

PRIVATE EQUITY AS A SOURCE OF GROWTH

THE TOTAL VOLUME OF ADDITIONAL
PRIVATE EQUITY CAPITAL THAT THE EBRD
REGION COULD POTENTIALLY ATTRACT IS

US\$30.5 BILLION

ON AVERAGE

30

ADDITIONAL JOBS ARE CREATED
BY EACH COMPANY IN THE EBRD
REGION THAT RECEIVES PRIVATE
EQUITY INVESTMENT



Private equity funds in the transition region not only target companies with high growth rates but also assist their growth by implementing operational improvements. They also relax companies' credit constraints and increase both employment and physical investment. The transition region is home to a sizeable pool of companies that could potentially benefit from these positive growth effects associated with private equity investment. However, in order for a larger segment of the economy to reap the benefits of private equity investment, policy-makers need to address a number of institutional constraints.

Introduction

Private equity investment has played an important role in stimulating company growth and innovation in the advanced market economies of North America, western Europe and Asia. However, such growth has, at times, been achieved by shedding employment, cutting costs and/or limiting capital expenditure.¹ Such investment may generate short-term financial returns for shareholders, but its long-term implications for the economy as a whole are less clear. It is therefore important to differentiate between the social and financial returns on private equity investment and to have a good understanding of how economic productivity and output respond to private equity financing.

¹ See Kaplan and Strömberg (2009).

18%

AVERAGE ANNUAL REVENUE GROWTH OF INVESTEE COMPANIES IN THE EBRD REGION PRIOR TO RECEIVING PRIVATE EQUITY FINANCING

Chapter 3 demonstrated that private equity funds in the transition region often rely on operational improvements to achieve financial returns for their investors. This chapter asks a different question: how do these operational improvements contribute to economic development – specifically, employment, productivity, profitability and physical investment – in the companies that private equity funds invest in?

Analysis shows that private equity funds in the transition region have a positive impact on both profitability and employment levels. The estimated impact on revenue and employment in the region is stronger than that reported for advanced economies. This is achieved via a combination of scaling up operations, increasing capital expenditure with the aim of improving labour productivity and introducing leaner production methods associated with better inventory and cash management. Furthermore, private equity financing enables companies to access credit markets and fund some of their physical investment and operational improvements through bank finance. This effect has gained in prominence since the global financial crisis and is of particular benefit to smaller companies.

There is a sizeable pool of companies in the EBRD region similar to those that have already attracted private equity financing. These companies have typically sustained high levels of revenue growth over a number of years, they have room for the operational improvements that private equity funds can deliver, and they are not overvalued. Many of these companies could potentially benefit from private equity injections. Indeed, it is thought that they have the potential to attract an estimated US\$ 30.5 billion of private equity financing. However, private equity funds in the region have invested a total of just US\$ 9.2 billion since 2010. This disparity reinforces the observation in the previous chapter that private equity is an underutilised source of external finance in the region. More importantly, it means that the positive impact that private equity has on companies and workers remains limited to small sections of the economy.

There are two ways in which policy-makers can help ensure that more companies in the region benefit from private equity financing. First, shareholder protection and the enforcement of corporate governance legislation are essential to increase the effectiveness of private equity in the region and make companies more attractive to potential investors. Given the long-term and illiquid nature of private equity as an asset class, investors need to be given a transparent and reliable legal framework, especially as regards the rights of minority shareholders. Second, the development of public equity markets and the establishment of stock exchanges tailored to small and medium-sized enterprises (SMEs) can provide private equity funds with more opportunities to exit investments. In addition, the development of credit markets can support the development of private equity, as high-growth companies typically rely on both bank loans and private equity financing to fund their expansion.

Private equity and economic outcomes

Evidence from advanced economies

Evidence suggests that private equity investment is associated with significant operational improvements and rising profitability in investee companies.² These findings have primarily been documented in developed economies. For instance, private equity activity in the United States and the United Kingdom has a positive impact on total factor productivity and innovation as measured by patent counts and citations.³ Similarly, companies that have received private equity financing in France and Sweden have experienced increases in operational efficiency and earnings.⁴

How private equity funds improve the operational performance of investee companies remains a matter of debate. Three issues dominate this debate. The first contentious issue is whether private equity funds do indeed improve companies' efficiency or simply invest in more efficient companies that would have performed better subsequently in any case. Evidence suggests that both effects exist. A recent study found, for instance, that companies invested in by US venture capital funds were an average of 7 per cent more productive than other firms. However, these investee companies also experienced, on average, a 12 per cent increase in productivity after receiving the investment.⁵ Buyout funds, in contrast, tend to invest in underpriced companies and may contribute little in the way of operational improvements.⁶

A second contentious issue is the impact that private equity has on employment. On the one hand, evidence from the United States and the United Kingdom shows that employment and wages grow more slowly in companies that receive private equity financing relative to the rest of the economy. This is consistent with the idea that private equity funds focus on reducing labour costs in order to improve operational efficiency. On the other hand, evidence from France shows that investee companies experience stronger growth in both jobs and wages than similar companies that have not received such investment.⁷ In other words, it does not seem possible to generalise the impact private equity has on employment.

A third contentious issue is whether private equity funds sacrifice long-term investment and focus on generating short-term cash flows. In the 1980s investee companies in the United States experienced reductions in capital expenditure following buyouts.⁸ However, subsequent studies have documented a positive impact on capital expenditure and investment in innovative activity in the United States and France.⁹ On balance, private equity funds do not appear to sacrifice long-term productivity in return for short-term gains.

In part, these conflicting findings reflect differences in the focus of private equity in different countries. For instance, buyout funds in the United States and the United Kingdom tend to target large, mature firms, where they focus on reducing capital expenditure, restructuring labour and financial engineering in order to increase profitability. In contrast, private equity funds in France, where credit markets are less developed, typically target credit-constrained companies with growth opportunities and help these companies to access alternative sources of finance.¹⁰

² See Kaplan and Strömberg (2009) for a review of academic studies on this subject.

³ See Chemmanur et al. (2011), Lerner et al. (2011) and Davis et al. (2014) for evidence on the United States. See Harris et al. (2005) and Amess et al. (2015) for evidence on the United Kingdom.

⁴ See Bergström et al. (2007) for evidence on Sweden and Boucly et al. (2011) for evidence on France.

⁵ See Chemmanur et al. (2011).

⁶ See Kaplan and Strömberg (2009).

⁷ Furthermore, investee companies in Sweden do not experience wage reductions or the restructuring of labour. See Bergström et al. (2007) and Boucly et al. (2011).

⁸ See Kaplan and Strömberg (2009).

⁹ See Boucly et al. (2011) and Lerner et al. (2011).

¹⁰ See Boucly et al. (2011).

With this in mind, this chapter examines the impact that private equity investment has on companies' performance in the EBRD's countries of operations. It begins by discussing the screening of companies by private equity funds, before documenting the impact that private equity investment has on revenue, profitability, employment and productivity in investee companies, taking into account the restructuring of labour and credit constraints.

Methodology

This analysis uses the EBRD's proprietary dataset, which covers the investments of more than 100 private equity funds across the EBRD region between 1992 and 2013. The data cover a variety of different types of private equity fund, including buyout, growth capital and venture capital funds (see Chapter 3 for further details).

Simply comparing the performance of companies with and without private equity investment may produce misleading results. This is because private equity investors may be good at choosing companies that have good growth potential. The superior performance of such companies following private equity investment would then reflect the funds' successful screening of potential investment targets, rather than efforts to improve companies' performance.

To address these concerns, changes in a company's performance after it receives private equity financing are compared with changes in the performance of similar companies without private equity involvement (by means of a "difference-in-differences analysis"). It is important to ensure that the companies that receive private equity investment are similar to those that do not (the "control group" in the analysis). The control group for each investee company comprises five similar firms drawn from the Orbis database of companies in the EBRD region. These firms are selected from the same country, industry and year as the investee company and are similar to it not only in terms of age, average sales and investment growth, but also in terms of their revenue, assets and fixed assets over the three-year period preceding the investment.¹¹

The impact of private equity on firms in the transition region Revenue

These comparisons reveal that, on average, increases in operating revenue are 35 per cent stronger for companies that receive private equity investment relative to their peers (see Table 4.1). This increase is achieved over a period of three to five years following the initial private equity injection. This is a large effect, given that for most companies in the region revenue grows by less than 10 per cent in a given year. Crucially, this positive impact is not driven by the targeting of high-growth companies. As Chart 4.1 shows, companies that are similar to those in the private equity sample also experience rapid growth in the years prior to the investment, but they fail to maintain that performance in the absence of private equity. The consistent growth in revenue of companies that receive private equity financing also translates into a 20 per cent stronger increase in operating profits relative to their peers.

TABLE 4.1. Impact of private equity investment on growth and productivity

	(1)	(2)	(3)	(4)
Dependent variable:	Operating revenue	Operating profits	Employment	Labour productivity
Average impact of private equity investment	0.3504*** (0.1066)	0.1973** (0.0821)	0.1946*** (0.0659)	0.3011** (0.1177)
Observations	10,210	10,210	10,210	10,210
R ²	0.3207	0.0815	0.2623	0.1528

Source: EBRD, Orbis and authors' calculations.

Note: This table reports the results of a difference-in-differences regression estimating the impact of private equity financing on company-level outcomes. The estimation sample comprises private equity and control group companies. Dependent variables are measured in logs. The results indicate the average impact of private equity investment on the log change (that is to say, change in per cent) in the dependent variable. Standard errors are clustered at the company level and shown in parentheses. *, ** and *** indicate statistical significance at the 10, 5 and 1 per cent levels respectively.

CHART 4.1. Impact of private equity on companies' revenue



Source: EBRD, Orbis and authors' calculations.

Note: Shaded areas indicate standard errors. The green vertical line indicates the year of the private equity investment, so points to the left show the evolution of revenue in the run-up to the investment and points to the right show its subsequent evolution.

Employment

Private equity financing also has a positive effect on employment. On average, investee companies see their labour force grow by a fifth more relative to other companies. This corresponds to approximately 30 additional jobs per investment. The impact on employment appears to be stronger in the EBRD region than it is in advanced economies (with a rate of 12 per cent being observed in France, for example),¹² as private equity funds in the EBRD region focus primarily on companies with strong growth potential, rather than mature companies that are in need of restructuring (as discussed in Chapter 3).

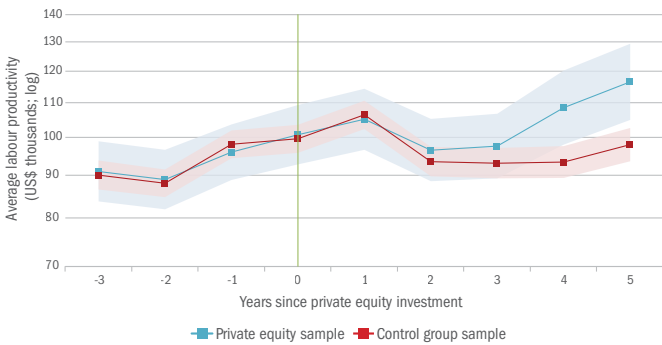
Labour productivity

As sales in investee companies grow faster than employment, sales per employee also increase – by nearly a third more than in other companies. Thus, companies with private equity investment are able not only to increase the number of people they employ, but also to employ these people more efficiently (for instance by adopting leaner production techniques). This runs counter to the widely held view that private equity investment normally entails the shedding of labour.

¹¹ The Orbis database, which is maintained by Bureau van Dijk, contains detailed data on firms' ownership and financial situations.

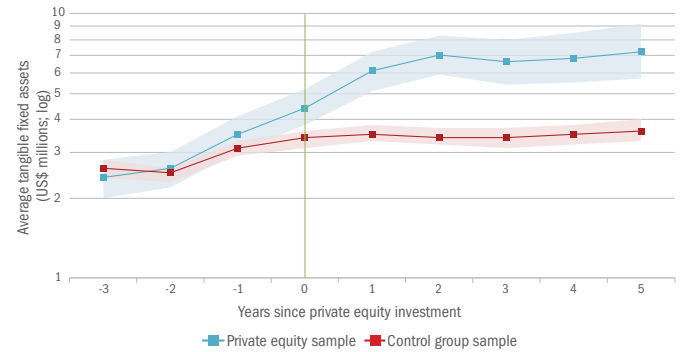
¹² See Boucly et al. (2011).

CHART 4.2. Impact of private equity on labour productivity



Source: EBRD, Orbis and authors' calculations.
Note: Shaded areas indicate standard errors. The green vertical line indicates the year of the private equity investment.

CHART 4.3. Impact of private equity on fixed capital investment



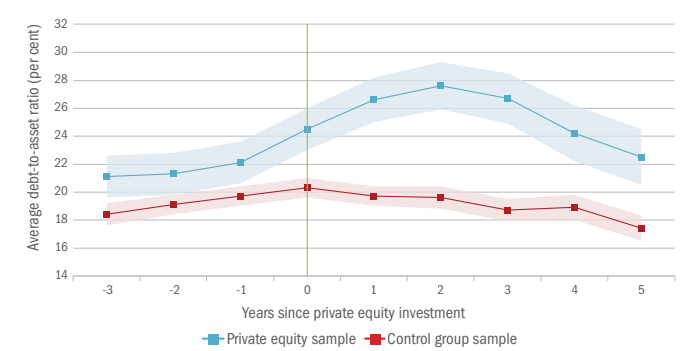
Source: EBRD, Orbis and authors' calculations.
Note: Shaded areas indicate standard errors. The green vertical line indicates the year of the private equity investment.

TABLE 4.2. Impact of private equity on investment and the accumulation of debt

	(1)	(2)	(3)	(4)	(5)
	Tangible fixed assets	Capital intensity	Stock of debt	Leverage	Inventory and cash management
Average impact of private equity investment	0.4126*** (0.1391)	0.4642*** (0.1095)	0.8731*** (0.2865)	0.0263 (0.0173)	0.0527*** (0.0195)
Observations	10,210	10,210	10,210	10,210	10,210
R ²	0.2387	0.2378	0.0448	0.0193	0.0124

Source: EBRD, Orbis and authors' calculations.
Note: This table reports the results of a difference-in-differences regression estimating the impact of private equity financing on company-level outcomes. The estimation sample comprises private equity and control group companies. Tangible fixed assets and the stock of debt are measured in logs. Columns (1) and (3) indicate the average impact of private equity investment on the log change (that is to say, change in per cent) in the dependent variable. Capital intensity is measured as fixed assets per employee. Leverage is the ratio of debt to total assets. Inventory and cash management is measured as the ratio of working capital to total capital employed. Columns (2), (4) and (5) indicate the average impact of private equity investment on the percentage change in the dependent variable. Standard errors are clustered at the company level and shown in parentheses. *, ** and *** indicate statistical significance at the 10, 5 and 1 per cent levels respectively.

CHART 4.4. Impact of private equity on debt-to-asset ratio



Source: EBRD, Orbis and authors' calculations.
Note: Shaded areas indicate standard errors. The green vertical line indicates the year of the private equity investment.

REVENUE GROWTH IS
ON AVERAGE
35%
STRONGER IN COMPANIES
RECEIVING PRIVATE
EQUITY INVESTMENT IN
THE EBRD REGION

Improvements in labour productivity may take several years to realise (see Chart 4.2). Initially, investee companies have similar levels of efficiency to their peers, but they then experience stronger improvements in efficiency after a few years of private equity involvement.

Investment

Another widely held view is that private equity funds tend to engage in far-reaching reductions in company assets. In particular, they may limit capital investment and research and development expenditure, which frees up cash in the short term but hurts the future profitability of the company. If financial returns are primarily achieved in this way, the improvement in operational efficiency may be short-lived.

In fact, contrary to this view, private equity funds in the EBRD region substantially increase capital expenditure in order to improve operational efficiency. The analysis reveals that

investee companies experience a 41 per cent stronger increase in their capital stock (which includes buildings, machinery and computers) following private equity investment relative to companies that do not receive private equity financing (see Table 4.2). This remarkable increase in fixed-asset investment translates into a 46 per cent stronger increase in capital per employee.

Increases in physical investment typically take place within two years of private equity funds' initial investment (see Chart 4.3). The stock of physical capital then stabilises, which explains why improvements in labour productivity are realised in later years.

Debt

How do investee companies finance the surge in capital expenditure? On the one hand, companies can use some of the freshly raised equity from private equity funds to invest in physical capital. On the other hand, if some of the equity is used to increase collateralisable assets, then leverage – defined as the ratio of debt to total assets – can also comfortably increase as the company has more assets to borrow against.¹³ Thus, private equity financing can also help investee companies to become more creditworthy borrowers in other ways.¹⁴ Banks are often unwilling to finance investment plans submitted by entrepreneurial companies with unpredictable prospects. However, when a private equity transaction takes place, this sends a strong signal to the credit market, indicating that the company has a promising business plan that has been approved by the private equity fund and will be subject to close monitoring by private equity professionals.

The analysis reveals that investee companies' stock of debt almost doubles relative to companies that do not receive private equity investment (see Table 4.2). As with capital expenditure, borrowing takes place in the early years of the investment period (see Chart 4.4). In fact, analysis suggests that investee companies issue additional debt to finance part of their capital expenditure.

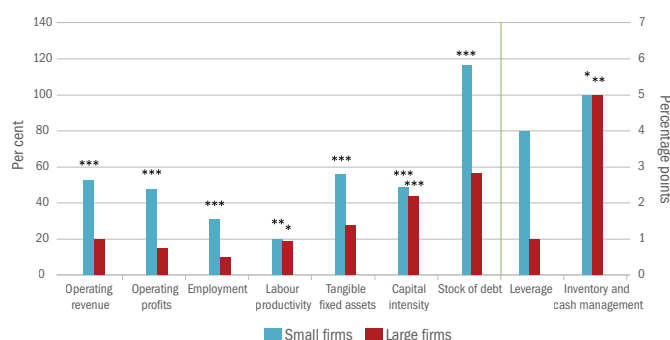
The resulting increase in capital intensity translates into higher levels of productivity and revenue, such that there is no significant increase in investee companies' debt-to-asset ratio. The higher levels of revenue are then used to pay down debt in later years.

Cash flow management

Private equity funds also seek to improve the operational efficiency of their investee companies through better management of inventories and cash. For instance, they can introduce better inventory management systems and ensure faster payments by customers, which combine to reduce the working capital needed by the company. This allows retained cash to be put to more effective use. Indeed, the data show that investee companies in the EBRD region experience a 5 percentage point improvement in the ratio of working capital to total capital relative to their peers (see Table 4.2).

If access to credit and operational improvements are key to the economic impact of private equity, one would expect stronger outcomes for companies that are more credit-constrained and

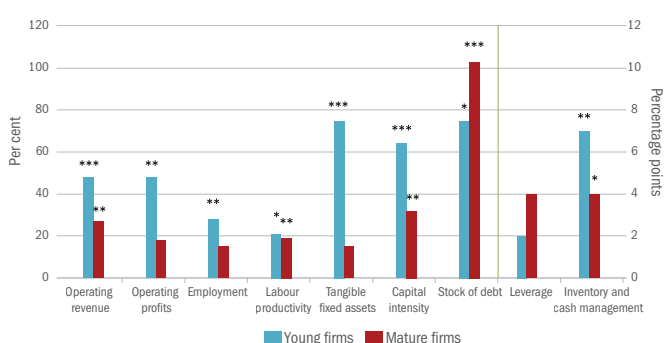
CHART 4.5. Impact of private equity investment on firms' performance by firm size



Source: EBRD, Orbis and authors' calculations.

Note: This chart shows the results of a difference-in-differences regression estimating the impact of private equity financing on company-level outcomes. The estimation sample comprises private equity and control group companies. Small companies are defined as having average employment levels that are below the sample median in the three years prior to a private equity investment, while large companies have employment levels that are above the median. *, ** and *** indicate statistical significance at the 10, 5 and 1 per cent levels respectively.

CHART 4.6. Impact of private equity investment on firms' performance by firm age



Source: EBRD, Orbis and authors' calculations.

Note: This chart shows the results of a difference-in-differences regression estimating the impact of private equity financing on company-level outcomes. The estimation sample comprises private equity and control group companies. Young companies are defined as being younger than the sample median prior to a private equity investment, while mature companies are older than the median. *, ** and *** indicate statistical significance at the 10, 5 and 1 per cent levels respectively.

inefficient prior to that private equity investment. In the EBRD region, such companies are typically smaller and younger firms, which often do not have physical assets and stable cash flows to borrow against. These companies are also less innovative and therefore less productive, as documented in last year's *Transition Report*.

The analysis suggests that private equity financing does indeed benefit small and young companies more than it benefits large and mature companies. The additional growth in revenue caused by private equity investment is around twice as large for small and young companies as it is for large and mature companies (see Charts 4.5 and 4.6). A similar pattern

¹³ The measure of debt used in this analysis is derived from unconsolidated company accounts and excludes debt taken on by holding companies. Debt which is taken on by a private equity fund to finance a buyout transaction and borne by a holding company, which in turn owns the investee company, is not captured.

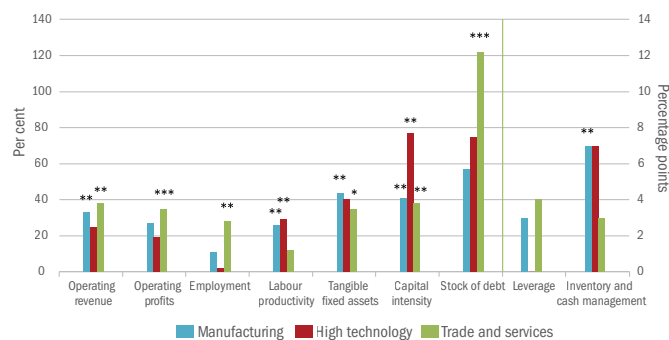
¹⁴ See Boucly et al. (2011).

can be observed for other measures of performance, including investment in physical capital and cash flow management. Furthermore, the impact on profitability and employment is primarily observed for small and young firms. In other words, large and mature investee companies experience only limited additional growth in their profitability or employment following private equity investment. In these companies, efforts appear to be focused primarily on eliminating operational inefficiencies and improving cash flow management.

The ways in which private equity funds improve investee companies' performance vary from sector to sector. In high-technology sectors, private equity funds undertake large-scale capital investment to improve productivity, but this investment does not seem to create additional jobs (see Chart 4.7). Companies in the retail, wholesale trade and services sectors, which often lack collateralisable assets, see the largest increases in the stock of debt in line with private equity's role in relaxing financial constraints. This additional funding source is then used to increase capital expenditure, which brings about higher levels of employment and profitability.

Strikingly, the impact of private equity on access to credit has doubled since the global financial crisis.¹⁵ This reflects the fact that (in the absence of private equity funds' seal of approval) firms have faced much tighter credit conditions. As a result, the impact of private equity in terms of capital expenditure growth and associated improvements in labour productivity has also increased, ultimately translating into a stronger impact on revenue growth.

CHART 4.7. Impact of private equity investment on firms' performance by sector



Source: EBRD, Orbis and authors' calculations.

Note: This chart shows the results of a difference-in-differences regression estimating the impact of private equity financing on company-level outcomes. The estimation sample comprises private equity and control group companies. *, ** and *** indicate statistical significance at the 10, 5 and 1 per cent levels respectively.

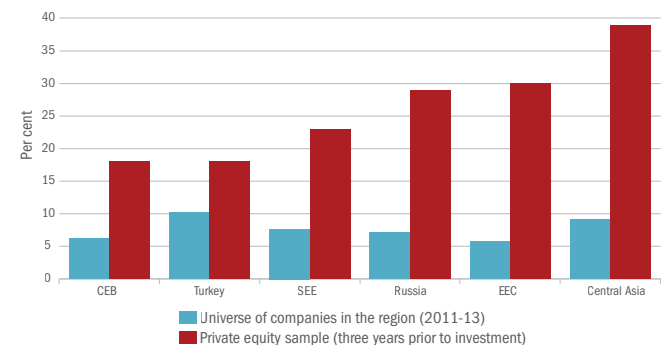
Scaling up private equity in the transition region

Increasing the penetration of private equity investment in the EBRD region could enable a larger set of companies to reap the benefits of such financing. But how many more companies are there in the transition region that could potentially attract private equity financing? To answer this question, this section uses a database of all active companies in the transition region ("the universe of companies") and compares them to the investee companies receiving private equity financing.

Potential targets

The analysis above suggests that companies must meet four criteria in order to qualify as a potential target for private equity investment. The first is strong growth: potential targets are required to grow faster than the average investee company from the same region prior to investment. Companies in the private equity sample typically display average annual revenue growth of more than 18 per cent prior to receiving private equity financing. This figure is around three times the growth rate of the typical company in the EBRD region since 2011 (see Chart 4.8). Private equity funds investing in eastern Europe and the Caucasus (EEC), Russia and Central Asia appear to target companies with particularly strong growth histories – perhaps to compensate for the perceived higher risks of investing in these regions. For these reasons, the criteria applied to target companies are region-specific. For instance, for the purposes of this analysis, potential targets are required to display growth rates of at least 18 per cent in central Europe and the Baltic states (CEB), but 28 per cent in Russia.

CHART 4.8. Average growth rates of investee companies and the rest of the economy



Source: EBRD, Orbis and authors' calculations.

¹⁵ This may also reflect the fact that private equity transactions conducted since 2008 are relatively recent, so investee companies have not yet had time to repay a significant percentage of any debt taken on following the private equity investment.

Second, potential targets are required to have a positive return on their assets, but room for operational improvement. The return on assets – defined as the ratio of net income to total assets – captures how efficiently a company uses its capital to generate earnings. Thus, ratios must be no higher than that of the average investee company. Companies that already have high ratios may not be attractive targets, as the scope for further operational improvements may appear limited.

Similarly, the third criterion relates to the sales margin. It is required to be positive, but no higher than that of the average investee company in the private equity sample, leaving scope for improvement.

Lastly, potential target companies are required to have a valuation that is not prohibitively high. Private equity funds report that this is one of the most important factors when it comes to choosing an investment.¹⁶ The proxy for valuation used here is the ratio of a company's book value to its earnings (before interest and taxes).¹⁷ It is assumed that a potential target company's ratio cannot exceed the 70th percentile of the distribution of these ratios in the sample of investee companies. Table 4.3 shows the criteria applied for returns on assets, sales margins and company valuations by region.¹⁸

On the basis of these criteria, potential target companies in the EBRD region have a total book value of US\$ 61 billion (measured in 2013 prices; see Table 4.4). Assuming that owners would be willing to sell half of their companies' shares to potential investors, a total of US\$ 30.5 billion could be deployed in the region by equity investors. If all of this amount were to come from private equity funds – rather than being raised through initial public offerings (IPOs), foreign direct investment or other forms of direct ownership – it would correspond to around 0.5 per cent of the region's GDP, a steep increase in private equity penetration (which currently stands at less than 0.1 per cent). Indeed, a total of just US\$ 9.2 billion of private equity capital has been invested in the EBRD region since 2010.¹⁹ However, even the increased amount falls short of the level of private equity activity in advanced markets such as the United Kingdom, where the corresponding figure is around 1 per cent of GDP.

Tripling the number of companies receiving private equity investment, which would mean a jump to 2,100 from around 700 (since 2010), could create an estimated 42,000 jobs in the region.²⁰ However, this calculation assumes that private equity investors will continue looking for relatively large investee companies, whereas the vast majority of potential investment targets identified in Table 4.4 are relatively small. This is particularly true of Turkey (see Chart 4.9). Furthermore, these calculations are not precise and are purely indicative. For instance, the recent downturn in the economic prospects of Russia and the CIS region has probably led to the pool of potential target companies being underestimated in these countries.

TABLE 4.3. Criteria for identifying potential targets for private equity investment

	Return on assets	Sales margin	Valuation
Central Europe and the Baltic states	0.12	0.07	8.33
Eastern Europe and the Caucasus	0.10	0.05	9.33
Russia	0.15	0.13	5.25
South-eastern Europe	0.11	0.11	7.85
Turkey	0.08	0.10	9.17

Source: EBRD private equity sample.

Note: This table reports the criteria applied to potential targets from the universe of companies in the region. The return on assets is measured as the ratio of net income to total assets. The sales margin is measured as the ratio of earnings before interest and taxes to operating revenue. A company's valuation is measured as the ratio of book value to earnings before interest and taxes.

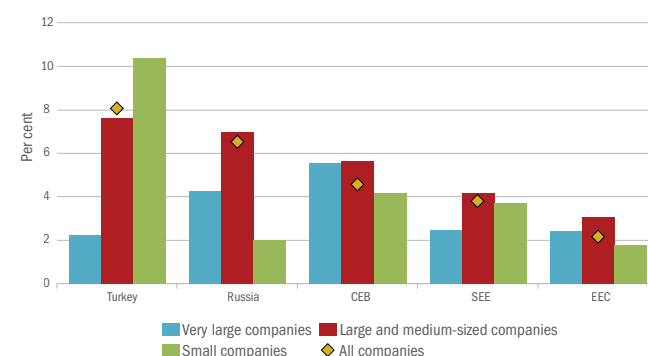
TABLE 4.4. Potential private equity investment in the EBRD region

	Number of potential targets	Total value of companies (US\$ billions)
Central Europe and the Baltic states	6,014	16.84
Eastern Europe and the Caucasus	3,145	2.01
Russia	16,946	34.78
South-eastern Europe	13,052	5.06
Turkey	505	2.18

Source: Orbis.

Note: Company values are calculated using companies' book values and measured in 2013 prices.

CHART 4.9. Shares of potential targets for private equity funds in the universe of companies



Source: EBRD, Orbis and authors' calculations.

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COMPANIES ARE CURRENTLY LISTED ON BORSA İSTANBUL'S EMERGING COMPANIES MARKET

¹⁶ See Gompers et al. (2015). In their survey of private equity funds in the United States, all investors mentioned growth in the value of the underlying business as a driver of returns.

¹⁷ As target companies are typically unlisted, their book values are assumed to be strongly correlated with their market values.

¹⁸ These data are not available for companies in Central Asia, which are dropped from the subsequent analysis.

¹⁹ This is based on investment in Russia, Turkey and the CEB, EEC and SEE regions.

²⁰ This is based on the number of companies that have received private equity financing since 2010 and the estimate of 30 new jobs per private equity investment.

What can policy-makers do?

Given the significant benefits that private equity involvement entails in terms of investment, job creation and company growth, encouraging more private equity investment in the region could help to scale up investment and stimulate more growth. There are a sizeable number of potential private equity targets in the region. However, levels of private equity investment in the region have remained relatively low compared with advanced markets, as documented in Chapter 3. What could policy-makers do to make the region more attractive to private equity investors?

Investor protection and corporate governance

There is a significant degree of heterogeneity across the EBRD region in terms of corporate transparency, investor protection and corporate governance. Weak shareholder protection may discourage investors from engaging in relatively risky, illiquid and long-term projects such as private equity investments. Furthermore, in countries with civil law or socialist legal backgrounds and countries where legal enforcement is difficult, private equity funds are more reliant on obtaining majority control and having more representation on the board.²¹ This significantly reduces the number of potential private equity deals, as many entrepreneurs may be reluctant to hand over majority control at an early stage when the valuations of their companies are still low.²² It also makes it difficult for funds to diversify their portfolios by targeting a large number of companies.

In order to determine the quality of corporate governance legislation and its implementation in the region, the EBRD launched a new corporate governance assessment in 2014.²³ This assessment sought to ascertain whether minority shareholders that want to play an active role in the company, such as private equity funds, (i) can conclude shareholder agreements and rely on their enforceability, (ii) have the option to appoint a board member and (iii) can rely on the disclosure offered by companies.

Shareholder agreements can be an effective tool enabling investors such as private equity funds to protect their investments. However, the EBRD's assessment has revealed limitations in the use of this tool in the transition region. In most countries, shareholder agreements do not need to be disclosed. Furthermore, in most countries it is not clear whether they are enforceable. They seem to be fairly rare in practice, and little or no case law exists on this matter.²⁴

Furthermore, while many countries in the region have legislation enabling minority shareholders to appoint board members, it often does not apply automatically. In other words, minority shareholders have to formally request that such provisions be applied. For instance, existing legislation in many countries allows cumulative voting on the appointment of board members to be requested. This would prevent the majority shareholder from appointing all board members.²⁵ For cumulative voting to work effectively, however, the company's shareholders need to know who the other shareholders are in order to be able to organise themselves, form an alliance and nominate a candidate to elect. Unfortunately, lists of shareholders are not easily available in many cases.

Moreover, in some cases, boards may have little say in decision-making. Companies across the region tend to be organised under a two-tier system, with separate supervisory and executive boards. In an ideal world, the general meeting of shareholders would appoint the supervisory board which would then appoint and remove the company's executives. However, the EBRD's assessment has found that in a number of countries the default legal rule enables the general meeting of shareholders to appoint both the supervisory board and the management (unless the company's by-laws provide otherwise). This mechanism, coupled with the absence of cumulative voting, allows a controlling shareholder to appoint both the supervisory board and the company's executives, depriving the board of any leverage over these executives. This discourages private equity funds from acquiring minority positions and prevents private equity funds that do hold minority stakes from carrying out operational improvements.

Another key aspect of governance from the perspective of potential investors is the level of non-financial disclosure. Although financial reporting in the region has reached a good standard, previous instances of corporate fraud have underscored the importance of validation procedures for financial reports. In this respect, a key role is played by audit committees. Members of a company's audit committee need to be qualified and independent if they are to recommend best practices in the area of reporting and provide stakeholders with a clear picture of key developments in the company. The EBRD's assessment suggests that this may not be the case except for a very small number of countries (such as Poland and Turkey). A lack of independence and expertise on company boards makes it more difficult for private equity funds (which have limited resources) to ensure adequate monitoring of their investee companies.

Development of equity markets

Private equity funds aim to exit their investee companies within a limited period of time and achieve the highest possible valuation. Exiting an investment via an IPO is an attractive option in both regards. However, exiting investments via IPOs is harder in the EBRD region than it is in more advanced economies owing to the lower average level of capital market development. Furthermore, less developed and less liquid capital markets may also reduce the expected returns from an investment. Both factors discourage private equity activity in the region.

Although there is significant variation across countries (see Box 4.1), capital market development tends to be the area where the EBRD region lags furthest behind western Europe and the United States when it comes to attracting venture capital and private equity. According to the index compiled by the IESE Business School, the region scores a lowly 40 out of 100 in this area, where 100 indicates the level of capital market development in the United States (see Chart 4.10), while in other areas (such as investor protection and corporate governance) the region's scores are substantially higher. This shows that increasing the depth of capital markets should be a clear priority when it comes to attracting more private equity investment to the region.

²¹ See Lerner and Schoar (2005).

²² See Lerner and Schoar (2005).

²³ This assessment is based on research carried out by the EBRD's Legal Transition Team. These questionnaires are based on internationally recognised best practices and cover both relevant legislation and "soft law" governance norms such as corporate governance codes. The EBRD team validates responses to the questionnaire by looking at the applicable framework and the disclosure offered by the

10 largest listed companies in each country.

²⁴ In a few countries – such as Estonia, Latvia and Poland – they are considered enforceable, but this is often subject to strict legal conditions. The assessment has also found that shareholders rarely seek redress on behalf of the company (by means of a "derivative suit") where they feel that their rights have been breached.

A number of policy options are available to facilitate the development of public equity markets. First, policy-makers can support the establishment of exchanges designed specifically for SMEs (see Box 4.2). Many of the companies in the EBRD region that attract private equity financing are SMEs and more SMEs may be able to attract such funding if they can list their shares on an exchange with relative ease at the time of exit. In contrast with a national stock exchange which typically caters for large conglomerates, an “SME growth market” allows smaller companies to float shares under a more flexible regulatory system at a lower cost. A very successful example of such an exchange is the AIM in the United Kingdom, while Poland, Romania and Turkey all have fledgling SME growth markets. Stricter enforcement of insider trading rules is also instrumental in supporting the development of equity markets (see Box 4.1).

Second, channelling more savings from households and institutional investors into equity markets is crucial. EU member states’ efforts to establish a capital markets union should help to match institutional investors with productive companies across the EU (including SMEs and start-ups, which are most in need of long-term capital). In particular, the European Commission’s green paper on this issue²⁶ recommends measures to reduce transaction costs and cross-border marketing costs, which should increase competition and attract new players. Harmonising regulations in the areas of insolvency legislation and tax regimes should also encourage institutional investors to invest larger amounts in the region’s capital markets. This could help EU member states in the EBRD region to attract foreign capital and make up for their relatively low levels of domestic savings.

A third and related policy option concerns pension systems in the region. Since the global financial crisis, there have been setbacks in a number of countries in terms of the development of mandatory funded pension systems, which have placed private pension funds under intense pressure. When funded pension schemes are cut back as a result of regulatory changes, the liquidity and efficiency of local capital markets suffer. As a result, less funding is available for the region’s companies and the prospects of a successful IPO become less certain. This has a particular impact on capital directed towards long-term “alternative” investments such as private equity.

CHART 4.10. Attractiveness of eastern Europe in terms of private equity (2015)



Source: 2015 Venture Capital and Private Equity Country Attractiveness Index (<http://blog.iese.edu/vcpeindex>).

COMPANIES IN THE EBRD REGION RECEIVING PRIVATE EQUITY INVESTMENT HAVE ON AVERAGE

150
EMPLOYEES

700

COMPANIES IN THE EBRD REGION HAVE RECEIVED PRIVATE EQUITY INVESTMENT SINCE 2010

²⁵ Under the cumulative voting system, each shareholder has one vote per share for each of the directors to be elected, but can use all of those votes on a single director. Cumulative voting is not provided for by law in Azerbaijan, Bosnia and Herzegovina, Bulgaria, Cyprus, Estonia, FYR Macedonia, Hungary, Jordan, Morocco, the Slovak Republic, Slovenia or Tunisia.

²⁶ See European Commission (2015).

Conclusion

This chapter has shown that private equity investment can help to transform companies, ultimately boosting investment, employment and growth in the EBRD region. Private equity funds help companies to gain better access to credit and increase physical investment. These funds constantly monitor companies' operations to ensure that investment in capital helps to make employees more productive rather than merely replacing them. As a result, a company that attracts private equity financing will enjoy stronger growth in revenue and employment than similar companies that do not have access to such risk capital.

The positive effect private equity has on employment and physical investment is striking, particularly as negative effects have sometimes been found in advanced economies where private equity funds tend to focus on cutting costs and restructuring in mature companies. In the EBRD region, in contrast, private equity funds typically invest in credit-constrained companies with considerable growth potential, adopting strategies that generate investment and jobs.

The number of companies in the region that have strong growth prospects and could potentially attract private equity funding is estimated at around 40,000 – more than 50 times the actual number of companies that have received such financing in recent years. Extending equity financing to just a fraction of these companies would create a significant number of jobs and boost investment.

In order to increase the presence of private equity firms in the region, policy-makers can help to strengthen the protection of minority shareholders and support the development of private equity markets. As they are often minority shareholders, private equity firms stand to benefit from improved enforcement of regulations designed to protect minority shareholders and the application of industry best practices in terms of information disclosure rules. Furthermore, the establishment of stock exchanges that are specifically designed for smaller companies can help to enhance SMEs' access to equity financing and improve private equity funds' exit opportunities, making investment in SMEs more attractive. Stricter enforcement of insider trading laws is another crucial driver of stock market development and an area where significant work remains to be done across the region. Last but not least, it is also important to revitalise bank lending in the region, as private equity firms and other equity investors rely on complementary debt financing to fund investment underpinning the growth and modernisation of firms.

BOX 4.1. AN ANATOMY OF STOCK MARKETS IN EMERGING EUROPE²⁷

Emerging market stocks have become an integral part of global stock portfolios following the wave of financial liberalisation in the late 1980s and early 1990s. While most emerging stock markets have been studied in detail, relatively little is known about stock markets in emerging Europe, which have tended to be liberalised later than those of other emerging markets.²⁸ This box provides an overview of the development of stock markets in central and eastern Europe, Kazakhstan, Russia and Turkey since the mid-1990s. It uses firm-level data to construct stock market indices and market development indicators that help to assess the current state of development of the region's stock markets, as well as looking at the benefits of diversification for global investors.

Indicators of stock market development

Stock market development can be tracked using five key indicators. The first indicator, the ratio of total market capitalisation to GDP, measures the size of the stock market relative to the size of the economy. Two liquidity indicators, stock market turnover and the average percentage of non-zero daily returns, track the evolution of market liquidity. And the last two indicators track stock market concentration at firm and industry level respectively, using Herfindahl-Hirschman Indices (HHIs). Investors prefer unconcentrated stock markets with more opportunities for diversification.

These indicators suggest that Russia and Turkey have the most highly developed stock markets thanks to the large market capitalisations of their domestic listed companies and their high levels of trading activity (see Table 4.1.1, where darker shading indicates a higher level of development). They are similar to Germany in these respects, but they lag some way behind the United States. However, stock market activity in these countries continues to be dominated by a few industries, as reflected in their high concentration indices. The same is true of the rest of the region.

Drivers of stock market development

After the fall of the Iron Curtain, many countries in the region liberalised their stock markets by allowing foreign investors to invest in domestic stocks, introducing insider trading laws and – at a somewhat later stage – establishing electronic trading systems. Countries implemented these policies at different times, and the reform process remains incomplete across the region. Knowing which reforms are most strongly associated with the development of stock markets can help policy-makers to determine their priorities in this area.

²⁷ This box is based on Baele et al. (2015).

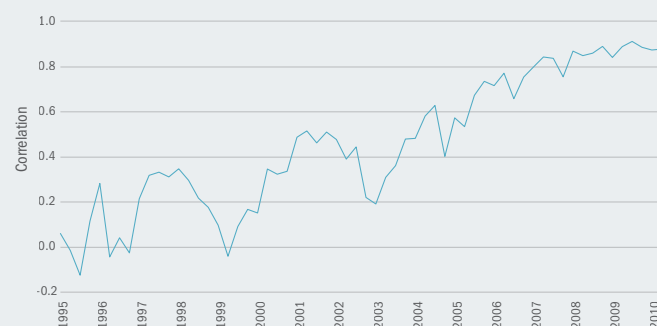
²⁸ See Bekaert and Harvey (2014).

TABLE 4.1.1. Indicators of stock market development

	Equity market development ranking	Ratio of market capitalisation to GDP	Turnover	Non-zero returns	Firm-level HHI	Industry-level HHI
Russia	1	0.59	0.81	0.91	0.05	0.20
Turkey	2	0.39	1.37	0.83	0.03	0.22
Hungary	3	0.22	1.07	0.95	0.20	0.16
Poland	4	0.32	0.37	0.81	0.04	0.22
Slovenia	5	0.19	0.09	0.85	0.12	0.11
Czech Rep.	6	0.21	0.49	0.97	0.27	0.31
Lithuania	7	0.12	0.07	0.90	0.06	0.18
Ukraine	8	0.09	0.10	0.78	0.10	0.21
Bulgaria	9	0.08	0.06	0.66	0.03	0.15
Estonia	10	0.09	0.31	0.81	0.10	0.35
Croatia	11	0.14	0.06	0.90	0.30	0.29
Romania	12	0.08	0.14	0.82	0.21	0.33
Serbia	13	0.05	0.08	0.70	0.07	0.31
Latvia	14	0.04	0.03	0.62	0.14	0.34
Slovak Rep.	15	0.03	0.28	0.24	0.59	0.67
Kazakhstan	16	0.06	0.01	0.65	0.25	0.39
Germany	-	0.43	1.14	-	-	0.14
United States	-	1.18	1.76	-	-	0.13

Source: Baele et al. (2015).

Note: Turnover is defined as the ratio of the total dollar trading volume per year over the end-of-year market capitalisation. Non-zero returns is the value-weighted average percentage of non-zero daily price returns in local currency. HHI indicates the Herfindahl-Hirschman Index and captures how total stock market capitalisation is distributed across listed companies and industries.

CHART 4.1.1. Correlation between stock market returns in emerging and western Europe

Source: Baele et al. (2015).

The enforcement of insider trading laws – as evidenced by prosecutions – systematically fosters the development of stock markets, according to an unreported regression analysis. In countries with stronger enforcement, market capitalisation and liquidity levels tend to be higher, and larger numbers of companies (and companies in more industries) tend to be listed on the stock exchange. In countries with weak enforcement, market-makers protect themselves by increasing their sell price and lowering their buy price, thereby increasing transaction costs and the cost of issuing stock. Thus, by reducing the cost of stock, stronger enforcement of insider trading laws fosters trading activity and attracts more companies to the stock market. The introduction of electronic trading has also contributed to increases in market capitalisation in many countries.

Diversification benefits

Stock market investors are keen to hold a diverse portfolio of investments. So, do stock markets in emerging Europe offer additional diversification opportunities for investors? In the early 1990s Latin America and south-east Asia were regarded as the ideal investment opportunities, offering growth potential and great diversification benefits, as there was little correlation between returns in these markets and those in developed markets.²⁹ Over the last two decades, however, the two have become much more strongly correlated. As a result, the diversification benefits of investing in emerging markets have become less clear. At the same time, stock markets in the EBRD region were liberalised later than others and were still relatively poorly integrated with world markets when the global financial crisis struck.³⁰

Since the financial crisis, however, returns in emerging Europe's stock markets have been very similar to those in western European stock markets (see Chart 4.1.1, in which the custom-made emerging Europe index is based on more than 2,000 individual stocks from the stock markets listed in Table 4.1.1; the western European stock market index comes from MSCI).³¹ This indicates that the factors affecting the future profitability of companies in the EBRD region have been closely aligned with those prevailing in western Europe. If this strong correlation persists in the coming years, the region may be unable to offer many diversification benefits to global investors.

²⁹ See Harvey (1995).

³⁰ See Bekaert and Harvey (2014).

³¹ The stocks in Chart 4.1.1 have passed a series of inclusion tests looking at data availability and liquidity, as well as careful checks on return data. These custom-made value-weighted indices aim to account for around 85 per cent of total market capitalisation.

BOX 4.2. EXCHANGES AS COMPANY FINANCING HUBS

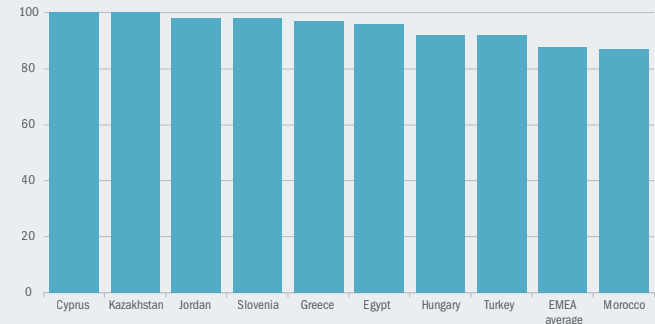
Small and medium-sized enterprises (SMEs) are a major driver of economic growth and employment in the EBRD region. However, it has become harder for SMEs to obtain bank financing since the global financial crisis (see Chapter 2). Equity markets could help to alleviate constraints in terms of SMEs' access to finance, as regards both equity (via the listing of companies) and debt (via the issuance of corporate bonds). However, much remains to be done if exchanges are to become effective providers of financing to SMEs.

In terms of market capitalisation, SMEs already make up the majority of most exchanges' clients in the EBRD region (see Chart 4.2.1). However, SMEs typically face the same listing requirements and regulatory regimes as large companies. Brokerage and initial public offering (IPO) consultancy fees can be particularly high for SMEs as a percentage of sales or profits. For instance, the average cost of an IPO for SMEs in Turkey is 7 per cent of the capital raised, compared with only 4 per cent for larger companies.

A few stock exchanges in the EBRD region already have designated SME market segments, such as the Emerging Companies Market operated by Borsa İstanbul, the NewConnect market at the Warsaw Stock Exchange or the Aero market recently established by the Bucharest Stock Exchange. These segments remain relatively small. For instance, 22 companies are currently listed on the Emerging Companies Market, which had a trading volume of US\$ 890 million in 2014. SMEs listed there benefit from a special subsidy of approximately US\$ 35,000 from Turkey's SME Development Center, which helps to bring down the costs faced by smaller firms. Special incentives encouraging brokers, investment banks, analysts and accounting firms to specialise in small companies also reduce the cost of listing for SMEs. Shares in SMEs tend to be traded less frequently than blue-chip stocks, so the design of SME markets and their legal and regulatory environments needs to take account of the lower levels of liquidity in these segments.

The US Jumpstart Our Business Startups (JOBS) Act, the new EU Markets in Financial Instruments Directive (MiFID II) and Canada's TMX Group provide some guidance in this respect. In the United States, the JOBS Act focuses on what it calls "emerging growth companies" (EGCs), providing a legal framework for EGCs with audited accounts that plan to raise up to US\$ 1 million of capital annually and unaudited EGCs planning to raise up to US\$ 500,000 per year. SMEs are subject to less onerous registration procedures and reporting/disclosure requirements,

CHART 4.2.1. Percentage of overall market capitalisation accounted for by small and mid-caps



Source: World Federation of Exchanges 2013 Market Segmentation Survey.

Note: Small and mid-caps are companies with market capitalisation of up to US\$ 1.3 billion. EMEA stands for Europe, Middle East and Africa.

while at the same time specific investment restrictions apply for retail investors in this segment.

In the EU, MiFID II creates new tailor-made markets for SMEs in the form of multilateral trading facilities (MTFs).³² MiFID II maintains high levels of protection for investors, while reducing unnecessary administrative burdens for issuers in these markets. Existing growth markets can voluntarily choose to register as SME growth markets, as long as at least 50 per cent of issuers are SMEs.

Exchanges with a multi-level equity market structure covering issuers of various sizes that are at different stages of development are in a very good position to offer SMEs access to capital markets (see Chart 4.2.2). For example, the TMX Group in Canada operates a tiered equity market consisting of three markets: (i) the Toronto Stock Exchange (TSX), the main market targeting large and medium-sized companies; (ii) the TSX Venture Exchange, a junior equity market focusing on SMEs; and (iii) the NEX market segment, which is for companies which do not fulfil the criteria for listing on the TSX or the TSX Venture Exchange. The multi-level market structure provides companies with simplified listing procedures, helping them to graduate to higher market segments.

The development of such specialist SME exchanges and simplified regulatory and listing requirements for SMEs can greatly improve SMEs' access to finance across the EBRD region and diversify the funding options available to SMEs.

CHART 4.2.2. A company financing hub with a multi-level structure



Source: EBRD.

³² An MTF is a trading platform operated by an approved market operator (such as an exchange or an investment bank). The US equivalent is the alternative trading system (ATS). MTFs were introduced by the first Markets in Financial Instruments Directive (MiFID) with the primary aim of enhancing competition, encouraging trading and offering competitive prices. MTFs are subject to more relaxed regulatory requirements compared with regulated markets operated by exchanges.

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