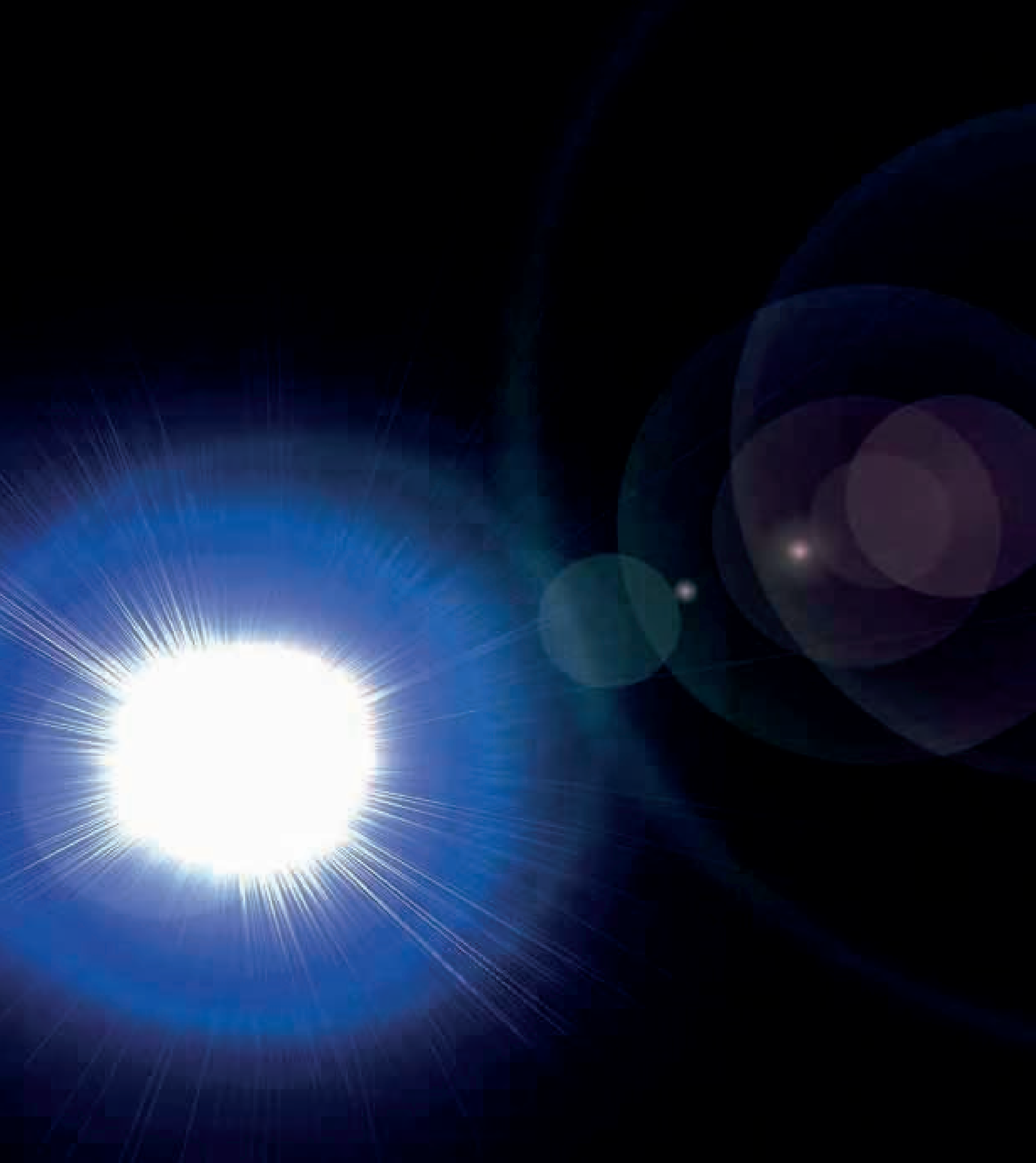
1. The private equity market

In this section we set the scene: we clarify some definitions, describe the origins of the private equity market and examine the data on the size and growth of the private equity industry.



1.1 What is private equity?

'Private'

Private equity is risk capital provided outside the public markets. It is worth emphasising at this early stage that the word 'private' has nothing to do with secrecy. It simply contrasts with the 'public' quoted markets.

'Equity'

Equity is the umbrella term under which you find an array of financial instruments that equitably share in the profits and losses of a business. Traditionally equity was seen as being synonymous with 'ordinary shares'. It is still the convention to refer to an equity percentage meaning the percentage of ordinary shares held. However, as we will expand upon, equity has a broader meaning when used in the phrase 'private equity'. It means the total amount of capital that is both put at risk of loss in a transaction and that, as a financial package, has a share in any capital gain earned. As we elaborate in sections 3 and 4, a private equity investment will often be in the form of both ordinary shares and loans.

1.1.1 What is a private equity fund?

Much, but not all, of the investing done in the private equity market is by private equity funds. A private equity fund is a form of 'investment club' in which the principal investors are institutional investors such as pension funds, investment funds, endowment funds, insurance companies, banks, family offices/high net worth individuals and funds-of-funds, as well as the private equity fund managers themselves. The objective of a private equity fund is to invest equity or risk capital in a portfolio of private companies which are identified and researched by the private equity fund managers. Private equity funds are generally designed to generate capital profits from the sale of investments rather than income from dividends, fees and interest payments.

A private equity fund may take minority or majority stakes in its investments, though generally it will be the latter in the larger buy-outs. At the same time that a private equity fund makes an investment in a private company, there is usually some bank debt or other debt capital raised to meet part of the capital required to fund the acquisition. This debt is the 'leverage' of a leveraged buy-out.

1.1.2 What are the objectives of private equity investment?

Obviously all investors wish to make a return. This can be either an income, from interest or dividends, or a capital gain by selling a particular investment when it has been made more valuable. Private equity is predominantly about generating capital gains. The idea is to buy equity stakes in businesses, actively managing those businesses and then realising the value created by selling or floating the business. The appetite and incentives of most private equity investors are firmly focused on achieving capital gains. They generally aim to achieve capital growth, not income. The objective of private equity is therefore clearly focused on increasing shareholder value.

1.1.3 What is the difference between venture capital, growth capital and private equity?

The businesses invested in by private equity range from early-stage ventures, usually termed venture capital investments, through businesses requiring growth or development capital to the purchase of an established business in a management buy-out or buy-in. In this sense private equity is a generic term that incorporates venture, growth and buy-out capital. However, although all these cases involve private equity, the term is now generally used to refer to later-stage development capital but mostly buy-outs and buy-ins of established businesses. These are generally the focus of our commentary. Private equity therefore usually contrasts with venture capital, which is used to describe early-stage investments.

The term, therefore, has a confusingly loose definition, being both a generic term for 'not quoted equity' and a more precise definition referring specifically to the market for institutional private equity funds that target buy-outs and growth capital. Care is needed to be clear which definition is being used when discussing or researching private equity.

The evolution of the term is perhaps best illustrated by the naming of trade bodies: the BVCA is the UK trade association and EVCA is the European trade body. Both were formed as venture capital associations when many firms did both buy-outs and early stage venture capital investments, but now describe themselves as private equity and venture capital associations.

1.1.4 Are there any theoretical ideas behind the private equity investment model?

There are essentially three classes of argument that are put forward to explain the private equity model of investing.

Seekers of market failure

The first and simplest is that private equity seeks out and takes advantage of market failures that create mispricing opportunities. This argument encompasses a trading strategy, taking advantage of periodic mispricing, and an active search for financial gain by taking advantage of so-called 'loopholes'.

One particular aspect of this argument that is widely discussed is the question of what impact the tax deductibility of interest has on investment returns. It is worth saying at this early stage that not all interest is deductible against tax and that there are no special exemptions for private equity of any kind. On the contrary, there are in many countries special provisions designed to disallow the deductibility of interest on connected party loans of the type used by private equity firms. We revisit the critics' version of this argument in more detail below.

Solving the principal–agent problem

The second and more widely accepted economic theory in the academic literature argues that there is a principal–agent problem in many companies. The shareholders are the principals (ie, owners) of any corporation. Managers act as agents of shareholders. Managers are incentivised by whatever their employment contracts motivate. They are not generally incentivised to maximise the realisable value to the shareholders. Furthermore, there is no clear way to hold management to account for their actions. As a consequence shareholders do not try to hold managers to account. If they do not believe the managers are maximising value in publicly traded companies investors simply sell the shares and move on (although efforts are underway to encourage public company-investor engagement). Shareholders in private companies which are managed by agents on their behalf will, under this hypothesis, receive lower returns than they otherwise might have received. It is argued that this lack of accountability of senior managers allows them to pursue projects that are either excessively risky or, conversely, excessively conservative. This represents an inefficiency of the market.

Private equity seeks to address this principal–agent problem by tightly aligning the interests of managers and shareholders to achieve economic efficiencies. This idea of alignment is central to all the economic structures observed in the private equity market. We expand upon how this alignment is created throughout the publication.

Private equity, therefore, seeks to address one of the central problems facing what is known as corporate governance: how do shareholders make managers accountable for their decisions?

Some argue that private equity is an alternative long-term form of corporate governance to traditional public companies. Others see private equity as a type of transitional 'shock therapy' for underperforming companies.

Sacrificing liquidity to solve information asymmetries

You can reduce risk by holding assets that are easier to sell ie, by having more liquidity, or by maximising the information you have before and during the period you hold an investment, enabling you to manage risk effectively. If you can do both, you can achieve consistently superior returns with lower risks than any other market participants. That is one major reason why insider dealing in quoted shares is illegal. In reality you often have to trade liquidity for information rights.

Similarly you can adopt an active investment stance and seek to influence the management of the company or a passive one and simply sell out if you perceive management to be weak or taking the business in the wrong direction. If you have decided to trade liquidity for information you may lose the option to trade out of investments that are not going in the direction you anticipated.

Private equity is not about trading on public markets, or trading in currencies, bonds or any other publicly quoted security or derivatives. These are the realm of other fund managers including hedge funds.

Private equity investments are illiquid and traded only on acquisition or exit (although this is changing). Generally, but not always, private equity managers have good information prior to making their investment through their due diligence processes. During the investment this level of access to information continues both through contractual rights to receive information and close involvement with the investee company at board level.

In contrast, investors in public companies buy liquid assets (shares, bonds and options) and generally use a trading strategy to try and make exceptional returns. Insider dealing laws are designed to prevent anybody from making exceptional returns from private information not available to other participants in the public markets. These types of investors sell out of companies when they think that they are no longer likely to generate good returns. In summary, they have high liquidity and trade on the basis of publicly available information.

There are instances where companies are publicly traded but have low volumes of trades making them effectively illiquid. These types of business have often been the interest of both funds focused on quoted market failure and private equity funds looking to complete public to private (P2P) transactions.

1.1.5 What do private equity fund managers do?

Private equity fund managers have five principal roles.

1. Raise funds from investors

These funds are used to make investments, principally in businesses which are, or will become, private companies. Funds are raised from investors, often internationally, such as pension funds banks and insurance companies. These investors will generally invest via a limited partnership, as will the private equity fund managers themselves. In section 2 we expand on the fund management roles of private equity.

2. Source investment opportunities

A private equity fund must source and complete successful transactions to generate profit and support the raising of further funds. A significant amount of effort and resource is invested in prospecting for transactions and relationship management with individuals who may give access to deals. These include investment bankers, accountants and other advisers and senior figures in industry. Increasingly, investment teams are focusing on particular sectors of the economy or geographies.

3. Negotiate, structure and make investments

Having found investment opportunities, private equity fund managers have to negotiate the acquisition and structure the finances of the transaction to achieve the multiple objectives of the various parties. Fund managers therefore need skilled financial engineers and negotiators in their team to create the desired blend of incentives and returns while managing the associated risks. In the early days of private equity, fund managers were usually financial experts rather than sector or operational management specialists. This has changed over the years. It is argued by advocates of private equity that this trend has gradually contributed to and evolved effective management techniques in its investments. In section 3 we explain the basics of deal structuring and provide an illustration in section 4.

Private equity uses debt to amplify investment returns (see below). Fund managers therefore need to be skilled in creating financial packages that generate the required blend of incentives without creating excessive risk.

4. Actively manage investments

Private equity fund managers have become hands-on managers of their investments. While they do not generally exercise day-to-day control, they are actively involved in setting and monitoring the implementation of strategy. This is the basis of the argument that private equity has become an alternative model of corporate governance.

5. Realise returns

Fund managers realise returns primarily through capital gains by selling or floating those investments, but also from income and dividend recapitalisations, which we examine in section 3. The industry generally now talks of a four- to six-year exit horizon, meaning that the investment will be made with the explicit assumption that it will be sold or floated within that timeframe. This exit horizon is the source of the criticism that private equity is a short-term investment strategy.

1.1.6 What risks do investors in private equity funds take?

In any equity investment, whether public or private, there is the risk of losing the capital invested. In private equity, investments are long-term, irrevocable commitments to fund unknown, future investment opportunities. An investor commits to these risks and delegates the investment decision to the fund manager. (See section 2.)

1.1.7 What risks do private equity fund managers take themselves?

To align the interests of investors and fund managers, the fund managers typically invest alongside the investors, on the same terms, in any fund. The fund manager is therefore both an investor, on the same terms as other investors, and the fund manager. If a fund loses money, the fund managers will make the same loss on their investment offset by any income guaranteed from fees not spent on the costs of the fund.

1.1.8 What rewards do private equity investors earn?

The fund manager has four sources of reward.

1. They may receive a return as an investor in the fund in the same way as any other investor in the fund.
2. They receive a salary from the fund management company at a normal market rate.
3. They may receive a share in the profits of the fund management company.
4. They may receive something called 'carried interest' which is triggered once a minimum threshold return is achieved.

1.1.9 What is carried interest?

If the fund achieves returns above a minimum threshold, the fund manager takes a preferential share of the return in the form of so-called 'carried interest' (or 'carry'). Traditionally the threshold, or hurdle rate, has been 8% per annum over the life of the fund and the share has been 20% of the profits above the hurdle rate. (See section 2.)

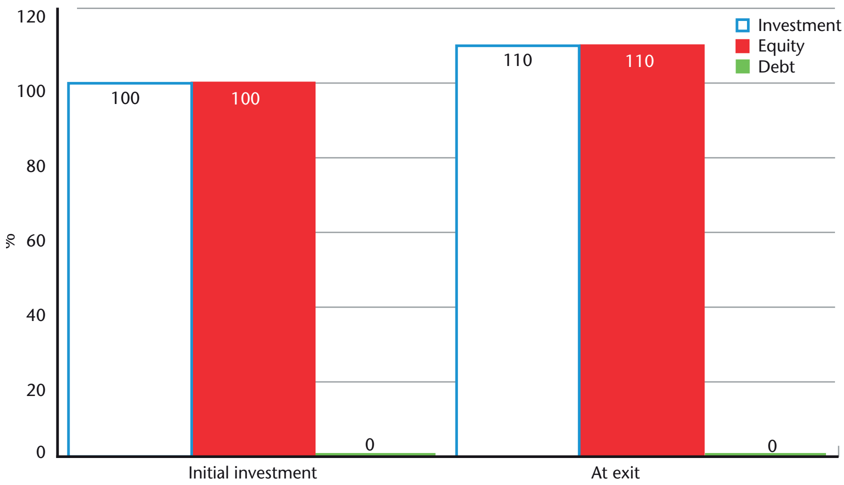
1.1.10 What is leverage and what role does it play in private equity?

Using borrowed money alongside your own reduces the amount you have to invest and so amplifies the returns or losses on any particular investment. This amplification has various names: in the US it is called leverage, in the UK it was traditionally called gearing. They are the same idea.

When you use only your own money in an investment, the return on the investment is the same as the return on your equity.

Figure 1.1: Effects of leverage – no debt

100% equity: 0% debt
10% increase in total value
10% increase in equity value

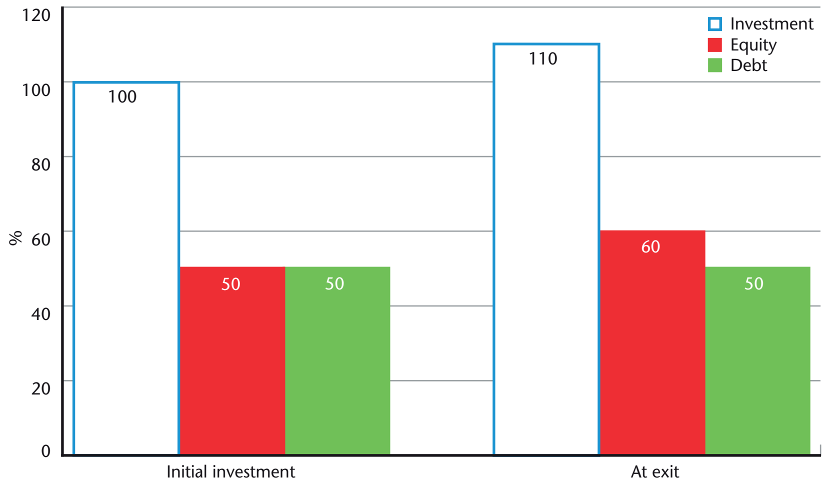


Source: Gilligan and Wright.

If external debt (which has a fixed return) is used to fund the investment, the prospective returns are increased because the equity is reduced and yet it still captures all of the capital gain (Figure 1.2).

Figure 1.2: Effects of leverage – 50% debt

50% equity: 50% debt
10% increase in total value
20% increase in equity value

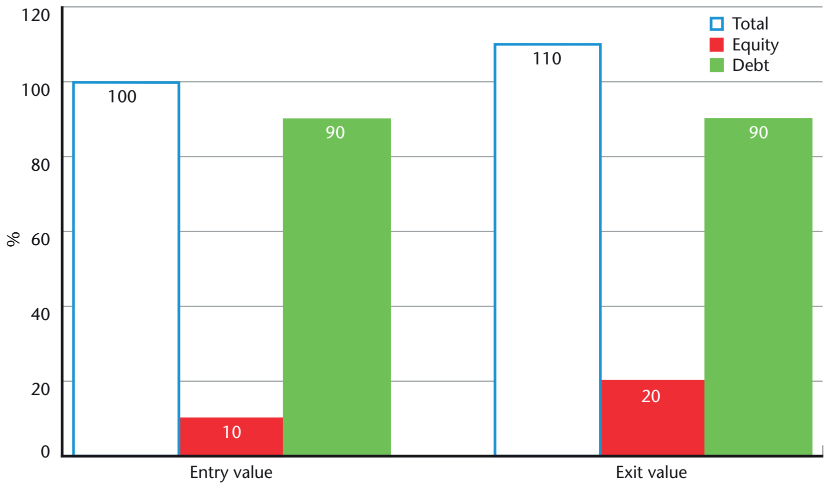


Source: Gilligan and Wright.

As borrowings rise, this amplification increases with the prospective return on equity increasing in inverse proportion to the gearing ratio (Figure 1.3).

Figure 1.3: Effects of leverage – 90% debt

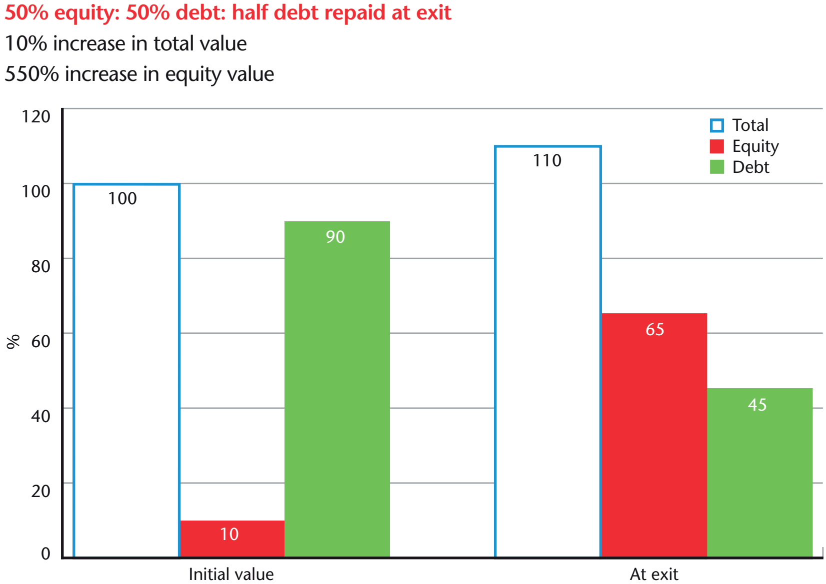
10% equity: 90% debt
10% increase in total value
100% increase in equity value



Source: Gilligan and Wright.

Furthermore as debt is repaid, the value flows to the equity (Figure 1.4). It is worth noting that the cash used to repay debt could have been retained by the company reducing risk.

Figure 1.4: Effects of leverage – 50% debt, 50% repaid



Source: Gilligan and Wright.

Much work has been undertaken by academics and others to try and establish what proportion of the return from a private equity investment comes from:

1. increases in total investment value, or
2. the effect of leverage on equity returns.

This so-called 'attribution analysis' is a hot topic in both academic studies and the discussions of returns achieved by funds.

1.1.11 What impact does the gearing have on the private equity fund manager's return?

As we noted above, fund managers are rewarded with salaries and carried interest. In an investment with no debt, the 8% carry trigger requires an 8% growth in the investment. The fund manager would receive 20% of the excess ie, 20% of 2 = 0.4.

As gearing rises, equity returns rise. Carried interest is measured against fund returns. It therefore follows that as gearing rises, prospective carried interest rises. With 50% gearing, the equity hurdle is 108% of 50 = 54.

The excess above this is 6 and the fund manager would receive 20% X 6 = 1.2.

Furthermore, size matters in carried interest. If our examples were in £000 the maximum carry would be 20% of £9,200 or £1,840. If it was in £m, the same amount would be £1.84m.

108% X 10 = 10.8

The excess above this is 9.2 and the fund manager would receive 20% X 9.2 = £1.84.

There are therefore real incentives to maximise debt levels subject to bankruptcy risk.

1.1.12 Does size matter?

People are motivated by nominal returns: you can not spend rates of return, you can only spend cash. The larger the units in our above example the more important this becomes as an incentive to the individual: if the units are £000, the incentive increases from £400 to £1,840, arguably not meaningful. If the units are £m the incentive moves from £400k to £1.84m, an altogether more significant amount of money.

Therefore, there are very clear incentives to grow investment size. Large funds not only generate higher fees and therefore proportionately higher revenues but, as they do bigger deals, the successful ones generate more carried interest. There are big incentives to be big.

1.1.13 What impact does leverage have on bankruptcy risk?

The other side of this amplification of return is increased financial risk. We can characterise risk as being crystallised at the point that the value of the project is less than the value of the debt. Equivalently, the project has negative net worth when the equity value has been consumed. As there is less equity in a geared/levered structure, the probability of becoming insolvent is higher than an ungeared/unlevered structure. As gearing/leverage increases, other things being equal, the probability of becoming insolvent rises. This risk of failure by becoming insolvent is generally termed bankruptcy risk.

Private equity investors use debt to consciously create financial risk to amplify the return on equity. We return to this idea frequently. It is vital to appreciate that risk and reward are two sides of the same coin. It is always possible to generate risk without reward, but if you can generate rewards without risk, you have created the economic equivalent of a perpetual motion machine, which is impossible.

1.1.14 How do private equity funds control their investments?

The ability to act decisively comes from the fact that a private equity fund manager actively manages and controls each company using:

- board representation;
- contracts which limit certain actions of management without the consent of the investors;
- voting control over all material matters;
- full access to company information and board minutes; and
- a culture and incentive system that rewards success highly and penalises failure.

1.1.15 Leverage in funds versus leverage in investments

It is crucially important to understand that leverage can be found at different levels of any financial structure and its impact differs.

Private equity funds use debt in each individual investment, but generally none within the fund. The investments stand or fall on their own two feet, there is no recourse to the fund. Therefore, while there is bankruptcy risk in each investee company, there is generally none in the fund.

In contrast many other types of fund manager use leverage within the fund to amplify returns.

In a similar way a trading company may have some borrowings on its or its subsidiaries' balance sheets, often cross-guaranteed by the other companies in the trading group.

The risks of leverage are most threatening when they are compounded: where a geared fund owns geared investments, returns can appear spectacular, but will be at greater risk. One of the lessons of the banking crisis is the importance of understanding where losses will fall if the risks created by borrowing materialise.

This amplification works in both directions; you may lose all your money sooner in a geared investment. However, losing money is finite, return is, in principle, infinite.

Furthermore, nobody invests in the belief that they will lose their money. Investment managers need to have the belief that they can make relatively good returns, or they should do something else. There is therefore a mix of incentives leaning towards the use of gearing to amplify returns within any type of fund. The market pressure is to increase borrowings and give investors more liquidity, which if unfettered will lead to increases in risk within the fund structures.

With a few exceptions, private equity puts all the gearing in each individual investment, tailored to that investment's characteristics. Hedge funds and many other quoted investment fund managers put the gearing in the fund itself and hold a diversified portfolio of investments that may, or may not, be individually geared.

1.1.16 What market risks does private equity create?

We believe that this distinction between leverage in a fund and in its investments is important in understanding the market risks created by hedge funds and private equity funds and for informing regulatory responses to the systemic failures seen in the past. We have argued that the traditional private equity fund structure has operated to limit systemic risk by offering long-term, illiquid, unleveraged investment assets mostly to institutional investors with large diversified portfolios. Pressure to increase leverage within funds and to provide liquidity to investors not matched to the liquidity of the underlying assets would lead to increased systemic risk. The debt-free structure of a private equity fund is, in most European jurisdictions, a market-driven norm, not a regulatory requirement. We return to this when we discuss regulation in section 2.

The contribution, if any, of the private equity industry to the market failures seen in 2007/2008 arose through failures in the associated acquisition finance banking market, not within the private equity fund structures. On this analysis the private equity industry was a wholly willing victim (and beneficiary) of a failure of the banking system, not a cause of the failure.

1.1.17 A financial canary in the coal mine?

One might characterise the private equity industry as a group of early adopters of financial innovation, rather than the creators of that innovation. Because of the amplification caused by the use of leverage, coupled with the early adoption of new techniques and practices, if private equity is suffering or booming it may be a sign of things to come in the wider financial markets and economy. Certainly the rise of mega buy-outs and the loosening of bank terms leading up to the financial crisis was symptomatic of structural issues that heralded problems elsewhere. As such, private equity is potentially an early warning system; a financial canary in the coal mine.

1.2 A summary of the core ideas. The 4As: amplification, alignment, active management and attention to detail

Private equity firms are strategic investors generally seeking to create and realise value. To achieve this they follow a series of strategies that can be crudely characterised under the following alliterative headings.

Amplification: Private equity uses debt to consciously create a level of financial risk that exaggerates the returns on equity.

Alignment: Equity incentives are used to create potentially unlimited incentives to motivate people to generate (predominantly) capital gains.

Active management: The body of research on investment performance generally shows that a passive trading strategy of 'stock picking' does not generate materially higher long-run returns than simply choosing to buy indices of stock markets. This has been reinforced by the imposition of insider trading laws that prohibit the use of private information to achieve superior returns. Those who have generated long-term outperformance since the imposition of the insider trading laws are those who have actively intervened to improve the performance and management of businesses. This appears to be as true of a few public investors, such as Berkshire Hathaway, as it is of private investors, such as the private equity firms. The form of this active management has evolved over the years, but it remains a key feature in explaining the performance of private equity investments.

Attention to detail: Private equity is transactional, whole companies are bought and sold. In consequence a great deal of due diligence is done on each deal and the transaction structure. Great emphasis is placed on measuring and managing every relevant aspect of a business's performance, including, for example, tax structuring.

We expand on each of these themes throughout this work.

1.3 A brief history of private equity

While there have always been equity investments made outside the public markets, private equity as we understand the term today, emerged in the 1980s from, broadly, two pre-existing pools of funds: venture capital and development capital. Venture capital (VC) provides equity capital to early and emerging businesses. Development capital provides equity capital to expand existing businesses. The term private equity was adopted from the late 1980s. Before then it was more common to hear institutions refer to themselves as venture capitalists in the UK and leveraged buy-out (LBO) firms in the US.

1.3.1 Asset stripping and financial assistance

In the 1970s in many developed countries it became illegal to use the assets of a target company to give security to a lender to a bidder for that company. Essentially you could not promise to give security on assets you did not own. This was specifically designed to stop the asset stripping that had been seen in the late 1960s. In the 1960s corporate raiders sought out companies with undervalued assets, bought the businesses and then closed the business down and sold the assets. This left the unsecured creditors and employees to suffer a loss. The financial assistance prohibition aimed to prevent this by making it a criminal offence to asset strip in most countries.

However, an unintended consequence of this legislation was that it prevented the rescue of viable companies many of which were subsidiaries of larger failing businesses. These subsidiaries could not provide security to a purchaser's bank that wished to lend money to help acquire and rescue a business. To reverse this unintended prohibition, and to encourage the rescue of viable businesses, a change was made to the law in a number of countries. In the UK it was made in the Companies Act 1981 which allowed UK companies to give financial assistance under certain tightly controlled circumstances. The law on financial assistance broadly required the directors to make a statutory declaration that as far as they knew at the completion date of the transaction, the company would be solvent for the next 12 months. If they made the declaration knowing it to be untrue, it was a criminal offence.

1.3.2 1980s first buy-out boom

Following the legal change on financial assistance in most jurisdictions, the number of buy-outs grew rapidly. Initially growth was seen in the US whereas in Europe the market was overwhelmingly dominated by the UK. By the mid-1980s, 3i, which at that time was jointly owned by the Bank of England and the major clearing banks, had an overwhelmingly strong position in Britain. Other early UK participants were subsidiaries of banks that had historically focused on development capital and other financial investors with a background in venture capital.

1.3.3 1980s 'hands-off, eyes-on'

Virtually all early UK funds were generalist investors who had skills in financial engineering and transactions but had little hands-on management input. Investors closely monitored their investments, but the underlying philosophy was passively to back management to manage.

1.3.4 Mid-1980s: new entrants

The returns earned by the early buy-out investors were perceived to be very good. This led to a growth in the funds committed by existing investors and to the emergence of new funds raised by groups of investors who wished to enter the market. In the UK many of these funds' founder managers were from the relatively small pool of experienced investors, often they were ex-3i executives. In the US they tended to be from consultancy and investment banking backgrounds.

1.3.5 1989: mega deals V1.0

In the US two factors enabled the market to expand rapidly: firstly a market for sub-prime 'junk' bonds was created. This enabled investors to issue high yield debt to fund acquisitions. Secondly, the early funds generated returns that were widely held to be outperforming the market. This led to ever larger funds, capable of doing ever larger deals. The peak of the market was the iconic buy-out of RJR Nabisco in 1988 for approximately $23bn.

Due to the relatively small size of the European funds, the capacity of the European buy-out market was severely limited and in consequence many transactions were syndicated between equity investors. To put the scale of the industry in context, a large European buy-out during this period was generally defined as one in excess of £10m, in the current market it might be defined as perhaps £0.5bn–£1bn or thereabouts. At the end of the 1980s the largest deal in Europe was the 1989 Isosceles buy-out of Gateway Supermarkets for £2.2bn.

1.3.6 Captives versus independents

By the end of the first wave of buy-outs in the 1980s the industry was characterised by a split between so-called 'captive funds' that were owned by a large corporate parent and independent firms that had taken the partnership form that we see as the commonest structure today, plus, in Europe, 3i.

1.3.7 Yield versus capital gain

Some smaller captive funds and 3i tended to be longer-term holders of an investment (compared to current structures – see section 2) without an explicit exit policy. They demanded a higher yield from their investments. Independent firms were generally structured as 10-year funds (as we see today) and therefore were more focused on generating capital gains with a defined exit policy and had lower yield requirements.

1.3.8 1990s blow up and buy-outs of captive funds

Following the impact of the recession of the early 1990s, and high interest rates, many leveraged investments struggled or failed. Appetite to support in-house private equity declined leading many of the captive funds themselves to be bought out from their parent companies by their partners. Virtually all rebranded themselves as private equity or buy-out firms and abandoned any pretension to venture capital activities (Table 1.1). In this limited sense the partners of many private equity fund managers have taken the risks and earned the rewards of a manager in a buy-out.

Table 1.1: Selected large UK buy-out firms and their predecessors

Name of firm	Predecessor firm	Type of predecessor
Permira	Schroder Ventures	UK parent captive
Apax Partners	Alan Patricoff Associates (Europe)	US affiliate independent
CVC Capital Partners	Citicorp Venture Capital (Europe)	US parent captive
Cinven	Coal Board Investment Managers Venture Capital	Public sector pension fund manager
3i Group	Industrial and Commercial Finance Corporation	Bank and public joint venture
Terra Firma	Nomura Principal Finance Group	Japanese parent captive
Charterhouse Capital	Charterhouse Development Capital	UK parent captive

Source: Gilligan and Wright.

1.3.9 Hands-on investors and sector specialisation

As competition for transactions increased, the need to generate value in individual investments increased. This led to a variety of strategies aimed at increasing the success rate and the value of each success to funds. Investors generally became much more active in the management of each individual investment. Many investors began to focus on specific industries and sectors to gain an advantage over the generalist investors. Today most firms have a sector bias and an active investment style.

1.3.10 Globalisation and the growth of global mega-funds

In the late 1990s and after the turn of the century the market split in two: the largest private equity funds have become increasingly international in their outlook, while in the mid-market the businesses have become more focused on specific sectors or types of business. The trend in globalisation has led to a growth in the number of non-UK investors based in London seeking UK and European transactions.

1.3.11 2005–2007: boom

The prolonged period of economic growth with low inflation from the mid-1990s to the 2008 financial crisis was characterised by: ever larger funds, larger deals, greater complexity in structures, greater leverage and an explosion in the size of private equity as a global industry. It was still a poorly understood, little reported industry and operated from a number of unregulated jurisdictions.

The debt markets also metamorphosed and banks that had previously held loans on their own balance sheets, sold them into the wholesale market. They ceased to earn the majority of their income from net interest payments and became fee earning businesses that parcelled up loans to be sold on to other financial institutions.

Innovation in the debt markets led to the emergence of markets in new forms of derivatives. Most of these instruments were designed to allow risk to be traded. This has always been one of the functions of derivatives, but when they were stripped from their underlying loans, they became tradable assets creating some perverse, unintended incentives (see section 2).

New businesses emerged that mimicked the use of leverage seen in private equity financial structures in individual investments but without certain controls that operate in the traditional fund structures: they created leveraged funds to make leveraged investments, doubling up the risks and apparent rewards.

1.3.12 2007–2008: bust

By 2007 the wholesale debt markets were opaque and poorly understood by most. There was an implicit assumption that there was an available appetite for debt in the global market that was effectively infinite or unlimited. This allowed banking institutions to fund themselves using facilities that were renewed continuously in the highly liquid debt markets. When the default rates on US mortgages turned out to be higher than expected, it was unclear who was holding the associated risk. In the absence of any clear information about who was going to be making losses, banks and institutions started to hold on to all the cash that was available to them and reduced or stopped lending to the wholesale markets. This meant that wholesale credit dried up and banks reliant on renewing facilities were unable to refinance and became insolvent. Initially smaller banks struggled and failed, but as the scale of the confusion spread, the world's largest institutions turned to governments to provide capital and guarantees. In the case of Lehman Brothers, the US government declined to rescue them and the investment bank failed.

The impact on the private equity market was abrupt and precipitous. Banks needed to hold cash rather than to generate lending. Deal volumes, which are reliant on leverage, collapsed. The largest deals were the worst affected. Those who had used debt within their fund structures rapidly faced insolvency as there was a mismatch between the dates they were expecting to realise their investments and the date that their borrowings were repayable.

1.3.13 2009–2012: hangover

The aftermath of the financial crisis showed both the strengths and weaknesses in the private equity model. On the positive side of the balance, the traditional 'ten plus two' fund (see section 2) was bankrupt remote, it could not spread risk because the whole risk fell on its partners. This is an important and little publicised fact: private equity fund structures in a limited way stopped the creation of systemic risk.

However, perverse situations arose between fund managers and their partners. Many funds had raised billions of dollars prior to the crash on the assumption that leverage would be available to support deals. They found themselves charging fees on capital that would be unlikely to be deployed. Investors were understandably unhappy.

As we will illustrate below, the period of extremely low interest rates that has followed the crisis has prevented the feared collapse of many companies with high levels of borrowings, including buy-outs and other private equity investments. Had the recession been accompanied by high interest rates, the failure rate would certainly have been materially higher, in all types of business.

1.3.14 2014: where we are today

As we emerge, blinking into the light of a period of economic growth, the private equity industry is still going through its process of slow adjustment to the crisis that started over half a decade ago. Some funds are in terminal decline, unable to raise new funds and managing out their portfolios motivated by a mix of maintaining fee income and hoping for carried interest to move into positive territories. Others who fared better are seeking to take advantage of downward pressure on asset prices to buy at the bottom of the cycle, hoping to profit on the upturn, although this may be too late as prices have already begun to rise. Models are emerging that embed active management methodologies into a fund's organisation, moving ever further away from the old model of backing incumbent management to buy the businesses they run.

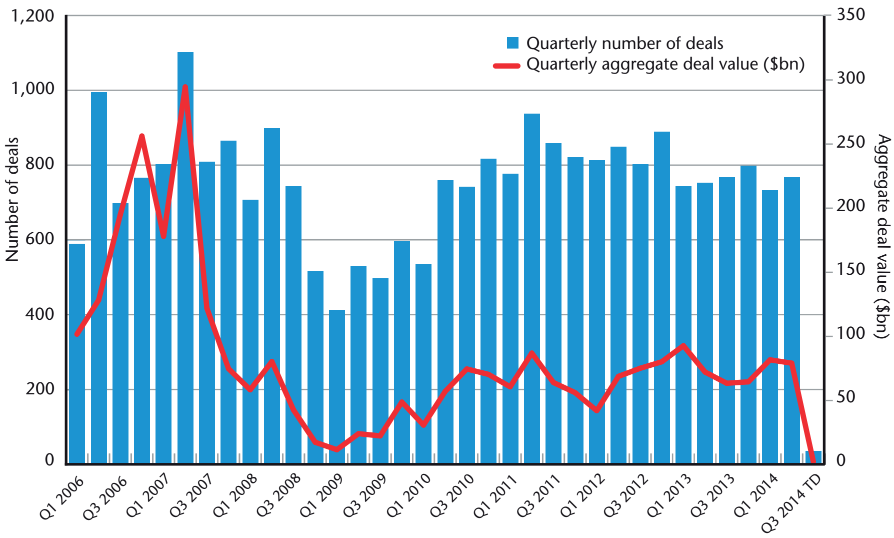
Furthermore, some fund managers that started life as pure private equity investors are now in reality diversified alternative asset managers, with an array of different funds under management, moving to a model that could be characterised as a financial conglomerate model.

In academia there has been a reappraisal of the past assumptions and analyses. Some old accepted wisdom (for instance, regarding persistence of returns) has been swept aside, some given new, more rigorous underpinning as new data sets have become available and new techniques applied to old questions. Some 252 papers have been added to Social Science Research Network with the phrase 'private equity' in their title between 2011 and 2014.

1.4 How big is the private equity market?

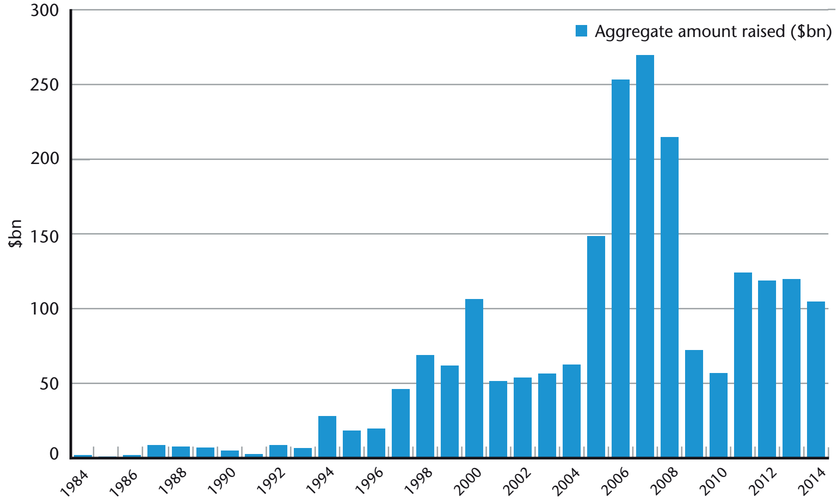
There are two important measures of the size of the buy-out market: the amount invested in (Figure 1.5) and the amount of new funds raised or committed to (Figure 1.6) private equity.

Figure 1.5: Global private equity investments, global number and aggregate value of private equity-backed buy-out deals, Q1 2006–Q3 2014 TD (July 2014)



Source: Preqin.

Figure 1.6: Global private equity funds raised ($bn) 1984–2014 TD (July 2014)



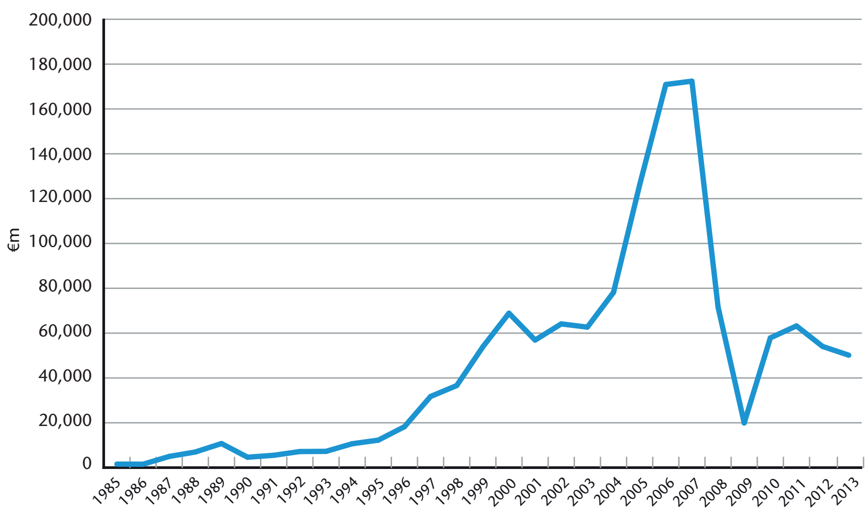
Source: Preqin.

The figures illustrate both the overall growth in the private equity market and its cyclicality. Following the dotcom boom the level of new funds raised declined. From 2005 onwards fund raisings grew dramatically, peaking in 2007.

After the financial crisis the volume of funds raised fell sharply. This reflected a number of factors. Firstly there were fewer larger deals to do, so the existing capital commitments were not drawn down as rapidly as had been expected. Secondly the financial crisis damaged the balance sheets of all investors and in consequence there was less ability to invest in alternative assets. Thirdly, even if there had been deals to do, the banking market was severely affected by the crash and there was therefore no debt availability to fund leveraged deals.

Looking at the buy-out data for Europe over a longer period gives a clearer picture of the cyclicality of the market and the importance of private equity in the overall market for control of corporations.

Figure 1.7: Value of European buy-outs (€m) 1985–2013

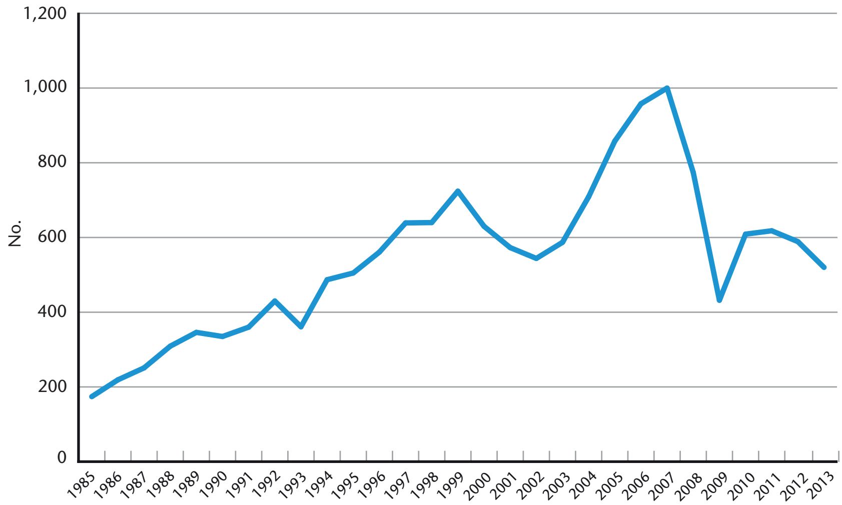


Source: CMBOR/EY/Equistone Partners Europe.

As illustrated in Figure 1.7, the market for buy-outs was cyclical up to the 2004–2008 boom. During and following the financial crisis the market fell back to levels not seen since the mid-1990s. Factors contributing to this were concentrated in the debt markets. Neither banks nor the bond markets had the appetite for buying the debt of buy-outs.

The data on number of transactions also shows a cyclical market around a growing trend up to the crisis (Figure 1.8). Thereafter volumes fell by an unprecedented amount before staging a bounce-back in 2010. Between 2011 and 2014 the market has remained essentially flat.

Figure 1.8: European buy-out market by number of transactions 1985–2013

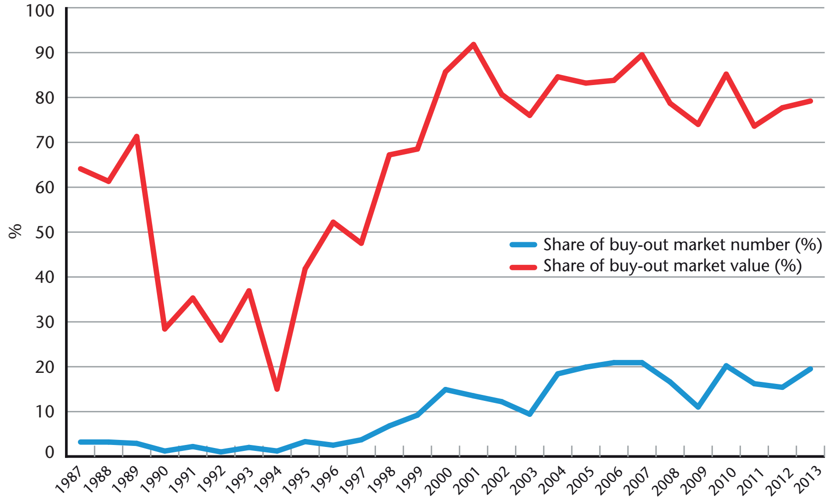


Source: CMBOR/EY/Equistone Partners Europe.

1.4.1 How significant are larger deals in the private equity market?

Most public interest is focused on the large buy-out market. However, the data shows that buy-outs with a deal value of £100m or more represented only a tenth of total buy-outs by number, despite representing almost nine-tenths by value (Figure 1.9). Buy-outs are therefore a very important feature of the UK mid-market but large buy-outs are a small fraction of the UK private equity market by number.

Figure 1.9: £100m buy-outs as a percentage of the market by number and value (UK) 1985–2013



Source: CMBOR/EY/Equistone Partners Europe.

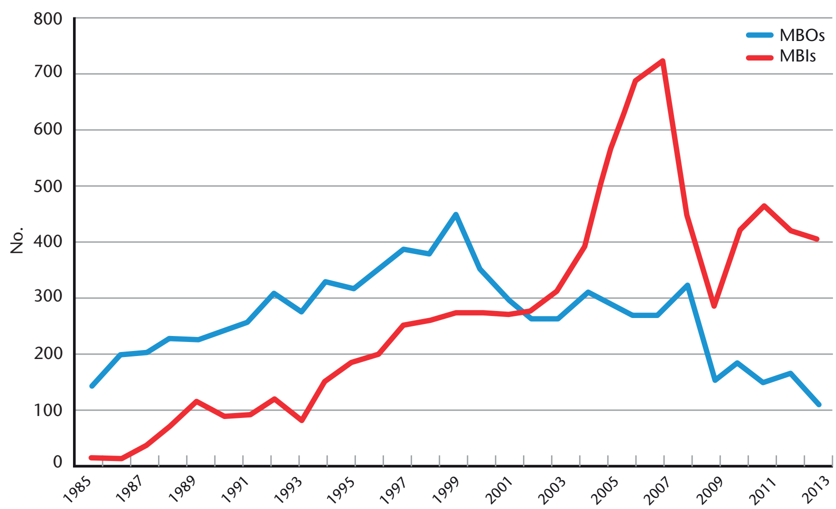
1.4.2 The death of the management buy-out?

Buy-outs come in a variety of flavours, but the two simple definitions relate to where the management team are prior to the deal. If the management are incumbent in the company, it is a management buy-out or MBO. If they are a new team brought into the company as part of the deal, it is a management buy-in or MBI.

Breaking the data down by MBO and MBI reveals two underlying trends:

First, there is a long-term trend against MBOs led by incumbent management teams. Although deal numbers for both MBOs and MBIs rose steadily up to 2000, since then their trends have diverged with MBIs now more common than MBOs (Figure 1.10). MBIs have shown signs of some recovery since the financial crisis, but this is not the case for MBOs.

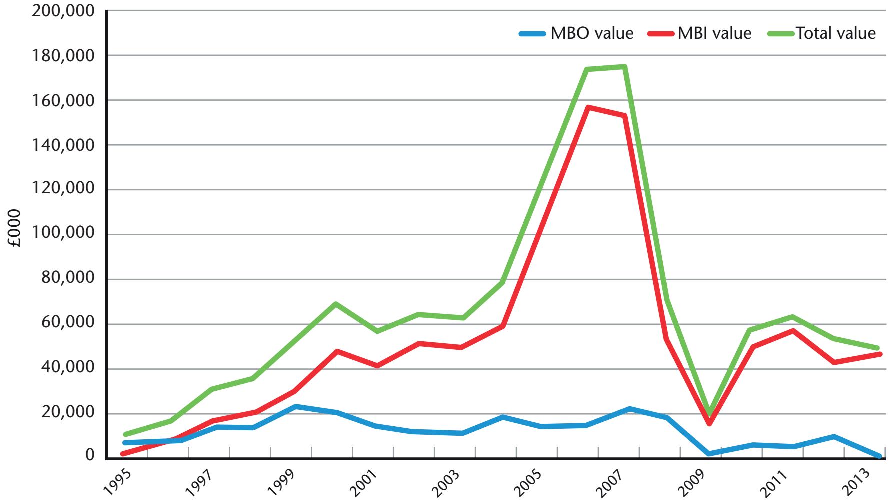
Figure 1.10: Buy-in versus buy-out by number (Europe) 1985–2013



Source: CMBOR/EY/Equistone Partners Europe.

Second, the largest deals have increasingly involved investor-led MBIs (Figure 1.11)

Figure 1.11: Buy-in versus buy-out by value (Europe) 1995–2013



Source: CMBOR/EY/Equistone Partners Europe.

1.4.3 The company auction process

The reasons for this shift relate substantially to changes in the way vendors manage the process of selling companies.

In the early days of the buy-out industry, management often expected to lead a transaction. They would appoint advisers who would raise funds to acquire a business from the vendors. In this process vendors had to attempt to manage a process that could lead to a trade sale or a management buy-out. The potential trade purchasers were understandably concerned about the impact on the business if the management team were the losing under-bidders. Similarly the vendors had to manage the potential conflicts of interest with their own management teams who were both running the business and trying to buy it. The solution was the creation of the company auction process by corporate financiers.

In an auction a sales document is prepared and circulated to potential interested parties including both private equity and trade buyers. The level playing field should reduce conflicts for management and capture more of the value for the vendor. It also encourages private equity houses to team up with external managers in an attempt to gain a sector advantage, giving a boost to the MBI/Institutional Buy out (IBO) numbers at the expense of the MBO numbers. Auction processes are virtually ubiquitous both in larger transactions and in disposals by private equity firms (secondary buy-outs).

If auctions generally increase the price paid for buy-outs by acquirers, there is a transfer of value from the purchasers to vendors. If prices are not higher as a result of the process, there is a leakage of value due to transaction costs. Other things being equal we would expect either of these to reduce returns when compared to the past performance. In addition to paying an increased price, there is a further downside as purchasers with poorer access to management in any auction process take on more risk (as they lose access to management's inside view). This again might be expected to reduce returns in private equity overall.

1.4.4 Deal initiation and proprietary deal flow

Private equity funds predictably do not like competitive auctions. They receive poorer access to the company than in an unfettered private process and have to bid against other interested parties, which forces up the price. They therefore invest heavily in 'deal initiation' (or 'deal origination') in order to pre-empt these competitive processes. The transactions that a firm initiates itself are so-called 'off-market' deals. When fund raising, much play is made of these proprietary deals, ie, those 'owned' by the fund in some undefined sense. More proprietary deal flow should in principle mean less competition, lower prices, better access to information and therefore the holy grail of both higher returns and lower risks.

This is what drives a large proportion of especially mid-market deal initiation activity. A 'good eye for a deal' is one of the key skills for a successful investor.

1.4.5 What have been the biggest UK deals?

Table 1.2: Largest UK buy-outs to date

Buy-out name	Year of acquisition	Value (£m)	Source	Exit	Year of exit
Alliance Boots	2007	11,100	P2P	Partial exit with option for full sale	2015
MEPC	2000	3,488	P2P	Trade sale	2003
Saga & AA	2007	est. 3,350	Secondary buy-out	Flotation	2014
EMI Group	2007	3,223	P2P	Trade sale/debt-equity swap	2011
Tomkins	2010	2,890	P2P	Significant stake realised	2014
Spirit Amber	2003	2,510	UK divestment	Trade sale	2006
Somerfield/Gateway	1989	2,157	P2P	Flotation	1996
Yell Group	2001	2,140	UK divestment	Flotation	2003
Global Merchant Services	2010	2,025	UK divestment	None	
Unique Pub Company	2002	2,013	Secondary buy-out	Trade sale	2004
EMAP	2008	2,000	P2P	None	
Meridien Hotels	2001	1,900	UK divestment	Trade sale & write off	2004
Expro International Group	2008	1,806	P2P	None	
The AA	2004	1,750	UK divestment	Merger	2007
Debenhams	2003	1,720	P2P	Flotation	2006
Laurel Pub Company	2001	1,630	UK divestment	Trade sale	2004
Warner Chilcott	2005	1,614	P2P	Flotation	2006
United Biscuits	2006	1,600	Secondary buy-out	Trade sale pending at time of going to press	
Iceland Foods	2012	1,450	Parent in administration	None	
BUPA Hospitals	2007	1,440	UK divestment	Flotation	2014

Source: CMBOR/EY/Equistone Partners Europe.

Of the largest transactions shown in Table 1.2 none failed in the formal insolvency sense, but at least three delivered no equity value to their original investors. More information can be found on these and other larger transactions by looking at the Walker Guidelines Monitoring Group website.

1.4.6 What have been the biggest deals in the world?

Of the largest LBO bids ever made, nearly all took place at the height of the private equity boom that ended around July 2007 (Table 1.3). It is also notable that two of these bids did not complete. Another, Clear Channel, was only completed some two years after the initial agreement, following a legal dispute as the private equity backers placed pressure on the lenders to keep to their agreement to provide debt and negotiations to reduce the purchase price in the wake of the credit crisis. It is also interesting that two of the largest deals were completed in 2013.

Table 1.3: The world's largest buy-outs

Firm	Deal date	Deal size ($m)	Investors	Primary industry
Energy Future Holdings Corporation	2007	45,000	California Public Employees' Retirement System (CalPERS), Citigroup, Energy Capital Partners, Goldman Sachs Merchant Banking Division, Kohlberg Kravis Roberts, Lehman Brothers, Morgan Stanley, Quintana Capital Group, TPG	Energy
Equity Office Properties Trust	2006	39,000	Blackstone Group	Property
HCA Holdings Inc.	2006	33,000	Bain Capital, Citigroup, Kohlberg Kravis Roberts, Merrill Lynch Global Private equity, Ridgemont Equity Partners	Healthcare
First Data	2007	29,000	Citi Private equity, Goldman Sachs Merchant Banking Division, Kohlberg Kravis Roberts	Financial Services
H.J. Heinz Company	2013	28,000	3G Capital, Berkshire Hathaway	Food
Caesars Entertainment Corporation	2006	27,800	Apollo Global Management, Blackstone Group, California Public Employees' Retirement System (CalPERS), TPG	Leisure
Alltel Corporation	2007	27,500	Goldman Sachs Merchant Banking Division, TPG	Telecom Media
Hilton Worldwide	2007	26,000	Blackstone Group	Leisure
Dell Inc.	2013	24,900	MSD Capital, Silver Lake	Hardware
Clear Channel	2006	24,000	Bain Capital, Thomas H Lee Partners	Advertising

Source: Preqin.

1.4.7 What are the largest private equity funds in the world?

An indication of the largest private equity funds in the world that lead new investments is given in Table 1.4.

Table 1.4: Estimate of the world's largest private equity funds (all time)

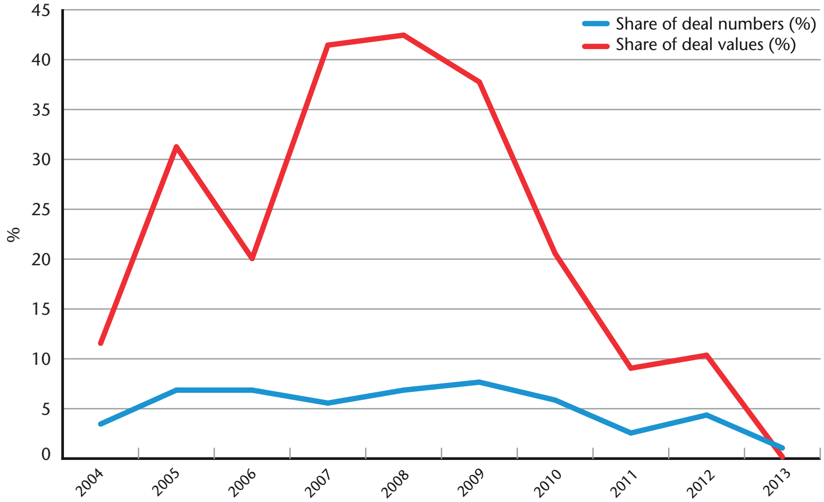
Firm	Fund manager	Final close size: (Ccy m)	Fund manager location
Blackstone Capital Partners V	Blackstone Group	$21,700	US
GS Capital Partners VI	Goldman Sachs Merchant Banking Division	$20,300	US
TPG Partners VI	TPG	$18,873	US
Apollo Investment Fund VIII	Apollo Global Management	$18,380	US
Apax Europe VII	Apax Partners	€11,204	UK
KKR Fund 2006	Kohlberg Kravis Roberts	$17,642	US
Blackstone Capital Partners VI	Blackstone Group	$16,200	US
TPG Partners V	TPG	$15,372	US
Apollo Investment Fund VII	Apollo Global Management	$14,676	US
CVC European Equity Partners V	CVC Capital Partners	€10,750	UK
Permira IV	Permira	€11,100	UK
CVC European Equity Partners VI	CVC Capital Partners	€10,907	UK
Carlyle Partners V	Carlyle Group	$13,700	US
Carlyle Partners VI	Carlyle Group	$13,000	US
Providence Equity Partners VI	Providence Equity Partners	$12,099	US
Advent Global Private equity VII	Advent International	€8,500	US
Bain Capital Fund X	Bain Capital	$10,707	US
Advent Global Private equity VI	Advent International	€6,600	US
Silver Lake Partners IV	Silver Lake	$10,300	US
Apollo Investment Fund VI	Apollo Global Management	$10,136	US
Silver Lake Partners III	Silver Lake	$9,400	US
KKR North American XI Fund	Kohlberg Kravis Roberts	$9,000	US
Hellman & Friedman VII	Hellman & Friedman	$8,900	US
BC European Cap IX	BC Partners	€6,500	UK
GS Capital Partners V	Goldman Sachs Merchant Banking Division	$8,500	US

Source: Preqin.

The table reinforces the dominance of US/UK fund managers and the concentration of European private equity funds originating from the UK.

1.4.8 How significant are public to private transactions in the private equity market?

Figure 1.12: Percentage share of public to private buy-outs by number and value (UK) 2004–2013



Source: CMBOR/EY/Equistone Partners Europe.

Public company acquisitions by private equity funds ('public to privates', or 'P2Ps') have attracted much scrutiny and comment. We suggest that there is an over-emphasis on P2Ps in the press and academic literature due to a greater availability of data on public companies. Questions of insider dealing and failure of corporate governance have been examined by a number of authorities in the UK and US. As seen above, around half of the largest UK buy-outs have been public to private buy-outs. A sustained period of activity, beginning around 1998, accelerated from 2004 culminating in the UK's largest P2P transaction to date, Alliance Boots plc in 2007. However, as illustrated in Figure 1.12, P2Ps represent a relatively small proportion (by number) of the overall private equity market. P2Ps at time of writing have fallen to their lowest level in the UK for some 17 years as changes to rules relating to public companies have increased the difficulty of executing such transactions.