PRIVATE EQUITY

1. Introduction

The credit crunch was most likely viewed as a mixed blessing by many private equity executives. On the one hand, it signalled the end of the most favourable set of economic conditions the private equity industry had ever witnessed: abundant capital, low interest rates, increasing stock market values and a truly amazing willingness amongst banks and other investors to provide debt financing on a scale and on terms never previously observed. But the clouds that have descended since August 2007 have at least one silver lining: the intense public scrutiny of the private equity industry has been, to some extent, diverted into other areas of the financial system, in particular the investment banks, rating agencies, imploding hedge funds and structured vehicles etc. During this crisis, private equity funds have attracted little attention, except for their activities in taking advantage of banks' desire to sell debt backing private equity deals. But the private equity industry remains active, having attracted large amounts of committed capital, and is continuing to invest – albeit not in the headline grabbing purchases of large public companies. And public scrutiny is redeveloping.

In this chapter we explore the current state of the academic and policy debate regarding private equity. Why has the private equity industry grown so strongly? Was this growth fuelled mainly by cheap and abundant debt? How does private equity create value, and is this done at the expense of workers or other stakeholders? Does private equity contribute to systemic risks in the financial system? Should private equity be regulated more vigorously, and, if so, in what ways? How will the credit crunch impact on existing private equity-owned companies? What impact will the expansion of private equity have on national tax revenues, and is the tax-treatment of private equity companies, or the executives who work in private equity, unfair? We will address these questions in the context of the recent European experience and policy debates.

But before addressing these questions the chapter starts by providing a brief primer on private equity. Despite the recent media and public attention, the workings of the private equity industry are opaque and often misunderstood. Section 2 defines terms, explains the simple economics of the private equity industry, and how it draws on other parts of the financial system, and presents some key statistics about the private equity sector.

The attention that private equity has recently attracted – particularly leveraged buy-outs (LBOs), which constitute a large proportion of the money invested – comes in three main forms.

First, the critics of private equity often claim that private equity creates little enduring value but rather makes returns for investors by imposing excessive levels of debt on the companies they buy, cutting jobs and investment, and reducing the taxes they pay to governments. We discuss the evidence regarding the impact of private equity on the companies they invest in and on the extent of value creation in section 3.

Indicative of the concerns regarding private equity, Poul Nyrup Rasmussen - the President of the Party of European Socialists in the European Parliament, and a leading critic of the private equity industry - recently claimed, "These 'leveraged buyouts' leave the company saddled with debt and interest payments, its workers are laid off, and its assets are sold. A once profitable and healthy company is milked for shortterm profits, benefiting neither workers nor the real economy" (Rasmussen, 2008). This represents the latest in a series of critical opinions of private equity, which started in earnest with the "locusts" badge that was pinned on the industry by German politician Franz Muntefering in 2004. He claimed that private equity funds act as "irresponsible locust swarms, who measure success in quarterly intervals, suck off substance and let companies die once they have eaten them away". This badge has largely stuck with the industry. As general statements, these are gross misrepresentations of the workings of private equity, as shall be explained in the course of the chapter. However, some of the blame for such misunderstand-

ing arguably lies with the private equity sector itself, which has provided relatively little systematic and convincing evidence to rebut these claims. It is only recently that independent academic research has started to shine a light into the workings of private equity.

This leads into the second main area of concern: the appropriate level of transparency and reporting by private equity funds and the companies they invest in. This has been the subject of considerable attention within Europe in the last two years. The Walker Review in the UK examined these issues in depth and has been followed by similar reviews in other European countries. We discuss these issues in section 4.

The third main area of concern is taxation. The leverage in LBOs creates tax shields which can mean significant reductions in the amount of corporate tax paid by the companies that are acquired by private equity. On the one hand, this may simply be a more efficient way of financing companies, resulting in a lower cost of capital, which might be good for investment levels and equity valuation. On the other hand, tax authorities lose corporate tax receipts. In addition to these questions of corporate taxation, there is also a set of highly political issues relating to the personal taxation of private equity executives. To a large extent these derive from the unusual structure of private equity funds, whereby the private equity executives share in the profits of the fund, but these profit shares are frequently taxed as capital gains rather than income. Since many countries set capital gains taxes at lower rates than income taxes, a major political issue has arisen in both Europe and the US. This set of taxation issues is discussed in section 5. Conclusions are drawn in section 6.

the stock market, and the private equity fund performs a so-called public-to-private transaction, thereby removing the entire company from the stock market. But in the majority of cases buy-out transactions will involve privately owned companies, such as family-owned companies or a particular division of an existing (public or private) company.

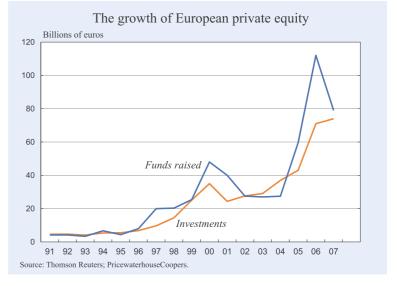
In between these two extremes are other forms of later-stage financing, such as providing expansion capital to develop existing businesses. However, the two main forms of private equity are venture capital (VC) and buyouts. As will be explained, one of the contentious aspects of buyouts is that they typically employ significant amounts of debt, and hence are referred to as *leveraged* buy-outs (LBO).

The European private equity industry has grown strongly in recent years. Figure 3.1 shows the recent data for both funds raised and invested, where the funds have European companies as their targets. The way private equity funds work is that investors make commitments of capital, but the money is only drawn down when the fund finds a company to invest in, or to purchase outright. Hence there is a distinction between money raised and invested, as demonstrated in Figure 3.1. Investors have been allocating increasing amounts to private equity funds targeting European companies, with over €70bn of equity being invested in both 2006 and 2007. What Figure 3.1 also shows is that there is currently a significant overhang of unspent commitments, as fundraising has raced ahead of investment. Therefore, even without any further fundraising there exists a large amount of capital currently looking for investment within Europe.

2. A primer on private equity

Private equity refers to the entire asset class of equity investments that are not quoted on stock markets. So private equity stretches from venture capital — working with really early stage companies that in many cases will have no revenues but potentially good ideas or technology—right through to large buy-outs, where the private equity firm buys the whole company. In some cases these companies might themselves be quoted on

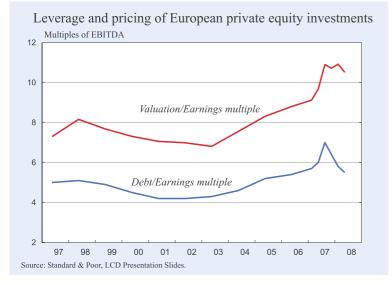
Figure 3.1



It is also worth noting that these figures only refer to the equity invested - LBOs, by definition, employ significant amounts of debt. As a result, the scale of transactions involving private equity are usually 2 to 3 times larger than the equity invested. The recent trends in leverage, and pricing, for European private equity buyouts can be seen in Figure 3.2. Given the importance of cash-flow in LBOs - since cash is required to service the interest on debt - capital structure and pricing of transactions is typically expressed in terms of multiples of earnings before interest, taxes, depreciation and amortisation (EBITDA), which gives an estimate of cash flow (before considering capital expenditures). Through the economic cycle, and across all transactions, the average level of debt has been about 5 times EBITDA, relative to a total transaction value of about

7 times EBITDA, implying an equity contribution of about 30 percent. However, the impact of the credit boom can be seen clearly in the figures, with average debt levels and purchase prices rising to multiples, at the peak of the market, of over 7 and 10 respectively. The proportionate equity contribution did not, on average, change too much, but clearly the portfolio companies had a significantly larger amount of debt to service.

Figure 3.2



Box 3.1

What is a private equity fund?

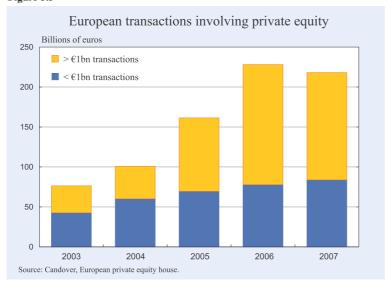
As their name implies, private equity (PE) funds invest in the equity of private companies - that is, companies that are not listed on stock exchanges, or, in the case of public-to-private transactions, cease to be listed once taken over by a private equity fund. In the case of public companies there is normally a separation between ownership and control, but PE funds often take controlling stakes or, in the case of buyouts, purchase the whole company. PE funds therefore both provide capital and control the strategy of the firm. Private equity has become an established asset class deriving most of their funds from institutional investors such as pension funds, endowments, insurance companies and sovereign wealth funds. PE funds generally focus on buying equity in companies, although in 2007 some funds started buying the deeply discounted debt of existing buyouts. However, in the case of more mature companies with predicable cash flow, they purchase their targets using a significant amount of debt. Unlike their hedge fund cousins, this debt is put into the acquired company rather than being retained in the fund itself. Hedge funds and PE funds share the same "two and twenty" fee and incentive structure. The two refers to a 2% annual management fee, and the twenty to a 20% share in any profits. In practice, although the twenty is more or less ubiquitous, the two has been shrinking as PE funds have become larger. Two key differences between hedge funds and PE funds are (i) investors commit capital for the strictly-limited 10year life of the fund; the PE fund invests in companies and then returns the proceeds to investors; and (ii) the executives in PE funds receive their profit share on the basis of the ultimate performance of the entire portfolio once all the cash has been returned to investors, not, as in hedge funds, as an annual profit share payment. These differences make PE funds more stable in terms of their financing and personnel, and more long-term in focus, in comparison with hedge funds.

Critically, the debt in private equity transactions is taken on by the companies that are acquired, *not* by the fund itself. Furthermore, there is no recourse for debt investors either to the assets of the fund or other portfolio companies. Therefore, unlike hedge funds, which often take on significant leverage within the fund, private equity funds themselves are not leveraged; the portfolio companies are. Consequently, private equity funds will not suffer the sort of meltdowns

observed in the hedge fund sector, although some of the companies acquired by private equity funds are likely to default on their debts. We return later to the issue of whether large-scale defaults should be expected for companies acquired during the credit boom.

Since buyouts employ a large amount of debt financing, the total value of transactions involving private equity funds is much larger than the (equity) funds that are raised. This can be seen in Figure 3.3, which shows that total European transactions

Figure 3.3



involving private equity funds exceeded €200bn in both 2006 and 2007. Buyouts by private equity funds are really just a particular type of merger and acquisition (M&A) activity: private equity funds' involvement in global M&A has been growing strongly in recent years, peaking at 27 percent of total transactions (by value) in 2006. However, as long as the current conditions in the debt markets persist, the share of private equity will fall significantly, to the benefit of traditional corporate acquirors who will face less competition.

While the European private equity industry has been growing strongly, all the growth has been focused on buy-outs rather than venture capital. As recently as 2002 around 30 percent of European funds were raised for VC investments, with the remainder allocated to buyouts. However, in recent years, despite the various efforts of governments to boost the VC industry, funds raised have stagnated as the private equity industry as a whole has grown strongly. This has resulted in a significant fall in VC as a proportion of total funds raised: within Europe only 15 percent of total funds raised over the period 2005-07 were targeted at VC. The corresponding growth in the share, and absolute value, of buyout funds has been mainly associated with the growth of very large buyout funds that are capable of taking over companies worth several billion euros. This trend can be seen in Figure 3.3, which shows the growth in the scale and nature of private equity transactions in Europe in recent years, in particular the growth of the billion euro plus deals. But as the deals have got larger, the targets have become familiar companies, often household names, which helps to explain the growth in media, political and trade union attention that private equity funds have "enjoyed".

Where does the money come from and who runs the private equity funds? Most of the money comes from institutional investors, such as pension funds, endowments and insurance companies, although high-net-worth individuals also invest directly or through fund of funds intermediaries – who provide them with a more diversified portfolio of investments. It is interesting to note, in the context of the current policy debates, which, as we dis-

cuss later, often cast private equity as operating against the interests of workers, that pension funds are probably the most significant beneficiaries from any successes that private equity may achieve. This irony was noted by Phillip Jennings, General Secretary of the UNI Global Union who remarked: "Unions need to be aware that the money they are paying into pension funds is feeding the beast that may devour them."

In terms of asset allocation, at present the proportion of investment portfolios that are allocated to private equity is considerably higher in the US than in Europe - although all surveys of European investors tend to find that the fund managers are aiming to increase their allocation to private equity. For instance, at the most macro level, it is estimated that global investment in private equity funds currently totals less than 1 percent of assets under management. But the Russell Survey on Alternative Investing (2007) found that target allocations by European investors into private equity averaged 6.1 percent of total portfolios, slightly behind the target for US investors (7.6 percent) and somewhat above Japanese investors' target (4.5 percent). Even a very conservative interpretation of these figures would imply a significant growth in the flow of money into private equity in years to come.

What about the funds themselves? There are all sorts of different players in this market. Most of the pure private equity funds are structured as limited partnerships. These are essentially tax-efficient investment vehicles that have a limited duration – almost always with a 10-year life. This limited life structure means

that private equity funds are not investors who buy to own the companies for the long term – they are buy-to-sell investors. They want to make their investments, create value and then exit. In usual market conditions, the target holding-period would be 3–5 years, perhaps longer for early-stage venture capital investments. During the credit boom, however, holding periods fell significantly as abundant debt and equity capital provided quick exit opportunities.

Although a common perception of private equity funds is that they are "short-termist" investors, this does not really stand up to scrutiny. Of course, it depends on what is meant by short-termist. If the focus is on holding periods, the average period that private equity funds invest in companies is considerably longer than the average holding period for fund managers who invest in public equity markets (usual estimates are around 3 months on average). If the claim is that constantly having to report quarterly earnings to investors shortens the time-horizons of managers, then this can hardly be true of private equity, where the investors have committed capital for up to 10 years and are simply seeking the highest possible returns on their investment.

There is, however, an interesting tension between the ways that private equity performance is measured that can give incentives for funds to seek an exit earlier than might be optimal. The returns achieved by private equity funds are judged according to two measures of performance – the main one is the absolute return earned, or money multiple. For whatever cash they commit, the investors care about how much cash they get out, net of all the payments to the fund. A good investment might earn 3, 4 or even higher multiples of the original sum invested. Alternatively, the investment may disappoint and return a fraction of the original sum after a few years. Focusing on absolute returns creates no incentives to exit an investment before value has been maximized.

On the other hand, the second performance measure is the internal rate of return (IRR) that investors achieve, which depends on how long it takes for the investors to get their money back. Performance of alternative assets, such as private equity and hedge funds, is often measured by IRRs. These capture the precise timings of cash flows of funds from, and back to, investors. This is important in the case of PE as investors commit funds at a point in time but only actually send the money to the fund when investment opportunities arise. By focusing on IRRs, PE funds

have an incentive to return cash to investors quickly, as the IRR measures both the extent of the returns and how quickly they are achieved. So a profit achieved in two years will have a higher IRR than if the same profit took four years to achieve.

Clearly these performance measures can conflict – an early exit might be good for the IRR but deliver a poor money multiple. In recent years, when credit was abundant and banks were prepared to lend everincreasing amounts of debt, many funds re-capitalized their portfolio companies by taking on additional debt and paying out a dividend to investors. Such financial restructuring will significantly boost the IRR but will (in itself) have no impact on the absolute returns earned by investors (since the value of the equity in the firm has reduced in line with the increased debt). Of course, there might be tax or incentive advantages from such action (which are discussed more generally later) but there are also significant transaction costs associated with debt issues. On the whole, such recapitalizations are relatively benign from the viewpoint of the investor, so long as the portfolio company can operate comfortably with the debt levels imposed on it. However, they demonstrate the different incentives that funds face according to the performance metric used, and why investors should focus on both IRR and money multiples.

Given these performance measures, the private equity firm has sharp incentives to create value, to exit the investments and return the money to the investors. It is worth stressing that the funds have to find a willing buyer for their investments. Therefore, if private equity investors really did "sell off the assets", or if the companies they invested in were "milked for short-term profits" and if they ultimately "let companies die" (to précis the quotes from the introduction) they would be acting against their own interests. The buy-to-sell nature of private equity is only complete once the sale has been agreed, and a healthy, efficient company is worth more than a ravaged shell.

Furthermore, reputation and performance are particularly critical to private equity organizations. Partnership agreements do not let the funds reinvest the proceeds in the next available opportunity – these are not like mutual funds or hedge funds which shuffle their holdings and only return the money if investors ask for it. Funds can only be invested once, and then must be returned to investors. This means that private equity organizations regularly have to go out and raise capital by launching a new fund. This

creates a dynamic industry where poor performance results in rapid erosion of funds under management, and in which the best performing private equity houses can grow in size very rapidly, as new funds are marketed to eager investors.

For instance, the first European \$1bn fund was raised as recently as 1997, but funds of the successful firms have grown hugely, with several \$15bn funds being raised in the last few years. In the US this growth of the successful private equity organizations has gone even further, with several leading firms diversifying into various forms of debt funds, hedge funds, corporate finance advisory, and even securities underwriting. There has been a notable convergence between the activities of investment banks and organizations such as Blackstone and Texas Pacific Group, and it remains to be seen how far this convergence goes, especially with the changing business models being forced on investment banks.

The final aspect that is worth highlighting is the way that the private equity firm, which is the so-called general partner (GP) of the partnership, is remunerated. There are two components to the remuneration – a fee for managing the fund, which is often 2 percent per annum. It could be higher for successful venture capital firms (reflecting the generally smaller size of VC funds) and will usually be lower - perhaps around 1.5 percent – for the much larger buy-out funds. This fee is typically paid on the capital committed, not the amount invested at any one time. So over the ten-year life of a \$10 billion fund a 1.5 percent management fee would sum up to \$1.5bn. Of course, there are many different contractual variations that can lead to lower or higher total fees. But the fact remains that these are extraordinary sums of money, which, for the larger funds, are many times the costs of running the fund. And these fees are guaranteed, whatever the performance of the fund. The general partner also shares in the profits of the fund.

This profit share is the second part of the remuneration and is referred to in the private equity world as "carried interest". The carried interest is almost always set at 20 percent of the net profits earned by investors and is only payable when the investment is realized and the cash has flowed back to investors. Usually the GPs only start to earn carried interest once the LPs have received all their money back, plus all the fees they have paid, plus a "hurdle rate" of return, typically an 8 percent IRR. So if a \$10bn fund returns \$20bn to its investors, the profits (after fees of,

say, \$1.5bn, as above) would be \$8.5 billion, and the lucky few in the private equity fund who enjoy a share of the carried interest would share 20 percent of this – that is, \$1.7bn.

The remuneration enjoyed by partners in private equity funds are not, in general, reported, except to the investors in the fund. However, the scale of the personal returns that can be earned by successful private equity executives can be inferred from sources such as the prospectuses of those private equity firms who have chosen to conduct an IPO of their management company (such as Blackstone and Apollo), from the acquisition of trophy assets (such as Premiership football clubs) and the entertainers who are engaged for significant anniversary parties (such as Rod Stewart). Furthermore, as will be discussed below, carried interest is typically taxed at capital gains tax rates, which in most countries are significantly below marginal income tax rates. This led to the powerful image, widely reported in the media, of private equity executives paying lower tax rates than their cleaners.

So private equity has become much less private in recent years. Large public companies are now within the grasp of private equity funds, unions have launched an effective campaign which has managed to make the badge of "asset strippers" stick, the remuneration and taxation of private equity executives has hit the headlines and the sector has become the subject of intense public scrutiny. As private equity has grown in economic significance, and spread into new countries, a number of concerns have been raised. These can be classified into three main areas: the impact of private equity ownership on portfolio companies, the appropriate level of transparency and regulation, and taxation. The next sections consider each of these in turn.

3. The economic impact of private equity

The case for private equity ultimately depends on whether private equity creates value. For investors, the *extent* of value creation – in terms of superior returns – probably matters more than its *source*. But from a public policy perspective, the source of investor returns matters: if private equity creates value by enhancing efficiency and creating stronger companies, then a vibrant private equity sector should enhance economic growth. On the other hand, if private equity returns derived mainly from increasing debt levels and thereby reducing corporate taxes, then the impact

on the overall economy would be minimal: investor returns would be largely matched by taxpayer losses.¹

These are the sorts of issues that are driving public policy towards private equity within Europe. We discuss the tax issues in more detail later, but some countries have responded to the growth of private equity funds by restricting the interest deductibility of debt. Whether such policy is sensible depends in large part on the economic impact of private equity. In this section we start by reviewing the evidence on performance, viewed from the perspective of investors. Then we consider the evidence on the ways

private equity funds create, or destroy, value. Clearly, although value creation is the main focus of private equity funds, public policy in many countries has paid rather more attention to whether private equity ownership creates employment, and we investigate the evidence on this in section 3.3. Finally in this section we consider whether the often highly-leveraged structures employed in LBOs contribute to potential systemic financial instability through increased default risk.

3.1 Returns

Evidence on private equity returns is partial at best. This is in large part because the private equity structure - a limited partnership - is a private contract between investors and the fund. The investors in the fund obtain detailed, regular updates on performance, but such information is not generally available to others, certainly not at the level of the performance of individual portfolio companies. Indeed, partnership agreements would often specifically prohibit the release of information to third parties. Some fundlevel data is published by public pension funds in the US - such as the California Public Employees' Retirement System, one of the largest investors in private equity - but more systematic and balanced data on performance is simply not available at the present time.

Table 3.1

Cumulative pooled returns to European private equity

| | IRR (%) | | Investment multiple | | |
|------------------------|--------------|----------------|---------------------|-----------|-------|
| | All funds | Top Quarter | Realised | Remaining | Total |
| Early Stage | - 0.8 | 13.1 | 0.41 | 0.56 | 0.97 |
| Development | 7.8 | 17.3 | 0.77 | 0.69 | 1.46 |
| Balanced | 6.8 | 19.9 | 0.66 | 0.62 | 1.28 |
| All Venture Capital | 4.5 | 14.9 | 0.59 | 0.61 | 1.20 |
| Buyout | 16.3 | 34.2 | 0.93 | 0.6 | 1.53 |
| Generalist | 9.3 | 11.4 | 1.03 | 0.42 | 1.45 |
| All private equity | 11.8 | 23.5 | 0.88 | 0.58 | 1.46 |

This table pools all the funds raised within Europe since 1986 and measures the return on the entire portfolio as of December 2007, using both the internal rate of return (IRR) and the multiple of the original investment that the funds returned to investors.

Source: EVCA (2008).

This is not to say that data does not exist: various data vendors and industry associations survey both LPs and GPs to obtain evidence on return performance. However, as discussed in more detail in Jenkinson (2008), the existing data suffers from significant sample selection issues, most of which probably bias the reported returns in an upward direction.

In Table 3.1 we report the returns published by the European Private Equity and Venture Capital Association (EVCA). This takes the longest possible perspective on the performance of private equity within Europe, by estimating returns from the inception of the industry in the mid-1980s to the most recent funds for which performance data is available. The data measure the net return (after payment of management fees and carried interest) that the investors would have received from investing in all European private equity funds that are included in the survey.

As can be seen, the observed average private equity returns in Europe differ hugely from venture capital to buyouts. VC returns have been dreadful. Despite public policy often giving inducements and subsidies to VC, the net average returns – as measured by IRRs – have barely kept pace with inflation. Indeed, when looking at early-stage VC – investing in real start-ups – the average returns have been slightly negative, meaning that investors have not even received all their original investment back, as can be seen from the average investment multiple of 0.97. However, an important feature of PE returns is the variability

¹ Even in such a case, the fact that private equity-backed companies benefitted from a lower post-tax cost of capital could have positive economic effects, such as increasing levels of investment.

across funds: whereas mutual funds may differ in performance by a few percentage points over time, private equity funds have hugely differential performance. This can be seen in the European VC numbers: the average return of 4.5 percent is ten percentage points below the return obtained by the top quarter of the funds. Manager selection in private equity is therefore critical. Of course, the problem is in anticipating which managers will be the top-performers in the future. Although there is considerable variability, in general the performance of funds focused on European venture capital has been hugely disappointing and has resulted in an exodus by investors.

In contrast, buyout returns have, on average — and before risk-adjustment — been much more impressive. Average IRRs have been around 16 percent with investors receiving around &protect1.5 for every &protect1 invested. Again, however, there is huge variability, with the top quartile of buyout funds producing IRRs of around 34 percent. These rather impressive returns are what has attracted investors into European private equity, where most of the funds have been targeted at buyouts, and, in particular, large buyouts (as witnessed earlier in Figure 3.3).

However, one should not reach for the cheque-book too rapidly! These returns are not risk-adjusted, and this is potentially important given the extent of the financial leverage employed in buyouts. Simple finance theory tells us that increasing use of debt will increase expected equity returns to compensate for the higher level of risk borne by equity holders. This might have seemed an academic nicety through the boom period when asset prices, earnings, and leverage were all increasing. But since the summer of 2007, the relevance of such matters is now starting to become apparent. With European economies now in recession, the market value of the equity stakes of many private equity investments are collapsing, and in some cases will already be negative. This does not mean the private equity funds will abandon such companies, but it does point to some fund vintages producing very disappointing returns: investors with 2004 and 2005 vintage funds in their cellars will be watching developments with some trepidation.

Some hints as to the extent of the recent fall in the value of private equity portfolios can be seen from the public announcements of some of the funds, as well as the evidence from funds that are themselves publicly quoted. For instance, the LPX Europe Index, which measures the performance of 25 listed Europe

130

pean private equity funds, fell by 64 percent during 2008. Of course, the public equity markets themselves fell considerably over this period, and it remains to be seen how public and private equity returns compare. However, understanding the true risk and return characteristics of private equity, and how performance compares with reasonable benchmarks, will be difficult until the required data - at the level of the portfolio company – is made available by the funds or the investors. The evidence available to date, notwithstanding all these caveats, does suggest that the topperforming funds can add significant value to their portfolio companies and produce some impressive returns for investors. This is much more apparent at the buyout end of the market, at least in Europe, than in venture capital. However, the recent precipitous falls in market valuations will undoubtedly tarnish many performance records, including those of some of the best-known funds.

3.2 Sources of value added

Whilst the overall returns earned by funds give some measure of the attractiveness of private equity as an asset class, from an economic policy perspective it matters how returns are derived. For instance, if the returns of the high-performing funds are derived from running business more efficiently, then public policy should be supportive. If all the gains are at the expense of taxpayers or employees, then different policies may apply.

A key issue, therefore, is an attribution analysis of the sources of returns to private equity. Broadly speaking there are three potential sources of value: increased operating efficiency, more efficient capital structure, and market timing or arbitrage.

Despite the clear importance of attribution analysis, little systematic evidence has been produced to date. In large part this is because the required company-level data is not generally available without the cooperation of the private equity funds. However, evidence to this effect is beginning to emerge.

For instance, an interesting new study of UK companies has been conducted by Acharya and Kehoe (2008). They study the performance of large transactions (> €100mn in enterprise value; the median EV in the sample is €470mn) conducted by "large and mature" private equity houses. This is not, therefore, a study based on a stratified sample of the whole sector, and should be viewed more as giving an insight

into how the successful funds – who are likely to be large and mature – have an impact on their portfolio companies.

The sample consists of 66 portfolio companies acquired between 1996 and 2004; however, of these 29 involved corporate restructuring in the form of acquisitions or divestments by the target firm. As we shall see later, when discussing the effect of private equity ownership on employment, a complication in analyzing the impact of private equity ownership is that significant corporate restructuring often occurs. This makes it very difficult to trace the impact on the original company, since restructuring often overwhelms organic growth (or decline). In this study, the result is that only 37 deals in the sample involved "organic" growth.

These companies are benchmarked against public market comparators, and the authors try to identify the extent of the risk-adjusted excess return, or, borrowing from the hedge fund market, "alpha". They also, estimate the IRRs and investment multiples on the deals. In general they focus on exited investments, although 7 deals have not exited as yet. Clearly, this focus may introduce a sampling bias, as an exit is most likely once growth in firm value has been achieved and the PE fund is in a position to provide returns for its investors. On the other hand, only when the investments have exited do we know the real value created.

The authors find an alpha for their sample of private equity investments of 9 percent p.a., which is statistically significant. Note, however, that for this comparison with public markets, the sample selection biases are very relevant. In terms of the sources of out-performance, they find that much of the efficiency improvements come from improved operating performance, in particular increasing EBITDA margins. Therefore, the bottom line of this study is that private equity ownership in this sample was associated with outperformance even after controlling for leverage and risk. There is also no evidence of asset stripping: the companies grew revenue more than their quoted peers, increased capital expenditures and capital efficiency. They also increased employment, although more slowly than their quoted peers. Strong incentive structures, active management and a clear strategic direction seem to be the factors driving the out-performance - thereby giving some strong support to the case for private equity as an alternative corporate governance structure.

Few comparable studies have been performed in other European countries, or, for that matter, in the US. However, Ernst and Young have produced an analysis of the top 100 exits by private equity funds in 2007 – which includes portfolio companies from Europe, the US and Asia. Again, this focus on exits (and the largest exits) clearly creates some significant sample selection biases, although as a study of "successful" private equity transactions it nonetheless has some value.

Not surprisingly – given the way the sample was constructed – the largest 100 private equity exits outperformed comparable public companies. Furthermore, since the survey is based on exits that took place in 2007, and the average holding period of a company by a PE fund is 3–4 years, the historical scope of the survey is heavily weighted towards some of the most advantageous conditions private equity has ever experienced. It is inconceivable that private equity-held companies will create value at similar rates in 2008–9, given the extent of recent markdowns in asset values.

In terms of the sources of value creation, the study focuses on the growth in enterprise value and EBIT-DA. In terms of EV the compound average growth rate (CAGR) for private equity-owned companies was 24 percent compared with a public company benchmark of 12 percent. For private equity-owned companies the EBITDA CAGR was, on average, 16 percent, compared with the public benchmark of 10 percent. And in terms of EBITDA per employee, the private equity-owned companies produced a CAGR of 12 percent, compared with the public benchmark of 8 percent.

Clearly, there are serious questions about whether the results regarding value creation apply across the sector. To date, the few studies that have been conducted have tended to focus on the more successful exits and more successful funds. However, these studies - and other more stylized case-study evidence - suggest that the claim that private equity creates value merely by asset-stripping is false. At its most effective, private equity funds clearly do create value during their tenure as owners. This tends to be by growing revenues and margins. Managers are highly incentivized and are required to operate with limited free cash flow (after interest payments). When successful – and private equity ownership is certainly no magic wand that invariably produces wonderful results – the resultant operational efficiencies are magnified by the highly

leveraged structures that are adopted. Of course, these amplification effects of leverage also work in reverse, which implies that many PE-backed companies will seriously underperform their publicly-quoted peers as the world moves into recession.

3.3 Employment

As should now be clear, the private equity model is one of extremely sharp incentives on all parties – in particular for the management of the portfolio companies, and the private equity executives – to create value for investors. This alignment of incentives is, arguably, one of the key governance impacts of private equity ownership. Creating value is therefore the over-whelming goal of private equity, and other possible desiderata – such as maintaining or creating employment – are not part of the contract. Just like in any company that is trying to maximize its value, employment should be optimized rather than maximized.

However, as the private equity sector has become the focus of increasing attention, unions and politicians have started to claim that the private equity model, almost by construction, leads to job losses. Recall part of the earlier quote from Poul Nyrup Rasmussen: "assets are sold and workers are laid off". The earlier evidence on the sources of value creation cast doubt upon the validity of this claim, but there have also been a few other studies that have looked in detail at the question of whether private equity companies create or destroy jobs.

Probably the most comprehensive study to date has been carried out on US data by Davis et al. (2008). This paper is instructive not only for the results they derive but also in demonstrating how difficult it is to estimate changes in employment levels at companies that are changing their strategy and organization in significant ways. Rather than focus exclusively on employment at the overall firm level, the research also delves into establishment-level data. This distinction can be important: the sale of a division or business unit would be recorded as a loss of employment at the firm level, even though the establishment may continue to employ exactly the same number of workers under the new owner. Since many private equity transactions involve a net sale of divisions or business unit, an establishment-level analysis overcomes the potentially distorting results of corporate restructuring. However, while the use of establishment data has some attractions, there are also some significant drawbacks. In particular, since some business units are sold to other companies, tracking establishments for 5 years after an LBO, as the study does, means that it is not possible to produce a clean measure of the impact of continued private equity ownership.

The study identifies 5,000 private equity-backed US firms, covering more than 300,000 establishments, as well as an additional 1.4 million establishments used as comparators, matched by industry, age, size etc. Since most of the public policy issues that have been raised regarding employment relate to LBOs, only transactions that involved leverage are considered. Job creation and job destruction are considered separately as gross creation and destruction dwarfs net changes. The authors focus on the employment path relative to comparator firms. This is critical as all establishments – irrespective of ownership – undergo patterns of rise and fall, as new establishments replace older ones.

Despite all these caveats, the study produces some interesting results. The rate of acquisitions, sales, new plants and closures are approximately twice as high in private equity-backed firms, so there is a much greater extent of corporate restructuring. The net result for employment on a firm-level basis, across all sectors, is that those firms taken over by PE have 3.6–4.5 percent fewer employees after two years, once all acquisitions and exits are taken into account. For this part of the study, the timescale is shortened to two years, to partially mitigate the impact of major acquisitions and divestments.

However, as noted earlier, this does not necessarily imply that private equity ownership results in the loss of jobs in the overall economy. The establishment-level analysis gives some additional clues, though, with the authors concluding that US establishments taken over by PE have 10 percent fewer employees after 5 years than if they had developed in line with similar workplaces not subject to an LBO. However, as noted earlier, this result has to be interpreted with care as the establishments may have changed ownership during this period.

Overall, this study finds some relatively modest differences in employment, with private equity ownership being associated with slightly lower levels of net job creation. However, in addition to the caveats previously noted, there are various other general problems in drawing conclusions. In particular, although the authors are careful to conduct their analysis relative

to a control group, it may well be that the sorts of companies that private equity targets are precisely those where inefficiency is high or where restructuring is required. And, more generally, from a public policy perspective it cannot be an objective to protect jobs *per se* – the overarching objective is to create competitive, valuable companies. What the study does show, however, is that the perception of some commentators of private equity as being slash-and-burn owners who lay off most of the workers is quite unjustified.

No similar in-depth study has been performed on European firms. However, there have been some attempts to measure the employment effects of private equity. The European Private Equity and Venture Capital Association (EVCA) produced a study that reported various estimates of employment growth in early stage firms and LBOs (see EVCA 2005). Perhaps not surprisingly, all the evidence suggested early-stage firms grew employment rapidly, with the headline claim being that 630,000 new jobs were created by VC-backed firms within Europe over the period 2000 04 – a growth rate in employment of 5.4 percent per annum. The impact of LBOs was also claimed to be very positive, with an estimated growth rate of employment of around 2.4 percent per annum, which translated into 420,000 new jobs across Europe.

However, there are various concerns about this analysis. The impact of LBOs is based on a sample of just 99 portfolio companies that private equity funds had invested in over the period 1997-2004. The sample was derived from a voluntary on-line survey, which raises various potentially serious concerns about sample-selection biases. In particular, knowing the political environment within which private equity increasingly operates, it seems likely that funds would be more likely to complete the survey in respect of portfolio companies where employment grew strongly. Furthermore, by considering the employment effects at the firm level, the study encounters the problems identified earlier regarding restructuring. In an attempt to focus on organic growth (or contraction) the study excludes companies where employment levels changed by more than 20 percent per annum, but this does not really address the issue. Furthermore, the report benchmarks employment levels against publicly quoted European comparators. It seems likely that the latter may be larger and more mature than the LBO sample, although no information comparing the two groups is supplied. For all these reasons, the very positive impact that LBOs are claimed to have on employment levels needs to be interpreted with care.

At the national level within Europe there have been few studies that look at employment. One exception is Amess and Wright (2007), which looks at UK-based firms. One feature of this study is that it distinguishes between deals where the private equity fund works with the existing management - referred to as management buyouts (MBOs) - and those where new management is introduced by the private equity owners - referred to as management buy-ins (MBIs). The sample for the analysis comprises 1350 firms that had undergone an LBO. It is worth noting, however, that the definitions employed could include younger companies seeking growth capital (which might have low or no debt), as well as more mature companies. Hence it is questionable whether this study really focuses on the LBOs that have caught the attention of politicians and unions.

As in the other studies, comparator firms are identified and employment growth compared at the level of the firm. Companies are excluded if assets change by more than 100 percent in any one year, which is a fairly coarse control for restructuring effects. The authors conclude that employment growth is 0.5 percent per annum higher for MBOs and 0.8 percent per annum lower for MBIs as compared with the control group. Leaving aside the general problems, discussed earlier, regarding inference in these firm-level studies, these results seem directionally plausible. To the extent that MBOs can really be distinguished from MBIs, one might expect the latter - where new management is being introduced to replace the old – to be associated with more job cuts. On the other hand, the cases where incumbent management is supported by incoming private equity investors might be those companies that have been run more efficiently.

Overall, an interpretation of the results regarding the impact of private equity on employment is complex. Indeed, given that in many cases private equity owners execute significant changes in corporate strategy, it is difficult to even construct an appropriate counterfactual. For instance, comparing with public companies may not be appropriate if they are not subject to significant changes in strategy. And strategic changes are very idiosyncratic. The ability to compare "organic" employment creation or destruction is therefore limited. Overall, however, the results seem to suggest that employment grows, if anything, at somewhat lower rates under private equity ownership. Whether this is a good or bad thing is another matter. But the claims of some unions and politicians that private equity funds sack workers and cripple the

companies are based more on anecdotal than systematic evidence.

3.4 Financial distress

So far in this section we have reviewed the evidence on financial returns, the sources of returns, and the impact on employment. However, given the extensive leverage employed by private equity funds in many buyouts, should we expect to observe financial distress among portfolio companies, and imploding of funds in the manner witnessed amongst hedge funds? The short answer to these questions is yes and no. Starting with the issue of the impact on funds, as noted previously, PE funds are not leveraged within the fund itself. Leverage is used to acquire the portfolio company, which is kept within the acquired firm, and has recourse neither to the fund nor to the other portfolio companies. So, if an individual portfolio company becomes bankrupt, the equity stake of the private equity fund would become worthless, and the debt providers would take over ownership and control of the company. Of course, this will harm the returns of the PE fund – as their investment is written down to zero – but the impact does not spread to other companies in the portfolio.

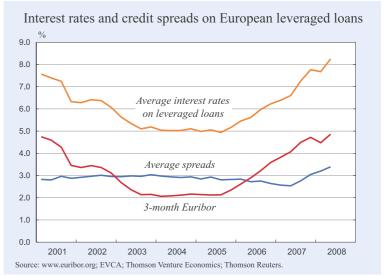
Furthermore, investors commit money to private equity funds for up to ten years, and so cannot withdraw capital if a fund is doing poorly or if recession takes hold. In contrast, hedge funds attracted capital that was far more mobile: many hedge funds allowed withdrawals by investors with only a few months notice. The value of the "patient capital" provided by investors in private equity funds has only become fully

appreciated in recent months, as investors have been scrambling for liquidity. Hedge funds have been experiencing large-scale redemption requests by investors, and little new capital being committed. In some cases this has resulted in huge asset sell-offs by hedge funds - often into markets with few buyers - and the mismatch between the relative liquidity of investor commitments and the illiquidity of many of the underlying assets has caused enormous problems. In many cases hedge funds have had to invoke "lock-up" clauses to restrict investor withdrawals, to allow a more orderly run-down of the fund. The main problem that PE funds are experiencing is some investors are becoming seriously over-committed, in terms of asset-allocation, to private equity, given the slowdown in the rate at which capital is being returned to investors. But withdrawal of existing investments, which would impact on the portfolio companies, is simply not possible.²

Of course, although the private equity fund structure provides long-term capital commitments, they are still exposed to the current economic realities of falling asset prices, falling liquidity and rapidly worsening macroeconomic conditions. While the funds themselves will not implode, will some of the portfolio companies experience financial distress and bankruptcy? As noted earlier, the answer to this question is undoubtedly "yes". However, such problems are likely to be less acute in the short-term than might be assumed, given that private equity funds have been buying assets at record prices and taking on large amounts of debt (as shown by figure 3.2).

Why? Because PE funds made good use of the boom in leveraged finance in the last few years to borrow at low interest rates on relatively lenient terms from banks and other providers of debt financing. Leveraged loans for private equity buyouts are priced relative to inter-bank interest rates such as LIBOR or EURIBOR. As figure 3.4 shows, not only were inter-

Figure 3.4



² There is, however, a growing secondary market in private equity investments. Recently some high-profile investors, such as Harvard University and the Wellcome Trust, have announced that they intend to sell some of their existing investments. However, these would be sales of partnership interests to other investors, and so would not deprive the fund or their portfolio companies of money.

est rates low, but the average spreads on leveraged loans stayed low as lending multiples rose. Consequently, credit metrics – such as interest coverage – did not deteriorate as much as one might assume from the raw figures on the extent of debt.

Furthermore, much of the debt provided for private equity buyouts was both relatively long-term - typically loans have a 7-9 year term - and had a significant non-amortising proportion. Most corporate debt requires both interest payments and repayments of principal during the life of the loan. However, much of the debt used to fund buy-outs has involved "bullet" re-payments whereby the principal is only repaid at the end of the term of the loan. Indeed, for some portions of the debt, interest payments may not be required or may be at the discretion of the borrower. These "payment in kind" and "toggle payment" features became common during 2006 and 2007 and will provide borrowers with valuable flexibility. As long as the company can continue to meet the required interest payments, financial distress may be delayed or avoided completely. As Europe has entered what looks like a deep recession and banks remain reluctant to either extend or re-finance loans, the value of such long-term funding with low repayments will become apparent.

A final feature of the leverage boom was that covenants associated with loan agreements became looser. An extreme version of this phenomenon was the "cov-lite" loans that many private equity funds negotiated for their portfolio companies. Such loans have few on-going requirements, in terms of maintaining particular credit or balance sheet ratios, other than to keep paying the agreed interest on the debt. Of course, even paying the interest will be impossible for some companies, but this is not only true for private equity-owned companies but for the corporate sector in general. However, the relatively permissive loan agreements that were the norm during the leverage boom will reduce the number of companies entering financial distress.

In summary, many private equity funds took full advantage of the leverage boom by negotiating large, long-term loans that give their portfolios unusual amounts of flexibility in terms of repayment. The terms of such borrowing will help to reduce, but not eliminate, the number of portfolio companies that suffer financial distress.

So who paid the price for this historically unprecedented extension and pricing of credit? The answer is,

those that arranged and ultimately provided such leveraged lending. Often the lending was arranged by investment banks, and in some cases they took the entire deal onto their books before finding investors for the debt. This resulted in a huge overhang of unsyndicated leveraged loans whose market prices fell dramatically as the credit crisis developed. Leveraged loans certainly played their part in the downfall of the investment banks, but the private equity funds were — on the whole — acting entirely rationally in accepting as much mispriced debt that they were offered.

The other main losers were the plethora of financial institutions that invested in leveraged loans as they were pooled, tranched, structured, enhanced (or not) and distributed around the financial system. Hedge funds, collateralized loan obligations, monoline insurers, banks and insurance companies all shared in the pain. And, ironically, they now find some private equity funds offering to buy back the debt at a fraction of the face value.

However, there is one sting in the tail of the leverage bubble. As noted earlier, the lack of covenants on many loans reduces the likelihood of default, even if the equity in the company is essentially worthless. There are likely to be a significant number of companies that were bought by private equity funds at the top of the market where the prospects of them ever recovering their investment, let alone make a reasonable return, is low, certainly for the next few years. In normal circumstances, such companies would default and the private equity owners would hand the keys to the bankers who would take over control of the company. Losing the entire equity stake is clearly bad, but when the outcome is reasonably quick it enables the private equity executives to move onto more productive activities, such as adding value to more promising companies or sourcing new investments. Cov-lite loans are likely to result in a growing number of "zombie" companies - the living dead who only survive due to the generous borrowing taken out at the top of the market. Such firms may take much longer to default - in some cases this may be delayed until loans have to be re-financed after around 7-9 years. As a result, private equity funds will have to continue to manage and nurture such companies, even if the beneficiaries of this effort are mainly the banks and other investors who provided the debt financing rather than the equity investors.

In summary, leveraging any asset increases risk and expected return. This amplifies positive returns in

good market conditions and similarly amplifies negative returns when economic conditions worsen. There is no doubt that as the European economy now has entered recession the incidence of default and financial distress will rise, for all companies, whether private equity-owned or not. Although the amount of debt taken on by private equity buyouts in recent years hit record levels, the terms of such loans were also historically unprecedented in their leniency. It remains to be seen how these two factors balance in the coming months.

4. Transparency and regulation

Within Europe considerable attention has been devoted to whether private equity should be regulated and, if so, how. It is worth noting that private equity remains an asset class that is largely the domain of institutional investors. Although retail investors can gain exposure to private equity through certain funds that operate publicly listed vehicles (such as 3i, Candover, etc.), or through asset managers who put together portfolios of private equity investments, individuals (other than the "ultra-high-net-worth") cannot gain access to direct investments in the underlying limited partnerships.

Of all the European countries, the UK has seen more activity by private equity funds, both in terms of investment in companies, and in terms of the location of many of the private equity professionals. In part this is because the UK was one of the first countries to agree the status and taxation of limited partnerships, but also because the UK has a long-standing laissez-faire approach towards corporate ownership and M&A activity. It has also, in recent years, been the country where the private equity industry has been under the most scrutiny.

The first major review of the private equity industry was undertaken by the Financial Services Authority in 2006 (see FSA, 2006). This report broadly gave the industry a clean bill of health, although the potential for conflicts of interest between the LPs and the GPs was identified as warranting further investigation. The FSA therefore produced a thematic review of conflicts of interest, which was published in July 2008 (FSA, 2008). This report noted that, in general, "funds operated business models with a high degree of alignment between the interests of managers and fund investors". This is not surprising, since the limited partnership agreements

are the subject of extensive discussion between the LPs and the GPs, with both sides being advised by lawyers and specialized consultants. Some investors obtained better terms than others (for instance, early "cornerstone" investors), but more often funds operated with strict equal-treatment rules regarding investor terms. In general the level of disclosure and reporting by the funds was judged to be extensive and widespread.

An interesting theme that recurs through all the various reviews and investigations is that investors report few problems with private equity funds. They have access to regular detailed reports on the performance of the individual portfolio companies and on the overall fund, and are fully informed about the returns and payments of fees and any carried interest to the GPs. So whilst private equity investments are indeed private, subject only to general laws relating to all private companies or transactions, there are no issues regarding transparency or information asymmetry between the investors and the funds.

So, two sophisticated parties agree to do business, and both are happy with the outcome. Reputations are critical, and funds are strictly time-limited, so any bad behaviour or poor performance would likely jeopardize raising a future fund. Entry into the industry constantly occurs, as experienced individuals leave larger organizations to form their own funds, on the back of previous successful transactions. Why the public concern?

The answer to this question is largely political. As private equity started acquiring much larger organizations some of which were household brands – such as the AA or Boots in the UK - public attention grew. However, a critical role was played by trade unions in the UK and elsewhere, who focused on examples where private equity-owned companies shut down plants and/or reduced employment. As noted in the previous section, whilst such cases undoubtedly exist, it is far from clear whether private equity owners, on balance, create or destroy more jobs than other forms of ownership. Nonetheless, the power of example was strong, and private equity firms, lacking experience in dealing with anyone other than their limited circle of investors, proved unable to shake off the labels of job-destroyers and asset-strippers.

In the UK this led to the industry association, the BVCA, forming a high-level working group, chaired

by Sir David Walker, to investigate disclosure and transparency in private equity. Again the dog did not bark: investors were satisfied with the level of disclosure and transparency. The final recommendations of the review therefore focused on enhanced reporting and communication to the general public.

Most of the recommendations on enhanced reporting are relatively modest, and some funds probably already satisfied many of them. The review suggested additional reporting – over and above what any private company would be required to report - by larger portfolio companies owned by larger private equity funds. With a nod to the unions, the size criteria for this enhanced reporting include employment levels (at least 1,000 UK employees) as well as the value of the company (over £500mn, or over £300mn in the case of public-to-private transactions, where the public would have previously had access to more information). Such firms are required to publish their annual reports on their website within 6 months of the year-end, reveal which private equity funds own them and to publish a business and financial review, including information relevant to employees and other stakeholders. To date, 53 companies have signed up to this enhanced level of disclosure.

The other strand of recommendations related to the private equity firms themselves. Those (generally larger) firms that own portfolio companies that are subject to the enhanced reporting, are required to publish an annual report giving information on their investment approach, their portfolio companies, the broad geographic distribution of their investors and information about the top management. To date, 32 firms have agreed to communicate such information to the general public, and a monitoring group has been established to ensure compliance with this voluntary code.

The first batch of these reports have been produced and, in some cases, make interesting reading. But, on average, they are about as interesting as the glossy annual reports from public companies that are often assigned rapidly to the re-cycling bin! It is debatable whether the benefits of such reporting and communication outweigh the costs.

The final recommendation of the Walker Review acknowledged – correctly – that the industry should "undertake rigorous evidence-based analysis of the economic impact of private equity activity". As noted

in the previous section, evidence on the extent, and sources, of the value created by private equity ownership remains incomplete and largely anecdotal. The first report BVCA (2009), has just been published. Although it includes some interesting analysis, the current dataset – with just 14 exited investments – is too small to draw any general conclusions.

Many other countries across Europe have been conducting their versions of the Walker Review. During June 2008 both the Danish and the Swedish industry associations published their reviews of the appropriate extent of transparency and disclosure. In most important respects these mirror the approach suggested by the Walker review - in particular the establishment of a code of practice defined and policed by the industry itself, rather than the introduction of new statutory requirements. There are, of course, local differences, which in the main relate to the relevant size of companies and funds (for example, the Danish proposals cover over one-half of the private equity funds in Denmark, whereas the Walker proposals are relevant to only about 15 percent of UK private equity funds), and the extent to which existing laws already require adequate reporting by private companies, engagement with workers and board representation.

Other European countries have followed suit and have produced their own transparency proposals. What seems likely is that the pressure for a set of common guidelines that apply across Europe will grow. However, it remains to be seen who exactly benefits from this increased transparency and reporting. After all, the investors already have all the information they could possibly desire. Whilst these reviews by the various industry associations have, for the time being, calmed the political storm, a sober cost-benefit analysis might well question the value of these voluntary codes.

We now turn to a final set of public policy issues relating to taxation that continue to attract public attention to the private equity industry.

5. Taxation issues raised by private equity

Two main policy issues have been raised regarding private equity: whether the tax system actually encourages LBOs and results in a reduction in national tax revenues, and whether the tax treatment of the private equity executives' carried interests in the funds is appropriate and fair. We consider these in turn.

5.1 Tax deductibility of debt

Most tax systems allow tax-deductibility of interest expenses on debt at the corporate level. And most tax systems treat equity financing less generously, by not allowing full tax deductibility of dividend payments or retained earnings. As a result, most companies have an incentive at the margin, other things equal, to increase the use of debt to reduce their post-tax cost of capital. The tax benefits have to be weighed against the potential costs – such as the reduction in financial flexibility or the probability of financial distress – but for many companies the potential net gains from increasing leverage are significant.

Private equity funds often transform the capital structure of companies they acquire, and thereby take full advantage of the tax deductibility of interest payments. This can significantly reduce the amount of corporation taxes flowing into the public coffers. As a result, many countries, both in Europe and elsewhere, have started to question whether the tax system should allow full tax-deductibility for interest expenses, and thereby discourage the more leveraged capital structures.³

In large part such moves seem motivated by a view that, beyond a certain point, leveraged capital structures are only motivated by the potential tax savings, and so should therefore be discouraged. On the other hand, the potential benefits of leverage extend beyond tax issues. As noted in a seminal paper by Jensen and Meckling (1976), debt can help to overcome agency issues by removing free cash-flow and sharpening the incentives of managers. The optimal level of debt will vary significantly between companies, depending on all sorts of considerations (the stability of revenues, operational leverage, competition etc.). It seems likely that any simple tax rule to limit the tax deductibility of interest payments will constrain some companies from implementing perfectly legitimate capital structures. For such companies, the post-tax cost of capital will be increased relative to their international competitors.

The other main motivation for restricting the taxdeductibility of interest payments resulted from concern about the impact on national tax revenues. To some extent one would expect that as more debt is used, tax revenues should increase from the providers

of debt capital. In the past this used to be provided by local banks, whose taxable profits might rise as a result. However, during the recent leverage boom, much of the debt was provided by hedge funds, CLO funds and others, many of whom operated offshore. As a result, the flowback of taxes from debt providers was less likely to occur. Whilst undoubtedly true, at the current time the prospect of even banks paying taxes on profits appears some way off, and few of these new financial players are likely to be providing finance for some time. In any case, this is really just an example of the difficulties national governments are finding levying taxes on the corporate sector within a global financial system. It is not hard to relocate a company to a jurisdiction that does not impose such rules, or to organize the tax affairs of a company to channel profits to lower-tax countries. Rules to arbitrarily limit the capital structure choices of companies are unlikely to be either efficient or effective in maintaining tax revenues.

It is worth making one further observation regarding the tax benefits of leverage. In large part the beneficiaries of these tax benefits are likely to be the vendors of the companies that are acquired by private equity funds, rather than the investors in the private equity fund. Why? Because leverage is a commodity that is available to all reputable private equity funds. Provided the companies are acquired in a competitive process, any tax benefits of leverage should be reflected in the purchase price paid by the private equity funds — i.e. as part of the takeover premium. Therefore, the main impact of rules to restrict the tax-deductibility of debt may be felt by the owners of existing assets, rather than in the returns reported by private equity funds.

5.2 How should carried interests be taxed?

The second area of public debate regarding the taxation of private equity relates to the taxation of those working in the sector. In particular, in both the US and Europe, the taxation of the carried interests of the private equity executives has become the subject of considerable debate in the media and amongst politicians.

The issue is essentially whether these carried interests – the share of the profits made by the fund – should be treated as capital gain or income? This is a complex issue. The GPs are committing capital to the funds, so capital gains tax has some justification. On the other hand, they obtain the carried interests as a result of

 $^{^3}$ Most tax systems include thin-capitalization rules to catch tax avoidance associated with the creation of debt that is, in economic terms, equity.

their role as employees of the fund, and so carried interest looks much like a profit share, which would normally be subject to income taxes.

A full discussion of this issue is beyond the scope of this chapter, although a good summary of the issues is provided by Lawton (2008). However, the current tax treatment in many European countries appears very generous, especially when capital gains tax rates are reduced to low levels for longer-term holders of assets (concessions which normally benefit private equity executives). However, dealing with the complexities of any such reform should not be under-estimated. For instance, those countries - such as the UK - which have responded to the political out-cry by simply increasing capital gains tax rates (or removing taper relief) are potentially harming all sorts of other entrepreneurial incentives in a quest to raise taxes on private equity GPs. Such issues have undoubtedly moved down the political agenda in the current environment, with future carried interest payments likely to fall significantly, and private equity funds being among the few with capital to invest. But these issues are likely to re-emerge in due course.

6. Conclusions

Private equity plays an increasingly important role in the financial system. Despite recent market turmoil, the private equity model of ownership and governance is here to stay. Although it has attracted much negative publicity in recent years, in particular within some European countries, many of the negative claims regarding the impact of private equity on the economy are not supported by the evidence.

A major issue facing private equity funds is that there is little understanding of how they add value. This is in part due to the culture of privacy within the industry, which is a major impediment to public understanding of the role of private equity in the economy. Whilst some analysis has been published, it is often selective and partial, and frequently funded and vetted by industry associations. For many of the successful funds there is good story to tell, but to date only the large institutional investors have heard it. As a result, the claims of private equity funds are often greeted with scepticism.

One outcome of the veil of secrecy has been the push to increase transparency in many countries. As discussed, whilst no bad thing, this is likely to have limited impact. The investors in private equity funds already had access to regular, detailed reporting. There is no information asymmetry for those providing the capital, and, if there was, then as some of the largest and most sophisticated global investors they could obtain any information they desired. It is not clear that private companies should have to comply with different standards of reporting according to who the owners are. In general, the Walker Review, and similar initiatives in other countries, may have some effect at the margin in terms of information flow to employees and other interested parties but is unlikely to satisfy the critics.

Another response to the growth in private equity has been to amend tax policies. At the corporate level, tax policies to make leveraged buyouts more difficult or costly have questionable justification and uncertain impact. The optimal capital structure will differ between companies, and restricting the taxdeductibility of debt will either raise the post-tax cost of capital or encourage tax avoidance by companies that find themselves constrained by the policy. In many cases the main impact of such policies is likely to be felt by the existing owners of companies that might be acquired by private equity funds rather than in the returns earned by private equity funds themselves. At the personal level the taxation of private equity executives is an area that warrants careful consideration as it is debatable whether their profit shares should be taxed as capital gains as opposed to income, or some hybrid of the two. But given the international nature of the industry, it is questionable how much money would be raised, and poorly thought-out policy might result in significant changes in the location of the funds.

Finally, although the future returns earned by private equity funds that invested heavily in the period prior to the leverage bubble bursting in August 2007 are likely to be poor, the extent of financial distress and bankruptcy of the portfolio companies may be lower than might be expected. In large part this is due to the fact that private equity funds took full advantage of the unprecedentedly generous terms associated with debt financing during the leverage bubble. Whilst the investment banks, hedge funds and CLO funds that provided the debt have witnessed spectacular losses, many of the portfolio companies themselves now enjoy long-term fixed rate, cheap debt financing with few covenants. Of course, as the European economy is in recession, leverage increases the susceptibility to financial distress and bankruptcy, and there is no

doubt that some high-profile bankruptcies will occur. But the financial structure employed by many private equity funds may enable many of their portfolio companies to continue operating without defaulting long enough to see through the recession. What is in no doubt is that holding periods will lengthen, investment rates will slow, the terms of future lending will return to historical norms and that most existing funds will witness significantly reduced returns.

However, history informs us that some of the best periods to invest in private equity are at the start of a recession, when asset prices are low and the need for rapid corporate transformations is at a premium. It is not surprising, therefore, that private equity fundraising continues, and investor surveys show an increase in asset allocation to private equity. Economies need a diversity of sources of capital, and public policy should let the market decide which source is most appropriate for a given company, without imposing tax or other regulatory restrictions to favour one source over another.

References

Acharya, V. V. and C. Kehoe (2008), "Corporate Governance and Value Creation: Evidence from Private Equity", IFA Working Paper, FIN 482

Amess, K. and M. Wright (2007), "The Wage and Employment Effects of Leveraged Buyouts in the UK", *International Journal of the Economics of Business* 14, 179–195.

BVCA (2009), BVCA Annual Report on the Performance of Portfolio Companies, 2008, available from www.bvca.co.uk.

Davis, S., J. Haltiwanger, R. Jarmin, J. Lerner and J. Miranda (2008), "Private equity and employment", in *The Global Impact of Private Equity Report 2008*, World Economic Forum.

EVCA (2005), "Employment Effect of Venture Capital and Private Equity", research paper produced by the Centre for Entrepreneurial and Financial Studies, Technical University of Munich, for the EVCA.

FSA (2006), "Private Equity: A Discussion of Risk and Regulatory Engagement", Discussion paper 06/6, available at $http://www.fsa.gov.uk/pubs/discussion/dp06_06.pdf \; .$

FSA (2008), "Thematic Review of the Management of Conflicts of Interest within Private Equity Firms", Capital Markets Bulletin, Issue 3, July.

Jenkinson, T. (2008), "The Development and Performance of European Private Equity", in Xavier Freixas, Philipp Hartmann and Colin Mayer (eds), *Handbook of European Financial Markets and Institutions*. Oxford: Oxford University Press.

Jensen, M. C. and W. H. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics* 4, 305–360.

Lawton, A. (2008), "Taxing Private Equity Carried Interest using an Incentive Stock Option Analogy", *Harvard Law Review* 3. 846–366.

Rasmussen, P. N. (2008), "Taming the Private Equity 'Locusts'", Project Syndicate, available at www.project-syndicate.org/commentary/rasmussenp1

Russell Investment Group (2007), Russell Investments Survey on Alternative Investing. December, Washington.