Methodological issues in estimating the impact of private equity buyouts on employment

By

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1. Introduction and summary

Media reports and claims by participants in the private equity business consistently claim that companies which have been bought out by private equity create jobs, and generate faster growth in employment than other companies. This report examines the surveys on which they are based, especially the methods used for selecting the companies, collecting data and calculating the contribution of private equity funds, and discusses the validity and interpretation of these results. It then discusses the main issues concerning data on this subject, and offers conclusions on future useful research.

The main findings can be summarised as follows:

- The major surveys conducted for the UK, EU, and USA private equity associations suffer from a number of flaws, both in sampling and in data quality, rendering their estimates of employment impact effectively worthless. Recent surveys in the UK by academics and journalists avoid many of these problems.
- Most of the assertions made by commentators, and some made by the reports themselves, cannot be justified on the basis of the evidence from existing surveys. The most reliable results suggest that buyouts generally depress wages but there is no clear overall effect on employment compared with other forms of ownership.
- Problems of self-selection and the difficulty of verifying data on employment arise from the information opacity which is a systematic feature of private equity buyouts.
- There is a need for (a) detailed research on the actual impact on employment, pay and industrial relations in each buyout in recent years (b) much greater information rights for employees and investors both before and after buyouts

2. Issues

2.1. Overview

Most of the discussion concerning the impact on employment of private equity (PE) buyouts is ultimately based on reference to a small number of surveys and reports. The next section examines five of the most relevant and influential reports: three published by private equity associations for the UK, Europe and the USA (BVCA/IE 2006; EVCA/CEFS 2005; NVCA/Global Insights 2007), one by the Financial Times (FT 2007), and one by academics at Nottingham (Amess and Wright 2007).

Other recent reports, such as those published by A.T.Kearney and The Work Foundation, rely principally on these surveys for their information (AT Kearney 2007; Thornton 2007). The Kearney report also references other reports by national associations of private equity groups, which may have similar flaws to those discussed below.

There are a number of methodological problems with all the surveys published by the PE associations of the UK, USA and Europe. None of these surveys can support the highly general claims that PE groups increase employment in companies in which they invest. The FT survey suffers less from these flaws, and the Amess and Wright survey addresses most of the methodological problems.

The soundest research, by Amess and Wright, is compatible with the hypothesis that the net contribution of private equity groups (as distinct from internal managers) is to deliver reductions in wages, and to deliver employment levels lower than the companies' potential, and that these are the mechanisms of an "opportunistic transfer of wealth from employees to new owners".

On wages, their evidence strongly suggests that PE buyouts have an overall effect of depressing wages. The evidence on employment is mixed. Evidence of growth in employment needs to be interpreted by comparison with comparable companies, in terms of sector and growth prospects.

2.2. Sampling issues

The issue that is currently most discussed is the effect of PE buyouts of companies which are stock exchange quoted (public companies). This is a different category of company from PE venture capital investment in small start-up companies. It is well known, and not contentious, that start-up companies which survive will show significant growth. A number of surveys however include data on both buyouts and venture capital investments, but then use the data to draw conclusions about buyouts. Such data may however reflect the positive impact of venture capital, and within the total, the impact of buyouts may be negative.

Voluntary surveys of firms can provide some useful data but cannot be regarded as representative where the respondents select themselves in ways which bias the results. Data collected from those who can choose whether or not to respond, or data collected from buyouts which have survived, risks giving an unrepresentative picture.¹

The numbers employed by PE companies has certainly risen over the last few years. But this is because the number and size of companies owned by PE funds has grown sharply in recent years in the UK, Europe and the USA – it does not necessarily reflect any growth at all in the individual companies. Of itself, this data tells us about the growth of PE funds (which is well known and not disputed) but nothing about whether employment in the companies themselves is higher or lower than it would have been without the change of ownership.

2.3. Data issues

Most surveys rely on data provided by respondents in the PE-owned companies themselves, which is not checked or verified, or use respondents' own judgments and opinions as raw data. This kind of data is less robust than verifiable public data.

Employment data is presented in some surveys as though it was derived by totalling information about individual companies, but this is not always the case. In the absence of good public data, some of the surveys use estimates based on general information about companies in a sector, rather than information about a sample of actual companies.

2.4. Interpretation issues

Any study of the effects of a specific phenomenon, such as PE needs to establish what difference that factor makes. Data on the employment changes in PE companies therefore needs to be compared with data on other similar companies which have not changed ownership. Such comparisons are sometimes made with trends in the whole economy, but should be made between PE and non-PE companies in the same sector – otherwise the comparison may simply reflect the fact that PE companies are in faster-growing sectors, for example.

There is a related issue which concerns interpretation of results. Within each sector, companies which are the subject of buyouts by PE funds are selected according to whether they can deliver sufficient growth to be worth more in 6 years time. This selected set of companies should therefore, in every sector, be generating faster growth in output and employment than others, before the PE fund bought them: if they are not, then the PE funds' own performance as selectors of growth companies would be worse than random. The companies, if well selected, may have continued to exhibit faster than average growth if they had not been the subject of buyouts.

3. Surveys

Five surveys are examined in this section: the three principal surveys covering the UK, USA and EU (each commissioned by the relevant association representing private equity and venture capital); and two other surveys concerning the UK, one by Financial Times journalists, and one study by academics at Nottingham University.

¹ The Global Insights 2007 survey shows the scale of failures for venture capital: out of 11,686 firms backed by venture capital between 1991 and 2000, 14% have been floated as stock exchange companies, 33% have been sold to other private investors or companies, 18% are known to have failed, and another 35% are still private or 'unknown' – but Global Insights says that "of these [the 35%] most have quietly failed". So almost half of the firms backed by venture capital have failed completely. (Global Insights p.11)

3.1. NVCA/Global Insight surveys (USA)

The USA venture capital association, the NVCA, publishes an annual report compiled by Global Insights. The latest version of this report was published in February 2007 (NVCA/Global Insights 2007); a previous report under the same title was published in 2004.

The report suffers from the inclusion of venture capital, unclear coverage, partial lack of sectoral comparisons, and data weaknesses including selective data, lack of data, and data estimates.²

The survey nowhere defines which sets of companies are covered by the survey figures. This makes interpretation of the figures very difficult.

Firstly, it appears that the survey includes venture capital start-ups as well as buyouts. Global Insights (GI) consistently use the phrase 'venture capital backed companies'. This means that the results cannot be used to draw conclusions about buyouts alone.

Secondly, it appears that the survey actually covers some large stock exchange quoted companies: the main section on employment says that: "Venture capital backed companies known for their innovative technology and business models, such as Microsoft, Intel, Genentech, and Starbucks, added more than 1.3 million jobs to the U.S. economy between 2000 and 2005, resulting in annual growth of approximately 2.9 percent." (page13) This implies that the set of companies covered includes all companies who had ever, at any stage, had private equity investors, in which case the employment and sales of companies are still included even years after they have been launched on the stock exchange. But it is implausible to claim that the growth of publicly listed companies should be attributable to PE investment at an earlier stage.

Thirdly, GI make some unexplained revisions to their previously reported data for earlier years. The 2007 report has different, lower, data on employment levels in 2000 and 2003 from the 2004 report (see table 1). The revisions are crucial to GI's claims about employment growth. GI estimates that the level of employment in PE firms in 2005 was 10.0million, but the previous report had said that employment in 2003 was 10.1 million – in which case GI would have had to report a **fall** in employment in PE-backed companies, compared with growth of 1.3% in the national economy. But GI avoid this by revising the figure for 2003 downwards, to 9.2 million, and so claims that employment in these companies has risen.

Table 1.	Changes in employment data between NVCA/Global Insight surveys of 2004 and 2007
(millions of er	nployees)

	GI survey 2004	GI survey 2007
2000	9.5	8.7
2003	10.1	9.2
2005		10.0

Finally, GI's figures are flawed by miscalculations. On their own data, they miscalculate the CAGR for 2003-2005 as 4.1%, when the correct figure is 4.3%; and the CAGR for 2000-2005 is miscalculated as 2.9%, instead of the correct figure of 2.8%

GI also revises in the 2003 data in the tables of employment in the largest states, with odd results. For example, GI are now telling Californians that PE supports 2.285 million jobs in their state in 2005, about 10% less than the figure of 2.471 million jobs in 2003 which the previous report had claimed. But that figure for 2003 has now been revised downwards to 2.173million, so GI claims the figure for 2005 represents a 2.5 percent annual growth rate in employment." (Page 20).

² The Economic Importance of Venture Capital Backed Companies to the U.S. Economy Third Edition NVCA/Global Insight 2007: page 23. <u>http://www.nvca.org/pdf/NVCA_VentureCapital07.pdf</u>

[&]quot;The second database consisted of 181 venture capital backed companies that offered IPOs during the January 1, 2003 to June 20, 2006 period. Sales and employment figures for all 181 companies were obtained and added to the database. The third database was comprised of 306 companies that received venture capital backed investment funds over the March 1, 2003 to June 30, 2003 period. Employment and sales data for 2005 were obtained for 143 of the 306 firms"

The data is presented in the report as though it was based on actual data for all the companies covered. However, much of the data is estimated by the authors; data is missing for many companies – especially the recently PE-backed companies; and the data that was collected consists of non-verifiable reports from the companies.

Of the 306 companies that received venture capital backing between 2003 and 2005, employment and sales data was only obtained for 143 - so data is missing for more than half the target population, and these non-respondents may be more likely to be poor performers.

By contrast, data was used for all 181 companies which offered IPOs during the period – a group which, by definition, represents a successfully exited buyout. The contrast between data availability for these IPOs, as compared with the recent investment targets, highlights the problem for researchers of the private data opacity created by PE buyouts,

For the great majority of other companies in their database GI used no company data at all, but simply assumed that they grew at the average industry rate "2005 employment and revenue figures were projected using industry growth rates.' ³ No comparative conclusions can be drawn from such a circular assumption. GI only attempted to get specific data on the largest 200 companies in 2003, but even for this group GI used actual data for 2003 and then for 2005 'employment and revenue estimates were entered into the database as available'. So the 2005 data on this group of largest companies was partly estimated and partly missing, in both cases to an unknown extent.

The 2004 report claimed that 'venture-capital backed company wages grow faster than national average', on the basis of figures showing that VC-backed companies experienced 12% growth in wages from 200-2003, compared with 11% for non-VC companies. As the report itself notes, "venture capital firms tend to cluster in fast growing and higher paying industries", and so such figures may therefore simply reflect the sectoral distribution – it leaves open whether the impact of PE on wages is positive, neutral or negative. There is no discussion of wage data in the 2007 survey.

3.2. EVCA/CEFS study (EU)

The European Private Equity and Venture capital Association (EVCA) published a report on the "Employment Contribution of Private Equity and Venture Capital in Europe" in December 2005 (EVCA/CEFS 2005).⁴ The survey suffers from various methodological and data limitations (some of which are noted in the report itself).⁵

The overall figures, which are most commonly quoted, include venture capital companies; the figures on employment levels are only estimates based on assumptions, not observations; the figures of employment growth are based on unverifiable data from a small and self-selected sample of companies; and the full results of the comparisons with non-PE companies are not published.

The CEFS study is based on a survey of 99 buyout companies and 102 venture capital financed companies, and finds that 6m people are employed in PE-financed companies (of which 5m. in buyouts), 3% of total employment in Europe. It claims that 1million new jobs were created by European PE companies between 2000 and 2004: 420,000 (net of post-purchase reductions) were in buyouts, and 630,000 in venture-backed companies. PE-financed buyout companies experienced employment growth of 2.4% per annum, compared with only 0.7% across Europe as a whole in the same period, and an average annual decline of 0.2% in employment in the largest 600 private companies. ⁶ They also found that in management buyouts, employment grew by 3.1% per year, but where new management was brought in (which happened in only a

³ This may be a very large number of companies, since GI describe their database as consisting of '23,476 venture capital backed companies'; excluding the 200 largest in 2003, the 181 IPOs, and the 306 newly backed companies since 2003, leaves 22,791 companies on which the data consists of assumed parity with sectoral performance (97.1% of GI's entire database).

⁴ Employment Contribution of Private Equity and Venture Capital in Europe. EVCA. December 2005. <u>http://www.evca.com/images/attachments/tmpl 9 art 129 att 953.pdf</u>).

⁵ Appendix 1 pages 30-38.

⁶ Employment Contribution of Private Equity and Venture Capital in Europe. EVCA. December 2005. <u>http://www.evca.com/images/attachments/tmpl 9 art 129 att 953.pdf</u>

small number of cases), employment fell by an average of 2.3% per year. Venture start-up companies showed the fastest employment growth, not surprisingly.⁷

The first limitation is that the data on employment levels are not based on the study of actual employment of even a sample set of companies. They are calculated from (a) data on the distribution of buyout companies by bands of numbers employed (b) assumptions about the average size of companies within each band, and then (c) multiplying these estimates by the number of companies in which PE funds have invested. These employment estimates are then split between buyouts and venture start-ups, not on the basis of any data about actual companies, but by a simple rule of thumb assumption that companies with more than 200 employees are buyouts and companies with less than 200 are start-ups.⁸

The second limitation is that the data on employment growth came entirely from PE groups themselves. The PE groups decided which companies they wanted to include – worse performing companies may be less likely to be included, thus skewing the sample. The PE groups also decided whether to answer themselves, or ask the companies to answer – in either case, the data submitted by the groups was not publicly verifiable.

The third weakness in the study lies in the comparisons between buyout companies and other companies in the same sector. This sectoral comparison is important because buyouts are likely to concentrate on growth sectors, and growth companies within these sectors, and so are likely to show a faster growth profile than the economy as a whole. There is a general weakness, because the set of non-PE companies chosen for comparison were the largest companies in each sector, and therefore not necessarily the fastest growing group in each sector. The results of this comparison are not fully presented in the report, but the text allows the derivation of the table below (table 2). As the report itself acknowledges, the buyouts do not perform better than the largest listed companies in every sector: indeed, transportation and computing may be the only two out of ten sectors in which buyouts do better.

Table 2.	Comparative employment effect by sector of PE Buyouts in EVCA/CEFS study
(2 - no figure of	iven in report)

(? = no figure given in report).				
Sector	PE Buyout	Largest EU	Difference $(+ =$	Buyouts BETTER or
	companies	companies in	buyouts better)	WORSE than sector
		sector		average
	Employment	Employment		
	growth %	growth %		
Transportation	17.3	0.6	+16.7	BETTER
Computer-related	10.3	1.4	+8.9	BETTER
Healthcare	6.7	?	?	?
Construction	5.0	?	?	?
Consumer-related	4.0	?	?	?
Manufacturing	2.7	?	?	?
Other services	-2.3	0.6	-2.9	WORSE
Chemicals and materials	-3.0	-2.8	-0.2	WORSE
Financial services	-3.8	0.4	-4.2	WORSE
Communications	-6.3	1.3	-7.6	WORSE

Source: author's calculations from text of EVCA study section 3.4

3.3. BVCA/IE 2006 (UK)

The BVCA publish an annual report on the economic impact of private equity, carried out by : the latest version was published in November 2006 (BVCA/IE 2006). A full report is also available (IE/BVCA 2006). The employment claims of the report suffer from special problems, and in other respects the report suffers from a similar set of flaws to other surveys, including the inclusion of venture capital, self-selecting samples, and reliance on private data.

⁷ Employment Contribution of Private Equity and Venture Capital in Europe. EVCA. December 2005. <u>http://www.evca.com/images/attachments/tmpl 9 art 129 att 953.pdf</u>

⁸ See appendix 1 pages 30-33

The report claims that "companies that have received private equity funding account for the employment of around 2.8 million people in the UK, equivalent to 19% of UK private sector employees...over the five years to 2005/6, the number of people employed worldwide by UK private equity-backed companies increased by an average of 9% p.a." (page 3). All three of these figures are problematic, however.

Firstly, the figure of 2.9m. does not measure actual jobs in PE companies at present, but employment in any company which has ever, at any time in its history, received private equity investment ⁹, and so it does not reflect actual employees of actual PE companies in 2006. The report confirms this by estimating that the actual numbers employed by PE companies in 2006 was only 1.2 million – "8% of UK private sector employees" (pages 5,7). The report claims credit for this - "This year we have also estimated the number of people employed by companies that are *currently* backed by private equity." (p.5) – and this is the figure used in the BVCA evidence to the Treasury, which avoids all mention of the headline figures of 2.8 million and 19%.

Secondly, it is difficult to reconcile their claims, about the proportion of private sector employees, with the actual government data on private sector employment. At the end of 2006, this stood at about 23.2 million – about four-fifths of total UK employment, which stands at 29.0million. ¹⁰ Using these official figures, the BVCA estimate of 1.2 million current PE company employees represents only 5.2% of official private sector employment, and just 4.1% of total UK employment. The BVCA headline estimate of 2.8million should be 12.1% of private sector employment, 9.6% of total UK employment. The percentages claimed by BVCA do not appear to be correct. The corrections are set out in table 3.

		··· J ·····
	'Headline' PE	Actual current PE
	employees	company
	figure (BVCA	employees
	estimate 2006)	(BVCA estimate
		2006)
Employees (millions)	2.8	1.2
BVCA claimed % of private sector employees	19%	8%
BVCA figures as % of actual UK private sector employees (23.2m.)	12%	5%
BVCA figures as % of all UK employees (29.0m.)	10%	4%

Table 3. Correcting BVCA calculations of percentages of UK private sector employment

Sources: (a) BVCA estimates from BVCA/IE 2006 (b) Figures on private and public sector employment: National Statistics Press Release 14 March 2007 Public sector employment Quarter 4 2006 Table 5, page 17. http://www.statistics.gov.uk/pdfdir/pse0307.pdf

Thirdly, the claimed annual rate of increase does not fit easily with the BVCA figures for numbers employed in their reports for previous years. In 2005 BVCA gave exactly the same estimate of the level, 2.9m.; in 2004 and 2003 the levels were slightly lower, at 2.7m.; so the average annual growth rate over the last three years has been only 2.4% per annum.

Companies backed by venture capital accounted for 62% of the sample in the survey (p.8). The claim made at the start, that 92% of companies said "without private equity the business would not have existed at all or would have developed less rapidly" demonstrates the distorting effects of including venture capital companies, and of a self-selecting set of respondents.

The sample and data suffer from two layers of self-selection. Firstly, the survey began with a set of 5,700 existing companies, thus excluding all those companies which had failed to survive. Secondly, most did not take part in the survey: 1,457 agreed to respond, a response rate of about 26%.

⁹ "Companies included and defined in this report as 'private equity backed companies' are companies that have, at some time, received private equity investment, regardless of whether a private equity investor still holds a stake in the company." (BVCA/IE 2007, p.22)

¹⁰ National Statistics Press Release 14 March 2007 Public sector employment Quarter 4 2006 Table 5, page 17. http://www.statistics.gov.uk/pdfdir/pse0307.pdf

Some of the data is surprising. For example, venture companies in the survey have increased their worldwide employment by 12% p.a., but over the same 5-year period their sales have increased by only 8% per annum – implying an annual decline in labour productivity. MBOs, the FTSE 100, and the FTSE Mid-250 companies, used for comparisons, all showed sales growth faster than employment growth: although the implied productivity improvement of MBOs was also worse than for either set of FTSE companies (see table 4). The survey makes no comment on this at all, in either the published or the full version. It is also surprising if venture companies have grown their sales only slightly faster than FTSE 100 companies, over the last 5 years, which is also implied by the BVCA/IE results. These results suggest that the data or the sample should be reviewed for possible flaws.

	Annual growth in	Annual growth	Implied annual change
	sales	in employment	in labour productivity
Venture companies	8%	12%	-3.6%
MBOs	7%	10%	+2.8%
FTSE mid-250 companies	5%	2%	+2.9%
FTSE 100 companies	7%	1%	+5.9%

Source: BVCA/IE 2007, p. 5, 6, 9, 10 and author's calculations

The full survey report, however, does discuss the problem of the implied comparison – the difficulty of knowing what would have happened without a PE buyout. The authors also note that it is questionable to assume that all employment growth in PE companies should be attributed to the PE investment; "The assumption is most vulnerable perhaps for management buyouts and buy-ins, where the alternative of trade sales (sales of subsidiaries to other companies) is often available and where, in any event, the economic activity might continue – though potentially at a slower rate of growth – if the buyout did not take place." (IE/BVCA 2006 pp 6-7)

3.4. FT survey April 2007

The Financial Times published the results of a survey of the largest 30 buyouts in the UK in 2003 and 2004 - both the report and the data are made available by the FT¹¹ (FT 2007). The report says that "More than 36,700 extra jobs were added, a rise of more than 25 per cent... The FT's finding that private equity backed deals are more likely to increase employment than reduce it mirrors other recent studies". The figure of 36,700 is a rounded net total arrived at by adding up the reported gains (totalling 49,198) and the reported losses (totalling 12,468).

The great majority of the reported employment changes arise from mergers and acquisitions, not from organic growth; the survey has to rely on unverified data from companies, and some companies, including some with known job losses, excluded themselves from the survey.

The report contains some discussion of the reasons for changes, as the overall picture "masks a wide variety of different outcomes and management decisions". One interesting feature is the importance of acquisitions and disposals. This factor was mentioned by a quarter of the companies, but in terms of size, it is much the greatest factor – the acquisitions of the nursing home group NHP and of gambling group Gala alone account for nearly 30,000 of the job gains, and 7,000 are from the overseas expansion of Fitness first, which may also represent mainly acquisitions; the disposals by Linpac account for nearly a third of the job losses. Apart from these four cases, the net gain is 3,000 – which would represent growth of about 2%. The report also noted the relevance of discussing what would have happened in the absence of private equity – in discussing the losses at Queens Moat House it notes that the company was near insolvent at the time of takeover and so may not have continued without cutbacks in any case – although, like others, the survey fails to make systematic comparisons with companies from the same sectors.

¹¹ FT.com : report at

 $[\]frac{\text{http://search.ft.com/ftArticle?queryText=private+equity&y=0&aje=true&x=0&id=070401004169&page=9}{\text{http://www.ft.com/cms/57636bb0-e066-11db-8b48-000b5df10621.xls}} and data at \\ \frac{\text{http://www.ft.com/cms/57636bb0-e066-11db-8b48-000b5df10621.xls}}{\text{http://www.ft.com/cms/57636bb0-e066-11db-8b48-000b5df10621.xls}} and data at \\ \frac{\text{http://search.ft.com/cms/57636bb0-e066-11db-8b48-000b5df10621.xls}}{\text{http://search.ft.com/cms/57636bb0-e066-11db-8b48-000b5df10621.xls}} and \\ \frac{\text{http://search.ft.com/cms/57636bb0-e066-11db-8b48-000b5df$

Despite being small in number, the companies studied were chosen by the researchers on the basis of clear criteria – and so exclude venture capital start-ups. However, the survey still suffers from problems of self-selection in relation to the data: 6 out of the 30 did not give any figures; and the employment data was supplied by the firms themselves, not from published sources. This affects the status of the headline net figure: the report notes that Queens Moat Houses admitted that they had made big reductions in employment, but declined to give figures: as a result the net 'total' does not reflect this loss of jobs. Others who did not give figures may also be concealing job losses: for example, another company listed in the FT survey as not providing figures is Torex, now merged with iSoft, which is experiencing considerable difficulties and last year "pleased investors" by announcing it would cut the jobs of 15% of its workforce.¹²

Finally, it is not strictly accurate to say that "PE backed deals are more likely to increase employment". Out of the 30 companies, 10 gave the FT figures showing an increase, 2 said there was no change, 12 gave the FT figures showing there had been reductions, and 6 gave no information. It would be more correct to say that the buyouts were slightly more likely to reduce employment, but the increases were larger than the losses.

3.5. Amess and Wright (2007)

Amess and Wright's study is far more reliable than the industry sponsored reports, in a number of key respects. Firstly, its sample is not based on self-selected respondents to questionnaires, but on a dataset covering the full range of leveraged buyouts (LBOs) in the UK. Secondly, it excludes venture capital startups. Thirdly, it builds in comparisons with firms in the same sector which were not subject to LBOs. Fourthly, they use published audited data from company accounts filed at Companies House (which even privately owned companies are required to submit).

The survey also distinguishes between LBOs involving existing managers, which are classified as management buyouts (MBOs), and takeovers by private funds without any existing management, which are classified as management buy-ins (MBIs).

Two points should be noted about the sample which affect its interpretation in relation to the impact of PE funds.

Firstly, the dataset includes management buyouts (MBOs) even where no private equity fund was involved.¹³ This may have a significant effect on interpretation of the results, because Amess and Wright find that it is the subset of MBOs which accounts for the positive contributions to employment levels: they do not report if this is still true for the subset of MBOs where PE funds are involved. It is thus possible that the results for MBOs, and for LBOs overall, overstate employment gains compared with the subset of MBOs including PE funds.

Secondly, in the control set of companies not subject to LBOs, Amess and Wright excluded firms which showed growth in assets of more than 100% in any one year, in order to exclude the effects of mergers and takeovers.¹⁴ The rationale for this is not explained, but it means that the growth of the non-LBO sample is deflated by the exclusion of the effect of acquisitions, whereas growth by acquisitions made by the LBOs themselves appears to remain included. This second issue may lead to over-estimating employment growth in LBOs relative to other firms – acquisitions and disposals account for a large proportion of the employment effects observed in the data from the FT survey, for example (see above).

The main results on employment and wages are shown in Table 5.

Overall, the report finds that there is no significant effect of LBOs on employment, compared with other companies; but buyouts involving existing managers (MBOs) are associated with higher employment (after

¹² ComputerWire August 28, 2006 iSoft Avoids Delisting After Publishing Results

¹³ "MBIs are typically larger than MBOs because they are primarily instigated by the private equity firms. In contrast, MBOs might not have private equity support and are typically instigated by incumbent managers."

¹⁴ "firms whose total assets increased by at least 100% in a one year period were also precluded. Following Conyon *et al.* (2001b), we used this 'rule of thumb' in an attempt to avoid mergers and acquisitions entering the control sample."

the first year), whereas buyouts which are purely external (MBIs) are associated with significantly lower employment.¹⁵

On wages, the analysis concludes that, overall, all LBOs are associated with significant cuts in wages, compared with firms which have not been the subject of LBOs. This relative cut in wages is greatest for MBIs, but is also significant for MBOs. Whereas employees of non-buyout companies get average increases of 0.93% per year, employees in MBOs only get an average rise of 0.62%, and employees of MBIs get on average a slight pay reduction per year of 0.04%.

	Average annual change in employment (%)	Average annual change in wages (%)
Non-buyout companies	0.26	0.93
MBOs	0.77	0.62
MBIs	-0.55	-0.04

Table 5.	Changes in employment and wages in MBOs, MBIs, and non-buyout companies
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Source: Amess et al 2007B, Amess and Wright 2007, from text.

They conclude that these findings are consistent with the theory "that corporate change will lead to management breaking implicit agreements and transferring wealth from employees to new owners." This theory was developed in response to the similar wave of mergers and buyouts in the 1980s, when shareholders also made large gains from increased share prices¹⁶. The takeovers did not create wealth by improving productivity but simply enabled shareholders to extract more at the expense of other stakeholders, including employees: "hostile takeovers facilitate opportunistic behaviour at the expense of stakeholders…the available empirical evidence suggests that the redistributions associated with takeovers can be large." (Shliefer and Summers 1988 p.34)

They also conclude that the findings are consistent with the theory that MBOs enable internal managers to perform better without the constraints of the previous organisational structure, but these internal managers are also likely to be aware of maintaining trust relations with workers, and so protect employment "to elicit employee commitment to the recovery and success of the firm"; external financial specialists are less likely to recognise these benefits and so more likely to cut jobs.

One feature of these findings is the general effect of LBOs in depressing wages, an aspect which has been given much less attention than the impact on employment. The difference between MBOs and MBIs in employment effects suggests that the external contribution of PE firms may be the most problematic aspect of buyouts for employment effects. The contribution of internal managers (with or without PE involvement) is positive for growth which supports employment; without this contribution, the impact of LBOs on employment growth is negative (and is also negative on wages). This negative impact may be greater than shown in the results, if the LBO data includes growth by acquisitions, some of which is excluded from the non-LBO firms (see above).

PE firms do not choose companies for buyouts at random, so companies which are chosen for buyouts are likely to be those with most potential for growth. Amess and Wright for example found that LBO companies, before the buyout, had significantly lower productivity than other companies in the same sector.

4. Conclusions

The estimates of employment impact made by the BVCA, EVCA and NVCA are worthless. This paper shares the conclusions of a report prepared for the OECD on private equity, which concluded that: "Evidence on the effects of buy-outs on employment is mixed", and did not consider the surveys sponsored by the private equity associations were even worth mentioning. (Wright et al. 2007A p.50).

¹⁵ "We find that all LBOs together do not have a significant effect on employment growth but they do have significantly lower wage growth than non-LBOs. Both MBOs and MBIs are found to have a negative impact on wage growth. The employment equation, however, indicates that MBOs have higher employment growth and MBIs have lower employment growth than cohorts in the same industry."

¹⁶ These gains by shareholders were also defended on the grounds that they must be based on increased efficiency: "this increased profitability must come from the company's improved productivity" (Jensen 1984).

This discussion has highlighted the problem of the lack of public audited data and self-selected samples of companies. This problem is created by the buyout process: in buyouts, PE firms are taking information about the firms out of the public domain, and the PE firms themselves gain a monopoly on information about these companies. This information monopoly creates asymmetries which are problematic not only for employees and unions but also for investors, policy makers and researchers.

The information rights of employees and investors in PE companies should be strengthened by regulation, so that audited information at least equivalent to Companies House accounts is made available to unions or investors; this information should also be made publicly available on the internet, to facilitate independent research; reports from CEOs on company strategy should be made available to unions and investors at least annually. Independent research should be encouraged into the actual experience of employment in all companies which have been the subject of PE buyouts. The BCVA and ECVA should be encouraged to review the methodologies used for their surveys.

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