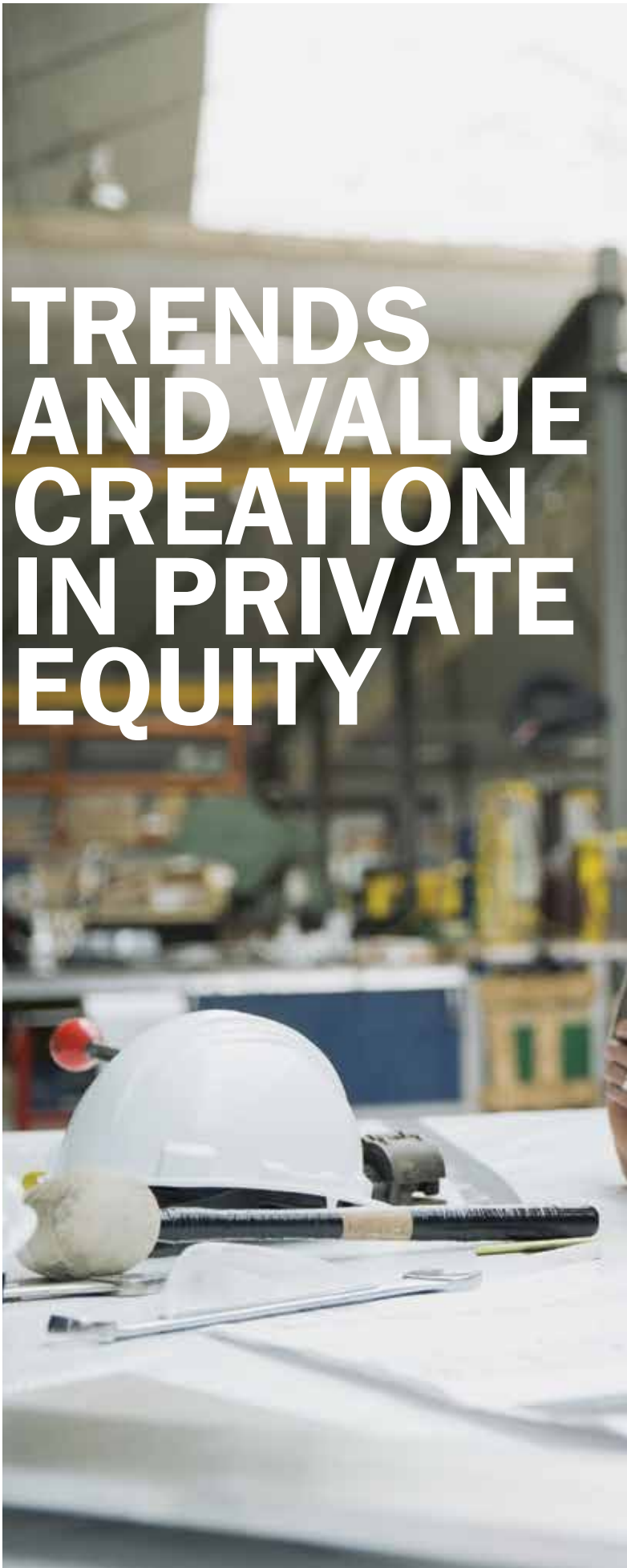


TRENDS AND VALUE CREATION IN PRIVATE EQUITY

Private equity can generate both financial value for investors and economic value for the companies involved. Despite the strong growth of private equity globally, the transition region receives only a small share of these global flows. Compared with advanced economies, private equity funds in the transition region rely less on debt financing and more on selecting high-growth companies and implementing operational improvements to create value.

Introduction

The transition region has benefited significantly from the rise of equity financing as an alternative and a complement to bank finance over the past 15 years. Public equity markets in the region have grown in size and liquidity, enabling companies to attract not only domestic savings but also capital from foreign investors.[1] In addition, increasing flows of foreign direct investment (FDI) have transformed economies into more efficient providers of goods and services, creating jobs and economic growth along the way.[2] However, a third source of equity finance – private equity – remains a relatively untapped source of funding. In theory, it has the potential to combine the appeal that public equity markets have for financial investors with the positive impact that FDI has on local economies. This chapter and the next one look at how private equity can achieve these objectives and how successful it has been so far.

"Equity financing" generally refers to financial instruments that result in investors sharing in the profits and losses of a business. Equity's risk-sharing function sets it apart from debt financing

[1] See Baele et al. (2015). The largest stock markets in the region, namely Poland, Russia and Turkey, each have a market capitalisation of well over US$ 200 billion. See also Box 4.1.
[2] See Estrin et al. (2009) and Javorcik (2015).


1%
OF GLOBAL PRIVATE EQUITY IS INVESTED IN THE EBRD REGION
76%
SHARE OF GROWTH AND VENTURE CAPITAL IN THE EBRD REGION BY NUMBER OF DEALS BETWEEN 2009 AND 2014 INVESTED IN PRIVATE EQUITY
BETWEEN 2008 AND 2014 PRIVATE EQUITY CAPITAL INVESTED IN THE EBRD REGION TOTALLED
US$21.4 BILLION

and makes it attractive for certain types of investors and companies. From an investor's perspective, an equity investment in a company has the potential for significant capital gains if that company is successful. From the company's perspective, it provides an additional and longer-term source of capital to grow the business.

Private equity sits between public equity and outright ownership (for instance, as a result of FDI) in terms of the investment horizon and the degree of corporate control. It is a medium-term investment which does not have the liquidity or the short-term horizon associated with investing in publicly traded equities. In contrast with public equity, it ties the investor closely to the company through the acquisition of a significant equity stake that entails some control rights and membership of the board. This allows private equity investors to adopt a more hands-on approach when managing their investment and implementing operational changes at a company. It is similar to FDI in this regard but the investment is for a shorter period of time.

The objective of private equity investors is predominantly to generate capital gains and increase shareholder value. Private equity funds do this by identifying promising businesses, actively managing those businesses to improve efficiency, and selling them or floating them on public markets to realise financial returns. The fact that private equity funds aim to generate financial returns primarily through better management and efficiency – as demonstrated later in this chapter – means that they also generate economic value for the companies they invest in. While increasing shareholder value, private equity investment can also stimulate company growth, employment and productivity. Thus, private equity can, in principle, be an attractive source of capital for economic growth and transition. The next chapter documents these effects on individual companies and local economies in more detail.

This chapter assesses the role and performance of private equity in the transition region. Two stylised facts should be noted in this regard. First, the region attracts only a small share of all private equity capital that is invested globally. That share is, for instance, smaller than the region's shares of world output, FDI and portfolio investment. Second, the region's share of total private equity investment in emerging markets has been declining recently. Thus, it appears that private equity remains underutilised as a source of finance in the transition region. Moreover, the limited use of debt in private equity transactions in the transition region restricts returns to what can be achieved via revenue growth, so returns are lower than those seen in more developed economies.

What is private equity?

Private equity financing aims to fill the gap between internally generated financing and conventional market sources such as bank loans and public equity. It is risk capital provided outside public markets to companies with high levels of growth potential, start-ups, young companies at an early stage of development and, in some cases, companies that require a financial turnaround. Unlike most stock market investors, private equity investors typically acquire significant equity stakes that entail control rights and the right to nominate directors. As a result, they adopt a more hands-on approach when managing their investments.

A private equity fund is a collective investment scheme that typically attracts capital commitments from a variety of institutional investors (such as pension funds, endowment funds, banks and family offices), as well as the fund managers themselves. Private equity funds typically operate as a limited partnership, which is controlled by a private equity firm referred to as the "general partner". Investors that participate in the fund are called "limited partners" and they usually commit their capital for several "rounds" (or "closings"). The limited partnership is often set up for a fixed term of 10 years. The general partner typically makes investments in non-listed companies. Besides capital, the general partner provides investee (or "portfolio") companies with strategic and managerial support.

In addition to private equity investment, portfolio companies may also raise financing from banks. When a private equity fund finances its investment in a company with more debt than equity or cash, it is referred to as a "leveraged buyout".[3] Each portfolio company is managed by the fund for four to six years on behalf of the fund's investors and an exit is achieved when the fund is able to realise its investment. This takes place once the investee company has grown sufficiently or become financially sound and the fund is able to sell the company to a strategic investor (usually a company in the same industry), another private equity fund or a current shareholder in the company, or float it on the stock market via an initial public offering (IPO). Because each investment is highly risky, a private equity fund typically invests in 10 to 20 companies over the lifetime of the fund and seeks to achieve large returns on some exits to compensate for losses on others.

At a conceptual level, private equity addresses the market failure created by the "principal-agent problem" which can be observed in many companies. The motivations of public company managers and those of shareholders may not always be perfectly aligned. Instead, managers may act in their own best interests while shareholders fail to fully hold them to account. This is because shareholders are not as well-informed about the company as managers are. In addition, the dispersal of ownership makes it harder for shareholders to coordinate their actions and monitor the management.

In publicly traded companies, investors can simply sell their shares and move on if they believe that managers are not maximising the value of the company. In private equity, the problem is addressed by closely aligning the interests of managers and shareholders to achieve economic efficiencies.[4] A later section in this chapter looks at how private equity funds align these interests through close monitoring of companies, positions on the board and financial incentives given to company managers. In the transition region, supervisory boards play a crucial role in aligning the incentives of shareholders and management (see Box 3.1).

[3] In the United States, for instance, more than 60 per cent of a buyout is typically financed using debt. See Kaplan and Strömberg (2009).
[4] See Gilligan and Wright (2014).

BOX 3.1. A SURVEY OF BOARD MEMBERS IN THE TRANSITION REGION

The board of directors forms an integral part of a firm's governance mechanisms. Board members are appointed by shareholders to promote their interests and to supervise and advise the chief executive and other executive directors. In order to gain a better understanding of how boards operate in practice in transition countries, an electronic survey was recently sent to a large number of current and past EBRD board nominees (that is to say, board members nominated by the EBRD on account of its substantial equity stake in the relevant firm).

The aim of the survey was to collect information about how board members in various countries perceive their own role, the role of their board and the role of the legal and institutional environment. A total of 246 surveys were sent out and 131 complete responses were received. Around 25 per cent of respondents were female, about 55 per cent had prior board experience and around 45 per cent had prior experience in the relevant industry.

Board conduct

How do boards operate in practice? The survey indicated that members spent an average of 2.7 days a month on their duties, with the average board convening around five times a year and the average meeting lasting five hours.

More than 80 per cent of boards were perceived to set clear targets; 29 per cent of boards met without management and 20 per cent of boards held independent strategy "away days"; while 35 per cent of respondents felt that the board did not have a good understanding of the second level of management. In 16 per cent of companies the roles of chairman of the board and chief executive were combined. In the remaining 84 per cent of cases these roles were clearly separated, as one would expect in a well-governed firm. Taken together, these results suggest that interactions between the board and senior management vary across companies.

Distribution of power within the board

Who, in practice, has the power on companies' boards? The survey indicates that in 40 per cent of companies the board's agenda is set by the chairman of the board and in 12 per cent it is determined by non-executive directors. In the remaining 48 per cent of companies the board's agenda is actually wholly or partially set by management.

In 51 per cent of cases the board takes the final decision on strategic issues, in 42 per cent of companies it is the majority shareholder and in the remaining 7 per cent it is the management. New board members are typically proposed by shareholders and, to a lesser extent, by the chairman of the board or current board members.

The survey also asked whether the respondent had ever voted against board proposals. Around a third reported that they had never voted against a proposal. This is not necessarily a bad thing, as it is quite possible for disagreements to be discussed and cleared up in the boardroom without a formal vote taking place. Almost 70 per cent of the surveyed board members indicated that they voted against board proposals either rarely or sometimes, suggesting that voting is resorted to where necessary.

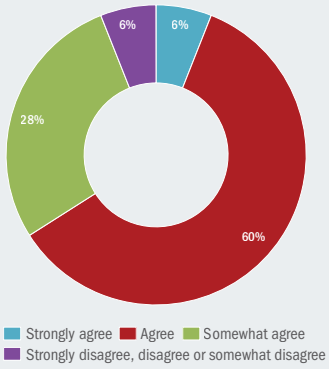
Institutional quality

Does local legislation across the transition region sufficiently empower board members to fulfil their roles? Just under 6 per cent disagreed with this statement, 28 per cent somewhat agreed and 66 per cent agreed or agreed strongly (see Chart 3.1.1). Interestingly, regression analysis points to a strongly significant negative correlation between the likelihood of voting against board proposals and board members' judgement on whether local legislation gives them enough power to fulfil their role (while controlling for other director and industry-level characteristics). Thus, the greater the perceived strength of local legislation, the less a board member feels the need to vote against board proposals. This suggests that board members can function in a less confrontational manner when formal legal institutions provide them with sufficient backing.

Lastly, the survey also presented board members with a case study about a hypothetical conflict between shareholders and the board.[5] Respondents were then asked whether they thought that the courts in their respective countries would rule fairly and objectively in this case. The opinions were divided: around half of all board members said they did not think that this would happen.

Overall, the results of this survey suggest that in order to further empower board members, it may be useful in some cases to distinguish more clearly between the responsibilities of executive management and the supervisory board, and in some countries there is a need to strengthen the legal framework governing boards of directors.

CHART 3.1.1. Does local legislation sufficiently empower you to fulfil your role as a board member?



Source: EBRD survey.

[5] There have been a number of high-profile disputes involving disagreements between shareholders (and their representatives on the board) and the company's chief executive (who may potentially represent one particular shareholder). Examples include TNK vs BP in TNK-BP in 2008, Altima/Alfa vs Telenor in Vympelkom and Interros vs RUSAL in Norilsk Nickel.

Recent trends in private equity

Private equity has grown steadily as a global asset class over the last two decades. In mid-2014 the total value of assets under management by private equity funds stood at more than US$ 2.5 trillion, while an estimated US$ 1 trillion of "dry powder" remains available to invest in companies.[6]

The transition region saw the first signs of private equity activity in the early 1990s, with funds supported by government agencies (such as the early enterprise funds led by the United States) as well as funds supported by international financial institutions such as the EBRD (which helped to set up regional venture funds in Russia and post-privatisation funds in central Europe). Since then, many new players have entered the market and some of them have successfully raised follow-on funds.

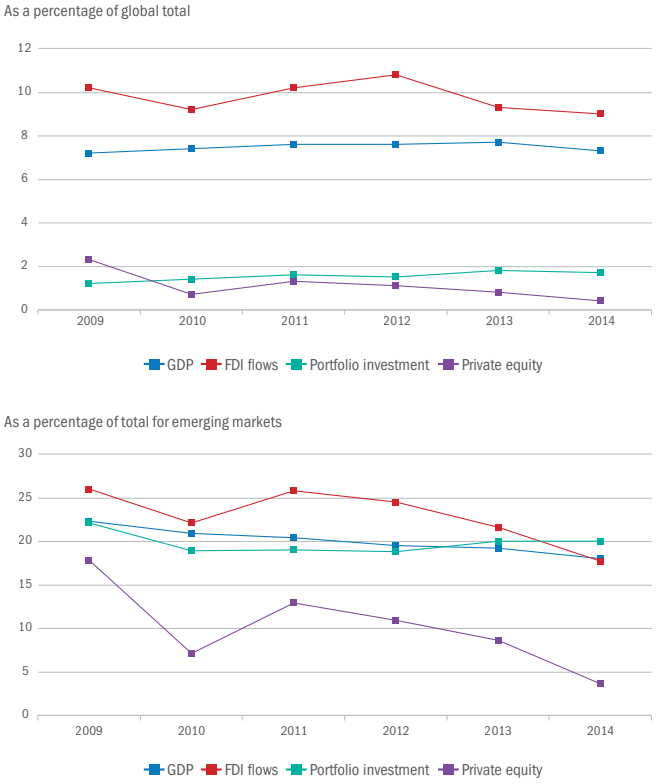
The rise of private equity activity in the region reflects the rapid economic growth seen in the early 2000s, which was accompanied by rising consumer wealth and the EU accession of countries in central and south-eastern Europe. However, it has failed to match the (even stronger) increase seen in FDI inflows or the growth of private equity investment in emerging markets globally. Indeed, total investment by private equity firms in emerging markets worldwide stood at US$ 35 billion in 2014, a five-fold increase on the US$ 7 billion that was recorded in 2004.[7]

These disparities have become more pronounced since 2009. During this period, the EBRD's countries of operations have only attracted around 1 per cent of global private equity investment (see upper panel of Chart 3.1). This is a relatively small share for a region that accounts for around 7 per cent of world output and receives around 10 per cent of global FDI inflows. The region's share of global portfolio inflows (which include cross-border purchases of public equities and sovereign and corporate bonds) is much smaller, at around 2 per cent, but still larger than its share of private equity. Thus, the region has been much more successful at attracting FDI and investment in traded securities than it has at attracting private equity.

In fact, the region's share of global private equity flows has been declining in recent years. Prior to the global financial crisis, the region accounted for close to a fifth of all capital invested by private equity funds in emerging markets. By 2014, however, this share had dropped below 10 per cent (see lower panel of Chart 3.1). This decline has been mirrored by a similar decline in the region's share of FDI flows to emerging markets. These trends suggest that international investors are currently reluctant to commit long-term funds to the region, despite the fact that the region has become more successful at attracting shorter-term portfolio investment flows.

As a result, levels of private equity investment in the EBRD region remain very low indeed as a percentage of economic activity (see Chart 3.2). While private equity investment totals more than 1 per cent of GDP in the United States, the United Kingdom and many other large developed economies (and even more in smaller developed economies such as Israel), in Poland, Russia and Turkey (the main destinations for private equity investment in the transition region) private equity capital totals less than 0.1 per cent of GDP. This is significantly lower than the corresponding ratios in emerging markets such as Brazil

CHART 3.1. Private equity activity and capital flows into the EBRD region, 2009-14



Source: GDP figures from Euromonitor International (data derived from national statistics, Eurostat, OECD, UN, IMF and UNCTAD); FDI data from International Financial Statistics; portfolio investment figures from IMF Coordinated Portfolio Investment Surveys; private equity data from Asia Private Equity Review, EMPEA, EVCA and PitchBook.

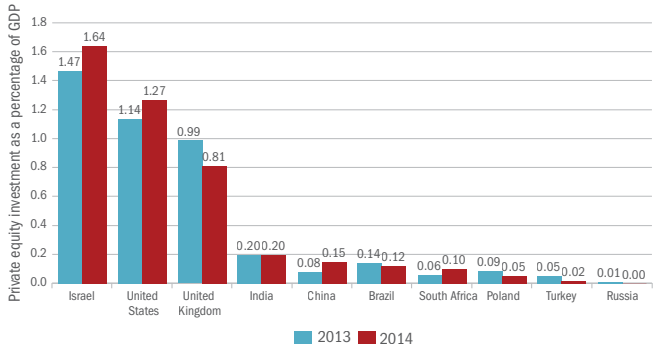
BETWEEN 2009 AND 2014 GROWTH CAPITAL AND VENTURE CAPITAL MADE UP

47%

OF PRIVATE EQUITY INVESTMENT IN THE EBRD REGION IN VALUE TERMS

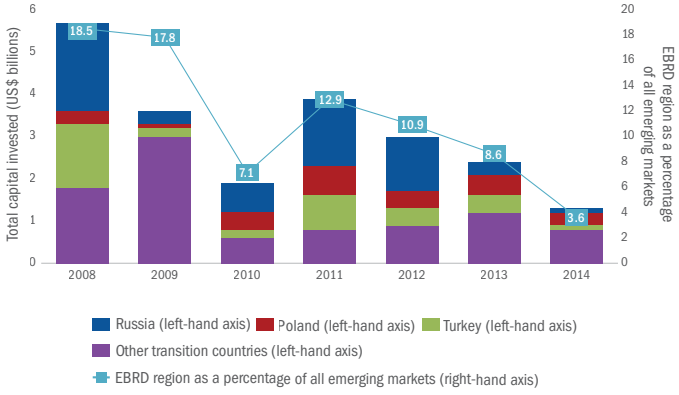
[6] See Preqin (2015).
[7] Emerging Markets Private Equity Association (EMPEA) industry statistics, 2015.

CHART 3.2. Global private equity penetration, 2013-14



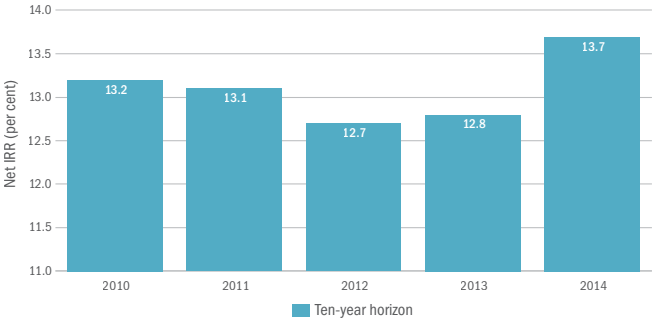
Source: EMPEA, Centre for Management Buy-Out Research, PitchBook, Israel Venture Capital Research Center and IMF.

CHART 3.3. Private equity inflows across the EBRD region, 2009-14



Source: EMPEA.

CHART 3.4. Annual private equity returns in the EBRD region



Source: EBRD.
Note: Ten-year horizon returns reflect the return from selling a portfolio of funds that are purchased ten years prior to the indicated year, and are reported in US$ as at year-end. Figures reflect pooled end-to-end returns, net of fees, expenses and carried interest.

and India. This suggests that there is significant potential for further leveraging the economic value created by private equity funds in terms of employment and output growth (as discussed in the next chapter).

Private equity investment in the region initially bounced back after the crisis but it has been declining since 2011. This decline, relating to private equity flows to other emerging markets, largely reflects weaker private equity activity in Russia (see Chart 3.3), changes to the pension system in Poland (see Chapter 4) and a slowdown in economic growth across the region as a whole, as economies have been affected by falling energy prices, the political turmoil surrounding Ukraine, the sluggish growth in the rest of Europe and cross-border deleveraging, resulting in low or negative rates of credit growth (see also Chapter 2 and the Macroeconomic Overview).

This may explain why private equity returns in the region have fallen short of investors' targets. In developed economies, investors typically seek annual returns in excess of 15 per cent (net of fees) to compensate for the long-term nature of investments.[8] Net horizon returns in emerging Europe, however, have been around 13 per cent in recent years (see Chart 3.4). Moreover, net returns had been on a downward trajectory for several years before they started to recover.

In addition to these cyclical factors, structural factors also help to explain the generally low levels of private equity activity in the EBRD region. For instance, concerns regarding the quality of institutions, weak legal protection of minority shareholders and poor corporate governance in some countries may discourage private equity investors, while poor contract enforcement could limit private equity funds' ability to assert control over the management of investee companies (see Chapter 4). Such institutional weaknesses may affect the ability of private equity funds to improve companies' performance and generate financial returns.

[8] See Gompers et al. (2015). Private equity funds typically charge their investors (that is to say, limited partners) a 2 per cent management fee on capital deployed and retain 20 per cent of capital gains over a certain return threshold promised to their investors, which is usually set at 8 per cent. Taking this into account, the targeted return in gross IRR terms is around 20-25 per cent.

How do private equity funds create value for investors?

Financial, governance and operational engineering

Private equity funds typically generate returns in three ways: through financial engineering, governance engineering and operational engineering.[9] Private equity funds differ from each other in the way that they finance their investee companies. Some funds (referred to as "buyout funds") predominantly acquire controlling stakes in established companies and actively use debt to finance parts of these acquisitions. Such *financial engineering* – the active use of debt financing in buyout transactions – tends to increase financial discipline in investee companies, which face pressure to make repayments on time. Thus, it improves the efficiency of cash flow management. Leverage can also add to firms' value, as interest payments on loans are tax deductible in many countries.[10,11]

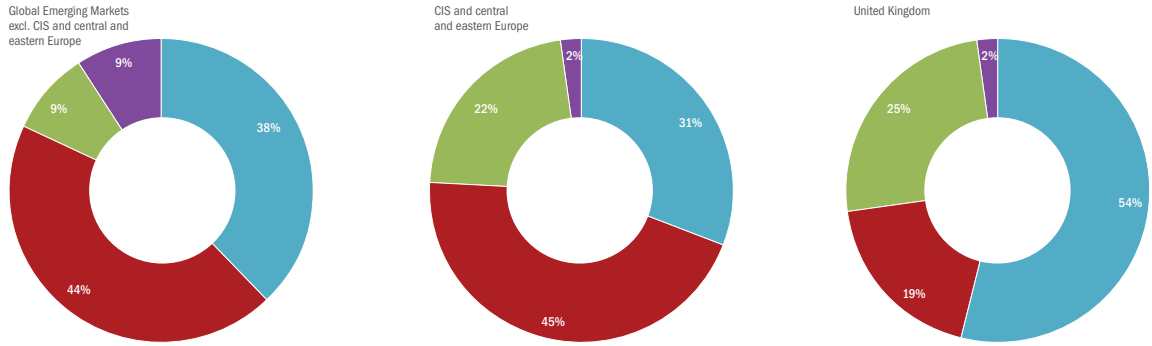
Other forms of private equity – such as growth capital funds and venture capital funds – typically use only equity or cash to fund their investment in companies. Growth capital funds often acquire minority shares in relatively mature companies that are seeking to expand or restructure their operations or enter new markets. Venture capital funds, on the other hand, typically acquire minority stakes in young companies. They may also provide seed capital for research and development (R&D) or start-up capital for product development and the commercialisation of research output. These types of fund tend to focus on governance and operational engineering.

In *governance engineering*, private equity funds maintain a tight grip on the boards of the companies they invest in and make changes to the management of these firms. They closely monitor the performance of companies' managers, possibly giving them strong financial incentives in the form of stock options in the company.[12] Holding stock options – which can only be cashed in when the controlling fund withdraws – helps to focus managers' attention on longer-term objectives. On the other hand, poorly performing executives may also be replaced.[13]

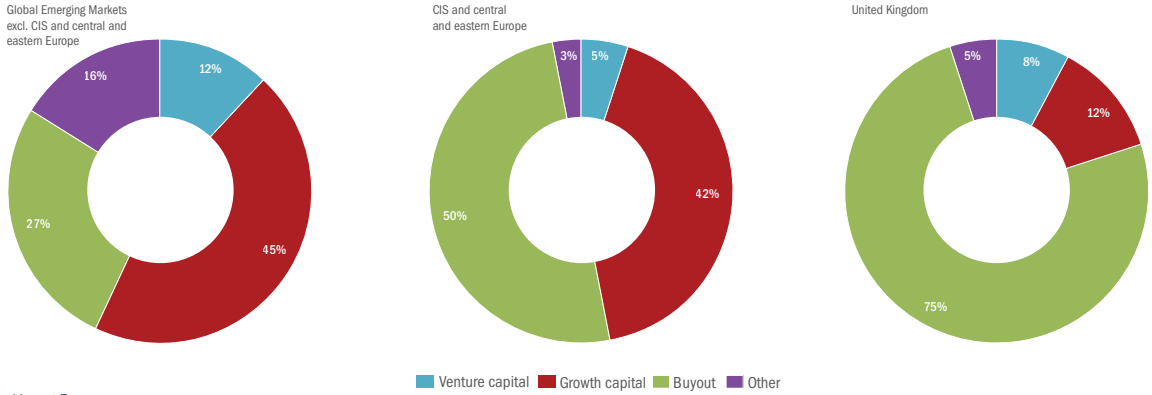
In *operational engineering*, private equity funds engage in active cost cutting and market repositioning at investee companies or scale up capital investments and sales. They may also grow their investee companies through the acquisition of other companies. Other measures include the improvement of both inventory management and relations with customers and suppliers to reduce working capital requirements. This strategy is dependent not only on the ability of funds to successfully implement operational changes, but also on their ability to identify

CHART 3.5. Percentage breakdown of private equity deals by type of fund, 2009-14

Panel A: Number of deals



Panel B: Total capital invested



Source: EMPEA and Invest Europe.
Note: Growth capital funds include mezzanine transactions. Venture capital funds include seed, early-stage and late-stage transactions. "Other" includes private investment in public equities, rescue/turnaround capital and replacement capital.

[9] This classification is taken from Kaplan and Strömberg (2009).
[10] "Leverage" refers to the idea that returns or losses on an investment can be amplified when borrowed money is used alongside an investor's equity to invest in a company.
[11] See Kaplan and Strömberg (2009). Beyond a certain point, higher levels of leverage can also increase the risk of financial distress and weigh on company valuations.
[12] A recent survey of private equity funds based in the United States has found that funds prefer small boards of directors (typically between five and seven members) and a mixture of existing company management and outsiders who are not affiliated with the fund. They also allocate an average of 17 per cent of company equity to management and employees. See Gompers et al. (2015).
[13] See Cornelli et al. (2013).

companies where such improvements will generate large returns.

Private equity funds tend to view operational and governance engineering as their main strategies, although they also use financial engineering.[14] In fact, most top private equity firms now focus on particular industries and they often hire professionals with specific industry expertise.[15] While financial engineering strategies are easier for competitors to imitate, management expertise and sector-specific know-how are scarce and unique. This gives the private equity firms that have them an important competitive edge.

WHEN IT WAS FLOATED ON THE NASDAQ IN 2011 THE MARKET VALUATION OF YANDEX WAS

US$8 BILLION

How do equity funds create value in the transition region?

Private equity investment in emerging markets tends to make less use of leverage. This largely reflects the fact that financial leverage tends to be favoured in buyout deals, which focus on mature and older companies that are in need of restructuring, and these are more commonly found in advanced economies. In emerging Europe and Central Asia, buyout deals accounted for around 20 per cent of deals and around half of all capital invested over the period 2009-14. This was higher than in other emerging markets but slightly lower than in developed economies such as the United Kingdom (see Chart 3.5).

Most of the private equity investment in the region involved growth capital and venture capital (which accounted for 76 per cent of deals and 47 per cent of all capital invested). This was slightly lower than in other emerging markets but higher than in the United Kingdom. Instead of focusing on a single investment type, most private equity funds in the region invest in a combination of buyout, growth and venture capital deals.

The differences partly reflect the fact that the number of suitable targets for buyout funds – mature companies with good restructuring potential – is smaller in the region where the EBRD invests. In addition, the higher cost of debt, the less developed credit markets and the immaturity of secondary markets in the region all combine to make buyout deals less feasible.

The resulting focus on operational and governance engineering may in fact be beneficial for economic development. Operational engineering leads to more efficient use of scarce resources – both within companies and across economies as a whole. Meanwhile, governance engineering ensures that economic returns are passed on to shareholders rather than being appropriated by managers – a major problem faced by many transition economies in their early privatisation programmes (see also Box 3.2).[16]

However, the focus on operational and governance strategies may also make it more difficult to achieve targeted returns on investment. For instance, strategies that rely on sales growth naturally favour certain industries (such as consumer services) and countries with large domestic markets such as Brazil, China, India, Russia and Turkey. In smaller countries, increasing sales growth will often entail breaking through into export markets. This is the case for most countries in the transition region.

Strategies focusing on governance engineering may be hindered by the poor quality of economic institutions. For instance, private equity investors in countries with civil law or socialist legal backgrounds – which includes most of the EBRD region – or countries where legal enforcement is difficult are more reliant on obtaining majority control (which typically also requires greater use of debt to finance acquisitions) as well as stronger representation on the board of the company.[17] In this way, investors use ownership to overcome problems relating to the lack of enforcement of contracts. However, if managers of investee companies are forced to give up ownership rights and control, their incentives may become misaligned with those of the private equity funds, limiting the success of governance engineering strategies.[18]

What explains financial returns on private equity?

Private equity funds tend to outperform public equity markets.[19] This suggests that these funds succeed in translating their operational and governance engineering strategies into financial returns for investors. However, critics of the private equity industry point out that private equity funds may simply time their investments well (for instance, taking advantage of low borrowing costs to increase leverage) and have access to superior information that allows them to select firms with good prospects while contributing little or nothing to the firms' operational performance.

This section looks at whether private equity investment in the transition region has delivered returns in excess of market benchmarks and, if so, whether these "excess" returns are explained by financial leverage, the timing of investment or improvements in the way that firms are managed. This analysis uses data on 291 investments carried out by 99 private equity funds that the EBRD participated in between 1992 and 2013. The data cover a variety of funds, including buyout, growth capital and venture capital funds, and correspond to a small subset of the EBRD's investments in private equity funds in the region.

The contribution that operational improvements make to overall returns (referred to as "private equity alpha") is measured using a three-stage approach (as pioneered by Acharya et al. [2013], see Box 3.3). First, an IRR is calculated for each investment on the basis of gross cash flows (that is to say, cash flows before fees).[20] Second, the analysis identifies the component of this return which is due to the use of debt, which has the additional advantage of being tax deductible. Third, the remaining component (referred to as the "unlevered return")

[14] See Gompers et al. (2015).
[15] See Kaplan and Strömberg (2009).
[16] See Estrin et al. (2009).
[17] See Lerner and Schoar (2005).
[18] See Lerner and Schoar (2005).
[19] See Harris et al. (2014) and Gompers et al. (2015).
[20] See Box 3.3 for a technical description of the methodology employed. The IRR is defined as the discount rate that would make the present value of all cash flows equal to zero; it takes account of the timing of cash flows.

BOX 3.2. HOW DOES EQUITY INVESTMENT CONTRIBUTE TO ECONOMIC DEVELOPMENT?

Equity investment enables shareholders to adopt a long-term and hands-on approach in their investee companies, fostering sound corporate governance and transparency, making appropriate contributions to business strategy and optimising management. This is the primary effect of equity investment. Crucially, however, it also contributes to the transfer of skills and has positive demonstration effects in terms of the development of local capital markets and competitive market-oriented behaviour. For instance, equity investment typically aims to use growth capital injections, IPOs and private placements, privatisation and restructuring efforts, and sectoral consolidation as entry and exit strategies for target assets.

Earlier experience in Russia and more recent transactions in Turkey demonstrate the transformative potential of equity investment for individual companies and domestic capital markets. The Baring Vostok Private Equity Fund, which closed in 2001 and focused primarily on medium-sized companies in Russia and other parts of the former Soviet Union, is a prime example of this. The fund's investment strategy revolved around the acquisition of majority or substantial minority stakes in companies in a wide range of sectors, with the primary goal of achieving value creation through growth and improvements in corporate governance.

One of the fund's earliest investee companies, a leading Russian IT firm, underwent a transformational expansion during the fund's holding period. Indeed, the fund successfully floated its principal asset, Yandex, on the NASDAQ in 2011 with a valuation of US$ 8 billion. In 2003 the fund invested in Europlan, an automobile and truck leasing company that has since grown into a strong player in the highly competitive Russian market. Under the fund's tutelage, the company launched new products and diversified its funding base through the issuance of bonds, fuelling growth in its market share and allowing it to serve small and medium-sized enterprises (SMEs) across the country.

At the same time, the fund managed to retain and expand its best-in-class investment team at a time when increased competition levels were being observed in the region. The follow-on fund attracted capital from institutional investors around the world and it is now in the top quartile of the best-performing funds in the Commonwealth of Independent States. From the perspective of private-sector development, the successful financial performance of both the fund and its investee companies has created positive demonstration effects for both entrepreneurs and investors focusing on the region. Just as importantly, the dissemination of best practices in terms of value creation and corporate governance to a wider range of industries and market players has helped to strengthen the region's business climate and competitive environment.

In 2011 the EBRD invested in Turkasset (formerly LBT), an asset management company in Turkey that focuses on acquiring and working out distressed and non-performing loans (NPLs) from banks and other financial institutions in the country. The firm was one of six asset management companies that were licensed by the Turkish banking regulator in the country's nascent market and it was majority owned by Actera Group, a leading private equity firm in Turkey. The EBRD's investment rationale spanned considerations at three levels: firms and SMEs across the country, the banking sector and the company itself.

SMEs and other firms with outstanding debt burdens often find it difficult to obtain working capital or effectively redeploy their productive assets. Asset management companies are more constructive than banks when it comes to reaching agreements with borrowers, which allows companies to reopen banking relationships. Banks vary in terms of their expertise in dealing with NPLs and their willingness to effectively address this problem, with moral hazard being their main concern. In addition to being relieved of this burden through the sale of NPLs – since most NPLs acquired by asset management companies in Turkey have already been fully provisioned or written off by the originating lenders – the banks are able to take the proceeds from the sale of the NPLs and the equity that is freed up and leverage it for more lending to the real economy.

Backed by the EBRD's investment, the company was able to embark on a growth strategy, consolidating its market position and creating value for its shareholders by differentiating its services from those of its competitors, putting strong corporate governance and collection practices in place and optimising its operational know-how and infrastructure.

The transaction has had a positive impact in a number of areas. The company played a major role in the establishment of an industry association for asset management companies in Turkey, creating a platform fostering dialogue between market players and communication with regulators, policy-makers and the public. In addition, the firm continues to use sound and ethically acceptable collection methods, as exemplified by the fact that physical collections are avoided and physical meetings with clients are held only at the company's offices, with recording for training and quality control purposes. In 2013 and 2014 the company was the subject of hardly any complaints by customers/borrowers and there were no material complaints or penalties from the regulator.

The company continues to purchase portfolios from a widening range of Turkish banks to increase its coverage and diversify its exposure, thereby helping to expand the NPL acquisition market and encourage more banks to sell their portfolios. In 2014 Turkasset spent TRY 182 million on purchasing the unpaid balances of NPL portfolios, up 53 per cent from 2013. In addition, since 2012 (when the Capital Markets Board of Turkey authorised Turkasset to issue corporate bonds to finance its NPL portfolio purchases) the company has issued a total of TRY 376 million of bonds with varying maturities and contributed to the deepening of the Turkish corporate bond market (particularly for non-bank issuers).

is compared with the performance of a public stock market index (which is similarly stripped of the effect of leverage).[21] The performance of the equity market benchmark captures the effect that the timing of the investment has on the realised return. The remaining component, "private equity alpha",[22] captures the extent to which the investment outperforms the stock market index after the effects of financial leverage have been removed. It shows the value of operational improvements that can be attributed to private equity activity and the ability of private equity funds to identify firms with good prospects.

What drives financial returns: leverage, timing or efficiency gains?

Private equity investments included in the analysis have averaged a gross IRR of 17.7 per cent over the last two decades – although just over 10 per cent of investments have been written off, having delivered no returns at all. In fact, the percentage of write-offs is slightly higher than the average figure observed in developed economies, but so is the average return.[23]

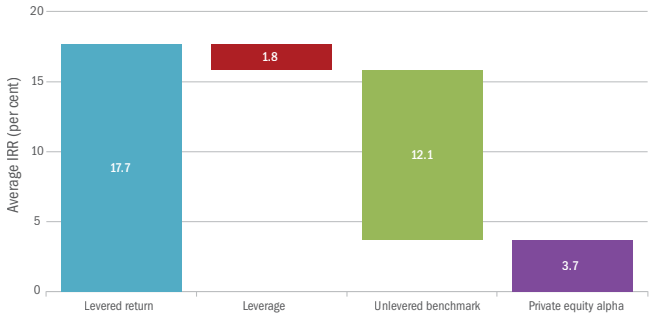
What drives this profile, with its greater risks and higher returns? The breakdown of returns reveals that, on average, around 1.8 percentage points (out of the total return of 17.7 per cent) can be attributed to the use of financial leverage (see Chart 3.6). This is lower than in the United States and western Europe where financial leverage accounts for around half of all returns.[24] Thus, financial leverage plays a relatively small role in generating returns in the EBRD region.

A large share of the return (12.1 percentage points) is due to increases in market valuations during the period of investment – in other words, due to the timing of the investment. Lastly, the remaining portion of the return (3.7 percentage points) is due to actual operational improvements. This is slightly smaller than the figure observed in developed economies where operational improvements produce sizeable returns for private equity funds.[25]

These results suggest that private equity funds operating in the transition region achieve similar results in terms of operational improvements in investee companies to their peers in advanced economies. However, their overall returns are lower than those of US-based funds owing to their modest use of financial leverage.[26]

Within the transition region, leverage plays a relatively more important role in central Europe and the Baltic states (CEB), accounting for close to a fifth of average returns while in Russia and south-eastern Europe (SEE) it plays a minimal role. This reflects the more highly developed financial systems in the CEB region. Indeed, buyout funds – which are more reliant on external financing – are becoming increasingly common in these countries. At the same time, operational improvements make a greater contribution to overall returns in Russia and the SEE region, possibly reflecting the greater risks involved in investing in these regions.

CHART 3.6. Decomposition of private equity returns in the EBRD region



Source: EBRD.
Note: Gross returns reported. The IRR is defined as the discount rate that would make the present value of all cash flows equal to zero; it takes account of the timing of cash flows and represents the return on an investor's investment in a private equity fund. The estimates are based on a subset of investments by private equity funds that the EBRD participated in between 1992 and 2013.

Timing also plays a prominent role in creating financial value in the CEB region, explaining more than half of returns. This reflects the more developed capital markets in the CEB region that facilitate exits from private equity investments (see Box 4.1). For instance, Poland had the largest number of IPOs in Europe every year from 2009 to 2012. On average, however, exiting investments via IPOs is still more difficult in the CEB region than it is in advanced economies. The most common exit route in both the EBRD region and advanced economies is the strategic sale, in which a private company (possibly in a similar industry) purchases the investee company in order to expand its own business or exploit the complementarity of products.[27] The greater presence of European multinationals also makes this exit route easier in the CEB region.

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PRIVATE EQUITY DEALS WERE CONDUCTED IN THE EBRD REGION BETWEEN 2008 AND 2014

[21] The benchmark return is the annualised buy-and-hold return for the MSCI Emerging Markets Total Return Index during the holding period of each investment. It is unlevered using the debt positions of listed companies from similar sectors in the region (see Box 3.3). In order to unlever the benchmark return, the sector's average debt-to-equity ratio is calculated for the three-year period starting at the time of the deal.
[22] This terminology is taken from Acharya et al. (2013).
[23] See Lopez de Silanes et al. (2013).
[24] See Acharya et al. (2013) and Puche et al. (2015).
[25] See Acharya et al. (2013).
[26] See Puche et al. (2015) for evidence from emerging Europe and emerging Asia.
[27] See Kaplan and Strömberg (2009).

Operational improvements contribute the least to returns in financial services (see Chart 3.7). However, absolute returns have been lowest in manufacturing across different industries as leverage and market timing play a limited role, whereas leverage and market timing are relatively more instrumental in driving returns in other industries.

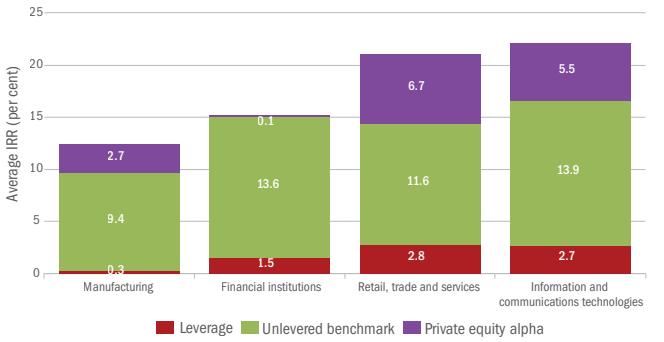
Further analysis suggests that timing seems to matter more for smaller deals than large-cap deals. Even so, a considerable share of value creation comes from operational improvements, regardless of the size of the deal.

Returns by deal type and investment strategy

As indicated earlier in this chapter, growth capital and venture capital funds are more prevalent than buyout funds in the EBRD region. However, analysis reveals that buyout deals have delivered by far the highest levels of absolute returns. This is consistent with global trends as buyout funds have generally delivered better returns than venture capital funds since the bursting of the dot-com bubble of 1999-2001.[28] The difference is largely explained by the use of financial leverage, which accounts for 45 per cent of buyout investment returns in the transition region (see Chart 3.8) while returns on growth capital investment have been driven primarily by the timing of the investment.

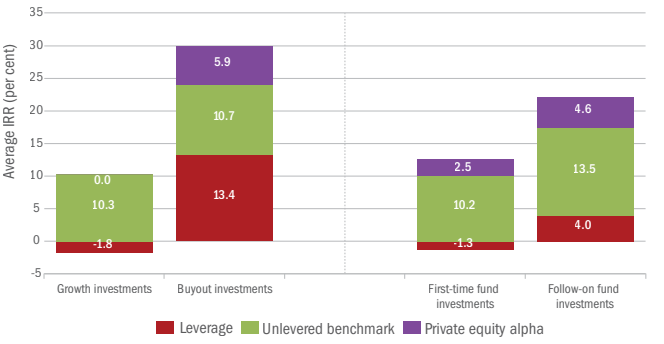
The equity funds in the sample are at different stages of their lives and investment cycles. Successful private equity firms often raise follow-on funds with larger capital commitments from their investors. Applying the breakdown to investments made by first-time and follow-on funds separately reveals that investments made by follow-on funds deliver higher absolute returns (see Chart 3.8). This is partly due to the fact that many follow-on funds were raised and disbursed during the period of abundant global liquidity prior to 2009 – leverage contributed to returns during that period and public equity markets in the region performed remarkably well. Furthermore, investments made by larger funds have tended, on average, to deliver higher absolute returns, mostly due to the greater impact of operational improvements (see Chart 3.9).

CHART 3.7. Private equity returns by sector



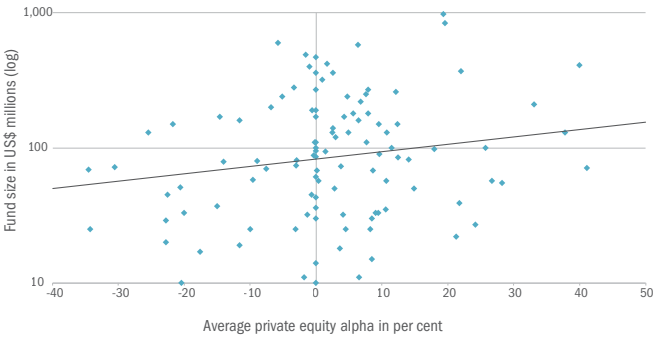
Source: EBRD.
Note: Gross returns reported. The estimates are based on a subset of investments by private equity funds that the EBRD participated in between 1992 and 2013.

CHART 3.8. Private equity returns by type of deal



Source: EBRD.
Note: Gross returns reported. The estimates are based on a subset of investments by private equity funds that the EBRD participated in between 1992 and 2013.

CHART 3.9. Operational improvements and fund size



Source: EBRD.
Note: Each data point denotes an individual private equity fund.

[28] See Harris et al. (2014).

TABLE 3.1. Sources of operational improvements

Dependent variable	(1) Private equity alpha	(2) IRR	(3) PME
Change in sales	0.1111*	0.1391*	0.6580***
	(0.0602)	(0.0754)	(0.2401)
Change in EBIT margin	-0.0406	0.0382	0.2707
	(0.0873)	(0.1128)	(0.3943)
Change in EV/EBIT multiple	0.0015	0.0036	0.0084
	(0.0019)	(0.0022)	(0.0072)
Deal value *(log)*	0.0036	0.0253	0.0356
	(0.0146)	(0.0189)	(0.0674)
Duration	-0.0265***	-0.0520***	-0.1057***
	(0.0082)	(0.0124)	(0.0309)
Constant	0.2804***	0.3633*	1.5254***
	(0.0713)	(0.1949)	(0.3428)
Entry period dummies	Yes	Yes	Yes
R^2	0.2777	0.4247	0.2571
Number of deals in the regression	180	180	180

Source: EBRD, Orbis and authors' calculations.
Note: The values indicate how a percentage change in each variable affects a percentage change in the dependent variable. Standard errors are reported in parentheses. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. "PME" means "public market equivalent"; "EV" means "enterprise value". For unlisted investments in the sample, a matched sample of five listed companies from the region is used to calculate an average multiple, which is then multiplied by EBIT to reach EV. Changes in sales, EBIT margin and EV/EBIT multiple are adjusted by subtracting the average change in these measures in similar companies listed in the EBRD region over the same time period. In particular, each private equity investment is matched with five listed companies from the region which are similar in terms of sector, total assets and investment year; the average change in operating measures for these companies is subtracted from the investments for which the private equity alpha is measured.

Drivers of operational improvements

There are three basic channels through which operational engineering carried out by private equity funds increases returns: revenue growth, improvements in sales margins and increases in the value of companies. Revenue growth is a strategy that is especially popular in emerging markets.[29] Funds can, for instance, help investee companies increase their sales by providing advice on product positioning and market knowledge. Private equity funds also rely on improving sales margins in investee companies, essentially aiming to generate a higher percentage of earnings for each dollar of sales.[30] This strategy typically focuses on cost cutting and efficiency improvements. Lastly, private equity funds can add financial value to their investments by exiting at a time when potential buyers value the company highly – for instance, owing to the attractiveness of the relevant industry ("multiple expansion").[31] Returns can also reflect the bargaining power of the private equity fund in relation to its investee company at the time it made the investment, since it will have tried to secure a share of the company's assets for as low a price as possible.

Regression analysis is employed in order to understand how each of these strategies affects private equity alpha (see Table 3.1). The analysis takes into account the year in which investments were made, the duration of each investment, the size of the investment and the performance of similar companies that are publicly listed. The results confirm that growth in sales is the primary driver of private equity returns (column 2) and the component of returns relating to operational improvements (column 1). This highlights the value of private equity funds providing investee companies with guidance in order to reach larger numbers of customers. In other words, this additional revenue growth enables private equity funds to deliver returns in excess of what can be achieved by simply investing in stock market indices in the relevant emerging markets.[32] Moreover, further analysis (not reported) shows that revenue growth remains the key driver of returns regardless of whether a private equity fund is experienced, large or focused on a single country.

ON AVERAGE 11%
OF PRIVATE EQUITY RETURNS IN THE EBRD REGION CAN BE ATTRIBUTED TO THE USE OF LEVERAGE

[29] See Gompers et al. (2015).
[30] Sales margins are typically measured as a ratio of EBIT (earnings before interest and taxes) or EBITDA (earnings before interest, taxes, depreciation and amortisation) to revenues.
[31] Valuation multiples are typically measured as a ratio of company value to EBIT or EBITDA.
[32] Column 3 in Table 3.1 shows that revenue growth is positively correlated with a higher PME. The PME benchmarks the return on a private equity investment against a hypothetical investment in the MSCI Emerging Markets Total Return Index over the same period of time.

Conclusion

Private equity funds can contribute towards a more diverse financial infrastructure, which can have a positive impact on economic growth and efficiency. They can provide their investee companies with both long-term risk capital and industry expertise. The evidence in this chapter suggests that they may be able to create economic and financial value by improving the operations, corporate governance and debt capacity of the companies they invest in.

Private equity remains an underutilised source of external funding for companies in the EBRD region. Despite the rise in private equity activity globally, the EBRD region has received only a small share of total private equity investment. The region has also seen its share of investment in emerging markets decline in recent years. Some of this can be traced back to the sluggish growth rates observed recently in the region. The weak recovery, combined with adverse credit market conditions, has resulted in lower returns for private equity funds in the region, which rely mainly on revenue growth to generate returns.

There are several ways that policy-makers can increase the presence of private equity funds in the region. First, helping companies to access foreign markets can help them to move beyond the confines of their typically small local economies. Greater cross-border integration of markets, especially in sectors such as the retail, consumer goods and ICT industries (which is where private equity funds are most active), can help these companies sell to more markets and thus better exploit economies of scale. Second, academic studies point to complementarity between government R&D spending and venture capital, while government-funded mentoring for start-ups can add value to companies.[33] A thriving venture capital industry supported by such government programmes can help the region to move towards a competitive knowledge-based economy.

Third, policy-makers should aim to improve the functioning of credit markets by promoting the supply of long-term bank loans and remedying information asymmetries between banks and companies that would be eligible for private equity investment. Some of the value created by private equity funds stems from information about companies that is revealed during due diligence, which is costly to acquire when it comes to smaller and more opaque companies. Greater information sharing between banks and private equity funds for such companies can improve the pricing of the risk of lending and enable greater access to credit. This can, in turn, enable companies to undertake more capital expenditure – as the next chapter shows – and deliver higher financial returns to private equity investors through the use of leverage. Thus, a more sophisticated credit market is crucial not only in order to help companies to grow but also in order to help private equity become more attractive in the region as an asset class.

BOX 3.3. METHODOLOGY

Internal rates of return (IRRs) are calculated using the entire time series of gross cash flows (that is to say, cash flows before fees) from and to the fund, as reported by the private equity firm.[34] These IRRs are then unlevered and benchmarked against returns from a public stock market index (the MSCI Emerging Markets Total Return Index) which are unlevered in the same way. The difference between the two is called "private equity alpha". The following formula is used to unlever the return generated at the company level:

$$(1) \qquad R_{U,i} = \frac{R_{L,i} + R_{D,i}(1-t)(D/E_i)}{(1 + D/E_i)}$$

Since private equity firms do not report the average cost of debt, $R_{D,i}$, the average lending rate during the holding period in the country in which the portfolio company's headquarters are located is used for this calculation. The leverage ratio D/E_i is the average of the debt-to-equity ratios at the beginning and end of the holding period. The tax rate t is the average corporate tax rate during the holding period in the country in which the portfolio company's headquarters are located.

Formula 1 is also used to derive the unlevered benchmark return, $R_{BU,i}$, from the levered benchmark return, $R_{BL,i}$. In this case, the benchmark return is the annualised buy-and-hold return for the MSCI Emerging Markets Total Return Index during the holding period. The unlevered return $R_{BU,i}$, is calculated using the average D/E ratio for the sector over a three-year period starting at the time of the deal. The calculations assume that the same tax rate and cost of debt apply to each deal in a given country and sector.

Once the unlevered return (which is stripped of the effects of financial leverage) has been obtained for both the deal and the benchmark, the private equity return that is brought about via genuine operational improvement is calculated. Private equity alpha is defined as:

$$(2) \qquad \alpha_{U,i} = R_{U,i} - R_{BU,i}$$

Applying formulae 1 and 2 derives the following from each deal's IRR: (i) deal-level private equity alpha α_i; (ii) the unlevered benchmark return $R_{BU,i}$; and (iii) the total leverage effect $R_{U,i} - R_{BU,i}$. These three components of the total IRR for each deal are reported in the text.

[33] See Da Rin et al. (2011) and Gonzalez-Uribe and Leatherbee (2014).

[34] This methodology is based on Acharya et al. (2013).

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