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Compensation Policy, Human Resource Management Practices and Takeovers

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This paper was prepared for the DTI/PSI workshop on Making Linked Employer-Employee Data Relevant to Policy Analysts. It originated in a joint project started with Andrew Hildreth (U.C. Berkeley), to whom the author is thankful for several discussions. The author would also like to thank Denis Fougère, Robert Gary-Bobo, Francis Kramarz, Jérôme Philippe, Antoine Terracol, Jan van Ours and the participants in seminars at CREST, Tilburg University, the University of Aberdeen, the Joint UCD-Queen's Belfast Economic Seminar and the TEAM internal workshop for useful comments. All remaining errors are mine.

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Abstract

This paper uses a unique linked employer-employee data (LEED) set to examine the determinants of mergers and acquisitions and to study post-takeover employment. It find that firms involved in takeovers are qualitatively different from non-takeover firms and that post-takeover employment probabilities are highly dependent on individual characteristics (human resource management policies) and the firm's pre-takeover compensation policy. It also discusses the value of LEED for such an analysis and draws conclusions for industrial and labor policy based on combining these results with results from the literature on displaced workers.

Résumé

Ce papier exploite une base unique de données appariées employeur - employé (LEED) afin d'examiner les déterminants des fusions et des acquisitions ainsi que l'emploi après une fusion ou une acquisition. Nous trouvons que les entreprises qui participent à des fusions ou des acquisitions sont qualitativement différentes de celles qui n'y participent pas et que les caractéristiques des employés (gestion des ressources humaines) et la politique de rémunération de l'entreprise avant la transaction influent fortement sur la probabilité qu'un individu garde son emploi. Nous discutons également de la pertinence des données LEED pour ce genre d'analyse et nous tirons des conclusions pour les politiques industrielles et d'emploi sur la base de ces résultats et de ceux obtenus dans la littérature sur les licenciements collectifs.

Key Words: Mergers and Acquisitions, Takeovers, Employment, Linked Employer-Employee Data (LEED)
Mots Clés; Fusions et Acquisitions, Emploi, Données appariées employeur - employée (LEED)

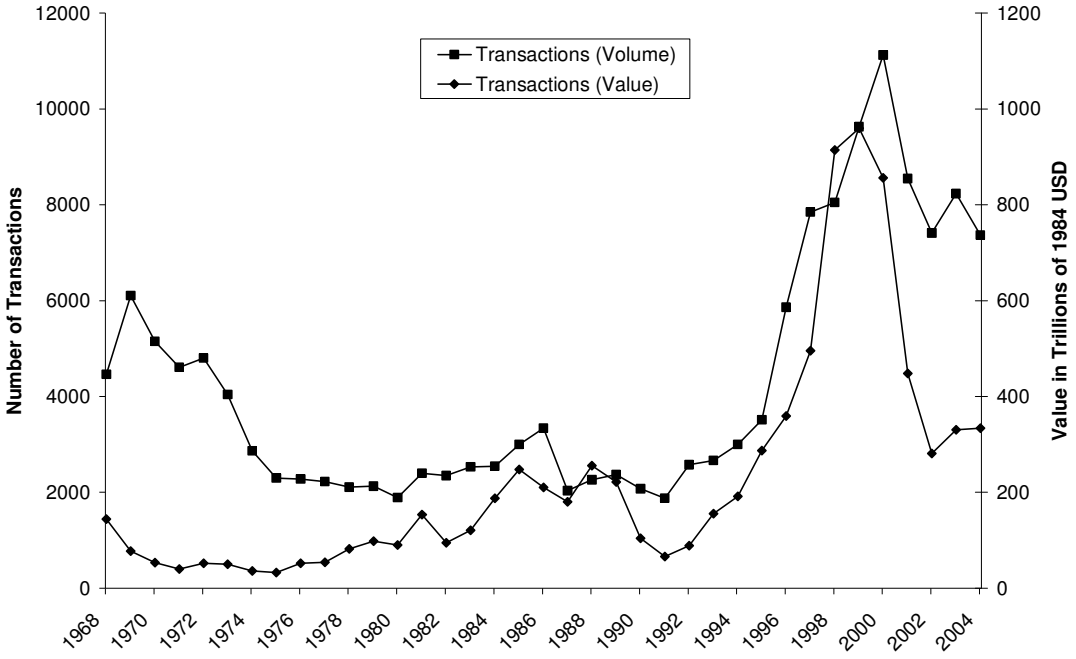
JEL Codes / Codes JEL : L21, L22, L24, J31, J23

In order to grow, firms (and economies) need capital to invest and projects in which to invest it. The capital that firms need can be drawn from many different sources, including bank financing, stock emissions, direct issuance of corporate debt, receipt of equity or cash injections from other firms. Different sources of financing come with different constraints for the firm, but in every case the entity that provides the financing hopes for a return on its investment derived from the operations of the firm.

The projects are also of different sorts, depending on the sector(s) of the economy in which the firm operates. The project can either involve expanding existing capacities or acquiring new ones. Both sorts of goals can be achieved by "organic" growth, with the firm creating opportunities by itself, via joint ventures with other firms or by acquisition of another firm that possesses the capacities, market share, products, distribution networks or whatever the firm needs in order to grow.

Companies have been exploiting this last possibility for many years. Figure 1 shows that even in the late 1960s (when the earliest consistent data are available), several thousand mergers and acquisitions were undertaken each year in the United States, and these transactions, although varying over time and increasing substantially in value, have remained economically important.

Figure 1
U.S. & U.S. Cross-Border Mergers and Acquisitions



Source: FactSet Mergerstat LLC, U.S. Bureau of Labour Statistics.

Since an acquiring firm must pay the market price for its target (plus the additional costs associated with undertaking the transaction), its choice of target becomes critical. If the acquiring firm cannot improve the profitability of the newly created entity by more than the costs associated with creating it, then the transaction will not take place. Clearly, one of the means by which profits can be increased is to reduce costs, namely through firing workers seen as overpaid, poorly adapted or simply superfluous to the needs of the new entity. Thus the compensation structure and human resource management policies of the target firm become an object of interest for predators, and post-transaction layoffs can reflect the acquiring firm's efforts to improve the profitability of the newly created entity.

Such considerations explain why mergers and acquisitions are often portrayed in the media in terms of their perceived negative consequences for labour as opposed to their positive consequences for growth. Press releases that accompany mergers often stress the potential for "rationalising" or "downsising", talking of possible "synergies" resulting from consolidating existing structures. All of these policies imply workforce reductions,

and although they are sometimes implemented through early retirements or non-replacement of workers who quit, they also correspond in many cases to mass layoffs.

This paper addresses the merger and acquisition process from the pre-transaction period (when the predator firm chooses its target) to the post-transaction period (when restructuring actually takes place). The primary focus is on compensation and employment, although consideration is also given to other elements of the process. In particular, using a unique linked employer-employee data set from France, we begin by exploring the differences between predator and target firms along several dimensions, including compensation and employment. This allows us to characterise which sorts of firms are more likely to be targeted for takeovers and which ones are more likely to undertake them. We then look at the post-transaction reorganisation period and try to establish whether workers from the acquired firm are more or less at risk of a layoff, which sorts of workers are more likely to be laid off and which sorts of firms are more likely to undertake large adjustments post-takeover in their work forces.

From a policy perspective, all of these issues are important. When considering ways to foster economic growth, it may be useful to see what sorts of firms are the ones that undertake the acquisitions, as these are the ones that are aggressively seeking growth opportunities and may be worthy of additional attention. Conversely, if one can identify the sorts of firms that are most likely to be acquired, one can prepare for the risk of layoffs in the areas where such firms are located. In particular, by analysing which workers stay and which workers go after a takeover, employment services can better structure their preparation for assisting these workers when they become laid off. Employment services can also direct resources to geographic areas where particularly vulnerable firms are established in anticipation of the post-takeover layoffs and make plans for helping the types of workers who are most likely to appear in search of assistance.

How Economists Perceive Mergers and Acquisitions

The vast majority of the attention among economists concerning mergers and acquisitions has focused on the reasons why one firm might acquire another. Several main explanations have arisen:

- *Controlling the actions of incumbent management*.[2] When the management team of a firm takes poor decisions that result in the firm's stock being priced below its potential, an outside firm can acquire the underperforming firm, change the management team, reverse the poor decisions and reap the gains from the improved efficiency. If these gains are sufficient to offset the costs, the transaction will take place. The literature[3] has pointed to compensation policy and human resource management practices as two areas in which an existing management team, perhaps in the hopes of buying peaceful labour relations or of trying to create a paternalistic environment, often makes "poor" decisions that can render a firm a takeover target.
- *Costly capital and the lack of investment opportunities*. As a firm matures, the return on its remaining opportunities for organic growth decreases (it exploits the best opportunities first and works its way down the list). However, it may build up a capital structure and a debt history that renders its cost of acquiring additional capital relatively low. Conversely, a newly created firm which may have had to borrow extensively to finance its starting up may be unable to find additional sources of capital to exploit its (relatively high return) investment opportunities. In such a situation, the mature firm may acquire the potentially fast-growing firm, whose stock price will not incorporate the returns on investments it is unable to finance on its own, in order to have access to these higher-return opportunities for investment while taking advantage of its relatively advantageous credit terms for financing the additional investments.

[2] Some examples of this appraoch include Manne (1965), Jensen and Meckling (1976) and Jensen (1984, 1986, 1988).
[3] See, for example, Bertrand and Mullainathan (2003), Brown and Medoff (1988) and Gofhale, Groshen and Neumark (1995).

- *Attaining a critical mass*.[4] A firm may have access to a production technology which is particularly efficient at high volumes of output, but it is unable to generate enough demand on its own. As a result, it may attempt to acquire additional distribution outlets or access to additional markets in order to exploit the cost advantages of large scale production inherent in its technology.
- *Increasing market share*.[5] When a firm has a substantial degree of market power, even without going as far as a monopoly, it can often exercise a certain degree of control over market prices and output levels and thereby improve profitability. In order to attain sufficient market share, firms may attempt to buy competitors. Of course, such strategies are frowned upon by competition authorities and are thus rarely presented to the media under this angle.
- *Enforcement of a threat under tacit collusion*.[6] In the absence of an explicit motive to gain market share, firms may partake in pricing and production practices that represent collusive behavior. However, since these implicit arrangements are subject to undercutting by a member of the cartel, other members may use the threat of takeover to enforce the arrangements and may occasionally need to act on this threat in order to maintain their credibility.
- *Insuring against market-specific risks*.[7] If a firm is in a sector that is subject to important demand or input price fluctuations, it may seek to insure its share price against these fluctuations by diversifying into other, more stable, sectors or sectors with counterbalancing risks. This conglomeration approach, popular in the 1980s, has gradually been abandoned by firms focusing on their "core competences" while letting investors insure themselves privately by mixing shares within their own investment portfolios.

How Do Linked Employer-Employee Data Help?

[4] See, for example, Bradley, Desai and Kim (1983).
[5] See, for example, Eckbo (1983) and Borenstein (1990).
[6] See, for example, Compte, Jenny and Rey (2002).
[77] See, for example, Matsusaka (1993).

Since the objective of this paper is to study the employment and compensation dimensions of the takeover process, one obviously needs information on employment and compensation in firms involved in takeovers. This information can come from a variety of sources on either the employer or the employee side of the employment relation, or from linked employer-employee data.

Data coming from employer-side sources include the aggregate statistics published by various statistical agencies and investment banks, corporate tax returns, corporate accounts published by firms listed on stock markets or employer surveys. Each of these sources has its disadvantages. The aggregate data are clearly inadequate since it is impossible to know if a sector that undergoes significant restructuring through takeovers and also loses significant numbers of workers is losing the workers because of the takeovers or responding to some external negative demand shock by laying off workers and simultaneously consolidating. Furthermore, there is no way of knowing whether or not the firms that are laying off workers are also the firms involved in the takeover activity.

Tax returns and corporate account data are more promising, in that one can identify particular firms and measure total employment and total compensation costs. However, there is significant work associated with identifying which firms are involved in takeover activity; this information is made available by consulting firms, investment banks and occasionally statistical institutes, but it is not easy to merge accurately with the accounts information. Furthermore, although one can now identify which firms are involved in the takeover activity, one cannot tell which workers are let go, nor whether a firm with, for example, a high compensation cost per worker is really overpaying its workers or whether it has a genuinely more productive workforce that it needs to compensate appropriately.

Employer-side surveys come even closer to the ideal, since one can ask detailed questions about the structure of the workforce and compensation by type of worker. But once again, the problem lies in interpreting the figures: if a firm's employment remains stable after a

takeover yet its wage bill falls, have its workers taken a pay cut or were the more expensive ones fired and replaced with less expensive workers doing the same jobs? An additional issue lies in how representative the data is; the only employer-side survey-based studies in the literature are restricted to narrow sectors in specific geographic areas, and it is hard to generalise about what might happen on a nationwide scale on the basis of such analyses.

Employee-side data analyses are much rarer, in that the majority of employee-side data do not ask whether a person's employer has been involved in takeover activity. Some of the literature on mass layoffs tries to consider whether the layoffs occurred as a result of a plant's closing or while a plant remained open, but to this date they have not explicitly considered takeovers as a reason for the layoff. This is due to the absence of data on the question: neither the United States' Displaced Workers Supplement to the Current Population Survey nor Canada's COEP data, the two main sources used in the literature on mass layoffs, ask if the firm underwent a takeover. Furthermore, even if such information were available, workers typically do not possess detailed knowledge of their employer's financial accounts (and are never asked about it in surveys), meaning that one could not control for alternative explanations of takeovers when analysing takeovers with this sort of data.

Linked employer-employee data, such as those exploited in this paper, can solve all of these problems. Since the data include information on the firm side, such as data on corporate accounts and identification of which firms are involved in takeover activity (and their role in the takeover), one can control for various explanations of takeovers other than just compensation and employment issues and one can cleanly identify the acquiring, acquired and control (non-takeover) firms. Since the data also include information from the worker side, one can also cleanly identify whether the in-place workforce is "overpaid", inappropriately structured (e.g. too many high skilled-workers for the production technology) or too numerous relative to other comparable firms. Since the data are also longitudinal, meaning that individual firms and workers can be followed over time, one can also see which workers stay and which workers go after a takeover.

In fact, the linked employer-employee data that are used in this paper are drawn from several sources. The first source is a longitudinal data set of firm accounts (FUTE) established by INSEE, France's National Institute for Statistics and Economic Studies, that draws on corporate account data filed for tax purposes and from supplementary surveys. This data, of which we use the 1993-1999 information, covers all sectors of the economy and firms of all sizes, and allows one to control for explanations of takeovers that are related to a firm's financial situation, revenues or sector of activity. A second source is the little-exploited data in the Modification of Structure (MDST) database, also compiled by INSEE. This data, available from 1993-1999, covers all asset transfers over a minimum size (8 million French Francs) between firms and classifies them by type. Among the types of asset transfers covered are mergers (several firms transfer all of their assets to a newly created entity) and acquisitions (the acquired firm transfers all of its assets to the acquiring firm). Both of these data sets use the standard identification code for French firms (the SIREN) which allows the data to be combined easily and reliably.

On the individual side, this paper exploits two other data sets, the Annual Declarations of Social Data (DADS) and the Permanent Demographic Sample (EDP). The DADS is a longitudinal data set available from 1976-1999 which provides information on every job held in the private, state-owned, local government and non-profit sector by every worker in France. The longitudinal version of this data covers roughly 1/25 of the French population (people born in October of even-numbered years) and contains both an individual's national identification number (NNI) and the SIREN code of the employer, in addition to information on earnings, occupation, hours worked during the year and a rather limited set of individual characteristics (age, sex, place of birth and place of work). The EDP data, which are drawn from census records, birth, death and marriage certificates and other administrative sources for individuals born in the first 4 days of October, allow us to add additional individual-specific characteristics such as education to the DADS data, due to their use of the individual's NNI as an identifier.

The DADS data are the key linked employer-employee data source, and due to the presence of both the NNI and the SIREN in these data, all four data sets can be brought together in one combined database for analysis. This allows us to resolve all of the problems associated with having only employer-side or only employee-side data, and as Table 1 below shows, one can thus characterise firms by their status (acquired, acquiring or control) according to firm- or worker-side characteristics. However, since dating an individual's employment status relative to the takeover date is complicated when considering firms that have engaged in multiple takeovers, the analysis undertaken here only considers French firms that were either involved in no takeovers at all during the 1993-1999 period (Non-MDST Firms) or involved in only one takeover during this period (Acquired and Acquiring Firms).

Table 1 shows that there are differences between target and predator firms along all of the dimensions considered: compensation policy, human resource management policy and firm accounts. In particular, on average, firms that are acquired pay above the rates paid by acquiring and control firms, although they do not increase pay with seniority as much as acquiring firms. The target firms also tend to employ slightly less educated and younger workers, who do not remain employed for as long as in the other sorts of firms. The target firms are also smaller, more indebted, have higher returns on assets and are more productive than predator firms on average. The simple fact that different sorts of firms can be classified along all three sorts of dimensions is a testament to the usefulness of linked employer-employee data.

Identifying the Significant Differences Between Acquired and Acquiring Firms

The descriptive statistics presented in Table 1 only provide a general picture of the sorts of firms that are involved in takeovers, and as such they are not sufficient to distinguish the characteristics that really discriminate between predator firms and their targets, since some variables may tend to vary together. For example, if a firm is to remain competitive on the labour market it may have to match average compensation in other firms. If it pays

a lower initial wage, it may have to pay higher returns to job seniority to attract workers. This situation is consistent with the average figures in Table 1 when comparing predator firms to target firms, but a question remains unresolved: is it really the same firms that pay less on average that pay more for seniority, or do these firms pay less overall (base pay and seniority returns) while other firms pay more both on average and for job seniority, with the relative differences in the two subgroups offsetting each other?

Using econometric techniques for analysing qualitative data (logit models), one can control for such correlation between variables and distinguish which variables really increase the likelihood that a given firm will be the target of a takeover or become an acquirer of other firms. For details, the reader is referred to Margolis (2005), but the main results are presented here and in table 2.

First, in terms of compensation policy, there is basically nothing that distinguishes target firms from predators, although they both pay better for seniority (while target firms pay worse starting wages) than firms in the control group. One consequence of the target firms' lower return to seniority relative to control firms is that target firms also have workforces with lower job seniority than control firms, while no significant differences in average seniority are apparent between target and predator firms. Since the literature on mass layoffs suggests that high-seniority workers have a harder time finding jobs post-layoff, this is somewhat encouraging news if the majority of workforce reductions post takeover occur in the acquired firm.

On the human resource management side, almost nothing significantly distinguishes target firms from predators. However, both sorts of firms employ relatively fewer senior workers and more men than control firms. Again, this is encouraging news since the mass layoffs literature has also noted that less senior and male workers tend to find new jobs faster than more senior or blue collar workers.[8]

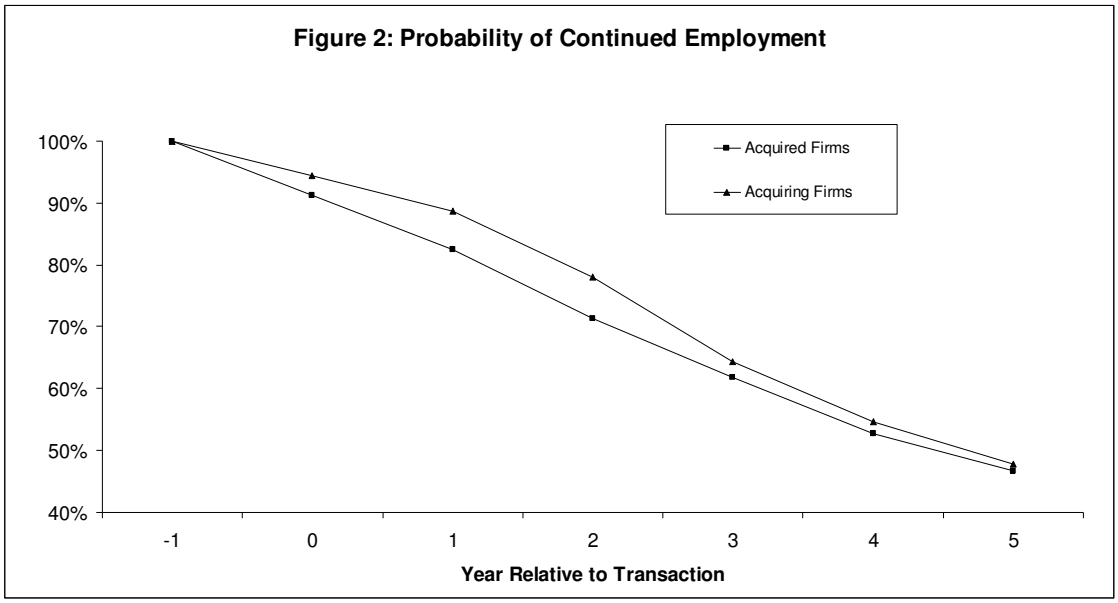
[8] See Fallick (1996) for a (somewhat dated) survey of the North American literature. Kuhn (2002) provides an international perspective on displaced workers and Margolis (2002) provides an in-depth look at the determinants of new job finding for displaced workers in France.

With respect to the information available in the firm's accounts, the econometric results suggest that the investment opportunities explanation for takeover is particularly relevant in France. Acquired firms, in addition to being significantly smaller than their purchasers, have (insignificantly) higher debt-to-asset ratios while maintaining higher rates of return on their assets. Thus it may indeed be the case that firms with healthier balance sheets but more limited investment opportunities use takeovers as a means of gaining access to new avenues of growth.

Who Stays and Who Leaves After a Takeover?

Once one has characterised which firms are more or less likely to be involved in takeover activity, one can turn one's attention to which workers in those firms are more or less likely to stay on with the new entity after the transaction. The longitudinal linked employer-employee data used here allow one to consider workers who were employed by acquired and acquiring firms in the year before the takeover and follow them in the years after the takeover to see which workers stay and which leave, either through layoffs or by quitting (the data do not provide information on the reason for the separation).

The first step is to look at overall workforce retention in acquired and acquiring firms. Figure 2 shows the probability of continued employment in acquired and acquiring firms. While it seems clear that more layoffs occur in the target firm in the short term than in the predator firm (the difference is significant for the first 2 years), such differences in separation behavior tend to disappear in the medium term.



When looking in detail at which workers stay with their firms (see table 3), however, it becomes clear that the layoffs are not evenly distributed across the existing work force. This simple observation is actually quite informative given that almost no workforce characteristics distinguished acquiring firms from their targets. It implies that a predator firm does not base its takeover decision on the composition of its target's workforce, as might be expected if the takeover is hostile and the acquiring firm has no access to the target firm's personnel records. Thus human resource management policies do not form the basis of the takeover decision, whereas compensation policies may enter into account. On the other hand, once the transaction is completed, the acquiring firm obtains access to the acquired firm's personnel records and can selectively organise its layoffs to maximise the cost savings while minimising production losses due to having fewer workers.

Looking first at the employees of the acquired firm, those who were employed by firms that paid particularly below market wages or rewarded seniority particularly poorly are least likely to stay with the new entity post takeover. This is consistent with the idea that the new owners are likely to impose a corporate culture where employees are expected to exert effort (and will be compensated for it), and that those employees who were used to a corporate culture in which people were not paid much but little was expected of them in terms of effort (the literature often considers returns to job seniority as providing a

mechanism for inciting individuals to exert effort on the job) are more likely to quit when their firm is absorbed.

In terms of worker characteristics, senior workers are most likely to stay with the new entity post-takeover, as are men, older workers, skilled blue collar workers and workers whose market value, both in terms of education and other unobservable characteristics, is relatively high. The results concerning the market value of workers may reflect the fact that it is costly to find such high-value workers, and the predator firm takes advantage of the fact that the target firm has already paid these costs. The results concerning job seniority are likely to reflect collective bargaining agreement conditions and legislation concerning layoffs that protect longer-tenure workers over recent hires. It is worth noting, however, that low-seniority workers and white collar workers (the difference with unskilled blue collar workers is insignificant) are the most likely to separate from their employers post-takeover and that these workers are, at least in some dimensions, the workers that the literature on mass layoffs suggests find new employment more easily.

When looking at firm accounts, it appears that an employee of a large firm (measured by assets) has a significantly higher chance of leaving the new entity than an employee of a smaller firm. On the other hand, employees of firms that were more indebted yet more profitable prior to the transaction are more likely to stay on with the newly created entity post-takeover. Perhaps surprisingly, the effect of average employee productivity changes over time, with the workers of more productive acquired firms initially staying with a higher probability than those of less productive acquired firms and the relation reversing two years after the takeover.[9] When considering acquiring firms, a similar inversion takes place, although it is statistically insignificant and takes place at a much longer distance from the actual takeover event.

The results concerning continued employment in firms that acquire other firms are very similar to the results for employee retention in acquired firms, in terms of which workers

[9] The fact that the coefficient changes sign over the duration of the employment spell implies that simple duration econometric models would be misspecified when analyzing this model. This is the primary reason why we chose to analyse the continued employment duration through a series of logit models.

are more likely to stay or leave, although unskilled blue collar workers in acquired firms do tend to separate with a significantly higher probability than skilled blue collar workers or white collar workers in these firms. This observation provides partial validation for the idea that the acquiring firm's management team has an "ideal" workforce structure in mind and uses the occasion of the takeover to proceed with "necessary" reorganisations both in house and with its newly acquired staff. Since firms involved in takeovers are similar to each other ex-ante in terms of the structure of their workforces (and different from firms that do not undergo a merger or acquisition), it is perhaps unsurprising that the same sorts of workers from both acquired and acquiring firms stay with the newly created entity post transaction. However, since these sorts of firms can be distinguished from non-takeover firms according to the characteristics of their workforces, such similar post-transaction behavior should ease the task of employment agencies somewhat as they can prepare to accommodate similar types of workers in a similar manner in areas where "typical" firms are found without having to worry about which side of the transaction the firm will be on.

Conclusion: Takeovers Have Important Consequences for Employment that Are Only Visible in Linked Employer-Employee Data

The analysis undertaken in this paper represents a step forward with respect to existing knowledge about takeovers along several dimensions. Acquired and acquiring firms were characterised in terms of their compensation policies and human resource management practices, as opposed to simply balance sheet data. Detailed analyses of which workers are most at risk of separating from their employer post takeover were also carried out, and the distribution of layoffs between acquired and acquiring firms was investigated. None of these additional steps could have been undertaken without the detailed linked employer-employee data that served as the basis for the analysis.

French firms have been shown to behave essentially as predicted by economic theory concerning mergers and acquisitions. Some takeovers seem to be driven by ex-ante

perceptible differences in firm characteristics, most notably compensation policy, that could be perceived as sources of inefficiency to be improved upon after the takeover occurs. Analysis of post-transaction employment shows that workforce reorganisations performed by the new entity target similar types of workers in the acquired and acquiring firms, suggesting that acquiring firms may use the takeover event as a justification for undertaking a broader restructuring, integrating the acquired firm's employees into the new entity and keeping only the most appropriate workers from both firms.

French firms also seem to follow the investment opportunities model of takeovers, in that acquired firms tend to be more indebted but with significantly higher returns on assets than the firms that acquire them. Such takeovers may indeed correspond to mature firms "buying in" opportunities for growth while young firms obtain their necessary financing by being integrated into a larger entity.

The workers who leave the post-transaction entity can be characterised by their observable characteristics as well as their "market value" (a measure of unobservable characteristics). They tend to be younger, female and white-collar workers with low job tenure and characteristics (both education-related and unmeasured in the data) that give them low market value. For the most part, these characteristics describe the workers who also find it easiest to get new jobs following a mass layoff, which means that employment services may not need to be directed as intensely to employees laid off after a takeover since these workers are likely to be able to find new jobs relatively easily even in the absence of additional assistance.

As a final note, it is worth highlighting the manner in which the results shown here can be used to inform policy. First, it seems that some smaller firms disappear due to their inability to access affordable capital, even though they have promising investment opportunities. This suggests that capital markets should be investigated for failures and that there may be an additional justification for subsidising fast-growing firms: not only do they seem unable to access capital markets adequately, but they are more likely to be

acquired by other firms and such acquisitions tend to lead to (proportionally) large reductions in employment.

Second, acquired firms do indeed lay off workers more than acquiring firms but only in the short term, while the workers who end up laid off may not be as much in need of reemployment assistance as might previously have been thought. Both acquired and acquiring firms differ from non-takeover firms in observable ways, and similar sorts of workers are laid off from both types of firms after a takeover, so employment agencies may be able to do some planning for layoffs before they occur by focusing on firms that are more likely to be involved in takeover activity. But the planning may not need much in terms of additional resources (with the exception of women, those workers whose educational or otherwise unobservable characteristics make them less desirable to the labour market and unskilled blue-collar workers from the predator firms) since the workers most likely to be laid off are also those who can find new jobs the quickest after a layoff.

In sum, mergers and acquisitions are intimately related to the compensation policies and human resource management practices of the firms involved. One can use linked employer-employee data to target policy initiatives along several dimensions related to takeover activity, and an analysis of the employment implications of takeovers may lead to different policy recommendations than might have be preconceived in the absence of such detailed microeconometric evidence.

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Table 1: Descriptive Statistics by Sample
(Means with Standard Deviations in Parentheses)

Variable	Multiple Takeover	Taken Over	Taking Over	No Takeover
Compensation Policy				
Firm-Specific Fixed Effect	-0.4987	-0.2558	-0.3724	-0.3686
Firm-Specific Seniority Returns (per Year of Job Seniority)	3.86%	3.07%	3.43%	2.99%
Human Resource Management Policy				
Male	62.98%	64.64%	63.30%	63.09%
Potential Experience (Current Age - School-Leaving Age)	36.76	29.14	39.72	34.84
Years of Job Seniority	6.13	4.78	7.49	5.88
Skilled Blue Collar	16.25%	21.70%	19.68%	21.97%
Unskilled Blue Collar	17.20%	26.84%	20.74%	25.57%
No Education	27.84%	29.27%	28.08%	29.13%
Baccalauréat (High School Diploma)	6.64%	6.44%	6.50%	6.43%
Advanced Tertiary Education	3.34%	2.81%	3.03%	2.86%
Firm Accounts				
Total Employment	6314.57	835.92	18869.65	8201.16
Fixed Assets Net of Depreciation and Amortization (MFFr 1990)	9.4257E+06	1.2086E+06	9.2926E+07	1.4519E+07
Pct. Increase in Value of Fixed Assets (t-1 to t)	2423.56	134.93	705.04	209.01
Total Debt/Total Assets	67.33%	73.58%	69.23%	72.22%
Return on Assets	2.78%	3.87%	3.11%	3.56%
Value Added per Worker (MFFr 1990)	1426.01	352.13	282.31	311.58
Number of Observations	357392	287043	543601	3142435

Sources: MDST, FUTE, DADS and EDP data and Author's Calculations.

Notes: The excluded educational categories are only primary education, pre-high school level vocation or technical education, pre-high school level general education, high schoo level technical or pofessional education and 2 year post-high school education. The excluded occupation is white collar.

Table 2
Logit Regressions: Characterization of Firms Relative to Takeover Activity
(Coefficients with Standard Errors in Parentheses)

Probability Modeled Comparison Group	P(Acquired) Acquiring Firms	P(Acquired) Control Firms	P(Acquiring) Control Firms
Human Resource Management			
Male	-0.0460	0.1591 ***	0.1917 ***
	(0.0858)	(0.0365)	(0.0521)
Age	-0.0221	0.0094	0.0064
	(0.0159)	(0.0089)	(0.0090)
Job Seniority	-0.0055	-0.0198 ***	-0.0224 ***
	(0.0048)	(0.0022)	(0.0030)
Skilled Blue Collar	-0.1784 **	-0.1999 ***	-0.0661
	(0.0803)	(0.0352)	(0.0493)
Unskilled Blue Collar	-0.0256	-0.0547	-0.0556
	(0.0776)	(0.0336)	(0.0482)
Return to Fixed Unobservable	1.57E-06	1.900E-05	1.230E-06
Individual-Specific Characterisitcs	(5.300E-05)	(2.100E-05)	(2.500E-05)
Returns to Education	7.00E-06	-3.000E-05	8.593E-06
	(1.170E-04)	(4.800E-05)	(7.000E-05)
Returns to Observable (Time-Varying)	-5.700E-04	-3.600E-04	1.280E-04
Individual-Specific Characterisitcs	(6.620E-04)	(2.500E-04)	(4.010E-04)
Compensation Policy			
Firm-Specific Fixed Effect	-0.1015	-0.0709 **	-0.0030
	(0.0682)	(0.0277)	(0.0399)
Firm-Specific Seniority Returns	-0.2344	0.2887 **	0.6306 ***
	(0.2370)	(0.1165)	(0.1672)
Residual from Earnings Decomposition	-0.1331 **	-0.0818 ***	0.0218
	(0.0669)	(0.0269)	(0.0392)
Firm Accounts			
Log(Total Employment)	0.4589	0.0804	-0.0125
	(0.4410)	(0.2079)	(0.2893)
Log(Value of Fixed Assets Net of Depreciation and Amortization)	-0.7321 *	0.1637	0.4069
	(0.4411)	(0.2077)	(0.2892)
Percent Increase in the Value of Fixed Assets	-3.580E-07	6.621E-08	2.247E-07
Net of Depreciation and Amortization	(1.780E-06)	(1.045E-06)	(3.101E-07)
Log(Total Debt/Total Assets)	0.0181	0.0249	0.0282
	(0.0437)	(0.0209)	(0.0257)
Log(Return on Assets)	0.0517 ***	0.0453 ***	0.0064
	(0.0151)	(0.0072)	(0.0094)
Log(Value Added per Worker)	-0.0588	0.0830 ***	0.1408 ***
	(0.0495)	(0.0237)	(0.0301)
Log Likelihood	-3897.1845	-15352.8675	-8191.83
Number of Dependent Variable=1 Firms	4536	4536	2210
Number of Firms	6746	74807	72481

Sources: MDST, FUTE, DADS and EDP data and Author's Calculations.

Notes: All models also include controls for 9 observation years, 10 sectors, Paris region, 8 educational categories, age^2, age^3 and age^4, Log(capital-labor ratio), Log(sales/worker) and the interation of seniority with returns to seniority. *** indicates a coefficient significant at the 1% level, ** at the 5% level and * at the 10% level. One observation per firm, representing averages over the sample period, is used for the analysis.

Table 3
Logit Regressions: Probability of Continued Employment
(Coefficients with Standard Errors in Parentheses)

Variable	Acquired Firms			Acquiring Firms		
	1 year after	2 years after	5 years after	1 year after	2 years after	5 years after
Human Resource Management						
Male	0.6230 **	0.8024 *	1.3165	0.4441	0.3413	2.7088 ***
	(0.3135)	(0.4421)	(1.0012)	(0.3186)	(0.3917)	(1.0475)
Age	0.3728 *	0.6409 **	1.3074 **	0.4639 **	0.1450	0.7694
	(0.1973)	(0.2943)	(0.6578)	(0.2017)	(0.2634)	(0.6555)
Job Seniority	0.0209 ***	0.0156 ***	0.0043	0.0093 ***	0.0250 ***	0.0445 ***
	(0.0021)	(0.0026)	(0.0057)	(0.0020)	(0.0025)	(0.0058)
Skilled Blue Collar	0.0890 **	0.2114 ***	0.2917 ***	-0.0436	0.0335	0.2335 **
	(0.0377)	(0.0453)	(0.0937)	(0.0346)	(0.0435)	(0.0946)
Unskilled Blue Collar	0.0292	0.0734	0.0970	-0.1301 ***	-0.0688	-0.1905 *
	(0.0407)	(0.0502)	(0.1069)	(0.0387)	(0.0482)	(0.1115)
Return to Fixed Unobservable	0.1631 ***	0.3404 ***	0.3854 ***	0.1947 ***	0.1719 ***	0.2128 **
Individual-Specific Characterisitcs	(0.0299)	(0.0408)	(0.0969)	(0.0310)	(0.0386)	(0.0960)
Returns to Education	0.1634 ***	0.3402 ***	0.3851 ***	0.1948 ***	0.1721 ***	0.2130 **
	(0.0299)	(0.0408)	(0.0969)	(0.0310)	(0.0386)	(0.0960)
Returns to Observable (Time-Varying)	-1.0999	-3.5280 **	-5.4494	-1.3130	-0.8246	-8.2198 **
Individual-Specific Characterisitcs	(1.0975)	(1.5513)	(3.4497)	(1.1180)	(1.3845)	(3.5221)
Compensation Policy						
Firm-Specific Fixed Effect	0.2252 ***	0.2776 ***	0.8409 ***	0.2626 ***	0.1019	0.9212 ***
	(0.0330)	(0.0446)	(0.1116)	(0.0457)	(0.0664)	(0.1652)
Firm-Specific Seniority Returns	0.1753	0.3932 ***	0.6705 ***	-1.9967 ***	-2.2268 ***	0.9989
	(0.1073)	(0.1366)	(0.2075)	(0.2799)	(0.3805)	(0.9479)
Residual from Earnings Decomposition	0.0343	0.1156 ***	0.0580	0.0198	0.0636 *	0.0358
	(0.0226)	(0.0325)	(0.0848)	(0.0250)	(0.0349)	(0.0856)
Firm Accounts						
Log(Total Employment)	0.0094	0.0258 ***	0.0909 ***	0.0542 ***	0.0508 ***	0.0088
	(0.0064)	(0.0081)	(0.0177)	(0.0065)	(0.0075)	(0.0209)
Log(Value of Fixed Assets Net of Depreciation	-0.1070 ***	-0.2732 ***	-0.3048 ***	-0.2583 ***	-0.0971 ***	-0.2618 ***
and Amortization)	(0.0112)	(0.0140)	(0.0300)	(0.0100)	(0.0126)	(0.0340)
Percent Increase in the Value of Fixed Assets	-5.400E-04 **	1.730E-03 ***	-0.0022 ***	-8.100E-04 **	4.200E-05	-0.0265 ***
Net of Depreciation and Amortization	(2.450E-04)	(2.570E-04)	(0.0004)	(3.560E-04)	(1.180E-04)	(0.0094)
Log(Total Debt/Total Assets)	0.2613 ***	0.2736 ***	0.0217	0.2196 ***	0.3438 ***	-0.7780 ***
	(0.0408)	(0.0496)	(0.1097)	(0.0444)	(0.0503)	(0.1399)
Log(Return on Assets)	0.0313 ***	0.0952 ***	0.0780 **	0.0630 ***	-0.0737 ***	0.0528
	(0.0115)	(0.0143)	(0.0309)	(0.0101)	(0.0115)	(0.0373)
Log(Value Added per Worker)	0.3777 ***	-0.1227 **	-0.9281 ***	0.3617 ***	0.5152 ***	-0.1804
	(0.0488)	(0.0599)	(0.1495)	(0.0536)	(0.0673)	(0.1992)
Log Likelihood	-5851.0055	-3919.493	-893.785	-6703.903	-4397.9905	-914.871
Number of Individuals Still Employed	2982	1906	385	6256	4209	888
Number of Eligible Individuals	17114	14363	8702	17706	13287	7488

Sources: MDST, FUTE, DADS and EDP data and Author's Calculations.

Notes: See notes to table 2. Each individual employed in the relevant firm in the year preceding the takeover year is potentially eligible, although the number of logit models in which an individual participates depends on the takeover date relative to the end of sample date (1999).