



## Private equity: transformation or tax evasion?

By Martin Olsson and Joacim Tåg

*Recent IFN research reveals that short-termist behavior is not widespread among private equity firms, and that tax evasion is not what really generates returns for investors. In addition, the researchers have found that routine and off-shoreable jobs, or jobs that have survived thanks to aggressive labour unions, are prime targets for layoffs after buyouts.*

The private equity industry has grown immensely during the last three decades. It is a global phenomenon, making private equity firms important owners of corporate assets. So far, the industry has shown no signs of slowing down, and the trend is likely to continue into the future.

However, as private equity buyouts are often controversial, there is a need for research about their real economic consequences, such as effects on firms and workers. Recent work in the United States reports that

buyouts lead to modest net job losses but large increases in gross job creation and destruction.<sup>1</sup>

Ongoing research at IFN is examining which groups of workers experience job losses and which do not, and investigating whether buyouts are associated with short-termist behavior and large gains from tax avoidance. Both benefits and losses need to be considered when trying to understand the private equity industry, the research suggests.

### A superior form?

It is still unclear whether private equity funds generate better return than public equity funds. Early studies have found no outperformance after accounting for the often high fees paid by investors.<sup>2</sup> Recent analyses in America and Britain suggests, however, that US private equity funds consistently outperform public equity markets, even net of fees. During the period 1984 to 2008, each dollar invested in private equity funds returned, net of fees, 20% more than a dollar invested in the S&P 500, the authors

<sup>1</sup> Davis et al (2014). See Tåg (2012) for a survey of the academic literature on the real economic effects of buyouts.

<sup>2</sup> Phalippou (2009).

found.<sup>3</sup> But how do private equity firms generate their returns to investors?

When the private equity business model was developed in the 1980s, it was argued that "leveraged buyout associations", as private equity firms were called back then, were a superior organizational form because they concentrated ownership, implemented strong pay-for-performance schemes for managers, and increased the leverage of buyout firms.<sup>4</sup>

By aligning the incentives of the owners and the managers, concentrated ownership reduces the agency problem in firms, when investors have small ownership stakes and "free ride", relying on the efforts of others. But with concentrated ownership, investors have more incentives to effectively control management. Moreover, strong pay-for-performance schemes help because they incentivize managers – indeed, it is common that managers themselves take substantial ownership stakes in the buyout companies they manage. Finally, buyouts use outside debt finance when acquiring firms, which results in high leverage that puts pressure on managers to generate cash flow to service interest payments. Such pressure helps to ensure that any extra cash in the firm is not used for unproductive investments or acquisitions.

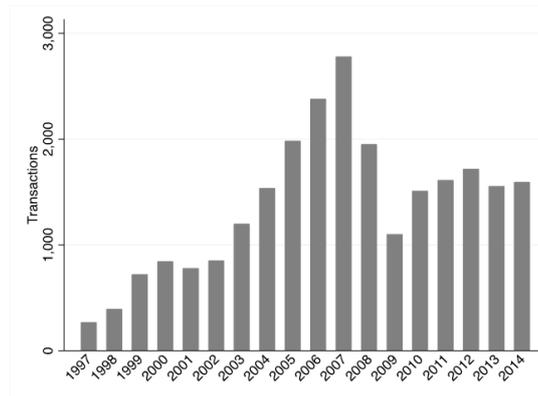
But why can't public firms themselves make these changes to governance? Recent work by IFN researchers suggests that the temporary nature of private equity ownership is an important aspect of the explanation. Pehr-Johan Norbäck, Lars Persson and Joacim Tåg have shown how the drive by private equity firms to maximize the resale price instead of profits is an important difference from normal ownership.<sup>5</sup> This focus on the resale price induces stronger incentives to improve productivity through governance and reorganization activities, since these activities increase the resale price by raising the product market profits of the acquirer and by decreasing the product market profits for non-acquiring firms. As a result, bidders operating in the same product market are willing

<sup>3</sup> Harris et al (2014).

<sup>4</sup> Jensen (1989).

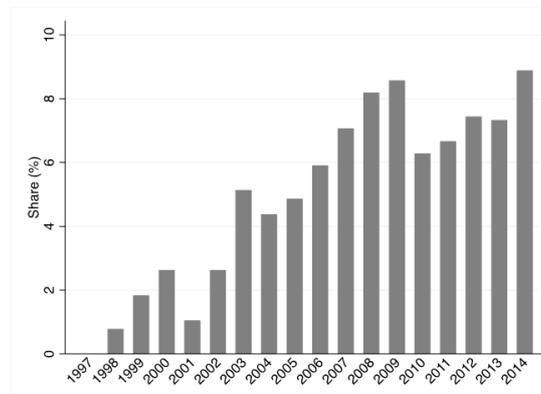
<sup>5</sup> Norbäck, Persson and Tåg (2013).

Figure 1: Number of buyout transactions worldwide between 1997 and 2014



Source: Zephyr, 2014-12-02

Figure 2: Share of buyouts transactions undertaken in non-OECD countries



Source: Zephyr, 2014-12-02

## The buyout industry

The buyout industry started in the US in the 1980s. The idea was to raise capital from rich individuals and combine it with borrowed money to buy underperforming firms, take them private and restructure them before reselling them to a new owner. Access to cheap junk bonds, a financial innovation at the time, allowed private money to be leveraged and meant even large listed firms became potential targets for buyouts. The pioneers of the industry often made headlines, as many struck gold several times over.

In the early 2000s the industry boomed. According to data from Zephyr Database, in 1997 fewer than 500 transactions were undertaken worldwide. But the number grew immensely after the millennium with more than 2,700 at the peak in 2007 (Figure 1). The global financial crisis ended the boom, but the industry started to recover in 2010 and has since stabilized at around 1,500 transactions per year.

From being a phenomenon limited to the US, the industry has spread throughout the world: in 2014, around 60% of all transactions worldwide were undertaken outside the US, with some 9% undertaken in non-OECD countries (Figure 2). For the past decade, companies in Europe have been prime targets, with transaction volume increasing from around €13 billion in 1997 to more than €68 billion in 2014. Around 6% of total private sector employment in 2013 was in private equity backed companies.

to pay both for obtaining the company and for preventing rivals from obtaining it.

Publicly listed firms are not focused on the resell price at an exit, and thus they do not have the same incentives to improve governance and reorganize themselves to improve profitability, the IFN research shows.

### Higher rates of job creation?

Governance changes in buyouts not only reduce agency problems, they also affect production decisions. Recent US research has presented evidence that private equity firms catalyze the process of creative destruction within firms. In comparison to control firms, firms that become private equity backed see higher rates of job creation and job destruction, the authors found. In addition, plants or factories that are less productive tend to be closed down, and some are replaced with new, more productive establishments.<sup>6</sup> Productivity improvements are also consistent with documented evidence of operating profitability and positive returns to investors in private equity funds.

At the moment research at IFN is ongoing to shed more light on production changes in the wake of private equity buyouts. By analyzing high quality data for Swedish workers, we are investigating reasons for layoffs after private equity buyouts. The research is generating evidence, for example, that layoffs can be understood in terms of the job polarization process. Job polarization refers to the pattern that employment in low- and high-skilled jobs has increased and employment in medium-skilled jobs has decreased over time in most developed countries, thanks to the automation of routine job tasks due to technological development, offshoring due to the globalization of product and labor markets, and the weakening of labor unions over time.

Analyzing worker-level evidence of moves to unemployment suggests that these three explanations – automation, offshoring, and weak labor unions – also can explain layoffs in private equity buyouts. The argument is that private equity governance is effective in reigning in rampant agency problems in firms that before the buyout allowed managers to avoid difficult and unpopular decisions. For example investments in automation or offshoring production, as well as exhibiting strength when negotiating with labor unions. While entrenched managers may procrastinate regarding these decisions, they can be crucial for improving productivity and profitability. Thus, firms in which these decisions have been delayed are prime targets for buyouts. Consequently, workers in routine jobs or offshorable jobs and workers that are entrenched because of ties to aggressive labor unions are prime targets for layoffs after buyouts.

IFN's ongoing research on worker-level effects of buyouts directly speaks to concerns about job losses often

## Who runs private equity?

The modern private equity fund is structured as a partnership between general partners who run the fund and limited partners who provide money for the fund. The limited partners are large institutional investors, such as sovereign wealth funds, pension funds and insurance companies.

Large institutional investors often lack the resources or the ability to acquire controlling stakes in attractive investment targets, so by having private equity firms as intermediaries, institutional investors can delegate the monitoring and reorganization of firms to specialized experts.

Typically, a private equity firm runs two or three funds simultaneously with a time span for each fund of around ten years, after which it is dissolved. The general partners make money through a management fee of 1-2% of committed capital; in addition, a 20% carried interest performance fee is paid for all returns over a "hurdle" rate set at around 8%.

voiced in the media. Our evidence shows that workers performing routine or offshorable job tasks that can easily be automated are more at risk of losing their jobs. The same goes for workers who are entrenched in the firm because of ties to strong labor unions. On average, however, we do not find that workers in private equity buyouts are more or less likely to become unemployed after a buyout. The reason is that there are groups of workers who do considerably better after a buyout compared to others: workers doing non-routine tasks or tasks that are not easy to offshore are less likely to become unemployed. One explanation is that new production technologies that allow for automation and offshoring mean the firm can focus on what they do best: i.e. tasks that cannot be automated or offshored.

### Not in it for the short term

Research on investments by private equity firms also confirms the argument that a focusing of operations occurs after a buyout. US researchers have presented evidence that private equity-backed firms have more focused on patenting activities; at the same time, they found no evidence that private equity firms reduce long term investments, by reducing patenting activities, which speaks to the debate on whether temporary ownership of corporate assets lead to short-termist thinking.<sup>7</sup>

In addition to this evidence, there are two arguments against private equity firms engaging in opportunistic

<sup>6</sup>Davis et al (2014). See Tåg (2012) for a survey of the literature on the real economic effects of buyouts. That buyouts are associated with productivity improvements have been shown in many academic studies almost independently of time period and country of study.

<sup>7</sup>Lerner et al (2013).

short-termist behavior. First, a large part of the returns to investors are due to the difference between the acquisition price and the resale price – buy low and sell high is a good way to generate outstanding returns. Yet it can prove difficult to find a buyer at a high price for a firm in which long-run investments in production methods have been neglected. If product markets are sufficiently competitive, competition acts as a safeguard for abusive short-termist tactics by private equity firms. Second, private equity firms are repeatedly raising capital from investors and selling firms because when a fund is closed down they need to raise new funds and buy and resell new companies to continue operating. If a private equity firm gets a reputation of reselling shells of hollowed out companies, they will soon be out of business.

### Avoiding taxes?

While short-termist behavior is not likely to be a widespread concern, avoiding taxes might be more of a worry from a social welfare perspective. Private equity firms are often accused of rampant tax avoidance. Their funds, and the management companies that often employ the general partners, are often located in tax havens. In addition, it is unclear in many jurisdictions how the carried interest is to be taxed: is it labor income or capital income? Finally, the high leverage they put on target firms means they can make extensive use of the debt tax shield: interest payments to financial institutions or to parent companies are often tax deductible.

IFN research by Norbäck, Persson, and Tåg suggests

that the debt tax shield affects efficiency in the market for corporate control when industrial buyers and private equity firms both bid for the same target firms.<sup>8</sup> They show that a debt tax shield can lead to distortions in ownership efficiency – an industrial bidder on target firms may not be able to bid as high as a private equity firm that can count home gains from deductions on interest payments. In cases where the industrial buyer would be a better owner, ownership efficiency may be distorted because the debt tax shield substitutes for productive ownership. This can create welfare losses in terms of lower productivity and lost consumer surplus.

Another finding in this research is that any gains created by the debt tax shield benefit mainly the owners who sell their assets to private equity firms. The reason is simple. Bidding competition between private equity firms for corporate assets ensures that tax gains are immediately absorbed in higher acquisition prices. This argument has some empirical support in research at the University of Oxford's Said Business School, which studied a large sample of private equity buyouts.<sup>9</sup>

It seems thus not to be the case that the returns to private equity investors are generated by escaping corporate taxes. Nevertheless, there are good arguments for why aggressive tax planning by private equity firms could lead to distortions in ownership efficiency resulting in lower productivity and higher consumer prices. As the IFN researchers point out, placing limits on the debt tax shield is one possible policy intervention to counter this concern.

<sup>8</sup> Norbäck, Persson and Tåg (2014).

<sup>9</sup> Jenkinson and Stucke (2011).

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