4 Industrial policies supporting firms

Young firms in the EBRD regions often struggle to scale up their operations and transform into larger, more productive enterprises. This chapter analyses the growth dynamics of such firms, revealing that many promising young businesses experience a slowdown in growth when they become SMEs. The inability to grow fast enough hinders their transformation into large firms, and it is large firms which drive job reallocation and innovation. These findings suggest that targeted government interventions tailored to firms' age and growth potential can effectively promote growth among promising young businesses. Proper targeting is important in this regard, as direct state assistance often lacks differentiation – a problem that is prevalent in both the EBRD regions and advanced economies.

Introduction

In the economies where the EBRD invests, young firms – defined as those that are five years old or less – often struggle to scale up their operations and transform into larger, more productive and more innovative enterprises. Despite their dynamism and resilience during crises, many promising young firms in the EBRD regions experience a slowdown in growth when they cease to be micro-enterprises and become SMEs. After achieving SME status, a significant number of those firms continue to operate on a relatively small scale compared with their counterparts in more advanced economies.

The inability of young firms to grow fast enough can hinder their transformation into large firms, which tend to be more productive and innovative. Larger firms (especially those with over 100 employees) are the primary drivers of job reallocation (both job creation and job destruction) in the EBRD regions. Those larger firms often pay better wages, attract workers from smaller companies during crises and benefit from economies of scale. Moreover, the presence of large firms – particularly "superstar" firms whose markups are above the average for their industries (exporting domestic firms or multinationals, for instance) – can generate positive spillover effects at a local level, such as productivity increases in firms that supply to large firms entering a new market.[1]

Over the past two decades, EBRD economies have made greater use of direct state assistance when seeking to address the challenges faced by young firms (although the overall level of such assistance remains low compared with more advanced economies). This chapter reveals that direct state assistance often lacks differentiation and targets firms indiscriminately – a problem that is not unique to EBRD economies and is also prevalent in more economically advanced regions. Countries could benefit from making their industrial policies more targeted, addressing the specific challenges faced by young firms and designing interventions that support their growth and scaling-up processes.

Larger firms – especially those with

100+ EMPLOYEES

– are the primary drivers of job reallocation (both job creation and job destruction) in the EBRD regions

The business landscape in the EBRD regions

This section documents key stylised facts about firms in the EBRD regions using four data sources. First, Bureau van Dijk's global Orbis database provides granular financial information and balance sheet data for more than 1.8 million firms in selected EBRD economies and Portugal from 2016 to 2021. Analysis that is based on this dataset focuses on seven EBRD economies in "emerging Europe" (Bosnia and Herzegovina, Croatia, Czechia, Hungary, Lithuania, Romania and Serbia), plus Portugal as a comparator. Those countries were selected on the basis of two criteria: filing with national business registries had to be mandatory, and data had to be representative at the national level.[2] While Orbis is one of the most granular sources of firm-level microdata, allowing in-depth analysis, its coverage is only comprehensive for a specific set of countries and it is less reliable for tracking firms' entries and exits. This limitation should be borne in mind when interpreting the results.

The second dataset used is the EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS), which has covered more than 50,000 firms across 44 countries over 14 years, offering insights into firms' financial situations, innovation practices and business obstacles. While this is a survey-based dataset and only covers a subsample of the firm population, it provides novel insights into innovation practices, business obstacles and other aspects of firms' circumstances that are otherwise difficult to observe.

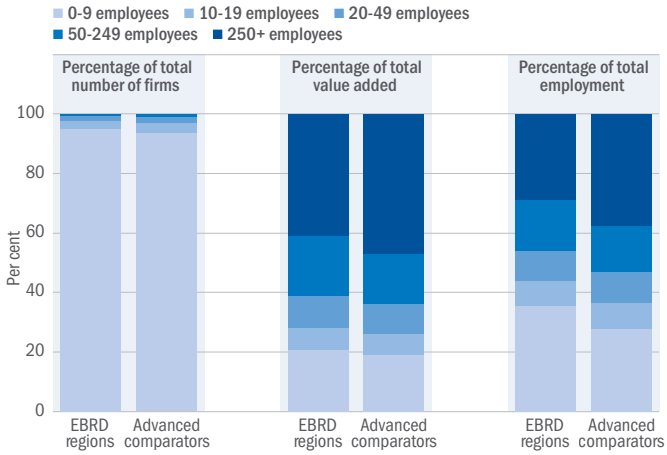
Third, Eurostat's Structural Business Statistics (SBS) contain official aggregate data for all EU member states over time. Although Eurostat provides high-quality statistics, these data are only available at an aggregate level and are limited to EU countries.

The fourth dataset, Worldscope, is a comprehensive financial database that provides detailed and standardised financial information on publicly listed companies worldwide. Worldscope is used to describe "superstar" firms in the EBRD regions and compare them with their peers in other emerging market economies.

[1] See Amiti et al. (2023).

[2] Representativeness was validated using the methodology employed by Kalemli-Ozcan et al. (2024).

CHART 4.1. Smaller firms dominate in terms of numbers, but larger firms contribute more to aggregate output and employment



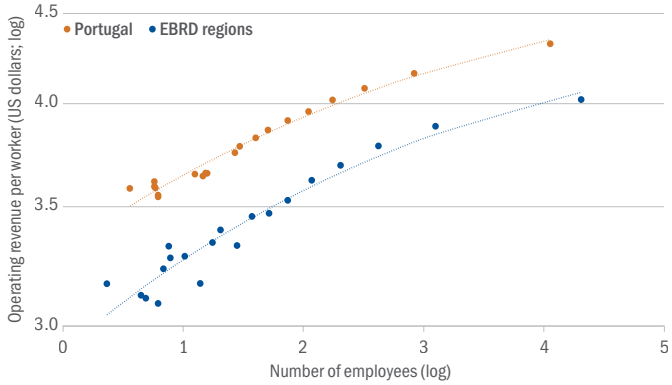
Source: Eurostat's SBS database (2021).

Note: The sample comprises firms in the manufacturing and service sectors. Data for the EBRD regions cover Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Greece, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Serbia, the Slovak Republic and Slovenia. The advanced comparators are Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Malta, the Netherlands, Norway, Spain and Sweden.

SMEs are abundant, but large firms contribute more to aggregate output

Chart 4.1 reveals two key insights about the breakdown of firms by size in the EBRD regions and advanced comparator economies. First, firms with fewer than 250 employees make up the majority of businesses, accounting for more than 99 per cent of all firms in the EBRD regions and more advanced European economies (see left-hand panel). Micro-firms (those with nine employees or fewer) make up a slightly larger share of the business landscape in the EBRD regions, accounting for almost 95 per cent of all firms, compared with just over 93 per cent in more advanced comparator economies. Second, despite being small in number, firms with 250 employees or more are the primary contributors to aggregate economic activity. In terms of value added, those larger firms generate almost 41 per cent of total output in the EBRD regions and 47 per cent in comparator economies (see central panel). In terms of employment, they account for 29 per cent of aggregate employment in the EBRD regions and 38 per cent in comparator economies (see right-hand panel), with similar figures being observed in the United States of America.[3] In short, while smaller firms dominate in terms of numbers, larger firms play a bigger role when it comes to driving economic output and employment, both in the EBRD regions and in more advanced economies.

CHART 4.2. Large firms tend to be more productive



Source: Bureau van Dijk's Orbis database (2016-21).

Note: This binned scatter plot shows the relationship between the log of operating revenue per worker and the log of the number of employees, accounting for country and year fixed effects, as well as a dummy for being in manufacturing. Data cover corporate, individually owned and family-owned firms. They do not cover the financial sector, the education sector, public administrations, the health and social care sector, international organisations or the production of goods for own use. Data for the EBRD regions cover Bosnia and Herzegovina, Croatia, Czechia, Hungary, Lithuania, Romania and Serbia.

Large firms tend to be more productive

Large firms are important not only for their contribution to total output and employment, but also because of their more efficient production processes. Chart 4.2 illustrates this relationship using Orbis data for emerging Europe and Portugal, looking at how output per worker changes with firm size. In both emerging Europe and Portugal, there is a positive and statistically significant correlation between the log of operating revenue per worker and the log of the number of employees, accounting for country and year fixed effects, as well as a manufacturing sector indicator.[4] This indicates that larger firms tend to be more productive than smaller ones, with a 1 per cent increase in the number of employees being associated with a 0.25 per cent increase in operating revenue per worker. While the correlations for emerging Europe and Portugal are almost identical, there is a level difference between the two in terms of productivity. The data show that even the most productive large firms in emerging Europe lag behind counterparts of equal size in Portugal in terms of productivity. This may suggest the presence of distortions that affect firms' productivity across the size distribution.[5]

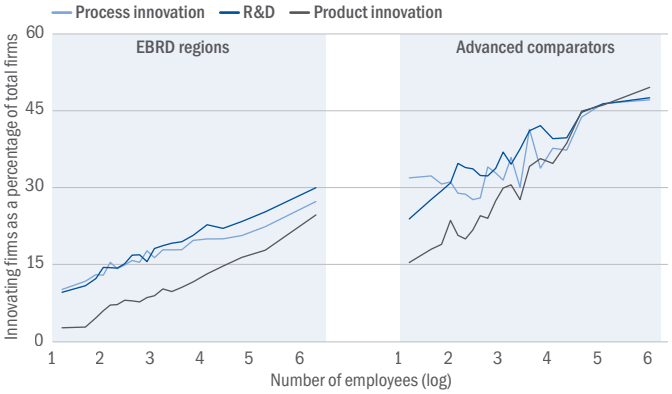
[3] See Guner et al. (2008).
[4] While the log of operating revenue per worker is just a proxy for productivity, this is the best metric available given the data. Ayerst et al. (2024) use this measure instead of value added per worker because material costs are not reported comprehensively in Orbis.
[5] See Hsieh and Klenow (2009).

Larger firms are often more productive for a variety of reasons.[6] First, they can exploit economies of scale and spread costs over larger amounts of output, resulting in lower average costs per unit of production. Second, better managerial practices are associated with higher levels of productivity: since larger firms attract top managers, their productivity can also be explained by their superior managerial practices.[7] More generally, larger firms are able to pay higher wages and are therefore able to attract and retain more skilled workers, which in turn increases their productivity. Third, larger firms can take advantage of a more specialised labour force, which can increase efficiency and productivity.[8] Lastly, larger firms tend to invest more in R&D and are more likely to adopt advanced technologies, which make production processes more productive and efficient (as the next section will show).

Large firms also tend to be more innovative

One reason why larger firms tend to be more productive is that they are also more likely to innovate than smaller firms. Chart 4.3 uses BEEPS data to show the correlations between three different measures of innovation and the log of the number of employees, demonstrating that larger firms are more likely to have (i) improved a production process, (ii) spent money on R&D and (iii) introduced a new product to their market. All in all, a 1 per cent increase in the number of employees is associated with a 4 per cent increase in the number of innovating firms. This positive correlation between firm size and different types of corporate innovation can be seen in both the EBRD regions and more advanced economies.

CHART 4.3. Larger firms tend to innovate more than smaller firms



Source: BEEPS III-VI (unweighted averages).

Note: This binned scatter plot is based on the log of the number of employees plus (i) a dummy variable that is equal to 1 if the firm has improved a process or introduced a new one over the past three years, (ii) a dummy variable that is equal to 1 if the firm has incurred R&D expenses during the past fiscal year, and (iii) a dummy variable that is equal to 1 if the firm has introduced a new product to its market over the past three years. Regressions include country, year and sector fixed effects, plus controls for being an exporter and for having 50 per cent of shares owned by the state. Data for the EBRD regions cover all EBRD economies, while the advanced comparators are Austria, Belgium, Finland, France, Germany, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden.

[6] See Ciani et al. (2020) and Bertanzetti et al. (2024).
[7] See Bloom et al. (2013) for a study looking at India and Bloom et al. (2012) for a study covering EBRD economies.
[8] See Chaney and Ossa (2013).

Fresh ventures: young firms in the EBRD regions

Disentangling the roles played by firms' age and size may help to explain differences in the overall efficiency of the private sector.[9] Many studies have documented the role that young businesses play in job creation, emphasising the critical role of startups in the employment growth dynamics of rich countries,[10] emerging markets and developing economies.[11]

If promising new firms are to reap the benefits of operating at scale (such as increased productivity and innovation), they must scale up swiftly without internal or external constraints. This section looks at (i) whether young firms in the EBRD regions face more severe frictions than their counterparts in advanced economies, (ii) which frictions affect them most, and (iii) the importance of such firms for the generation of employment in the EBRD regions.

These questions are addressed using Orbis data for the period 2016-21, with firms classified on the basis of their age and size. "Young" firms are five years old or less, while "mature" firms are more than five years old. Firms are classified on the basis of size using the following commonly applied criteria: "micro-firms" have nine employees or fewer; "SMEs" have between 10 and 99 employees; and "large" firms employ 100 people or more. Table 4.1 summarises this classification.

Job creation and destruction

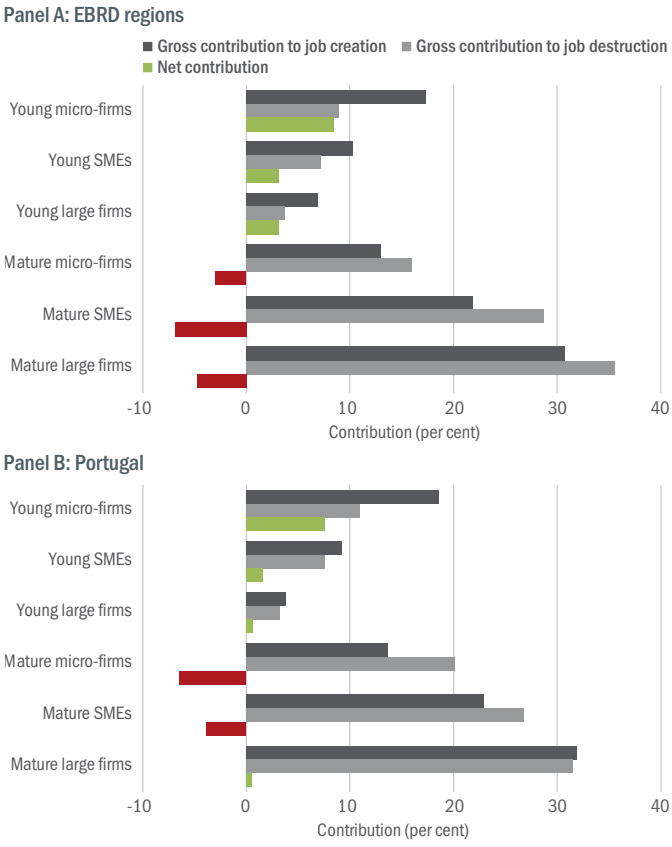
In the EBRD regions, mature firms contributed the most to gross job creation in the period 2016-21, but their net contribution was actually negative as a result of their high levels of job destruction (see Chart 4.4). Mature large firms made the greatest contribution to job reallocation, followed by mature SMEs and mature micro-firms. A similar pattern could be observed in Portugal, although mature SMEs made a small positive contribution to net job creation in that country. In both the EBRD regions and Portugal, young firms are more dynamic than mature firms and make the largest contributions to net job creation.

These results indicate that well-established SMEs and large firms contribute the most to job reallocation and reoptimisation, but their net contribution to job creation is negative or close to zero. In contrast, young firms of all sizes contribute positively to job creation, helping to increase employment. Importantly, this holds for both emerging Europe and Portugal.

TABLE 4.1. Firms are categorised by age and size

		Age in years	
		5 or less	**More than 5**
Number of employees	9 or fewer	Young micro-firms	Mature micro-firms
	10 to 99	Young SMEs	Mature SMEs
	100 or more	Young large firms	Mature large firms

CHART 4.4. Young firms contribute most to net job creation, while mature firms make the largest contribution to job reallocation



Source: Orbis database (2016-21).

Note: This chart shows gross and net contributions to job creation and job destruction for firms in different categories. Data are based on a balanced panel of corporate, individually owned and family-owned firms and do not cover the financial sector, the education sector, public administrations, the health and social care sector, international organisations or the production of goods for own use. Data for the EBRD regions cover Bosnia and Herzegovina, Croatia, Czechia, Hungary, Lithuania, Romania and Serbia.

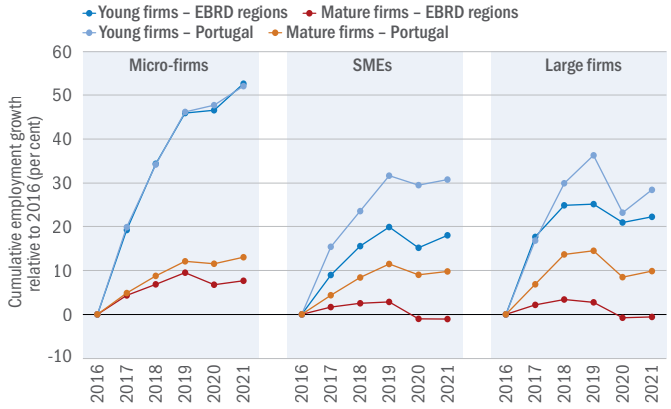
[9] See Criscuolo et al. (2014).
[10] See Haltiwanger et al. (2013) and Sterk et al. (2021).
[11] See Rijkers et al. (2014) and Ayyagari et al. (2014).

Young firms grow fast in terms of employment, but slow with age

Young firms tend to grow faster than mature firms. Chart 4.5 looks at a balanced panel of firms that were active in 2016 and remained so until 2021, plotting the cumulative employment growth rates of firms in the various categories over that period. The chart highlights two important findings. First, young micro-firms in the EBRD regions and Portugal grew by more than 50 per cent over the period 2016-21, with the two groups recording remarkably similar cumulative growth rates. In contrast, mature micro-firms grew at a much slower rate, with firms in the EBRD regions expanding by less than 10 per cent. Second, the data suggest that promising young firms in the EBRD regions encounter a ceiling that hinders their ability to scale up. While young SMEs in Portugal grew by 31 per cent over the review period, young SMEs in the EBRD regions grew by about half as much. This deviation in growth rates occurs relatively early in the five-year period analysed, indicating that these young firms were affected not only by the challenges of Covid-19, but also by other obstacles in their business environments.

One indication that younger firms may face constraints on their growth is their significantly higher average return to capital compared with mature large firms (see Chart 4.6). If younger firms were not facing constraints on their growth, their average return to capital would be comparable to that of firms that had grown in size over longer periods.[12] As Chart 4.6 shows, this is not the case. In fact, after accounting for sector, year and country fixed effects, young firms (of all sizes) exhibit significantly higher average returns to capital (measured as the log of the ratio of operating revenues to total assets) relative to mature large firms. This suggests that, both in the EBRD regions and (to a lesser extent) in comparator countries such as Portugal, there are potential gains to be reaped from reallocating more capital to younger firms.

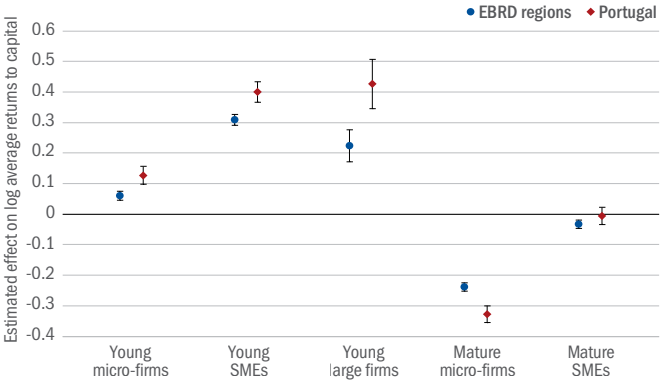
CHART 4.5. Promising young firms grow fast, but growth slows as soon as they become SMEs



Source: Orbis database (2016-21).

Note: The cumulative employment growth rate relative to 2016 is calculated as: $(E_t - E_{2016})/E_{2016}$. Data are based on a balanced panel of corporate, individually owned and family-owned firms and do not cover the financial sector, the education sector, public administrations, the health and social care sector, international organisations or the production of goods for own use. The firms in each sample do not change from year to year (that is to say, categories are based on firms' status in 2016). Data for the EBRD regions cover Bosnia and Herzegovina, Croatia, Czechia, Hungary, Lithuania, Romania and Serbia.

CHART 4.6. Young firms have higher returns to capital than mature firms



Source: Orbis database (2016-21).

Note: This chart shows the coefficients that are derived from the following regression:

$$\log\left(\frac{\text{Operating Revenues}}{\text{Total Assets}}\right) = \beta_1 \text{Young Micro} + \beta_2 \text{Young SME} + \beta_3 \text{Young Large} + \beta_4 \text{Old Micro} + \beta_5 \text{Old SME} + X'\gamma + \varepsilon$$

The excluded category is mature large firms. Data are based on a balanced panel of corporate, individually owned and family-owned firms and do not cover the financial sector, the education sector, public administrations, the health and social care sector, international organisations or the production of goods for own use. Data for the EBRD regions cover Bosnia and Herzegovina, Croatia, Czechia, Hungary, Lithuania, Romania and Serbia. The chart indicates 95 per cent confidence intervals.

[12] See Hsieh and Olken (2014) for a discussion on returns to capital among small and large firms.

Younger firms and mature firms face different challenges

The fact that young firms have higher returns to capital suggests that they are affected by frictions which slow their growth. Chart 4.7 looks at the nature of those challenges in EBRD economies using BEEPS data, indicating the percentages of young and mature firms that are affected by various types of business constraint.

The top three constraints overall in the EBRD regions are political instability, corruption and tax rates, with each affecting over a quarter of all firms. It is noticeable that young firms are more likely than mature firms to list corruption, unfair competition from the informal sector and inefficient courts as challenges. Meanwhile, mature firms are more likely than young firms to report that high tax rates, electricity-related issues and workforce skills are challenging. These differences suggest that young firms, which often need to apply for various types of licence, are particularly vulnerable to everyday corruption by public officials, as well as direct competition from informal competitors. In western European comparator countries, the equivalent figures for most of these constraints are substantially lower.

In the EBRD regions, mature micro-firms – the firms with the weakest growth – account for more than half of the total business landscape, whereas young micro-firms make up one-third of all firms (see Chart 4.8). Mature SMEs account for a further 12 per cent, young SMEs make up about 2 per cent, mature large firms account for approximately 1 per cent, and young large firms make up just 0.1 per cent. Given their importance for job creation, policies should focus on young firms, which make up a small percentage of total firms, but account for a larger share of total job creation.

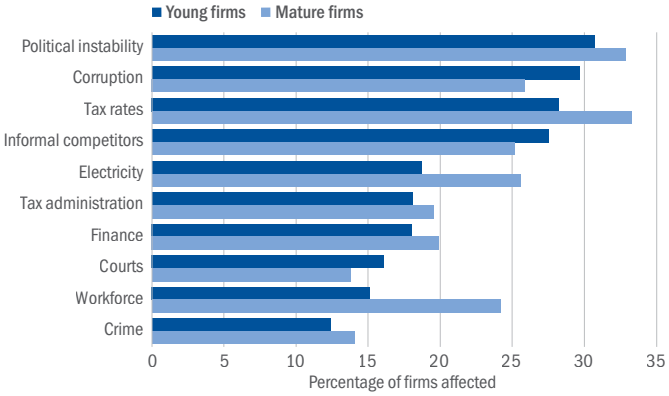
The average returns to capital of young micro-firms, SMEs and large firms are

10 TO 30

PERCENTAGE POINTS

higher than those of mature large firms

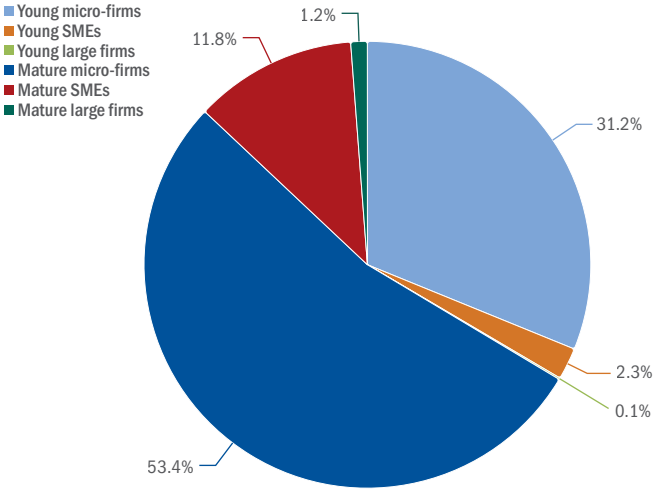
CHART 4.7. Corruption and informal competitors affect young firms more than older ones



Source: BEEPS III-VI and World Bank Enterprise Surveys (using the most recent survey year available for each country; unweighted averages).

Note: This chart indicates the percentages of young and mature firms in EBRD economies which report that the issue in question is a moderate, major or very severe obstacle to their operations. Data cover all EBRD economies with the exception of Turkmenistan.

CHART 4.8. Mature micro-firms far outnumber promising young firms in the EBRD regions



Source: Orbis database (2021 only).

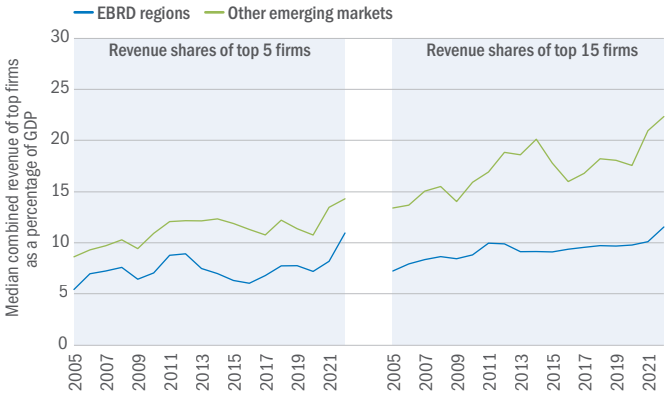
Note: This chart provides a breakdown of total firms in the economy by type of firm. Data are based on a balanced panel of corporate, individually owned and family-owned firms and do not cover the financial sector, the education sector, public administrations, the health and social care sector, international organisations or the production of goods for own use. Data cover Bosnia and Herzegovina, Croatia, Czechia, Hungary, Lithuania, Romania and Serbia.

The rise of "superstar" firms

As shown in the previous sections, while young firms make a disproportionate contribution to net employment growth, large firms are often more productive and innovative. In particular, in many countries, a small set of "superstar" firms are responsible for the bulk of domestic innovation and knowledge spillovers.[13] These are the firms with the largest revenue shares and the highest market values in their industries. Their markups and profit margins often outstrip those of their competitors, and they are at the forefront of innovation in their respective fields.[14] In economically advanced economies such as the United States, industry sales have increasingly become concentrated in a small number of firms in recent decades, fostering an environment where a few firms dominate their respective markets. A key question is whether such firms exist in the EBRD regions and whether EBRD economies differ from other emerging markets in this regard. In order to explore this phenomenon from the perspective of the EBRD regions, this section leverages a comprehensive dataset from Worldscope, analysing key indicators such as revenue shares and markups.[15]

The revenue shares of top 5 and top 15 firms have been growing in recent years, both in the EBRD regions and in other emerging markets (see Chart 4.9). In the EBRD regions, the median revenue share of top 15 firms increased from 5 per cent in 2005 to 11 per cent in 2022, while the median revenue share of top 15 firms in other emerging markets rose from 13 per cent in 2005 to 22 per cent in 2022. The rise of large firms brings both benefits and challenges, which have significant policy implications. On the one hand, large firms tend to be more productive and invest heavily in R&D, stimulating innovation. On the other hand, however, they operate as oligopolists, leading to increases in market concentration. This dominance creates barriers to the entry of new market participants, undermining the competitive environment that fosters dynamic economic activity. What is more, idiosyncratic shocks that affect those very large firms can spread throughout the entire economy, causing large aggregate shocks to GDP and impacting all firms.[16] These features of the growth of large firms have important policy implications. Policymakers should balance the benefits of large firms' innovation and productivity with the need to prevent excessive market concentration. When implementing industrial policies, the need for anti-trust regulations and support for SMEs should also be taken into consideration.

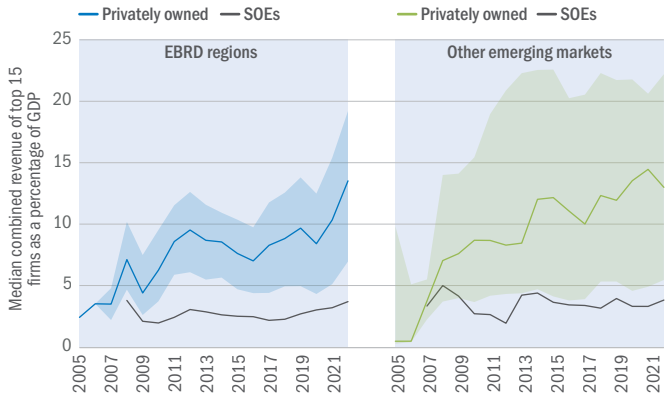
CHART 4.9. The revenue shares of large firms have grown in the EBRD regions, but less than in other emerging markets



Source: Yan (2024), Worldscope and authors' calculations.

Note: This chart is based on firm-level information on publicly listed firms in Worldscope. Top firms were identified on the basis of their revenue. For the EBRD regions, median revenue shares were calculated across five economies (Bulgaria, Morocco, Poland, Romania and Türkiye) for top 15 firms and across seven economies (the same five, plus Hungary and Ukraine) for top 5 firms. For other emerging markets, they were calculated across 15 economies (Argentina, Bangladesh, Brazil, Chile, China, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, the Philippines, Russia, South Africa and Thailand) for top 15 firms and across 16 economies (the same 15, plus Colombia) for top 5 firms.

CHART 4.10. The increase in the revenue share of the largest firms has been driven mostly by private companies



Source: Yan (2024), Worldscope and authors' calculations.

Note: This chart is based on firm-level information on publicly listed firms in Worldscope. Top firms were identified on the basis of their revenue. For the EBRD regions, median revenue shares were calculated across five economies (Bulgaria, Morocco, Poland, Romania and Türkiye); for other emerging markets, they were calculated across 15 economies (Argentina, Bangladesh, Brazil, Chile, China, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, the Philippines, Russia, South Africa and Thailand). Shaded areas show the interquartile ranges for privately owned enterprises.

[13] See Amiti et al. (2024).

[14] See, for instance, Autor et al. (2020) and De Loecker et al. (2020).

[15] Firm markups are estimated on the basis of optimal cost minimisation decisions using balance sheet data and a production approach in line with De Loecker and Warzynski (2012). By estimating a translog production function with non-parametric functions and employing a generalised method of moments (GMM) approach, we obtain the firm-level time-varying output elasticities of variable inputs. The markup is then estimated as the ratio of (i) the output elasticity of the variable input to (ii) expenditure on the input as a share of total sales. This method provides estimates of firm-level markups without specifying how firms compete in the product market.

[16] See Gabaix (2011).

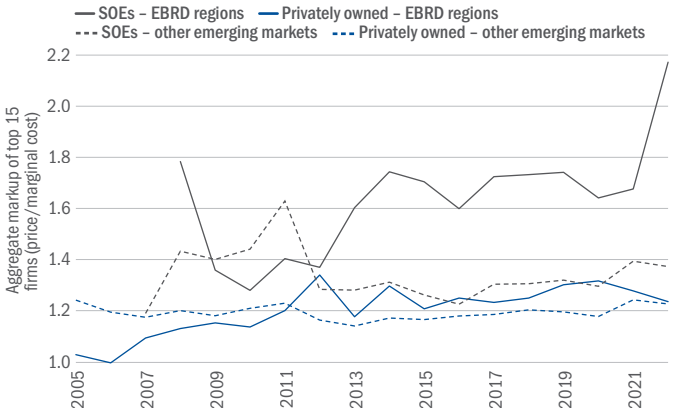
Looking at the ultimate owners of publicly listed firms in emerging markets, we can see that the increase in the aggregate revenue share of top firms has been driven mostly by privately owned enterprises, while the revenue share of state-owned enterprises (SOEs) has been relatively stable (see Chart 4.10). This is true of both EBRD economies and other emerging markets, although the distribution of the revenue share of privately owned enterprises is broader in other emerging markets.

However, looking at firm markups, the aggregate markup for SOEs is still much higher than the equivalent figure for privately owned enterprises (see Chart 4.11). SOEs in the EBRD regions exhibit significantly higher markups than their counterparts in other emerging markets, while private firms' markups are similar across the two groups of economies. The significant increase seen in the markups of SOEs in the EBRD regions has been driven mostly by the mining sector in recent years and by the transport sector and public utilities in the period before that. This disparity in markups may reflect differing levels of competition and market efficiency, particularly for SOEs in EBRD regions, highlighting the need for policy interventions to enhance the competitiveness of markets.

There are several emerging markets and developing economies where the top five exporters account for a significant percentage of total exports. In the Kyrgyz Republic, for example, the top five exporting firms account for 48 per cent of total exports. In Zambia, meanwhile, the equivalent figure is a striking 82 per cent – the highest figure in the group of comparator countries (see Chart 4.12). Similar trends can be observed in some advanced economies: in France, for example, export champions in export-intensive sectors make a major contribution tototal exports.[17]

"SUPERSTAR"
firms accounted for
11%
of total revenue in EBRD economies in 2022, up from
5% in 2005

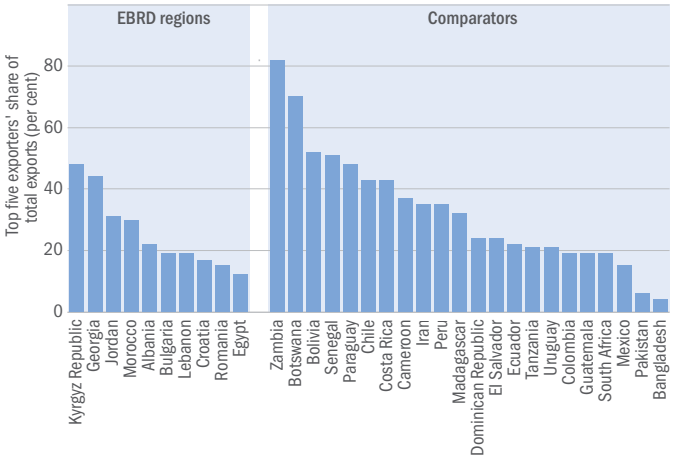
CHART 4.11. SOEs in the EBRD regions have more market power



Source: Yan (2024), Worldscope, Orbis database and authors' calculations.

Note: This chart is based on firm-level information on publicly listed firms. Top firms were identified on the basis of their revenue. Firm markups were estimated on the basis of optimal cost minimisation decisions using balance sheet data and a production approach, in line with De Loecker and Warzynski (2012). Average markups were calculated at firm level, and those averages were then aggregated, being weighted by firm revenue.

CHART 4.12. "Superstar" firms account for a substantial percentage of total exports in emerging markets and developing economies



Source: Exporter dynamics database constructed by Freund and Pierola (2020).[18]

Note: Data represent averages over subsets of years within the period 2000-13, with those subsets varying from country to country.

[17] See Gaubert and Itskhoki (2021).
[18] Worldscope does not provide data at sector level.

The rise of "superstar" firms in the EBRD regions and other emerging markets and developing economies presents both opportunities and challenges. The increasing concentration of revenue among the top firms signals a shift towards a situation where more market power is in the hands of a few private actors. While this could help to drive efficiency and innovation as a result of economies of scale, it also raises concerns about market competition, especially in sectors where SOEs continue to maintain higher markups despite stable revenue shares. In addition, the heavy reliance on a few dominant exporters underscores the need for policies that broaden the export base, reduce barriers to market entry and enhance economic resilience.

So far, this chapter has shown that large firms generally demonstrate greater productivity and innovation. Those companies play a crucial role in economic dynamics, accounting for a significant proportion of both job creation and job destruction. However, young firms drive most *net* job creation and exhibit stronger growth than their mature counterparts. Ideally, successful young firms should be able to scale up rapidly in order to capitalise on economies of scale. However, evidence suggests that young firms in many EBRD economies face constraints, as indicated by their unusually high returns to capital. BEEPS data point to several challenges that these firms encounter, including competition from the informal sector, corruption, inefficient legal systems and infrastructure barriers (such as unreliable electricity supply). The most effective way for policy to support promising young firms would be to reduce these barriers. This could involve improving infrastructure, ensuring reliable access to electricity, combating corruption and reforming the justice system to enhance the efficiency of the courts. Such measures would create a business environment that was more conducive to young firms thriving, growing and contributing to economic growth.

In addition, governments can also employ more active industrial policies, especially when there are indications that promising young firms with projects with high net present values are financially constrained or lack the collateral required to obtain credit from private banks. The next section of this chapter looks at the question of state support for firms, comparing the EBRD regions with advanced and emerging market economies. It also addresses the need for governments to target firms irrespective of size, focusing on the companies with the greatest growth potential. Box 4.1 discusses the EBRD's Star Venture programme, which is an example of how to stimulate the startup ecosystem in emerging market economies.

State assistance for firms

The success of industrial policies hinges on the quality of government intervention (see Chapter 1). This section looks at how economies in the EBRD regions use state assistance to support firms. It begins by describing state assistance and examining the most recent evidence on the causal effect that state assistance has on firms. It then looks at how many of the industrial policies designed by EBRD economies can be classified as state assistance. Lastly, it examines the question of whether EBRD economies differentiate their policies enough to accommodate firm-level heterogeneity, as described in the previous section of this chapter. Box 4.2 uses a case study to look at how governments can ensure the success of targeted direct intervention by "letting losers go" – a task that they may find easier and cheaper than "picking winners".

Defining state assistance

Direct state assistance can be defined as the use of industrial policies to support firms. That assistance can take various forms, including direct instruments such as in-kind grants, state aid, financial grants and production subsidies. Support can also take the form of loans (including loan guarantees, state loans and interest payment subsidies). Tax-based advantages are another avenue of assistance, comprising tax or social insurance relief and tax-based export incentives. Lastly, equity instruments such as capital injections and equity stakes (including bailouts) represent another key form of state support for firms. These diverse mechanisms allow governments to provide targeted assistance to businesses in various sectors and at various stages of development. Table 4.2 details the goals of each of these kinds of intervention with examples from the EBRD regions.

The analysis in this section is based primarily on the Global Trade Alert database, which provides information on state interventions affecting trade in goods and services, foreign investment and labour force migration (see Chapter 1 for more details). In order to identify direct state assistance, the GTA database was filtered to look only at the intervention types listed in Table 4.2, with the analysis covering 23 EBRD economies plus comparator countries over the period 2009-23.[19] Furthermore, firm-specific policies were filtered out, in order to prevent the inclusion of direct state

[19] The 23 EBRD economies covered are Armenia, Azerbaijan, Bulgaria, Croatia, Czechia, Egypt, Estonia, Greece, Hungary, Jordan, Kazakhstan, Latvia, Lithuania, Morocco, North Macedonia, Poland, Romania, the Slovak Republic, Slovenia, Tunisia, Türkiye, Ukraine and Uzbekistan. The comparator countries are Brazil, China, France, Germany, India, Spain, the United Kingdom and the United States. While the GTA database covers the period from 2008 to the present, the analysis in this section looks only at the period 2009-23, since data for 2008 and 2024 are incomplete.

TABLE 4.2. Examples of direct state assistance in the EBRD regions

Type of intervention	Description
In-kind grants	Allocation of non-monetary state resources such as land to support firms. For example, the Turkish government has allocated land for Sino Energy's production facility for battery cells and battery modules.
State aid	Monetary incentives used to boost sectors. "For example, 12 EU member states (including seven EBRD economies) have set up a €1.2 billion scheme to support the development of cloud and edge computing technologies (the IPCEI-CIS project)."
Financial grants	Monetary incentives used to boost sectors (usually with stricter rules than state aid). For example, public financing has been used to develop port infrastructure on Krievu Sala, Latvia.
Production subsidies	Subsidies that lower production costs. For example, tariffs on yarn have been abolished in Egypt, with subsidies put in place instead.
Loan guarantees	Government guarantees on loans. For example, Latvia's guarantee scheme for banks has been extended.
State loans	Loans issued by the government. For example, Türkiye established a loan programme for agricultural producers in 2009.
Interest payment subsidies	Government assistance with interest payments. For example, Kazakhstan subsidised the interest rates on credit and leasing obligations as part of the "Agrobusiness 2020" initiative.
Tax or social insurance relief	Government support that lowers firms' tax liabilities. For example, the Slovak Republic has reduced the excise duty on mineral oils.
Tax-based export incentives	Tax incentives for exporters to increase competitiveness. For example, Moldova introduced VAT and customs duty concessions for export-oriented enterprises in 2015.
Capital injections and equity stakes (including bailouts)	Equity instruments used by governments. For example, Poland has recapitalised certain financial institutions.

assistance that only targeted one specific firm. A two-pronged approach was used for this: first, all firm-specific policies as identified by the GTA database were excluded; and second, policy descriptions were fed into ChatGPT in order to remove any other firm-specific policies from the dataset.[20]

The resulting dataset included 705 direct state assistance policies in EBRD economies over the period 2009-23 (which accounted for 12.18 per cent of the total GTA sample for those economies over that period).

State assistance as a double-edged sword

There is a growing body of research analysing the impact that state assistance policies have on firms' growth – not only in high-income economies,[21] but also in the EBRD regions[22] and other emerging market economies.[23] These studies analyse a wide range of state assistance policies, including the provision of discretionary grants to firms in disadvantaged areas (through the Regional Selective Assistance Programme in the United Kingdom, for example), R&D subsidies (through Regional Law 7/2002 in Italy, for instance) and access to subsidised bank credit via government guarantees and an interest rate cap (through initiatives such as the Credit Certification Programme in Portugal).

[20] The following prompt was given to ChatGPT in order to weed out such single-firm policies: "You are an expert in industrial policy. You are very familiar with such policies, including but not limited to infrastructure, transportation, agriculture, manufacturing, etc. Given the below policy text, is it an industrial policy that only targets a single firm? Please think step by step. Your answer should start with 'Yes' or 'No', and then the next paragraph should provide a concise explanation."

[21] See, for instance, Cerqua and Pellegrini (2014) and Cingano et al. (2023) on Italy, Criscuolo et al. (2019) on the United Kingdom and Bonfim et al. (2021) on Portugal.

[22] See, for example, Horváth and Lang (2021) on Hungary.

[23] See, for instance, De Mel et al. (2008) on Sri Lanka and Rotemberg (2019) on India.

Some of those studies show that policies have a positive effect on the employment and investment levels of the beneficiary firms – which implies that they can, in principle, address major constraints on firms' growth (such as credit constraints), especially for SMEs. Horváth and Lang (2021) found that Hungary's Funding for Growth Programme, a large-scale subsidised loan programme implemented by the country's central bank, had resulted in increases in employment, productivity and investment in SMEs that had benefited from the policy. Similarly, Beņkovskis et al. (2019) found that Latvian firms benefiting from the support of the European Regional Development Fund saw immediate increases in their employment, turnover and capital stock per employee, while productivity growth did not come until two years later.

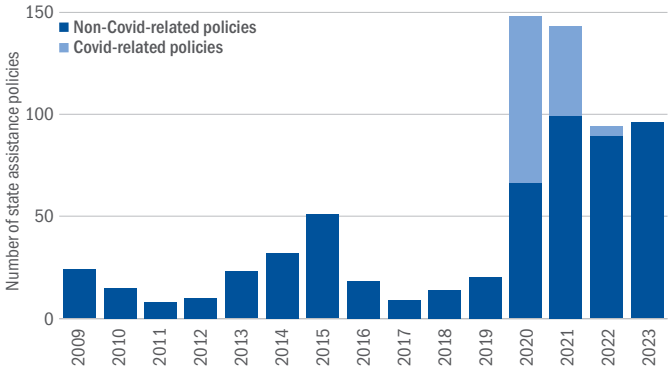
There is a growing body of evidence suggesting that while government support can boost the performance of individual firms, this may come at the cost of displacing competitors' growth. There are studies in various countries illustrating this trade-off. In China, for instance, Cai and Szeidl (2024) found that firms benefiting from government loan programmes improved their performance, but at the expense of their competitors. Similarly, Rotemberg (2019) observed that subsidies for small firms in India led indirectly to losses for ineligible competitors. Ru (2018), meanwhile, showed that loans from the China Development Bank to SOEs had crowded out private firms in the same industries, while crowding in downstream private firms, especially more efficient ones.

Other research has examined the negative spillover effects that state assistance has on ineligible firms in the relevant sectors or clusters. For example, Blonigen (2016) discovered that sector-specific aid could harm the export competitiveness of downstream sectors, and Du et al. (2023) noted that while subsidised firms in China experienced productivity boosts, non-subsidised firms in the relevant clusters saw a weakening of productivity growth.

State assistance in the EBRD regions

EBRD economies have increased their use of state assistance over the last decade (see Chart 4.13). It should be noted, in this regard, that the increase in state assistance's share of total industrial policies has not been driven solely by governments' responses to the Covid-19 pandemic. By 2023, state assistance accounted for approximately 23 per cent of all industrial policies in the EBRD regions.

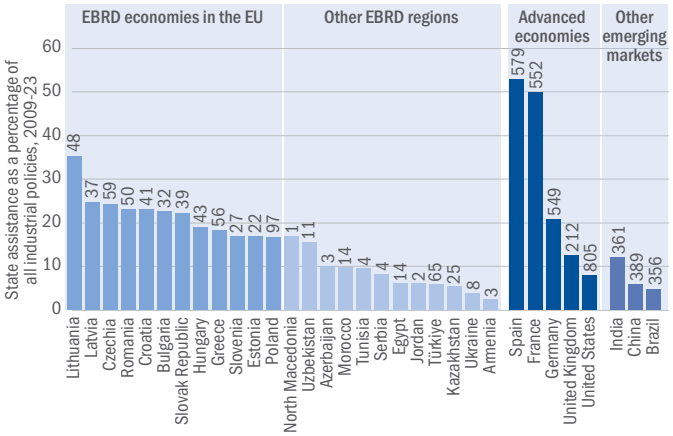
CHART 4.13. Use of state assistance has increased in the EBRD regions



Source: GTA database and authors' calculations.

Note: The data in this chart cover the following EBRD economies: Armenia, Azerbaijan, Bulgaria, Croatia, Czechia, Egypt, Estonia, Greece, Hungary, Jordan, Kazakhstan, Latvia, Lithuania, Morocco, North Macedonia, Poland, Romania, the Slovak Republic, Slovenia, Tunisia, Türkiye, Ukraine and Uzbekistan. Covid-related policies were identified by searching policy descriptions for relevant keywords.

CHART 4.14. EBRD economies make less use of state assistance than richer economies, but more use than other emerging markets



Source: GTA database and authors' calculations.

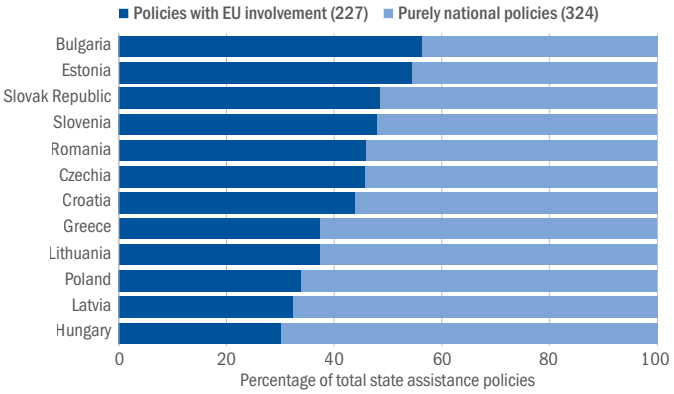
Note: The figures at the top of each bar indicate the total number of state assistance policies in the period 2009-23 for each economy.

The economies in the EBRD regions are no more reliant on state assistance than many other economies. As Chart 4.14 shows, state assistance accounts for a significantly higher percentage of total industrial policies in advanced economies such as Spain and France, where that figure exceeds 50 per cent. This is well above the 35 per cent seen in Lithuania, which is the highest level in the EBRD regions. At the other end of the spectrum, Armenia has the lowest figure, with state assistance accounting for just 2 per cent of all industrial policies. Overall, use of state assistance in the EBRD regions tends, on average, to be lower than in wealthier countries such as Spain and France as a percentage of total industrial policies, but higher than in emerging market economies such as India, China and Brazil, where state assistance accounts for just 7 per cent of all industrial policies. It should be noted, however, that the number of state assistance policies is far lower in the EBRD regions than it is in other emerging markets and advanced economies. China, for example, implemented 389 state assistance policies between 2009 and 2023, while Spain and France both implemented more than 550. The economies of the EBRD regions averaged 47 state assistance policies each over that period, compared with averages of 74 and 180 for other emerging markets and advanced economies respectively.

EBRD economies in the EU make greater use of state assistance than other EBRD economies. Indeed, in 2023 less than 10 per cent of the total number of state assistance policies in the EBRD regions were in economies outside the EU. However, a significant percentage of the state assistance policies that are used in EBRD economies in the EU have some form of EU involvement through the European Commission, the European Investment Bank (EIB), the European Agricultural Fund for Rural Development (EAFRD), the European Investment Fund (EIF), the European Maritime, Fisheries and Aquaculture Fund (EMFAF), the European Agricultural Guarantee Fund (EAGF) and other supranational EU policies. This reflects the fact that EBRD economies in the EU are heavily reliant on external international support when directing state assistance to their firms (see Chart 4.15).

A closer look at the specific instruments employed in the EBRD regions reveals that direct grants and loans are the most commonly used forms of state assistance. However, their relative popularity has shifted over time, as Chart 4.16 shows. In 2023, direct grants accounted for a substantial 81 per cent of all state assistance policies, following significant increases in their use over time. Conversely, loans now make up less than 8 per cent of all state assistance policies, pointing to a decline in their use.

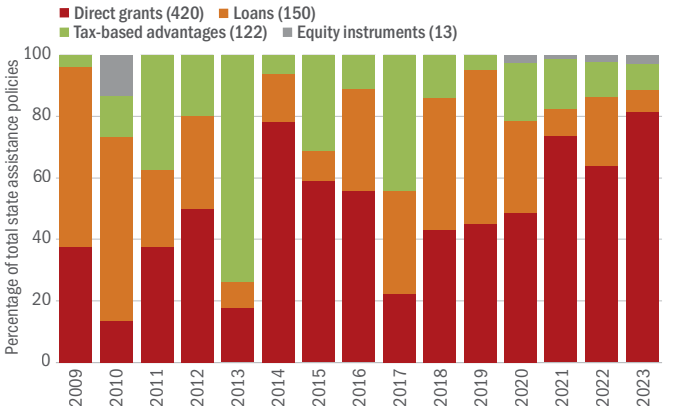
CHART 4.15. A significant percentage of state assistance policies in EBRD economies in the EU over the period 2009-23 had some form of EU involvement



Source: GTA database and authors' calculations.

Note: "Policies with EU involvement" are policies involving the European Commission, the EIB, the EAFRD, the EIF, the EMFAF or the EAGF, as well as other supranational EU policies. The figures in parentheses in the legend are totals for all economies across all years.

CHART 4.16. Direct grants and state loans are the most common types of state assistance instrument in the EBRD regions



Source: GTA database and authors' calculations.

Note: The data in this chart cover the following EBRD economies: Armenia, Azerbaijan, Bulgaria, Croatia, Czechia, Egypt, Estonia, Greece, Hungary, Jordan, Kazakhstan, Latvia, Lithuania, Morocco, North Macedonia, Poland, Romania, the Slovak Republic, Slovenia, Tunisia, Türkiye, Ukraine and Uzbekistan. The figures in parentheses in the legend are totals across all years.

Within the category of direct grants, we can see that financial grants and production subsidies feature prominently. Indeed, as Chart 4.17 illustrates, financial grants account for 55 per cent of all state assistance provided. In the category of tax-based advantages, tax or social insurance relief is the most common form of state assistance.

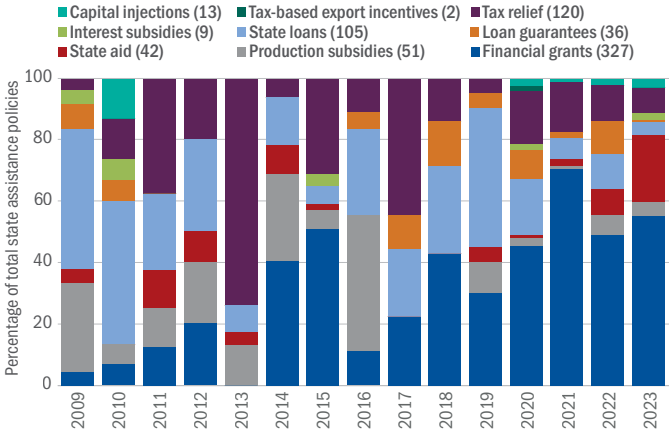
These trends underscore the evolving nature of state assistance in the EBRD regions, with governments showing a clear preference for direct grants, especially in the form of financial grants and production subsidies. While loans and tax-based advantages still have a role to play, their relative importance has diminished over time.

There is scope to better differentiate state assistance for firms

While state assistance is rich in content and variety in the economies where the EBRD invests, there is still poor differentiation in terms of targeting. Chart 4.18 looks at the types of firm that EBRD economies target with their state assistance. In most economies, state assistance policies do not target specific firms, with such targeted policies accounting for just 2 per cent of total state assistance in Lithuania (but 42 per cent in Morocco). It is also important to note that there is very little explicit focus on young firms. Only three EBRD economies have state assistance policies targeting young firms: Hungary (where such policies make up 2 per cent of total state assistance), Kazakhstan (with 4 per cent) and Morocco (with a relatively high 7 per cent).

Only
3 EBRD ECONOMIES
have state assistance policies that explicitly target young firms

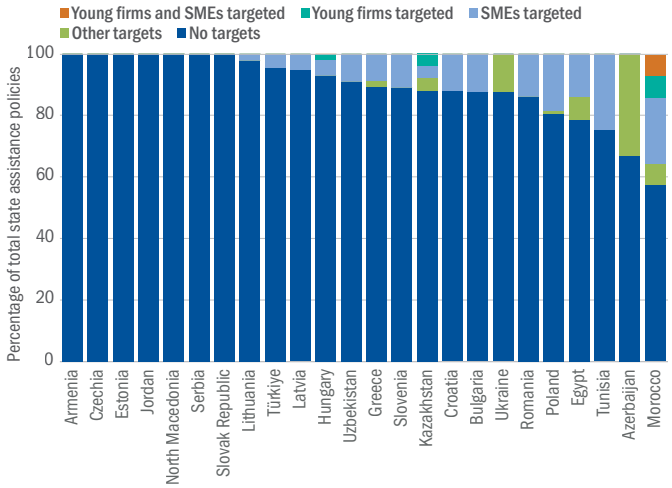
CHART 4.17. Financial grants are an increasingly popular form of state assistance in the EBRD regions



Source: GTA database and authors' calculations.

Note: The data in this chart cover the following EBRD economies: Armenia, Azerbaijan, Bulgaria, Croatia, Czechia, Egypt, Estonia, Greece, Hungary, Jordan, Kazakhstan, Latvia, Lithuania, Morocco, North Macedonia, Poland, Romania, the Slovak Republic, Slovenia, Tunisia, Türkiye, Ukraine and Uzbekistan. The figures in parentheses in the legend are totals across all years.

CHART 4.18. Most state assistance policies in EBRD economies are untargeted



Source: GTA database and authors' calculations.

Note: Policies targeting "young" firms were identified by searching intellectual property descriptions for the following keywords: "entrepreneur", "entrepreneurship", "entrepreneurial", "incubator", "young firms", "accelerator", "startup", "start-up", "start up", "venture capital", "early-stage", "gazelle", "seed" and "angel investment". Policies targeting SMEs were identified using GTA's classification. "Other targets" includes policies targeting specific sectors, locations and SOEs.

Conclusion and policy implications

In many EBRD economies, as this chapter has highlighted, large firms tend to be relatively productive and innovative, and responsible for a large percentage of the total churn and job reallocation in the labour market. At the same time, it is younger firms that contribute most to net job creation. Policymakers can help those younger and more dynamic firms to scale up more quickly by helping them to overcome constraints and barriers such as corruption, inefficient court systems and competition from the informal sector. Well-targeted industrial policies can also play a useful role here, for example by helping firms to overcome informational frictions in credit and venture capital markets. While EBRD economies have made increased use of state assistance over the past decade, the targeting and design of those policies appears to be relatively undifferentiated, with insufficient focus on supporting young, high-growth firms.

Deciding on the appropriate targeting of industrial policies is not an easy task, as governments need to take account of possible indirect effects within the economy. Such policies could include subsidised lending, with governments providing assistance to young firms that have insufficient credit history or collateral (while guarding against the risk of crowding out private lenders).[24] Governments could also offer credit guarantees with the aim of mitigating or removing some of the risks that young, high-growth firms may face. While credit guarantees can allow under-served firms to take more risks, one potential downside is that they can lead to excessive increases in the number of risky projects, increasing the likelihood of defaults. Lastly, government-backed venture capital could make it easier for young firms to raise funds, with governments either acting as "general partners" (actively seeking investment for promising firms) or acting as "limited partners" (providing funds, but not interfering in investment decisions). The main caveat with such an instrument is that government backed venture capital requires highly skilled public administrators and independent evaluation processes that are insulated from political capture.[25]

[24] See Banerjee and Duflo (2014).
[25] See De Haas and González-Uribe (2024) for a discussion of financial industrial policy.

BOX 4.1.

The EBRD's Star Venture programme

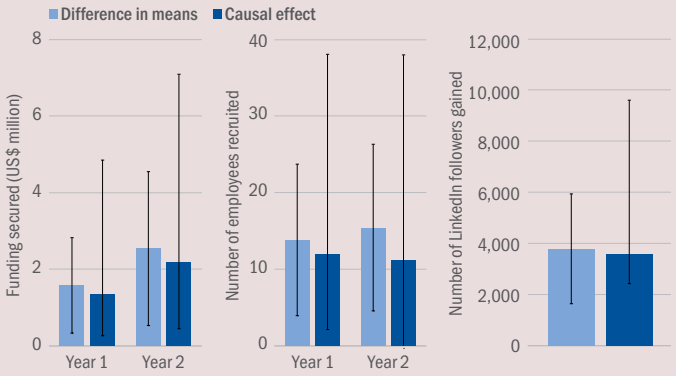
Entrepreneurial ecosystems typically feature structured, time-limited programmes that can help promising startups to grow through funding and capacity building. However, evidence on the effectiveness of such programmes is limited – especially in developing economies and emerging markets, and particularly as regards mentoring and entrepreneurship training. This box presents evidence on the impact of such technical assistance through analysis of the EBRD's Star Venture programme, which supports early-stage startups across various industries through tailored advisory services, training, mentorship and investor networks.

Startups with strong growth potential are vital for market economies owing to their innovation, rapid scaling, job creation and revenue generation. The entrepreneurs behind such firms are typically well educated and driven, requiring less help with basic business skills and more specialist advice on refining their business models and attracting investment. Studies show that, in addition to financing, entrepreneurial know-how, management skills and market access are also essential for successful scaling.[26]

The Star Venture programme provides tailored technical assistance to high-potential startups, offering business know-how, mentorship and access to risk capital. This support focuses on refining business models, improving product-market fit and positioning firms for external investment.

In order to qualify for support, startups must have a marketable product or service, demonstrate strong growth potential and be less than 10 years old. Startups are recruited through public calls for applications, after which EBRD staff and consultants shortlist candidates on the basis of funding and capacity. Shortlisted startups pitch to judges, who score them in six areas, and the top-scoring firms are invited to join the programme. Once they have been selected, startups gain access to a network of mentors, investors and business tools. Over the past four years, Star Venture has supported more than 250 tech startups and 33 local accelerators across 26 economies, with a budget of €25.7 million provided by 12 donors.

CHART 4.1.1. Estimated outcomes for funding, employment and market reach



Source: Star Venture administrative data (including application files), Dealroom, LinkedIn and authors' calculations.

Note: This bar chart shows estimates for simple differences in means (light blue bars) and a local randomisation regression discontinuity approach within an optimally selected window of five ranks left and right of the relevant cut-off for selection (dark blue bars). The error bars for the differences in means and causal effects indicate confidence intervals at the 95 per cent level calculated using ordinary least squares and local randomisation inference respectively. Outcomes for funding and employment are measured one and two years after joining the Star Venture programme. LinkedIn followers are measured as at March 2024 for all startups, so firms' exposure to the programme varies.

This box assesses the causal effect of the Star Venture programme by comparing the performance of participating startups with that of a similar group of startups that were shortlisted but not selected. A quasi-experimental method (a regression discontinuity design) is used to distinguish between the effects of the programme itself and the impact of the initial selection process. The comparison focuses on startups that are near the cut-off point for selection, which is determined by the cohort's capacity. (For example, if eight startups are admitted, the cut-off point is after position 8 in the score-based ranking.)

[26] See González-Uribe and Leatherbee (2018) and McKenzie et al. (2023).

The analysis uses data on 327 shortlisted startups across 23 cohorts in 11 countries/regions. Of those shortlisted startups, 155 were selected to participate in the Star Venture programme, while the other 172 firms were ultimately rejected. The cohorts in question embarked on the programme between 2019 and 2022.

The causal effect of the Star Venture programme is assessed by comparing outcomes for participating startups one and two years after joining with equivalent outcomes for startups that were not selected, using funding, employment and numbers of LinkedIn followers as indicators of success. The results indicate that participation in the programme leads to substantial improvements in key business metrics. In terms of funding, participation in the programme results in startups securing an average of US$ 1.34 million more in funding within one year of joining, with that figure rising to US$ 2.17 million after two years. On average, participating startups also recruit 12 employees more within one year of joining, with that employment growth remaining robust in the second year. And in terms of market reach, participation in the programme results, on average, in startups achieving 3,577 LinkedIn followers more (based on data as at March 2024), pointing to enhanced market visibility and improvements in brand recognition and market access.

These outcomes highlight the programme's effectiveness in facilitating the financial and operational scaling of high-potential startups. A summary of the main results can be found in Chart 4.1.1.

The Star Venture programme provides robust evidence that structured, tailored business assistance can play a pivotal role in the growth of startups in emerging markets. Its combination of strategic business training, targeted advisory support and mentorship has proven to be particularly effective in helping startups to overcome growth challenges and achieve scalability. These findings offer valuable insights for the design and implementation of entrepreneurship support programmes in similar contexts.

Over the past four years, the Star Venture programme has supported more than

250

TECH STARTUPS

and

33

LOCAL ACCELERATORS

across

26

ECONOMIES

BOX 4.2.

Bureaucratic capacity and the privatisation of SOEs in the former East Germany

The success of industrial policy hinges on administrative agencies' capacity to implement policies effectively and efficiently. Bureaucrats need to have the right combination of expertise, resources and technology, and they also need to have enough autonomy to implement the policies mandated by politicians.[27] This can be particularly challenging when policies involve picking "losers" – for instance, deciding which loss-making firms to liquidate.

Against this backdrop, the privatisation of SOEs in the former East Germany after reunification offers important lessons. One of the largest and most rapid privatisation programmes in history, this required the creation of a new agency – the *Treuhand* – to implement industrial restructuring and privatisation within a very short time frame. The *Treuhand*'s mandate required it to ensure "efficiency and competitiveness" through "closure [...] of companies that cannot be restructured". In-depth analysis of contemporary and archival firm-level data by Mergele et al. (2024) reveals three key findings about the *Treuhand*'s performance:

1. Using initial labour productivity as a simple measure of "competitiveness", more productive firms were (i) more likely to be privatised (rather than liquidated), (ii) privatised faster, (iii) sold for higher prices and (iv) more likely to be acquired by buyers in the former West Germany. The agency relied on internal firm rating scores assigned with the help of management consultants, which were an important predictor of liquidation decisions (as demonstrated in Chart 4.2.1), even after controlling for other factors.
2. Firms with higher initial productivity that were not liquidated by the agency were more likely to survive in the long run (up to 20 years post-privatisation). The internal firm rating scores can also help to predict survival post-privatisation.
3. Using a machine learning approach to compare the *Treuhand*'s actual choices with counterfactual scenarios involving the liquidation of different sets of firms, the actual outcomes of the privatisation programme can be benchmarked against those alternative scenarios. This analysis suggests that while the *Treuhand* successfully avoided the worst possible outcomes (that is to say, it did not target the firms with the lowest predicted probability of survival), it did not achieve the best possible results, either (that is to say, it failed to target the firms with the highest predicted probability of survival).

These findings contain three lessons for the design and implementation of industrial policies for firms. First, they suggest that the agency was generally able to identify unviable firms and select them for liquidation. Thus, government agencies may be able to pursue their mandated objectives even in the face of potential pressure from political interest groups. Second, they show that the *Treuhand*'s internal firm ratings proved to be valuable inputs when deciding which enterprises to privatise and liquidate. Moreover, the *Treuhand*'s central office achieved better privatisation outcomes than regional branches, pointing to the importance of having access to detailed information and centralised institutional expertise. And third, they indicate that the rapid pace of privatisation may have come at the expense of achieving the best possible outcomes in terms of retaining viable firms and maintaining local ownership.

These insights from Germany's historical experience of privatisation highlight some of the challenges of implementing large-scale industrial policies and privatisation programmes. They demonstrate the importance of building institutional capacity, establishing careful firm selection processes and balancing speed with the need to ensure optimal long-term outcomes. Even then, policymakers need to recognise the practical difficulties not only of picking winners, but also of letting losers go.

[27] See Barteska and Lee (2024) and Juhász and Lane (2024).

CHART 4.2.1. The probability of liquidation increases as the firm rating deteriorates

Source: Mergele et al. (2024).

Note: This binned scatter plot shows the fitted regression line that is derived by regressing the probability of liquidation (as opposed to privatisation) on firm ratings while controlling for *Land*, industry and survey fixed effects. Industries are defined on the basis of three-digit Standard Industrial Classification (SIC) codes.

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