

THE IMPLICATIONS OF ALTERNATIVE INVESTMENT VEHICLES FOR CORPORATE GOVERNANCE:

A SURVEY OF EMPIRICAL RESEARCH

A report prepared for the Steering Group on Corporate Governance by

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The views expressed in this paper do not necessarily reflect those of either the OECD or its member governments.

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Executive Summary

This paper reviews the trends in and impacts of private equity and investor-led buy-outs in OECD countries. The evidence is derived principally from the CMBOR database and studies based on this dataset. Additional evidence is provided by a review of the relevant literature.

The main findings are as follows:

- The private equity and buy-out market is now a global phenomenon. Having diffused from the US to the UK and Continental Europe, notable activity is also taking place in Japan and elsewhere in Asia.
- A remarkable increase in activity has recently occurred in Continental Europe, which now outstrips the UK by some margin after having been at a much lower level for over a decade.
- Buy-outs of private firms [family succession] and divestments of divisions account for the largest shares of vendor sources of deals.
- Public to private buy-outs (PTPs) of whole listed corporations account for a small share of deal volume but a relatively large share of deal value. In the UK in 2005, PTPs equated to 30 % of the total market value from just 3 % of all buy-out deals. From being mainly focused on the US and UK, PTP transactions are now occurring in all major markets.
- The greatest increase in vendor source of deals has involved secondary buy-outs where private
 equity firms sell their investment to another private equity firm. This activity effectively prolongs
 the life-cycle of the buy-out structure of incentives and control mechanisms.
- Cross-border activity by private equity firms has increased substantially, with activity by some major US private equity firms being a critical factor behind the growth of European buy-out value in recent years. The total value of US-led buy-outs amounted to almost €52 billion for the whole of Europe in 2006, compared to €7 billion in 2001.
- Private equity bidders for listed companies typically use irrevocable commitments to ensure the success of a PTP proposal, reduce the costs associated with failure, and minimize risk of a bidding contest.
- The ability to conduct PTP transactions in different countries is influenced by the ability to squeeze out minority shareholders. There are marked differences between regimes, with the US, UK and Ireland being at easier end of the spectrum, while Italy, Denmark, Finland and Spain are at the more restricted end.
- The ability of syndicates of PE firms to bid for larger listed corporations may enhance the overall takeover market where other more traditional corporate bidders may be absent or find it difficult to acquire control.
- The potential downsides from possible collusion by syndicates of private equity firms may need to be weighed against the performance benefits to be derived from the improved corporate governance and incentives mechanisms they introduce.

- UK evidence indicates that PTPs are associated with lower valuations and greater board ownership than either traditional acquisitions by other corporations or firms that remain listed.
- Higher levels of concentration in the private equity market are associated with lower prices being paid to acquire companies.
- Hedge funds may trigger restructuring and focus on cost reduction over the relatively shorter term. Different types of hedge funds may emerge with different mandates and a focus on different types of buyouts.
- The average share of debt in financing structures varies markedly across deal sizes, with larger deals having the larger shares of senior and mezzanine debt. Among the very largest deals, the average combined share of financing structures accounted for by senior and mezzanine debt has increased from 55% in 2000 to 67.3% in 2006.
- The European market shows a steep rise in the average Debt/EBIT ratio to over 9 in 2006 from just 4.2 in 1999 for buy-outs valued at over €100m. The benign economic environment of recent years has produced a virtuous circle for buy-outs. If this were to change, the wholesale disposal of some of the more esoteric debt products could follow with implications for the wider financial system which are difficult to predict.
- The sharp increase in refinancing of private equity deals in recent years suggests that an increasing number of large buy-outs are returning to the debt market in order to release capital to investors.
- Legislation covering the taxation of private equity companies differs from one country to another and can encourage or discourage private equity investment activity; the impact on borrowing behaviour may differ as the resulting interest deductions may be different.
- PTP companies have significantly higher default probability than companies not going private prior to being bought out.
- On average, pre-transaction shareholders in PTPs reap a premium of approximately 40%. The chief sources of shareholder wealth gains appear to be undervaluation of the pre-transaction target firm and incentive realignment through enhanced equity ownership for managers.
- During the twenty-year period 1985-2005 about 12% of UK buy-outs had entered receivership by the end of 2005. Some 94% of receiverships were from buy-outs with initial deal values of less than £20 million.
- In UK buyouts that defaulted, secured creditors recovered on average 62% of their investment, and many of these companies were eventually restructured and sold as going concerns.
- Evidence indicates that exited buyouts in the U.K. generate an average return of 22.2%, net of market index returns, on the enterprise value of the firm, indicating that real gains are achieved.

The most common form of value creation by private equity firms is through add-on acquisitions (53%) and replacements within the top management team (43%). In around a fifth of cases, value creating activities involved expansion of the product line, growth in sales, a new marketing approach, strategic

reorientation, organizational restructuring, geographical expansion, cost cutting and lay-offs/consolidation and outsourcing.

- There is a general consensus that across different methodologies, measures, and time periods, regarding a key stylized fact: Private equity deals and, especially, insider-driven MBOs enhance performance and have a salient effect on work practices. The findings of productivity studies are consistent with the notion that private equity transactions result in the reallocation of a firm's resources to more efficient uses.
- Over 60% of buy-outs record increases in employment. Employment in MBOs dips initially after the buyout but then begins to rises above pre-buyout levels, being 21.4% higher on average by the fourth year after the buy-out compared to the year before buy-out. In contrast, for MBIs, there is a greater dip in employment level immediately after the deal with the level remaining below the pre-buy-out level, on average being 3.3% below the pre-buy-out level by the fourth year afterwards; it cannot be assumed that the pre-buyout employment levels would have been sustainable.
- It is becoming more difficult to generate financial returns realized through financial engineering alone. Private equity fund need the expertise to deliver changes in strategy and product development, rather than just financial structuring, indicating a shift to buyouts involving businesses where managers have identified entrepreneurial opportunities that cannot be delivered within the pre-buy-out bureaucratic corporate structure. 69.6% of private equity backed buyouts increased their product range, 62.5% expanded into new markets, 53.7% invested in new sites or locations and 52% developed existing sites.
- Trade sales have generally been the most common form of exit except in recession periods. Initial public offerings (IPOs) were often chosen in the late 1980s, when the stock markets were relatively healthy, but have been less popular since then. Secondary buy-outs have gained importance since the mid 1990s, accounting for almost a third of all exits in the UK and substantial shares of exits elsewhere.
- The number of partial sales following buy-outs is generally between 70 and 100 per annum in the UK but around half this level across Continental Europe as a whole. The total value of partial sales peaked at €9 billion in the UK in 2005, with €2.2 billion worth of disposals in Continental Europe.
- Following IPO, accounting performance remains significantly above the firms' sector for four
 years but declines during this period. Private equity backed MBOs in the UK tend to IPO earlier
 than their non-private equity backed counterparts. IPOs of MBOs backed by more reputable
 private equity firms tend to exit earlier and perform better than those backed by less prestigious
 private equity firms.

1. Introduction

The recent international surge of private equity markets has been accompanied by concerns about their effects, both positive and negative (see for example Financial Services Authority, 2006). These concerns emphasize a need to evaluate the impact of these transactions on organizations and on society as a whole.

This paper reviews evidence on the development and effects of private equity and management buyouts in OECD countries. Section 2 briefly defines private equity and buy-out transactions. Section 3 reviews developments in key private equity and buy-out markets. Section 4 analyses aspects of the operation of private equity firms. In particular, we consider approaches to the negotiation of transactions; competition and collusion issues relating to bidding for deals; deal pricing; the different nature of funds providers; leverage and financial instruments; the extent of deal refinancing; and the role of the taxation regime. Section 5 reviews evidence on the antecedents of public to private buy-outs in particular, that is the factors driving their occurrence. Section 6 reviews the evidence on the financial performance of private equity and buy-outs in terms of returns to shareholders and bondholders at the time of the buy-out transaction; returns to investors; and issues relating to creditors and distress costs. Section 7 examines the real effects of private equity and buy-outs in terms of the impact on productivity; investee firm strategy; employees and HRM; the nature of entrepreneurial buy-outs; and the factors that drive the gains in private equity and buy-out investments. Section 8 discusses realizations and exits in terms of, firstly, the trends in different OECD countries and, secondly, the post-exit effects on buy-out firms.

2. Definitions of private equity and buy-outs.

In general, buy-out deals are defined here to involve cases where a controlling stake of over 50 per cent in an existing business has changed ownership and a new independent legal entity is created. In these transactions, ownership is concentrated in the hands of management and private equity firms, if present, with substantial funding also provided by banks. Private equity firms become active investors through taking board seats and specifying contractual restrictions on the behaviour of management which include detailed reporting requirements. Lenders also typically specify and closely monitor detailed loan covenants (Citron et al., 1997). In this paper, private equity backed buy-outs are defined as involving only those cases which are funded by private equity funds. Deals from other types of fund which do not strictly adhere to the PE model of buying a company and making a return by achieving a relatively short term capital gain are excluded. These excluded deals involve transactions by funds such as property and infrastructure funds. These funds are generally set up with the backing of pension funds in order to buy infrastructure or property based companies (see section 4.1 below).

Buy-outs may take a number of forms. In a leveraged buy-out (LBO), typically a publicly-quoted corporation or a large division of a group, is acquired by a leveraged buyout (LBO) association. In the US, the resulting private company is typically controlled by a small board of directors representing the LBO association, with the CEO usually the only insider on the board (Jensen, 1993). As the name suggests, these deals are generally highly leveraged with the private equity firm acquiring a significant equity stake. The same institutions may be involved as debt and equity subscribers - under a so-called "strip financing" arrangement - or, alternatively, specialist institutions may be involved with debt instruments ranging from secured loans to junk bonds (Jensen, 1993).

Investor-led buy-outs (IBOs) involve the acquisition of a whole company or a division of a larger group in a transaction led by a private equity firm and are also referred to as bought deals or financial purchases. The private equity firm will typically either retain existing management to run the company or bring in new management to do so, or employ some combination of internal and external management. Incumbent management may or may not receive a direct equity stake or may receive stock options. IBOs developed in the late 1990s when private equity firms were searching for attractive deals in an increasingly competitive market and where corporate vendors or large divisions were seeking to sell them through auctions rather than giving preference to incumbent managers. These deals have similarities with LBOs. The differences can be summarized in terms of the metamorphosis of LBO Associations into private equity firms as the industry has developed. As the names suggest, IBOs tend to have lower leverage than LBOs

and may be expected to create value through developing the company not just through efficiency improvements.

By contrast, a management buy-out (MBO) usually involves the acquisition of a divested division or subsidiary or of a private family owned firm by a new company in which the existing management takes a substantial proportion of the equity. In place of the LBO association, MBOs usually require the support of a private equity firm. The former parent may retain an equity stake, perhaps to support a continuing trading relationship. In smaller transactions management are likely to obtain a majority of the voting equity (CMBOR, 2005). MBOs typically involve a small group of senior managers as equity-holders but depending on circumstances equity-holding may be extended to other management and employees creating a management-employee buy-out (MEBO). MEBOs may occur, for example, where it is important to tie in the specific human capital of the employees or where a firm is widely spread geographically making direct management difficult or on privatisation where there is a need to encourage trade unions to support the transfer of ownership [e.g. in bus services and transportation].

A management buy-in (MBI) (Robbie et al., 1992) is simply an MBO in which the leading members of the management team are outsiders. Although superficially similar to MBOs, MBIs carry greater risks as incoming management do not have the benefits of the insiders' knowledge of the operation of the business. Venture capitalists have sought to address this problem by putting together hybrid buy-in/management buy-outs (so-called BIMBOs) to obtain the benefits of the entrepreneurial expertise of the outside managers and the intimate internal knowledge of the incumbent management.

Leveraged build-ups (LBUs) involve the development of a corporate group based on an initial buy-out or buy-in which serves as a platform investment to which are added a series of acquisitions. LBUs developed as private equity firms sought new means of generating returns from buy-out type investments. The initial platform deal may need to be of a sufficiently large size for it to attract the management with the skills and experience to grow a large business through acquisition. LBUs may be attractive in fragmented industries with strong demand prospects. The potential problems with LBUs relate to the identification, purchase and subsequent integration of suitable acquisition candidates.

3. Trends in buy-outs

Since the development of highly leveraged transactions involving listed companies in the US in the late 1970s, buy-outs have become an international phenomenon. In Europe, the UK led the way with activity levels growing rapidly in the early 1980s (Wright, Chiplin, Robbie and Albrighton, 2000). The Continental European buy-out market first saw growth later in the decade (Wright, Thompson and Robbie, 1992), with France and the Netherlands in particular seeing considerable buy-out activity. Initially activity in Germany was slower to develop but has recently become much more important.

Buy-outs have been an important feature of the privatisation of state assets during the transition from communism to a market economy in Central and Eastern Europe since the beginning of the 1990s, including some countries that are now part of the OECD (Wright, Filatotchev and Buck, 2002). The need for major restructuring in Japan and Korea has given an impetus to buy-outs in the Far East with buy-outs now spreading in significant numbers to Asia.

In the first part of this section we analyse the general trends in private equity and management buyouts. We then discuss international developments in transactions involving the taking private of listed corporations. This is followed by an analysis of cross-border private equity investments.

3.1 Market overview

3.1.1 General trends

Whilst it is notoriously difficult to obtain consistent data on the private equity market, various information sources can be used to provide an overall picture of global trends. Although not distinguishing between investment phases some of the findings of the PWC Global Private Equity Report are useful in pointing towards buy-out market trends within the wider private equity context.

Global fundraising increased from \$87bn in 2003 to €131bn in 2004 although this is still well short of the peak of \$262bn raised at the height of the dot.com boom in 2000. Two thirds of venture capital and private equity money is sourced in North America however investment opportunities have become increasingly global. Considering cumulative data from 1998 to 2004 57% was invested in North America, 28% in Europe and 10% to Asia Pacific with the remainder being spread between the Middle East, Africa, Central and South America.

In terms of fund raising specifically for buyouts, €183bn was raised in the USA in 2005 compared to only €42bn in 2004 (Buyouts, 2006). According to EVCA the expected allocation of funds raised for buy-outs across Europe rose from €17.8bn in 2004 to €57.7bn in 2005.

Recent trends have seen huge growth in European PE market value, with 39% of the 2004 total invested in Europe compared to 41% in the USA, whilst there has also been a move towards the Asia Pacific region in recent years, which received 16% of the total investment in 2004.

Management buy-outs have typically accounted for less than 10% of the total number of investments made by VC and PE firms in Europe (EVCA, 2006). However, generally over half of the total funding raised has been invested into MBO/MBIs rather than earlier stage investments. In recent years more funds have been targeted at later stage deals such that in 2005 approximately one fifth of all investments made were into buy-outs accounting for over 70% of the total private equity capital invested in 2005.

The US market started to develop during the mid-1970s but in Western Europe, only the UK and the Netherlands had shown significant activity by the mid-1980s. Data on buy-out deal activity in the USA can be difficult to collate as definitions are not consistent, however it is clear that the market remained relatively flat during the 1990s following the problems brought about by the recession of the early 1990s. Since 2001 the USA buy-out market has seen significant growth in deal activity and value with a total number of 600 buy-outs valued at \$182 billion in 2006 (Figure 1).

Number 🖿 Total Number 🗨 Total Value (\$m)

Figure 1. Buy-out/in trends in the USA

Source: Thomson Financial

Private equity markets in many Western European countries are now well-established. CMBOR data show that deal value across Western Europe was negligible in the mid-1980s but two decades later has become substantial (see textbox for definition used in CMBOR data coverage). After the flat years of 2000-2003, the market started to grow rapidly, increasing by more than 50 % in 2005 and rising further in 2006 to reach €142 billion (Figure 2). The UK has historically been the biggest buy-out market in Europe and generally contributed half of the total value. However, since 2001 the UK share has fallen to just over a quarter of the total value as other regions have begun to mature.

Number □Number — – Value (€m)

Figure 2. Trends of Buy-outs/Buy-ins in Western Europe

Source: CMBOR/Barclays Private Equity/Deloitte

Box 1. Textbox: CMBOR Buy-out coverage

CMBOR data covers both non private equity backed buy-outs and Private Equity (PE) backed buy-outs. The bulk of the value in CMBOR data comes from PE backed buy-outs which are lower in number but have a much higher average value than typical non-private equity backed deals. For any deal to be included on the CMBOR database a controlling stake of over 50 per cent has to change ownership No other venture capital stage (seed, start up and development capital) is included in CMBOR figures. Deals must either be led by an internal management team (MBO) an external management team (MBI), a combination of the two (BIMBO), or a dedicated private equity firm (IBO). CMBOR PE backed buy-out data only includes buy-outs which are funded by private equity funds and does not include deals from other types of fund which do not strictly adhere to the PE model of buying a company and making a return by achieving a relatively short term capital gain. Other deals which are now often quoted as being private equity based transactions can involve funds such as property and infrastructure funds; these funds are generally set up with the backing of pension funds in order to buy infrastructure or property based companies. The main aim is for the target companies of these funds to deliver a long term predictable cash flow (an annuity type investment) rather than a short term capital gain (PE type investment). These types of transaction are not included in CMBOR figures.

The total number of deals across Western Europe rose fourfold from just over 300 in the mid-1980s and has been relatively stable at around 1,300 since 1997. There were a record 1,423 buy-outs in 2005, continuing the upward trend since the slight dip in activity observed in 2000. Within these totals, the UK and France in particular have made the major contribution, whilst Germany has become much more important of late.

Markets in most countries in Europe initially developed with the advent of relatively small buy-outs initiated by the management team. Deals have since grown in size with the average value across Europe in 2006 being €114 million, up from €21 million in 1996. In addition management buy-ins (MBIs), including institutional buy-outs (IBOs), have become much more influential since the mid 1990s and now account for nearly 90 % of the total European market value and 50 % of the volume of all transactions. The number of employees working for firms which have undergone a management buy-out is a significant part of the overall workforce. Our estimates are that this has increased across the whole of Europe from 450,000 in new deals completed in 2003 to 850,000 for new deals done in 2005 (CMBOR data), the latter figure including the buy-out of ISS in Denmark with 273,000 employees. The vast majority of buy-outs are SMEs (Figure 3).

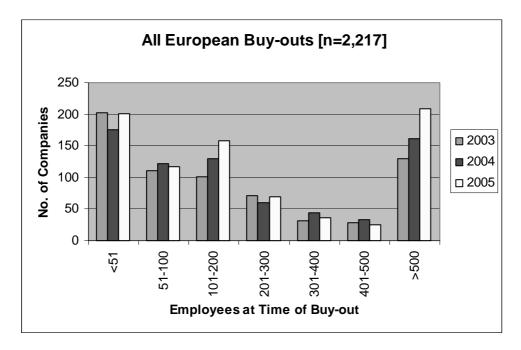


Figure 3. Employee Distribution of Buy-outs

Source: CMBOR

The UK is clearly the most mature of the European regions and has been the largest buy-out market in Europe, both by volume and value, for many years. France and Germany have been the second and third most active markets in Europe for many years, with the growth of the French buy-out market accelerating in 2005 (Figure 4). The Netherlands and Scandinavian countries also have relatively mature buy-out markets with a regular flow of deals each year. Activity in the southern European countries has been relatively weak although the Spanish market has shown promise in recent years. Occasional large restructuring deals in the smaller market countries can distort country rankings (Figure 5). For example, the value of the Italian market was boosted in 2005 primarily due to the Wind Telecommunications deal valued at over €12 billion. Similarly the €13 billion public to private buy-out of the Danish communications provider TDC and the multi billion Euro buy-outs of VNU and Philips Semiconductors in the Netherlands distorted the normal status quo in 2006.

Austria Belgium Denmark **Finland** France **Germany** Ireland Italy Netherlands Norw ay Portugal Spain Sweden **Switzerland** UK 800 100 200 300 400 500 600 700 ■ 2004 ■ 2005 □ 2006

Figure 4. European Buy-outs/Buy-ins by Country - Number of deals

Source: CMBOR/Barclays Private Equity/Deloitte

Austria Belgium Denmark Finland France **Germany** Ireland Italy Netherlands Norw ay Portugal **Spain** Sweden **Switzerland** UK 0 5000 10000 15000 20000 25000 30000 35000 40000 45000 ■ 2004 ■ 2005 □ 2006

Figure 5. European Buy-outs/Buy-ins by Country - Value of deals (€m)

Source: CMBOR/Barclays Private Equity/Deloitte

Management buy-outs and buy-ins have also featured in a number of other OECD countries with well established if relatively small markets in Australia and Canada (Tables 1 and 2). Private equity and, in particular, buyout markets are also beginning to develop in Japan and Korea.

Table 1. Number of Buy-outs/Buy-ins

Country Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
SN	203	178	187	302	175	160	167	306	422	549
Austria	7	2	4	13	7	18	12	14	14	7
Belgium	10	19	16	19	25	24	20	37	28	26
Denmark	16	13	18	18	12	18	12	14	30	20
Finland	32	16	19	15	23	29	28	27	32	15
France	139	150	148	131	126	124	141	159	228	155
Germany	66	62	53	99	91	108	105	111	124	136
Ireland	80	15	6	12	16	20	14	1	7	14
Italy	25	32	43	31	18	38	44	43	45	49
Netherlands	61	75	99	79	09	62	74	73	85	75
Norway	9	4	8	7	6	12	16	13	16	19
Portugal	ဗ	2	9	2	_	9	2	က	2	2
Spain	23	37	30	28	37	42	52	34	20	48
Sweden	20	23	32	25	49	25	24	39	38	35
Switzerland	65	51	26	54	20	36	31	35	30	23
놀	209	069	658	623	643	639	713	902	691	617
Australia	8	10	17	7	25	17	25	18	27	19
Canada	2	œ	12	29	22	20	11	21	28	33
Japan		_	10	13	31	24	49	26	43	_
S.Korea					2	2			_	က

Source: CMBOR/Barclays Private Equity/Deloitte/ Thomson Financial/JBORI

Corporate Affairs Division, Directorate for Financial and Enterprise Affairs Organisation for Economic Co-operation and Development 2 rue André-Pascal, Paris 75116, France http://www.oecd.org/daf/corporate-affairs/

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Table 2. Value of Buy-outs/Buy-ins (€m)

Country Name	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006
SN	11510	16633	20590	32308	18462	31538	72308	105385	152308	179231
Austria	128	92	089	734	47	154	303	110	287	41
Belgium	414	820	2595	342	1744	517	1448	2270	4257	588
Denmark	263	267	2520	1313	200	1391	848	260	7089	13369
Finland	440	260	1085	675	1047	480	1039	277	2163	881
France	5281	6153	8387	6502	6387	15568	8767	11520	21623	23282
Germany	3538	5230	4642	14879	7229	8252	11974	17915	12928	20622
Ireland	69	243	1475	259	5021	4930	747	977	773	1004
Italy	3121	029	2997	2560	1107	3428	7773	2940	17527	6392
Netherlands	1059	3397	2906	1856	4433	1899	4958	7614	10338	25782
Norway	180	22	225	1004	1370	142	308	431	470	1581
Portugal	64	84	206	83	2	26	54	8	9/	94
Spain	374	854	1715	941	1532	2069	934	2279	9391	4100
Sweden	1375	928	2686	3169	3005	1116	2226	1701	4702	5435
Switzerland	2426	1347	1013	1772	715	2766	865	1584	1081	924
¥	17114	23270	26869	38419	31346	24851	23574	30155	35411	38261
Australia	78	1293	3433	168	1315	553	478	752	1147	3911
Canada	10	298	30	2365	228	1979	916	2279	1704	2404
Japan		24	926	1074	1473	711	5121	4745	2734	24
S. Korea					692	491			673	1093
0000			i							

Source: CMBOR/Barclays Private Equity/Deloitte/Thomson Financial

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http://www.oecd.org/daf/corporate-affairs/

3.1.2 Vendor source of deals

The largest share of European buy-outs now comes from family/private firms, often resulting from a situation where there is no obvious family successor, with the company subsequently sold to the incumbent management team (Figure 6). Family/private deals were the most common source of buy-outs in seven of the twelve majority European countries in 2005 (Table 3).

Local parent divestment of non-core businesses also accounts for a quarter of all activity although this has fallen as a source of buy-outs in recent years. Secondary buy-outs, involving private equity firms buying and selling companies between themselves, have become increasingly important lately both as an exit mechanism and source of deals. Secondary buy-outs accounted for 15 % of all activity in 2005.

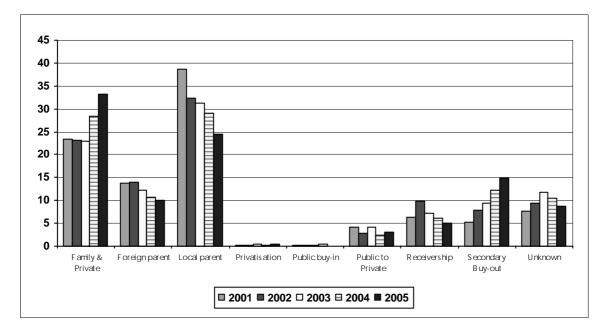


Figure 6. Buy-outs/Buy-ins by Source in Europe - Percentage of Total Number

Source: CMBOR/Barclays Private Equity/Deloitte

Public-to-private (PTP) buy-outs, whereby a company is de-listed from the stock exchange, has become another important feature of the buy-out market in some countries in recent years. Although the number of this type of buy-out is relatively small, the total value can be significant. Generally the prime targets for these transactions are underperforming firms with relatively illiquid stock. As the relatively soft targets or "low-hanging fruit" have been picked, the size of PTP deal has increased with, for example, the total value of PTP deals in the UK in 2005, equating to 30 % of the total value from just 3 % of all activity. We focus on this segment of the private equity market in more detail below.

Table 3. Sources of Buy-outs/Buy-ins in 2005

Country	Most Common	Number
	Source	(% of all deals)
Belgium	Family/private	42.3
Denmark	Local parent divestment	35.7
Finland	Local parent divestment	46.9
France	Family/private	44.2
Germany	Local parent divestment	41.3
Italy	Family/private	52.5
Netherlands	Local parent divestment	45.9
Norway	Family/private	46.2
Spain	Family/private	44.7
Sweden	Local parent divestment	34.2
Switzerland	Family/private	48.0
UK	Family/private	32.7

Source: CMBOR/Barclays Private Equity/Deloitte

In the US, secondary buy-outs are also becoming increasingly popular, although sources differ regarding just how important. The most comprehensive source shows secondary buy-outs accounting for an average of 1% by volume of all new deals between 1988 and 2000 rising to an average of 4.7% by volume between 2003 and 2006^{1,2}). In Japan buy-outs arising from Japanese company divestments are the most common source of buy-out with very few arising from foreign firm divestments (indicative of the paucity of foreign firms operating in Japan). Secondary buy-outs in Japan are also increasing in popularity, as is the case in other OECD countries. No secondaries were recorded by the Japanese Buy-out Research Institute (JBORI) before 2001 but eight were completed in 2006. We comment further on secondary buy-outs in section 8.1.

3.1.3 Relative Size of Individual Markets

In order to give an indication of the relative importance of the buy-out market to the economy in each country, OECD figures for gross domestic product have been used to compare total buy-out value as a proportion of gross domestic product (GDP).

On this basis, the USA and the UK have the world's most developed LBO markets and had a record buy-out value during 2005 which equated to 1.6 per cent of these countries' gross domestic product. UK buy-out value reached its second highest level in 2005 with the proportion of buy-out value to GDP at 1.9 per cent (Figure 7). When the figures of the two most mature markets are compared with some of the major European economies it can be seen that countries such as France, Germany and Italy still trail not just in absolute but also in relative terms and that increased activity in these markets could therefore be possible. Since 2000, France has had an average buy-out value to GDP of 0.8 per cent, while Germany has achieved only 0.5 per cent and Italy only 0.4 per cent over this period.

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¹ Data from Thomson One Banker, 2006 (Thomson Financial).

² An alternative source, based on unspecified proprietary data, places their importance as much higher at 15% by volume in 2003 and 23% by volume in 2004; this suggests a focus on the larger end of the market (Buyouts: The End of the beginning or the beginning of the end? Private Equity Canada 2005. Volume 2 (McKinsey & Company).

Denmark Netherlands USA Sweden **Finland** Italy Belgium France **Spain** Germany Ireland Canada Australia South Korea **Norway** Japan **Portugal** Sw itzerland Austria 0.00% 0.50% 1.00% 1.50% 2.00% 2.50% 3.00% 3.50% 4.00% ■ 2005 ■ 2004 □ 2003

Figure 7. Buy-outs as a Percentage of GDP

Source: CMBOR/Barclays Private Equity/Deloitte/OECD/Thomson Financial

Using this measure it is clear that buy-out markets outside of the USA and Western Europe are still considerably under developed with the proportion of total buy-out value to GDP still at comparatively low levels. In Australia, Canada and South Korea, total buy-out value was only around 0.2 per cent of GDP in 2005 and less than 0.1 per cent in Japan. The totals for these countries has remained relatively unchanged since 2002 and are in line with some of the least active European countries.

3.2 Public to Private Buy-outs (PTPs)

Recent years have seen the Public to Private (PTPs) sector as a growing influence on the buy-out markets of both the USA and Europe, with PTPs also evident in Japan and Australia. Generally this influence has been more attributable to the amount of capital invested in this type of buy-out rather than the number completed; as buy-out de-listings are normally larger in value than deals in the wider buy-out market. Both the USA and the UK did see a surge in large deal activity in the going private sector at the end of the 1980's with RJR Nabisco still one of the most high profile LBOs of all time after having a value of \$30.2 billion in 1989. The record for the world's largest LBO remained intact up until 2006, when HCA, a US healthcare group, finally surpassed Nabisco with a value of \$32.1 billion. The late 1980s also provided one of the UK's largest ever buy-outs with the £2.2 billion Gateway transaction. Following this surge in PTP activity in the late 1980s, and some subsequent poor returns from these transactions, there was a slowdown in both US and UK PTP transactions with activity not really picking up until a decade later.

3.2.1 USA

The increased size of PE funds under management has resulted in these funds having the ability to target ever larger transactions that may also involve large workforces (e.g. the healthcare facility operator HCA has a workforce of 190,000). When looking at the magnitude of some of the PTP buy-outs in 2006, it is perhaps of little surprise that they are the focus of increasing comment by the public and some state governments have expressed concern

PTP buy-out value surged to a record \$120 billion in the USA in 2006 from around \$75 billion in 2005 (Figure 8). The latest figure was far in excess of any other recorded and was mainly due to three huge completions which had a combined value of \$67 billion.

Number ■ Total Number 🗕 Total Value (\$m)

Figure 8. PTP Buy-outs in the USA

Source: Thomson Financial

In addition to HCA, there were two other huge PTP buy-outs in the US in 2006 with Freescale Semiconductor having a value of \$17.5 billion and Albertsons valued at \$17.4 billion (Table 4). The tend has continued into 2007.

Table 4. Largest PTP Buy-outs in the USA

Buy-out	Investor	Year	Amount (\$m)
HCA Inc	Investor Group	2006	32147
RJR Nabisco Inc	Kohlberg Kravis Roberts & Co	1989	30205
Georgia-Pacific Corp	Koch Forest Products Inc	2005	20460
Freescale Semiconductor Inc	Firestone Holdings LLC	2006	17455
Albertsons Inc	Investor Group	2006	17368
SunGard Data Systems Inc	Investor Group	2005	10844
Beatrice Companies Inc	BCI Holdings Corp	1986	8175
Toys "R" Us Inc	Investor Group	2005	6114
Michaels Stores Inc	Investor Group	2006	6046
Safeway Stores Inc	SSI Holdings Corp	1986	5502
Hospital Corp of America	HCA-Hospital Corp of America	1989	5285
Southland Corp	JT Acquisition Corp	1987	5177
Neiman Marcus Group Inc	Investor Group	2005	5157
Metro-Goldwyn-Mayer Inc	LOC Acquisition Co	2005	4812
CarrAmerica Realty Corp	Blackstone Group LP	2006	4797

Source: Thomson Financial

In the USA the high value of some PTP transactions has led to an increase in the percentage of PTP value to total buy-out market value. In 2002 this stood at just 16 per cent but provisional figures for 2006 show PTP value at over 60 per cent of total LBO market value. This is a considerable way above the corresponding share for Europe, see below.

3.2.2 *Europe*

The UK PTP market reached an initial high in 1989 with thirteen transactions in that year having a combined value of over £3.5 billion (Figure 9), although the majority of that was accounted for by the buyout of supermarket chain Somerfield/Gateway at almost £2.2 billion. This was by far the largest UK buyout of any kind up to that data and remained so until 2000 when MEPC was taken private for £3.5 billion.

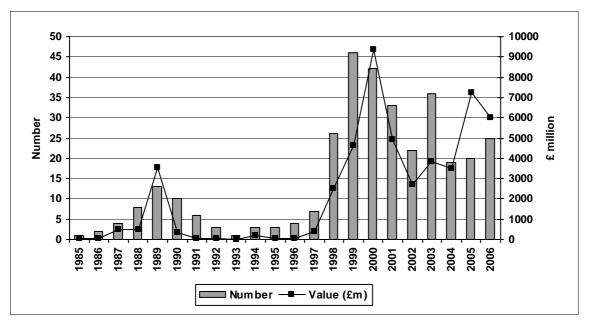


Figure 9. PTP Buy-outs in the UK

Source: CMBOR/Barclays Private Equity/Deloitte

The UK PTP market fell to relatively low levels in the early 1990s with very little activity taking place until 1998 when 26 deals completed for £2.5 billion. From then, both the number and value of PTP buy-outs rose rapidly with a record 46 in 1999 (£4.6 billion invested) followed by 42 in 2000 and a record value that year of £9.4 billion. This peak in investment value came during a period of record stock market valuations and a boom in technology stocks, with subsequent events showing that many quoted companies had been highly over-valued. Following the high levels of investment in 2000 the market then fell to £2.7 billion in 2002 with only 22 transactions. Going privates have since built up momentum once more with 2005 having a value of £7.2 billion; although this fell in 2006 to £5.8 billion. PTP deal flow has remained relatively low in recent years with just 20 in 2005 and 24 in 2006.

Although the PTP sector has become a large source of buy-out market value, the number of transactions remains relatively low when compared to the wider buy-out sector. Recent figures in the UK show that PTPs only account for between 2.5 to 5 per cent of total buy-out volume but between 20 and 30 per cent of total buy-out market value, having risen as high as two fifths of market value in 2000.

The PTP market in continental Europe (CE) also saw a surge in activity in the late 1980s with 15 deals in 1989 having a combined value of \in 2.4 billion. This was followed by 13 in 1989 at \in 1.9 billion. Mirroring the UK market, Europe then saw little activity in the 1990s until 1998 when there was another surge in activity to \in 5.2 billion from 31 transactions (Figure 10)

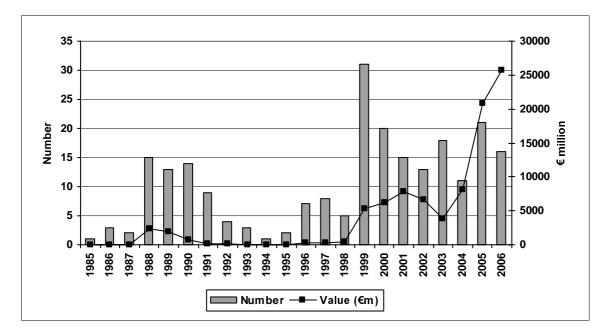


Figure 10. PTP Buy-outs in CE

Source: CMBOR/Barclays Private Equity/Deloitte

By the end of 2004 the CE market had reached a new record value of $\in 8.1$ billion from just 11 transactions. Activity then rose further in 2005 to a $\in 20.1$ billion from 21 PTPs and has since risen even further in 2006 to $\in 25.7$ billion from 16 transactions; although almost $\in 22$ billion of this total (85%) is accounted for by two huge transactions, the $\in 13$ billion TDC buy-out and VNU at $\in 8.7$ billion.

In CE PTPs have made up only between 2 and 4 per cent of the total buy-out market by volume since 2000 but have contributed between a tenth and a quarter of total market value during the same period.

The two largest PTP transactions in Europe of all time both took place in 2006 with Danish telecommunications company TDC having a value of €13 billion (Table 5). This was a syndicated transaction with Blackstone, Kohlberg Kravis Roberts and Providence Equity Partners of the USA teaming with Permira and Apax Partners of the UK to provide the equity funding for the deal. Although the company is not on the scale of HCA in the USA it nonetheless has a substantial workforce of over 20,000. VNU had a value of €8.7 billion and was also a syndicated buy-out involving Blackstone, Carlyle Group, KKR, Thomas H Lee Partners, Hellman & Friedman and Alpinvest. Again, the company is a huge provider of employment with over 40,000 employees.

Table 5. Largest European PTP Buy-outs

Buy-out	Country	Year	Amount (€m)
TDC A/S	Denmark	2006	13000
VNU NV/Valcon Acquisition	Netherlands	2006	8700
MEPC/Leconport	UK	2000	5581
Eircom (Valentia)	Ireland	2001	4810
Amadeus Global Travel distribution	Spain	2005	4340
Rexel	France	2005	3700
Jefferson Smurfit	Ireland	2002	3508
Somerfield/Gateway	UK	1989	3451
Celanese	Germany	2004	3100
ISS	Denmark	2005	2970
Debenhams (Baroness Retail)	UK	2003	2494
Warner Chilcott plc (Waren Acquisition)	UK	2005	2340
SBS Broadcasting	Belgium	2005	2094
United Biscuits/Finalrealm	UK	2000	2080
Schmalbach-Lubeca	Germany	2000	2020
Galeries Lafayette	France	2005	2000

Source: CMBOR/Barclays Private Equity/Deloitte

The relatively small nature of other international LBO markets means that PTP activity has been quite low in number but there have been some noteworthy transactions, especially in Japan and Australia.

3.2.3 Japan

In Japan from 2000 to 2003 there were only 12 PTP transactions with a combined value of Yen 115 billion (Figure 11).

■ Total Number — Total Value (¥b)

Figure 11. PTP Buy-outs in Japan

Source: Japan Buy-out Research Institute

The largest of these, Toshiba Tungaloy a manufacturer of machinery was a 35.7 billion yen buy-out led by Nomura in December 2003. Since then the Japanese market has seen 12 further PTP transactions by the end of 2006 and the value has rocketed to over ¥1000 billion (€7 billion). Clothing manufacturer World Co was the largest at €1.5 billion in November 2005 with equity funding from Advantage Partners. Possible evidence of the growing interest in the Japanese PTP market was further demonstrated in July 2006 when restaurant and retail chain Skylark became the largest Japanese PTP, the deal was led by Nomura and CVC Capital Partners and had a value of ¥257 billion (€1.8 billion). With the increased availability of private equity funds and many foreign private equity firms eager to enter the market it seems that there remains a great deal of untapped potential in the Japanese PTP market. At still only a small proportion of the European market and a fraction of the US market and with Japanese managers reportedly increasingly eager to run firms without the extra accountability imposed on them by the quoted sector, many believe there is the potential for a sharp increase in going privates, the beginning of which has been seen.

3.2.4 Australia

In Australia the PTP market has also remained relatively small although there were four transactions as long ago as 1990 for a total value of €272 million. This came after Australia had seen its largest ever PTP in 1989 when brewing company Elders IXL was the subject of a €3.2 billion buy-out in a year which had experienced a sharp rise in world wide PTP transaction value. As in many other countries, activity then stalled during the 1990s until 2001 with six PTPs completing since that period. The single PTP in 2006 was the December completion of healthcare provider DCA Group; taken private for €920 million by CVC Capital Partners.

3.3 Cross-border private equity investments

The past several years have seen a boom in international private equity activity. According to the European Venture Capital and Private Equity Association (EVCA) cross border investments represents almost 38% of the total amount of early stage and later stage private equity investments in 2005. This is a significant increase compared to 2000 in which the total amount of cross-border investment equalled 27%.

Several factors have contributed to the internationalization of the industry: internationalization of capital sources, increased competitiveness of the domestic market, need for risk diversification, more and more firms pursuing global strategies, growth of developing economies, and increasing opportunities for exiting investments due to further development of IPO markets. A critical factor in the growth of international private equity investing has been the perception of the increasing difficulty of finding attractive private equity investments in the home market. Further, in many markets, foreign PE inflows fill untapped market demand. Also, even though domestic players have better knowledge with respect to local market conditions, in Europe UK PE investors often have more experience with respect to private equity investing and, therefore, are able to add significant value to cross-border investments.

Cross-border activity of some of the major United States private equity firms has been a critical factor behind the growth of European buy-out value in recent years. Buy-outs led by US private equity firms reached another record value in Europe in 2005 with both the UK and CE seeing very large-scale completions. The total value of US-led buy-outs amounted to just over €26 billion for the whole of Europe in 2005, continuing the growth seen since 2001 when the total value of buy-outs backed by US private equity firms stood at €7 billion. US private equity firms' investments in Europe in 2005 were directed at a wide cross-section of countries, with the Netherlands, France, Italy, Germany and Spain all having their

market values boosted. The largest US-backed buy-out in 2005 was in France where Rexel was bought by a consortium led by Clayton Dubilier & Rice for €3.7 billion (Table 6).

Table 6. Major US Backed Buy-outs in Europe (2005)

Buy-out	Value	Lead investor	Country
	(€m)		
Rexel	3700	Clayton Dubilier & Rice	France
Warner Chilcott	2356	JP Morgan	UK
SBS Broadcasting	2090	Kohlberg Kravis Roberts	Belgium
InterGen	1413	AIG Global Investment Gp	Netherlands
Pirelli cable-making business	1300	Goldman Sachs	Italy
Grp Taittinger/Societe Du Louvre	1200	Starwood Capital Group	France
Debis AitFinance	1195	CerberusCapital Management	Netherlands
Manchester United	1154	Glazer Family	UK
Framatome Connectors Int	1067	Bain Capital	France
British Vita (TPG Spring)	975	Texas Pacific Group	UK
Recoletos	856	Providence Equity Partners	Spain
Selenia	835	Kohlberg Kravis Roberts	Italy
NHP/Nursing Home Properties	823	Blackstone	UK
Sirona Dental Systems	800	Madison Dearborn	Germany

Source: CMBOR/Barclays Private Equity/Deloitte

In Table 7, we report the number of buyout investments by UK private equity investors in Continental Europe for a 15 year time period. We include all the investments by PE firms that originated from the UK even if they invested through a local branch. For example, an investment made by Barclays Private Equity France will be included in the figures reported throughout this article. It is clear from the total number of investments abroad that the international focus of UK private equity firms increased considerably during the 1990s. The upward trend in foreign investment activity reached a maximum in 1999 with 132 investments after which a significant drop can be observed. However, the absolute amount invested overseas has grown steadily

The Implications of Alternative Investment Vehicles for Corporate Governance

Table 7. Distribution of Foreign Investments by UK Investors (by number)

Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Austria	0	4	2	0	0	0	0	0	3	2	0	0	1	1	0
Belgium	0	0	_	0	0	_	2	9	9	2	_	_	4	7	3
Denmark	0	0	_	0	0	0	_	0	2	2	2	0	2	0	2
Finland	0	0	0	0	2	2	_	_	0	_	_	2	က	8	2
France	10	22	13	25	25	33	43	29	52	37	32	29	18	15	25
Germany	2	10	6	19	20	24	22	24	20	56	10	7	13	15	14
Ireland	0	က	0	9	3	_	2	2	3	4	4	4	_	0	0
Italy	9	2	80	13	က	8	10	တ	13	10	_	7	2	4	က
Netherlands	2	_	က	7	o	4	2	9	2	9	4	4	80	8	3
Norway	0	0	0	0	0	_	0	0	_	0	0	0	0	0	0
Portugal	0	0	0	0	_	0	0	0	_	_	0	_	0	0	_
Spain	2	0	2	7	<u></u>	о	7	15	14	7	13	2	က	80	∞
Sweden	-	0	2	_	2	2	2	_	7	2	4	က	2	7	2
Switzerland	0	0	_	0	2	2	9	4	2	9	_	80	_	4	_
Eastern Europe	0	0	0	0	0	0	0	0	0	_	0	0	4	_	4
Other	0	0	0	0	0	_	2	7	0	_	0	_	0	0	_
Total	23	45	45	98	79	91	110	102	132	112	73	78	65	73	72

Source: CMBOR/Barclays Private Equity/Deloitte

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Table 8 shows that even though the number of cross-border deals has decreased substantially from 2000 onwards, the average value of a deal has increased considerably.

Table 8. Average Value Cross-Border Deals by UK Investors

Year	Average value (€ million)	Number of Transactions
1991	38.2	22
1992	26.9	43
1993	49.0	43
1994	46.0	75
1995	40.6	71
1996	61.0	82
1997	188.0	94
1998	123.8	95
1999	134.5	118
2000	182.3	106
2001	261.2	69
2002	412.1	67
2003	317.1	57
2004	292.3	69
2005	420.7	68

Source: CMBOR/Barclays Private Equity/Deloitte

Looking at the different countries UK PE firms invest in, we can see that in the first half of the 1990s, Germany and France were the most popular places that attract UK private equity investors. Besides Germany and France, UK PE investors also had a number of investments in Italy, The Netherlands and Spain. Given the proximity and development of the Dutch PE market at that time, it is surprising that it didn't receive more investments. One potential reason for this lack of interest might have been the presence of experienced local investors such as Alpinvest and NPM. Only CVC Capital Partners was well represented in the Dutch market. From the second half of the nineties, Sweden, Belgium and Switzerland also saw the entry of several UK PE investors. There has been modest interest in the smaller economy markets. Over the last couple of years, Finland and Eastern Europe attracted a small number of UK PE investors. In general, however, France, Germany and Spain are the most popular countries for UK PE investors to invest in. Both Germany and France are considered to be attractive destinations as a substantial number of large companies have been reorganized. In Germany, a protracted period of sluggish economic activity has forced corporate Germany to restructure its operations providing extensive opportunities for PE investors. In France, the large number of private and family owned companies has provided a number of investment opportunities.

Syndication with domestic partners is often used as an internationalization strategy in order to obtain access to local market information and to facilitate monitoring. Further, by syndicating the increased risk associated with international investments can be reduced. From a domestic provider perspective, syndication with foreign investors can build networks that provide access to foreign stock markets and overseas customers that might otherwise be difficult to achieve. Over the observed time period, 1991-2006, almost 50% of the international investments by UK PE investors were syndicated. There is also a general downward trend in the percentage of investments that are syndicated by UK firms entering European markets. One reason for this is that more and more UK private equity investors have local offices in Continental European countries with local partners which reduces the need to rely on domestic PE players through syndication; moreover there is relatively little local private equity capacity.

The percentage of deals syndicated by UK PE investors varies across European countries (Table 9). In Germany, Portugal and Switzerland less than 40% of the investments made by UK PE investors are syndicated which represents the lowest level of syndication activity by UK PE investors for continental European investments. At the top end of the distribution we find Austria and The Netherlands in which more than 60% of the deals are syndicated. As syndication might be used to reduce the extent of uncertainty when entering a country, one would expect less syndication activity the more experience UK PE investors gain with a certain country. This does not appear to be the case. For example, the extent of syndication in the French market is still relatively high. One reason for this might be that France is still considered a challenging destination from a legal and cultural perspective. Contrary to France, in Eastern Europe, which is relatively new for UK PE investors, only 36% of the deals are syndicated. One potential reason for this finding is that those investors who enter relatively new markets have already gained experience in other countries and, therefore, feel more confident to invest alone.

Table 9. Syndication by UK PE Firms in Different European Countries (1991-2006)

Country	Sole Investment	Syndication	Total	
Austria	5	8	13	
	38.46%	61.54%	100	
Belgium	18	17	35	
	51.43%	48.57%	100	
Denmark	8	6	14	
	57.14%	42.86%	100	
Finland	9	12	21	
	42.86%	57.14%	100	
France	199	220	419	
	47.49%	52.51%	100	
Germany	162	86	248	
	65.32%	34.68%	100	
Ireland	22	18	40	
	55%	45%	100	
Italy	59	50	109	
	54.13%	45.87%	100	
Netherlands	31	52	83	
	37.35%	62.65%	100	
Norway	3	0	3	
	100%	0%	100	
Portugal	3	2	5	
	60%	40%	100	
Spain	69	61	130	
	53.08%	46.92%	100	
Sweden	25	24	49	
	51.02%	48.98%	100	
Switzerland	26	16	42	
	61.9%	38.1%	100	
Eastern Europe	7	4	11	
	63.64%	36.36%	100	

Source: CMBOR/Barclays Private Equity/Deloitte

4. Market Operation

4.1 Negotiations

Private equity firms can improve the chances of success in negotiating a buy-out of a listed corporation by seeking irrevocable commitments from significant shareholders to accept the bidder's bid before the offer is made public. Gaining these commitments means that the bidder is sending a signal to other non-committed shareholders that the deal is a good one. The announcement of substantial irrevocable commitments may also make other potential bidders less likely to enter the contest with an alternative bid. The initial commitment ensures that, without any higher alternative bid, the agreement to sell the share becomes binding. Private equity bidders for listed companies may use irrevocable commitments in an attempt to ensure the success of a PTP proposal and reduce the costs associated with failure, as well as avoiding a bidding contest that would potentially reduce their returns from the investment. Weir et al. (2007) find that those proposing a management buyout (MBO) are more likely to gain the backing of other shareholders the greater the bid premium and the more likely the private equity backer is to be reputable.

Although large public to private transactions have now become more established in the European market the rules regarding the treatment of minority shareholders continues to vary quite markedly across the different jurisdictions of the region. In the UK, Ireland and Sweden rules relating to the squeeze-out of minority stakes make it relatively easy to de-list a company. In the UK, if the acquirer obtains 90 per cent of the target company there is a right under the Companies Act to compulsorily obtain the remaining 10 per cent. In Ireland the threshold is lower at only 80 per cent and in Sweden and Norway laws relating to company takeovers make it relatively easy to de-list a company. After reaching 90 per cent it is possible to make a compulsory acquisition of the remainder of shares. The Austrian Takeover Act sets out a minimum level of acceptance of 90 per cent with France, Germany the Netherlands and Belgium at 95 per cent. Italian law makes it more difficult to conduct a PTP with 98 per cent acceptance necessary before a compulsory purchase can take place and in Denmark and Finland control has to be 100 per cent in order that the stock exchange will accept a delisting. In Spain minorities are well protected and it is difficult to force them out; the lack of a squeeze out procedure has kept public to private buy-outs low.

Minority squeeze-outs have been quite controversial in the US. The US Securities and Exchange Commission requires that minority shareholders (and all others) be given detailed information about a going private transaction, including why the offer is deemed fair to those shareholders, as well as their appraisal rights, if any (Rule 13e-3 and Regulations 14A and 14C). The Delaware courts have ruled that there is a fiduciary duty to treat minority shareholders fairly in such transactions. Target companies in minority squeeze-outs typically establish special committees of independent directors, and the company is likely to have a fairness opinion prepared by its investment banker in order to avoid the problems of treating minority shareholders unfairly. Successful lawsuits for breach of fiduciary duty related to squeezeout transactions have occurred in the US. Also in the US, "Going private" transactions are intended to reduce the number of shareholders below 300 and are typically achieved through: (1) a reverse split at a very high ratio with fractional shares resulting from the reverse split being cashed out, (2) a reverse/forward split with fractional shares resulting from the reverse split being cashed out, or (3) a cash buyout of shares from shareholders owning less than a designated number of shares (tender offer or odd-lot stock repurchase). These transactions allow listed companies to de-list; one result is that by doing so they do not have to comply with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002. (US Proxy Voting Manual).

Informational asymmetries between vendors and purchasers may impact buy-outs involving private family firm succession. Flows of information may impact both succession planning and the buy-out

negotiation process. A number of negotiation issues are raised, which centre around information asymmetries between founders and managers, as well as the extent to which negotiations are dominated by one or the other party or whether they are collaborative (Howorth, et al., 2004). Scholes, Wright, Westhead and Burrows (2007) find lower information asymmetry problems if family firm vendors and the existing management team are equally involved in succession planning. However, they find negotiations were less likely to involve a mutually agreed price where the succession process was driven by the vendor.

4.2 Competition and collusion

Although some buy-out practitioners still believe that the private equity market should be a 'private' market and thus should not be open to the scrutiny public markets may warrant, increasing regulatory and political attention is being directed to some of the issues surrounding private equity transactions. Transactions of the magnitude seen in recent years are now causing various regulatory bodies to focus on the potential issues of increased private ownership of formerly publicly owned companies. In particular, concern seems to be growing over potential collusion in club deals. For example it has been suggested that rival firms have been encouraged not to bid for a particular deal during an auction process in order that the bid price remains low; in return the non bidding firms would then be offered a stake in the target after terms have been agreed.

Private equity firms have denied any form of collusion and have argued that with ever increasing deal values, clubs must be formed. Clearly, although buy-out funds have seen a dramatic increase in size over recent years, no one particular fund will want to over-allocate a large amount of capital to one transaction. In order that multi billion dollar buy-outs are undertaken it has become essential to bring in other funds.

The behaviour of PE firms needs to be considered in the wider context of the market for corporate control and corporate governance. The ability of syndicates of PE firms to bid for larger listed corporations may add to the market for corporate control where other more traditional corporate bidders may be absent or find it difficult to acquire control. UK evidence indicates that PTPs have higher incidence of the two posts of CEO and board Chair being held by the same person than traditional acquisitions of corporations and are associated with lower valuations and greater board ownership (Weir and Wright, 2007). The potential downsides from possible collusion by syndicates may therefore need to be weighed against the performance benefits to be derived from the improved corporate governance and incentives mechanisms they introduce. The clubs themselves appear to also have coordination problems as they increase in size, suggesting that market forces are also serving to diffuse the potential issue.

Some of the largest US private equity firms now seem to be countering the possibility of increased legislative scrutiny with the recent formation of their own trade association. The Private Equity Council (PEC) has been formed in Washington DC by such private equity heavyweights as KKR, the Blackstone Group, the Carlyle Group and Bain Capital as an advocate of the PE industry; the aim being to bring increased recognition to the industry's role in the wider economy.

4.3 Pricing

An indication that private equity firms are now prepared to pay more for buy-out targets can be seen in the relationship between profit before interest and tax and total transaction value (P/E Ratio). This has risen consistently over the LBO market's development. Evidence of this rise can more clearly be seen in the UK market (Figure 12) where data availability covers a longer period than for the CE market (Figure 13). For smaller UK buy-outs between £10m and £100m PE ratios have risen consistently since the early

1990s from around 8 to above 12 in recent years. Correspondingly, larger buy-outs over £100 million have followed a similar pattern rising from around 10 in the early nineties to over 16 in 2006.

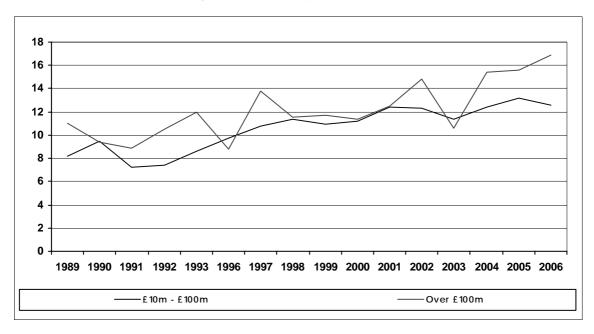


Figure 12. UK Buy-out PBIT Ratios

Source: CMBOR/Barclays Private Equity/Deloitte

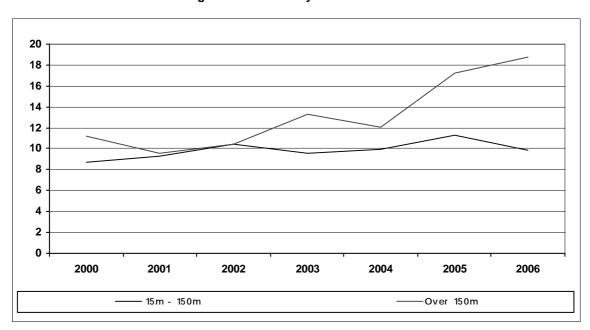


Figure 13. CE Buy-out PBIT Ratios

Source: CMBOR/Barclays Private Equity/Deloitte

In CE, where buy-outs of over \$150 million have grown significantly from just 30 in 1998 to a record 109 in 2005, there has been a marked increase in P/E ratios from around 11 in 2000 to almost 19 in 2006. Whereas, in the European lower mid market (€15m - €150m) where the annual volume of deals has remained relatively stable since 1998, the pricing of transactions has remained little changed; rising only moderately from around 9 to 10 in the last five years.

In the USA purchase price multiples for buy-outs have also shown a generally rising trend in recent years. Using data from Standard & Poor which tracks transaction value as a multiple of EBITDA, US buy-outs over \$250 million have seen a rise in the average P/E ratio from under 6 in 1995 to over 7.5 by the end of 2005. For buy-outs between \$250m and \$499m, S&P data shows multiples having risen to a peak in 1998 at around 8.7 and then falling back to 6.5 in 2001 before rising to end 2005 at around 8.5. LBOs above \$500 million followed a similar pattern and peaked in 1998 at just under 9 before falling to 6.7 in 2001 and rising again to end 2005 at 8.8.

Meuleman and Wright (2007) examine the relationship between private equity industry concentration and the extent of interfirm networking through syndication on the prices that private equity firms pay to acquire investment targets using data from the population of 988 UK buyout targets in the period 1993 to 2002. Their results indicate that higher levels of market concentration are associated with lower prices when using total transaction value and transaction-value-to-EBIT as dependent variables.

The development of networks of private equity firms may be expected to reduce competitive rivalry, increase tacit collusion and hence lower prices. However, Meuleman and Wright (2007) find some evidence that the density of networks is associated with higher transaction values and insignificantly associated with transaction-value-to-EBIT multiples paid. Private equity firms with a higher market share were willing to pay a higher price to acquire investment targets, perhaps reflecting their greater efficiency and ability to create more value.

They also find that private equity firms are willing to pay higher prices the larger the amount invested by the management of the buyout firm, and if the vendor retains a financial stake in the buyout target, private equity investors are willing to pay a premium, indicating that these send a positive signal of the value of the underlying buyout target. More successful private equity firms were willing to pay a higher price and the inflow of funds in the industry has a positive impact on the prices investors pay to acquire targets. They also find that the higher the number of investors active in a given year, the lower the prices associated with buyout firms; this finding may be associated with lower prices attracting more private equity investors.

4.4 Fund providers

In the U.S., private equity investors in buyouts tend to be limited partners, while in Europe, private equity firms that are divisions of banks and insurance companies play a more important role. These different firms may have varying investment time horizons and differences in their balance of general monitoring and specific sector skills. Hedge funds have also emerged recently as players in the buyout market. These funds have traditionally been less actively involved in their investments than private equity investors. They also require greater liquidity and have had shorter time horizons than private equity firms.

Hedge funds may trigger restructuring and focus on cost reduction over the relatively shorter term. If this is the case, it raises doubt regarding the ability of hedge funds to generate long-run value in the buyout firms that they invest in. Another concern is whether hedge funds will seek to exit quickly when one of their buyout investments becomes financially distressed or whether they will become actively involved in

restructuring. Different types of hedge funds may emerge with different mandates and a focus on different types of buyouts. Such funds may begin to recruit executives with private equity expertise. Further research, then, is needed to analyze the different buyout market segments occupied by private equity firms and hedge funds, the different involvement of these types of investors in their deals and the performance impacts.

In addition to hedge funds, other hybrid investment funds have entered the market in order to try and emulate various aspects of the private equity model, and by so doing look to be increasing competition in the larger deal sector. Other deals which are similar to private equity based transactions can be from funds such as property and infrastructure funds. These funds are generally set up with the backing of pension funds in order to buy infrastructure or property based companies. The main aim is for these target companies to deliver a long term predictable cash flow (an annuity type investment) rather than a short term capital gain (PE type investment). Examples of acquisitions by these funds include AB Ports in the UK at £2.8 billion which was funded mainly from an infrastructure fund. Australian Bank Macquarie has entered this market in the last few years and purchased Thames Water in 2006. The Kemble Water consortium led by Macquarie's European infrastructure fund offered the highest price for Thames, with an £8bn deal including £3.2bn in debt after a bidding process in which UK private equity firm Terra Firma had initially shown an interest.

The resurgence of club deals has enabled syndicates of private equity firms, albeit smaller than in the 1980s, to bid for very large buyouts that would otherwise be too risky to fund on their own.³ In addition to this risk-spreading rationale, they may bring together the diverse specialist skills required to restructure and regenerate a particular deal (Wright and Lockett, 2003). Despite the presence of "drag along" and similar provisions, coordination may be problematical when restructuring of distressed buyouts is required (Citron, Wright and Burrows, 2006).

4.5 Leverage and financial instruments

The first wave of LBOs in the U.S. was associated with concerns about excessive leverage (Kaplan and Stein, 1993). Similarly, while the percentage of debt in buyout deals peaked in the late 1980s in the U.K. and sharply declined in the early 1990s, this has recently increased. In the average deal transacted in 2005, senior secured debt represented 51% of the purchase price, with subordinated (mezzanine) debt accounting for around 5% of the deal price (Figure 14). The average share of debt in financing structures varies markedly across deal sizes, with larger deals having the larger shares of senior and mezzanine debt (Table 10). Among the very largest deals, the average combined share of financing structures accounted for by senior and mezzanine debt has increased from 55% in 2000 to 67.3% in 2006, with the major part of this increase accounted for by senior debt. These increases have prompted regulatory concerns about conflicts of interest between different classes of finance providers as well as the likelihood of collapse of large private equity deals and the impact on lenders, purchasers of the debt and orderly markets (FSA, 2006).

were funded by, on average, ten equity providers, eleven debt providers, and two mezzanine providers. However, in the ten largest buyouts over the period 2001-2005, there were, on average, three equity providers, four debt providers, and one mezzanine provider.

³ For example, in the years 1985-89, when the U.K. market was immature, the top ten buyouts

20 80 18 70 16 60 Type of Finance/% 50 Base Rate/% 40 30 20 10 988 990 1992 966 991 994 ■ Equity ⊏ ⊐ Mezzanine ⊏ □ Debt ■ Other - UK Interest Rates

Figure 14. Average Buyout Structures and U.K. Interest Rates

Source: CMBOR/Barclays Private Equity/Deloitte

Table 10. Average Financing Structures By Deal Size for all European MBOs/MBIs

Panel A: Deal Size Below €50m

Type of Finance (Average %)	2000	2001	2002	2003	2004	2005	2006
Equity	51.6	43.2	37.0	43.0	43.3	38.9	36.7
Mezzanine	4.8	3.5	3.0	0.9	2.9	2.4	4.6
Debt	38.3	44.8	46.6	48.8	45.2	47.3	48.9
Loan Note	2.3	2.5	6.9	3.5	4.9	3.6	3.8
Other Finance	3.3	5.9	6.5	3.8	3.7	7.9	6.0
Total financing (€m)	4635	3971	2429	2224	2274	2623	1743

Source: CMBOR/Barclays Private Equity/Deloitte

Panel B: Deal Size €50-€250m

Type of Finance (Average %)	2000	2001	2002	2003	2004	2005	2006
Equity	38.7	31.6	31.6	39.1	35.6	33.2	35.0
Mezzanine	6.1	11.7	6.2	6.5	8.1	9.3	9.9
Debt	50.8	47.8	53.7	51.3	53.4	53.9	50.7
Loan Note	0.9	4.4	4.3	0.4	0.5	1.8	2.7
Other Finance	3.5	4.4	4.2	2.6	2.3	1.7	1.7
Total financing (€m)	9807	7298	7416	8464	8795	9752	6274

Source: CMBOR/Barclays Private Equity/Deloitte

Panel C: Deal Size above €250m

Type of Finance (Average %)	2000	2001	2002	2003	2004	2005	2006
Equity	27.8	29.3	29.1	30.5	29.4	29.3	33.0
Mezzanine	10.8	7.1	10.2	9.7	9.7	10.5	9.0
Debt	52.1	49.7	51.3	56.6	58.6	58.2	57.0
Loan Note	0.1	2.2	2.1	0.0	1.2	0.0	0.2
Other Finance	9.2	11.8	7.3	3.2	1.1	2.0	8.0
Total financing (€m)	23882	22332	36886	34305	37938	56795	47730

Source: CMBOR/Barclays Private Equity/Deloitte

Panel D: Deal Size above €500m

Type of Finance (Average %)	2000	2001	2002	2003	2004	2005	2006
Equity	28.0	24.8	26.1	31.4	28.9	29.8	32.2
Mezzanine	8.0	8.2	8.8	9.6	9.5	11.6	8.3
Debt	47.0	48.8	49.4	54.1	59.6	57.0	59.0
Loan Note	0.1	3.5	2.1	0.0	0.6	0.0	0.3
Other Finance	16.9	14.7	13.7	4.9	1.4	1.6	0.2
Total financing (€m)	17384	15858	30214	29339	32874	49716	40279

Source: CMBOR/Barclays Private Equity/Deloitte

4.5.1 Equity

The equity in buy-out transactions is provided by both private equity firms and management. On average, in UK transactions with a deal value of at least £10million, management share ownership equity stake has generally been around 33 per cent, although in 2006 the figure was 42% (Table 11). The equity finance provided by private equity firms is obtained principally from pension funds in independent private equity firms and from their parent organization in captive private equity firms.

Table 11. Management's contribution and equity stakes in UK buy-outs

Management Contribution & equity(%)	2001	2002	2003	2004	2005	2006
Deal value £10 m or more Management contribution (% of total finance) Proportion of equity held by management	2.1 36.8	2.0 35.7	3.0 27.6	2.5 33.0	2.3 33.6	3.3 41.6
Deal value less than £10 m						
Management contribution (% of total finance)	5.0	7.6	3.5	8.8	7.9	13.3
Proportion of equity held by management	61.8	78.4	66.8	62.0	77.0	77.0

Source: CMBOR/Barclays Private Equity/Deloitte

In the UK, the level of equity deployed in buy-outs has generally been on average between 35 per cent and 45 per cent of the total transaction value of the buy-out throughout the history of the market. Although CMBOR data on CE buy-outs has been recorded over a shorter timeframe than for the UK market, it is evident that on average European deals have also been purchased using a similar proportion of equity. This average has also ranged roughly between 35 per cent and 45 per cent since data collection started in 1999.

Pension Funds are now the largest single contributor of capital raised for the European private equity market accounting for 25 per cent of total European funds raised in 2005 according to EVCA figures. This amounted to €16.8 billion, although clearly, private equity remains a relatively small part of total pension

fund allocation with about 1 or 2 per cent invested in the asset class on average. It is not yet fully clear what affect the Basel II Accord will have on the private equity market when it comes into force in 2008. However, it is believed that in countries such as Germany, where banks have held a lot of underperforming long term loans in small and medium sized companies, there may have to be a rebalancing of capital with long term loans being replaced by equity. It is thought that this could help boost private equity investment in the country.

4.5.2 Debt

The debt in buy-out structures may be provided in a number of forms, depending on the ability of the buy-out firm to provide the lender with collateral and/or evidence of a stable cash flow to enable repayment of the interest and capital and /or the ability of the firm to sell-off surplus assets to pay down some of the debt.

Senior debt, that is debt secured on the assets of the business, can take different forms with different interest and repayment conditions attached. The most typical layer is a straightforward repayment loan (so-called 'A' tranche). Other layers (so-called 'B' and 'C' tranches) may have longer maturities and repayment conditions that involve the roll-up of interest at a higher rate than the 'A' tranche and capital repayment delayed until the buy-out exits.

Senior debt has begun to take a higher proportion of total structuring in buy-outs over recent years. In addition to record levels of buy-out funds in the US in recent years, new issuance of leveraged loans continues to climb. Value reached \$246 million in the US in 2005 compared to \$195 million in 2004. The first quarter of 2006 alone saw \$90 billion (Standard & Poor's).

Debt levels in Europe have indeed risen over recent years with the total proportion of senior debt used in buy-outs in the UK in 2005 at over 50 per cent for the first time in the history of the market. This proportion has risen from just 36 per cent in 1992. This was however in the early days of the market when buy-outs were generally quite small and bank base rates were between 7 and 10 per cent rather than around the 5 per cent level seen in the UK in 2006. Debt in Europe has also reached high levels in the last few years, rising to a peak of over 55 per cent in 2003 and staying high in 2005 at over 53 per cent and around 54 per cent in 2006

In large buy-outs the debt is underwritten by an investment bank or a large commercial bank and then syndicated. Recently this debt has been increasingly purchased by hedge funds and Collateralized Debt Obligations (CDO's) or Collateralized Loan Obligations (CLOs) funds. A CDO fund is a pooled investment vehicle which invests in a diversified group of debt assets. To finance its investments the pool vehicle issues bonds/notes to investors. The servicing and repayment of these notes is linked directly to the performance of the underlying assets. The majority of CDO funds invest in one or a combination of the following: Senior secured loans; Mezzanine loans; High Yield bonds; Investment grade loans (these are loans that are rated BBB- or Baa3 and above); and SME (small and medium sized enterprise) / Emerging markets / Mortgage backed loans. Depending on the underlying asset combination certain acronyms are used; CDOs imply a combination of loans and high yield instruments, whereas Collateralised Loan Obligations (CLO's) imply a loan only fund The packaging of debt into financial instruments such as Collateralized Debt Obligations (CDO's) and Collateralized Loan Obligations (CLOs) is causing concerns as to whether it is known who actually owns the large amount of leveraged loans now being issued.

Second lien debt has come into the buy-out market in recent years as an alternative to mezzanine financing (see below). It is effectively a tranche of senior debt with some contractual subordination and

because of this offers a higher yield. Where a C tranche of senior debt has typically been priced at around 3.25 per cent over Euribor for large deals in recent years, second lien has been priced at around 5.50 per cent over Euribor.

Lenders typically specify and closely monitor detailed loan covenants to help ensure that the buy-out maintains its ability to service the debt. MBO lending agreements typically contain on average both more and a greater variety of accounting-based and non-accounting covenants than do general bank lending agreements. Various covenants may be used but the most important are minimum cash flow-based interest coverage ratio covenants, net worth covenants and dividend covenants (Citron, Robbie and Wright, 1997). Breaching of covenants provides an early warning signal of liquidity problems. If covenants are breached, the lender has the power to take corrective action before the point is reached where the firm is unable to pay the interest.

Banks may have been encouraged to loosen lending criteria because they are now more able to pass on risk to hedge funds and other investors. Figures from Merrill Lynch covering the US market indicate that there has been a weakening of loan covenants on leveraged loans with the average number falling to 2.8 in the second quarter of 2006 from 4.7 covenants per loan in 1997.

The share of debt in the financial structure reveals only one aspect of leverage. It is also important to consider the ability of a target firm to support a larger share of debt in the financing structure either in terms of the stability of its earnings, expected growth in earnings or through asset disposals. Hence, a critical figure is the income gearing in a particular deal, i.e. the number of times interest payments are covered by cash flows. The Debt/EBIT ratio provides an approximation of this figure; the higher ratio, the riskier is the gearing. CMBOR data covering the European market also shows a steep rise in the average Debt/EBIT ratio over recent years with a figure of over 9 recorded in 2006 from just 4.2 in 1999 for buyouts valued at over €100m. It is believed that the benign economic environment seen over recent years of low inflation, low interest rates and robust economic growth has produced a virtuous circle for buy-outs. If this were to change, the wholesale disposal of some of the more esoteric debt products could follow with implications for the wider financial system which are difficult to predict. As buy-outs become bigger and account for a significant and growing share of employment, there is growing policy awareness of the potential implications of a sudden rise in interest rates or slowdown in economic growth for the buy-out sector. In the UK the Financial Services Authority (FSA) has recently begun investigating the possible effects of the growing influences of private equity and the implications of excessive leverage on the wider economy. However, despite these concerns many investors continue to be attracted to the European senior debt and mezzanine market by low default rates, opportunities for diversification from the US and the prospects of high yields.

Average debt multiples to EBITDA in the USA fell at the top end of the market in 2005 to 5.7 from 5.9 in 2004 for buy-outs valued at over \$1 billion (Standard & Poor's data). Buy-outs from \$500m to \$1 billion also fell to 5 from 5.9 in 2004. Buy-outs below \$500 million had an average Debt to EBITDA multiple of 4.7 in 2005 from around 4.5 in 2004.

4.5.3 Mezzanine

In some cases, notably where a significant premium is paid on asset value, the buy-out firm may have insufficient assets to provide collateral to enable senior debt is obtained but it may have a strong stable cash flow. In these cases, mezzanine or subordinated debt may be obtained. For the lender, this is riskier than senior debt as there is less security but a higher rate of interest and possibly an equity option may be paid to the lender to compensate.

Mezzanine finance was until recently usually provided by dedicated mezzanine companies but is now offered by many of the major banking sector debt providers. In CE, mezzanine has recently made up around 7 to 8 per cent of total deal structuring but in 2005 reached a new high of 10 per cent of average buy-out financing. In the UK, mezzanine does not appear to be so widely used and only amounts to around 4 per cent of deal structuring on average. In Europe mezzanine tranches have grown in size in the past few years with Gala using a record €683 million in 2005 for the acquisition of Coral. This was soon eclipsed in 2006 by the €1 billion used in the €2.1 billion LBO of Casema. Mezzanine providers report that much of the recent increased issuance of mezzanine has been taken up by hedge funds and CLO/CDO funds which are relatively new entrants to the LBO market.

4.6 Refinancing Buy-outs

In addition to the concerns about the higher leverage being deployed in the private equity market, questions have also been raised relating to the refinancing of some recent deals and whether equity is being replaced by debt in order that straight cash payments or dividends can be paid to investors. The result could be even higher leverage levels in the buy-out market than the entry buy-out structuring data would suggest.

Data for the European market (including the UK) is inconclusive but does show a rapid rise in company restructurings in the last four years. After falling to just €7 billion in 2002 re-financings rose rapidly to €45 billion by the end of 2005. This has fallen back in 2006 but provisional data still shows over €36 billion raised to refinance European buy-outs (Table 12).

Table 12. Number and Value of European Restructurings by Buy-outs

Refinancing Year	No.	Val. (€m)
1995	33	201
1996	32	986
1997	111	1641
1998	110	4395
1999	97	3115
2000	124	8807
2001	110	17632
2002	116	7303
2003	92	11837
2004	139	33077
2005	135	45200
2006	102	36179

Source: CMBOR/Barclays Private Equity/Deloitte

Examining the data for acquisitions by European companies which were formerly a buy-out (leveraged build-ups) it is clear that a large part of the refinancing total can be accounted for by the acquisitions of other companies (Table 13). In 2003 the total value of acquisitions by private equity backed companies was only \in 1.7 billion in Europe but this figure rose sharply to \in 17.8 billion by the end of 2005. A sizable proportion of this total is accounted for by the purchase of Coral Group by Gala Clubs for \in 3.2 billion with a \in 4.1 billion debt and mezzanine package being used to help finance this acquisition. The refinancing of buy-outs has several other possibilities in addition to dividend recaps, i.e. for the acquisition of another company, for expansion of operations, or to obtain a new debt package on more favourable terms. However, the sharp increase in refinancing totals in recent years does add weight to the premise that an increasing number of large LBOs are now returning to the debt market in order to release capital to investors.

Table 13. Number and Value of European Acquisitions by Buy-outs

Acquisition Year	No.	Val. (€m)
1995	2	0
1996	8	488
1997	22	824
1998	50	162
1999	69	4267
2000	189	17248
2001	167	6810
2002	129	6057
2003	126	1724
2004	144	6143
2005	203	17838
2006	163	4515

Source: CMBOR/Barclays Private Equity/Deloitte

4.7 Taxation regime

Tax relief on interest payments is a significant part of virtually all corporation taxes around the world and a company can reduce its after-tax cost of capital by increasing debt relative to equity. Legislation covering the taxation of private equity companies differs from one country to another and can encourage or discourage private equity investment activity; the impact on borrowing behaviour may differ as the resulting interest deductions may be different. Anti-avoidance provisions are in place in the UK, Spain, France, Germany, the Netherlands, the USA and Japan to determine the validity of tax deductions, for example, the maximum rate of interest for which a tax deduction is available (Devereux et al. 2006).

In the UK the Finance Bill of 2005 extended the existing transfer pricing rules to private equity transactions thus disallowing some tax deductions and also delayed tax relief payments related to interest on debt. Both of these changes were seen as negative by the private equity industry.

According to EVCA, Germany ranks only 18th in its private equity framework provisions out of the 21 major European countries. The tax situation has been unfavourable in Germany for some time with, for example, a penal tax regime for those investing in certain types of foreign investment funds. In addition, by the year 2000 private equity managers had moved their funds out of Germany and had set up funds in Jersey, Luxembourg and Switzerland where tax treatments were well established and understood. The new German coalition government is in the process of reforming the legislation, in the shape of the Private Equity Act, which may encourage the setting-up of German-based funds and may attract foreign investors. Indeed, the forthcoming German 2008 tax reform will bring Germany somewhat into line with the USA with regard to these anti-avoidance regulations.

Canada introduced a new Tax Fairness Plan in October 2006 which removed the tax advantages of publicly traded income trusts and partnerships compared to conventional Canadian public corporations. A move that may impact the private equity community in the US and Canada as many firms divested their portfolio companies into the Canadian income trust public market. This may force private equity firms to look at alternative exit strategies.

5. Antecedents

A major theoretical argument for the taking private of listed corporations and divisions of such corporations through a buy-out concerns the existence of agency costs arising from under-incentivized and

weakly-monitored management in firms funded largely through equity where the pressure to service funding was low. It was argued that these buy-outs were more likely to be in mature sectors with high levels of free cash flow.

Much of the early evidence relating to the antecedents to the taking private of listed firms relates to 1980s buyouts in the US. US studies of the role of free cash flow in the decision to go private have produced mixed results. Lehn and Poulsen (1989) and Singh (1990) report that firms going private have greater free cash flow than firms remaining public but lower sales growth. However, Kieschnick (1998) reworked Lehn and Poulsen's sample using a weighted logistic regression and found free cash flow and sales growth to be insignificant. In addition, Opler and Titman (1993) find that leveraged buyouts are more likely to exhibit only the *combined* characteristics of low Tobin's Q and high cash flow than firms remaining public. Further, Halpern et al (1999) also find no evidence to support the free cash flow hypothesis. This US evidence, therefore, suggests that going private is not being driven by the need to return free cash to the shareholders.

A second argument concerns the opportunity to reap benefits from tax reductions associated with changing the funding of corporations from equity to debt where interest on debt is treated more favourably than dividends on shares for tax purposes. Kaplan (1989b) estimates the tax benefits of US PTPs to be between 21% and 72% of the premium paid to shareholders to take the company private for the first half of the 1980s.

Singh (1990) reports that US MBOs were significantly more under takeover pressure prior to the MBO than a sample of matched firms. DeAngelo (1986) finds no evidence of systematic manipulation of pre-buyout accounting data by incumbent management. Wu (1997) does show evidence consistent with the view that managers manipulate earnings downwards prior to the MBO proposal. Asquith and Wizman (1990), Cook et al. (1992) and Warga and Welch (1993) show that bondholders with covenants offering low protection against corporate restructuring lose some percentage of their investment.

More recently, the development of corporate governance codes (Keasey, Thompson and Wright, 2005) may lead to at least a prima facie convergence of internal governance mechanisms across firms. Improved internal governance may reduce the need for external governance in the form of hostile takeovers or for PTPs. As internal governance improves, agency problems may be reduced and it becomes more difficult for managers to protect their own interests by rejecting an outside bid. Weir, Laing and Wright (2005a) show for the UK that, before they go private, PTPs tend to separate the functions of CEO and Chair of the board less often than those firms remaining public (in contrast to suggestions by the Combined Corporate Governance Code) but do not have fewer outside directors. The authors also show that companies going private have higher CEO and outside blockholders than firms remaining public.

Weir and Wright (2006) report that UK PTPs have higher duality of CEO and board Chair than traditional acquisitions of corporations. The authors also report that public-to-private buyouts had lower valuations than traditional acquisition of listed corporations by other corporations, indicating managerial private information, and greater board ownership suggesting that outside bidders have been deterred from bidding for the firms because of the potential difficulties involved in dealing with significant board ownership. Australian PTP evidence indicates that insider ownership is not significantly higher in PTPs than for traditional acquisitions of listed corporations (Evans, Poa and Rath, 2005) (Table 14).

Table 14. Recent Studies of the Role of Owners and Corporate Governance of Public Traded Companies:
Pension Funds, Buyouts and Private Equity, Hedge Funds and Private Placements

Authors	Country	Nature of Transactions	Findings
Eddey, Lee and Taylor (1996)	Australia	MBOs	Takeover threat strongly associated with going private
Weir, Laing and Wright (2005a)	U.K.	MBO, MBIs Listed Corporations	Firms going private have higher CEO ownership, higher institutional blockholder ownership, more duality of CEO and Board Chair but no difference in outside directors or takeover threats compared to firms remaining listed
Evans, Poa and Rath (2005)	Australia	MBOs, Acquisitions of Listed Corporations	Firms going private have higher liquidity, lower growth rates, lower leverage pre-buyout, and lower R&D. Managerial ownership is higher in going privates but not significantly so. FCF is not significantly different. Takeover threat less likely to be associated with going private
Weir and Wright (2006)	U.K.	MBO, MBI, Acquisitions of listed corporations	Firms going private have higher CEO ownership, higher institutional blockholder ownership, more duality of CEO and Board Chair but no difference in outside directors or takeover threats compared to firms subject to traditional takeovers
Dai (2007)	U.S.	Venture Capital, Hedge Fund investments in listed corporations	VCs typically gain substantial ownership stakes, request board seats and retain their holdings after the PIPE. Hedge funds rarely join the board of directors and typically cash-out their investment shortly after the PIPE. The share price performance of VC-invested firms is greater than for hedge-fund invested firms in both the short term and the long term. However, the valuation effect of having a VC investor in a PIPE seems to derive from a certification effect rather than a monitoring effect.

Source: Adapted from Cumming, Siegel and Wright (2007).

Opler and Titman (1993) consider financial distress cost, measured by R&D intensity, as a factor deterring a PTP buyout and lowering the shareholder value gains. Weir, Wright and Scholes (2007) extend Opler and Titman's US work by testing the financial distress costs hypothesis in the context of the UK, a contract-based distress resolution system, and by considering the role of private equity firms. Using a dataset covering 115 public-to-private buy-outs (PTPs) completed in the period 1998 to 2001 and 115 randomly selected firms that remained public, they find contrasting evidence to that for US PTPs. Consistent with the financial distress costs model, firms going private are more likely to have better asset collateralisation, have less debt and be more diversified. However, in contrast to the US, UK PTPs did not have lower R&D. This may reflect the greater involvement of private equity firms in buy-outs in the UK than in the US and the relatively high level of innovative activity post buy-out.

R&D intensity, however, is not an accurate measure of bankruptcy risk or distress costs. Sudarsanam, Wright and Huang (2007) employ a direct measure of bankruptcy risk and financial distress estimated from stock market data and using the option pricing model. These are the default probability and proximity to default (Table 15). They find that 20 out of their sample of 199 UK PTPs completed in the period 1997 to 2005 were in the high risk of default category using Moody's KMV model. Controlling for

other factors reported in earlier studies as contributing to the PTP decision, and comparing their PTP sample with a control sample of similar firms not going private, Sudarsanam, Wright and Huang (2007) find that going private companies have significantly higher default probability. They report a cumulative abnormal return (CAR) of 15% for a 7 day announcement period for firms subject to going private but that returns are higher for target firms faced with higher bankruptcy risk suggesting a strong turnaround motivation for the PTP deal. Hence, in contrast to US evidence, the UK evidence shows that financial distress does not deter a PTP buyout.

Table 15. Distribution of Default Probability of UK PTPs 1997-2005

DFTPRBLTY is the default probability estimated based on the market data during the calendar year before the announcement of the going private deal.

Default Probability Range (bps)	Frequency	Percent (%)	Cumulative Frequency	Cumulative Percent (%)
DFTPRBLTY <2	124	62.31	124	62.31
2< DFTPRBLTY <=5	8	4.02	132	66.33
5< DFTPRBLTY <=10	9	4.52	141	70.85
10< DFTPRBLTY <=20	6	3.02	147	73.87
20< DFTPRBLTY <=50	6	3.02	153	76.88
50< DFTPRBLTY <=200	17	8.54	170	85.43
200< DFTPRBLTY <=400	9	4.52	179	89.95
DFTPRBLTY >400	20	10.05	199	100.00

Source: Sudarsanam et al. (2007)

An alternative to PTP is for the firm to remain listed but for private equity firms to invest. Dai (2007) examines the emerging phenomenon of private investments in public firms (PIPEs) with a particular focus on whether and to what extent venture capital and hedge fund investors add value. The author reports that VCs typically gain substantial ownership stakes, request board seats and retain their holdings after the PIPE. In contrast, she finds that hedge funds rarely join the board of directors and typically cash-out their investment shortly after the PIPE. Importantly, she also finds that the share price performance of VC-invested firms is greater than for hedge-fund invested firms in both the short term and the long term. However, the valuation effect of having a VC investor in a PIPE seems to derive from a certification effect rather than a monitoring effect.

6. Financial Performance of Buyouts and Private Equity

Table 16 presents the salient characteristics of recent studies of the financial returns to leveraged and managed buyouts.

Table 16. Studies of the Financial (Firm-Level) Returns to Private Equity and Leveraged and Management Buyouts and Private Equity: post-1995

		Nature of	
Authors	Country	Transactions	Findings
Wright, Wilson, Robbie (1996)	U.K.	Matched MBOs and non-MBOs	Profitability Higher for MBOs than comparable non-MBOs for up to 5 years
Van de Gucht and Moore (1998)	U.S.	MBO, MBI, LBO	Share Prices Higher in Aftermath of LBO
Andrade and Kaplan (1998)	U.S.	LBOs	Net effect of high leverage and distress creates value after adjusting for market returns
Halpern et al (1999)	U.S.	MBOs & non-MBOs	The poorer the prior performance of the LBO, the higher the share premium but moderated by size of managerial equity stake; low management stake cases more likely to exit
Cotter and Peck (2001)	U.S.	LBOs	Corporate Governance Mechanisms Substitute for Debt
Goh, Gombola, Liu and Chou (2002)	U.S.	MBO, MBI, LBO	Share Prices Higher in Aftermath of LBO
Desbrieres & Schatt (2002)	France	MBOs, MBIs	Accounting performance changes depend on vendor source of deal
Citron, Wright, Rippington and Ball (2003)	U.K.	MBOs, MBIs	Secured creditors recover on average 62% of loans in failed buyouts
Cumming and Walz (2004)	U.S., U.K., Continental Europe, other (39 countries)	MBO/MBI, LBO, and VC	Private Returns to Investors in Relation to Law Quality, Fund Characteristics and Corporate Governance Mechanisms
Kaplan and Schoar (2005)	U.S.	VC and Buyout Funds	Persistence in Returns Among Top Performing Funds
Renneboog, Simons and Wright (2006)	U.K.	MBO/MBI	Share Prices Higher in Aftermath of LBO mainly associated with pre- buyout undervaluation of firm, incentive alignment and increased interest tax shields
Groh and Gottschalg (2006)	U.S.	MBOs	Risk Adjusted Performance of U.S. Buyouts Significantly Greater Than S&P index
Nikoskelainen and Wright (2006)	U.K.	MBOs	Private Returns to Investors Enhanced By Context-Dependent Corporate Governance Mechanisms

Source: Adapted from Cumming, Siegel and Wright (2007).

6.1. Returns to shareholders

For listed corporations, the value vendors place on a business is reflected in the share price response to the announcement of an attempt to take a firm private. A series of US studies in the 1980s [DeAngelo et

al (1984), Kaplan (1989a), Lehn and Poulsen (1989), Marais et al (1989)] finds a large abnormal gain for the target's shareholders when a going private LBO deal is announced. Kaplan (1989a) reports a median abnormal gain of 42% for 76 US buy-outs in the period 1980-86. Similar stock market studies of voluntary divestments as LBOs by diversified companies [e.g. Hite and Vetsuypens (1980), Markides (1992)] reveal small but significant positive announcement effects.

There is the possibility of systematically lower premia where insiders involved in the buy-out take action to reduce the apparent valuation in order to buy-out at a price that is advantageous to themselves. This could be passive, where managers simply exploit asset prices which appear (to them) to be too low or it could be the result of some deliberate misrepresentation or concealment by them. Evidence on the former has been obtained from abnormal stock market returns for announced and then withdrawn LBOs [DeAngelo et al (1984); Marais et al (1989)]. Smith (1990) argues that abandoned, hidden-information buyouts should show the same subsequent performance gains as completed ones and hence the same market response, assuming the buyout is solely motivated by insider information. She finds no such evidence and hence concludes against the hidden information view. However, the stock market response appears to depend substantially on whether or not a subsequent bid occurs [Lee (1992)]; whilst existing owners returns are greater when competitive bids are received [Easterwood et al (1994)].

Insiders may manage earnings prior to a management bid in order to reduce the profits base for valuing the business. The evidence is somewhat contradictory: DeAngelo (1986) reports none whilst Perry and Williams (1994) find evidence of consistent falls in the last complete financial year prior to an announcement. Kaplan and Stein (1993) analyse the structure of MBO pricing across the whole 1980s. They suggest that deal prices rose with the level of leverage leading to over-heating and a sharp rise in the failure rate at the end of the decade. Thus if there were initial transfers from the pre-MBO owners, this trend was reversed across the period.

Renneboog, Simons, and Wright (2007) examine the magnitude and the sources of the expected shareholder gains in U.K. public to private transactions (PTPs) in the second wave of buyouts from 1997-2003. These authors find that, on average, pre-transaction shareholders reap a premium of approximately 40% when the transaction is consummated. They also report that the share price reaction to the PTP announcement generates a 30% abnormal return, implying that the large premia reported in studies of the first wave of buyouts have been sustained in the recent wave of buyouts.

However, a different picture emerges when the sources of these anticipated value increases are investigated. Renneboog et al. distinguish among the following potential causes of value gains: tax benefits, incentive realignment, control reasons, free cash flow reduction, transactions cost reduction, takeover defences, undervaluation and wealth transfers. The chief sources of shareholder wealth gains appear to be undervaluation of the pre-transaction target firm, increased interest tax shields and incentive realignment. Weir, Laing and Wright (2005b) also identify undervaluation as a major rationale for going private in the U.K. during this period. An expected reduction of free cash flows does not determine the premiums nor are PTPs a defensive reaction against a takeover. This evidence is only partly consistent with the early US evidence cited above; the undervaluation argument being more important in the UK, perhaps reflecting the significant numbers of PTPs completed where the founder had retained a significant equity stake.

The wealth of existing bondholders will be adversely affected if new debt, issued at the time of the restructuring, impacts adversely on the perceived riskiness of the original debt. Marais et al (1989) fail to detect any such wealth transfer but Asquith and Wizman (1990) report a small average loss of market value but those original bonds with protective covenants showed a positive effect. As buy-outs typically

substitute debt for equity they tend to reduce corporate tax liabilities but this tax saving generally accounts for only a small fraction of the value gain in buy-outs (Kaplan (1989b; Schipper and Smith, 1988).

6.2. Returns to investors

Fund level data published by national venture capital associations and the European Private Equity & Venture Capital Association (EVCA) consistently show that the internal rates of return (IRRs) on buy-out funds outperform any other form of private equity/venture capital investment (Table 17).

Table 17. Pan-European Returns (IRR) achieved on Private Equity

	1999	2000	2001	2002	2003	2004	2005
Early	21.6	21.9	15.7	8.0	5.4	4.2	2.3
Development	13.7	13.8	13.4	10.0	8.5	7.4	9.0
Balanced	19.0	16.8	20.5	12.8	11.2	10.7	8.5
All Venture Capital	17.6	16.8	15.8	9.5	7.4	6.7	6.2
Buyout	23.9	21.0	19.8	17.8	17.0	16.5	17.8
Generalist	14.3	13.9	11.1	6.7	6.9	6.4	8.8
All Private Equity	19.4	18.3	17.2	12.2	10.9	10.6	10.6

Source: EVCA/Thomson Venture Economics

Note: Pooled IRR is obtained by taking cash flows from inception together with the residual value for each fund and aggregating them into a pool as if it were a single fund

Groh and Gottschalg (2006) provide evidence of the financial performance of buyouts from a sample of 199 US buyout fund investments from 1984-2004. The authors compare buyout returns to a control portfolio of equally risky levered investments in the S&P 500 Index. They find a positive and statistically significant alpha for buyouts. Their analysis illustrates the importance of risk adjustments for operating risk and leverage risk when comparing buyout returns to index benchmarks. The authors also show that buyout investors select transactions in industries with low operating risk while successfully leveraging their investments and transferring transaction risks to lenders.

Previous research has also demonstrated that buyout specialists play an important role in structuring the debt used to finance the LBO and in monitoring management in the post-LBO firm (Cotter and Peck, 2001). Buyout specialists that control a majority of the post-LBO equity tend to have less debt and thus, are less likely to experience financial distress. Buyout specialists that closely monitor managers through stronger representation on the board also tend to use less debt. Active monitoring by a buyout specialist substitutes for tighter debt terms in monitoring and motivating managers of LBOs.

Nikoskelainen and Wright (2007) examine the role of corporate governance in enhancing the real returns to exited buyouts from the investor's perspective. They find an average (median) return of 22.2% (-5.3%), net of market index returns, based on a sample of 321 exited buyouts in the U.K. between 1995 and 2004. IPO exits outperform trade sales and secondary buy-outs. Their analysis indicates that a balance of interrelated firm-level corporate governance mechanisms (including gearing, syndication, and management ownership) is critical for value-increase in buyouts, and the importance of these mechanisms for enhancing returns is context-dependent in relation to the size of the transaction, among other things. The authors also show that return characteristics and the probability of a positive return are mainly related to size of the buyout target and acquisitions carried out during the holding period. Furthermore, they also find that the return characteristics between insider driven buyouts and outsider driven buy-ins are different.

Cumming and Walz (2004) compare buyout returns to the returns to other stages of venture capital and private equity investment using a large international sample in 39 countries. For the subset of the buyout data from the U,S, and the U,K, which spans the 1984-2001 period, they find an average (median)

return to LBOs to be 26.1% (31.4%) and an average return to MBOs/Management Buy Ins (MBIs) to be 21.5% (18.5%) net of market index returns (country-specific Morgan Stanley Capital International (MSCI)) returns. A noteworthy finding of this study is that the average returns to earlier stage venture capital investments are significantly greater than the average returns to buyouts, whereas the median returns to buyouts are greater than the median returns to earlier stage venture capital investments.

Cumming and Walz (2004) show returns are greater in countries with stronger legal conditions, which shows the importance of the legal environment for facilitating external corporate governance mechanisms. Mean (median) buyout returns net of the MSCI index were 21.5% (18.5%) in the U.S. and -1.0% (13.4%) in the U.K. over 1984-2001 in the 1984-2001 period. The higher returns in the U.S. versus the U.K. are consistent with the slightly higher legality index in the U.S., and are also attributable to the larger size of the U.S. market and other transaction-specific factors that have enhanced returns in the U.S. Cumming, Fleming, and Schwienbacher (2006) provide consistent evidence that VC/PE backed companies are more likely to achieve IPOs in countries with a superior environment in a sample 468 VC/PE investments from 12 Australasian countries.

Cumming and Walz (2004) find that the structure of the investment enhances returns: returns are high for syndicated investments (consistent with Nikoskelainen and Wright ,2006) but lower for co-investments which suggests the capital from a follow-on fund is used to bail out the bad investments from earlier funds (consistent with Gompers and Lerner, 1999). Cumming and Walz (2004) also show that convertible securities that enable periodic cash flows back to the investor prior to exit enhance returns.

Fund characteristics are equally important for returns. For instance, more established funds achieve higher returns (see also Kaplan and Schoar, 2005, for consistent evidence based on a U.S.-only sample). As well, those funds that invest in fewer projects per fund manager achieve higher returns, which is consistent with other work that shows smaller portfolio sizes per manager implies improved screening and greater value-added provided by the investor to the investee (Kanniainen and Keuschnigg, 2003, 2004; Schmidt, 2006; Cumming, 2006).

6.3 Creditors and distress costs

A further class of investors that need to be considered is creditors, ranging from senior secured to junior subordinated. Returns to these investors may involve either interest only or a combination of interest and the return on equity warrants (options) which are converted on exit or some other crystallization point. The returns to these investors also warrants attention when LBOs and private equity deals become distressed. Andrade and Kaplan (1998) find that for U.S. buyouts that defaulted, the leveraged buyout companies retained approximately the same value they had obtained before the buyout. In U.K. buyouts that defaulted, secured creditors recovered on average 62% of their investment, and many of these companies were eventually restructured and sold as going concerns (Citron et al., 2003). Evidence on the returns to subordinated creditors in such cases is generally lacking.

measures in the VC sector (Armour and Cumming, 2006; Wright et al., 2005).

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⁴ The legality index is a weighted average of legal index variables relating to civil versus common law, efficiency of the judicial system, rule of law, corruption, risk of expropriation, risk of contract repudiation, and shareholder rights (La Port et al., 1998; Berkowitz, et al., 2003). The higher index in the US than the UK is principally attributable to the higher scoring of the US in terms of the rule of law as identified in the International Country Risk Guide. Note that there is some debate about the appropriateness of these

Distress regimes vary across institutional environments (Armour and Cumming, 2006). As private equity firms internationalize, different distress regimes may impact both where they undertake deals but also the returns they and the debt providers who invest alongside them earn. Andrade and Kaplan's (1998) study showed that the distress costs of highly leveraged LBOs in the U.S. were low; the costs of financial distress in these firms amounted to 10-23% of firm value. Betker (1997) finds that the ratio of direct costs of bankruptcy to assets for traditional Chapter 11 cases is lower if the firm is a highly leveraged transaction (HLT) than for distressed firms in general and suggests that this is because HLT's reduce creditor coordination problems.

Using a dataset of 65 management buy-outs in distress, Citron et al. (2006) analyze the determinants of bankruptcy costs under the UK's receivership regime. They find that the direct costs of receivership consume a significant percentage of the receivership proceeds, with both mean and median receivership costs equal to about 20% of total receivership proceeds, while continuing trading costs consume a further 29% of total receivership proceeds. In comparison with Franks and Sussman's (2005) more general population of small firms, where the direct costs of bankruptcy appear to be relatively high, with a mean ranging between 24.3% and 42.4% (median 18.5% to 26.8%) of total bankruptcy proceeds, these MBOs experienced fewer going-concern realizations in receivership (30%), made a lower average repayment to secured creditors and made fewer 100% repayments to these creditors. These results contrast with expectations about buy-outs following Jensen (1989). That these MBOs entered formal insolvency procedures despite the presence of specialized lender monitoring, suggests that these cases will have been the ones considered most difficult to reorganize.

Citron et al's (2006) findings do not support the argument that multiple lenders create inefficiencies resulting in significantly lower secured creditor recovery rates. However when there are multiple secured lenders, the senior secured lender gains at the expense of other secured creditors as the lender first registering the charge over assets obtains priority. They also find that receivership costs are positively related to the proportion of secured debt repaid and that, consistent with the presence of a scale effect, the relative significance of receivership costs declines as firm size grows.

Kaplan and Stein (1993) in a study of larger US buy-outs and Wright et al. (1994) for the UK provide strong evidence that higher amounts of debt were associated with an increased probability of failure or needing to be restructured. More recently, our examination of the 451 UK private equity-backed deals completed from 1996 with a transaction value of at least £10 million that had exited up to the end of November 2006 provides some systematic evidence relating to the issue of whether high leverage is associated with buyout failure (Table 18). Among all these exited buy-outs, those that entered bankruptcy had slightly higher proportions of senior secured debt in their initial financing structures. A more finegrained breakdown shows that those buy-outs in the deal size range of £10-49.9 million that entered receivership had starting financial structures with larger proportions of senior debt than those that exited through other routes. The small number of deals in the £100 million deal range that entered receivership had the highest average proportion of senior debt and this was also substantially above that for other exits in the size range. However, these differences are not statistically significant. Looking at all forms of debt in these exited buy-outs, that is senior secured debt, mezzanine debt, high yield debt and vendor loans, a similar pattern of differences emerges, except that for some deal size categories non-receivership exits had slightly higher percentages of debt than receivership exits. Overall, the differences in the proportion of funding structures accounted for by all forms of debt were not statistically significantly different between buy-outs that entered receivership and those that exited by flotation, trade sale or secondary buy-out.

Table 18. Pan-European Returns (IRR) achieved on Private Equity

Deal Size Range	No.	Senior debt as % of Total Financing	Total Debt as ² % of Total Financing
1. At least £10m			
All exited deals	451	51.4	61.9
Receiverships	73	53.7	61.1
Other exits ¹	378	51.0	62.1
2. £10-49.9m			
All exited deals	273	50.8	59.3
Receiverships	59	53.6	61.1
Other exits	214	50.0	58.7
3. £10m to £99.9m			
All exited deals	356	51.4	60.8
Receiverships	69	53.4	60.7
Other exits	287	51.0	60.9
4. At least £100m			
All exited deals	95	51.3	66.1
Receiverships	4	58.0	67.9
Other exits	91	51.0	66.0

Source: EVCA/Thomson Venture Economics

Footnotes: 1. Includes flotations, trade sale, secondary buy-out. 2. Includes senior secured debt, mezzanine debt, high yield debt and vendor loans

Sudarsanam et al. (2007) extend their finding that PTPs have a higher default probability before buyouts than non-PTPs by examining whether PTPs that eventually exit through bankruptcy had higher initial default probability and distance to default than PTPs that exited through IPO, trade sale, secondary buyout or no exit. They find that PTPs that end up in bankruptcy as an exit mode have the highest default probability amounting to 376 basis points and 2.76 standard deviations to the default threshold.

6.4. Accounting performance

Research on US LBOs during the 1980s indicates substantial mean improvements in profitability and cash flow measures over the interval between one year *prior* to the transaction and two or three years *subsequent* to it (Kaplan, 1989a; Kaplan and Stein, 1993; Smith 1990; Muscarella and Vetsuypens, 1990; Opler, 1992; Smart and Waldfogel, 1994). Similarly, UK evidence indicates the vast majority of buy-outs show clear improvements in profitability and working capital management (Wright et al., 1992). Wright, Wilson, and Robbie (1996) concluded using a sample of U.K. firms experiencing an MBO in the mid-1980s that they generated significantly higher increases in return on assets than comparable firms that did not experience an MBO over a period from two to five years after buyout.

In the more recently developed French market, Desbrieres and Schatt (2002) analyze a sample of 161 MBOs occurring in France during the period 1988 to 1994. The authors find that firms that were acquired outperform comparable firms in the same industry both before and after the buyout. However, in contrast to findings relating to U.S. and U.K. LBOs, the performance of French MBO firms declines after the transaction is consummated. This downturn in performance seems to be less detrimental to former

subsidiaries of groups than to former family businesses, the latter forming a more important part of the French market.

A representative survey of private equity-backed buy-outs completed in the EU between 1992–1997 showed that the average EBIT as a percentage of turnover initially jumped from 4.2% in the first year after buy-out and rose to approximately 7 % by year 3. Almost two-thirds of respondents (65 %) to this survey reported that their turnover had improved in comparison with competitors since the buy-out. About the same proportion of managers (67.3 %) also reported their belief that EBIT had grown more than their competitors' profits since the buy-out had taken place (CMBOR/EVCA, 2002).

One difficulty with accounting measures is the manipulation of financial statements around the time of the buyout. DeAngelo (1986), Kaplan (1989) and Lee (1992) cast doubt on the manipulation and insider trading arguments but Wu (1997) shows earnings manipulation in 87 management buyouts during 1980-1987. Wu's findings are consistent with the view that managers manipulate earnings downwards prior to the MBO proposal.

Chou et al. (2005) provide further evidence of earnings management around security offerings. They find positive and significant discretionary current accruals coincident with offerings of reverse LBOs. In other words, managers manipulate earnings upward prior to offering stock in a reverse LBO, and this earnings manipulation has a significant effect on the post-issue performance.

Earnings manipulation impacts the market's ability to assess the quality of buyouts. Gilson (2000) shows most analysts were negative or indifferent in their assessment of the UAL LBO deal, and some analysts even misinterpreted key terms of the deal. Further, even while UAL's stock price relative to the market and industry eventually doubled, analysts' opinions of the deal did not change.

Overall, recent evidence on buyout performance is consistent with superior risk adjusted performance relative to industry benchmarks. Buyout returns are significantly enhanced by corporate governance mechanisms, that is equity incentives for managers, board representation by private equity firms and need to meet debt servicing commitments. However, financial performance of buyouts is difficult to measure, particularly in the case of accounting measures which have been shown to be plagued by earnings manipulation.

6.5 What drives returns? Debt, monitoring and incentives

Some indications of the effects of monitoring mechanisms introduced in buy-outs are given by comparing alternative organisational forms. For example, leveraged recapitalizations, which simply substitute debt for equity in quoted companies, have been shown to raise shareholder value (Denis and Denis, 1992) but they do not appear to have the same performance impact as LBOs, which also involve managerial ownership and institutional involvement [Denis (1994)]. Similarly, defensive ESOPs, in which leveraged employee share purchases are used to forestall takeovers, do not appear to perform as well as LBOs. [Chen and Kensinger (1988)]. Thompson et al (1992b) found that the management team shareholding size had by far the larger impact on relative performance in UK MBOs. Similarly, Phan and Hill (1995) found that managerial equity stakes had a much stronger effect on performance than debt levels for periods of three and five years following the buy-out.

A CMBOR survey of 300 management buy-outs across Europe questioned management teams about the nature of the contribution of their private equity provider (CMBOR/EVCA, 2001). Other than the provision of funding, the single most important contributions of the private equity firm were, in order of

declining importance, financial advice and financial contacts, acting as a sounding board for management ideas, and providing strategic advice. Some 84% of respondents claimed that without private equity support the firm would no longer have existed.

A recent study of several hundred buyouts across Europe by Wright and Gottschalg (2007) shows that some private equity firms are repeatedly able to create real and lasting value through their investments. Indeed, their buyouts enhance the competitive position and long-term prospects of the acquired companies. What makes a difference is their capacity to actively work with the management of their portfolio companies to improve strategy and operational effectiveness.

This study finds that private equity firms help build better businesses as their deep experience in making buyout deals helps them take the right decisions during the deal and after the acquisition. Second, a clear strategic focus on specific target industries enables these private equity firms to build up and leverage expertise. Third, early and honest communication of what the buyout means for the company and its employees, including targets, risks and rewards, is important in creating the motivation necessary to meet ambitious business plans. Fourth, a strong and trust-based relationship between company management and private equity investors is the basis for value added involvement in strategic and operational decisions. Finally, keeping a balance between the growth in capital under management and available managerial resources is required for a private equity firm's continuing success.

Evidence from 637 buy-outs across Europe suggests that the most common form of value creation is through add-on acquisitions (53%) and replacements within the top management team (43%). In around a fifth of cases, value creating activities involved expansion of the product line, growth in sales, a new marketing approach, strategic reorientation, organizational restructuring, geographical expansion, cost cutting and lay-offs/consolidation and outsourcing.

7. Real Effects of Buyouts

7.1 Productivity

Amess (2002, 2003) presents U.K. evidence on the effects of full-firm MBOs on productivity, based on company-level data. However, it is more desirable to assess the productivity of establishments or plants before and after MBOs rather than using firm level data. Plants data on physical output and inputs, or resources consumed in production, such as labor, physical capital, and intermediate goods and materials can be used to construct indicators of productivity, which measure the efficiency of resource utilization. Table 19 presents the salient characteristics of studies of the real effects of leverage and managed buyouts. To the best of our knowledge, there are no empirical studies of private equity.

Table 19. Studies of the Real Effects of Leveraged and Management Buyouts and Private Equity

Authors	Country	Unit of Analysis	Nature of Transactions	Findings
Lichtenberg and Siegel (1990a)	U.S.	Plant	Divisional and Full- Firm LBOs and MBOs of Public and Private Companies	Plants Involved in LBOs and MBOs Are More Productive Than Comparable Plants Before the Buyout; LBOs and especially MBO Plants Experience a Substantial Increase in Productivity After a Buyout; Employment and Wages of Non-production Workers at Plants (But Not Production Workers) Declines After an LBO or MBO; No Decline in R&D Investment
Wright, Thompson and Robbie (1992)	U.K.	Firm	Divisional, and Full- firm MBOs of Private Companies	MBOs enhance new product development
Long and Ravenscraft (1993)	U.S.	Division	LBOs and MBOs	LBOs Result in a Reduction in R&D Expenditure
Zahra (1995)	U.S.	Firm	MBOs	MBOs result in more effective use of R&D expenditure and new product development
Bruining and Wright (2002)	Holland	Firm	Divisional MBOs	MBOs result in more entrepreneurial activities such as new product & market development
Amess (2002)	U.K.	Firm	MBOs	MBOs Enhance Productivity
Amess (2003)	U.K.	Firm	MBOs	MBOs Enhance Productivity
Bruining, Boselie, Wright, and Bacon (2005)	U.K and Holland	Firm	MBOs	MBOs Lead to Increases in Levels of Employment, Training, Employee Empowerment, and Wages: These Effects Were Stronger in the U.K. Than in the Netherlands
Amess, Brown, and Thompson (2006)	U.K.	Firm	MBOs	Employees in MBO Firms Have More Discretion Over Their Work Practices
Harris, Siegel, and Wright (2005)	U.K.	Plant	Divisional and Full- Firm LBOs and MBOs of Public and Private Companies	Plants Involved in MBOs Are Less Productive Than Comparable Plants Before the Buyout; They Experience a Substantial Increase in Productivity After a Buyout; Plants Involved in an MBO Experience a Substantial Reduction in Employment
Amess and Wright (2006)	U.K.	Firm	MBOs and MBIs	Employment grows in MBOs but falls in MBIs after buyout

Note: Real effects comprise changes in factor productivity, changes in employment and employee relations conditions, new product development and R&D expenditure.

Adapted from Cumming, Siegel and Wright (2007).

Lichtenberg and Siegel (1990) analyzed data on US manufacturing plants for the years 1972-1988, finding that MBO plants had higher total factor productivity (TFP) than representative establishments in the same industry before they changed owners. However, they also reported that MBO plants experienced significant improvements in TFP after the MBO. More importantly, the authors also found that this enhancement in economic performance could not be attributed to reductions in R&D, wages, capital investment, or layoffs of blue-collar personnel.

Harris, Siegel, and Wright (2005), analyzing longitudinal data for approximately 36,000 U.K. manufacturing establishments, extended the Lichtenberg and Siegel (1990) study in three important ways. First, the authors analyzed a considerably larger sample of MBOs, basically the entire population of U.K. manufacturing MBOs. Their final sample consisted of 979 MBOs and 4877 plants, as opposed to 48 MBOs and 399 plants in the Lichtenberg and Siegel study, and covered a more recent period (1994-1998).

The authors found that MBO establishments were less productive than comparable plants before the transfer of ownership. They also reported that MBO plants experienced a substantial increase in productivity after a buyout (+70.5% and +90.3% more efficient in the short and long run, respectively) and that these post-buyout productivity gains are pervasive across industries (the average manufacturing plant experienced a substantial increase in TFP in 14 out of 18 industries). The results imply that the improvement in economic performance may be due to measures undertaken by new owners or managers to reduce the labor intensity of production, through the outsourcing of intermediate goods and materials. This evidence suggests that MBOs may be a useful mechanism for reducing agency costs and enhancing economic efficiency.

7.2 Strategy

Buyouts are a means for refocusing the strategic activities of the firm (Seth and Easterwood, 1993; Phan and Hill, 1995). Both Wright et al. (1992) and Zahra (1995) find that buy-outs are followed by significant increases in new product development and other aspects of corporate entrepreneurship.

US evidence strongly supports the view that capital investment falls immediately following the LBO as a result of the increased leverage ([Kaplan, 1989a; Smith, 1990). The evidence on UK MBOs is rather different. Wright et al (1992) report that asset sales are offset by new capital investment, particularly in plant and equipment. The effect of buy-outs on R&D is less clear, although on balance there seems to be a reduction (Long and Ravenscraft, 1993; Lichtenberg and Siegel, 1991; Smith, 1990). However, as many LBOs are in low R & D industries, the overall effect may be unsubstantial. There is some evidence that in buy-outs that do have R&D needs that this expenditure is used more effectively (Zahra, 1995).

7.3 Employees and HRM

Evidence on the effects of buy-outs on employment is mixed. Opler (1992), Kaplan (1989a) and Smith (1990) - but not Muscarella and Vetsuypens (1990) report small increases in total firm employment following LBOs. Kaplan (1989a) and Smith (1990), however, report that buy-outs do not expand their employment in line with industry averages. Lichtenberg and Siegel (1990) report an 8.5% fall in non-production workers, over a three year period, with production employment unchanged. Early UK evidence suggested that job losses occur most substantially at the time of the change in ownership (Wright et al, 1992).

Bruining, Boselie, Wright, and Bacon (2005) report that MBOs in the U.K. and the Netherlands result in an improvement in human resource management practices. Specifically, they found that there

were higher levels of employment, employee empowerment, and wages. These effects were found to be stronger in the U.K. than in Holland and emphasize the importance of understanding different institutional contexts even within Europe.

Amess, Brown, and Thompson (2006) also conducted an extensive analysis of the relationship between empowerment and supervision and MBOs. In general, they report that employees in UK MBO firms have more discretion over their work practices than comparable workers at non-MBO firms. Skilled employees, in particular, were found to have very low levels of supervision at MBO firms. Amess and Wright (2006) show in a panel of 1,350 U.K. LBOs observed over the period 1994-2003, that when LBOs are disaggregated, employment growth is 0.51 of a percentage point higher for MBOs after the change in ownership and 0.81 of a percentage point lower for MBIs. More detailed data indicates that employment in the MBOs dips initially after the buyout but then continues to rise, on average. In contrast, for MBIs, the employment level remains below the pre-buy-out level (Table 20). These findings are consistent with the notion that MBOs lead to the exploitation of growth opportunities, resulting in higher employment growth. The same patterns do not emerge from MBIs, typically because the latter transactions involve enterprises that require considerable restructuring. Amess and Wright (2007), however, find that on average wages in both MBOs and MBIs are lower than their non-buyout industry counterparts.

Table 20. The Post-MBO and Post-MBI Changes in Employment and Remuneration Per Employee

	Years relative to year of deal							
Variables	t + 1	t + 2	t + 3	t + 4	t + 5	t + 6		
MBO:								
<u>Employment</u>	-2.28%	2.96%	7.46%	21.43%	26.02%	36.19%		
	(-0.63)	(0.63)	(1.28)	(3.31)***	(3.15)***	(2.44) **		
% deals with positive	60.19%	65.12 [°] %	66.08%	64.32%	61.70%	61.42%		
change								
% deals with negative	35.73%	33.22%	32.16%	34.02%	36.17%	36.22%		
change								
% deals with no	4.08%	1.66%	1.77%	1.66%	2.13%	2.36%		
change								
Remuneration per	6.30%	11.22%	15.05%	19.89%	26.91%	28.27%		
employee	(3.80)***	(6.07)***	(6.62)***	(6.86)***	(5.05)***	(6.47)***		
% deals with positive	71.47%	75.67%	77.30%	81.67%	83.96%	86.61%		
change								
% deals with negative	28.53%	24.33%	22.70%	18.33%	16.04%	13.39%		
change								
% deals with no	0	0	0	0	0	0		
change								
Number of deals	319	301	283	241	188	127		
MBI:								
<u>Employment</u>	-10.22%	-9.70%	-11.10%	-3.35%	-5.02%	-18.26%		
	(-1.46)	(-1.24)	(1.24)	(-0.31)	(-0.37)	(-0.55)		
% deals with positive	57.5%	59.82%	58.65%	56.32%	55.93%	64.86%		
change								
% deals with negative	36.66%	36.61%	38.46%	39.08%	42.37%	35.10%		
change								
% deals with no	5.83%	3.57%	2.88%	4.60%	1.69%	0		
change								
Remuneration per	5.49	10.04%	15.47%	17.59%	25.03%	38.84%		
<u>employee</u>	(1.57)	(2.56)**	(3.46)***	(3.03)***	(3.33)***	(4.74)***		
% deals with positive	63.87%	72.07%	81.55%	79.07%	86.21%	94.49%		
change								
% deals with negative	35.13%	27.93%	18.45%	20.93%	13.79%	5.41%		
change	_							
% deals with no	0	0	0	0	0	0		
change						1		
Number of deals	120	112	104	87	59	37		

Notes: (1) column t + s (s = 1, 2, ..., 6) shows the per cent change in the relevant variable s years after the deal compared to the year prior to the deal (t - 1) on a deal-by-deal pairing. Thus, the employment change of 21.43% four years after the deal indicates that employment grew by 21.43/5 = 4.29% per annum; (2) paired t-statistics of equality between t - 1 and t + s years after the deal are in parentheses; (3) ***, **, and * indicates significance at the 1, 5, and 10% level, respectively.

Source: The employment and remuneration data are obtained from FAME and matched with the CMBOR database that provides information on the date of deals and exits. Due to exits the number of deals in the analysis declines over time. This means that caution must be taken when comparing changes in different buyouts periods. The advantage of this approach, however, is that we use all available deals and do not introduce bias by discarding deals in order to keep the sample size the same in each post-buyout period.

The end result is there is a general consensus that across different methodologies, measures, and time periods, regarding a key stylized fact: LBOs and especially, insider-driven MBOs enhance performance and have a salient effect on work practices. More generally, the findings of the productivity studies are consistent with the notion that private equity transactions result in the reallocation of a firm's resources to more efficient uses and to better managers.

7.4 Entrepreneurial buy-outs

The development of auctions for private equity deals and the stronger emphasis on shareholder value by corporations in recent years as corporate governance has become more active, impacts potential returns and the sources of these returns. Specifically, it may be considerably more difficult to generate the financial returns realized by LBOs during the 1980s in today's environment through financial engineering alone. While some private equity funds are persistently good performers, not all are, as evidenced by the differences in the median returns for different performance quartiles. Limited partners may need to be convinced that a private equity fund they are considering investing in has the expertise to deliver changes in strategy and product development, rather than just financial structuring. In the U.S., the buyout and private equity concept has now become more closely associated with seeking growth opportunities than with cost reduction and asset stripping (Kester, 1994).

This suggests a shift to buyouts involving businesses where managers who identify entrepreneurial opportunities for new products and markets become frustrated with a bureaucratic corporate structure where proposals for new ventures are rejected by corporate management because of the lack of hard information that fits into organization-level investment appraisal systems (Wright, Hoskisson, Busenitz, and Dial, 2000). These deals have included buyouts in technology-based sectors (Robbie, Wright and Albrighton, 1999). For private equity firms to play an important role in supporting these entrepreneurial buyouts may require them to hire executives with greater product market and strategic expertise to be able to assess the investment initially and to monitor it subsequently. Lower levels of debt may be necessary to enable the buyout firm to implement identified opportunities for strategic innovation.

"Busted tech" or turnaround buyouts, where owner-managers may already have the skill set and the incentives to pursue strategic innovations and/or where there may have been little monitoring over management, also offer opportunities for strategic shifts that were not feasible prior to the change in ownership (Wright, Hoskisson, Busenitz, 2001). The opportunity for a buyout may arise when the firm encounters difficulties, either through liquidity problems or poor execution of the business plan due to a lack of technological expertise. In this case, a buyout may constitute a mechanism for providing superior governance expertise relating to an innovative opportunity.

In the U.S., U.K. and the Netherlands, respectively, Zahra (1995), Wright et al. (1992) and Bruining and Wright (2002) find that buyouts are followed by significant increases in new product development and other aspects of corporate entrepreneurship. CMBOR/EVCA (2001) found that 69.6% of private equity backed buyouts increased their product range, 62.5% expanded into new markets, 53.7% invested in new sites or locations and 52% developed existing sites. Bruining and Wright (2002) observe important roles for the private equity funders in keeping added value strategies on track, assisting in new ventures and broadening market focus, and in having the knowledge to be able to assess invest in product development. Bruining, Bonnet and Wright (2004) provide detailed case analysis of how private equity firms can contribute to the development of management control systems that facilitate strategic change in different types of buy-outs. Analysis of buyouts in Japan suggests that there is scope to restructure both keiretsus and listed corporations through private-equity financed buyouts (Wright, Kitamura and Hoskisson, 2003). Wright et al (2003) suggest that in some contrast to the West, buyouts in Japan are likely to be of particular relevance in the spinning off of underperforming divisions where management's opportunities for growth are frustrated by bureaucratic internal control systems, creating scope for revitalization, that is involving catch-up investment, and entrepreneurial buyouts.

8. Realization and exits

Private equity firms are under significant pressure to achieve their target returns and hence work towards a timely exit.

8.1Exit trends

8.1.1 UK

The common forms of exit are trade sales, flotations, secondary buyouts and bankruptcy (receivership). The popularity of the different types of exit is dependent on the prevailing economic conditions and has varied over the last 15 years in the UK as shown in Figure 15. Trade sales have been the most common form of exit except in the early 1990s when the recession led to receiverships. Flotations or initial public offerings (IPOs) were often chosen in the late 1980s, when the stock markets were relatively healthy, but have been less popular since then.

Secondary buy-outs have gained importance since the mid 1990s and now account for almost a third of all exits in the UK. A number of factors have driven the need for financial investors to sell off their portfolio firms to other PE firms. These reasons include the difficulties in exiting buyouts via IPOs, the reduced acquisition appetite by corporations seeking to refocus (especially for smaller deals), and the need for private equity firms to exit from deals when PE funds come to the end of their life.

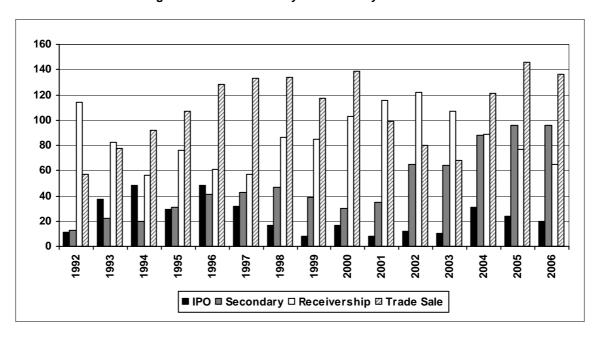


Figure 15. Exits of Buy-outs and Buy-ins in the UK

Source: CMBOR/Barclays Private Equity/Deloitte

In a secondary buyout, an initial buyout deal is refinanced with a new ownership structure including, typically, a new set of private equity financiers while the original financiers and possibly some of the management exit. Such deals account for a large proportion of the value of the U.K. market. Moreover, as buyout markets mature, we also observe tertiary and fourth time around deals (CMBOR, 2006). At the end

of 2006, a total of 16 companies in the UK (20 across the rest of Europe) had gone through at least three buy-outs. These tend to be mid-range deals that are cash generative in mature sectors, such as the retail sector, which can be easily re-leveraged.

The growing number of large secondary buy-outs, for example the recent sale of United Biscuits by a syndicate including Cinven to Blackstone Group for £1.6 billion, provides useful liquidity for the buy-out market at a time when alternative exit routes have become difficult. Currently, trade sale opportunities are growing again and stock markets have become more benign, which help to allay concerns from institutional investors over the recycling of capital that has been evident in recent years.

The changes in ownership and financing that occur each time may be a means of enabling buyouts to achieve the new long term organizational form as argued by Jensen (1993). However, these transactions raise important and challenging unresolved issues relating to performance evaluation. In particular, if the original private equity financiers were effective, how likely is it that further performance gains can be achieved?

For the incoming investors in secondary buy-outs, an important issue is: will managers be buyers or sellers in the deal and what will be the impact on performance? Furthermore, when management increases its equity stake, there may be a corresponding reduction in control by the private equity firm. This may result in management embarking on risky growth strategies with little monitoring. There are anecdotal examples of the effects of secondary buyouts (Robbie and Wright, 1990) and Nikoskelainen and Wright (2006) provide initial evidence that returns to exiting through secondary buyout are lower than for IPOs and sales to corporate buyers.

There is considerable debate about the longevity of buy-out structures. Evidence from the 1980s in both the US (Kaplan, 1991) and UK (Wright, et al., 1995) shows that buy-outs have a heterogeneous lifecycle, that is some are exited in a relatively short period of time, while others remain with the buy-out structure for periods in excess of five years. On average larger deals exit significantly sooner than small deals. That there have been some recent very short periods to exit of private equity deals is not new and should not be surprising. Some deals fail quickly while others may receive unsolicited bids by trade buyers within a short time after buy-out. However, it is important to consider the time of exit of a particular cohort, i.e. deals completed in a particular year, as a whole. On this basis, the average time to exit for those deals that have exited appears to be around four to five years (Table 21).

Table 21. Average Time to Exit To End of 2006 for UK Buy-outs/Buy-ins by Vintage Year

Year	Number	Number of Exits To Date	Average Time to Exit (months)
of	of		
Deal	Deals		
1990	606	275	62.7
1991	581	251	53.8
1992	597	224	57.9
1993	493	201	56.0
1994	565	240	54.8
1995	598	264	53.6
1996	647	276	51.4
1997	709	274	47.6
1998	690	284	47.6
1999	658	239	45.9
2000	623	202	44.4
2001	643	182	38.7
2002	639	151	46.8
2003	713	140	25.8
2004	706	92	44.9
2005	690	47	14.6
2006	676	5	7

Source: CMBOR/Barclays Private Equity/Deloitte

Financial distress and receivership represents the negative aspect of exits. Since the mid 1980s there have been 12,923 UK buy-outs of which 1,480 have so far entered receivership. The receivership rate varies according to vintage year, peaking at 21% for buy-outs completed in the boom years of 1988-1990 which subsequently encountered problems in the recession of the early 1990s. The failure rate of buy-outs completed during the first half of the 1990s was approximately 12% by September 2005. In addition, the large majority of receiverships occur in smaller firms. CMBOR data indicates that 94% of the receiverships were from buy-outs with initial deal values of less than £20 million.

As traditional forms of exit have become more difficult, refinancings and partial sales have become more frequent as they are a mechanism for private equity firms to cash out part of their investments while at the same time keeping control of their portfolio companies. Exiting through refinancing may involve either the private equity firm having the business borrow more and then paying themselves special dividends from the borrowings or engaging in a sale and leaseback of property assets to a third party and transferring the proceeds from the sale to the PE firm in the form of a dividend. With respect to exit through refinancing, in the UK, for example, in 2005 total refinancings accounted for over a thirds of the total value realized, compared to a little over a tenth in 1997 (CMBOR, 2006). Between 55 and 90 recapitalisations have been recorded each year in the UK. The total value returned through recapitalisation in 2005 was €19 billion, significantly adding to the €33 billion realised through full exit.

A partial sale of the portfolio company provides another means of realizing part of the initial investment without losing control. The sale of a subsidiary business is another means by which the private equity house may seek to return some or all of the original capital investment. Partial sales made up just over a third of the total value realized in the U.K. in 2001, when the value of the FTSE 100 fell sharply, but have since become less frequent and accounted for just under a quarter of the total in 2005. The number of partial sales recorded is generally between 70 and 100 per annum, with a further Θ billion value realised through partial sales in the UK in 2005 (Table 22).

8.1.2 Continental Europe

Across Continental Europe secondary buyouts have dominated over the last few years pushing trade sale exits into second place. IPOs being once again the least favoured exit option (Figure 15). Exit values were at record levels in 2006, driven largely by these major exits through secondaries. The total value of exits reached a record of €39 billion in the UK compared to €56 billion in CE (Table 18). A recent example of a secondary buy-out is the sale of the German company Brenntag by Bain Capital to BC Partners for €3.5 billion. In Continental Europe, refinancing also accounted for just over a third of total exit value in 2005. Partial sales now account for less than 5% of the total in 2005. The effect of these forms of exit on returns to private equity investments have yet to be analyzed.

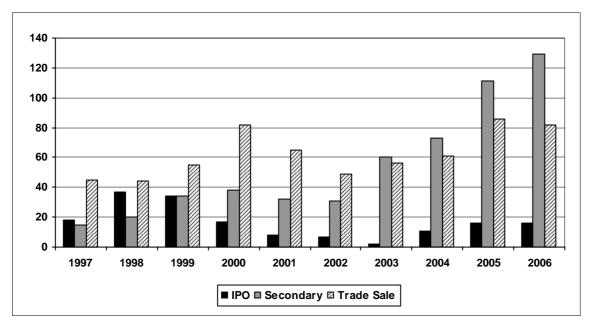


Figure 16. Exits of Buy-outs and Buy-ins in CE

Source: CMBOR/Barclays Private Equity/Deloitte

Table 22. Exit Numbers and Exit Values for European Buy-outs/Buy-ins

	UK		CE	
	Number	Total Exit Value (€m)	Number	Total Exit Value (€m)
	of		of	
	Exits		Exits	
1999	250	9752.6	127	9059.5
2000	289	14786.0	141	11965.9
2001	258	12676.2	109	7352.3
2002	279	16266.5	98	5799.9
2003	249	13281.2	126	10545.3
2004	330	27339.6	150	20789.2
2005	343	32805.6	221	43342.3
2006	318	39149.3	229	55807.2

Source: CMBOR/Barclays Private Equity/Deloitte

8.1.3 United States

In the United States, figures suggest a similar trend to that observed in Europe with exit via secondary buyout becoming more popular. There were six exits via secondary buyout in 2003 with a combined exit value of \$2.8 billion rising to 30 secondaries in 2006 with a value of \$6.3 billion (Thomson Financial, 2006).

8.1.4 Japan

According to JBORI, there were between 25 and 27 exits over the last three years and the majority of these were trades sales, accounting for about half of all exits by number. As expected in line with other OECD countries, secondary buy-outs are becoming more popular and have accounted for about a fifths of exits over the same period.

8.2 Post-exit effects

An important issue is whether the claimed benefits of private equity deals are sustained once the private buy-out structure ends. Holthausen and Larcker (1996) find that while leverage and management equity falls when US buy-outs return to market (reverse buy-outs), they remain high relative to comparable listed corporations that have not undergone a buy-out. Pre-IPO, buy-outs' accounting performance is significantly higher than the median for the buy-outs' sector. Following the IPO, accounting performance remains significantly above the firms' sector for four years but declines during this period. Consistent with other studies, they find that the change is positively related to changes in insider ownership but not to leverage. Bruton et al. (2002) also find that agency cost problems did not reappear immediately following a reverse buy-out but rather took several years to re-emerge.

Private equity backed MBOs in the UK tend to IPO earlier than their non-private equity backed counterparts (Jelic, Saadouni and Wright, 2005). There is some evidence that they are more under-priced than MBOs without private equity backing but not that they perform better than their non-private equity backed counterparts in the long run. In contrast to the grandstanding hypothesis relating to early stage venture capital firms (Gompers, 1996), private to public MBOs backed by more reputable private equity firms in the UK tend to exit earlier and these MBOs performed better than those backed by less prestigious private equity firms.

9. Concluding Comments

Private equity markets have now become a significant part of OECD economies. The largest and most developed buy-out market in the OECD is the USA. This is followed by the UK, France and Germany.

High levels of debt now in the PE system could be a danger going forward although as yet there have been very few large scale defaults. The level of interest rates could still play a big part in the LBO market's fortunes but many now believe that interest rates are nearing the top of their cycle. High levels of consumer debt especially in the US and UK could be vulnerable to any unforeseen economic shock. The subsequent slowdown in GDP could threaten the buy-out market and make it more difficult to service large amounts of debt.

Our review has shown that the buyout market has always been marked by innovation in financial instruments and funding structures. The emergence of second-lien bonds and loans, typically with fewer covenants than first-lien debt but sharing collateral with senior debt providers, introduces the possibility of

longer maturities and more attractive interest rates. Such debt instruments may limit future finance options by creating conflicts of interest between first- and second lien providers. Vertical strip financing, where finance providers invest both in equity and debt-like instruments, is one mechanism to help resolve some of these conflicts.

Finally, Secondary buy-outs are becoming increasingly popular as exit routes for private equity across the OECD countries. Private equity houses recycling capital in this way is an interesting phenomenon and one caused primarily by the difficulty in realizing investments using alternative exit routes (eg the stock exchange). These deals may lead to the prolongation of disintermediation from public markets but may maintain the positive benefits of private equity governance and incentives.

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