governments, while around a quarter reported that payment deferrals had been imposed directly by the government (see Chart 4.1.1). According to a survey of law firms conducted by the EBRD's Legal Transition Programme, forbearance in respect of loans (capital and interest repayments) was applied in 26 of the 33 economies surveyed, with all surveyed economies having introduced emergency banking regulations. In some economies, however, compliance with banking regulations was either partly or completely voluntary.

Did the onset of the pandemic lead to an increase in zombification?

Businesses were able to raise substantial amounts of external financing in response to the pandemic, both by drawing down on lines of credit from banks and by accessing government support programmes. In the EBRD regions, access to bank credit jumped in the first half of 2020. Evidence from Meta's Future of Business Surveys corroborates findings from the World Bank's follow-up Enterprise Surveys in showing that, in many countries, job losses were – to some extent, at least – prevented by extensive government support programmes (see Box 4.3).

The scale of these support programmes has fuelled concerns about a possible increase in zombification – whereby weak firms are kept alive artificially using cheap credit, with uncertainty as to whether those loans will be repaid – as well as fraud. Such zombification could have negative consequences for post-pandemic recovery plans if labour and capital get tied up in struggling firms and moribund sectors. This section revisits those concerns using regression analysis based on firm-level data.

On average, firms that had been classified as vulnerable or zombies in 2019 (before the onset of the pandemic) were no more likely to increase their debt levels in 2020 than firms that had been classified as healthy. In other words, Covid-19 support programmes were not biased in favour of weak firms.

Regression analysis can also be used to link changes in firms' debt in 2020 broken down by type of firm (healthy, vulnerable or a zombie based on 2019 accounts) with the number of supportive policy measures that were implemented in the early stages of the Covid-19 crisis in the economies where firms operate. In this analysis, the total number of supportive government policies is based on programmes in place as at April 2020, as documented in the EBRD's Regional Economic Prospects. Such policies include payment holidays for loans, rent and utilities, wage subsidies, the deferral of tax payments and social security contributions, the provision of loan subsidies and credit guarantees, and the suspension of inspections and audits.

This analysis reveals that in countries that introduced a larger number of policy measures to help businesses, zombie firms saw their borrowing grow at a faster rate than healthy firms (see Chart 4.10), with zombies benefiting disproportionately from preferential loan schemes and accommodative credit conditions. Consequently, it may be too early to dismiss concerns about accommodative policies encouraging the proliferation of zombie firms.

**ONE IN FOUR
BANKS IN THE EBRD
REGIONS HAD A TIER
1 CAPITAL ADEQUACY
RATIO OF LESS THAN
13.5 IN 2019**

¹³ See Ellul et al. (2020).

Why do banks continue lending to vulnerable firms and zombies?

What causes banks to provide subsidised credit to borrowers that they know to be financially vulnerable (a practice sometimes referred to as “extending and pretending”)? Four different mechanisms may be at play here, with the main one centring around bank capital and limited liability.¹⁴ In essence, banks with low levels of capital roll over credit to financially vulnerable firms in order to avoid writing off existing loans, as write-offs further erode their already thin capital base. In countries with weak banking supervision, regulatory forbearance towards banks can exacerbate this tendency.

Thus, undercapitalised banks can prolong economic slowdowns by continuing to lend to weaker firms that are on the verge of insolvency while withholding credit from healthy borrowers. The resulting economic weakness, in turn, prevents banks from rebuilding capital buffers. Prominent examples of such a vicious circle include Japan’s “lost decade” in the 1990s, the eurozone in the immediate aftermath of the global financial crisis of 2008-09 and India in 2016-19.¹⁵

Second, the inefficient resolution of financial difficulties or insolvency also plays a role.¹⁶ If restructuring struggling firms is costly and time-consuming or banks have limited influence over insolvency procedures, the restructuring route becomes less attractive for lenders relative to the evergreening of loans. In such an environment, a creditor may feel that the risk associated with evergreening is preferable to long, value-destroying court

proceedings, which carry negative stigma for the debtor and may or may not lead to partial recovery of the creditor’s assets.¹⁷ Foreign-owned banks tend to be particularly sensitive to deficiencies in a local legal and institutional environment and may shy away from lending as creditor protection falls.¹⁸

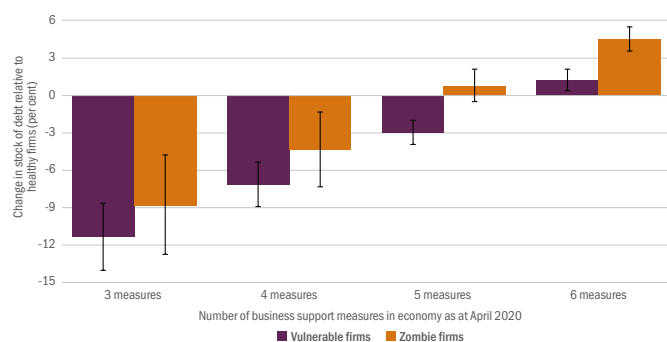
Third, the type of bank lending relationship also matters. Some banks establish long-term relationships with firms, whereby they gain detailed information about their clients over time and leverage that competitive advantage. On the basis of those insights, they may take a long-term view of a firm’s prospects, opting to help it weather temporary financial shocks (although such bridge funding may come at a price, with higher interest rates being charged).¹⁹ While relationship-based lenders will also need to cut funding to firms that are not viable in the long term, they may be in a better position to distinguish between temporary and chronic difficulties when compared with transaction-based lenders (which make decisions on the basis of algorithms, maintaining a short-term focus).

Fourth, banks – especially state-owned ones – may be under political pressure to limit firm closures and prevent job losses.²⁰

In order to shed light on the relative importance of these various mechanisms in the EBRD regions, this section combines information on firms’ finances taken from the Orbis database with detailed information on bank ownership, capital adequacy and lending techniques that was obtained as part of BEPS III (which covered 339 banks in economies across the EBRD regions). In particular, bank CEOs were asked how important relationship-based lending was to their business on a five-point scale ranging from “very unimportant” to “very important”. Banks that replied “very important” are regarded as relationship-based lenders, as opposed to transaction-based lenders.²¹

The data show that undercapitalised banks (those with a tier 1 capital adequacy ratio of less than 13.5 in 2019) are just as common among relationship-based banks as they are among transaction-based banks, indicating that the approach to lending is largely independent of the level of capitalisation. However, the prevalence of undercapitalised banks does vary by ownership type. While only 18 per cent of majority foreign-owned banks in the sample were undercapitalised, that figure rises to 29 per cent for privately owned domestic banks and 32 per cent for banks with majority state ownership.

CHART 4.10. In countries with significant support for businesses in the early stages of the Covid-19 pandemic, lending to zombie firms expanded faster than lending to healthy firms



SOURCE: Bureau van Dijk’s Orbis database, EBRD Regional Economic Prospects (April 2020) and authors’ calculations.

NOTE: Bars denote coefficients that are derived from regressing changes in stocks of debt between 2019 and 2020 on interaction variables combining indicators for vulnerable firms and zombie firms with the number of business support measures at country level. 95 per cent confidence intervals are shown.

¹⁴ See Caballero et al. (2008), Giannetti and Simonov (2013) and Acharya et al. (2022).

¹⁵ See Caballero et al. (2008) for Japan, Acharya et al. (2019), Kalemli-Özcan et al. (2022) and Schivardi et al. (2022) for the eurozone, and Kulkarni et al. (2021) for India.

¹⁶ See Altman et al. (2021) and Becker and Ivashina (2022).

¹⁷ See Helmersson et al. (2021).

¹⁸ See Qian and Strahan (2007).

¹⁹ See Beck et al. (2018) and Hu and Varas (2021).

²⁰ See Kulkarni et al. (2021).

²¹ See Beck et al. (2018).

Which banks lend to vulnerable and zombie firms?

Since the Orbis dataset indicates the identity of the main lender to a firm (if any) as at 2020, it is possible to see whether certain types of bank are more inclined to lend to zombie firms. This analysis assumes that firms' main lenders did not change over the preceding decade, as earlier studies have found that lending relationships tend to be fairly stable.²² A simple regression analysis relates the indicator variable for the type of firm (such as a zombie firm) to a bank of a certain type (state-owned or undercapitalised, for instance) being the main lender to the firm, with country fixed effects.²³ This analysis reveals two findings.

First, undercapitalised banks and state-owned banks are much more likely to be the main lenders to zombie firms (see Chart 4.11). A firm whose main lender is undercapitalised is 0.8 per cent more likely to be a zombie than a firm that borrows from a highly capitalised bank (while the average likelihood of being a zombie across all firms is around 5 per cent). Similarly, the likelihood of a firm being a zombie increases by 2.9 per cent when its main lender is state-owned, as opposed to privately owned.

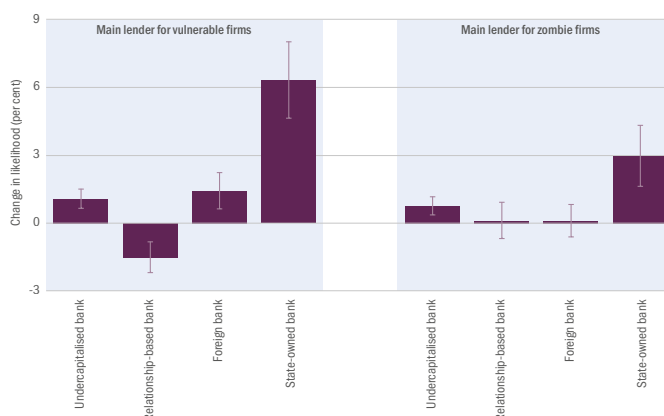
Second, a relationship-based bank is less likely to be the main lender to a financially vulnerable firm, with higher likelihoods being observed for undercapitalised, foreign and state-owned banks. A firm's likelihood of being in this category is 1.3 per cent lower if its main lender is a relationship-based bank, but 6.3 per cent higher if its main lender is state-owned. Around 20 to 25 per cent of all firms in the EBRD sample are classified as financially vulnerable.

Bank lending when firms' financial health deteriorates

Different types of bank may be more or less inclined to continue lending to firms if their financial health suddenly deteriorates. On the one hand, banks may be inclined to help firms to weather shocks, especially if those shocks are expected to be transitory in nature. On the other hand, banks may be unwilling or unable to accumulate additional risks on their balance sheets, especially if their capital base is already thin.

The following firm-level analysis looks at banks' responses to deteriorations in firms' health by linking changes in the logarithm of debt held by a particular firm to an indicator that captures deterioration in the firm's financial indicators which results in it being reclassified as financially vulnerable or a zombie (having previously been healthy). The analysis uses Orbis data on more than 2 million firms across 12 economies in the EBRD regions for the period 2009-20. Firm fixed effects take into account unobservable firm-level characteristics (such as business contacts and management know-how) which could affect the evolution of credit, as well as country-sector-year and bank-year fixed effects capturing factors that affect a certain bank or industry at a particular point in time. As such, the documented

CHART 4.11. Undercapitalised and state-owned banks are more likely to lend to zombie firms



SOURCE: Bureau van Dijk's Orbis database and authors' calculations.

NOTE: Changes in the likelihood of a firm being vulnerable or a zombie have been calculated by regressing the type of firm on the type of main lender. 95 per cent confidence intervals are shown.

relationships do not simply reflect changes in firm-bank pairings whereby better-performing firms switch to working with better-performing banks.

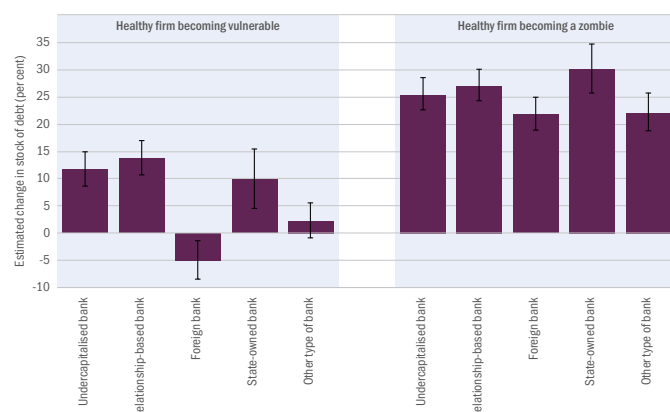
The analysis reveals that when a healthy firm becomes vulnerable its subsequent ability to borrow depends strongly on the type of bank that it borrows from. For a firm whose main lender is a well-capitalised, privately owned domestic bank that adopts a transaction-based approach (the most common scenario in the data), no statistically significant change in debt levels is observed. If the firm's main lender is an undercapitalised bank, its borrowing increases by an average of 9.4 per cent when its financial health deteriorates (relative to a firm whose main

ON AVERAGE, A ZOMBIE
 FIRM WILL HAVE
22%
 MORE DEBT THAN A
 FINANCIALLY HEALTHY
 EQUIVALENT

²² See Giannetti and Ongena (2012) and Kalemli-Özcan et al. (2022).

²³ These time-invariant effects ensure that the correlations are not driven by compositional changes.

CHART 4.12. The debt dynamics of a firm whose health deteriorates will depend on the nature of its main lender



SOURCE: Bureau van Dijk's Orbis database, BEPS III, World Bank Doing Business indicators (discontinued) and authors' calculations.

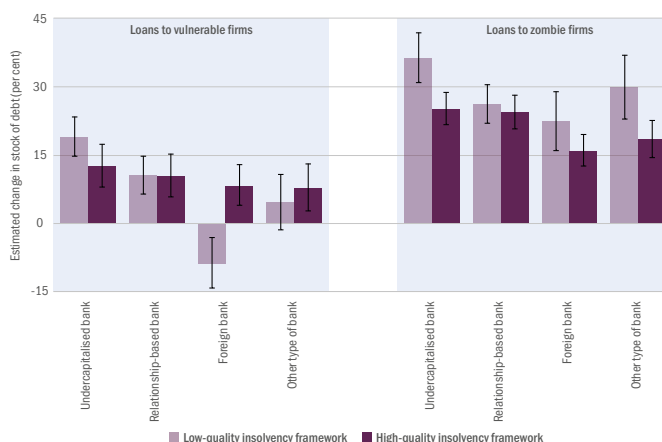
NOTE: Bars denote coefficients that are derived from regressing the logarithm of firms' debt on interaction variables combining indicators for vulnerable firms and zombie firms with indicators for types of main lender. 95 per cent confidence intervals are shown. Regressions include firm, country-sector-year and bank-year fixed effects, as well as controls for firms' assets and revenues.

lender is a well-capitalised, privately owned domestic bank; see Chart 4.12). Similar average differentials are estimated for a relationship-based bank (11.4 per cent) and a state-owned bank (7.6 per cent). In contrast, this differential is negative for firms whose main lender is a foreign bank, with stocks of debt falling when firms become financially vulnerable.

When a healthy firm becomes a zombie, its stock of debt increases by an average of 22 per cent if its main lender is a well-capitalised, privately owned, transaction-based domestic bank. That same firm will, on average, see its debt increase by an additional 3.3 percentage points if its main lender is undercapitalised, by 4.9 percentage points more if its main lender is a relationship-based bank, and by 8 percentage points more if that lender is a state-owned bank.

Lending to financially vulnerable firms may also be dependent on the local institutional environment. In order to account for this, the analysis is conducted separately using samples of countries with strong and weak insolvency procedures as reflected in the World Bank's Resolving Insolvency Indicator, which estimates, by means of a case study, the time, cost and outcome of – primarily liquidation-type – insolvency proceedings involving domestic entities in individual countries.²⁴

CHART 4.13. The debt dynamics of a firm whose health deteriorates will also depend on the strength of insolvency law



SOURCE: Bureau van Dijk's Orbis database, BEPS III and authors' calculations.

NOTE: Bars denote coefficients that are derived from regressing the logarithm of firms' debt on interaction variables combining indicators for vulnerable firms and zombie firms with indicators for types of main lender. 95 per cent confidence intervals are shown. Regressions include firm, country-sector-year and bank-year fixed effects, as well as controls for firms' assets and revenues.

This analysis indicates that zombie firms tend to increase their borrowing by more in settings with less efficient insolvency regimes – for instance, where creditors' expected recovery rates for distressed assets are lower, where commencement of insolvency proceedings takes a long time, or where creditors' participation in insolvency proceedings is limited. When a healthy firm becomes a zombie, it will increase its borrowing by an average of 29 per cent where the insolvency regime is weak – as opposed to 19 per cent where the regime is strong – if its main lender is a well-capitalised, privately owned, transaction-based domestic bank (see Chart 4.13). Other banks, including foreign-owned banks, also lend more to firms that become zombies when insolvency frameworks are weak.

²⁴ This indicator has been discontinued, so the analysis here should be interpreted as a historical comparison.

Zombie firms distort business operations

The presence of zombie firms can, in turn, affect the operations of other companies in the same sector (through horizontal spillovers), as well as having an impact via supply chain linkages (vertical spillovers). The next section documents such spillovers using firm-level data.

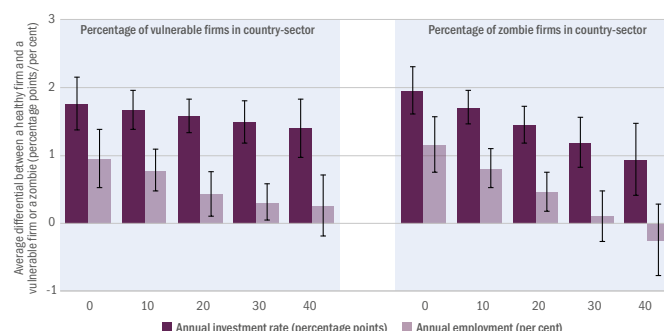
Horizontal spillovers

There are two main mechanisms underpinning horizontal spillovers from zombification. First, healthy firms face increased competition for inputs from zombies, as well as extra competition in product markets (a “congestion effect”). This pushes market prices downwards and wages upwards, squeezing operating margins.²⁵ In principle, better-performing firms should push weaker competitors out of the market, with workers being reallocated to more efficient producers. However, if large numbers of non-productive companies remain in the market, this creative destruction will be weakened, reducing numbers of new businesses and lessening existing firms’ incentives to invest.

Second, zombie firms make it harder for financially healthy firms to access credit (via a “crowding-out effect”), as capital-constrained banks that evergreen loans to zombies have less scope to lend to healthy firms.²⁶ Squeezed margins, as described above, may further impair firms’ ability to access external funding.

In order to illustrate these channels, the analysis that follows uses a firm-level regression framework which relates annual revenue, investment rates (proxied by percentage changes in fixed assets relative to the previous year’s stock of fixed assets)

CHART 4.14. Healthy firms perform less well in sectors with large numbers of zombie firms



SOURCE: Bureau van Dijk’s Orbis database and authors’ calculations.

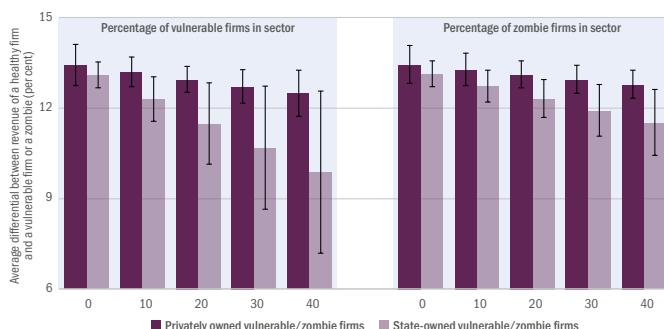
NOTE: Bars denote coefficients that are derived from regressing firms’ annual investment rates and annual employment on an indicator for healthy firms and an interaction variable combining that indicator with the percentages of vulnerable firms and zombies in the relevant country-sector. 95 per cent confidence intervals are shown. Regressions include firm and country-sector-year fixed effects, as well as controls for firms’ assets and stocks of debt.

and employment to a firm's status as a healthy firm, as well as the asset-weighted prevalence of financially vulnerable and zombie firms in the same sector. Specifications control for healthy firms' past stocks of debt and include firm and country-sector-year fixed effects, which take into account industry-specific trends, as well as firm-level characteristics that remain unchanged over time.

This analysis reveals that the presence of zombie firms is more harmful to healthy firms than the presence of other vulnerable firms, especially when it comes to investment and employment. The annual investment rate of a healthy firm will, on average, be 2 percentage points stronger than that of a vulnerable firm or a zombie if it operates in a sector with no zombie firms but an average number of vulnerable firms (see Chart 4.14). This differential drops to 1.4 percentage points when zombie firms account for 20 per cent of the sector on an asset-weighted basis. This is a sizeable effect, given that the average annual investment rate in the sample is 6 per cent. A similar trend can be observed for average annual employment changes (see Chart 4.14). Spillover patterns are similar, although somewhat weaker, in the presence of greater numbers of financially vulnerable firms with an average number of zombie firms.

Moreover, the analysis also reveals that such spillover effects are greater in the presence of state-owned zombies. On average, a healthy firm's revenue will be around 13 per cent higher than that of a vulnerable firm in the absence of any zombies but with an average number of vulnerable firms in its sector. If such a firm finds itself in a sector where privately owned zombies account for 20 per cent of total assets, that differential drops by half a percentage point. However, in a sector where state-owned zombies make up the same proportion of total assets, the differential drops by 2 percentage points to 11 per cent (see Chart 4.15).

CHART 4.15. Negative spillovers are greater in the presence of state-owned zombie firms



SOURCE: Bureau van Dijk's Orbis database and authors' calculations.

NOTE: Bars denote coefficients that are derived from regressing firms' revenue on an indicator for healthy firms and an interaction variable combining that indicator with the percentages of state-owned and privately owned vulnerable firms and zombies in the relevant country-sector. 95 per cent confidence intervals are shown. Regressions include firm and country-sector-year fixed effects, as well as controls for firms' assets and stocks of debt.

ON AVERAGE, A HEALTHY FIRM'S REVENUE WILL BE AROUND
13%
HIGHER THAN THAT OF A VULNERABLE FIRM IN THE ABSENCE OF ANY ZOMBIES

Vertical spillovers

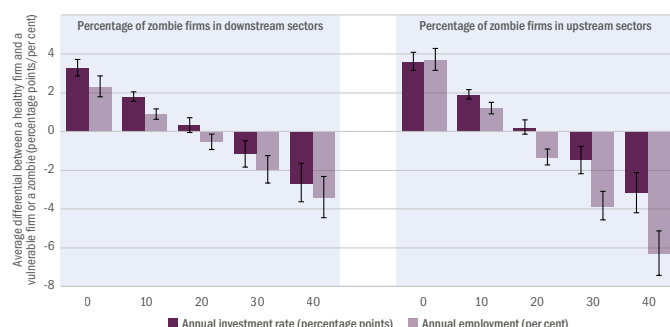
Distortions created by zombies and other financially vulnerable firms can also spread along supply chains. Downstream spillovers occur when distortions among suppliers are passed on to businesses that receive inputs from those suppliers. For instance, suppliers that are exposed to a large decline in bank financing can pass that liquidity shock on to their customers by reducing the amount of trade credit that is on offer or failing to deliver goods and services on time.²⁷ Meanwhile, a decline in market competition among a firm's suppliers (owing to a congestion effect caused by zombie firms, for instance) may result in less innovation and lower-quality inputs.

Upstream spillovers occur when credit market and other distortions cause a demand shock for suppliers providing inputs to a firm. If zombie firms become more prevalent in a sector that a business typically sells its products to, this will create uncertainty about future demand for the business's output and may prompt it to scale back its investment or operations. In the case of indirect exporters, which use intermediaries in other sectors to sell their products abroad, financial trouble for customers may also mean losing access to international markets.

The analysis that follows captures such vertical spillovers by using Eurostat's supply, use and input-output tables to account for the presence of vulnerable firms and zombies along the supply chain. An input-output matrix represents the linkages between different sectors of an economy – recording, for instance, how many of the inputs that a sector uses for production come from each of the other sectors. These input coefficients are used as weights to calculate the prevalence of vulnerable firms and zombies among a business's potential suppliers (that is to say, among

²⁷ See Costello (2020).

CHART 4.16. The presence of zombies negatively affects healthy firms via the supply chain



SOURCE: Bureau van Dijk's Orbis database, Eurostat and authors' calculations.

NOTE: Bars denote the coefficients that are derived from regressing firms' annual investment rates and annual employment on an indicator for healthy firms and an interaction variable combining that indicator with the percentages of vulnerable firms and zombies in the relevant country-sector. 95 per cent confidence intervals are shown. Regressions include firm and country-sector-year fixed effects, as well as controls for firms' assets and stocks of debt.

firms operating in upstream industries). Likewise, this information is also used to calculate the prevalence of vulnerable firms and zombies among a business's potential customers or off-takers (that is to say, among firms operating in downstream industries).

The analysis provides strong evidence of negative spillovers – both downstream and upstream – resulting from the presence of zombie firms in the supply chain. These spillovers can be observed for revenue growth, investment rates and employment (see Chart 4.16). In fact, if zombie firms are sufficiently prevalent in either downstream or upstream sectors – if they account for more than 20 per cent of total assets – that is predicted to result in *negative* investment rates and employment growth for affected healthy firms. No such spillovers arise in the presence of vulnerable firms that are not zombies, highlighting the distortionary effect that subsidised credit has on the allocation of resources within the economy.

The estimates indicate that the presence of zombie firms is slightly more harmful among customers than it is among suppliers. On average, a healthy firm that sees zombie firms' share of its off-takers rise from zero to 20 per cent will see its annual investment rate fall by 3 percentage points, while its annual employment will fall by an average of 4 per cent (see Chart 4.16).

Thus, zombie firms have more of an impact via vertical spillovers (that is to say, via supply chains) than via horizontal spillovers (that is to say, via spillovers within a given sector).

Conclusion and policy options

Policymakers provided unprecedented assistance to businesses in response to the Covid-19 pandemic, supporting firms using emergency grants, lines of credit, temporary moratoria on filing for insolvency and mandatory forbearance on payments of loan principal and interest. Such concerted action probably helped to prevent job losses and limited firm closures. However, partly as a side effect of those policies, many businesses are now shouldering a heavy debt burden at a time when global interest rates are rising.

This chapter has shown that weak businesses – especially zombie firms – can weigh on growth and investment by affecting the operations of otherwise healthy firms, be they direct competitors, suppliers or off-takers. In order to prevent zombification and help their economies to recover, policymakers can take action in four key areas: (i) gradual withdrawal of support for businesses, (ii) strengthening of banking supervision, (iii) reforms to insolvency resolution mechanisms and (iv) development of private debt and equity markets.

Withdrawal of support

The withdrawal of government credit guarantees and subsidies needs to be carried out gradually, with loan foreclosures ideally targeting structurally weak firms. Where countries have sufficient fiscal space, continued business support should be fine-tuned to ensure that only solvent and viable firms with temporary liquidity problems receive financial assistance. If risks are not properly priced, zombification will continue to pose risks to financial stability, as well as the outlook for growth in the medium term. After all, if zombie firms' viability is challenged further (for instance, in the event of a weak recovery, faster-than-expected interest rate hikes or an unbalanced withdrawal of policy support), creditors will be left exposed.

Banking supervision

Banking supervisors can support the economic recovery in three main ways. First, they need to ensure that banks provision adequately for losses as it becomes clearer which borrowers are viable and which are not. This will require banks to continually assess the risks associated with their loans and identify borrowers that are experiencing financial difficulties at an early stage. In order to incentivise the early resolution of financial distress, policymakers can introduce statutory frameworks that support hybrid or out-of-court financial restructuring outside of a full court-based insolvency process, thereby enabling banks and firms to apply faster and more cost-efficient solutions that are less damaging to the reputation of the borrower in question.²⁸ This will allow banks to find appropriate solutions in a timely manner and create a sufficient capital buffer to protect against unexpected losses.

Second, banks need to have sufficient capacity to monitor the financial health of borrowers and make greater use of expert judgement to identify firms in financial distress. For instance, large-scale on-site inspections of the credit portfolios of several Portuguese banks in 2012 and 2013 made it less likely that those banks would refinance zombie firms, with the banks immediately triggering those firms' default instead.²⁹

Third, banks can establish dedicated workout units to resolve distressed loans – which should be independent of loan origination activities, as recommended by the European Banking Authority (EBA).³⁰ This can prevent conflicts of interest between the team that originates loans and the team that is engaged in corporate recovery. Staff and management involved in workout activities should be given clear individual or team goals and incentives as part of an operational plan geared towards achieving an agreed target of reducing exposure to distressed borrowers. Having a dedicated workout unit can also ensure that the resolution of NPLs is handled by expert staff with specialist skills. Banks should take account of the specificities of their exposure to distressed borrowers (retail, SMEs or larger firms) and the particular types of collateral held when creating such workout units. Where overlaps between workout units and loan origination teams are unavoidable, a bank's internal controls should ensure that any potential conflicts of interest are sufficiently mitigated.

Reforms to insolvency frameworks

Efficient insolvency frameworks can reduce undercapitalised banks' incentives to evergreen loans, making insolvency reform a key complement to capital requirements, banking supervision and the reduction of NPLs. For example, when China introduced specialist courts for insolvency procedures, it reduced the duration of such proceedings by 36 per cent relative to traditional civil courts (thanks to better-trained judges and greater judicial independence from politicians) and helped to reallocate labour and capital away from zombie firms.³¹

Measures to improve the efficiency of insolvency procedures include electronic filing and case management systems, virtual court hearings and creditors' meetings, and out-of-court or hybrid solutions.³² All economies in the EBRD regions allow for court-supervised reorganisation, but hybrid procedures where part of the process is conducted out-of-court are only available in half of them, and private workouts (consensual financial restructuring based on contracts) are not common.³³ In private workouts, debtors and major financial creditors negotiate directly. In a hybrid approach, similar negotiations take place, but the court typically confirms any majority creditor agreement and a court order ensures that such an agreement is binding on all creditors. Out-of-court and hybrid approaches are a key feature of the insolvency landscape in developed markets and can also be particularly beneficial in countries with limited fiscal space and less effective insolvency systems.³⁴

Within the European Union, further harmonisation of insolvency frameworks (as foreseen under the action plan for the capital markets union) and restructuring schemes have the potential to be of great benefit. For instance, the EU directive on preventive restructuring frameworks offers the possibility of implementing hybrid or out-of-court debt restructuring in order to prevent a “hold-out” creditor or class of creditors from blocking a reasonable restructuring plan, subject to certain protections.

It is important to note, however, that insolvency legislation and efficient restructuring are not, on their own, sufficient to prevent lending to zombie firms. For example, the new insolvency law that was introduced in India in 2016 had a limited impact on lending to such firms because of the prevalence of poorly capitalised and state-owned banks.³⁵ As this chapter has found, state-owned banks are more likely than privately owned banks to engage in lending to financially vulnerable firms and zombies, especially if those firms are themselves state-owned. The removal of moratoria on debt enforcement and insolvency for state-owned firms, and the use of insolvency procedures for insolvent state-owned enterprises, are therefore essential in order to improve the governance of those firms in the longer term.

²⁸ See EBRD (2022).

²⁹ See Bonfim et al. (2022).

³⁰ See EBA (2018).

³¹ See Li and Ponticelli (2022).

³² See Helmersson et al. (2021) and EBRD (2022).

³³ See EBRD (2022).

³⁴ See Araujo et al. (2022).

³⁵ See Kulkarni et al. (2021).

Development of private debt and equity markets

A more efficient insolvency framework will enable all types of creditor – not just banks – to monitor their exposures closely and, where necessary, take steps to wind up distressed borrowers or support a formal restructuring of their debts. One emerging source of credit is private debt provided by global private debt funds. Importantly, private debt funds not only have the necessary experience of working with firms in financial distress and providing equity, they also have lower coordination costs and more institutional flexibility than banks when it comes to restructuring the debt of a struggling borrower. Indeed, private debt funds are dependent on the ability to restructure, as they target riskier borrowers in exchange for higher returns. Evidence shows that making greater use of private debt markets can help to curb lending to zombie firms when coupled with better-functioning insolvency regimes.³⁶

Banks' balance sheets need to remain well capitalised in order to help fund a strong economic recovery. To this end, contingency planning may include the use of credit-servicing companies to support the resolution of NPLs. Debt restructuring schemes that make use of the informational advantages and skills of investors in distressed debt can be particularly beneficial. Such investors may be more motivated than banks to turn a distressed business around and sell it as a going concern, rather than liquidating it on a piecemeal basis.

While many businesses have burned through their equity in a bid to survive the Covid-19 pandemic, government support has focused heavily on liquidity support via loans. As loan support schemes and credit guarantees are phased out, they may need to be complemented or replaced with measures that promote the use of equity or equity-like instruments (such as debt-for-equity swaps in jurisdictions where insolvency law permits it). This can help to reduce the debt burden on businesses that are already overleveraged but otherwise viable, while giving a bank creditor a potential future upside if the business is successfully restructured. Equity injections can also help where companies that are on the verge of becoming zombie firms require costly restructuring and fresh resources in order to turn them around.

BOX 4.1.

Insolvency and debt restructuring during the pandemic

In May 2022, the EBRD's Legal Transition Programme completed a survey of the emergency insolvency, banking and tax regulations that had been adopted by countries across the EBRD regions, as well as Belarus and Russia, in response to the Covid-19 pandemic (see Box 4.2 for an overview of insolvency regimes in those regions). The survey found that, overall, emergency banking and tax regulations were much more common than emergency insolvency measures. Thirty-three of the 35 EBRD economies surveyed adopted emergency banking regulations and tax relief measures, but only 18 of them introduced emergency insolvency measures. Common emergency tax measures included temporary tax relief and discounts (particularly for micro-firms and SMEs), the relaxation of real estate taxes and the acceleration of tax refunds. Of the 33 EBRD economies that introduced emergency banking regulations, 26 adopted forbearance measures. However, in some countries (Croatia, Georgia, Jordan, Moldova, North Macedonia and Poland), as well as in Belarus, compliance with emergency banking regulations was either partly or completely voluntary.

The use of banking regulations to introduce forbearance measures was an important indirect means of preventing mass insolvencies, with such measures including full or partial relief from the repayment of loan principal and capitalisation of interest. Adapting banking regulations in order to provide relief to borrowers was, in many countries, faster than amending insolvency legislation through a formal parliamentary process, with many changes to national banking rules coming in March and April 2020 in the early stages of the pandemic.

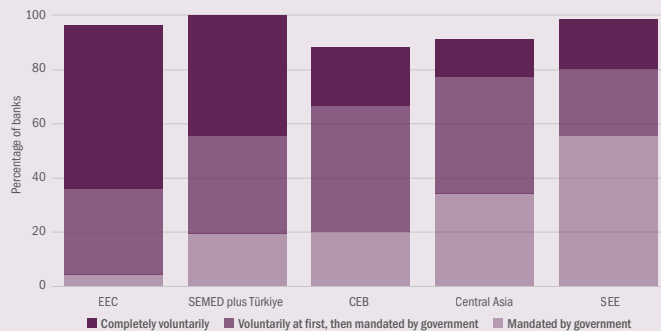
Data from the recent BEPS III survey show that almost all respondent banks (98 per cent) allowed at least some existing SME clients to temporarily defer repayment in response to Covid-19. More than 65 per cent of banks implemented such measures voluntarily – either completely voluntarily, or

³⁶ See Becker and Ivashina (2022).

voluntarily in the first instance before deferrals were mandated by the government. Another 27 per cent of surveyed banks reported that the temporary deferral of repayment had been imposed on them by the government (see Chart 4.1.1).

Respondents in countries that did not introduce emergency insolvency measures indicated either that insolvency was not a priority for policymakers or that the legislative process was inefficient. Countries reacted at different speeds to the Covid-19 pandemic: the Czech Republic, Türkiye and Uzbekistan were relatively quick to respond, adopting emergency insolvency legislation in March and April 2020, whereas Armenia and Ukraine did not complete that process until the fourth quarter of 2020. In May 2022, emergency insolvency legislation was still in force in Armenia, Belarus, the Czech Republic, Hungary, Latvia, Lithuania, Poland and Romania, showing the lingering effects of the pandemic.

CHART 4.1.1. Almost all banks gave existing SME clients some form of temporary repayment holiday in response to Covid-19



SOURCE: BEPS III.

A few countries, such as Hungary and Poland, made substantial changes to insolvency legislation as part of their emergency measures. Poland, for example, introduced a new simplified procedure for the reorganisation of businesses, which proved to be highly popular. Of the 18 countries that adopted emergency bankruptcy legislation of some kind, eight (Lithuania, North Macedonia, Romania, Russia, the Slovak Republic, Slovenia, Ukraine and Uzbekistan) imposed temporary bans preventing creditors from filing for a debtor's insolvency, while seven (the Czech Republic, Latvia, Lithuania, Poland, Romania, Russia and Slovenia) suspended the debtor's obligation to file for insolvency. In many other countries, such suspensions were not necessary, since – unlike in western Europe – firms' directors did not have a statutory duty to file for insolvency.

In some countries, court closures removed the need to legislate for temporary restrictions on the insolvency of creditors (or relax directors' statutory obligation to file for insolvency in countries where this was applicable). Court closures were seen in 25 of the surveyed economies. In 20 countries, this was a direct legal requirement, but in five economies (Albania, Bosnia and Herzegovina, Kazakhstan, the Kyrgyz Republic and Mongolia) court closures were an indirect result of other social distancing measures or stemmed from the relevant court exercising its discretion to close its courtrooms or postpone hearings. In economies where this was a legal requirement, the average length of such a suspension was two months. However, the duration of court closures varied considerably, and in Greece the suspension of courts' operations lasted a full 16 months. In some countries (such as the Slovak Republic and Slovenia) courts were able to hear urgent matters on an exceptional basis, despite the closure.

Seventy-four per cent of all banks surveyed in the context of BEPS III (which covered all of the EBRD regions, plus Belarus and Russia) reported that courts' enforcement of debt recovery had been negatively affected by their temporary closure or suspension, or the increased delays to court proceedings. Of those banks, almost a quarter indicated that the temporary closure or suspension of courts had a very negative or extremely negative effect on their ability to recover pledged assets.

BOX 4.2.

Insolvency regimes across the EBRD regions

A country's insolvency regime – the legal framework that deals with the solvency of businesses and individuals – needs to function well if it is to contribute to a resilient and sustainable financial system. Effective and efficient insolvency procedures not only help firms to access credit and invest in new projects, they also make it easier to deal with NPLs when firms can no longer repay their outstanding debts.

Given the economic importance of insolvency regimes, the EBRD's Legal Transition Programme recently carried out an in-depth assessment of those frameworks in a wide range of economies across the EBRD regions, plus Belarus and Russia. That assessment measured the availability, effectiveness and extensiveness of national insolvency procedures aimed at reorganising insolvent or financially distressed businesses. It covered all of the main measures that could be used to rescue a business, including temporary moratoria on creditor action (to provide breathing space for restructuring negotiations) and "cram down" provisions (which bind a dissenting minority of creditors to a plan that has majority creditor and/or court approval). The assessment reviewed national legislation and practices using a questionnaire that was circulated to law firms, banks and judicial representatives between September and November 2020.³⁷ A total of 457 respondents completed that questionnaire.³⁸

On the basis of this information, countries were scored on a scale of 0 to 100, focusing on five specific areas of interest: a country's general approach to the reorganisation of businesses; the planning and initial stages of the reorganisation procedure; the reorganisation plan; the approval phase of the reorganisation; and other relevant aspects. Countries also received a data transparency bonus of up to 10 points for publishing clear and comprehensive data on insolvency proceedings in general (including business reorganisation proceedings). Thus, the total assessment score had a possible range of 0 to 110.

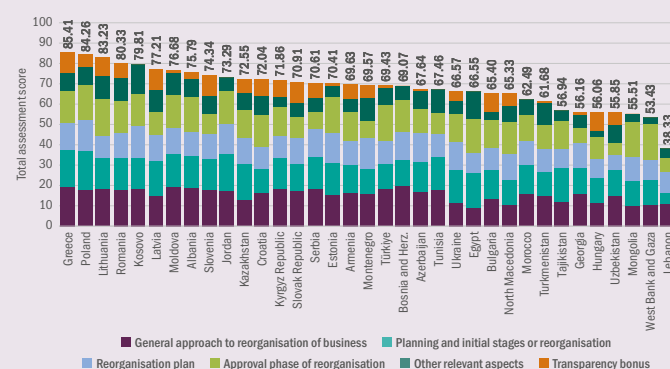
First and foremost, the assessment showed that most EBRD economies still need stronger insolvency frameworks when it comes to the reorganisation of businesses. On a scale of 0 to 110, those economies only averaged 64 in terms of the

strength of their legal, institutional and regulatory frameworks for the rescue of businesses, with scores ranging from 85 in Greece to just 38 in Lebanon (see Chart 4.2.1). Poland, Lithuania, Romania and Kosovo were the other top performers in terms of overall scores.

Second, the assessment reveals a significant data gap when it comes to insolvency. Only six of the economies covered by the assessment (Belarus, Greece, Latvia, Russia, the Slovak Republic and Slovenia) currently have a centralised electronic insolvency register. Much of the insolvency data collected in other countries is incomplete or out of date, which tends to reduce transparency for creditors, debtors and other stakeholders. The recent EU directive on preventive restructuring frameworks requires EU member states to collect certain insolvency data in the future and will help to narrow that data gap in those countries.³⁹

Third, many countries have not invested sufficiently in insolvency regulation. In the majority of EBRD economies, a government ministry (usually the ministry of justice) oversees the insolvency framework. There are only five countries with a dedicated state

CHART 4.2.1. The quality of business reorganisation varies across economies



SOURCE: EBRD (2022).

NOTE: Total assessment scores are on a scale of 0 to 110.

³⁷ See www.ebrd-restructuring.com (last accessed on 26 September 2022).

³⁸ For details, see EBRD (2022), Annex 1.

³⁹ Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

agency or government department responsible for insolvency (Albania, the Kyrgyz Republic, Latvia, Serbia and Uzbekistan). Moreover, commercial insolvency proceedings are often overseen by general civil courts, which limits the development of judicial expertise in this highly specialist area. Only 16 of the economies covered by the assessment have commercial courts or departments specialising in insolvency cases, with Armenia the only country to have a dedicated insolvency court.

Fourth, in some economies secured creditors do not participate fully in national insolvency procedures aimed at reorganising businesses. In 18 economies, there is at least one reorganisation procedure where secured creditors are not fully bound by the procedure, often because they retain certain veto rights. In eight of those economies – Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, Egypt, Estonia, North Macedonia, and the West Bank and Gaza – secured creditors are prevented from participating in some (but not all) reorganisation procedures, being required to either relinquish their security to vote on a reorganisation plan or restrict their participation and voting on a plan to the unsecured portion of their claims. And in three economies – the Kyrgyz Republic, Lebanon and Turkmenistan – that restriction applies to *all* reorganisation procedures. This can jeopardise a successful outcome, since secured creditors are not signatories to the reorganisation plan and can enforce their security following the expiry of any statutory moratorium or stay on creditor action.

Fifth, while insolvency procedures aimed at reorganising businesses should be efficient and time limited to improve the chances of a successful outcome, respondents completing the questionnaire reported long average durations. While stakeholders in Estonia, Latvia, Lithuania, Jordan and Romania reported average durations of three to six months, proceedings tend to last more than a year in Bosnia and Herzegovina, Croatia, Georgia, the Kyrgyz Republic, Morocco, Tunisia and Türkiye. Furthermore, there is also a general perception that business reorganisation can be misused in order to delay inevitable liquidation-type procedures. In most jurisdictions, the court will order a statutory moratorium or stay, preventing any new or ongoing proceedings or actions by creditors against the debtor business from going ahead for the duration of the procedure, in order to support any reorganisation of the business. Thus, long average durations can significantly affect creditors' rights and recoveries.

**ONLY
16
OF THE ECONOMIES
COVERED BY THE
ASSESSMENT HAVE
COMMERCIAL COURTS
OR DEPARTMENTS
SPECIALISING IN
INSOLVENCY CASES**

**MOST EBRD ECONOMIES
STILL NEED STRONGER
INSOLVENCY FRAMEWORKS
WHEN IT COMES TO THE
REORGANISATION OF
BUSINESSES**

BOX 4.3.

Government support, corporate debt and business challenges during the pandemic

The outbreak of Covid-19 and the resulting economic hardship faced by individuals and businesses across the EBRD regions prompted extensive government support. Much of the assistance that governments provided to firms took the form of financial support (especially grants and loans with flexible terms). While these measures helped to protect jobs and livelihoods, they also created challenges as regards corporate indebtedness.

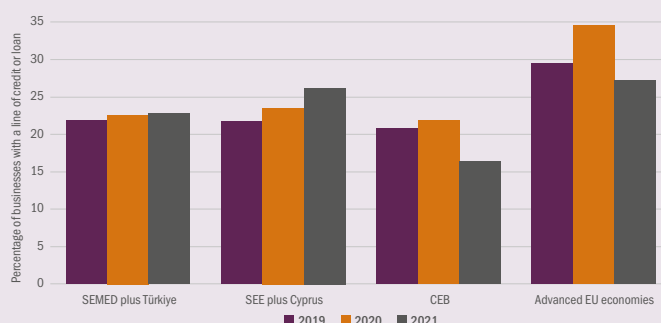
Effects and perceptions of government support measures

Since February 2016, Meta has been working with the OECD and the World Bank to administer surveys to SMEs, targeting firms that have an active business page on Facebook. These Future of Business Surveys offer unique insights into the challenges that smaller businesses have faced during the pandemic, with questions covering topics such as employment, government support and financial assistance. The project began as a monthly survey spanning 17 countries, before expanding to 42 countries in 2018. In 2019 it expanded again, covering 97 countries, but switched to a biannual basis. In 2020 additional monthly survey waves were conducted as questions shifted to issues relating to Covid-19. Overall, SMEs in 29 countries across the EBRD regions have been surveyed.

In their survey responses, firms pointed to the need for social security exemptions, tax deferrals and salary subsidies. Nearly a quarter of respondent firms in the EBRD regions reported that they needed access to loans and credit guarantees, while almost 20 per cent of businesses (including 40 per cent of firms in Türkiye) cited a need to defer loan repayments.

By March 2022, 29 per cent of the small firms surveyed had received government support in response to the pandemic: 15 per cent had received non-repayable grants or subsidies, while almost 10 per cent had received extra credit or been granted payment deferrals as part of government programmes. Government interventions had often made it much easier for SMEs to obtain bank credit, with the percentage of businesses with bank loans rising by a third between December 2019 and May 2020. In August 2020, the percentage of businesses with loans from financial institutions peaked at 29 per cent. That 2020 spike in access to credit was driven largely by firms in the southern and eastern Mediterranean (SEMED) and Türkiye, where levels of access to finance approached the levels seen in advanced EU economies.

CHART 4.3.1. The percentage of businesses with access to credit increased in 2020



SOURCE: Meta Future of Business Survey.

NOTE: The group of advanced EU economies comprises Austria, France, Germany, Italy, Portugal and Spain.

In central Europe and the Baltic states (CEB) and advanced EU economies, the impact of government support packages was relatively short-lived, however (see Chart 4.3.1). After increasing markedly in 2020, the percentage of SMEs with a bank loan was back to – or even below – pre-pandemic levels by 2021, with government programmes in those regions mainly acting as short-term bridge financing to help firms weather the initial period of social distancing. Once that period had passed, many businesses started paying back business support loans. By the end of March 2022, over 85 per cent of borrowers under the United Kingdom's Covid-19 loan guarantee schemes were making monthly repayments as scheduled or had fully repaid the relevant loans.⁴⁰

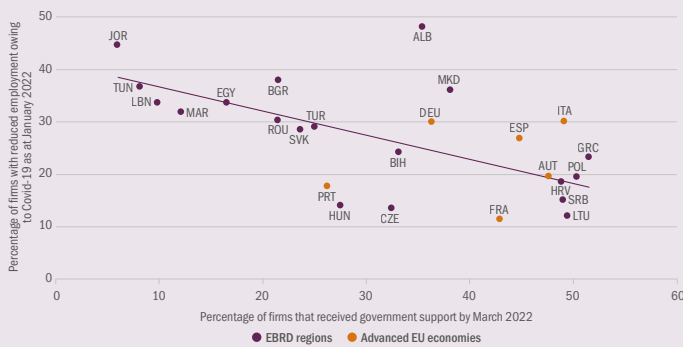
Overall, national policies targeting SMEs' access to funding appear to have been effective in preventing declines in employment: in economies where larger percentages of firms received government support (according to the survey), fewer firms had to make staff redundant (see Chart 4.3.2). In Lithuania and Poland, for instance, as many as half of all businesses surveyed received government support in response to the pandemic, and no more than 14 per cent of firms had to lay off staff. This effect is even stronger where government support was in the form of extra credit or temporary deferral of payment. In advanced EU economies, government support measures were similarly essential in providing liquidity to businesses and stabilising the economy.⁴¹

While more flexible lending dampened negative employment shocks during the pandemic, the overindebtedness of some firms is posing its own challenges. A firm-level phone survey that was conducted by the EBRD in 15 economies in the EBRD

⁴⁰ See "Covid-19 loan guarantee repayment data as at 31 March 2022". Available at <https://www.gov.uk/government/publications/covid-19-loan-guarantee-schemes-repayment-data/covid-19-loan-guarantee-schemes-repayment-data-as-at-31-march-2022> (last accessed on 26 September 2022).

⁴¹ See Cœuré (2021) for France, Tielens et al. (2021) for Belgium, and ESRB (2021) for the EU as a whole.

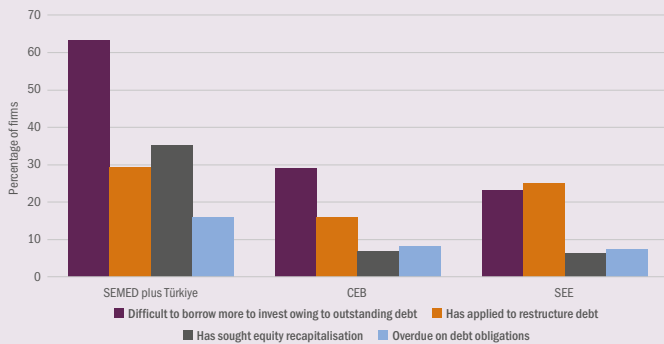
CHART 4.3.2. Government support for SMEs helped to prevent job losses during the pandemic



SOURCE: Meta Future of Business Survey.

NOTE: Where countries do not have data as at January 2022, values relate to December 2020.

CHART 4.3.3. Outstanding debt is weighing on new investment plans



SOURCE: EBRD survey of more than 800 firms conducted in May and June 2022.

regions in May and June 2022 (see Box 3.3) indicated that many businesses were struggling with their debt obligations. Over a third of respondents reported that their outstanding debt had made it difficult to borrow more to finance new investment. A total of 63 per cent of firms in the SEMED region and Türkiye reported that new investment was being restricted (see Chart 4.3.3), compared with around 25 per cent in central Europe and south-eastern Europe (SEE).

Businesses had coped with financial hardship caused by the pandemic in a variety of ways – for example, by applying to restructure their liabilities (20 per cent of firms) or seeking equity recapitalisation (10 per cent of firms). In addition, 10 per cent of the firms surveyed were behind on their repayments to financial institutions.

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FOLLOWING THE OUTBREAK
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ALMOST
20%
OF BUSINESSES CITED
A NEED TO DEFER LOAN
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THE OUTBREAK OF COVID-19

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