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## From Wall Street to Work Floor: How Private Equity Buyouts Affect Workers

Martin Olsson and Joacim Tåg

# From Wall Street to Work Floor: How Private Equity Buyouts Affect Workers<sup>1</sup>

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#### **ABSTRACT**

Private equity buyouts have sparked debates among labor unions and worker representatives on how they affect workers. This chapter provides an overview of academic evidence on how private equity buyouts affect workers. We review the theoretical reasons why employees could be affected and then survey the empirical evidence. We point out that significant strides have been made in understanding how private equity buyouts influence workers, with a plethora of studies available for policymakers and practitioners. These studies have found that the impact on workers is not uniform; it varies based on the type of buyout, the nature of workers' roles in the firm before the buyout, and the country's institutional environment. We also highlight a few understudied areas that warrant more attention.

#### 1 Introduction

Private equity buyouts involve private equity firms acquiring mature and established companies, improving them, and then reselling them. The private equity industry emerged in the 1980s when the United States (U.S.) experienced a surge in takeovers. After a decline in the 1990s, buyouts rebounded in the 2000s, spreading globally with increased transactions outside the U.S. and the United Kingdom (U.K.) in countries such as France, Germany, the Netherlands, and Sweden. Throughout the decades, buyouts have faced criticism from labor unions and worker representatives who argue that buyouts lead to layoffs and wage cuts, thereby benefiting investors at the workers' expense. Private equity firms have defended their practices by asserting that buyouts improve companies, create jobs, and boost long-term productivity.

This chapter surveys the academic literature on how private equity buyouts impact workers.<sup>2</sup> Understanding the effects of private equity buyouts on workers is crucial because it can help policymakers, stakeholders, and investors make informed decisions regarding regulations and policies. It can also help contribute to a more nuanced public debate.

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<sup>&</sup>lt;sup>2</sup> For broader surveys of the effect of private equity buyouts on other stakeholders, see, for instance, Tåg (2013), Kaplan and Strömberg (2009), Brown et al. (2020), Obernberger (2023), and Sørensen and Yasuda (2022).

Our survey is divided into two parts. The first part, Section 2, surveys the theoretical reasons why we should expect buyouts to affect workers. We highlight that private equity buyouts can profoundly impact workers through transformative changes in firms' operations. At the heart of this transformation is the alignment of incentives: reducing agency problems by transitioning from dispersed to concentrated ownership, which gives the new owners strong incentives to implement governance, financial, and operational engineering.

First, governance engineering often involves replacing incumbent leadership with professionals skilled in corporate restructuring or expansion, enhancing the firm's capacity to navigate substantial changes. This change in management can make implicit contracts and alliances with workers obsolete. It also involves introducing high-powered incentives for the new leadership, aligning their financial interests with the shareholders, thereby encouraging actions that enhance firm value. This renewed focus on shareholder value maximization can lead to new value creation through operational engineering that can benefit workers, but it can also lead to the renegotiation of labor contracts such that a larger share of the value created in the firm is allocated towards shareholders rather than the workers.

Second, financial engineering involves optimizing the firm's capital structure and providing capital to financially constrained firms. Increased leverage can provide tax savings and pressure managers and board members to perform well. It may also lead to higher wages for workers, who need compensation for the higher risk of bankruptcy. However, higher leverage comes with several negative aspects for workers. It increases the risk of mass layoffs due to bankruptcy, gives the firm stronger bargaining power in negotiations with labor unions, can dampen workers' incentives to invest in firm-specific capital, and can lead to a more stressful work environment. Financial engineering in the form of securing more capital for growth tends to be beneficial for workers, who now see their skills and firm-specific human capital to be in higher demand.

Third, operational engineering involves cutting slack, steering the firm toward growth, implementing superior management practices, and professionalizing and modernizing the firm. Although these changes can lead to layoffs and wage decreases, they can also present opportunities for employees through upskilling or reskilling. Furthermore, a better-managed and growth-oriented organization could offer greater stability and potential for career advancement.

The second part, Section 3, then surveys the empirical evidence on how private equity buyouts affect workers. We have three takeaways from this survey. First, the literature has made progress in understanding the implications of private equity buyouts for workers. The initial studies focused primarily on how firms' net employment and average wages change. These studies, however, suffered from the inability to pick up churn among workers. Subsequent studies remedied this problem by providing worker-level evidence on employment, wage, and career trajectories using matched employer-employee datasets. A recent wave of studies has also investigated worker outcomes related to health and job satisfaction. Thus, the question of how buyouts affect workers is no longer shrouded in mystery, and there is a healthy literature for policymakers and practitioners to draw on.

Second, this literature has found that the impact of private equity buyouts on workers varies considerably based on numerous factors. Whether it's focused on growth or reorganization, the buyout type undertaken plays a pivotal role in influencing workers' experiences. Reorganization deals, often public-to-private buyouts, tend to be associated with worse outcomes for workers, whereas growth transactions, often private-to-private transactions, tend to be good news from a worker's perspective. Moreover, the nature of tasks that workers handle within the firm matters. Buyouts often involve modernization efforts that complement the job tasks of high-skilled

workers, whereas low-skilled workers may face challenges as their roles become increasingly redundant. Additionally, the institutional environment, evidenced by differences between countries like France, Germany, the U.S., and Sweden, contributes to the varied impacts on workers. The institutional environment affects what types of transactions are common, and the bargaining power of workers and thus the ability of private equity firms to change how the firm operates. Hence, making blanket statements about how buyouts affect workers is an oversimplification.

Third, further research is crucial in understanding the implications of private equity buyouts on the workforce. Considering the high leverage involved in buyouts, more research should be devoted to how, if at all, bankruptcy impacts workers. A deeper understanding of heterogeneity across countries and industries is also needed. As the industry expands worldwide, it becomes increasingly important to understand how the institutional environment shapes labor relations following buyouts and what institutional details enable and hinder certain types of buyouts from taking place. Another evolving dimension is the tendency for a larger share of buyouts in the services sector rather than the manufacturing sector. This shift raises questions about what drives sectoral differences in how buyouts affect workers. Finally, there's a need to understand better the general equilibrium effects of buyouts on worker reallocation, including how private equity firms may concentrate industries, leading to monopsony in the labor market with reduced worker bargaining power and lower wages.

## 2 Why would buyouts affect workers?

A key underlying change that firms in buyouts go through, which is a key driver of how workers are affected, is incentive alignment.<sup>3</sup> In foundational work, Jensen (1986, 1989) claims that private equity firms are more effective than public corporations in reducing agency issues between dispersed owners and the firm's manager (Berle and Means, 1932; Jensen and Meckling, 1976). Buyouts reduce these agency problems because the company goes from having dispersed owners to full or majority control by the private equity firm.

Agency costs due to dispersed ownership can allow managers (and boards) of the firm to operate in their own interest and thus avoid operating the firm optimally from the shareholders' perspective. This is because dispersed ownership in public firms can lead to too-low monitoring incentives for managers because monitoring is a public good; shareholders can free-ride on each other's monitoring efforts (Berle and Means, 1932; Williamson, 1964; Shleifer and Vishny, 1986). From a worker's perspective, managers and boards operating in their own interest can avoid difficult decisions, such as firing workers or lowering wages. Alliances with workers can also lead to promotions based on factors other than performance. Managers and boards operating in their own interest can also lead to empire-building through over-hiring, excessive acquisitions, or over-diversification (Jensen, 1986; Williamson, 1964).

Concentrated ownership after buyouts resolves the free-riding problem, and the firm's underlying issues can be addressed with governance, financial, and operational engineering (Jensen, 1986, 1989; Kaplan and Strömberg, 2009). Before we delve into these three aspects of buyouts, it is worthwhile noting that an important distinction when addressing these problems is whether the

<sup>&</sup>lt;sup>3</sup> Temporary ownership can also incentivize productivity improvements. Norbäck et al. (2018) argue that if buyouts occur in concentrated industries and are exited through trade sales, private equity firms aiming to maximize trade sale revenues are more incentivized to ensure management teams work diligently to restructure the firm than permanent owners. The reasoning is that potential buyers are willing to pay for both restructured assets and preventing a rival from obtaining them. The more productive the assets are, the more valuable they are for bidders to acquire and keep from rivals. Thus, temporary ownership leads to a relative increase in productivity.

actions taken by the private equity firms result in value creation, as argued by Jensen (1989), or value capture from other stakeholders such as workers, pointed out by Shleifer and Summers (1988). In practice, this will depend on how the firms have been run before the buyout and the suboptimal decisions from the shareholders' perspective that the managers and the board had taken prior and on if the transaction is oriented towards growth or reorganization.

#### 2.1 Governance engineering

When private equity buyouts occur, the first area to witness significant transformation is usually the firm's governance structure. This process, commonly referred to as 'governance engineering,' is twofold. First, it can involve strategically replacing the firm's top-tier leadership - including the manager and board members. As Cuny and Talmor (2007) argue, the new owners without strong ties to managers and the board can explore all turnaround options, including manager and board member replacement. The individuals selected for these positions are generally experts in their respective fields, with an extensive corporate restructuring or expansion background. They also tend to be outsiders (Gompers et al. 2022). They bring knowledge and experience, enabling them to navigate the firm effectively through periods of substantial change. This transition in leadership can be a crucial element of governance engineering, as these individuals aim to correct existing organizational flaws and stimulate growth through implementing organizational engineering efforts.

Second, governance engineering entails the introduction of 'high-powered incentives' for managers and board members. The essence of this practice lies in harmonizing the financial interests of the managers and board members with those of the new shareholders (Holmström, 1979; Jensen and Meckling, 1976; Jensen and Murphy, 1990). Such incentives can manifest in various forms, such as share options, direct ownership stakes, or performance-related bonuses. By aligning their financial success with the firm's performance, these incentives serve to galvanize the new leadership into actions that enhance the firm's value.

The effects of these governance changes can have profound implications for the employees within the firm. First, the shift in managerial strategy and objectives can cause substantial changes in the work environment by triggering operational engineering (discussed below). Second, with the introduction of high-powered incentives, management's focus may lean more towards short-run performance and profitability. While this might lead to increased productivity and potentially higher profits, it could also induce a more stressful work environment. Third, buyouts can transfer value from employees to new shareholders by breaching implicit contracts with workers to reduce their wages or fire them (Shleifer and Summers, 1988). These implicit contracts made by previous management may have been the basis for investments by workers in firm-specific human capital that management promised would pay off later (such as working for low pay initially in the career and expecting wages to rise above market wage within the firm as tenure increases).

#### 2.2 Financial engineering

Financial engineering represents a critical aspect of private equity buyouts and involves optimizing the firm's capital structure and providing capital to financially constrained firms. Financial engineering most often leads to higher debt levels. Increased leverage ratios can increase firm value due to tax savings but can also increase value by putting more pressure on managers and board members to perform well. By pledging future cash flows to service the debt, the owners force managers to disburse "free cash flows," reducing the propensity to invest in projects with negative net present value and thereby preventing resource waste (Murphy, 1985; Jensen, 1986). Moreover,

the larger debt burden raises the risk of default and managerial and board turnover, forcing them to work harder (Grossman and Hart, 1982; Zwiebel, 1996).

Another important aspect of financial engineering involves capital provision, as private equity firms usually have good relations with capital providers. This is especially beneficial for firms constrained by their existing capital structure. The capital injection can support firms during restructuring or growth phases, enabling them to navigate transitional periods and implement previously financially unfeasible strategies.

Financial engineering has implications for workers. First, higher leverage increases the risk of bankruptcy and, thus, a complete shutdown of the firm, leading to all workers losing their jobs. While this is bad for workers, the increased bankruptcy risk can lead to higher wages if workers are compensated for the increased layoff risk (Berk, Stanton, Zechner, 2010). Second, higher leverage can provide firms with increased bargaining power in wage negotiations with labor unions as the firm can point to the need to cut costs to service debt payments and avoid bankruptcy. This tactic can lower employee wages (Perotti and Spier, 1993). Third, excessive debt may dampen the firm's overall investment incentives due to debt overhang (Myers, 1977). Besides increasing the risk of bankruptcy, it can also decrease investments in human capital, such as training and development. Fourth, the heightened pressure due to increased leverage and the accompanying focus on short-term returns to service debt can create a stressful work environment, leading to health issues and lower job satisfaction. Finally, providing capital to capital-constrained firms will allow them to grow and invest in productivity-enhancing activities. Growth can lower the probability of layoffs, and workers with firm-specific human capital can capture some of the returns from the new productivity and growth-enhancing investments through higher wages.

#### 2.3 Operational engineering

Operational engineering forms the third crucial facet of private equity buyouts. The process usually unfolds in conjunction with governance and financial engineering and targets several key areas: cutting slack, steering the firm towards growth, implementing superior management practices, and professionalizing and modernizing the firm (Kaplan and Strömberg, 2009; Sorensen and Yasuda, 2022). For instance, Bloom et al. (2009) illustrated that private equity-backed firms are generally better managed than their privately owned, family-owned, or government-owned counterparts. These firms demonstrate exceptional operational management practices, lacking the "tail" of poorly managed firms common among their non-private equity-backed counterparts. This underlines the importance and effectiveness of operational engineering in these organizations. In their early days in the 1980s, private equity firms primarily focused on governance and financial engineering. Operational engineering was not a prominent tool for value creation. However, as the industry grew more competitive and professionalized, operational engineering became more central in the private equity model (Kaplan and Strömberg, 2009).

Turning to the implications for workers, operational engineering can trigger substantial changes. As the new management implements strategies for growth or restructuring, employees may find themselves grappling with new roles or expectations. Depending on the firm's new direction, this could lead to upskilling, reskilling, or even job displacements. One direct consequence of operational engineering is the reduction of workforce redundancies and outdated skills. This process can lead to layoffs, wage decreases, and significant disruption for employees (Olsson and Tåg, 2017). Moreover, the transformational phase associated with operational engineering can induce profound changes in the work environment and the firm's operational structure. This can change workers' job satisfaction or health status as they adjust to the new organizational dynamics.

However, while these changes can present significant challenges for employees, they can also present opportunities. Upskilling or reskilling, such as new investments in IT, can enhance job security and employability in the long run (Agrawal and Tambe, 2016). Moreover, an organization that is better managed and more oriented towards growth can offer greater stability and potential for career advancement than a mismanaged organization with entrenched managers and board members.

## 3 How do buyouts affect workers?

While there is consensus in the literature that private equity buyouts are associated with improved firm performance, the evidence on how workers are affected is mixed. This is to be expected: the theoretical reasons for why buyouts should affect workers surveyed in Section 2 have mixed predictions. Empirical evidence on employment and private equity dates to the 1980s. However, most early studies use small samples with no explicit identification strategy, making it difficult to draw causal conclusions. These studies also focus primarily on net employment and wages, which ignores worker churn, making it hard to tell the effects on incumbent workers. However, since then, the literature has moved towards large sample analyses with well-thought-through identification strategies and matched employer-employee datasets. These typically use a difference-in-differences strategy using matching methods to create a control group. In addition, the literature has expanded beyond employment levels and wages by looking at worker-level outcomes relating to employment, wages, health, and job satisfaction.

#### 3.1 Employment and wages

In the U.S., the earliest evidence of how private equity buyouts affect employment and wages dates to the late 1970s and the early 1980s and is based on small sample studies. Smith (1990), studying 58 management buyouts 1977-1986, finds that operating returns increase around the buyout year, and this is not due to layoffs of workers; instead, adjusting the structure of working capital seems to explain the result. Kaplan (1989) studies 42 management buyouts between 1980 and 1986, of which post-buyout employment data were available. Among these companies, the post-buyout employment growth rate increases by 0.9%, representing a 12 percent employment drop relative to the industry-adjusted median growth rate during the same period. Muscarella and Vetsuypens (1990) also document an employment decline when studying 72 firms that went public between 1983 and 1987 after a full or divisional leverage buyout. Of the 26 firms with sufficient data, the median number of employees drops by 0.6 percent between the buyout and the IPO. Opler (1992), studying 44 buyouts in the second half of the 1980s, document a modest employment increase of 0.3 percent. Lichtenberg and Siegel (1990) test the hypothesis that LBOs increase efficiencies by "substituting incentives and compensation for direct monitoring by large bureaucratic staff" (Jensen, 1989). This hypothesis implies that i) the ratio of nonproduction to production worker employment should decrease, and, ii) the compensation for production workers should increase. To this end, they analyze 131 buyouts from 1983 to 1986 and examine the employment and compensation of production and nonproduction workers. Their results show a decline in nonproduction and production worker employment from one year before the buyout to two years after. However, the drop is relatively small and statistically insignificant among production workers; therefore, the ratio of nonproduction to production workers declines by 6.5 percent relative to the industry average. In addition, the study shows an increase in compensation for production workers, with an average annual increase of 3.6 percent and an average hourly compensation of 2.3 percent. Consequently, the ratio of nonproduction compensation to production worker compensation declines by 8.8 percent.

Later evidence for the U.S. relies on much larger datasets and paints a more nuanced picture. Davis et al. (2014) studies 3,200 firms targeted in buyouts and their 150,000 establishments using data from 1980 to 2015. With establishment data, they can go beyond the overall employment effect and analyze job dynamics to understand better how employment is affected by buyouts. Compared to a matched control group of establishments to non-targeted firms, their results show that despite modest overall employment effects, private equity buyouts lead to increased job dynamics and catalyze the creative destruction process. Specifically, employment at establishments operated by target firms as of the buyout year decreases by three percent over the two-year post-period and by six percent over a five-year post-period. These negative effects stem from the higher post-buyout job destruction rates in targeted firms at shrinking and exiting establishments. Simultaneously, new jobs are created at establishments opened after the buyout, so-called greenfield investments, leading to a higher job creation rate than in control firms. This results in an overall job reallocation rate that is 14 percent higher in targeted firms compared to non-targeted firms over two years. However, despite the relatively large effects on the job dynamic, the employment growth difference between the targeted and non-targeted firms is less than one percent. Finally, they estimate that earnings per worker falls by an average of 2.4 percent at continuing establishments over a twoyear period.

Agrawal and Tambe (2016) study whether private equity investments spur workers' careers. They hypothesize that workers' skills may depreciate and become obsolete in firms that do not receive private equity investment and, hence, have outdated production methods. To test this hypothesis, they focus on the IT sector and use resume information from an online job-search website in the U.S. to construct an employer-employee dataset of workers' employment history. They compare the career outcomes for 5,680 treated workers in firms acquired in leveraged buyouts with similar matched workers employed in firms not involved in leveraged buyouts. The results suggest that leverage buyouts boost workers' careers in terms of employability and wages, especially for those who perform jobs complementary to IT-based production methods. A plausible explanation is that these workers acquire human capital complementary to IT due to the investments the private equity firms make.

Faccio and Hsu (2017) find that political involvement in the U.S. private equity industry affects whether buyouts have positive or negative employment effects. To study the importance of political involvement, the authors define a private equity firm as politically connected if a general partner, board member, or top employee has an important political position, such as being a member of Congress or reporting affiliation to such a person. In buyouts of politically connected private equity firms, employment increases by an average of 1.24 percent per year. When non-connected private equity firms are involved, the employment effect following a buyout is almost one percentage point lower, on average (0.33 percent). The employment effects for politically connected deals are more positive in election years; in states with high levels of corruption, increases in employment at the state level are associated with a higher likelihood of being reelected, and target firms receive government contracts and grants if the private equity firm is politically connected. This suggests that the large positive employment effects for politically connected transactions might be due to an exchange of favors.

Lastly, Davis et al. (2019) examines how the type of buyout and the macroeconomic and credit conditions impact employment, productivity, and job reallocation. They use a large database of information on millions of firms from 1980 to 2013, containing around 6,000 buyouts. Their results show that productivity increases in most buyouts, but the employment effect depends on the buyout type and macroeconomic and credit conditions. In buyouts of firms under private ownership, employment increases on average by 13 percent, while it falls by 13 percent in buyouts

of publicly listed firms. However, these effects are sensitive to market conditions, as they are muted if the credit spread widens or there is a slowdown in GDP growth post-buyout.

Most studies are from the U.K., Germany, France, and Sweden on the other side of the North Atlantic Ocean. Several studies focus on buyouts in the U.K. In early case and survey study of buyouts by Wright et al. (1990), 25 percent of the firms involved in management buyouts shed employment. Cressy et al. (2011) also find a negative employment effect, studying 57 buyouts at the end of the 1990s. But Amess and Wright (2007) estimate no overall average employment growth effect when studying approximately 1,350 buyouts from 1999 to 2004, instead, they find that employment growth increases by, on average, 0.5 percentage points after a management buyout and 0.8 percentage points after a management buy-in, both relative to non-targeted firms. The wage growth rate falls after buyouts in management buy-ins by almost one percentage point and by 0.3 percentage points in management buyouts. Weir et al. (2015) examines 122 buyouts and find that private equity buyouts are associated with immediate job cuts that diminish over time. Goergen et al. (2014) also document employment cuts when studying institutional buyouts in the U.K. from 1997 to 2006. They estimate an immediate cut in the year after the acquisition and lower wage rates.

Antoni et al. (2019) find that buyouts in Germany are associated with negative worker-level effects. They analyze 511 buyouts from 2002 to 2008, involving 2,420 establishments and 152,057 employees, use a difference-in-differences approach, and create a control group using matching methods. Their results reveal that, on average, employment drops, and turnover increases after a buyout. In addition, individual-level earnings drop, on average, by 2.8 percent relative to the median five years after a buyout. However, these effects are not evenly distributed among employees, as employment losses are larger among white-collar workers, and earnings losses are greater among managers and relatively old workers.

In France, Boucly et al. (2011) analyze a sample of 839 leverage buyout deals from 1994 to 2004. Their findings show that, compared to a matched control group of firms, employment growth is 18 percent higher in target firms after a buyout. The positive effect on employment growth is concentrated on private-to-private transactions (in most cases, families cashing out of their business), while no growth effect is estimated for divisional and public-to-private buyouts, suggesting that private equity funds relax the credit constraints of private target firms, helping them grow. Fang et al. (2022) use employer-employee data and a matched control group of similar nontarget firms to study post-buyout effects on within-firm pay inequalities in 813 target firms in France from 1997 to 2014. Following a buyout, the wage gap drops between the 90th and 10th percentiles in the pay distribution, men and women, managers and non-managers, and old and young workers. The narrowing of the wage gap is explained by compositional changes in the workforce, where high-wage workers are replaced with relatively cheaper ones.

In Sweden, Bergström et al. (2007) study 73 private equity buyouts that exited from 1988 to 2006 and find no statistical effects on wages and employment during the holding period. That buyouts in Sweden have, on average, small worker-level effects are supported by Olsson and Tåg (2017). Instead of examining employment effects at the firm level, they study unemployment effects at the worker level using a difference-in-differences strategy. Swedish administrative employer-employee data make it possible to identify firms targeted in private equity buyouts, create a control group of firms using a large pool of potential non-targeted firms and matching methods, and then identify the employees in the targeted and control non-targeted firms and track them over time. More than 42,000 treated workers (and control workers) in 409 buyouts between 2002 and 2008. Overall, there is no effect on unemployment for workers employed in targeted firms relative to a similar control group of workers not experiencing a buyout. However, unemployment is nearly double

that of low-productivity firms in routine and offshorable occupations. These results suggest that ex-ante low-productive firms are restructured through automation and offshoring and that some buyouts are part of the job polarization process where technological advancements and globalization have led to workers performing routine and offshorable job tasks that have fallen behind workers performing job tasks that cannot be automated or performed by workers abroad. The additional result supports the idea that adverse unemployment effects are concentrated among workers in the middle of the income distribution. However, the number of buyouts in Sweden is too low to impact the overall job polarization process. In a follow-up study, Olsson and Tåg (2018) show that the nationality of private equity firms matters for how workers fare post-buyouts. When Swedish private equity firms are involved, there is an increased unemployment risk for workers in targeted firms (relative to control workers) by 20 percent, and their labor earnings decreased by seven percent. None of these effects are found when foreign private equity firms target Swedish companies.

Finally, Bernstein et al. (2017) delves into the effects of private equity buyouts on overall economic growth at the industry level and its cyclicality, spanning 20 industries across 26 nations from 1991 to 2009. They show that the growth rate is faster in industries where private equity funds have been active in the last five years, in total production, value-added, total wages, and employment than in other industries. Moreover, the study finds that private equity investments are associated with a reduced downside risk of shocks to industry growth rates.

#### 3.2 Health and job satisfaction

A new and growing literature looks at other worker outcomes besides wages and employment. Using Dutch data, Garcia-Gomez et al. (2022) address the question of whether firm-level improvements after buyouts come at the expense of workers' health. To this end, they analyze 274 buyouts and 55,742 employees in the Netherlands from 2007 to 2013. Compared to a matched control group of workers and using a difference-in-differences strategy, the authors document that workers with poor health status face substantial income and employment losses after buyouts. The income loss is partly offset by social transfer, and the authors find no evidence that buyouts harm workers' health. Cohn et al. (2021) also study how workers' health is affected and documented persistent declines in establishments-level injury rates among employees after private equity buyouts in publicly traded U.S. firms. Thus, there appears to be no evidence suggesting that buyouts harm worker health.

Job satisfaction may, however, decline. Gornall et al. (2022) show, using worker-level Glassdoor data from the U.S., that private equity buyouts don't affect the average base pay. However, they do lower perceived job quality due to increased employee risks. The decline in satisfaction post-LBO is mainly seen in high-leverage deals and among long-tenured employees with limited alternative job opportunities. Lambert et al. (2021) analyze a similar dataset and find declines in job satisfaction, with substantial heterogeneity across deal type. Job satisfaction drops the most and among all classes of workers after public-to-private buyouts.

#### 3.3 Effects via bankruptcy

A fundamental part of buyouts is increasing leverage and, thereby, the targeted firm's bankruptcy risk. So, an important question is whether the increased leverage hurts workers by increasing the risk of bankruptcy, which, in turn, leads to a complete shutdown of operations with potentially detrimental effects on workers. Kaplan and Strömberg (2009) analyze 17,171 buyouts worldwide from 1970 to 2007 and find that six percent ended in bankruptcy or reorganization. With an average holding period of six years, this corresponds to an annual bankruptcy rate of 1.2 percent.

This is lower than the 1.6 percent default rate for U.S. corporate bond issuers from 1980 to 2002 but higher than the 0.6 percent bankruptcy rate for U.S. publicly traded firms (Wright et al. 2009). Hotchkiss, Smith, and Strömberg (2021) analyze U.S. private equity deals and discover that companies backed by private equity tend to have greater leverage. Because of this higher leverage, these firms default more frequently than other entities in the leveraged loan markets. Yet, when these private equity-backed firms default, they tend to restructure faster, often outside the courtroom. Additionally, private equity owners face a lower likelihood of total financial loss in such situations.

Bankruptcy rates, however, vary with business cycles and across countries. Kaplan and Stein (1993) study 41 management buyouts in the U.S. between 1980 and 1984, with only one deal (two percent) defaulting. In contrast, among 83 management buyouts between 1985 and 1989, 27 percent defaulted, with almost eleven percent ending in bankruptcy. Lopez-de-Silanes et al. (2009) document that around ten percent of all worldwide deals in their sample result in bankruptcy, with rates ranging from five percent in Scandinavia to 13 percent in Germany. However, they define bankruptcy broadly, which could affect the results.

Boucly et al. (2011) find no increase in bankruptcy rates after a buyout in their study of 839 French buyouts from 1994 to 2004. Tyková and Borell (2012) also find that the bankruptcy risk is unchanged when analyzing buyouts in 15 European countries from 2000 to 2008. They also document that the bankruptcy rate is even lower when experienced private equity funds are involved. But Ayash and Rastad (2021) document that the bankruptcy risk increased by 18 percent in a ten-year period following 484 leverage buyouts of U.S. publicly traded firms from 1980 to 2006. Their analysis compares the bankruptcy risk for the targeted firms with the risk for propensity score-matched firms not targeted in a leveraged buyout.

Even when a debt default occurs, it may not have real effects. Andrade and Kaplan (1998) examine 31 management buyouts in Kaplan and Stein (1993) that later became financially distressed due to high leverage. They find that firms in their sample experienced a slight positive increase in value before becoming financially distressed, suggesting that the firm's value doesn't necessarily decline. Thus overall, the evidence on if private equity buyouts lead to more bankruptcies is mixed. And even conditional on bankruptcy, we have no evidence of how workers fare as the company may emerge intact from the bankruptcy proceedings with little or no layoffs.

## 4 Concluding summary

Private equity buyouts have sparked debates among labor unions and worker representatives on how they affect workers, and in this chapter, we have surveyed the academic literature on this issue. We discerned three core takeaways. Firstly, significant strides have been made in understanding how private equity buyouts influence workers, with a plethora of studies available for policymakers and practitioners. Secondly, the impact on workers is not uniform; it varies based on the type of buyout, the nature of workers' roles, and the country's institutional environment. Generalizing these impacts would be an oversimplification. Lastly, while the existing literature provides clarity on numerous facets, there remain gaps that warrant further exploration. This includes understanding the repercussions of high leverage on workers, the nuanced differences across countries and sectors, and the broader market effects, like potential industry concentration, that can affect worker bargaining power. As the industry continues to evolve, so must our insights into how private equity buyouts affect workers.

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