

# The Labor Market Consequences of Mergers and Acquisitions\*

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## Abstract

We study the impact of mergers and acquisitions (M&As) on firm performance and worker labor market outcomes in Sweden. Comparing firms that undergo M&As with those that eventually do so, we find that both joint profits and employment drop substantially following a merger. However, this masks substantial heterogeneity: Profits of firms that share a common board member with the target firm continue to grow as expected, and only firms without a common board member experience reduced profit. This is especially true for vertical M&As between firms in different industries. This heterogeneity reflects differences in the effect of mergers on salaries, where firms that share a common board member with the target firm cut salaries following mergers, while others do not. We provide evidence that firms that execute successful M&As strategically send board members to potential targets in the years leading up to the M&A. This suggests that information acquisition can play a crucial role in successfully executing an M&A.

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# 1 Introduction

Mergers and acquisitions (M&As) are an important feature of the corporate landscape, reorganizing firms and affecting workers' trajectories. In Sweden, 22.5 percent of workers experience at least one M&A during their career, in which their employer acts as either the acquiring or the target firm. Although M&As might be expected to improve firm outcomes, such as profits, CEO overconfidence or empire-building ambitions can lead to worse outcomes. Similarly, it is theoretically unclear how M&As shape workers' outcomes. On the one hand, if M&As result in higher productivity this could potentially rise incomes. On the other hand, M&As could lead to lower incomes due to increased local labor market concentration or layoffs stemming from firm restructuring.

In this paper, we use Swedish administrative data to study the trajectories of firms and workers involved in complete takeover M&A events. Specifically, we compare treated units to units who experience an M&A seven years later in a difference-in-differences (DiD) design.

We first evaluate firm-level outcomes. Since the M&As in our sample are complete takeovers and the target firms cease to exist after the M&A, we assess joint outcomes. Joint profits drop by 15.2 percent and joint employment by 20.4 percent after five years. We then report that the share of acquirer and target firms sharing a common board member increases to 77 percent in the years leading up to the M&A. Firms with such common board members experience similar declines in employment as those in the overall sample, but no decline in profits. A potential reason for this could be that common board members facilitate better acquisition of information on which the M&A is based. The decline in profits is largest for vertical M&As between firms in different industries that do not share a common board member, possibly due to greater information frictions.

Next, we turn to worker-level outcomes and find significant losses in incomes and employment among workers who are employed at the acquiring or target firm in the year before the M&A. Five years after the event, affected workers earn 5.2 percent less, conditional on employment, and are 5.2 percentage points less likely to be employed. These losses are larger for less-educated, older, and especially low-income workers.

Workers initially employed at the target firm are 8.8 percentage points less likely to leave their new employer, whereas those employed at the acquiring firm show no significant difference in their likelihood to leave. However, we find that both acquiring and target firm workers in administrative and customer service occupations are 14.6 and 21.8 percentage points more likely to leave suggesting that firms reduce their overhead labor costs. We further find that income losses are driven by workers who switch firms after the M&A as well as workers who remain at the merging firms, but only if these firms had a common board member before the M&A. Incomes of stayers at firms without a common board member continue to grow as expected, mirroring the loss in profits among these firms.

Recent discussions emphasize the potential role that M&As could play in reducing labor income

by increasing local labor market concentration (Marinescu and Hovenkamp, 2019; Marinescu and Posner, 2019). To evaluate this channel, we split our sample based on the predicted increase in the acquiring firm’s employment share within the respective local labor market, estimating the effects separately for M&As with low, medium, and large predicted increases in employer concentration. We do not find any evidence that our results are driven by this mechanism. This finding is robust to using different definitions of local labor markets. Furthermore, only 17.1 percent of M&As target firms that have hired at least one worker from the acquiring firm in the seven years leading up to the M&A. The losses in workers’ incomes and employment are similar between M&As where the target firm had previously hired workers from the acquiring firm and those where it had not. Given these results, it is unlikely that workers’ outcomes are driven by changes in firms’ labor market power.

We contribute to several strands of literature. First, our paper contributes to the literature evaluating the effects of M&As on firm outcomes with mixed findings. Hoberg and Phillips (2010) report increases in profits and sales for US firms when there are synergies from asset complementarities. Braguinsky, Ohyama, Okazaki, and Syverson (2015) find increases of profits of target firms in the Japanese cotton spinning industry at the turn of the last century. Bertrand and Zitouna (2011) find no effects on targets’ profits or product market power, but an increase in productivity in France and Blonigen and Pierce (2016) report an increase in mark-ups for US manufacturing firms, but no effects on plant-level productivity. Malmendier, Moretti, and Peters (2018) find that losers in close bidding contests outperform winners in terms of stock market value. Examples of reasons proposed for negative M&A outcomes include misaligned incentives between CEOs and shareholders (Jensen, 2024) or CEO overconfidence (Malmendier and Tate, 2005).

Secondly, we contribute to the recent literature that evaluates the labor market outcomes of M&As. The most closely related paper is Arnold, Milligan, Moon, and Tavakoli (2024), which finds declining incomes and employment among Canadian workers experiencing an M&A. Unlike our setting, their results are driven by workers moving to firms with higher pay premia but lower worker-firm match effects. They further report no changes in aggregate firm outcomes, but declining profit margins for acquiring firms. Lagaras (2024) finds income losses for Brazilian workers after M&A events. As in our setting, these losses are concentrated among workers who move to firms with lower pay premia. Arnold (2021) and Prager and Schmitt (2021) find that large M&As which lead to a large increase in employer concentration result in lower wages for workers. He and le Maire (2021) report that takeovers in Denmark can result in lower incomes when firms with low-paying managers take over firms with high-paying managers and replace the latter. Bach, Baghai, Bos, and Silva (2023) find that Swedish workers in both acquiring and target firms experience negative effects in mental health.

Finally, we contribute to the literature on mass layoffs that explains how losses in workers’ incomes are driven by the characteristics of their new employer. Lachowska, Mas, and Woodbury (2020) find that differences in firm pay premia only explain a relatively small share of the

decline in incomes compared to worker-firm specific match effects in the US state of Washington, whereas [Schmieder, Von Wachter, and Heining \(2023\)](#) report that differences in firm pay premia explain most of the decline in incomes in Germany.

The remainder of our paper is structured as follows. Section 2 outlines our empirical strategy. In Section 3 we describe our data and how we construct our estimation samples. In Section 4 we report our firm-level and worker-level results, and Section 5 concludes.

## 2 Empirical Strategy

For our main analysis we use a difference-in-differences design to estimate treatment effects of experiencing an M&A for firms and workers. Since units who undergo treatment are on a differential path compared to the overall population, we use not-yet treated units as a control group. Specifically, we compare each treated unit to units who experience an M&A seven years later by estimating

$$y_{it} = \sum_{k \neq -1} \beta_k \times \mathbb{1}\{s = k\} \times D_i + \gamma_i + \gamma_{s \times c} + \epsilon_{it}. \quad (1)$$

$y_{it}$  is the outcome of interest for observation  $i$  in year  $t$  where  $i$  refers to a unit in a given treatment year cohort  $c$  since the same unit can appear in both treatment and control group.  $\mathbb{1}\{s = k\}$  is an indicator function which equals 1 if event time  $s$  equals  $k$ ,  $D_i$  is a treatment group indicator, and  $\gamma_i$  and  $\gamma_{s \times c}$  are unit times cohort and event time times cohort fixed-effects.  $\beta_k$  captures the difference between treatment and control group in event period  $k$  relative to our baseline period  $s = -1$ . Our identifying assumption is that treated units would have followed the same trend as not-yet treated units if the M&A had not happened. We visually test this assumption by plotting pre-event coefficients  $\beta_k$  in our event-study plots in Section 4. In figures in which we compare results from several specifications we will report coefficients from a static DiD regression

$$y_{it} = \beta \times P_t \times D_i + \gamma_i + \gamma_{s \times c} + \epsilon_{it} \quad (2)$$

where  $P_t$  is an indicator for the post-event period.

## 3 Data

### 3.1 Firm sample

Our sample covers Swedish firms and workers from 1997 to 2019 and is based on several administrative data sources which we can link by unique firm and person identifiers. The main data source in our firm sample is Statistic Sweden’s (SCB) Structural Business Statistics (FEK) which covers annual balance sheet information for all non-financial publicly listed private firms in Sweden since 1997. We winsorize outcomes at the 0.5th and 99.5th percentiles. All variables

measured in monetary units are reported in 2018 Swedish Krona (SEK). We merge the balance sheet information with the matched employer-employee data (RAMS) and keep all firms with on average five employees over our sample period. Our data on M&As as well as board members of firms is taken from the Serrano database, which covers all M&As registered at the Swedish Companies Registration Office (*Bolagsverket*), including information on both acquiring and target firms. We restrict our sample to cases where we observe both the acquiring and the target firm in both the balance sheet as well as the employer-employee data. Since all M&As in our data are complete takeovers, we do not observe target firms after the event. We generate our main firm outcomes by summing over the respective variables of both the acquiring firm and the target firm in all years in which we observe both in the data. In the years after the M&A, when only the acquiring firm remains, outcomes correspond to the acquiring firm's outcomes. Any log outcomes that we report are logs of these sums. We generate a dummy for having a shared board member from the Serrano data on board members, which is linked to the administrative data. Board members are defined to be shared between acquiring and target firm if they sit on boards of both firms in a given year.

### 3.2 Worker sample

Information on income and workers' employment as well as the geographic location and industry of the workplace stem from the matched employer-employee data (RAMS). We link these to demographic information on age, gender, and education from the Longitudinal Integrated Database for Health Insurance and Labor Market Studies (LISA) and data on occupations from the Structure of Earnings Survey (SES), which covers a random subsample of around 50 percent of the private sector Swedish workforce and the full set of public sector employees every year. We define employment as having more than 10,000 SEK labor income in a given year. Occupation codes follow the 4-digit SSK classification from SCB. In one of our specifications, we define labor markets based on educational degrees. These degrees follow SCB's SUN 2000 GRP specification and contain 97 different categories, combining both vertical (e.g. high-school vs. college) and horizontal (e.g. technical vs. business) aspects of degrees. Layoffs including five or more employees must be registered at the Public Employment Service (PES). We obtain data on such layoffs for the years after 2004. We keep the main employment of all workers in prime working age between 23 and 60 who work at firms which on average have at least 5 employees over our sample period. We assign workers to acquiring and target firms based on their employment in the year prior to the event. Similar to the firm sample, we restrict the sample to events for which we observe both acquiring and target firm in the data.

### 3.3 Estimation samples

From both the firm and the worker sample, we construct our estimation samples by stacking treatment units who experience an M&A in a given year and control units that experience an

M&A seven years later. This implies that units can appear in both the treatment and control groups separately. We therefore two-way cluster our standard errors at both the event (M&A) and the unit level. If a unit experiences several M&A events, we keep one event at random. We follow units in the five years leading up to the M&A, the event year, and the five years after the event. In all estimations, we use a sample that is balanced with respect to the outcome variable. Regressions on log income will therefore only include workers who are employed throughout the sample period. Together with our time restrictions, this implies that we use M&A events from the eleven years between 2002 and 2012. Appendix Figure A1 plots the number of events in the worker and the firm samples. Overall, our analysis includes 4,568 events in the worker sample and 1,884 events in the firm sample.<sup>1</sup> Table 1 depicts descriptive statistics of acquiring firms and target firms in the firm estimations sample in columns 1 and 2 and of the entire population of firms that do not experience an M&A in column 3. Both acquiring firms and target firms are larger than the average firm, as measured by revenues and number of employees. They have a higher value-added per worker, generate higher profits, pay higher average wages, and employ slightly older and better educated workers. Acquiring firms are substantially larger than target firms on average and slightly more productive, as measured by value-added per worker. They generate higher profits and employ slightly better educated workers, but pay lower average wages.

	<b>Acquirer</b>	<b>Target</b>	<b>Other Firms</b>
Avg Payroll in 1000 SEK	458.79	504.84	352.97
Profit in mio SEK	3.59	1.67	.86
Revenue in mio SEK	84.86	45.85	20.89
VA per worker in 1000 SEK	1713.5	1524.5	884.81
Number of Employees	169.63	42.81	22.72
Avg Years of Educ	12	11.81	11.47
Avg Age	40.53	40.59	37.41

Table 1: Descriptive statistics

Note: The first two columns of this table contain descriptive statistics on acquiring and target firms and their employees in the year before the M&A. The third column contains information on the entire population of firms which are not in our estimation sample. For each of the latter firms we choose a random year matching the distribution of event years in the M&A sample.

## 4 Results

### 4.1 Firm outcomes

We first analyze how firm-level outcomes evolve after M&As. Since in all of our M&As the target firm disappears after the event, we generate joint firm outcomes by summing over the respective variables of both the acquiring and the target firms. Figure 1 shows estimates of  $\beta_k$

<sup>1</sup>The firm sample is smaller than the worker sample because we only observe firm balance sheet data for non-financial publicly listed firms.

from DiD event-studies (1) for two key outcomes.<sup>2</sup> Panel (a) plots the estimates for profit in millions SEK. There is a sharp drop in the year after the target firm is completely taken over by the acquiring firm and profits are 970,000 SEK lower five years after the M&A.<sup>3</sup> Panel (b) shows the estimates for log employment which is 20.4 log points lower five years after the M&A. However, this decline is smoother than the decline in profits.

The large declines in joint profits and employment may be surprising given that leveraging productive synergies or to exploiting product market power is often thought to be a main rationale for M&As. In the following steps, we provide evidence that highlights the role that information acquisition may play in performing successful M&As. Figure 2 plots the share of acquiring firms that share a common board member with the target firm in the five years leading up to the M&A.<sup>4</sup> This share increases from 47.8 percent five years before the M&A to 77 percent in the year before the M&A.

One potential explanation for this is that acquiring firms buy parts of the target firm, gaining them the right to appoint a board member in the years leading up to the M&A. This common board can then acquire information that is important for the acquiring firm's evaluation of the potential M&A. While we cannot directly prove this mechanism, it suggests that M&As between firms with a common board members should result in better firm outcomes. Figure 3 tests this hypothesis by plotting event-study estimates for our firm outcomes splitting the sample by M&As with common board member in the year prior to the event and those without common board member. While employment evolves similarly between firms with and without a common board member, only firms without a common board member experience a substantial drop in joint profits.

In Table 2, we further split the sample into horizontal and vertical M&As where an M&A is defined as horizontal if the acquiring and the target firm operate within the same 4-digit industry and vertical otherwise. We then compare the effects of M&As on joint profits between horizontal and vertical M&As for firms with and without a common board member. While profits drop in all four groups, only the estimated coefficient for vertical M&As between firms that do not share a common board member is significant, showing a drop of 3.3 million SEK.<sup>5</sup> Since information frictions are likely to be a larger issue between firms operating in different industries, we view this as additional evidence for our hypothesis.

## 4.2 Main worker outcomes

We next turn to worker-level outcomes. Figure 4 plots event-study estimates for our two main outcomes in the worker sample. Panel (a) plots the coefficients of a regression on log income for workers who remain employed throughout the eleven years around the M&A. The pre-event

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<sup>2</sup>See Appendix Figure A2 for the respective means of treatment and control groups.

<sup>3</sup>Average joint profits of treated firms are 6.25 million SEK in the year before the M&A

<sup>4</sup>Note that our firm sample only includes publicly listed firms.

<sup>5</sup>See Appendix Tables ?? for similar results on employment.

estimates in the years leading up to the M&A do not show any pre-trend. After the event incomes of treated workers fall relative to the control group by up to -5.2 percent five years after the event. Appendix Figure A3 panel (a) shows the respective averages of log income for both the treatment and control group. The relative drop in incomes of treated workers arises from a decline in the income growth rate rather than an actual decrease in nominal incomes. Panel (b) of Figure 4 plots coefficients on employment. Since we only include workers into our analysis who are employed in the year prior to the M&A, there is a significant, but small mechanical increase in coefficients in the reference period.<sup>6</sup> In the year of the M&A employment of treated workers falls by 2.3 percent and continues to drop up to -5.2 percent five years after the event.

To investigate differences in treatment effects by worker characteristics, we split our samples based on worker characteristics measured in the year prior to the M&A. Figure 5 depicts the coefficients from a static DiD as in equation (2). The average effect in the post-period is -2.9 percent for income and -2.8 percentage points for employment respectively. Generally, low-income, older, and less educated workers experience larger losses in both income and employment. The top three rows show that there is a step gradient in income and employment losses with respect to the income rank, relative to the overall population. Workers in the bottom tertile of the population experience average losses of 5.3 percent in income and 10.3 percentage points in employment compared to losses of 3.8 percent and 2.4 percentage points in income and employment, respectively, for workers in the middle tertile and 1.7 percent and 1.1 percentage points for workers in the upper tertile. The fourth to sixth rows display coefficients for regressions in which we split the sample by workers' ages. Older workers who are above 50 in the year before the M&A experience the largest losses of 3.9 percent in income and 4.6 percentage points in employment. Middle aged workers' incomes fall by 2.9 percent and their employment by 2.7 percentage points. Young workers below the age of 30 experience income losses of 1 percent, which are not statistically significant, and 2.4 percentage points decrease in employment. Rows seven and eight show results split by whether workers have a college degree. Incomes of workers without a college degree drop by 3.3 percent and 3.2 percentage points, respectively, while college-educated workers experience declines of 2.2 percent in incomes and 1.6 percentage points in employment. Rows nine and 10 show results separately for men and women. The differences between genders are relatively small. For men, incomes and employment fall by 2.7 percent and 3.3 percentage points, respectively, while for women incomes and employment fall by 3.1 percent and 2.5 percent, respectively.

M&As may be driven by the desire or offer the opportunity to reorganize production. To gain insights into changes of the employment structure, we estimate the probability of switching from working for the acquirer or target firm to either non-employment or working for another firm separately for workers initially employed at the acquiring firm and those initially employed at the target firm. We split the sample based on eight different 1-digit occupational groups. Figure

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<sup>6</sup>See also panel (b) of Appendix Figure A3.



8 shows the estimated coefficients from static DiD estimations. On average, workers initially employed at the acquiring firm are not significantly more or less likely to switch jobs relative to the control group. Workers initially employed at the target firm, however, are 8.8 percentage points more likely to not gain employment at the acquiring firm after the M&A. Appendix Figure A4 plots the estimated coefficients on log income and employment, similar to Figure 5, split by occupations and initial employment at the acquiring or target firm. Workers at the acquiring firm are 2.5 percentage points more likely to lose employment relative to the control group, and target workers are 3.6 percentage points more likely to lose employment. This implies that the switching probability of target firm workers is largely driven by seeking employment at other firms rather than losing employment.<sup>7</sup> For workers initially employed at the acquiring firm, all estimates on switching probabilities are insignificant except for those in service, care, and sales occupations, who are 8.5 percentage point more likely to remain at the acquiring firm, and for workers working in administrative and customer services occupations, who are 14.6 percentage points less likely to stay employed at their initial firm. For workers initially employed at the target firm, all occupations experience an increase in switching probabilities, although the estimates for workers in low-skilled and in mechanical manufacturing and transport occupations are statistically insignificant. As for acquiring firm workers, administrative and customer service workers are most likely to switch, with an increase of 21.8 percentage points. This is consistent with firms lowering overhead costs by reducing the total number of administrative workers. Perhaps surprisingly, managers at the target firm are not more likely to leave compared to, for example, low or high-skilled professionals.

### 4.3 Which mechanisms can explain the adverse effects on workers?

In the following section, we provide evidence for two channels that explain the income decline among workers impacted by an M&A. First, we show that the negative effects are concentrated among workers who leave or are laid off from the merging firms (switchers), whereas stayers experience only small negative effects, on average. Second, we show that among stayers only incomes of those whose merging firms had a common board member experience a decline in income while incomes of workers affected by an M&A without common board member do not decrease. Finally, we show that lower incomes are unlikely to result from increases in labor market concentration due to the M&As.

In Figure 6, we compare the incomes of treated workers who remain at the acquiring firm (stayers) throughout the entire post-period with those of control workers who remain at their employer in the year before the M&A and incomes of treated workers who switch jobs (switchers) with those of control workers who switch jobs at any point in the post-period. Effects on stayers are very small and only become significantly negative after 4 years. Treated workers who switch

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<sup>7</sup>Appendix Figure A5 plots the event-study estimates for switching probabilities for acquiring and target firm workers conditional on remaining in employment. The patterns are similar to those in Figure 8 with target workers' probability of working at a different firm increasing after the M&A and acquiring firm workers' probability remaining unaffected.

jobs, however, experience steep declines of 7.9 percent after five years. This implies that workers who switch jobs in the years following the M&A, fare considerably worse than control workers who switch jobs for other reasons. Since a higher share of workers than usual leave their firm after M&As, this can explain the negative effects on incomes for those who remain employed.

In the next step, we provide evidence for why workers who switch employers after an M&A experience a decline in relative incomes. To do this, we estimate AKM firm fixed effects (Abowd, Kramarz, and Margolis, 1999) following

$$y_{it} = \phi_i + \psi_j + \mathbf{X}'_{it}\delta + u_{it}. \quad (3)$$

Here,  $y_{it}$  refers to a worker’s log income,  $\phi_i$  denotes a worker fixed effect,  $\psi_j$  is the firm fixed effect of interest, and  $\mathbf{X}_{it}$  contains year fixed effects and a second-order polynomial of work experience.<sup>8</sup> The firm fixed effect  $\psi_j$  is a measure of firm-specific pay premiums holding individual workers’ productivity fixed. Panel (a) of Figure 7 plots the estimated event-study coefficients for the firm fixed effect of workers’ current employer for all workers who switch employers after the M&A. Although there is an upward pre-trend, making it difficult to interpret the results causally, there is a clear trend brake after the M&A. This qualitatively indicates that workers switch to firms offering substantially lower pay premiums. In panel (b) of Figure 7 we estimate effects on a second measure of job quality following Sorkin (2018). This job values measures the overall job quality including both pay and non-pay components based on employer-to-employer transitions.<sup>9</sup> To facilitate interpretation, we standardize the resulting job quality measures. Workers who switch employers after an M&A transition to jobs in with a 0.17 standard deviation lower overall job quality.

Mirroring the approach used for firm outcomes, which accounts for heterogeneity by acquirer and target firms having a common board member, we further split the sample of stayers into those whose merging firms had a common board member and those whose merging firms did not. Figure 9 plots the respective event-study estimates. Incomes of workers going through an M&A without a common board member—whose firms experience a drop in profits—remain unaffected. On the other hand, incomes of workers experiencing an M&A with common board members -whose firms do not experience a drop in profits- decline by 3.3 percent within five years.<sup>10</sup> The link between profits and incomes is, to some extent, mechanical from an accounting perspective, as profits are calculated as revenues minus costs, including payroll. however, this link may also reflect how aggressively the merging firm maximizes profits.

Recent discussions have highlighted the potentially harmful effects of ignoring labor market concentration in antitrust M&A evaluations (see e.g. Marinescu and Hovenkamp, 2019; Mari-

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<sup>8</sup>We define work experience as age - (years of education + 6).

<sup>9</sup>To ensure that we only capture voluntary transitions, we drop all transitions after M&As, establishment closures, and large layoffs.

<sup>10</sup>Appendix Table A1 reports estimates for log income and employment by having a common board member for stayers and switchers. While the effects on employment are very similar, incomes only fall for those workers affected by an M&A with common board member.

nescu and Posner, 2019). By increasing employer concentration in local labor markets, M&As can lower labor income by worsening workers' outside options. This would be in line with our estimates on log income reported in Section 4.2. To test this channel, we split our sample by the predicted increase in the local labor market employment share of the M&A for each worker. Specifically, in our main specification, we define a local labor market to contain all workers within a 3-digit occupations and municipality. We then split the sample into tertiles based on the respective employment share of the target firm if the target firm operates within the same local labor market. If the losses in income were a result of increased concentration, we would expect larger losses for M&As where the acquiring firm gains larger employment shares in the respective local labor markets. The average employment shares of target firms are 0.01 percent, 0.97 percent, and 28 percent in the lowest, middle, and upper tertiles, respectively.<sup>11</sup> The upper-left panel of Figure 10 shows the estimated coefficients from a static DiD for log income and employment. All coefficients are very similar and, although not significantly different, the point estimate for the upper tertile is even slightly lower than the estimates for the middle and lower tertile. In the remaining panels in Figure 10 we vary our definition of local labor markets and define them based on occupations, educational degrees, or 2-digit industries and either municipalities or larger regions.<sup>12</sup> We do not find any patterns suggesting that M&As leading to higher employer concentration result in worse outcomes for workers. In Appendix Figure A7 we further split the sample based on the relative expected increase in the acquiring firm's employment share as well as the acquiring firm's initial employment share and do not find any evidence suggesting that local labor market concentration plays a role in shaping our results. Note that this is unlikely to be driven by the peculiarities of the Swedish labor market. Previous work has found negative effects of labor market concentration on wages in Sweden in different contexts (Beuschlein and Massner, 2024; Thoresson, 2024). As a second test of the role that employer concentration may play in generating negative effects on workers' incomes, we split the sample according to the share of workers who transition from the acquiring firm to the target firm in the seven years before the M&A relative to all employer-to-employer transitions from the acquiring firm. If some firms acquire their direct labor market competitors to suppress wages, we should observe larger declines in workers' incomes for those firms. Overall, only 17.1 percent of M&As in our sample are between firms with such direct worker transition links. The average transition share to the target firm for those firms with positive shares is 7 percent.<sup>13</sup> Appendix Figure A9 plots the event-study estimates of log income for M&As with a positive transition share to the target firm and those without any previous transitions between the acquiring and target firm. Although the point estimates are slightly larger for events with positive transition share to the target firm, the difference is not statistically significant.

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<sup>11</sup>See Appendix Figure A6 for histograms of the distributions.

<sup>12</sup>There are 148 3-digit occupations, 97 educational degrees, and 16 2-digit industries as well as 290 municipalities and 21 regions.

<sup>13</sup>See Appendix Figure A8 for a histogram of the distribution of positive transition shares to the target firm.

## 5 Conclusion

In this paper, we use a DiD design to show that workers experience considerable losses in income and employment following an M&A event. These losses are particularly pronounced for initially poorer, older, and less educated workers. We report that many workers initially employed at the target firm transition to a firm other than the acquiring firm. Workers who are employed at the acquiring firm are on average not more likely to leave this firm. However, workers employed in administrative and customer services occupations from both the acquiring and the target firm are more likely to leave the firm. This suggests that firms try to reduce overhead labor cost after the M&A. Recent discussions have highlighted the potentially harmful role that M&As can play for workers by increasing local labor market concentration and, therefore, pushing down wages (Marinescu and Hovenkamp, 2019; Marinescu and Posner, 2019). We test this by splitting our sample according to the expected increase in local labor market employment shares of the acquiring firm and do not find any evidence suggesting that firm labor market power plays a role in shaping our results. We further document that only in 17.1 percent of our M&As do firms acquire direct labor market competitors that have hired workers from the acquiring firm in the years leading up to the M&A. Furthermore, the losses in income are not significantly larger for M&As in which firms do acquire direct labor market competitors. Instead, we document that the income losses are driven by workers who switch employment rather than those who remain at the acquiring firm. These switchers transition to firms that pay lower premia and provide overall less job quality. Next, we examine joint firm-level outcomes by summing over acquiring and target firms' balance sheet variables. We find substantial drops in profits and employment and profits. We show that the losses in profits are driven by M&As in which the acquiring and target firms do not share a common board member in the year before the event. This is consistent with a story of the importance of information acquisition in successfully executing M&As. We further test this hypothesis by reporting that the decline in profits after M&A without a common board member is especially pronounced in vertical M&As between firms operating in different industries, a setting in which information frictions are likely to be large. Our findings contribute to the ongoing policy debate on the role of antitrust law in labor markets and questions the efficacy of M&As in increasing firm profitability.

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## 6 Figures and tables

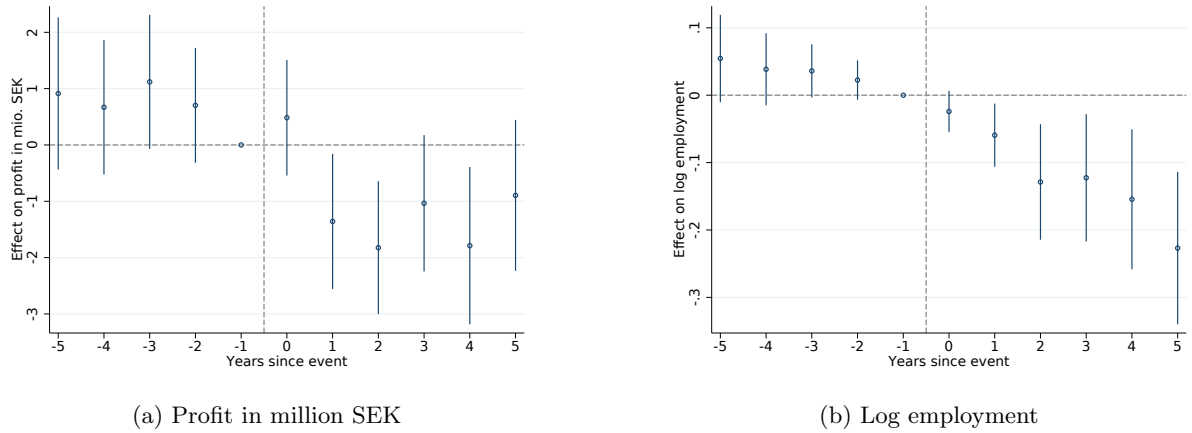


Figure 1: Firm outcomes

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for firm outcomes in the years around an M&A event. Panel (a) shows profits in million SEK and panel (b) log employment. The outcomes are generated by summing over the respective variables for the acquiring firm and the target firm. The reference period is the year before the M&A. Standard errors are clustered on the firm level.

	Common board member		No common board member	
	(1) Horizontal	(2) Vertical	(3) Horizontal	(4) Vertical
Post x Treatment	-1.159 (0.970)	-1.050 (0.847)	-2.321 (1.185)	-3.353** (1.160)
Constant	6.906*** (0.149)	6.897*** (0.131)	7.117*** (0.108)	7.280*** (0.128)
Firm FE	Yes	Yes	Yes	Yes
Event-time FE	Yes	Yes	Yes	Yes
Observations	1254	1782	858	1199

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 2: Profit in mio. SEK by common board member and horizontal M&A

Note: This tables reports estimated coefficients from static DiD regressions as in equation (2) for firms' joint profits in millions of SEK. Profit is computed by summing over profits of the acquiring firm and the target firm. The first two columns show results for firms that share a common board member in the year before the M&A. The last two columns show results for firms that do not share a common board member in the year before the M&A. Columns 1 and 3 report estimates for horizontal M&As and columns 2 and 4 report estimates for vertical M&As. We define M&As as being horizontal if they occur between firms within the same 4-digit industry and vertical otherwise. Standard errors are clustered on the firm-level.

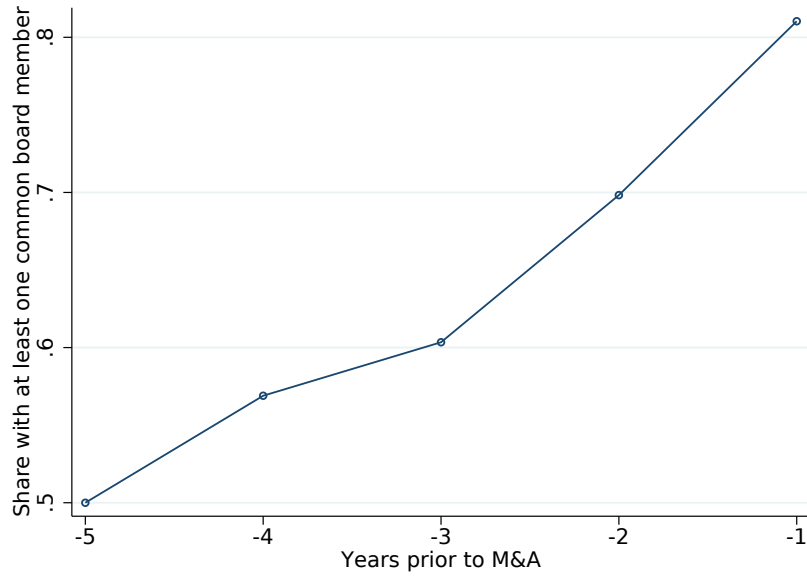


Figure 2: Sharing a board member

Notes: This figure shows the share of acquiring firms which share a common board member with the target firm in the years leading up to the M&A.

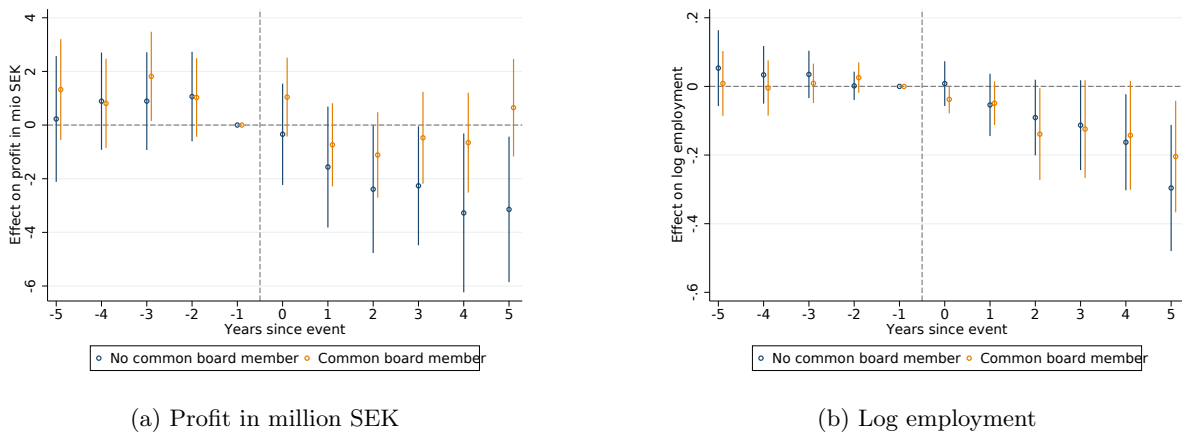


Figure 3: Firm outcomes by having a common board member

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for firm outcomes in the years around an M&A event. Panel (a) shows profits in million SEK and panel (b) log employment. The outcomes are generated by summing over the respective variables for the acquiring firm and the target firm. The sample is split into events where the acquiring and the target year share a common board member in the year before the M&A and events where they do not share a common board member. The reference period is the year before the M&A. Standard errors are clustered on the firm level.

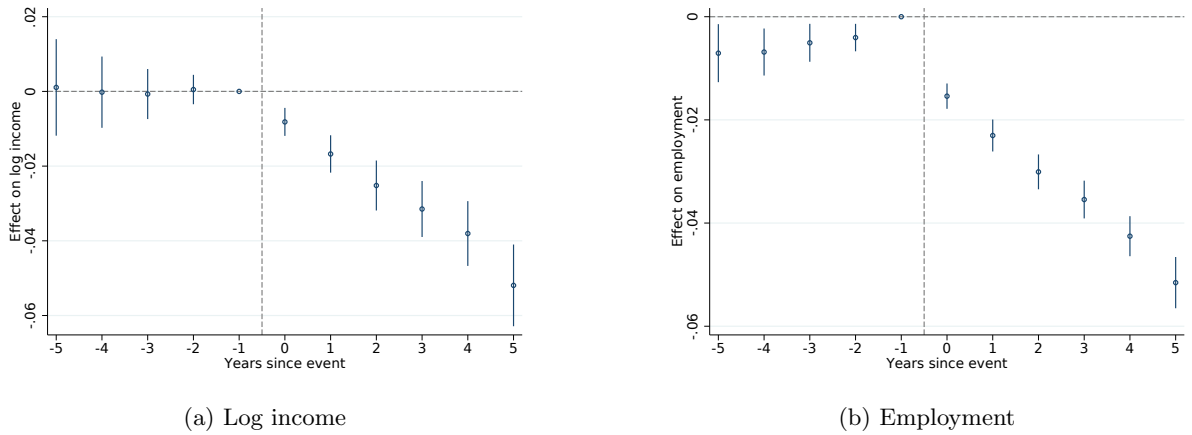


Figure 4: Worker outcomes

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for workers' log income and employment in the years around an M&A event. Employment is defined as having labor income of more than 1000 SEK in a given year. The reference period is the year before the M&A. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

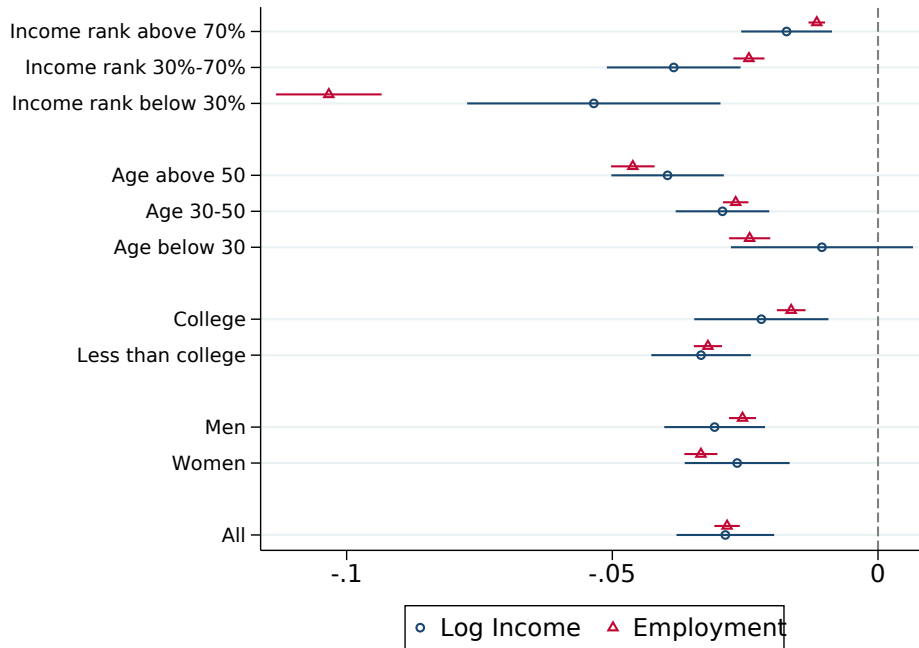


Figure 5: Heterogeneity by worker characteristics

Notes: This figure shows coefficients and 95 percent confidence intervals of a static DiD regression as in (2) for workers' log income and employment in the years around an M&A event. Employment is defined as having labor income of more than 1000 SEK in a given year. The top three estimates are from regressions where we split the sample by the total population income rank in the year before the M&A. In the fourth to sixth regressions we split by the worker's age in the year before the M&A. The seventh and eighth rows show estimates split by having a college degree in the year before the M&A. The ninth and tenth regressions are estimated separately by gender. The last row shows estimates for the entire estimation sample. Standard errors are two-way clustered on the worker and the acquirer-target firm level.



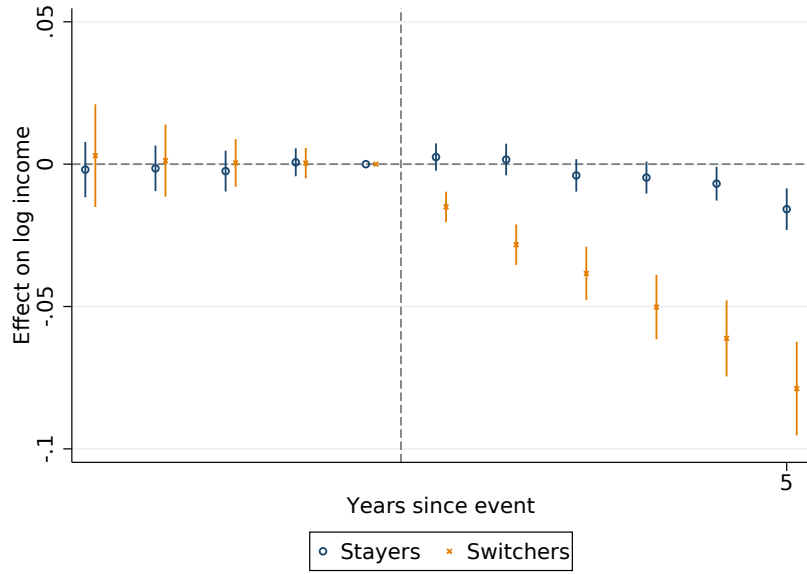


Figure 6: Log income for stayers and switchers

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for workers' log income in the years around an M&A event. The sample is split into workers remain at the acquiring firm after the M&A (stayers) and workers who at some point after the M&A switch employers (switchers). The reference period is the year before the M&A. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

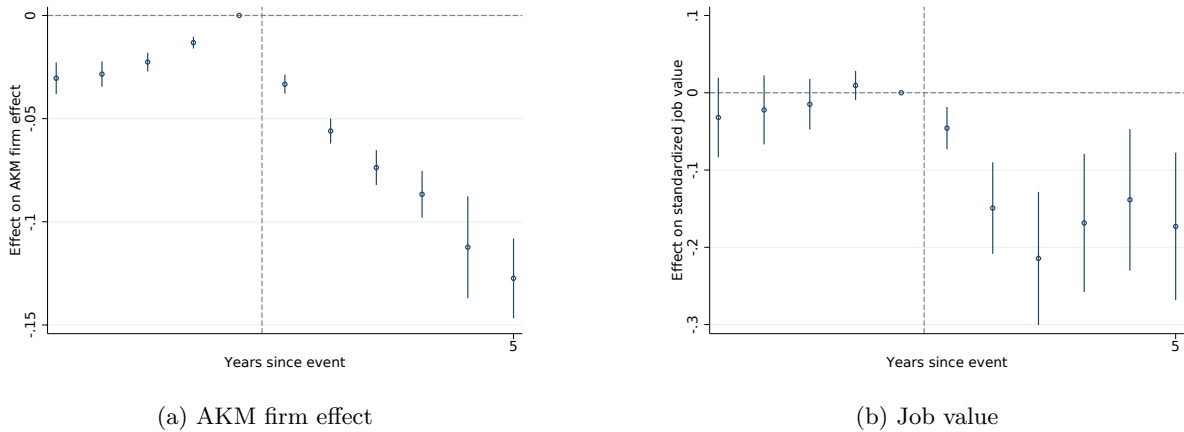


Figure 7: Firm quality of switchers

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for workers' AKM firm fixed effect and job value in the years around an M&A event. We only use workers who switch firms at any point after the M&A. The AKM firm fixed effects are estimates following equation (3). The job values is estimated following Sorkin (2018) and then standardized. The reference period is the year before the M&A. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

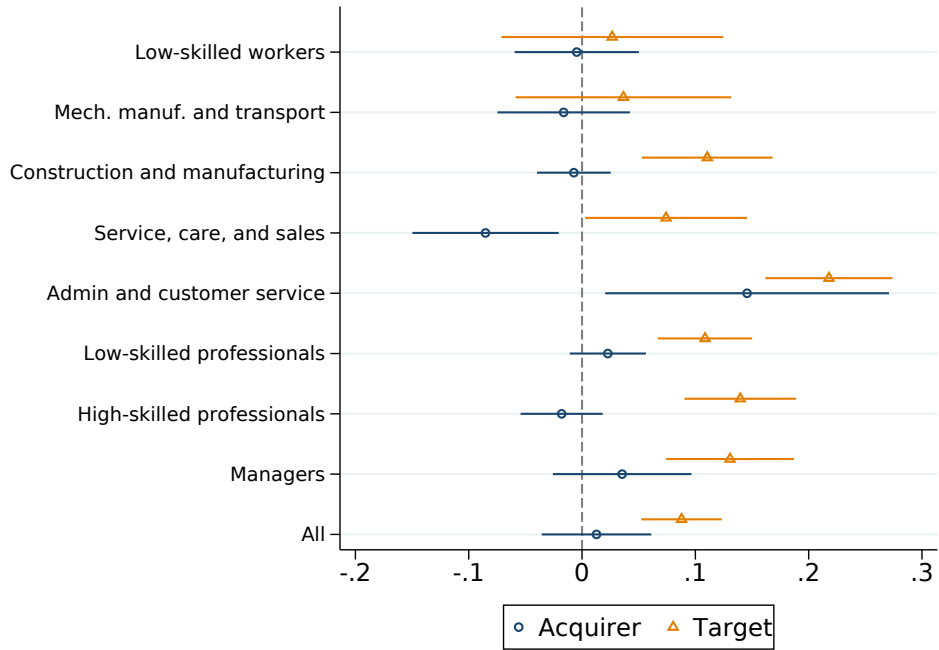


Figure 8: Probability of not working at acquiring or target firm

Notes: This figure shows coefficients and 95 percent confidence intervals of a static DiD regression as in (2) for workers' probability of switching from working for the acquirer target firm to non-employment or another firm in the years around an M&A event. Within each panel, the first eight rows show estimates for different 1-digit SSYK occupational groups fixed in the year before the M&A and the last row shows the respective average effect. The last row shows estimates for the entire estimation sample. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

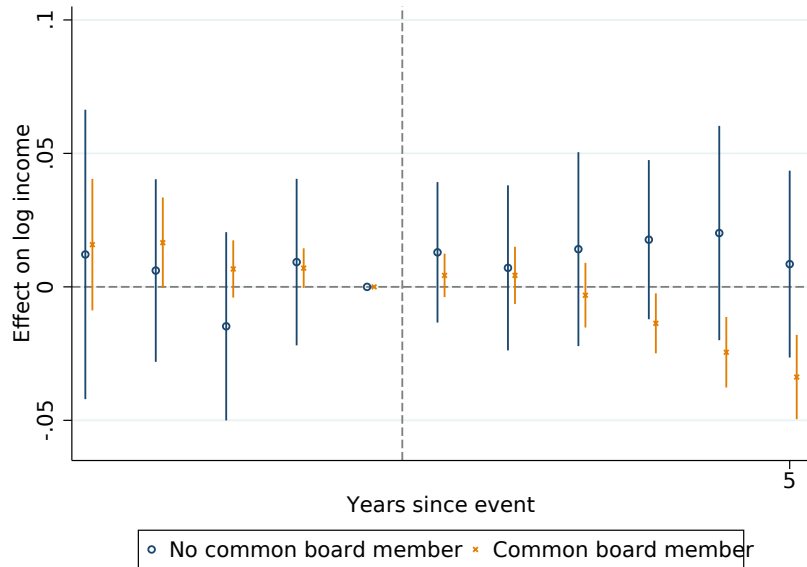


Figure 9: Log income of stayers by having a common board member

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for workers' log income in the years around an M&A event. The sample only contains workers who remain at the merging firm and is split into events where the acquiring and the target firm share a common board member in the year before the M&A and events where they do not share a common board member. The reference period is the year before the M&A. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

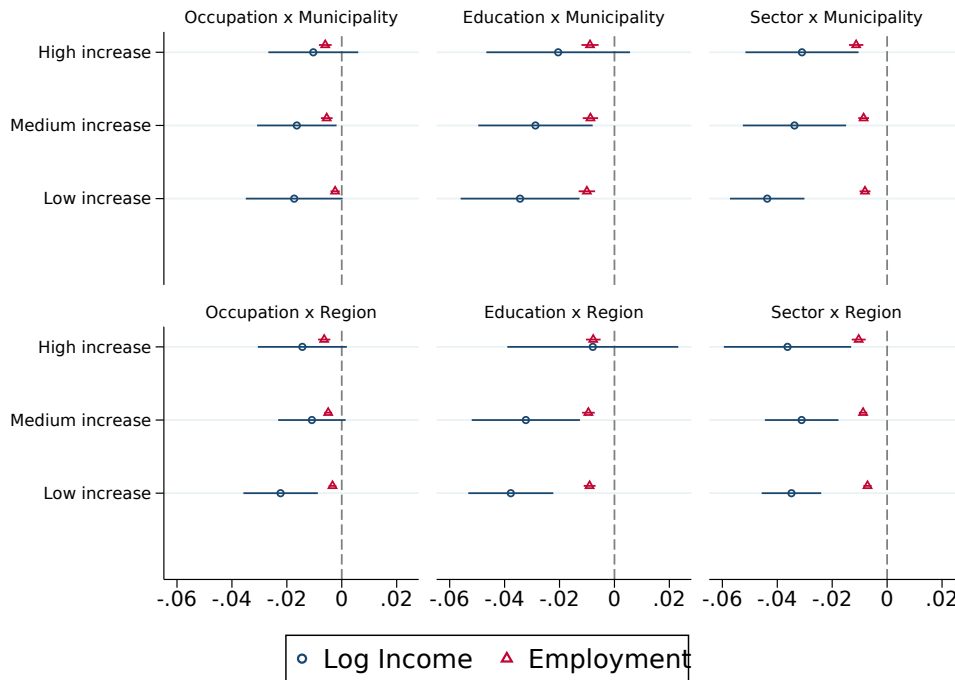


Figure 10: By predicted employment share increase

Notes: This figure shows coefficients and 95 percent confidence intervals of a static DiD regression as in (2) for workers' log income and employment in the years around an M&A event. Employment is defined as having labor income of more than 1000 SEK in a given year. The sample is split into tertiles by the predicted absolute increase in the firm's employment share in the respective local labor market. We define this increase as the employment share of the target firm in the respective local labor market in the year before the M&A. The six panels plot results for different definitions of local labor markets. We interact a geographic identifier with a worker characteristics. As geographic identifiers we use either one out of 290 municipalities or one out of 21 regions in Sweden. Worker characteristics are either one out of 97 educational degrees, one out of 148 3-digit occupations or one out of 16 2-digit sectors the worker is employed in. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

# A1 Appendix

## A1.1 Figures

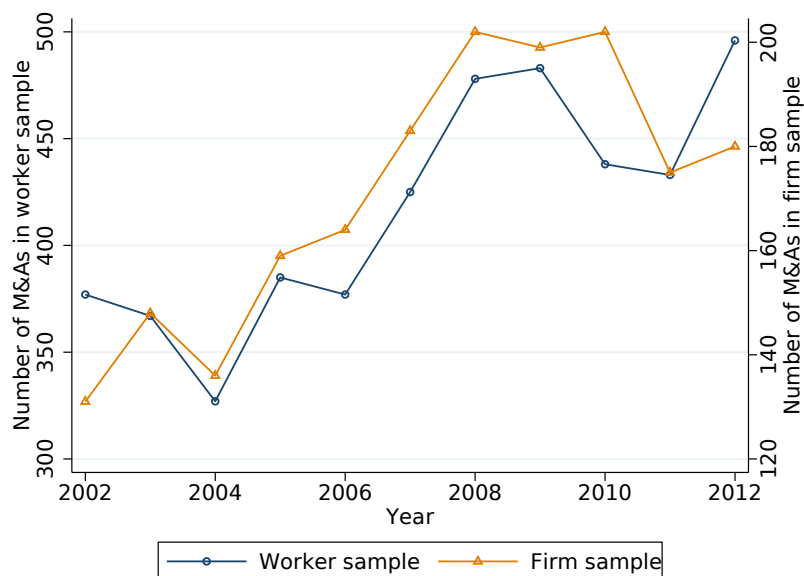
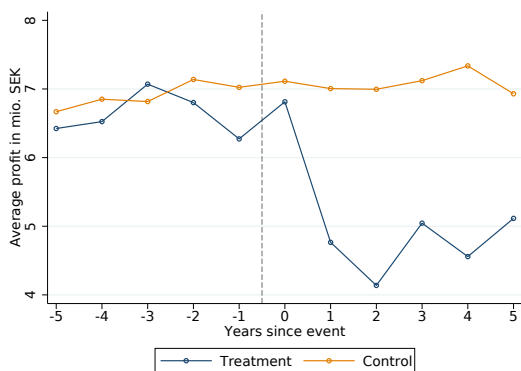
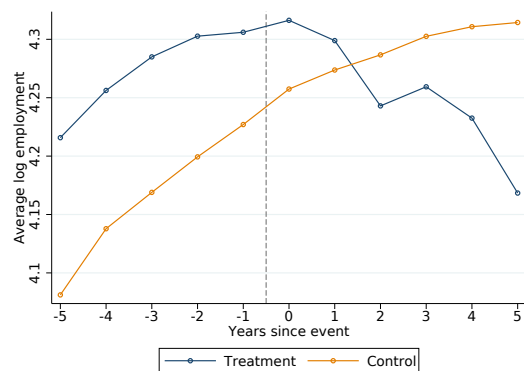


Figure A1: Number of M&A events

Notes: This figure shows the number of unique M&A events in the final worker and firm estimation samples in every year between 2002 and 2012.



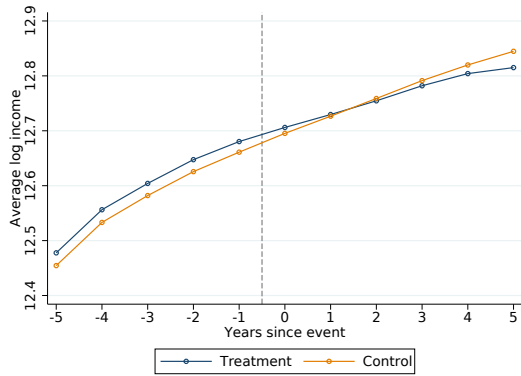
(a) Profit in million SEK



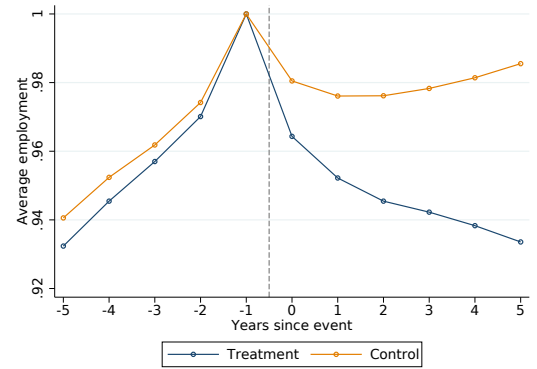
(b) Log employment

Figure A2: Average firm outcomes

Notes: This figure shows average firm outcomes in the years around an M&A event. Panel (a) shows profits in million SEK and panel (b) log employment. The outcomes are generated by summing over the respective variables for the acquiring firm and the target firm.



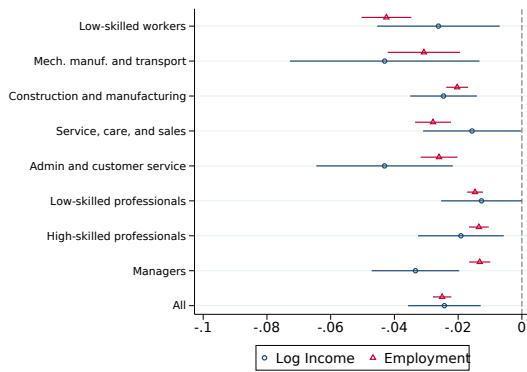
(a) Log income



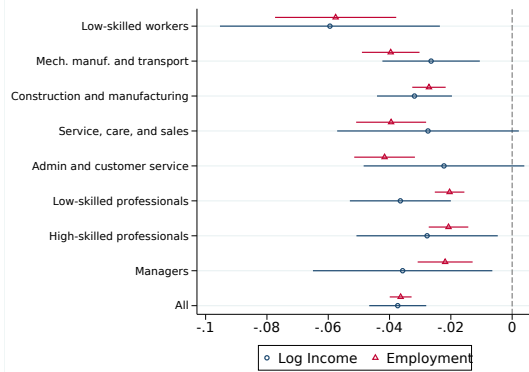
(b) Employment

Figure A3: Average worker outcomes

Notes: This figure shows workers' average log income and employment in the years around an M&A event. Employment is defined as having labor income of more than 1000 SEK in a given year.



(a) Acquiring firm



(b) Target firm

Figure A4: Heterogeneity by worker occupation

Notes: This figure shows coefficients and 95 percent confidence intervals of a static DiD regression as in (2) for workers' log income and employment in the years around an M&A event. Employment is defined as having labor income of more than 1000 SEK in a given year. Panel (a) shows estimates for workers who work at the acquiring firm in the year before the M&A and panel (b) for workers who work at the target firm in the year before the M&A. Within each panel, the first eight rows show estimates for different 1-digit SSK occupational groups fixed in the year before the M&A and the last row shows the respective average effect. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

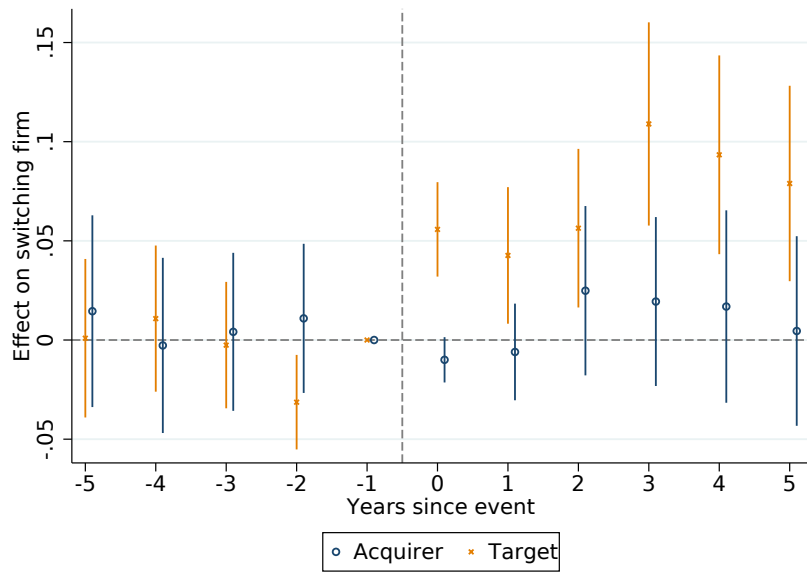
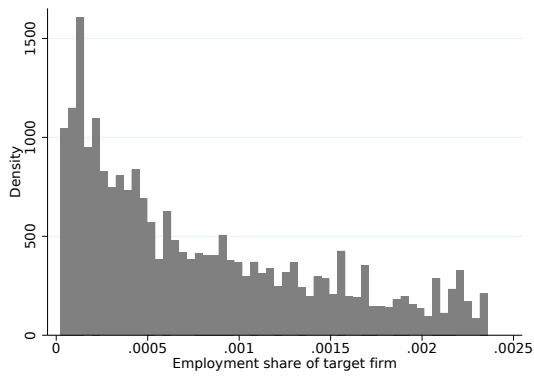
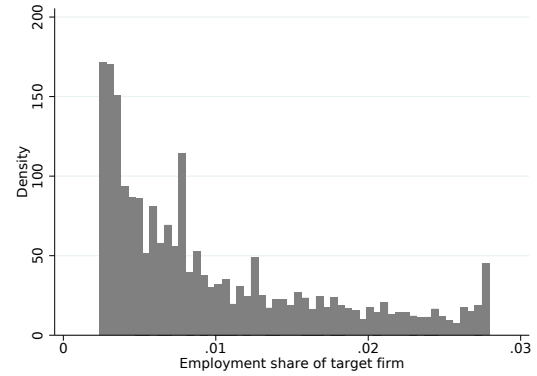


Figure A5: Switching job conditional on having employment

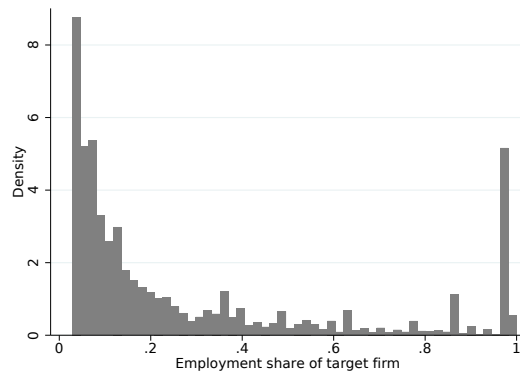
Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for workers' probability of working at a firm that is not the acquiring firm or the target firm involved in the years around an M&A event. The sample is split into workers who work at the acquiring firm in the year before the event and those that work at the target firm in the year before the event and only contains workers to are employed at any firm.. The reference period is the year before the M&A. Standard errors are two-way clustered on the worker and the acquirer-target firm level.



(a) Lowest tertile



(b) Middle tertile



(c) Highest tertile

Figure A6: Local labor market employment share of target firm

Notes: This figure plots the histograms of employment shares of the target firm in the workers' local labor markets in the year prior to the M&A. A local labor market contains all workers with the same 3-digit occupation in the same municipality. The three panels show the distributions for the lowest (a), middle (b), and highest (c) tertiles. This split corresponds to the one in Figure 10.

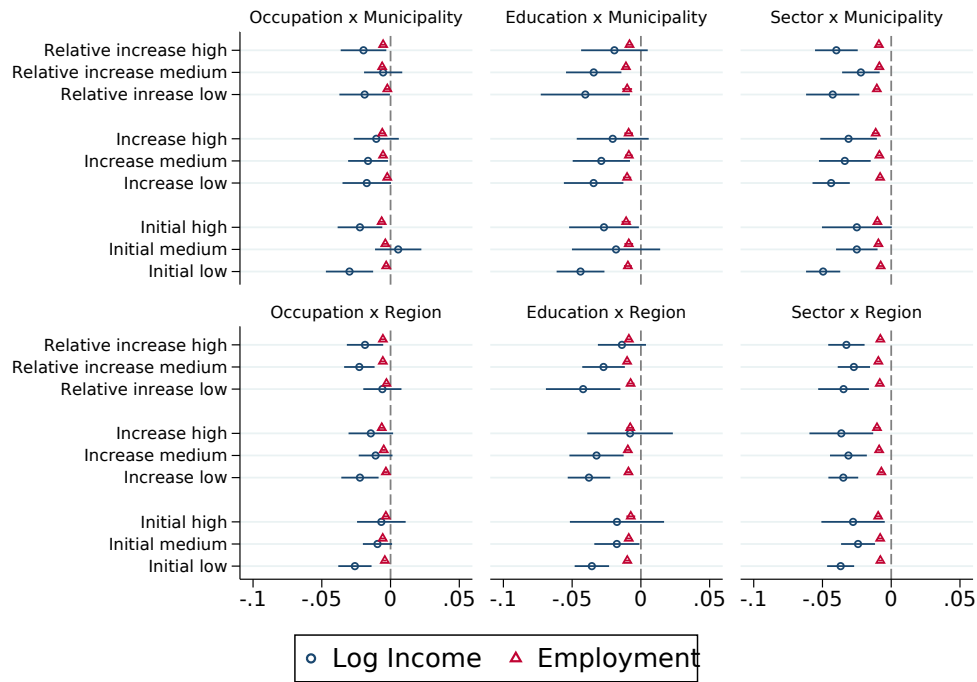


Figure A7: By predicted employment share increase

Notes: This figure shows coefficients and 95 percent confidence intervals of a static DiD regression as in (2) for workers' log income and employment in the years around an M&A event. Employment is defined as having labor income of more than 1000 SEK in a given year. We split the sample into tertiles according to three criteria. The first three rows show results based on splits by relative increase in predicted employment shares. The third to sixth row are based on splits depending on absolute increases in employment shares and correspond to the estimates depicted in Figure 10. We define these increases as the employment share of the target firm in the respective local labor market in the year before the M&A. The last three rows are based on sample splits depending on the initial employment share of the acquiring firm. The six panels plot results for different definitions of local labor markets. We interact a geographic identifier with a worker characteristics. As geographic identifiers we use either one out of 290 municipalities or one out of 21 regions in Sweden. Worker characteristics are either one out of 97 educational degrees, one out of 148 3-digit occupations or one out of 16 2-digit sectors the worker is employed in. Standard errors are two-way clustered on the worker and the acquirer-target firm level.



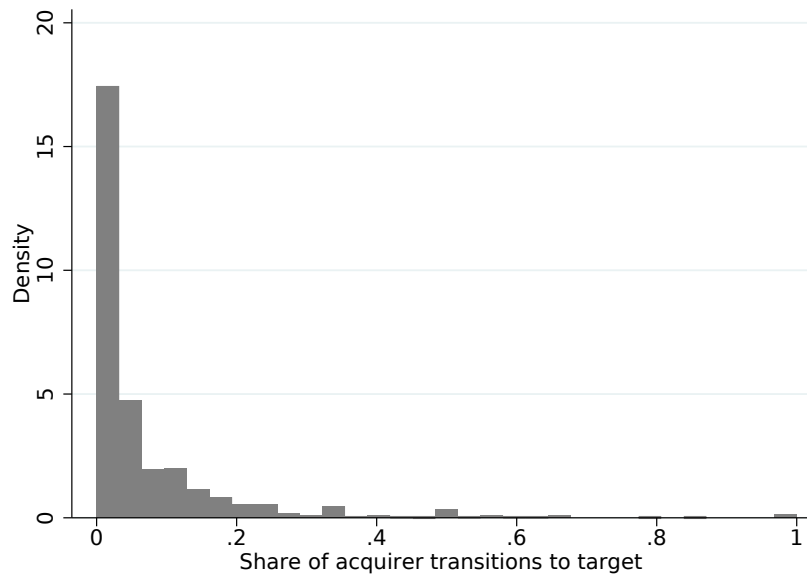


Figure A8: Share of positive previous transitions to target firm

Notes: This figure shows a histogram of the distribution of transitions from the acquiring firm to the target firm in the seven years before the M&A relative to all transitions to other employers for the 17.1 percent of M&As with a positive share.

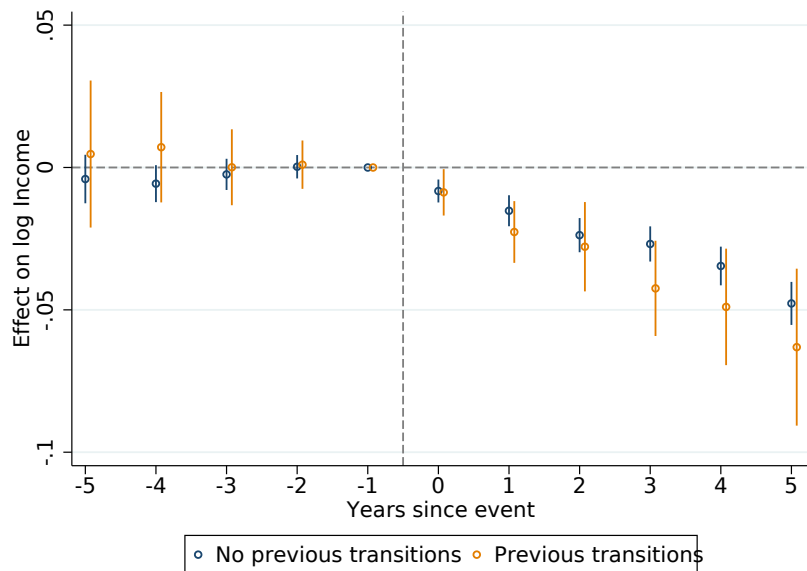


Figure A9: Log income for M&As by previous transitions to target firm

Notes: This figure shows coefficients and 95 percent confidence intervals of a DiD event-study as in (1) for workers' log income in the years around an M&A event. The sample is split into M&As of acquiring firms from which at least one worker transitions to the target firm in the seven years before the M&A and acquiring firms that do not experience such transitions. The reference period is the year before the M&A. Standard errors are two-way clustered on the worker and the acquirer-target firm level.

## A1.2 Tables

	Common board member		No common board member	
	(1) Log income	(2) Employment	(3) Log income	(4) Employment
Post x Treatment	-0.0457*** (0.00857)	-0.0378*** (0.00202)	-0.0106 (0.0100)	-0.0365*** (0.00449)
Constant	12.62*** (0.00265)	0.966*** (0.000652)	12.57*** (0.00260)	0.966*** (0.00115)
Person FE	Yes	Yes	Yes	Yes
Event-time FE	Yes	Yes	Yes	Yes
Observations	1165252	1492876	73238	102806

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A1: Worker outcomes - by common board member

Note: This tables reports estimated coefficients from static DiD regressions as in equation (2) for workers' log income and employment for the entire sample of firms. The first two columns show results for firms that share a common board member in the year before the M&A. The last two columns show results for firms that do not share a common board member in the year before the M&A. Columns 1 and 3 report estimates for log income and columns 2 and 4 report estimates for employment. Standard errors are clustered on the worker and the acquirer-target firm level.