

6

BOOSTING SME PRODUCTIVITY

MOVING RESOURCES
AWAY FROM INEFFICIENT
FIRMS TO MORE EFFICIENT
ONES COULD RAISE TOTAL
FACTOR PRODUCTIVITY BY

20
PERCENTAGE
POINTS

IN MANY EMERGING
MARKETS

IN CENTRAL EUROPE AND
ROMANIA, THE MEDIAN
LARGE FIRM IS

70%

MORE PRODUCTIVE
THAN THE MEDIAN
MICRO-SIZED ONE,
COMPARED WITH
40 PER CENT IN
THE REST OF THE EU



Predictably, firms in middle-income economies are less productive than their advanced-economy counterparts. However, the relative productivity gap is greater for small firms than for large enterprises. As countries develop, large enterprises, or “national champions”, may deliver fast growth and improvements in productivity. These enterprises, however, seldom excel in innovation on a global scale. As growth becomes more innovation intensive, the healthy ecosystem of small and medium-sized enterprises (SMEs) plays an increasingly important role. Yet regulation and poor governance in middle-income economies often create perverse incentives for firms to stay small, making it difficult for the countries to harness the innovation and creativity dividend.



EVERY 10 PER CENT RISE
IN GDP PER CAPITA IN THE
EBRD REGIONS SAW A

6%

RISE IN PATENTS GRANTED
PER CAPITA IN 2002-15,
WHILE IN CHINA, SOUTH
KOREA AND ISRAEL
THE CORRESPONDING
INCREASE IN PATENTING
AVERAGED 19 PER CENT

◀ The change in economic model at the heart of the middle-income trap is also reflected in the ways that firms enter the market, grow and cease to exist. In general, firms and industries in middle-income economies tend to be less productive than firms and industries in advanced economies (see Chart 6.1). In fact, these differences in productivity add up to differences in per capita income, so economic convergence is essentially about boosting the productivity of firms.

This chapter documents the differences between SMEs in emerging and advanced economies, then describes why these differences should concern policymakers and discusses ways to create a more dynamic SME ecosystem.

HOW SMES IN EMERGING MARKETS ARE DIFFERENT FROM SMES IN ADVANCED ECONOMIES

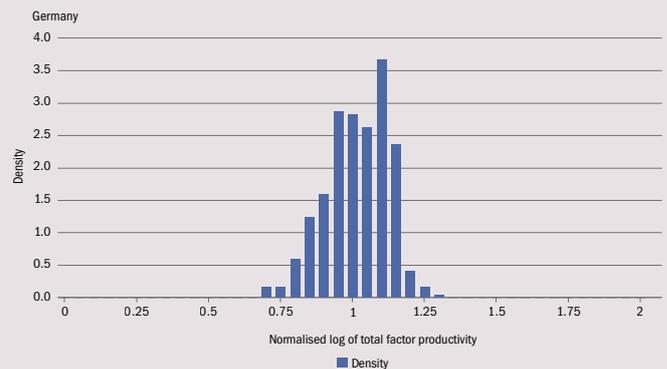
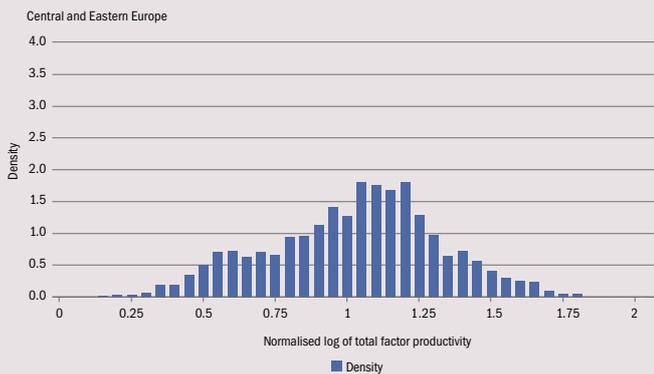
In middle-income economies small is not necessarily beautiful. On average, small firms tend to be less productive than large firms. This is to be expected if very productive small firms grow quickly, gain market share and become large, contributing to productivity growth in the economy as a whole. However, small

firms in the EBRD regions are found to be far less productive than their small counterparts in advanced economies, such as Germany. The difference between the productivity of large firms in the EBRD regions and large German firms is much smaller.

The inferior productivity levels of small firms are also evident when we compare small and large firms within the same economy. In central Europe and Romania, the median (typical) medium-sized firm is around 50 per cent more productive than the median micro-sized firm (see Chart 6.2). The median large firm is around 70 per cent more productive than the median micro-sized one. The respective ratios in the rest of the EU are considerably smaller, at 25 and 40 per cent, respectively.

As a result, emerging markets, including the EBRD regions, are home to an abundance of small, low-productivity firms that fail to innovate or grow, but manage to survive.¹ In advanced economies surviving firms tend to prosper, giving rise to a positive relationship between a firm’s age and size – a relationship that is often absent in emerging markets. For instance, companies in the USA grow fivefold, on average, in their first 30 years, while their Indian counterparts show barely any growth.²

CHART 6.1. Productivity varies considerably across industries



Source: EBRD (2017).
 Note: The analysis uses a combined industry-level sample, including Croatia, Estonia, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. Total factor productivity is normalised for each industry-country pair by removing the regional average. Cross-country differences in industry composition are controlled for. Density is calculated by dividing the relative frequency by the width of the class.

SMALL FIRMS IN THE EBRD REGIONS ARE FOUND TO BE FAR LESS PRODUCTIVE THAN THEIR SMALL COUNTERPARTS IN ADVANCED ECONOMIES, SUCH AS GERMANY.



¹ See EBRD (2014, 2017).

² See Hsieh and Klenow (2014).

This lack of dynamism also affects countries in the EBRD regions, where one in three firms did not change size-wise during a 12-year period (see Chart 6.3). In addition, the chances of a small firm growing or shrinking appear to be loosely related to its productivity.³ In contrast, only one in five firms in the rest of the EU remained static in size over the period 2002-13 and growth is typically conditional on productivity improvements.⁴

More generally, middle-income economies tend to be characterised by far more disparate company productivity levels, as many unproductive firms survive (see Chart 6.1). IMF estimates from 2017 suggest that improving the company-productivity dispersion profile to that of advanced economies – by moving resources away from inefficient firms to more efficient ones – could raise total factor productivity by around 20 percentage points in many emerging markets.⁵

Up to a certain point, lack of dynamism among small firms may matter less for development, as long as large enterprises are able to deliver sizeable improvements in productivity by importing existing technologies. These enterprises, however, seldom excel in innovation on a global scale. As growth becomes more innovation intensive, the healthy ecosystem of small and medium-sized enterprises (SMEs) starts to play an important role.

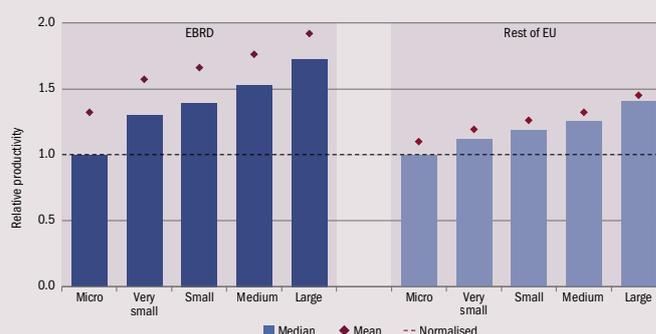
Most notably, SMEs increasingly engage in innovation that pushes the technological frontier. Frontier innovation is often protected by patents, which can be used to create a snapshot of innovative activity across economies. While emerging Europe has seen a considerable rise in per capita income since the mid-1990s, the increase in its rate of innovation has been far lower than in China, South Korea or Israel. The average stock of patents granted per 10,000 people in the EBRD regions increased by less than 50 per cent, on average, between 2002 and 2015. It more than quadrupled in South Korea and grew more than 30-fold in China, albeit from a low base (see Chart 6.4).

As a result, every 10 per cent rise in GDP per capita in the EBRD regions between 2002 and 2015 saw a 6 per cent rise in patents granted per capita, while in China, South Korea and Israel the corresponding increase averaged 19 per cent. Thus, growth has been relatively light on innovation in the EBRD regions, but more innovation intensive in comparator economies.

SHOULD POLICYMAKERS BE CONCERNED?

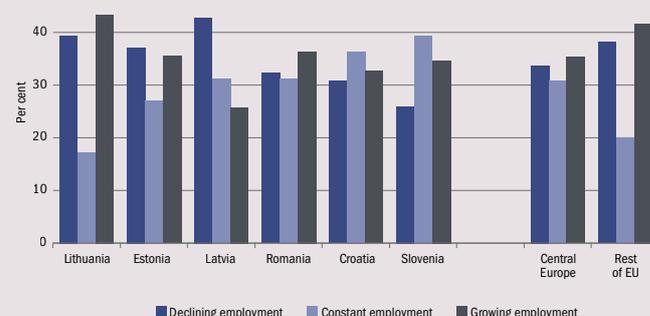
Job creation is often of primary concern to policymakers. Precisely where those jobs are created is also important – even more so in economies with highly disparate productivity across firms and industries. Aggregate productivity rises when company productivity improves, but it also rises when jobs are created in productive firms and disappear in unproductive ones. New market entrants tend to emulate fast-growing firms, which helps to spread successful management practices and promising technologies when markets function well. If firms that enter the market are able to combine labour and capital more efficiently than firms that shut down, the efficiency of production in the economy as a whole is boosted by this process of “creative destruction”.

CHART 6.2. Smaller firms are relatively inefficient, especially in central Europe and Romania



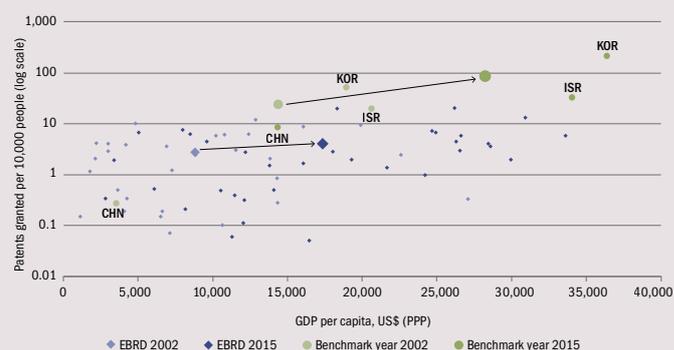
Source: EBRD (2017) based on CompNet (European Central Bank's Competitiveness Network) data. Notes: Data for 2002 to 2013. EBRD regions include Croatia, Estonia, Hungary, Latvia, Lithuania, Romania and Slovenia. Rest of EU includes Belgium, the Czech Republic, Denmark, Finland, Malta, Italy, Portugal and Spain. Productivity levels are normalised to 1 for the median micro-sized firm in EBRD regions and Rest of EU. Ratios with respect to the median micro-sized firm are calculated for each size, country and year, then simple averages are taken across regions and years.

CHART 6.3. Many firms in emerging Europe had stable headcount from 2002 to 2013



Source: CompNet and authors' calculations. Note: Based on data for the period 2002-13. Growth rates are calculated on the basis of the number of full-time employees over a three-year period for surviving firms. “Declining employment” means an average decline of more than 1 per cent per annum, while “growing employment” means average growth of more than 1 per cent per annum. All other cases are regarded as “constant employment”.

CHART 6.4. Growth in the EBRD regions has been relatively light on innovation



Source: EBRD (2017). Note: Larger diamonds represent the average for the EBRD regions. Larger circles represent the average for China, Israel and South Korea.

³ See Bircan (forthcoming).

⁴ See EBRD (2017).

⁵ See IMF (2017a).

Reassuringly, more productive firms and industries enjoy higher job creation rates (see Chart 6.5).⁶ An industry in emerging Europe that is as productive as its counterpart in Germany, for instance, enjoys a rate of net job creation in excess of 2 per cent. An industry that is only half as productive as its German counterpart creates jobs at a rate of 0.9 per cent per annum in net terms.

WHAT CAN BE DONE?

Policies designed to support SME development need not necessarily target the number of small firms or the share of small firms in an economy. Rather, priority should be given to creating a level playing field, making market entry straightforward for new firms, permitting young and innovative firms to grow fast and improve productivity. This allows the most productive SMEs to become successful, large and integrated into the global economy.

Consequently, even if SMEs do not necessarily account for a large share of an economy's output or employment, the success of the economic development model continues to rely on a well-functioning SME ecosystem.

In practice, regulations and poor governance often create perverse incentives for firms to stay small. Sometimes this is because larger firms are subject to much more onerous regulations in an attempt to protect jobs and create employer-based social-security nets. In Peru, for instance, a marginal increase in sales can lead to a drop in profitability of 25 per cent or more, as the firm is obliged to switch from one set of labour-code provisions to another once its annual income surpasses a certain level. This creates strong disincentives to grow beyond a certain size.⁷

In other cases, rent-seeking and predatory behaviour by national authorities may force firms to stay small and remain "under the radar". This can happen when the enforcement of certain rules and regulations – rather than the regulations themselves – is strongly linked to a firm's size. More robust property rights may be needed to prevent vested interests and incumbent firms from expropriating the intellectual and physical property of successful market newcomers. In short, therefore, completing the middle-income transition depends very much on institutional improvements that can boost the dynamism of small and medium-sized companies.

Slow corporate productivity growth appears to be further linked to the prevalence of family ownership in EBRD regions.⁸ The dominance of family ownership and management is often symptomatic of a lack of trust in the economy and a weak rule of law. In such conditions proprietors are often reluctant to hire professional managers with the right education and skills, to delegate tasks or yield control of company operations to take advantage of growth opportunities.⁹

Under-developed infrastructure and imperfections in the credit market may also prevent firms from accessing resources that are essential to scaling up operations. Small and innovative firms are at a particular disadvantage when it comes to accessing external capital, due to their lack of credit history with lenders and/or lack of tangible collateral.

More credit is not necessarily the answer, though. More accommodating financing conditions in the decade following the global financial crisis of 2008-09 have actually made it easier for large, less productive firms to stay in business, both in advanced economies and emerging markets. Creating a supportive environment for SMEs requires a different type of finance – such as specialised finance for innovation or equity – as we discuss further in Chapter 8.

Even in the presence of various constraints, greater market competition and openness to trade can substantially strengthen firms' motivation to improve their productivity and create jobs. Consider two industries with a productivity level of around 80 per cent of their counterparts in Germany. An open industry (one where production imports and output exports exceed 90 per cent of output by value) is estimated to create jobs at a rate of 2.5 per cent. An industry closed to trade (where the same ratio is less than 15 per cent) only creates jobs at a rate of 0.7 per cent (see Chart 6.6).

The same is true for industries that are integrated into global value chains versus industries that are not.¹⁰ Participation in international trade and global value chains helps speed up the reallocation of factors of production, including labour, to more efficient use, boosting productivity growth. In this regard, the market entry of multinationals through foreign direct investment may be an important source of productivity growth. Productivity spillovers are not uniform, however; they depend on the depth of local processing and on the industry in question.¹¹



**IN PERU, A MARGINAL
INCREASE IN SALES CAN LEAD
TO A DROP IN PROFITABILITY OF**

25%

**OR MORE, AS FIRMS MUST
SWITCH FROM ONE SET OF
LABOUR-CODE PROVISIONS
TO ANOTHER AS THEY GROW**

⁶ See also EBRD (2017).

⁷ See IDB (2018) and Azuero et al. (2017) for an example from Peru.

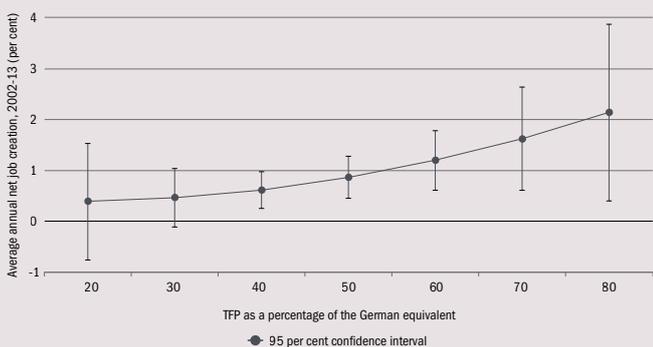
⁸ See Bloom et al. (2014) and Aghion and Bircan (2017).

⁹ See Akcigit et al. (2016).

¹⁰ See EBRD (2017).

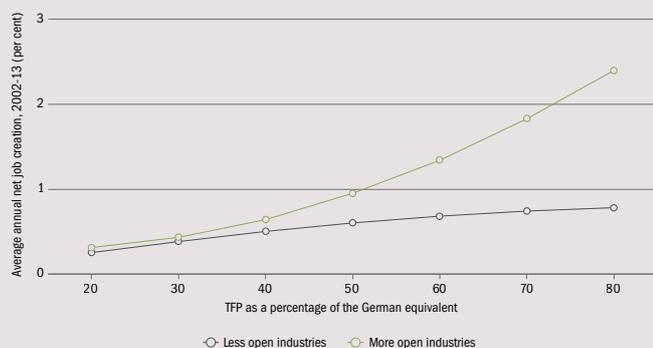
¹¹ See Fons-Rosen et al. (2018).

CHART 6.5. More productive industries create more jobs



Source: EBRD (2017).
 Note: Results are predicted growth rates from a country-by-industry panel regression of net job creation rates on relative TFP levels with respect to Germany, lagged by one period and controlling for country, industry and year fixed effects. The time period covered is 2002 to 2013. Vertical bars around estimates indicate the 95 per cent confidence interval.

CHART 6.6. Trade openness helps reallocate jobs to more productive industries



Source: EBRD (2017).
 Note: Results are predicted growth rates from a country-by-industry panel regression of net job creation rates on relative TFP levels with respect to Germany, trade openness and their interaction, all lagged by one period and controlling for country, industry and year fixed effects. The time period covered is 2002 to 2013. "Less open" and "more open" refer to industries with ratios of (exports + imports)/output equal to 15 per cent and 90 per cent, respectively. These numbers indicate the 25th and 75th distribution percentiles.

THE AVERAGE STOCK OF PATENTS GRANTED PER CAPITA IN THE EBRD REGIONS INCREASED BY LESS THAN

50%

BETWEEN 2002 AND 2015, WHILE IT MORE THAN QUADRUPLED IN SOUTH KOREA

