Private equity and employment - the Davos/WEF/Harvard study

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1.1. INTRODUCTION ................................................................. 1
1.2. RESULTS: WORKPLACES LOSE 10% OF JOBS IN 5 YEARS FOLLOWING PE TAKEOVER ................................................................. 1
1.3. BACKGROUND: STUDY DESIGNED IN RESPONSE TO UNION CRITIQUES ................................................................. 2
1.4. METHODOLOGY .......................................................................... 2
1.5. OVERALL RESULTS: CUMULATIVE JOB LOSSES OF 10% ................................................................................................. 2
1.6. NET JOB LOSSES AT FIRM LEVEL 2 YEARS AFTER PE TAKEOVER ................................................................................................. 3
1.7. OTHER POINTS ................................................................................ 3
1.7.1. Insecurity ............................................................. 3
1.7.2. Total jobs lost as a result of private equity takeovers in the USA ................................................................................................. 4
1.7.3. Common pattern of rise and fall, not just PE ......................... 5
1.7.4. Sectoral differences .................................................................. 4
1.7.5. Greenfield gains do not offset other job losses ..................... 4
1.7.6. Bankruptcy: more likely for PE firms ..................................... 4
1.8. MISLEADING SPIN, INADEQUATE PRESS REPORTS ................................................................. 5

1.1. Introduction

The World Economic Forum meeting at Davos has published a large new study on private equity (PE):
- The executive summary is available at http://www.weforum.org/pdf/cgi/pe/Executive_Summary.pdf

The study was led by Josh Lerner, Jacob H. Schiff Professor of Investment Banking at Harvard Business School. It included four separate studies, covering the ‘demography’ of PE, investment in innovation, impact on employment, and corporate governance. It also includes 6 case studies, two each from Europe, China, and India. This note is concerned only with the section “Private Equity and Employment”. 1

1.2. Results: workplaces lose 10% of jobs in 5 years following PE takeover

The Harvard/WEF study shows that:
- workplaces of firms taken over by PE have 10% less employees 5 years after the takeover, than if they had developed like similar workplaces not bought by PE: “the net impact on existing establishments is negative and substantial” (p.54)
- firms taken over by PE have 3.6%-4.5% less employees 2 years after the takeover, than if they had developed like similar workplaces not bought by PE (even after including the net effect of creating, buying, closing and selling new workplaces): “for a sample of surviving firms, we observe …a negative net impact on employment that is substantial but smaller than that from the establishment-level results that ignore greenfield entry.” (p.54)
- firms taken over by PE have much higher rates of closure, opening, acquisition and disposal of workplaces, in the 2 years following a PE takeover, than comparable firms: “we observe more greenfield entry, more acquisitions, divestitures and establishment shut-downs” (p.54)
The reporting of these results has been confused by misleading ‘spin’ about the impact of ‘greenfield’ employment changes and the comparative bankruptcy rate.

1.3. **Background: study designed in response to union critiques**

The design of the employment study was influenced by the critiques published by trade unions. The introduction to the employment section refers to the limitations of studies by the various private equity associations, listed as:

- Reliance on surveys with incomplete response
- Inability to control for employment changes in comparable firms
- Failure to distinguish cleanly between employment changes at firms backed by venture capital and firms backed by other forms of private equity
- Difficulties in disentangling organic job growth from acquisitions, divestitures and reorganizations
- Inability to determine where jobs are being created and destroyed

A footnote references only the two reports published by the SEIU and Unite/TGWU are the sources for these points: “See Service Employees International Union (2007) and Hall (2007) for detailed critiques.”

The report then states that “In this study, we construct and analyse a dataset that overcomes these limitations and, at the same time, encompasses a much larger set of employers and private equity transactions.”

1.4. **Methodology**

The study is based on the Longitudinal Business Database (LBD) at the US Bureau of the Census, which covers all non-farm private companies, to follow employment at PE-backed companies in the US between 1980 and 2005, before and after PE takeover. The study looked at employment changes in actual workplaces owned by these firms – factories, offices etc – as well as employment changes resulting from new establishments, the closure of existing establishments, and further takeovers or disposals by the firms. It identified about 5,000 PE-backed firms, covering 300,000 US establishments, and also a control group of 1.4 million other establishments and firms, selected for being of comparable industry, age, and size to the PE-backed establishments and firms at the time of their takeover. The study looked at employment changes for 5 years before and after the PE takeover.

This approach does not suffer from the methodological problems of the private equity association surveys. It provides data on changes in employment in actual workplaces, and, separately, employment changes in the firm as a whole, including the effects of acquisitions and disposals. It excludes venture capital companies and management buyouts where private equity was not involved. It covers all private equity buyouts in the USA since 1980, not a selected sample. It provides a set of ‘control’ firms with similar characteristics for meaningful comparisons. The main limitation is that it covers only the USA.

1.5. **Overall results: cumulative job losses of 10%**

The main results are based on studies of employment changes at establishment (workplace level). This data reflects what happens to employees in existing workplaces taken over by a PE fund. It does not include changes due to new workplaces being created, or bought. The data shows that employment shrinks more rapidly in establishments after a PE takeover, than in control establishments. The study found that the actual change in employment in the establishments subject to PE takeovers was about 7% worse after 3 years, and 10.3% worse after 5 years, than it would have been without the takeovers.

### Table 1. Cumulative difference in employment in workplaces after private equity takeovers

(percentage of total employment at year of takeover, compared with similar firms not subject to PE)

<table>
<thead>
<tr>
<th>% change</th>
<th>After 2 years</th>
<th>After 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ('000s)</td>
<td>-7%</td>
<td>-10.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-340,000</td>
</tr>
</tbody>
</table>
The report states:
“Figure 6C compares the actual employment level of private equity transactions pre- and post-transaction with the implied employment of these targets had they grown at the same rate as the controls. This exercise permits evaluating the cumulative impact of the differences in net growth rates between targets and controls. To conduct this counterfactual exercise, the employment level of the controls is normalized to be exactly equal to that of the targets in the transaction year. The pattern for the controls shows the counterfactual level of employment that would have emerged for targets if the targets had exhibited the same pre- and post-transaction employment growth rates as the controls. Figure 6C shows that, five years after the transaction, the targets have a level of employment that is 10.3% lower than it would be if targets had exhibited the same growth rates as controls.” (p.50)

1.6. Net job losses at firm level 2 years after PE takeover
A separate analysis of the firms takes account of the opening of new workplaces (‘greenfield’), the closure of existing workplaces, and the buying and selling of subsidiaries, as well as the effect on existing workplaces. The report finds that the net result of all this is negative: -3.6% of total employment after 2 years compared with control group. The table shows the details of this data. All elements of the effects were negative: the creation and exit of workplaces is negative; the net result of acquisitions and disposal is negative; and these add to a negative effect on employment in surviving workplaces.  

<table>
<thead>
<tr>
<th>Table 2. Employment changes in firms 2 years after private equity takeovers (percentage of total employment at year of takeover, compared with similar firms not subject to PE)</th>
</tr>
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<tbody>
<tr>
<td></td>
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<tr>
<td>-----------------------------------------------</td>
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<tr>
<td></td>
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<tr>
<td>Greenfield entry rate</td>
</tr>
<tr>
<td>Establishment exit rate</td>
</tr>
<tr>
<td><strong>Net effect of workplace creation and closures</strong></td>
</tr>
<tr>
<td>Establishment acquisition rate</td>
</tr>
<tr>
<td>Establishment divestiture rate</td>
</tr>
<tr>
<td><strong>Net effect of acquisitions and disposals</strong></td>
</tr>
<tr>
<td>Continuing establishment net growth rate</td>
</tr>
<tr>
<td><strong>Overall two–year growth rate</strong></td>
</tr>
</tbody>
</table>

1.7. Other points
1.7.1. Insecurity
As the report points out, the rate of acquisitions, sales, new plants and closures are all about twice as high in PE firms as in others. The report describes this process as ‘creative destruction’, but the other side of this is much greater insecurity for workers. In 2 years following a PE takeover, 24% of employees will have experienced their workplace being closed, sold, or reduced – double the uncertainty compared with a firm which has not been the subject of a PE takeover.
1.7.2. Total jobs lost as a result of private equity takeovers in the USA

Since the study was effectively looking at all the PE takeovers in the USA since 1980, and the employment effects are probably largely complete after 5 years, the difference represents an assessment of the overall actual effect of private equity on jobs in the USA. This implies that the loss is around 340,000 jobs.5

1.7.3. Sectoral differences

The study found significant differences in the impact between sectors. The cumulative effect after 5 years was lowest in manufacturing (-2.4%), around 10% in retail and services, and highest of all in finance, where the report only states that the effect is ‘very large’.

Table 3. Employment falls linked to private equity takeovers, by sector

(percentage of total employment at year of takeover, compared with similar firms not subject to PE)

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>Impact on employment 5 years after PE takeover (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Retail</td>
<td>-9.6%</td>
</tr>
<tr>
<td>Services</td>
<td>-9.7%</td>
</tr>
<tr>
<td>Finance, Insurance and Real Estate</td>
<td>&quot;very large&quot;</td>
</tr>
<tr>
<td>ALL SECTORS</td>
<td>-10.3%</td>
</tr>
</tbody>
</table>

Source: Harvard/WEF 2008, pp. 50-51, footnotes 17 and 19

1.7.4. Greenfield gains do not offset other job losses

It is very clear from the figures in table 2 that the greater increase in PE firms of ‘greenfield’ employment does not offset the other sources of job loss at existing establishments. It does not even offset the greater job loss from workplace closures.

1.7.5. Bankruptcy: more likely for PE firms

Some media coverage suggests that the report finds that job losses are offset by the fact that PE-backed companies have a lower bankruptcy rate, and so fewer jobs are lost through bankruptcies: e.g. the BBC report claims that “private equity-controlled firms are less likely to go bankrupt.”

This is untrue. It is not only untrue, it is the opposite of what the report found. The employment study itself has no specific observations on bankruptcies, but the first section of the report (“The new demography of private equity”) did produce evidence on this issue. It found that PE firms are twice as likely to go bankrupt as the average publicly owned company:

“For our total sample, 6% of deals have ended in bankruptcy or reorganization and the frequency of financial distress seems to have gone down over time. Excluding the LBOs occurring after 2002, which may not have had enough time to enter financial distress, the average rate is 7%. Assuming an average holding period of six years, this works out to an annual default rate of 1.2% per year. The annual default rate for US publicly traded firms in Compustat over the 1983 to 2002 period was half this number, 0.6%...” (p.8)

The study even notes that the real figure of PE bankruptcies may well be significantly higher than this:

“...One caveat is that not all distress cases may be recorded in publicly available data sources and some of these cases may be “hidden” in the relatively large fraction of “unknown” exits (11%).” (p.9)

The report even found that PE-backed buyouts were more likely to go bankrupt than other kinds of leveraged buyouts (LBOs):
“.... Although LBOs sponsored by private equity funds are more likely to experience a successful exit, they are also somewhat more likely to have their investments end up in financial distress, controlling for other factors.” (p.5)

And that the rate of bankruptcy of LBOs was highest of all in the UK and USA:

“Finally, possibly because Capital IQ coverage of corporate failures may be more accurate in the US and the UK, LBOs undertaken in these regions are more likely to end up in bankruptcy and the magnitudes are very large (five and seven percentage points, respectively).” (p.10)

The report does note that the annual bankruptcy rate of 1.2% is lower than that of corporate bonds:

“Even though the LBO default rates are indeed higher than that of Compustat firms, they are lower than the average default rates of corporate bond issuers 1980–2002, which was 1.6% according to Moody’s.” (p.9)

This may be relevant for investors considering PE or corporate bonds as alternative investments, but it has no implications for employment: as the designers of the employment study would point out, the group of companies which issue corporate bonds is not in any way matched or comparable to the companies bought by PE-firms. The employment study itself has no conclusion about relative bankruptcy rates.

1.7.6. Common pattern of rise and fall, not just PE

The patterns of employment growth and decline are similar for both the PE workplaces and the comparators, as shown in the graph. The report correctly points out that this shows the importance of having a matched sample, to avoid the false conclusion that the pattern is special to PE. It also points out that the broad pattern is typical of all employment data (“if one randomly observes establishments at some fixed point in their lifecycle, they will, on average, exhibit growth up to the point and will, on average, exhibit decline from that point on” – footnote 15). So the decline by itself shows nothing about the effect of PE. It is the gap between the two lines at the end, after 5 years, which shows the impact of PE.

Chart A. Employment patterns in PE and comparable workplaces before and after takeover

![Chart A](image)

1.8. Misleading spin, inadequate press reports

The press release of the WEF is extremely, presumably deliberately, confusing about these results.
- It states that “Employment has a “J-curve” pattern in the years pre-and-post buyout”, although the study at no point refers to a J-curve, nor do any of its results resemble a J-curve
- It fails to mention that the study shows that employment is 10% lower 5 years after a PE-takeover
It mentions that “Firms backed by private equity have 6% more greenfield job creation than the control group two years after the buyout.”, but fails to mention that PE firms have 8.6% greater job destruction from closing sites, so the net effect is in fact the same as the general trend.

The WEF summary of the panel discussion at Davos also credits Josh Lerner with an untrue account of the results of his own paper: “a review of 5,000 acquired companies found the number of jobs created at new factories or offices quickly offset job losses at old facilities” 6 – whereas the study in fact shows that after taking into account all the acquisitions and greenfields etc, firms bought by PE have 3.6% - 4.5% less employment after just 2 years, compared with other similar firms.

The Private Equity Council (PEC) encouraged the confusion by issuing a press release containing two untrue statements: “The studies demonstrate that PE firms are job savers and job growers. Firms acquired by PE on average are losing jobs at a faster clip than their peers when purchased - but over time, as the business is stabilized and refocused by PE investors, the employment trend rises to match the industry average at old facilities and exceeds average industry-wide job creation at new facilities.” 7

This disinformation was very successful. The main media reports have suggested that the report has mixed results on the employment impact, or even that it shows job loss to be a myth. The BBC’s report for example is captioned “Companies bought by private equity firms do not destroy jobs on a large scale, a study suggests”, and includes the incorrect statement that “private equity-controlled firms are less likely to go bankrupt.” 8 A report by Andrew Sorkin in the Herald Tribune managed to assert that “Companies owned by private equity shed, on average, about one percentage point more jobs than their peers.” 9. Three days later, the same journalist wrote a different report for the New York Times, but this time dismissed the report as “so muddied that it was difficult to make sense of it”, and instead preferred to quote another unsubstantiated claim by the PEC that PE funds created 8.4% more jobs than others 10.

The FT report by Martin Arnold came closest to accuracy, headlined ‘Fewer jobs created at private equity acquisitions’, and, correctly reporting that ‘Buy-out deals failed more often than other companies, the report found, with 6 per cent ending in bankruptcy or financial restructuring’. 11

1.9. Conclusion
The report is the soundest and most comprehensive study of the employment effects of PE. It shows beyond doubt that the employment impact of PE takeovers is negative. It supports both the assertions and the critiques published by the unions. It contains further interesting data on PE effects, e.g. the doubling of uncertainty of employment.

Notes

1 The authors are Josh Lerner, Harvard Business School; Steven J Davis, University of Chicago Graduate School of Business; John Haltiwanger, University of Maryland, Ron Jarmin and Javier Miranda, both US Bureau of the Census. This study is on pages 43-64 of the full report http://www.weforum.org/pdf/cgi/pe/Full_Report.pdf
3 Introduction p.43
4 The difference between the total in the table of -4.5% and the overall figure of -3.6% is explained by the report in terms of technical issues.
5 Footnote 17 states that the difference is 34,000 , which must be an error, as the base figure of the total employment is given in footnote 16 as 3.3m., and the gap is calculated as 10.3% of 3.3 million.
7 Business Wire January 25, 2008 Friday 9:00 AM GMT Private Equity Council Issues Statement on New PE Research Conducted by Prof. Josh Lerner for the World Economic Forum
Companies bought by private equity firms do not destroy jobs on a large scale, a study suggests.  

The International Herald Tribune January 26, 2008 Private equity buyouts get split review on job losses by Andrew Ross Sorkin.


Financial Times January 25, 2008 Fewer jobs created at private equity acquisitions By MARTIN ARNOLD