Oxera

Agenda Advancing economics in business

Realising value: private equity and the IPO exit route

Private equity houses have a number of routes available to exit from their investments, one of which is to float a portfolio company via an initial public offering on a stock market. How important is the IPO route to exit, what are the markets of choice for taking PE-backed companies public, and what is the share price performance of PE-backed IPOs in the after-market?

Private equity (PE) firms look for an exit route that allows them to realise a high return on their investment in a company and recycle cash into new investments once they have added maximum value by re-financing or improving the company's performance. Taking the company public in an initial public offering (IPO) is one of the exit routes available. An IPO may deliver higher returns than other forms of divestment through the higher valuations that may be achieved in the public equity markets; it may also provide the company with continued access to further equity finance required to secure future growth. However, the IPO process can be costly, with an outcome that may be deemed too uncertain for PE investors looking for a quick and sure exit. Furthermore, since IPOs typically involve lock-in agreements, which require PE firms to retain a stake in the company for some period after the flotation, they do not usually represent a complete exit.

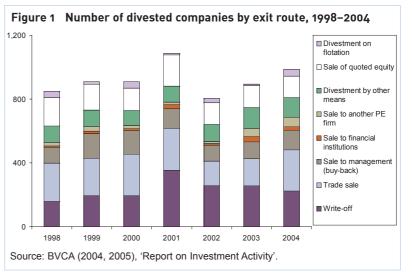
sale) or to another PE firm or financial institution; they can accept a buy-back from company management; or they may have to write off the investment if it has not been successful.

Figure 1 presents the relative importance of different types of exit route in the UK during the period 1998–2004, by number of divested companies. The IPO route forms a relatively small proportion of exits for PE houses—ranging between 1% and 5% during the period. If the subsequent sale of equity stakes in already publicly quoted companies is included, the recorded share of divestments via the stock markets increases to 18% in 2004 (20% if averaged during the period). In comparison, the number of companies divested via trade sales comprised 26% of the total in 2004 (24% on average during the period).¹

This article first examines the importance of IPOs as an exit route for PE firms in the UK. It then presents evidence on the share price performance of PE-backed companies following IPO on London's equity markets in particular, how do PE-backed IPOs perform in the after-market compared with other IPOs? The results draw on a study conducted by Oxera for the British Venture Capital Association (BVCA) and the London Stock Exchange (LSE).

PE exits via the IPO route

As an alternative to floating a company on the stock market in an IPO, PE firms can exit from their investment by selling their equity stakes to other companies (trade



This article is based on Oxera (2006), 'The London Markets and Private Equity-backed IPOs', prepared for the British Venture Capital Association and the London Stock Exchange. Available at www.oxera.com.

The IPO exit route is more important if measured in terms of total value of divestments. For example, while IPOs accounted for only 4% when measured in terms of divested companies in 2004, BVCA data suggests that around 10% of the total amount divested (measured at original cost) flowed through the IPO route.² However, trade sales remain the single most significant exit route (27% of the amount divested).

The larger share of IPOs, if measured by divested amount rather than by number of companies, can be explained by the fact that IPOs tend to be used mainly for larger PE-backed companies. Moreover, the share of IPOs would increase further if consistent data were available on total divestments measured at market values rather than original cost, since it is principally the most successful investments that make it to flotation.

Choice of market for PE-backed IPOs

The LSE currently has the most active IPO market in the world, attracting more new issuers than any other exchange in Europe and the USA.³ A significant proportion of these IPOs are backed by PE investors.

Figure 2 reports the number of IPOs of UK companies on the two London markets—the LSE's Main Market and the Alternative Investment Market (AIM)—aggregated over the period 1998–2004 and distinguishing between IPOs with PE involvement and those without. While AIM has been particularly successful in attracting IPOs overall, PE-backed IPOs are more frequent on the Main Market. Indeed, nearly half of all IPOs on the Main Market were PE-backed. In comparison, PE backing applied to just under 8% of IPOs on AIM. This is consistent with the previous observation that flotations tend to be used as an exit route mainly for the larger PE-backed companies, which are more likely to seek a listing on the Main Market. As also shown in Figure 2, IPOs on the Main Market are significantly larger than those on AIM. The total market value of companies admitted to the Main Market significantly exceeds that of companies on AIM, despite the lower overall number of Main Market IPOs.

PE backing on AIM is more significant when measured in terms of the market value of the floated companies rather than absolute IPO numbers. While less than 8% of IPOs on AIM were PE-backed, the relative market value of those IPOs amounted to more than 16%. On average, PE-backed IPOs on AIM were more than twice as large as other IPOs.

Evidence of outperformance?

PE firms have been criticised for loading the businesses in which they invest with debt and pocketing rich rewards by taking the companies public. The alternative view is that PE involvement in companies is good news—turning the companies around, improving their business operations and delivering superior returns for public shareholders.

What is the evidence? In particular, how do PE-backed IPOs perform in terms of shareholder returns following flotation on the LSE, and how does the return performance compare with UK IPOs that are not backed by PE?

To examine these questions, a dataset was created containing all IPOs of UK companies on the LSE's Main Market during the 1998–2004 period. After removing collective investment vehicles from the sample, excluding IPOs that took place in the bubble years 1999 and 2000, and deleting observations with insufficient price data, the final analysis was based on a sample of 62 IPOs on the Main Market. Containing 32 IPOs with PE backing and 30 without, the sample was reasonably balanced in terms of company size, industry and year of IPO. Total shareholder returns were calculated over the first year

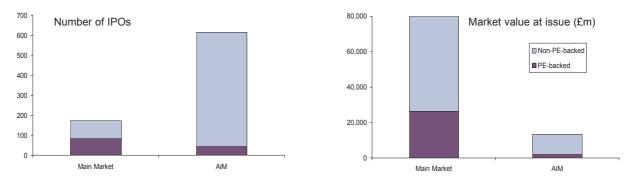


Figure 2 Total number and market value of PE-backed and other IPOs in London, 1998-2004

Note: IPOs exclude non-UK companies, investment trusts and other types of collective investment vehicle. PE-backed IPOs were identified by matching LSE data on IPOs with data on PE involvement provided by the BVCA. Source: Oxera (2006), op. cit.



following the IPO for each stock in the sample, adjusted to take account of the stock's risk and general market movements.⁴

Figure 3 presents the results, tracking the risk-adjusted abnormal returns that a buy-and-hold strategy would have earned over one year after IPO for two portfolios one containing all 32 PE-backed companies and one containing the 30 companies without PE backing. The reported average returns are market-value-weighted, with each stock in the portfolios weighted according to its market value at IPO date. The unweighted average returns show similar results.

Share prices tend to jump on the first day of trading, reflecting initial underpricing of shares offered in an IPO. This underpricing phenomenon has been much discussed in the academic literature, and can also be observed in Figure 3—average abnormal returns on the first day are 8.1% for PE-backed IPOs and 6.4% for other IPOs, suggesting that PE-backed IPOs tend to have a somewhat greater initial discount and first-day

premium. After the initial price jump, there is a distinctive dip in returns after a six-month period.

A particular issue of interest concerns share price movements around the time when lock-ins expire—ie, when directors and PE investors are allowed to sell their stake in the company they have taken public (often six months after the IPO or later). This issue was not examined in any detail in the study, although previous academic research does indeed suggest negative abnormal returns over the expiry event window.⁵

Instead, the results focus on the share price performance over the first post-IPO year as a whole. As

shown in Figure 3, after the six-month dip, returns of PEbacked companies start to increase to levels achieved on the first day of trading and beyond, while returns for non-PE backed IPOs remain Iow. Overall, the PE-backed IPO portfolio earned superior returns for investors during the first year of trading.

Table 1 summarises the results, giving average abnormal returns for each portfolio (unweighted and market-value-weighted) at several intervals during the one-year period. The table shows that PE-backed IPOs tended to consistently outperform the sample of IPOs without PE backing. Focusing on the value-weighted averages, which appear lower than the unweighted averages in both samples, the PE-backed portfolio return is 8.1% on the first day, increasing to 13.8% over one year. The portfolio of the non-PE-backed companies fares worse: the 6.4% first-day return is eradicated in the course of the first year—investors would have made a risk-adjusted abnormal return of -1.9% had they followed this investment strategy.

Table 1 Comparison of post-IPO performance of PE- and non-PE-backed companies, average abnormal returns (%)						
	Unweighted average			Market-value-weighted average		
	PE backing	No PE backing	Difference	PE backing	No PE backing	Difference
First day	12.4	9.8	2.6	8.1	6.4	1.7
First week	13.7	11.3	2.4	7.9	8.0	0.0
First month	14.9	11.6	0.0	10.6	7.0	3.6
First six months	5.7	2.0	3.8	3.5	-1.9	5.4
First year	15.2	6.1	9.1	13.8	-1.9	15.7

Note: The returns reported are average risk-adjusted buy-and-hold returns, calculated on the days specified in the table. The unweighted averages reflect the return of a portfolio consisting of an equal investment in each stock, while the value-weighted averages are calculated in proportion to the IPO value of each stock.

Source: Oxera (2006), op. cit.

These results indicate that PE-backed IPOs outperform other IPOs. However, it was not possible to establish whether the performance difference is significant in the statistical sense, because the sample size is relatively small, and the within-sample variation high. Hence, further research using a longer time period and larger sample would be required to establish the statistical significance of the outperformance of IPOs of PE-backed companies in the UK after-market.

There is a large body of literature on the impact of involvement of PE investors or, more specifically, venture capitalists (VC) on the IPO process and share price performance. However, much of the evidence is based on US data. For example, Brav and Gompers (1997) find a superior stock price performance of VC-backed IPOs during the 1972–92 period, although the performance difference largely disappears when the returns are weighted by the size of the offering.⁶ Gompers and Lerner (2001) compare the buy-and-hold returns of VCand non-VC-backed IPOs in the USA between 1976 and 1999, finding that VC-backed IPOs have significantly higher returns, especially during the mid- to late 1990s.7 Brav and Gompers (2004) establish a significant positive relationship between the degree of VC involvement (measured by VC board membership) and the long-run share price performance in a sample of US IPOs.⁸ These studies are consistent with the results presented in

Figure 3 and Table 1—ie, PE-backed IPOs of companies tend to deliver to public shareholders returns that are superior to those of other IPOs.

Concluding remarks

The IPO route to exit is chosen for only a relatively small number of PE-backed companies compared with trade sales or other exit routes, with IPOs tending to be undertaken mainly by the larger and generally more successful companies. Empirical evidence is limited in this area, and further research could be conducted to establish the costs and benefits of PE exits via the public equity markets relative to other routes.

A significant proportion of IPOs on London's equity markets are PE-backed—particularly on the Main Market but increasingly also on AIM. The empirical results presented in this article do not support any allegations of PE investors 'squeezing out' profits and then 'dumping' what is left on the market. Although further research should confirm the significance over a longer time period and for a larger sample of IPOs, the results are indicative—for public shareholders, PE-backed IPOs earned higher first-day premiums on average, suggesting that they had a greater degree of underpricing when they were brought to the market. They also tended to perform better in the following 12 months.

¹ The recorded numbers include partial and full divestments. There may also be a small degree of double-counting—for example, where more than one PE firm has divested from the same portfolio company.

² Source: BVCA (2004, 2005), 'Report on Investment Activity'.

⁸ Brav, A. and Gompers, P.A. (2004), 'Venture Capitalist Involvement and the Long-run Performance of IPOs'.

If you have any questions regarding the issues raised in this article, please contact the editor, Derek Holt: tel +44 (0) 1865 253 000 or email d_holt@oxera.com

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³ For a comparison of IPO activity across different stock exchanges, see PriceWaterhouseCoopers (2006), 'IPO Watch Europe—Review of the year 2005'.

⁴ The risk-adjusted abnormal returns measure the return a company earns over and above the beta-adjusted return on the FTSE 100 index. The company's beta was based on the beta of companies in the same FTSE industry sub-sector as the newly floated company. Source: London Business School Risk Measurement Service.

⁵ For a study using UK data, see Espenlaub, S., Goergen, M., Khurshed, A. and Renneboog, L. (2003), 'Lock-in Agreements in Venture Capitalbacked UK IPOs', ECGI Working Paper Series in Finance, 26/2003, European Corporate Governance Institute.

^e Brav, A. and Gompers, P.A. (1997), 'Myth or Reality? The Long-run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure Capital-backed Companies', *Journal of Finance*, **52**, pp. 1791–821.

⁷ Gompers, P. and Lerner, J. (2001), *The Money of Invention: How Venture Capital Creates New Wealth*, Boston, MA: Harvard Business School Press.