

Private equity and financial stability

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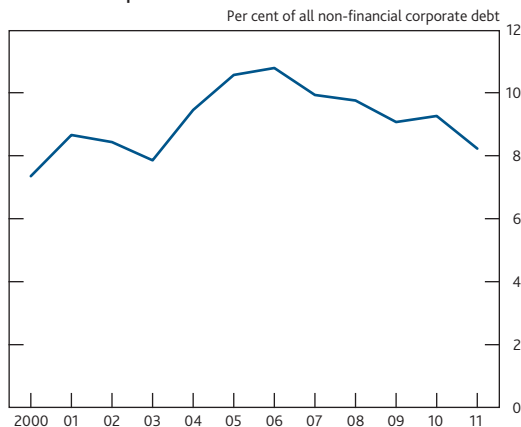
In the mid-2000s, there was a dramatic increase in acquisitions of UK companies by private equity funds. The leverage on these buyouts, especially the larger ones, was high. The resulting increase in indebtedness makes those companies more susceptible to default, exposing their lenders to potential losses. This risk is compounded by the need for companies to refinance a cluster of buyout debt maturing over the next few years in an environment of much tighter credit conditions. From a macroprudential policy perspective it will be important to monitor the use of debt in acquisitions in future episodes of exuberance. But there is also a potential role for private equity to play in promoting recovery in a downswing, in particular at the current juncture, by restructuring companies in difficulty.

A stable financial system is a key ingredient for a healthy corporate sector. In turn, a distressed corporate sector can have an adverse impact on the health of the financial system. Under a new regulatory framework coming into effect in April 2013, the Bank of England will take on an amended statutory objective to protect and enhance the stability of the financial system of the United Kingdom. And, in support of that objective, a Financial Policy Committee (FPC) — already operating in 'interim' mode — will be established within the Bank, charged with identifying, monitoring and taking action to remove or reduce systemic risks. Understanding different threats to stability, including from the sources and the structure of corporate finance and how these develop over the cycle, will be an important consideration for the FPC.

Private equity is a source of capital that has been raised outside of public equity markets for the purpose of investment in a company or asset. Private equity funds are sourced from investors — known as 'limited partners' — and then assigned to prospective investments by the fund managers — known as 'general partners'. Private equity funds differ from other investment funds in terms of strategy, typically seeking to control the businesses they invest in. They are also distinctive in terms of structure as they usually have a finite lifetime and are 'closed-end' — that is, they have a fixed number of shares. The origins of the industry lie in the purchase of equity stakes in companies — often referred to as 'buyout' activity — although some private equity firms now offer funds in other asset classes such as distressed debt and real estate. The focus of this article is on the buyout activity of private equity firms and the box on page 39 explains how a private equity buyout is structured.

Over the past two decades private equity has become an increasingly important source of capital in the global financial system. Companies owned by private equity funds now account for a material portion of the corporate sector. At the beginning of 2007, 14,000 firms were held in private equity ownership worldwide, compared to fewer than 5,000 in the year 2000 and fewer than 2,000 in the mid-1990s (World Economic Forum (2008)). In the United Kingdom the private equity owned sector amounts to around 5% of the corporate sector by total assets but accounts for a larger proportion of UK corporate sector debt — around 8%. Between 2000 and 2006, this share of debt accounted for by private equity owned companies grew significantly (Chart 1).

Chart 1 Relative amount of debt owed by private equity owned companies^(a)



Sources: Dealogic, S&P Capital IQ and Bank calculations.

(a) Sample includes all UK private non-financial corporations with balance sheet data available on S&P Capital IQ. Private equity owned companies are identified in two ways: (i) from a search on ownership within S&P Capital IQ; and (ii) from a search of private equity sponsored deals within Dealogic.

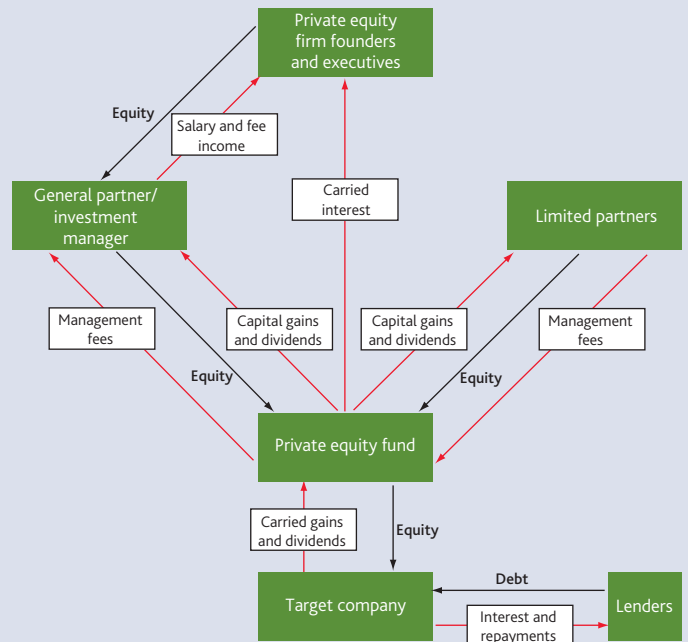
(1) The author would like to thank Tamara Li for her help in producing this article.

How is a private equity buyout structured?

A stylised illustration of a typical private equity buyout is shown in **Figure A**. The black arrows in **Figure A** represent the flow of capital in a private equity sponsored buyout. A private equity firm will typically establish a number of funds, each one ring-fenced for a different set of investments. The private equity firm and/or its staff typically invests its own capital into the fund. This capital sits alongside equity commitments from institutional investors or 'limited partners'. When the general partner/investment manager finds a prospective investment, it will use a portion of the fund's capital, combined with bank debt, to purchase the target company.

Red arrows in **Figure A** represent the payment of interest, fees, dividends and capital gains. Throughout the life of the fund — usually ten years with a possible two-year extension — the general partner/investment manager collects management fees (usually around 2% of the investment) from the limited partners, for which it returns dividends during and at the end of the investment. The private equity firm also takes a share of profits in the form of 'carried interest'. On funds established before the 2007–08 financial crisis, this usually amounts to around 20% of fund profits, once a certain hurdle rate (such as 8% return on equity for the limited partners) has been met.

Figure A Stylised illustration of a typical private equity buyout structure

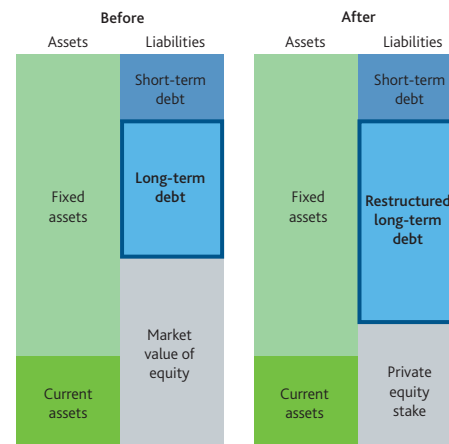


Sources: Centre for the Study of Financial Innovation (CSFI) (2010), Financial Services Authority (FSA) (2006) and Institute of Chartered Accountants in England and Wales (ICAEW) Corporate Finance Faculty (2010).

A key aspect of private equity investments is their use of debt. Most company buyouts are leveraged, meaning that investor equity is combined with debt in order to purchase a 'target' company. After acquisition, that debt becomes a liability of the purchased company. This is shown in **Figure 1**. The construction of a fund's portfolio of purchased firms in this way means that lenders only have recourse to the assets of the individual firm in the event of failure of that firm, and not to the assets of the other firms in the fund's portfolio. The use of debt in buyouts became particularly prominent in the run-up to the 2007–08 financial crisis, and has implications for the fragility of the corporate sector and, consequently, the resilience of the financial system.

This article investigates the implications of the leverage associated with private equity deals for the stability of the UK financial system. The first section sets out some background on private equity and its involvement in the UK corporate sector. The second section reviews some benefits and drawbacks of private equity buyouts for the 'target' company. The third section sets out two key risks for financial stability arising from the increased leverage associated with private equity deals, with a box on page 43 summarising some of the findings from the academic literature. The final section briefly discusses current private equity activity in the United Kingdom.

Figure 1 Stylised balance sheets before and after the leveraged buyout of a publicly listed company



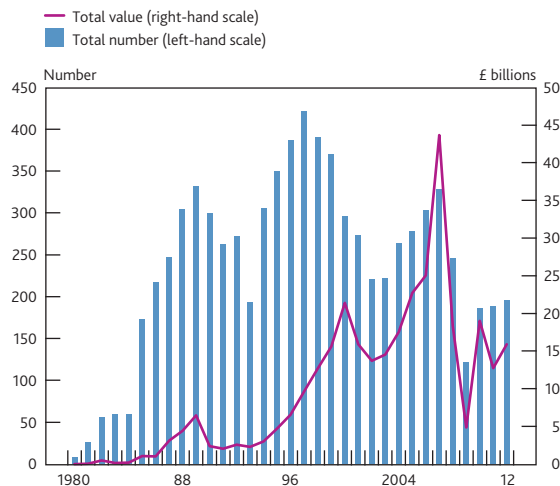
Private equity and the UK corporate sector

Acquisitions of companies by private equity funds rose to prominence in the 1980s in the United States. While a large volume of deals were also undertaken in the United Kingdom at this time (**Chart 2**), they were far smaller in value.

This picture changed in the late 1990s, with a pickup in deals involving larger UK companies. In the mid-2000s, private equity buyouts of companies with a total transaction value above £500 million accounted for over half of total

buyout activity (by value), with some of the largest deals taking place in 2007 (Table A).

Chart 2 Acquisitions of UK companies by private equity funds^{(a)(b)}



Sources: Centre for Management Buy-out and Private Equity Research (CMBOR), Equistone Partners Europe, Ernst & Young and Bank calculations.

(a) Value is defined as total transaction value (that is, it includes both debt and equity used to acquire a company).

(b) Acquisitions in this chart, and subsequent charts that use CMBOR data, include 'buy-ins', which usually involve a change of management, and 'buy-outs', in which the existing management is retained.

Table A Five largest UK private equity deals, 2000–08

| Company | Type of buyout ^(a) | Year of deal | Value ^(b) (£ billions) |
|---------------------|-------------------------------|--------------|-----------------------------------|
| Alliance Boots | P2P | 2007 | 11.1 |
| MEPC | P2P | 2000 | 3.5 |
| Acromas (AA & Saga) | SBO | 2007 | 3.4 |
| EMI | P2P | 2007 | 3.2 |
| Spirit Amber | Divestment | 2003 | 2.5 |

Source: ICAEW (2010).

(a) P2P = public to private; SBO = secondary buyout.

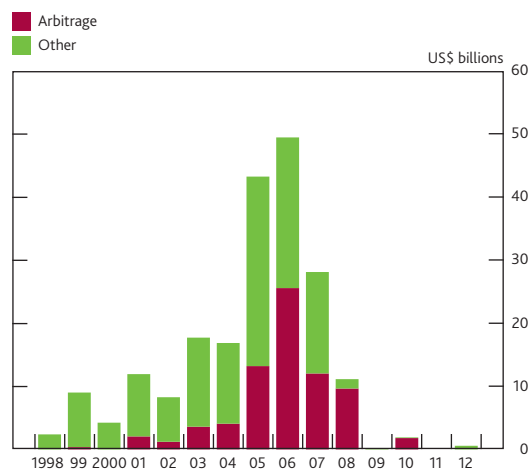
(b) Value is defined as total transaction value (that is, it includes both debt and equity used to acquire a company).

The growing importance of larger deals coincided with a loosening in credit conditions on lending used to fund acquisitions by private equity companies. Banks started to relax both the price and non-price terms and conditions of these loans in order to compete for business. The relaxation of non-price terms meant that a new class of 'covenant lite' lending emerged, on which standard terms that protect the lender were removed. As a result of the loosening in the terms of credit, buyout funds were able to use more debt, and relatively less equity, in taking over a company. A consequence of the increased use of debt was that overall deal values — the total amount of equity and debt used to finance an acquisition — rose and debt to earnings ratios of acquired companies started to climb.⁽¹⁾

A significant factor in the dramatic increase in the quantity of buyout debt was the 'originate to distribute' model. Banks originating leveraged loans used to finance buyouts became

less focused on the inherent risks of the transaction and more focused on collecting arrangement fees. For example, the Financial Services Authority (FSA) report into the failure of the Royal Bank of Scotland cited a decision by the bank's Board in 2006 to undertake an aggressive expansion strategy in leveraged finance as an important factor in the scale of the bank's eventual credit losses. After origination — and until leveraged loan markets froze in 2008 — banks were able to sell down (that is, 'distribute') leveraged loan exposures to non-bank entities such as collateralised loan obligations (CLOs). The demand for leveraged loans was high because many market participants were 'searching for yield'.⁽²⁾ Chart 3 illustrates the importance of CLOs in this originate to distribute model — arbitrage CLOs, which primarily contain private equity sponsored leveraged loans, grew dramatically between 2004 and 2006.

Chart 3 European CLO issuance, by type



Sources: Dealogic and Bank calculations.

The use of leverage, however, varied (and continues to vary) greatly across sector and deal size. Some industries provided more popular targets for leveraged buyouts because of their ability to take on leverage. For example, retailers, care homes, pubs and hotels were all common targets because of their property holdings (which could be used as collateral on leveraged loans) and relatively predictable cash flow generation. A common structure used in private equity buyouts was to purchase a company and split it into an 'OpCo' (the operating company) and a 'PropCo' (the property company). Under this model, the PropCo was able to borrow cheaply against the property it held, aided by a long lease with the tenant OpCo. This structure was designed to reduce the cost of the acquisition by cutting the firm's overall funding costs.⁽³⁾

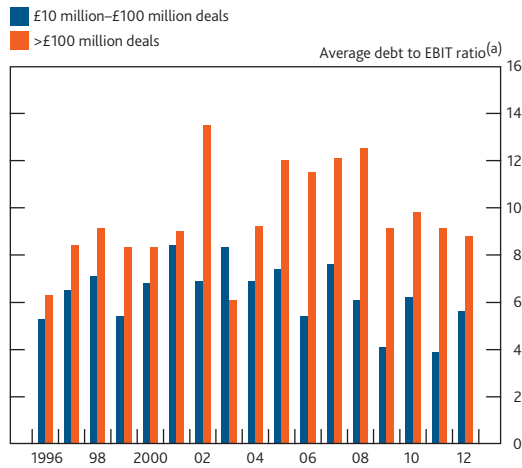
(1) See, for example, Axelson *et al* (2012).

(2) For a discussion of the 'search for yield', see, for example, the December 2005 Bank of England *Financial Stability Review*.

(3) The article 'Commercial property and financial stability' on pages 48–58 of this *Bulletin* discusses the OpCo/PropCo structure in the context of the link between the commercial property market and financial stability.

Lower-value buyouts, in which targets are more likely to be privately owned companies than publicly listed ones, tend to be less leveraged. **Chart 4** shows that deals greater than £100 million in value, represented by the orange bars, typically result in a much larger ratio of debt to earnings for the target company. The difference in leverage between small and large deals also became much starker from the mid-2000s.

Chart 4 Entry debt to earnings ratios on acquisitions of UK companies by private equity funds



Sources: CMBOR, Equistone Partners Europe, Ernst & Young and Bank calculations.

(a) EBIT: earnings before interest and tax.

Merits and drawbacks of private equity ownership

The pros and cons of the private equity ownership model are debated in the academic literature, as well as in other publications.⁽¹⁾ Economic theory can be used to suggest a number of benefits of private equity ownership, largely arising from the potential for improved alignment of interests between the managers and the owners of a company.

One such benefit put forward in favour of the private equity buyout is its use of debt financing and the disciplining effects this brings.⁽²⁾ Greater leverage introduces regular interest payments, reducing 'free' cash flow. Lower free cash flow can help to exert discipline on company management by removing resources that could otherwise be used by management to invest in negative net present value projects. Other benefits of private equity ownership that are often cited are listed in the first column of **Table B**.

But there can be disadvantages relating to the use of debt financing (second column of **Table B**). Capital gains on a private equity investment reflect any value added in restructuring the company, for example by raising revenues and increasing margins. These gains should, to a certain extent, be determined by the skill of the general partner in setting strategy and, in some cases, introducing new management. But they are also a function of deal leverage: in

Table B Potential advantages and disadvantages of private equity funded buyouts

| | Advantages | Disadvantages |
|--|--|---|
| Greater use of debt financing, in particular for larger buyouts | Disciplining effects on cash-flow management (Jensen (1989)). | Increases probability of default. |
| Time horizon | Buying out a listed company and taking it out of the public spotlight could ease pressure to meet short-term revenue or profitability targets (ICAEW (2008)). | Decisions, especially those made near to the end of a private equity fund's lifetime, could still be short term in nature, such as hoarding cash flow and cutting investment (Kosman (2009)). |
| Shareholder control | By giving one owner, rather than a fragmented group of shareholders, complete control, the private equity model allows greater shareholder influence over management (Kay (2012)). | Private equity ownership can introduce its own 'principal-agent' problems, caused by conflicts of interest between the general and limited partners (IOSCO (2010)). |

certain cases, the total cost of an acquisition will fall with the amount of debt funding used, implying that returns can be increased through greater leverage.⁽³⁾ Some commentators (for example Kosman (2009)) focus on the potential destabilising effects caused by leverage, which can become particularly overused in periods of loose credit conditions when debt is mispriced. An increase in investors' valuation of comparable firms over the private equity firm's holding period will also affect returns: in times of generally rising equity markets, private equity firms could expect to profit simply by holding an investment in a company.

The extent to which private equity buyouts result in a longer-term outlook than other types of shareholder is also contested. Although taking a company private puts it outside of the public spotlight, private equity firms are sometimes accused of short-term decisions to hoard cash flow, cut costs (including investment) and raise prices in order to allow a quick sale at a profit (Kosman (2009)). Such actions would be detrimental to the firm over a longer time horizon. In addition, the incentive structure of the relationship between general partner and limited partner has been questioned, with some arguing it has its own principal-agent problems. These problems could be caused by conflicts of interest between limited partners and the general partner. One example of a potential conflict — raised in IOSCO (2010) — is that general partners might operate multiple funds with competing or conflicting investment strategies. So even though a decision to allocate an investment to a particular fund might be rational from the overall private equity firm's perspective, it might not best serve the interests of limited partners participating in just one of those funds.

(1) See, for example, CSFI (2010) or Kosman (2009).

(2) See Jensen (1989).

(3) This results from a failure of the Modigliani-Miller (M-M) Capital Irrelevance Theorem (1958). A failure of M-M rests on there being financial frictions that distort the relationship between the cost of debt and the amount of equity. If capital markets were fully efficient, the capital structure of a transaction would have no impact on its overall cost of funding. A variety of information and incentive problems and policy distortions (for example the tax deductibility of debt) are widely believed to cause deviations from this theoretical equilibrium.

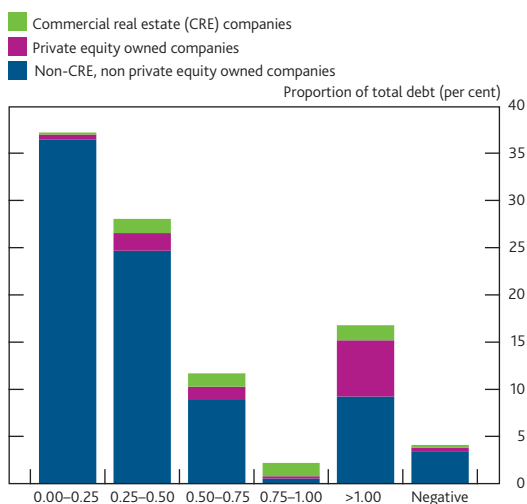
The following section of this article focuses on the use of debt in private equity buyouts, examining two potential financial stability risks: first, the implications of buyout debt for the fragility of corporate sector balance sheets; and second, the refinancing challenge associated with maturing buyout debt.

Risks to financial stability

Corporate sector fragility

A consequence of the increased use of debt financing on buyouts in the mid-2000s was that debt to earnings ratios, in particular on deals in excess of £100 million, climbed to persistently high levels. **Chart 5** illustrates that private equity owned companies typically have higher income gearing than other companies in the United Kingdom, as shown by the concentration of private equity owned companies with an income-gearing ratio over one.

Chart 5 2010 income-gearing distribution of private equity owned versus other companies^{(a)(b)(c)}



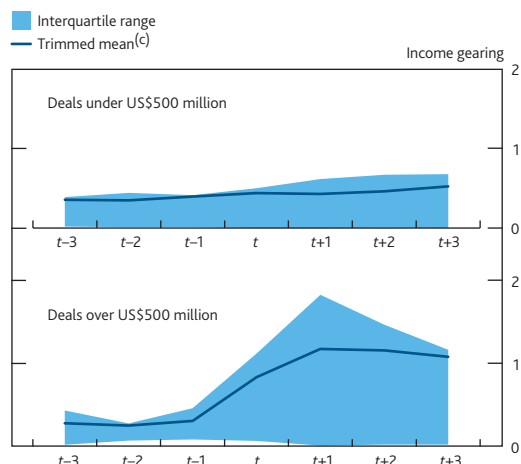
Sources: Dealogic, S&P Capital IQ and Bank calculations.

- (a) Distribution of income gearing, by firm, weighted by total debt.
- (b) Sample includes all UK private non-financial corporations (PNFCs) with balance sheet and income statement data available on S&P Capital IQ. Private equity owned companies are identified in two ways: (i) from a search on ownership within S&P Capital IQ; and (ii) from a search of private equity sponsored deals within Dealogic. Note that S&P Capital IQ balance sheet and income statement data do not fully capture the UK PNFC sector.
- (c) The definition of income gearing used is 2010 interest expenses divided by the average of 2006–10 operating income.

Not only are private equity owned companies more leveraged than their peers, but, as one might expect, their leverage often increases at the point of acquisition. **Chart 6** shows that the mean income gearing of companies involved in large deals rises sharply upon acquisition.

One risk to the UK financial system from these debt levels is the heightened fragility of the corporate sector. Specifically, higher debt levels could make companies less likely to undertake long-term investment if that investment is crowded out by the costs of servicing debt. Lower investment affects the productive capacity of the economy and could therefore have an indirect effect on the financial system via lower long-term corporate profitability. Higher debt levels could

Chart 6 Change in income gearing after initial acquisition by private equity fund^{(a)(b)}



Sources: Dealogic, S&P Capital IQ and Bank calculations.

- (a) 't' is the year in which the firm was taken over. The sample includes acquisitions between 1993 and 2010.
- (b) Income gearing is defined as net interest expense divided by operating income. Income gearing is set to 0 for any firm with positive net interest income and to 2 for any firm with negative income. Quartiles are recalculated each period and therefore may contain different firms in different periods.
- (c) Ten per cent of the sample is excluded (5% at either end of the distribution).

also make companies more likely to default. This would have a direct effect on the financial system through increased losses on bank lending.

Academic evidence on the impact of leveraged buyouts on investment is inconclusive. Long and Ravenscraft (1993), find that leveraged buyouts (LBOs) result in a reduction in research and development (R&D) expenditure, but that LBOs tend to take place in low R&D industries anyway. Lerner, Sorensen and Strömberg (2011) find that, in the years following private equity buyouts, target firms do not noticeably change investment behaviour, but perhaps pursue more important and influential innovations. Similarly, the impact of private equity funded LBOs on firm distress is unclear. Hotchkiss, Smith and Strömberg (2012) find that leverage accounts for the higher default rate of private equity owned firms relative to other firms. But Wilson *et al* (2012) find no difference in the failure rate after 2003. The box on page 43 sets out key findings of the academic literature in more detail.

One caveat to these results, however, is that the majority of academic studies are unweighted by firm size. Given the fact that higher-value deals, especially in the mid-2000s, were typically more leveraged, this might underplay the relationship between private equity ownership, leverage and distress.

A more complete picture on the success or failure of companies bought out at the peak of the leveraged lending boom might not become clear for many years. As can be seen from **Chart 7**, the majority of private equity investments from 2006 onwards have not yet been exited.⁽¹⁾ This is partly

(1) A private equity 'exit' is the exit of the private equity investor in a target company. This can arise through an initial public offering, insolvency, or a sale to another company, private equity firm, or investor.

Findings from the academic literature

This box provides a brief overview of the — largely mixed — findings from the academic literature on the performance of private equity and how private equity ownership affects firms' investment and likelihood of distress.

Private equity fund performance and leverage

Data published by trade bodies (for example, the British Venture Capital Association and European Venture Capital Association) show that buyout fund returns consistently outperform other forms of private equity investment, as well as other, alternative, asset classes.

Academic studies, however, reveal more mixed results. For example Kaplan and Schoar (2005) and Phalippou and Gottschalg (2009) show that private equity funds earn gross returns that exceed the S&P 500 average, but that once fees are taken into account, the net return is equal to or lower than S&P 500 average returns.

Axelson, Strömberg and Weisbach (2009) highlight the procyclical nature of the private equity industry, with a theoretical paper arguing that general partners have the incentive to invest in 'bad deals' in periods of loose credit conditions. A follow-up empirical paper by Axelson *et al* (2012) finds that variation in economy-wide credit conditions is the main determinant of leverage in buyouts, and that greater deal leverage is associated with higher deal values and lower investor returns.

Private equity ownership and investment

Lerner, Sorensen and Strömberg (2011), in a study of 472 leveraged buyout (LBO) transactions between 1980 and 2005, find that in the years following private equity buyouts, target firms do not noticeably change investment behaviour — proxied by the level of patenting activity — but that the number of patent citations does increase, perhaps indicating that private equity owned firms pursue more influential innovations.⁽¹⁾

Long and Ravenscraft (1993), using US data from 1977–91, find that LBOs result in a reduction in research and development (R&D) expenditure, but that LBOs tend to take place in low R&D industries anyway.

Private equity ownership and distress

In a study of US companies that took out leveraged finance between 1997 and 2010, Hotchkiss, Smith and Strömberg (2012) find that private equity owned firms typically have a higher annual default rate than other firms — 5.1% compared to 3.4%. This wedge disappears once leverage is controlled for, indicating that the prevalence of debt might explain the higher

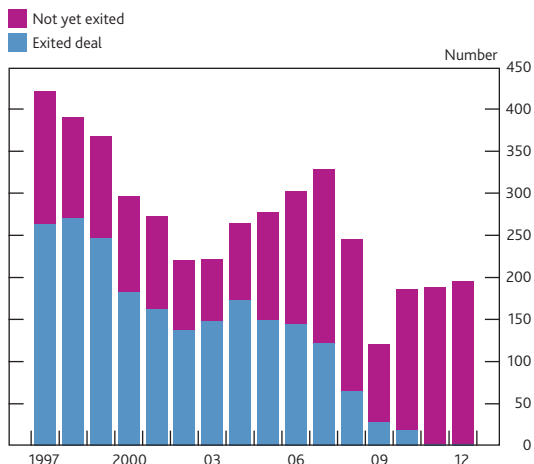
failure rate among private equity owned firms. The authors also find that distressed private equity owned firms are more likely to be restructured successfully — in terms of avoiding liquidation — than non private equity owned firms.

In evidence from a UK population of firms over the period 1995–2010, Wilson *et al* (2012) find that private equity backed companies perform more strongly (higher return on assets, higher interest cover, higher gross margin) than a matched sample of private and listed companies both before and during the recent recession. They also find that bought-out companies have a higher failure rate than other companies, but this does not apply for deals completed after 2003. And Andrade and Kaplan (1998), in a study of highly leveraged transactions that subsequently become financially distressed, find that the net effect of a highly leveraged buyout which subsequently becomes distressed is to leave the value of the company slightly higher.

The evidence on private equity ownership and distress is therefore mixed. But more time is needed to get a full picture of the effects of the recent boom in leveraged buyouts. As explained in the main text, the full picture will not be known until all private equity investments from this period have been exited. In addition, the majority of academic studies are unweighted which, given the fact that higher-value deals were typically more leveraged, might underplay the relationship between private equity ownership, leverage and distress.

(1) The citation count of a patent is the number of times the patent has been cited by other patents in the calendar year of the patent grant or the three calendar years following that.

Chart 7 Status of acquisitions of UK companies by private equity funds, by year of deal^{(a)(b)}



Sources: CMBOR, Equistone Partners Europe, Ernst & Young and Bank calculations.

- (a) Added together, the bars represent the total number of private equity sponsored acquisitions in a particular year.
 (b) Exit rates as of end-2012.

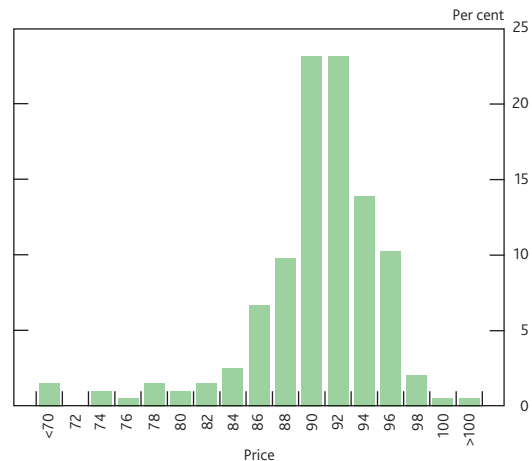
because the lifetime of a private equity fund is typically around ten years and many investments are not realised until towards the end of this period (ICAEW (2012)). But it is also likely to be due to the generally low level of mergers and acquisitions and initial public offerings since the crisis. The average time to exit for large (>£100 million) private equity buyouts completed in 2002 was less than three years. On the basis of current exit rates, the average exit time for 2008 deals could be over six years. And this rump of unrealised investments could be where problems are most likely to materialise, especially if private equity firms choose to extract dividends from the companies they own without any underlying improvement in corporate fundamentals. Market contacts report some signs of this, with several 'dividend recapitalisations' taking place in 2012.⁽¹⁾

Evidence of a link between private equity ownership and distress should most clearly become apparent in insolvency rates. While insolvencies in the United Kingdom have accounted for around 30% (in unweighted terms) of private equity exits since 2009, these make up less than 1% of overall UK insolvencies. But the aggregate rate of corporate insolvencies is currently much lower than that experienced in the 1990s recession. Given the large build-up in debt before the financial crisis, a larger rise in insolvencies might have been expected. The low level of interest rates combined with the practice of bank forbearance are two possible explanations for this.⁽²⁾

Moreover, there is evidence from a recent FSA study that the practice of forbearance is particularly widespread on debt exposures associated with private equity sponsored acquisitions. This study revealed that around a third of the £35 billion of major UK banks' leveraged loan exposures to European companies are benefiting from forbearance.⁽³⁾ This

would seem to indicate a high level of borrower distress. The pricing of leveraged loans is also indicative of market expectations of a high level of eventual default, with a long tail of loans held in European CLOs priced at a significant discount (Chart 8).

Chart 8 Distribution of underlying loan prices in European CLOs^{(a)(b)}



Source: Bank of America Merrill Lynch Global Research.

- (a) Data as at 30 January 2013.
 (b) A price of 100 indicates that the loan is priced at 'par' value. Most loans are prepayable at par on any coupon date. A price below 100 indicates that the loan is priced at a discount.

In summary, it is clear that leverage of the UK corporate sector has increased as a result of larger private equity acquisitions. And the high level of forbearance on leveraged loans, alongside current market prices, would seem to indicate elevated risks of default. But given the long lifetimes of private equity funds, low interest rates and the current attitudes of lenders towards forbearance, a more complete picture on the success or failure of companies bought out at the peak of the leveraged lending market may not become clear for a number of years.

The refinancing challenge

The second risk highlighted in this article is also heavily influenced by exit prospects for private equity firms and relates to the maturity, rather than the amount, of buyout debt.

The low level of exits, combined with a weak macroeconomic backdrop, suggests that many private equity owned companies may not currently be able to repay their leveraged loans and will therefore have to refinance. Failure to meet this refinancing challenge might result in default and therefore implies risks for bank exposures to private equity owned companies. Two circumstances make the refinancing challenge particularly acute: first, the clustering of leveraged loans

(1) A 'dividend recapitalisation' occurs when a company incurs a new debt in order to pay a dividend to equity holders.

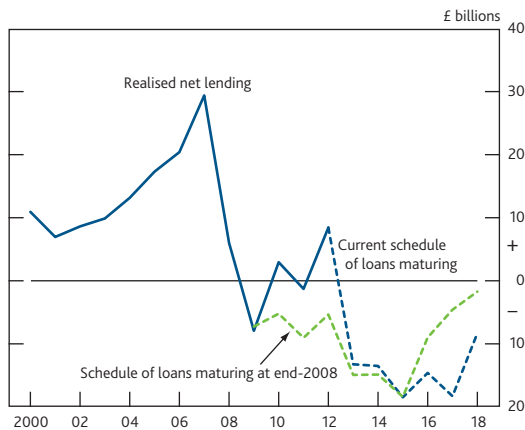
(2) See, for example, the November 2012 Bank of England *Financial Stability Report*, for a more detailed explanation.

(3) Data as at end-2011.

maturing over the next couple of years; and second, large changes to the investor base for leveraged loans since the 2007–08 financial crisis.

The average maturity of UK LBO debt is around seven years. Given that the peak in debt issuance was around 2007, there is a significant ‘hump’ of maturities from 2014. **Chart 9** shows where this cliff currently stands, but also estimates where it has stood in the recent past. The solid blue line reflects realised net lending — that is, loans being originated in a particular period minus loans maturing in that period. The dashed lines represent the schedule of loans maturing — or ‘refinancing cliff’ — at different points in time. The green dashed line shows that by end-2008, the scale of previous loan issuance had resulted in a refinancing cliff which peaked in 2015. Between 2008 and 2012, however, refinancing activity (some of which might be limited to forbearance), as well as further issuance, pushed out the cliff further — this is shown in the blue dashed line. As it currently stands, £32 billion of LBO debt is expected to mature in the period 2014–15, with a further £41 billion in the period 2016–18.

Chart 9 Net lending to private equity owned companies in the United Kingdom^{(a)(b)(c)}



Sources: Dealogic and Bank calculations.

- (a) The solid line shows net lending to leveraged companies with a financial sponsor (usually a private equity firm) in the United Kingdom (that is, loans being originated in a particular period minus loans maturing in that period). The dashed lines show the schedule of loans maturing at different points in time. The schedule of upcoming loans maturing is adjusted for refinanced loans, but the mapping between original and refinanced loans is imperfect, meaning that the chart may overestimate the scale of the refinancing cliff.
- (b) The Dealogic search was for UK syndicated lending to companies with a financial sponsor. The main use of proceeds for the majority of these loans is ‘LBO/MBO’, although categories such as ‘refinancing’ and ‘dividend recapitalisation’ are also captured.
- (c) As at 30 November 2012.

The refinancing challenge is exacerbated by the fact that, for much of the debt related to private equity acquisitions, a large lump sum will need to be repaid when loans mature. Some LBO debt is amortising — that is, the principal is repaid over the life of the loan. But a substantial portion is structured as a ‘bullet’ repayment: the principal is only repaid at the date of maturity. Of the £160 billion UK leveraged loans that were originated with a maturity of 2012 or later, £14 billion, or 9%, are amortising, meaning that only a minority of leveraged loan exposures will have been paid down after origination.⁽¹⁾

The identity of the debt holder is also important in understanding risks around the refinancing cliff. While leveraged loans were usually originated by a single bank or small group of banks, much of this was distributed after origination to other banks, as well as to non-banks such as CLOs. After the collapse of Lehman Brothers, the leveraged loan market shut down and many originating banks were left with ‘pipeline’ loans that could no longer be distributed. In the short term, the dramatic drop in CLO capacity — especially in Europe — led to unexpected bank exposures on recently originated loans.

But the drop in CLO capacity also affects longer-term refinancing conditions — market contacts indicate that since many European CLOs’ portfolios become fixed from 2014 onwards, they will no longer be able to refinance existing loans. Market contacts also point out that many banks are constrained in providing refinancing options given their focus on balance sheet repair. This change in the investor base for leveraged debt heightens the risk of firm difficulty around the refinancing cliff due to the shortage in the United Kingdom of other financing options, especially for low-rated companies. For example, the high-yield bond market — a potential source of refinancing — is much less developed in the United Kingdom than it is in the United States.

The wide distribution of leveraged loans to different parts of the financial system — associated with the originate to distribute model — further compounds the refinancing problem. If a leveraged loan associated with a particular deal is held by a wide range of investors, it can be very hard for lenders exposed at different points in the debt hierarchy to agree on a refinancing solution.

Recent activity involving private equity

The discussion above demonstrates that high leverage deals that were undertaken in periods of loose credit conditions potentially present a significant risk to the financial system. This risk comes through the leveraged loan exposure of UK banks, as well as through the effects of leveraged buyouts on corporate indebtedness.

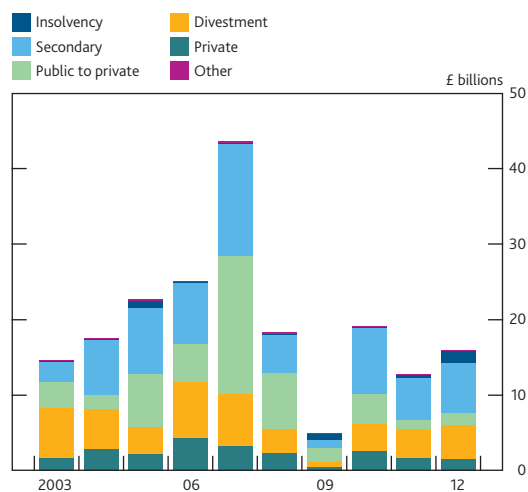
It will be important to monitor this risk from previous acquisitions by private equity funds. And from a macroprudential policy perspective, there is also a need to remain alert to any return to the debt levels used on acquisitions in the run-up to the 2007–08 financial crisis.

There might, however, be an important role for buyout funds to play in promoting economic recovery at the current juncture. By taking over struggling companies and restructuring them, private equity might be able to play a part

(1) This calculation assumes that only ‘Term Loan A’ tranches are amortising.

in increasing the productivity of the UK corporate sector. Activity in the UK buyout market, however, is currently relatively subdued. As **Chart 10** shows, there were very few transactions in 2009, and the market has been dominated by secondary buyouts (the sale of a company from one private equity fund to another) since then. Conversations with market contacts confirm that, in contrast with the United States, where many investors report that the buyout market is showing renewed signs of activity, the market in the United Kingdom remains much less active than before 2008.

Chart 10 Acquisitions of UK companies by private equity funds, by source



Sources: CMBOR, Equistone Partners Europe, Ernst & Young and Bank calculations.

The number and value of private equity sponsored acquisitions picked up following the early 1990s recession (**Chart 2**), which might indicate some role for private equity in a recession. In addition, Davis *et al* (2011) have argued that private equity fosters creative destruction in the US labour market — that is, a faster pace of job reallocation, with more job destruction but also more job creation. And a study from Oliver Gottschalg and Golding Capital Partners (2011) on realised private equity buyouts shows that the added value in

private equity returns is greatest during equity market downturns. There is some recent evidence that this may be taking place in the United Kingdom — private equity firms taking ownership of insolvent companies has accounted for 11% of buyout activity in 2012, compared to 3% of total private equity sponsored buyouts in 2011.

Conclusion

This article has outlined risks around the involvement of private equity firms in the UK corporate sector. In the mid-2000s, there was a dramatic increase in the value of private equity sponsored buyouts of UK companies. Aided by loose credit conditions, the leverage on these buyouts, in particular on large deals, was high.

While it is argued in some of the academic literature that a key strength of the private equity buyout is its use of leverage in imposing discipline on company management, the amount and maturity profile of buyout debt could present risks to UK financial stability. In particular, the increased indebtedness of the private equity owned corporate sector makes it more fragile and more susceptible to default. The refinancing challenge associated with the approaching hump in maturing debt compounds this risk. There is no clear evidence yet of a higher default rate among private equity owned companies, but there has been some evidence of the poor performance of loans to private equity sponsored firms since the crisis began. Nonetheless, a complete picture will not become clear until more investments from the mid-2000s have been exited. The FPC, in its role to protect and enhance the stability of the financial system of the United Kingdom, will continue to monitor potential risks to financial stability from private equity sponsored activity.

That said, there might be an important role for private equity funds at the current juncture in promoting economic recovery by restructuring struggling companies. The level of new buyout transactions, however, currently remains subdued.

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