

The impact of private equity on European companies and workers: key issues and a review of the evidence

Andrew Watt

ABSTRACT

This article provides an overview of the debate about private equity (PE) in Europe, with a focus on the performance of the firms taken over and the pay, conditions and job prospects of the workers they employ. It reviews quantitative indicators for the rise of PE in recent years and explains how the PE business model functions. The main concerns raised by the PE model are identified, and these are then confronted with the evidence from academic and other studies. Finally, some implications of relevance to the debate about the ‘varieties of capitalism’ within the European Union are also drawn.

1 INTRODUCTION AND DEFINITIONAL ISSUES

Google the phrase ‘private equity’ (PE), and you get, in early March 2008, more than 19 million hits. Not five years ago, the phrase was unknown outside a small coterie of bankers, pension fund managers and a handful of ‘high net worth individuals’ (i.e. very rich people). The media focus on PE steadily increased, reaching what can only be described as ‘fever pitch’ in 2007.¹ Trade unions in various countries, at European and indeed global level, initiated campaigns to protest against PE’s alleged negative impact on jobs and wages. Parliamentary enquiries into the PE business model followed, alongside a trickle of formal academic studies of the micro- and macro-level impact of PE ownership of an increasing share of firms in OECD countries.

This article provides an overview of the PE debate, with a focus on the consequences of PE for the ‘real economy’, in particular for the performance of the firms taken over, and the pay, conditions and job prospects of the workers they employ. By contrast, the issue of the ‘success’ of the PE firms themselves in generating high rates of financial returns for investors and fund managers, a subject of numerous studies and much controversy, is considered only peripherally (see e.g. Gottschalg, 2007). This introductory section continues by defining some of the terms used in the article

□ Andrew Watt is Senior Researcher at the European Trade Union Institute (ETUI-REHS). Correspondence should be addressed to Andrew Watt, Senior Researcher, European Trade Union Institute (ETUI-REHS), Research Department, 5 Blvd. du Roi Albert II, B-1210 Brussels, Belgium; email: awatt@etui.org
¹ Analysis of searches of relevant articles on ft.com—the *Financial Times* being the premier European financial newspaper—reveals the following article counts in 2003, 2005 and 2007: ‘private equity’ (3,009, 4,457, 10,179); ‘leveraged buyout’ (136, 214, 671); ‘Blackstone Group’ (77, 112, 722).

and distinguishing PE from some related phenomena. Section 2 provides a number of quantitative indicators for the rise of PE in recent years. This is followed by an explanation of how the PE business model functions (section 3). Section 4 sets out the main concerns raised by the PE model, as they emerge from government reports, and campaigns by, among others, trade unions; these concerns are then confronted with the—limited—evidence from academic and other studies (section 5). Some implications of relevance to the debate about the ‘varieties of capitalism’ within the European Union (EU) are drawn in the concluding section (section 6).

For the purposes of this article, the PE business model (described in greater detail in section 3) can be defined as follows: PE involves the pooling of capital from individual and institutional investors in funds which are used to purchase, usually with recourse to bank loans (‘leverage’), a controlling interest in existing productive enterprises. These ‘target’ or ‘portfolio’ companies are not, or—if they were previously listed—are no longer, publicly traded on stock exchanges. The purpose of the purchase is to resell the target company at a higher price after a limited period during which the company’s operations are restructured. The proceeds—a capital gain from resale plus dividend and other payouts prior to resale—are shared between the investors [limited partners (LP)] and the owner-managers of the PE fund [general partners (GP)].

It is worth dwelling briefly on what this definition excludes and what it encompasses. It excludes:

- Mergers and acquisitions by existing producer companies: these are structured totally differently to PE and the interest is normally primarily strategic rather than financial.
- Investment in new companies and start-ups (venture capital, seed capital): this is structured in a similar way to PE (and in Europe—but not in the United States—the two are grouped under a single trade organisation), but these forms of investment are rather different in their economic and political impact, investing much smaller sums in high-risk, new ventures.
- Various forms of ‘activist shareholder’ investment: this normally entails taking small stakes in large firms and using them to force managerial and strategic changes that have a short-run positive impact on the share price, without delisting companies from the stock exchange.
- Hedge funds: these are similar to PE funds in the way they obtain finance, and both use leverage (in somewhat different ways), but differ fundamentally in the type of investments made, which tend to be in much shorter-term and liquid financial assets.
- Sovereign wealth funds: these institutions also take stakes in companies (and invest money in PE funds), but are state-owned bodies with an agenda of obtaining stable long-term returns to serve demographic or economic stabilisation policy goals.

On the other hand, and importantly, the definition adopted here is such that it is *not* restricted to those target companies that used to be publicly traded and are then ‘taken private’ by PE (i.e. delisted from the stock exchange). Rather, it covers also family-run businesses and limited liability companies; the size of both the target company and the PE fund are irrelevant and can vary enormously, as can the extent to which leverage—financing purchases by (bank) debt—is used.

Finally, the relationship between PE and three important terms should be clarified. A leveraged buyout (LBO) is any purchase of a company using a substantial propor-

tion of debt. This is the typical activity of a PE fund, and in this article the term LBO will be used to refer to company takeovers by PE firms (although technically any acquisition, also by another producer company using debt, is an LBO).² Two terms that are frequently encountered, but not used extensively in this article, are management buy-ins (MBIs) and management buyouts (MBOs) (Amess and Wright, 2007). MBOs are driven by the incumbent managers, whereas MBIs involve the replacement of existing management with outsiders. Apart from reporting some statistics, this distinction is not used here for the reason that PE takeovers can involve elements of both.

2 THE RISE OF PE IN EUROPE

That the increasing media interest in PE reflects a growing real phenomenon in Europe³, rather than mere hype, can be readily shown with reference to a number of indicators: using a range of indicators helps address the definitional issues described above.

Figure 1 shows figures—from the European Private Equity and Venture Capital Association (EVCA), the trade body of the PE industry in Europe—for the two key

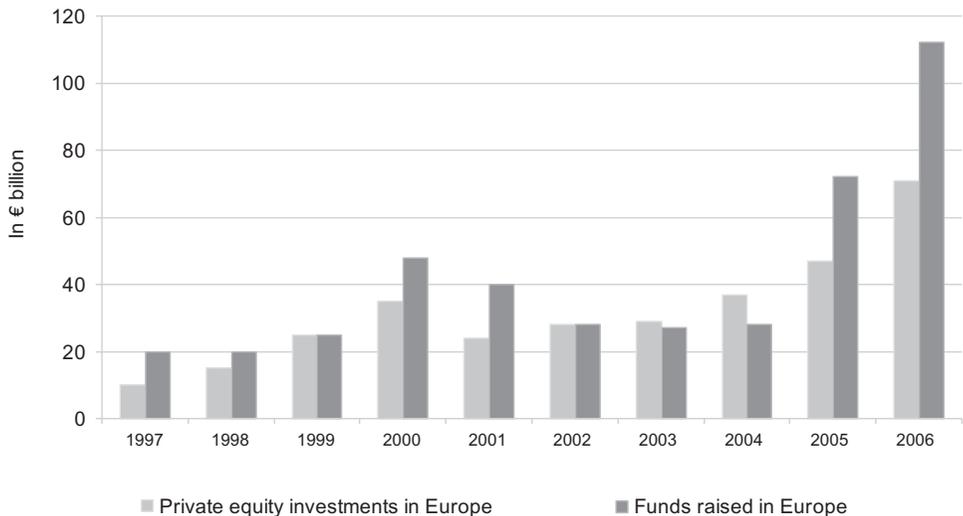


Figure 1: Private equity investments and funds raised in Europe

² Some readers will recall the furore over LBOs in the late 1980s, particularly in the United States, after a wave of takeovers that achieved notoriety with the battle for RJR Nabisco, as chronicled in the book and film, *Barbarians at the Gate*. While the term 'private equity' was not then used—the media, at least, referred more colourfully to 'corporate raiders'—the principles of LBOs remain unchanged to this day. Indeed, Henry Kravis, founder of KKR, one of the largest PE firms, was a protagonist in the RJR Nabisco saga.

³ The same is true of the United States and other OECD countries. The focus of this article, however, is Europe. It should be noted that a considerable proportion of European-based PE firms are subsidiaries of large US firms (BVCA, 2006). It would be interesting to examine whether the activities and impacts of US firms differ systematically from their European counterparts. However, as we see in section 5, the evidence even in the aggregate is patchy.

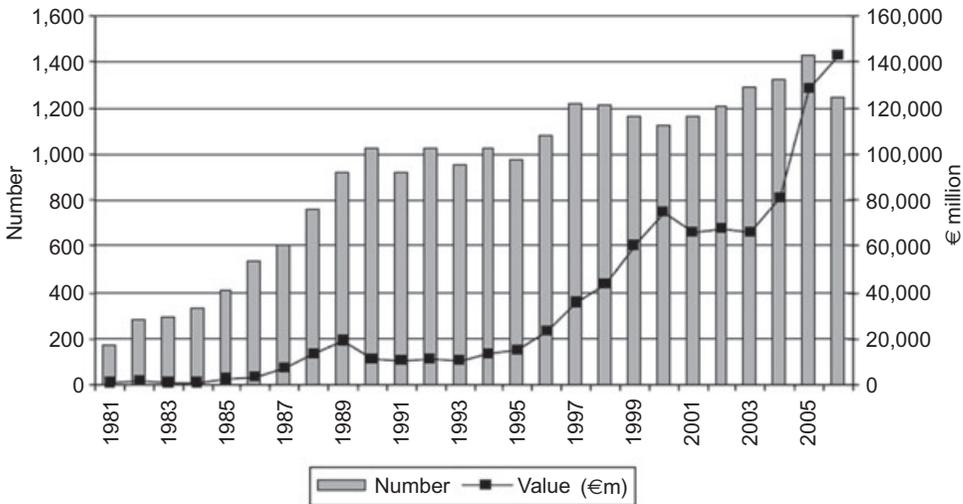


Figure 2: Trends of buyouts/buy-ins in Western Europe

Source: CMBOR (Centre for Management Buy-Out Research) data; figure taken from Wright *et al.* (2007: 11).

indicators of the 'size' of the PE industry:⁴ the amount it invests and the amount it raises in capital. Investment rose from around €10 bn in 1997 to almost €40 bn in 2000, before weakening in response to the cyclical downturn. Beginning in 2005, there was a rapid acceleration in investments, to around €75 bn. While following a similar trend (funds dispensed have first to be raised), the development of fund-raising was even more dramatic: in 2006 more than €110 bn was added to the PE 'war chest' in Europe, which will be disbursed in the coming years.

It is important to realise that leverage, which can be up to 4:1, means that PE spending is multiplied by an equivalent amount.⁵ Thus, an additional €110 bn of funds could be translated into target-company purchases totalling €440 bn. To put that number in context, it is almost €1,000 for every man, woman and child in the EU of 27.

Figure 2, using somewhat different definitions, shows a similar trend towards rising transaction volumes and deal numbers, with some cyclical variation: sharp increases in the late 1980s and 1990s were followed by periods of consolidation; again the sharp recent rise is evident. The figure also illustrates another important dimension: the sharp increase in the average deal size. For instance, in 1990, there were over 1,000 buyouts/buy-ins, but their total value was only some €15 bn, implying an average of less than €15 million. By contrast, the 2000 figures were just under 1,200 deals worth just less than €80 bn (average: around €66 million) and in 2006 just over 1,200 LBOs totalling over €140 bn, giving an average deal size of around €115 million, almost twice the figure just six years earlier.

⁴ The EVCA figures are probably the most comprehensive available for Europe. It should be noted that they also include venture capital (investment in start-ups), although this is of limited quantitative importance: 'seed' and 'start-up' investments accounted for 10.6 per cent of funds invested in 2006 (BVCA, 2006: 49).

⁵ Standard & Poor's estimates that in recent years the average equity stake for the whole leveraged buyout market in Europe (which includes recapitalisations and some other transactions) is around one-third, implying a leverage of 2:1. Communication from Mirela Ene, EVCA.

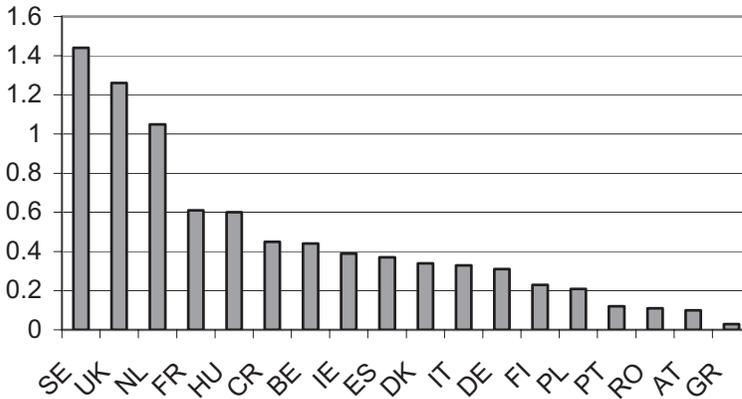


Figure 3: PE investment as a percentage of GDP, 2006

Source: EVCA (2007b: 50).

According to the EVCA (2007b: 67) the number of investments was more or less flat between 2005 and 2006 at just under 11,000, but the sum invested rose from under €50 bn to over €70 bn; the average deal sizes work out at €4.3 million and €6.6 million respectively.⁶ The EVCA (2007b: 69) also has a breakdown by firm size for 2005 and 2006. This suggests that, in terms of investment volume, large companies (+1,000 employees) account for between half and two-thirds. In the two years there were 96 and 172 cases respectively of investment in ‘mega’ companies employing more than 5,000 workers. On the other hand, in terms of the number of companies invested in, small and medium-sized enterprises predominate: 71–78 per cent of companies invested in Europe in 2005 and 2006 had less than 20 or 20–99 employees (*ibid.*).⁷

The sheer size of PE, plus the focus on larger deals, often involving household names, such as Boots or the Automobile Association in the UK, Hugo Boss in Germany, would have ensured the public spotlight was increasingly focused on PE activities, even without the controversy over the impact of its business model.

Particularly with a view to the question, running through this volume, of different models of capitalism within Europe, it is interesting to consider the extent to which PE penetrates different European economies. The best measure of this is PE investment in the country concerned as a percentage of GDP (Figure 3).

We see that in three countries, Sweden, the Netherlands and the UK, PE investment in 2006 accounted for more than 1 percentage point of GDP; this is a large number given that total investment is of the order of 20 per cent of GDP in advanced economies. However, contrary to what might have been expected, no clear pattern emerges along the lines of a ‘varieties of capitalism’ (Hall and Soskice, 2001) or typology of welfare capitalism (Esping-Andersen, 1990) approach: while the UK is in second place, Ireland, the other ‘Anglo-Saxon country’, is in the middle of the pack. Similarly, the ‘Nordic’, ‘Continental’ and eastern sets of countries are all distributed

⁶ The discrepancy between these and the figures just quoted reflects differences of definition; notably, the EVCA data include follow-on investments and counts investments by syndicates of PE funds separately, whereas for the CMBOR (Centre for Management Buy-Out Research) they are treated as one deal.

⁷ Some of this is venture capital finance, which is included in the EVCA figures and affects the figures for the number of companies, even if it does not have a big impact in terms of the amount invested.

evenly across the rankings. It could just about be said that PE penetration appears to be lower in the 'southern' countries.

With one significant exception, the overall ranking does not change fundamentally if the country in which the funds are managed (rather than invested) is used as the indicator (EVCA, 2007b: 57). The exception is that the PE firms themselves (rather than the target companies) are much more likely to be based in the UK: investment by PE firms located in the UK accounts for a significant 2.19 per cent of that country's GDP (2006). Almost 60 per cent of PE investment in Europe—the countries in Figure 3 plus Switzerland and Norway—was undertaken by PE funds located in the UK.

To sum up, in the European context, UK producer firms are only somewhat more likely to be the subject of PE takeover (at least on 2006 figures) than in most other European countries. However, across Europe, the PE funds making the takeovers are more likely than not to be British-based. In terms of investment destination and, to a lesser extent, also fund ownership, PE in Europe seems to cut across traditional distinctions between bank-based and capital-market-based systems. As we will see, this may well be because PE is a complex model that relies on debt (and thus banks), and has complex relations with stock markets and private owners. We turn to the PE business model in the next section.

3 THE PE BUSINESS MODEL—HOW DOES IT WORK?

The basic *modus operandi* of PE firms is summarised in Figure 4.⁸ The PE firm is set up by a (usually small) number of individuals or, in some cases, as an offshoot of a larger financial organisation, such as a bank; an example of the former is Blackstone's, of the latter is Barclay's Private Equity.⁹ These PE firms then launch one or more PE funds. They invest a relatively small amount of own capital into the fund—typically less than 5 per cent of the value of the fund—and take the position of GP in the fund.

The first task is to raise capital for the fund. Investors—who provide the remainder (typically >95 per cent) of the fund's capital—are attracted to commit their money by the promise of high returns. The track record of the fund managers and/or of the PE firm is used as a guide. Investors consist of pension funds, banks, insurance companies and wealthy individuals.¹⁰ They are termed limited partners (LP).

The terms of the funds' contract with investors vary, but the following arrangement is quite typical. The investors agree to tie up their money for a set period of usually 10 years. They pay the fund owners a management fee (often 1.5–2 per cent a year). They receive the earnings from the target company on its resale and intermittently in the form of dividends and other payouts. Above a threshold rate of return (typically 8 per cent), 20 per cent of the earnings are retained by the GPs as so-called 'carried interest'.

⁸ The diagram and following description synthesise a broad range of sources, including articles in the financial press, trade union publications (such as ITUC, 2007; IUF, 2007; TUAC, 2007), and information from the website of the EVCA. See also Thornton (2007) and Vitols (2007).

⁹ To give an idea of the orders of magnitude, the *EVCA Directory 2007* lists around 500 (associate and full) members who are independent general partners and around 130 who are subsidiaries of various financial institutions. (In both cases, subsidiaries of one firm registered in more than one country are counted separately; for instance, there are eight entries for Permira.)

¹⁰ In Europe, around 50 per cent of the funds are obtained from insurance companies, pension funds and banks. The share obtained from private individuals has fluctuated in recent years between about 5 and 10 per cent, including the contributions of PE GP to the fund (BVCA, 2006: 43).

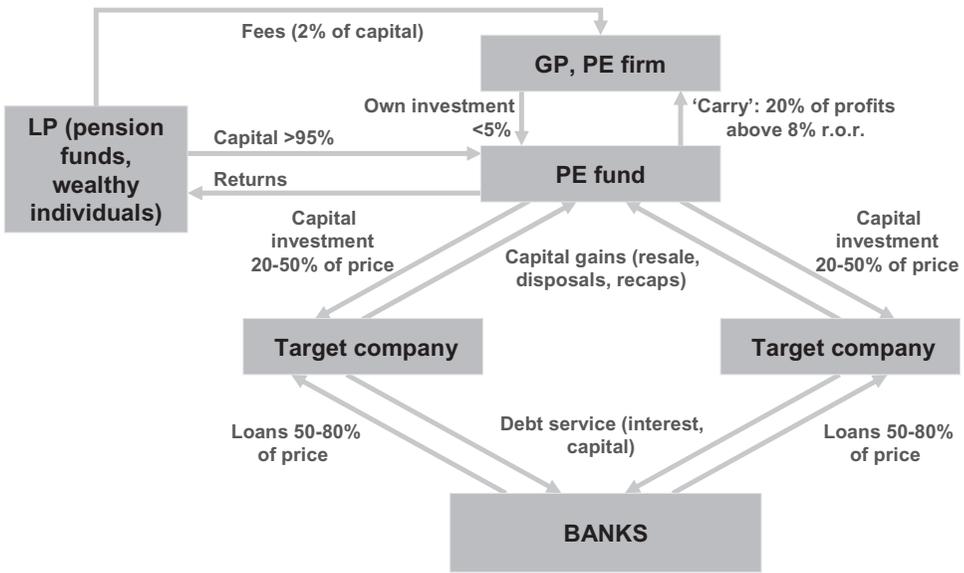


Figure 4: How the PE business model functions

Note: Author's conceptualisation; figures are typical values.

The fund's capital is used to purchase ('target' or 'portfolio') companies. Normally, each fund has a certain area of specialisation, in terms of the size, sector or nationality of the target companies it buys up; some specialise in turning around distressed companies. If the target company is listed in the stock exchange, an offer is made for the shares and the company is de-listed ('taken private'). In the case of privately owned companies, a purchase is negotiated with the owners. In the former case, PE firms are obviously looking for companies whose current share price, for whatever reason, is low compared to its potential value, or for privately owned companies, whose owners wish to 'cash out' or that are underperforming and thus cheap, relative to their potential resale value. Companies are bought and/or invested in until the monies in the fund are exhausted.

Of the money needed to buy the target companies, only a proportion (normally between 20 and 50 per cent) is provided by the fund itself. The rest is borrowed from banks, using the assets of the target companies as collateral for the loans.¹¹ This means that the target companies have to produce a stream of revenue (out of profits) with which to service these loans. They therefore tend to be more highly leveraged (have a higher debt-to-equity ratio) than non-PE-owned companies. As is well known from the corporate finance literature¹², there is no easily defined optimal capital structure: using more debt can be tax efficient (because interest payments are tax deductible while dividends are not), and leverage has a magnifying effect not only on returns, but

¹¹ As indicated earlier, the relationship between PE firms, investors and banks is not the key concern here. It may be remarked in passing that, in the context of low interest rates and returns, PE firms were often able to obtain extremely favourable terms for such bank loans. This related not only to interest rates but also to security and collateral. It is an open question whether, in the wake of the recent financial crisis, banks will be forced to take a hit on such so-called 'covenant lite' loans in cases where target companies run into trouble.

¹² The original reference is to two articles by Modigliani and Miller; for a textbook discussion, see Ross *et al.* (2008: Chapter 13).

also on losses. Put simply, this means that in the case of a good PE investment (or in ‘good times’), returns can be very high, whereas if restructuring is unsuccessful (or times are generally bad), the risks of bankruptcy are magnified.

The PE fund then runs the target companies with an explicit view to their resale (‘exit’) after a limited period, typically three to five years. In some cases, the existing management is retained. In others, external managers are put in place.¹³ Only occasionally, especially in small firms, does the PE firm itself assume day-to-day managerial functions, but it does determine the strategic orientation of the company. The target companies are run with a view to maximising the return to the new owners (the PE fund) over the lifetime of its engagement. PE’s exit takes one of two basic forms: either the target company is listed (or relisted) on the stock exchange, and shares are offered to the public in an initial public offering (IPO). Or a strategic buyer (normally a company in the same or a related sector) is sought. As a variant on the latter, the target company is sometimes bought by a second or even a third PE fund, seeking value not yet extracted by the first fund (secondary buyout).¹⁴

The main source of the return to the PE fund is a capital gain, that is, the difference between the purchase and sale price of the company, after allowing for the costs of any additional investment and revenues from divestment (sale of assets). In addition, the fund benefits from dividend payouts. Particularly controversial are so-called ‘dividend recapitalisations’ where money is borrowed against the target firms’ assets in order to finance an early payment to investors. In some cases, the PE fund also charges the company various consultancy and management fees.

In most cases the fund is ‘closed’, that is, the earnings from all these sources are periodically returned to the limited partners. From returns above a ‘hurdle rate’ so-called carried interest (‘carry’), often 20 per cent, is deducted by the GPs. They are not reinvested. Once all the target companies have been disposed of, the fund itself is liquidated. And the cycle can begin again.

From this description, a number of key characteristics of the PE model can be inferred that will be important in the evaluation to come:

- PE investments are illiquid and thus inherently risky, although purchase of a portfolio of target companies permits diversification. The risk is heightened by the use of leverage. All this implies the need for high returns.
- In terms of the financial side of the investment—that is, compared with other ‘asset classes’—the commitment is rather long term; in terms of the corporate governance side of the transaction the focus is short or medium term.
- The use of leverage implies the need for target companies to generate reasonably constant cash flow to meet commitments to creditors.
- PE can be expected to be particularly sensitive to the economic cycle, given that low (high) interest rates and a depressed (buoyant) stock market are favourable (unfavourable) conditions for the model to generate high returns.
- The PE model is the opposite of ‘patient capital’. Results have to be obtained quickly, and companies are not run for any ethical, emotional or other reasons

¹³ According to a survey of large buyouts, 68 per cent led to changes in top management in Europe and 74 per cent in the United States (Ernst & Young, 2008: 7).

¹⁴ In the large sample of LBOs examined in WEF (2008) (with a US and UK focus) IPOs accounted for 13 per cent of exits, 39 per cent were sold to another corporation and 24 per cent to another PE firm (WEF, 2008: viii, 18), the remainder being accounted for by ‘unknown’, bankruptcy and other sales (e.g. to management).

apart from maximising returns. Existing relationships between management, owners and workers are liable to be disrupted or terminated, unless they are believed to have value-enhancing properties.

- Whether or not this short-term focus leads to short-term decision making depends, ultimately, on the efficiency of capital markets, specifically on their ability to accurately price companies according to their longer-term earnings potential, and thus, for example, discount companies that have been ‘pumped dry’ or where investment has been cut to boost short-term results.

Taking the capital gains ‘earned’ by the PE fund as given for the moment, we can make a simple classification of the various possible sources of these returns:

1. Genuine improvements in the performance of the target firm: better management, new investment, changed strategies, higher ‘technical’ productivity and other value-enhancing restructuring lead to higher sales and profits, raise the expected earnings of the firm and thus increase its current value.
2. Transfer from workers: a change in the balance of power between workers and owners, including the rescinding of existing implicit and explicit contracts, leads to cuts in employment, increased intensity of work, cuts in pay and worsened working conditions. These cut costs and raise profitability, but the gain, at the level of the firm¹⁵, results from a loss to the workforce.
3. Transfer from the government: financial re-engineering of the company, especially the replacement of equity by debt, and also the taxation of income as capital gains, possibly also the transfer of profits abroad, etc., reduce tax revenues to government.
4. Transfer from other ‘capitalists’: this can occur in three main ways, all of which imply inefficiencies in capital markets: the previous owners are underpaid, investors in the PE fund are ‘exploited’ by the general partner, subsequent buyers are overcharged.

In essence, much of the public debate about PE can be boiled down to the question of the balance between these sources, which is an empirical question, and the views taken of their appropriateness or desirability, which is primarily a normative question.

4 ISSUES OF CONCERN FOR EUROPEAN WORKERS AND COMPANIES

We now consider what this business model means for the societies within which PE operates, focusing on the companies taken over and their employees. We approach this in the following way. We consider the concerns raised in the public debate, many of which arise out of the perception, implied in the above four-way classification, that at least part of PE gains are at the direct or indirect cost of other members of society, rather than the reward for a positive contribution made to that society. We then look at the limited evidence available to see the extent to which these concerns are supported by the empirical evidence.

¹⁵ Of course there are knock-on effects outside the firm when these workers are made redundant and when they re-enter the labour market.

The main concerns as expressed in the literature, in trade union campaigns and also parliamentary enquiries in a number of countries can be summarised as follows (among others, see ITUC, 2007; PES, 2007; Schmidt and Spindler, 2007; Thornton, 2007; TUAC, 2007; TUC, 2007; Vitols, 2007; WEF, 2008).

- Cuts in employment and pay, increased intensity of work and worsened working conditions in target companies in order to generate higher returns to owners;
- Related to this, negative impacts on workers' representation at the workplace, on information and consultation rights and collective bargaining more generally;
- Shortfalls in corporation tax revenues and a distorted playing field both between companies resulting from the tax deductibility of interest payments;
- Due to the taxation of carried interest as capital gains income, further tax revenue losses, which in turn promote inequality and is perceived as unfair, reducing citizens' willingness to pay tax;
- Increased risk of insolvency (at the micro level) and heightened instability of the financial system (macro level) due to the use of leverage;
- The prevalence of a short-term orientation (in PE firms, with knock-on effects to other companies) that depress real longer-term investment in real assets and human resources (training);
- Substantial risks to workers' pension funds in investing in PE, which also run the risk of pitting (retired or elderly) workers against (employed, younger) workers;
- Conflicts of interest and market abuse, such as collusion between PE firms and incumbent management and efforts to drive down the share price prior to purchasing the target company, etc.; and
- A reduction in the transparency of the corporate sector, leading to a loss of socially valuable data, resulting in particular from the taking private of publicly listed companies.

Before looking at the evidence, we should note that research into PE outcomes is at an early stage and there is a lack of rigorous studies using large case numbers. More fundamentally, any such research suffers from a number of serious problems of data availability and reliability, and a number of methodological issues remain unresolved.

Data on PE-owned companies are not freely available (at least not in as much detail as for listed companies). Indeed, one of the purposes of taking firms private is precisely to shield them from the public scrutiny that goes with being listed on the stock exchange. To a considerable extent, researchers have to rely either on surveys conducted or commissioned by PE trade associations or on case studies of individual companies. The former tend to focus very much on data on the funds themselves, rather than the target companies. There are questions about the response rate of surveys and their representativity. They may suffer from so-called survivorship bias, that is, ignoring failures, rendering them clearly unrepresentative.

The diversity of PE means that averages may tell us little. This also plagues the case-study approach: outcomes vary so much that any findings have limited general relevance. Related to this, the problem that PE is a highly controversial political issue means that great caution is required in interpreting the results of studies and looking behind the titles and headlines at the detailed findings and the methods used (e.g. Hall, 2007).

Where data are available, there are two key methodological problems relating to the analysis of the impact of PE (and other areas of social scientific enquiry). The first

is the question of the counterfactual. In our context this means the question: what would have happened to the company concerned, or to the economy more generally, in the absence of PE involvement. Where we have data on company performance, against what benchmark should they be measured? How do we account for the fact that the companies taken over by PE are far from being a random sample?

The second is the problem of defining the appropriate level of impact analysis. Extrapolating from micro to macro level is plagued with problems. Job losses or gains in a PE-owned company may be offset by employment changes elsewhere (subsidiaries, divestment); the prospect of PE-takeover may induce non-PE-owned companies to take defensive measures that are difficult to ascribe to that cause by looking at the data; on the other hand, even if PE target companies were systematically found to be shedding labour, this would not necessarily be a problem in a fully employed economy with effective social protection systems (i.e. if workers are swiftly transferred to other jobs with little loss of income or skills) and may reasonably be claimed to be contributing to increasing dynamism and productivity.

5 REVIEWING THE AVAILABLE EVIDENCE

With these caveats in mind, we proceed to review the available quantitative evidence on the main issues of concern: value generation by PE, the employment and pay and conditions of workers in target companies; the impact on worker representation. More briefly and qualitatively we assess the debate on the issues of taxation, short-termism and leverage and risk.¹⁶

Value generation by PE-owned companies

The most basic question is whether the involvement of PE ‘adds value’ to the firms taken over. Given that such value addition—at least in the perspective of the subsequent buyer—is a *sine qua non* for PE to earn returns, it should be obvious that PE, in the aggregate, adds value to target companies (leaving open the question of whether this is a genuine creation or a transfer from other actors).

The anecdotal evidence, not least from sharp critics of PE¹⁷, of massive capital gains over relatively short periods, suggest that PE funds are able to add value, in the narrow sense of raising the capital value (sale price, share capitalisation) of the firms invested in. However, this may be due more to an ability to spot underpriced companies and/or to hoodwink buyers into over-paying than to genuine value addition. A number of studies have sought to shed light on whether this is the case in various ways.

Weir *et al.* (2005) suggest that, in the UK, undervaluation by the stock market is a major incentive to take firms private, even when paying a substantial premium to shareholders. Ernst & Young (2008) considers large deals in the EU and United States and finds faster growth in ‘enterprise value’ than in firms considered comparable (although details on the comparison group are scanty). The study lists ‘careful

¹⁶ Due to space constraints we leave out the interesting issues surrounding workers’ pension funds, and market abuse and transparency issues. On the former see Evans and Hubbard (2008) and on the latter FSA (2006).

¹⁷ See many of the cases highlighted by the PES (2007: Annex 1), the IUF (<http://www.iuf.org/buyoutwatch/>) or the Hans-Böckler Foundation (<http://www.boeckler-boxen.de/2885.htm>).

and selective buying' as the first of four main strategies for PE 'success' (2008: 5). The study's authors do not appear to be aware that this finding at least partially invalidates the comparison with other firms on which their own positive assessment of PE is based. Similarly 'active management of the exit process' (not least carefully choosing the best time to exit) was reported to have added 'extra value' in the case of a quarter of European deals (p. 8).

Cao and Lerner (2007) compare the longer-term performance of former LBOs in an attempt to remove any possible 'hoodwinking' effects. Based on a study of almost 500 'reversed' LBOs (i.e. the sale to the public of firms that had previously been bought under an LBO), they find that they 'consistently outperform other IPOs and the market as a whole' (p. 3). As the authors themselves note (p. 9), however, there are questions regarding the representativity of the sample used. And LBO returns show greater variance than those from other IPOs, while their characteristics differ (e.g. they are larger).

Cumming *et al.* (2007) take a different approach, reviewing productivity studies at plant level, in order to focus on 'real' as opposed to 'financial' performance. The authors conclude that 'LBOs and especially MBOs enhance performance and have a salient effect on work practices' (p. 17). In a report for the European Parliament, Gottschalg (2007) examines various measures of PE performance. Analysing fundamental accounting data for LBOs, he points to enhanced average performance in terms of sales and profitability compared with a control group. However, the variance was again greater, and the analysis was based, for reasons of data limitation, not on the sample as a whole but on just 63 buyouts. Cautiously, the author concludes that he has found no evidence that buyouts have a *negative* impact (p. 19).

In conclusion, it seems likely on theoretical and empirical grounds that PE on average adds value to 'the firm', although sample effects may exaggerate the extent to which this is the case, and the average conceals great variance. These results do not, however, tell us to what extent this is through genuine value creation rather than value appropriation.

Employment effects in target companies

This is probably the single most controversial area in the PE debate. Perhaps unsurprisingly, there is a great deal of variation in the reported findings.

Trade bodies representing PE have conducted a number of studies pointing to substantial positive aggregate employment effects in PE target companies (BVCA, 2006; EVCA, 2005). However, these studies have been heavily criticised for selection and survivorship bias, inclusion of venture capital, and in some cases, faulty arithmetic (Hall, 2007; WEF, 2008: 43). Critical voices, notably from trade union organisations, have given numerous examples of individual companies where job losses have been dramatic.¹⁸

An OECD-commissioned study (Wright *et al.*, 2007) reviews other academic studies and reports 'mixed' results (p. 53). Amess and Wright (2007) show for the UK an interesting distinction between MBOs and MBIs (PE can in theory take both forms, but tends more towards the latter). MBOs are shown to raise employment after an initial dip (suggesting they exploit hidden strategic opportunities), MBIs to cut

¹⁸ The reader is referred, for example, to: http://www.boeckler.de/396_48994.html and www.iuf.org/buyoutwatch.

employment (pointing to more aggressive restructuring and breaking implicit contracts). However, the employment effects are rather small (+0.5 per cent and -0.8 per cent p.a.). Gottschalg (2007: 32f.) is rather agnostic on employment effects, identifying negative correlations between buyout activity and employment trends, but pointing out that this may be because buyout firms are attracted to sectors undergoing intensive restructuring.

However, an extensive study, to my knowledge the most comprehensive to date, commissioned by the World Economic Forum and presented at the 2008 WEF meeting in Davos (WEF, 2008), provides rather strong evidence that LBO activity results in larger employment losses than in control groups that adjust for factors such as enterprise size and sector; moreover, the corporate-backed WEF can hardly be accused of having an ideological axe to grind with PE.¹⁹

While cautious about providing a 'bottom-line number' (p. 54), given methodological difficulties, the researchers behind the study do note that 'the net impact on [employment in] existing establishments is negative and substantial' (p. 53). In the year of the LBO and for the three following years, employment losses are, on average, between 1 and 5 per cent a year greater than in the control group. Subsequently, there is little difference between the two groups. Overall, after five years employment is a very substantial 10 per cent below the level in the control group. This net effect results from gross job creation rates that are broadly similar in LBO target companies and the control group, but gross job destruction rates that are much greater for PE targets. To a limited extent, this is offset by greater employment growth through the setting up of new greenfield sites (which LBOs are more likely to do than the control group of companies). On the other hand, employment performance was also weaker in the years prior to the LBO than in the control group, which may suggest that LBOs focus on weaker firms in any given sector or size category. It can therefore be argued that the employment situation at the time of takeover was in many cases not sustainable; this exemplifies the problem that the firms selected for LBO are not a random sample with respect to characteristics that are hard or impossible to control for.

Overall, the weight of the serious academic research seems to point to—at least—an intensified period of restructuring following LBO acquisition in which job losses are substantial, also compared with comparable companies not taken over. This leaves open the question of how to evaluate such losses at the macroeconomic level, but it does indicate that workers in the average target company pay a high price in terms of job losses. This transfer is one source of 'value' for PE funds and their investors.

The impact on wages and working conditions

There has been little systematic study of these issues, which are even more difficult to assess on anything but a case-study basis than are employment trends. The Amess and Wright (2007) study just mentioned also looked at wage developments. The findings were less ambiguous than for employment: wage growth was slower than in non-LBO

¹⁹ Nevertheless, it is interesting to note that the study was much more critical regarding the employment impact of PE than suggested by the Press release on the report issued by the WEF. See http://www.weforum.org/en/media/Latest%20Press%20Releases/PrivateEquity_PressRelease, and Hall (2008).

companies for *both* MBOs and MBIs, in the latter case by almost a full percentage point a year (Amess and Wright, 2007: 19ff.). Particularly when external management is brought in, the LBO 'will lead to management breaking implicit agreements and transferring wealth from employees to new owners' (p. 22). The Hans Böckler Foundation (HBF) lists a substantial number of detailed and informative case studies for Germany where workers have been forced to accept pay cuts and/or longer working hours and other deteriorations in conditions (<http://www.boeckler-boxen.de/2885.htm>, Faber, 2006; see also PES, 2007: Annex 1). The representativity of such studies is always open to question, however, and the question of the right benchmark to evaluate them is left unanswered; with unemployment high, many German workers and unions have been forced into concession bargaining.

Regarding working conditions, Wright *et al.* (2007) report evidence for the UK and the Netherlands that human resource management (HRM) practices modernised working practices (flatter hierarchies, more 'empowerment' in MBO firms), although this is based on a limited sample (see also Thornton, 2007: 24f.). The Ernst & Young (2008: 7) study reports an expansion of financial incentives for employees; however, this does not appear to have extended beyond middle management.

At the European level, a problematic aspect is the fact that the Acquired Rights Directive, which protects workers' terms and conditions in the case of takeovers, does not apply in the case of PE takeover. This certainly unintended 'loophole' results from the formal fact that PE merely takes over the shares: the identity of the employing company remains the same.

Unfortunately the evidence base in this key area is narrow. However, if anything the findings on wages are clearer than for employment effects. Cuts in wages and conditions (absolute or relative to peer groups) do seem to be a frequent occurrence. Yet the same caveat applies, that, at the level of the individual firm, we lack a counterfactual: to the extent that the firms taken over were underperforming prior to acquisition, prevailing wage trends and conditions may not have been sustainable.

The impact on worker representation

There has been little systematic research in this area, and an assessment must rely on reports, mainly from the side of trade unions. The phenomenon of the 'vanishing employer' is a frequent complaint found in trade union publications: managers no longer negotiate with unions or workers' representatives, arguing that policy is determined by the new PE owners, while the latter argue that they are just financial investors and not involved with bargaining questions (Evans and Hubbard, 2008: 70f.; ITUC, 2007; IUF, 2007; TUC, 2007). The HBF case studies are particularly critical of issues regarding worker representation and codetermination rights (Faber, 2006; http://www.boeckler.de/396_48994.html). The IUF Private Equity Buyout Watch Update provides company-by-company cases and repeatedly identifies cases where trade unions, collective bargaining structures and worker participation are disregarded by new owners. Thornton (2007) reviews sources suggesting that, while there is evidence of some positive HRM changes (such as greater autonomy), there is also an increase in hostility to trade unions and cases of union derecognition (pp. 5, 24, 29).

Trade representatives note that PE is bound by national industrial relations and codetermination legislation. However, apart from issues of enforcement, there is still space for a substantial deterioration in actual standards from workers' point of view, as in most systems the law merely sets a basic floor, whereas actual practices are

determined by tradition and/or by collective agreements; the former can be discontinued and the latter rescinded.

It seems likely that the financial situation of the firm in question is, as is the case more generally, decisive for workers' ability to make their voice heard in negotiations with management. Where trade unions have a strong organisation position (and even use takeover to increase membership) and company prospects are good, they can bargain effectively with incoming PE owners.

National traditions are also likely to be relevant: in Germany, even for corporate turnarounds, there are cases where PE owners have seen workers' representatives as a positive resource (see Scheytt, 2006, and other articles in *Die Mitbestimmung* 06/2006).²⁰

It does not seem to be the case that PE itself—as opposed to broader trends towards 'financialisation'—is launching a wholesale attack on Rhineland capitalism, replacing corporatist structures at company level with Anglo-Saxon managerial unilateralism. The evidence, which seems plausible even if anecdotal, suggests that PE, with its narrow focus on obtaining its operating goals, is 'unideological', if unsentimental, in its approach to issues such as collective bargaining and worker participation.²¹ Worker representation institutions will come under threat, and may be destroyed if they are perceived, rightly or wrongly, as inimical to PE's goals. But the fund will carefully weigh the likely costs of such action.

Taxation

Opaque though the picture may be in other areas, there is little room for debate in the area of taxation. National taxation systems seem to privilege the PE business model in a discriminatory way in a number of areas.

The PE model is clearly tailored to reducing the tax liability of its portfolio companies. Interest payments on bank loans are tax deductible (privileging of debt over equity) in almost all jurisdictions. However, the aim of this measure is to promote borrowing for investment. It is not clear why governments should have an interest in effectively subsidising LBOs in this way, since they do not constitute new investment, but an ownership change.

Much income of GPs is taxed as capital gains at much lower rates than earned income (typically 10–15 per cent vs. 35–45 per cent). Whatever the justification for the differentiation between rates of capital-gains and income tax, it is hard to see why it could be justified in this case. PE itself insists that carried interest is its reward for value creation. Why then should it be more favourably taxed than earned or dividend income?

In individual countries PE has additional advantages: in Germany PE is not considered a business at all, and so does not pay *Gewerbesteuer* (a trading tax paid by producer companies). In the UK the tax on carried interest is reduced further by so-called 'taper relief' with the result that less than 10 per cent tax is paid on carried interest. On top of this, many PE executives are domiciled abroad, in low-tax

²⁰ http://www.boeckler.de/163_82189.html

²¹ At a recent meeting attended by the author, a union organiser in the United States noted that many American owners of family-run firms would rather see 'their' company go to the wall than 'let the union in'. PE, by contrast, would coldly weigh the implications for the bottom line of permitting unionisation and of fighting it.

jurisdictions, and despite living in the UK are not required to pay tax on income earned abroad.²²

The effects of the creative use of such tax breaks can be substantial. An investigation by the Danish finance ministry found that tax payments by seven large firms taken over by PE had fallen by more than 85 per cent after the takeover. It was concerned that around one-quarter of corporate tax revenue could be lost if no action were taken: in response it introduced a ceiling on the amount of interest that can be deducted (ITUC, 2007: 32; TUC, 2007: 7). Governments in other countries (including Germany and the UK) have enacted similar measures or are considering them.

PE representatives themselves have recognised that the perception of a lack of willingness to pay tax is a serious image issue. In a front-page interview with the *Financial Times* (3 June 2007), Nicholas Ferguson, a leading figure in the UK PE industry, said: 'Any common sense person would say that a highly-paid PE executive paying less tax than a cleaning lady or other low-paid workers, that can't be right. . . . I have not heard anyone give a clear explanation of why it is justified.'

There can thus be little doubt that the third potential source of PE revenues, a 'transfer' from the taxpayer, is an important source of 'value creation'. In addition, it distorts competition between companies; quite apart from its real economic impact, this also serves to distort the LBO/control group comparisons in terms of employment and corporate performance that were discussed above. It seems that governments have woken up to this fact and some changes, at least, are under way, with taxation the major focus of legislative and parliamentary activity linked to PE in the OECD countries (Evans and Hubbard, 2008: 72).

Short-termism and impact on investment

The contrast between short-term profits and the need for long-term investment was at the heart of the recent 'critical analysis' of PE commissioned by the Socialist Group of the European Parliament (PES, 2007). This is perhaps one of the thorniest areas in which to determine whether PE has a negative (or positive) impact, partly because concepts such as 'short termism' are hard to operationalise, partly because the effects can be felt not just at firm, but also macro level, while investment behaviour is subject to so many influences, and has long resisted all attempts to construct reliable predictive models.

The arguments and counter-arguments can be summarised succinctly. The typical five-year holding period militates, according to critics, against long-term investment. Planning horizons are longer than in listed companies, driven by quarterly reports and the need to please faddish analysts, while PE needs to sell a company with prospects and so it has to look further forward, comes the reply. PE sucks out cash from the company, especially via dividend recapitalisations, restricting internal finance needed for investment. PE supporters claim instead that PE provides capital for starved companies, while reducing free cash flow ensures that investment is more efficient (for a discussion see Schmidt and Spindler, 2007).

Gottschalg (2007) rejects the short-termism argument, arguing that blockholders (shareholdings of more than 5 per cent) are quite unstable in publicly listed

²² This led to changes in the 'non-dom' tax rules, but after intensive lobbying they were so watered down that the *Financial Times* headlined 'Non-dom Concessions Help UK Regain Status as Haven', 6 April 2008: <http://www.ft.com/cms/s/0/b4d54ea0-0b4c-11dd-8ccf-0000779fd2ac.html>

companies. This is of questionable relevance, however. It is the stability of the key managerial staff and directors that is relevant for investment time horizons.

As discussed above under 'value creation', there is some evidence (Cao and Lerner, 2007) that 'reverse LBOs' are sustainable and may actually perform better than comparable companies; this does not suggest that forward-looking, profitable investment has been cut. The WEF (2008: 27–35) study looked specifically at the issue of research and development (proxied by patent applications). Overall it could find little quantitative difference in the volume of patent applications compared with non-LBO companies, with some evidence of greater focus in the PE-run enterprises. Separately the WEF study (2008: 9) concludes that there has been no increase in the incidence of 'quick flips' (sales after less than two years).

In view of the very limited evidence available and the existence of arguments on both sides, it would appear wise to be cautious about prejudging this issue before further, representative and robust studies are conducted.

What is certainly true is that on the macroeconomic level the share of profits in national income has been increasing, whereas the share of investment has been falling in most countries. This is without doubt a very significant development. There is also little doubt that it is linked to trends such as globalisation and the 'financialisation' of the economy (e.g. Hein and Van Treeck, 2008; Palley, 2008; Rossman and Greenfield, 2006; Stockhammer, 2004). However, it may also reflect demographic factors (more elderly people living off capital income and changes in the nature of investment, including less fixed capital per worker).

To the extent that it is driven by corporate sector behaviour, a study covering a perspective wider than PE alone will be required for a fuller understanding of the phenomenon. Many large corporations have been buying back their own shares and increasing the rate of distribution, although to some extent this may constitute a defence mechanism against unwelcome advances from PE (and other companies seeking hostile takeovers). Further research will be needed to pin down these linkages, which certainly go far beyond the PE phenomenon, which is the focus here.

Leverage and risk

Rather like the previous issue, to which it is related, the question of the desirability of leverage and the issue of heightened risk have both a micro and macro dimension.

One of the effects of increasing the debt-to-equity ratio is to increase the risk of bankruptcy of the firm (Ross *et al.*, 2008: Chapter 13). This may be a risk that PE firms are happy to take, because they can accept the 'loss' of one or more companies out of a portfolio of target companies, because this is compensated by leverage-enhanced returns from the remainder. Such an approach, however, is inevitably at the cost of other stakeholders, particularly those who will lose their jobs, but also those holding the bonds or debt of the company (banks) and the tax authorities; see Schmidt and Spindler (2007) who argue that it may be necessary to tighten bankruptcy laws to protect the interests of other stakeholders.

Here, too, the data do not paint a clear picture. The WEF (2008: 8ff.) study reports that overall 6 per cent of LBO deals end in bankruptcy; the figure is lower in more recent years, but this is maybe because bankruptcy proceedings take time. The question is how to interpret this figure? Converted to annual rates it is twice as high as the overall US bankruptcy rate of listed companies. Moreover, the authors note the rather high figure of 11 per cent for the 'other' form of exit category, which may hide

more bankruptcies. On the other hand, some PE deals are explicitly attempts to turn around 'distressed' companies. Unsurprisingly, the failure rate of such enterprises is twice as high as the average (the problem being, once again, that PE-owned companies are not selected randomly).

Wright *et al.* (2007) report substantially higher bankruptcy rate figures for the UK, with a pronounced cyclical variation. As many as a fifth of the takeover deals done in the boom of the late 1980s went under in the recession of the early 1990s (p. 58), which does not bode well in the current constellation. On the other hand, most of the bankruptcies affected small companies.

Already prior to the financial crisis which started in the summer of 2007, some commentators were concerned about the systemic, rather than microeconomic, effects of highly leveraged buyouts, amid speculation about what would happen if a big PE firm were to fail. This led to a number of organisations, including the ECB (2007) and the UK Financial Services Authority (FSA, 2006), examining the issue (see also Thornton, 2007: 30). The tenor of these reports (seconded by Gottschalg, 2007: 37–42) was that there were indeed significant risks of PE firms going under and also of banks incurring losses. On the other hand, the size of these loans as a share of the total financial system, of investment or of banks' capitalisation was so small that it was inconceivable that plausible events in terms of individual fund failures could cause a serious crisis. For instance, regarding the exposure of banks the ECB concluded: 'the relatively low proportion of LBO-linked assets compared with total balance sheet sizes (or even own funds) seems to show that the potential for a severe market downturn to have a material impact on their [banks'] financial accounts is still rather limited' (ECB, 2007).

We can conclude that PE practices do seem to pose a rather higher risk of bankruptcy, imposing losses on other actors, for target companies, although it is difficult to determine the degree to which the bankruptcy risk is elevated. At the macroeconomic level, though, it seems that PE forms such a small part of the overall debt market that it is unlikely to be the cause of systemic problems, although the same could be said of the US sub-prime mortgage market, overlending in which triggered the recent global financial crisis.

6 CONCLUSION

PE is becoming a Europe-wide phenomenon. It is clearly not just a feature of 'Anglo-Saxon' capitalism; while its incidence varies, its immediate effects appear to be broadly similar across the countries for which we have data. Should policy makers in Europe be concerned about the rise of PE? On the limited available evidence reviewed in this article the short answer would definitely seem to be 'yes'!

Some of the criticisms found in the media or political speeches may be one-sided or exaggerated or ignore countervailing effects elsewhere in the economy. An efficient market economy clearly needs pressures on owners and managers to optimise productive efficiency, and PE can rightly claim to be one vehicle for this.

Yet that does not alter the main finding that the substantial returns earned by PE managers and investors are not solely due to any beneficial effects they may have induced in terms of the operating efficiency of the companies they have bought and subsequently re-sold. Rather, to some extent these returns reflect transfers from other stakeholders, notably workers and taxpayers (and probably also other investors, although that was not the focus here; see Gottschalg, 2007).

The findings, although nuanced, on employment, working conditions and wages suggest that workers in target companies are on average ‘squeezed’ harder and that they are one source of ‘value’ and thus profits for PE companies. The findings on taxation are less ambiguous: tax efficiency is a significant source of ‘value’ and to this extent PE’s profits are taxpayer losses. On the other hand, PE can probably be largely absolved from increasing risk and instability at the macro level, although the jury is still out at the micro level. The debate on short-termism and the impact on investment continues: while there is some evidence that the ‘financialisation’ phenomenon, as a whole, has had a negative impact on investment (relative to profits), that concept is not easy to operationalise and the causal links remain unclear. A great deal of further work is needed here.

A challenge for social science research in the future will be to obtain and analyse, using sound methodological approaches, comprehensive and reliable data that shed light on the relative orders of magnitude of these effects.

As part of this work, further light should be shed on an interesting question only touched upon here: is the impact of PE different within different ‘social models’ across Europe. While PE funds in Europe are concentrated in the UK, their buyout activities are, as we saw, rather widely spread with no obvious concentration according to ‘variety of capitalism’. Some authors (e.g. Schmidt and Spindler, 2007) have argued that PE may be a ‘foreign element’ in, for instance, the German political economy and, as such, more negative effects are to be expected there than in a context such as the UK, where PE is ‘at home’. An alternative thesis would be that PE is exerting a convergence pressure and is one of the forces driving all economies towards a more ‘Anglo-Saxon type’ model. A third interpretation would be that PE is itself adapting to national systems and alters its behaviour so as to maximise returns depending on the existing institutional constellations. Additional evidence and analysis will be required to distinguish between these (and possibly other) competing hypotheses.

Acknowledgements

I would like to thank, with the usual disclaimer, Mirela Ene, Béla Galgozi, Didier Guennoc and an anonymous referee for helpful comments on an earlier draft.

References

- 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**, 2, 179–195.
- BVCA (British Venture Capital Association) (2006), *The Economic Impact of Private Equity in the UK* (London, BVCA).
- Cao, J. and J. Lerner (2007), ‘The Performance of Reverse Leverage Buyouts’, National Bureau of Economic Research Working Paper no. 12626.
- Cumming, D., D. Siegel and M. Wright (2007), ‘Private Equity, Leveraged Buyouts and Governance’, *Journal of Corporate Finance*, **13**, 4, 439–460.
- ECB (European Central Bank) (2007), ‘Large Banks and Private Equity-sponsored Leveraged Buyouts in the EU’, *Monthly Bulletin*, April 2007.
- Ernst & Young (2008), *How Do Private Equity Investors Create Value? A Study of 2006 Exits in the US and Western Europe*. Available from: [http://www.ey.com/Global/assets.nsf/International/TAS_PE_CreateValue/\\$file/EY_TAS_PE_Create_Value_07.pdf](http://www.ey.com/Global/assets.nsf/International/TAS_PE_CreateValue/$file/EY_TAS_PE_Create_Value_07.pdf)
- Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism* (Princeton, NJ, Princeton University Press).

- Evans, J. and P. Hubbard (2008), 'From Shareholder Value to Private Equity—The Changing Face of Financialisation of the Economy', *TRANSFER, European Review of Labour and Research*, **14**, 1, 63–76.
- EVCA (2005), *Employment Contribution of Private Equity and Venture Capital in Europe* (Zaventem, Belgium, EVCA).
- EVCA (2007a), *EVCA Directory 2007*, EVCA, June 2007.
- EVCA (2007b), *EVCA Yearbook 2007, Annual Survey of Pan-European Private Equity and Venture Capital Activity*, EVCA, June 2007.
- Faber, O. (2006), 'Finanzinvestoren in Deutschland Portraits und Investitionsbeispiele', *Arbeitspapier* 123, Hans-Böckler Stiftung. Available from: http://www.boeckler.de/pdf/p_arbp_123.pdf
- FSA (2006), *Private Equity: A Discussion of Risk and Regulatory Engagement*, November 2006.
- Gottschalg, O. (2007), 'Private Equity and Leveraged Buyouts', *Study for the European Parliament* (IP/A/ECON/IC/2007-25). Available from: <http://www.europarl.europa.eu/activities/committees/studies/download.do?file=18809#search=%20leveraged%20>
- Hall, D. (2007), 'Methodological Issues in Estimating the Impact of Private Equity Buyouts on Employment', PSIRU, University of Greenwich. Available from: <http://www.psiru.org/reports/2007-05-PE-emp.doc>.
- Hall, D. (2008), 'Private Equity: Financial Investors, Public Services, and Employment', Report commissioned by European Federation of Public Service Unions, EPSU.
- Hall, P. and D. Soskice (eds) (2001), *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage* (Oxford, OUP).
- Hein, E. and T. van Treeck (2008), 'Finanzmarktorientierung—ein Investitions—und Wachstumshemmnis?' IMK Report, No. 26/2008 (January) (Düsseldorf, IMK in der Hans Böckler Stiftung).
- ITUC (International Trade Union Confederation) (2007), 'Where the House Always Wins: Private Equity, Hedge Funds and the New Casino Capitalism', *ITUC Report*, June 2007.
- IUF (International Union of Food Workers) (2007), *A Workers' Guide to Private Equity*. Available from: <http://www.iufdocuments.org/www/documents/A%20Worker's%20Guide%20to%20Private%20Equity-e.pdf>
- Palley, T. (2008), 'Financialization: What It Is and Why It Matters', IMK Working Paper, no. 4/2008, Düsseldorf.
- PES (Party of European Socialists) (2007), *Hedge Funds and Private Equity—A Critical Analysis*. Available from: http://www.socialistgroup.eu/gpes/media/documents/38708_38708_publication_hedge_funds.pdf
- Ross, S., R. Westerfield and B. Jordan (2008), *Essentials of Corporate Finance* (New York, McGraw-Hill).
- Rossmann, P. and G. Greenfield (2006), 'Financialization: New Routes to Profit, New Challenges for Trade Unions', *Labour Education, The Quarterly Review of the ILO Bureau for Workers' Activities*, **1**, 142, 55–62.
- Scheytt, S. (2006), 'Glück im Unglück', Die Mitbestimmung 06. Available from: http://www.boeckler.de/163_82189.html
- Schmidt, R. H. and G. Spindler (2007), 'Notwendigkeiten und Möglichkeiten der Regulierung von Private-Equity-Gesellschaften und Hedgefonds', unpublished report, Gutachten für Die Hans-Böckler-Stiftung.
- Stockhammer, E. (2004), 'Financialization and the Slowdown of Accumulation', *Cambridge Journal of Economics*, **28**, 3, 719–741.
- Thornton, P. (2007), 'Inside the Black Box: Shedding Light on Private Equity', Report for the Work Foundation, January. Available from: http://www.theworkfoundation.com/assets/docs/publications/56_private_equity.pdf
- TUAC (Trade Union Advisory Committee to the OECD) (2007), 'Joint OECD–TUAC Labour Management Programme Meeting—Financialisation of the Economy: Regulating Private

- Equity', *Summary Report*, November 2007. Available from: http://www.tuac.org/en/public/e-docs/00/00/01/60/document_doc.phtml
- TUC (2007), 'Private Equity—A TUC Perspective', *TUC Evidence to the Treasury Committee Enquiry*. Available from: <http://www.tuc.org.uk/economy/tuc-13312-fo-pdf>.
- Vitols, S. (2007), 'Private Equity: Financial Engineering or Solution to Market Failure?' Paper prepared for the conference, 11th Workshop of the Research Network Macroeconomic Policies, 26–27 October 2007, Berlin.
- WEF (2008), 'The Global Economic Impact of Private Equity Report 2008, Globalization of Alternative Investments', Working Paper Vol. 1. Available from: http://www.weforum.org/pdf/cgi/pe/Full_Report.pdf
- Weir, C., D. Laing and M. Wright (2005), 'Undervaluation, Private Information, Agency Costs and the Decision to Go Private', *Applied Financial Economics*, **15**, 13, 947–961.
- Wright, M., A. Burrows, R. Ball, L. Scholes, M. Menleman and K. Arness (2007), 'The Implications of Alternative Investment Vehicles for Corporate Governance', Consultants report commissioned by OECD (DAF/CA/CG(2007)1/ANN1).