Worker information and firm disclosure

Analysis of French workplace data

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Abstract

Information disclosure requirements significantly increased in French listed companies in the early 2000s, converging toward the U.S./U.K. stock market standards. Following the burgeoning literature on relations between corporate governance and labor, we investigate the consequences of this process regarding worker information: does more information for shareholders mean more information for workers? We take advantage of a French (representative) establishment survey that generates linked 'employer–employee representative' information at two points in time, 1998 and 2004. Our results strongly suggest that worker information has improved in listed companies but not in private ones, as an externality of the financialization process.

Key words: worker information, corporate governance, firm disclosure, workplace data

JEL codes : J53, G39, C21

Information des salariés et réglementation boursière: Analyse sur données d'établissements français

Résumé

Les sociétés cotées sont aujourd'hui soumises à une contrainte de transparence informationnelle à l'égard des actionnaires – contrainte totalement absente dans le cas de sociétés non cotées (qu'il s'agisse de la stratégie future, de la rémunération des dirigeants, etc.). Ce critère de transparence est porté à la fois par les investisseurs et le droit boursier : sur la dernière décennie, la réglementation en matière de divulgation d'information (*disclosure*) s'est considérablement renforcée en France (cf. par exemple la loi sur les Nouvelles Régulations Economiques de 2001), rapprochant en cela des standards boursiers nord-américains. Cet article, qui s'inscrit dans la littérature sur les liens entre gouvernance d'entreprise et emploi, s'interroge sur les conséquences de ce mouvement pour les salariés : ont-ils profité de cette transparence accrue pour augmenter l'information dont ils disposent sur la gestion de leur entreprise ? La question n'est pas neutre : si l'information est une ressource cruciale pour les investisseurs, elle l'est également pour les salariés. Une information précise accroît leur capacité et celle de leurs représentants à contrôler la direction et permet une meilleure allocation de leur capital humain spécifique.

Nous utilisons les enquêtes REPONSE 1998 et 2004, qui portent sur 3000 établissements représentatifs du tissu productif français. La qualité de l'information sur différents sujets (stratégie, conséquences sociales et environnementales de l'activité, etc.) est estimée à partir de réponses fournies par les représentants de la direction mais également par des représentants du personnel. La stratégie d'identification (de l'effet de la cotation sur la qualité de l'information) utilise la dimension du marché (local *versus* international) comme instrument de la cotation. Les résultats montrent que, pour 2004, les salariés travaillant dans des firmes cotées disposent d'un surcroît d'information, sur les sujets spécifiquement couverts par la réglementation boursière. En revanche, nous n'observons aucune relation semblable sur

l'échantillon 1998 de l'enquête, avant la vague de réformes boursières. Ces résultats tendent à montrer que les exigences de transparence portées par les investisseurs institutionnels et la réglementation boursière ont permis aux salariés d'accroître l'information stratégique à leur disposition.

Introduction

Over the last two decades, stock market activity has sharply grown in the U.S. as well as in Europe. At the same time, there has been a continuous increase in equity holdings by financial investors managing diversified portfolios, to the detriment of households, cross-holdings by non-financial companies and the State. This evolution has caused deep transformations at the corporate level; in particular, stock price has become a crucial metric for the corporate management of listed companies with shares that are traded on regulated markets. In terms of corporate governance, there is evidence of significant evolution underway since the beginning of the 1990s that has been driven by (minority) shareholder activism and regulatory changes. Regarding board composition, inside directors have steadily declined to the benefit of outsiders. These 'independent' directors are considered to be less captured by the internal (managerial) perspective and in a better position to favor stock market evaluation with respect to corporate conduct (Gordon, 2007). Regarding executive remuneration, stock-based compensation has gained in importance, with stock options and restricted stock now being a key component of managerial compensation in the U.S., U.K. and France (e.g., Jensen, Murphy and Wruck, 2004 for the U.S.). Altogether, these evolutions have increased the sensitivity of corporate executives to the interests of minority shareholders, thereby promoting a shareholder-value-oriented approach to managing a business (Useem, 1996; O'Sullivan, 2000; Hansmann and Kraakman, 2001; Dore, 2008; Lazonick, 2008).

Growing attention is now paid to the implications of this 'financialization' process for employment and industrial relations (Froud, Haslam, Johal and Williams, 2000; Gospel and Pendleton, 2004; Jacoby, 2005). For example, one might suspect that the prioritization of shareholder interests has altered the distribution of added value between shareholders and workers to the detriment of the latter. Also, and more recently, some studies have explored the influence of corporate governance and ownership structure on human resource management practices (Jackson, Höpner and Kurdelbusch, 2004; Jacoby, Nason and Saguchi, 2005; Black, Gospel and Pendleton, 2007; Conway, Deakin, Konzelmann, Petit, Rebérioux and Wilkinson, 2008; Perraudin, Petit and Rebérioux, 2008).[i]

There is, however, one aspect of this process likely to influence labor relations that has received little consideration until now: the increase in information disclosure and transparency requirements faced by corporate executives. Minority shareholders (whether financial investors or households) are at a distance from the firm management. As such, they need reliable information on the company's prior performance and future prospects, so as to make accurate sell and buy decisions (Black, 2000). Therefore, information is a critical resource for financial investors and demand for greater and better reporting is a key component of the financialization process: listed companies are under strong pressure by shareholders and regulators to regularly disclose financial and non-financial information, contrary to private, non-listed companies. Considering that information is a non-rival good, almost freely accessible once produced, it might then be conjectured that worker access to information has increased with enhanced disclosure requirements, a positive externality of the financialization process. This article empirically examines this question by comparing the extent of information sharing in listed and non-listed companies.

The intensity of information sharing with workers is an important topic for industrial relations, insofar as information regarding the company's past and future prospects is a critical resource not just for shareholders, but also for workers and their representatives: .

- First, information provision to workers helps them to adequately adjust their level of investment in firm-specific human capital by increasing the accuracy of their expectations regarding the firm's future prospects. A number of studies have acknowledged the growing significance of firm-specific human capital on firm performance and economic growth (e.g., Blair and Wallman, 2001; Corrado, Hulten and Sichel, 2006). Importantly, it is now widely recognized that workers investing in firm-specific human capital have a residual claim on the (uncertain) firm's future value, like stockholders investing at risk in the company's shares (Blair, 2000; Zingales, 2000): as such, more information means better investment.

- Second, the limitations of information asymmetry should help to enhance managerial accountability by improving the ability of workers to monitor (together with shareholders) corporate executives (Gelter, 2009). It is especially valuable in countries where worker involvement is legally supported, as in continental Europe, with codetermination in the form of board-level participation (as in Germany) or with strong rights for work councils (as in France). It should therefore come as no surprise that German trade unionists tend to consider transparency as a tool for codetermination, thereby supporting financial investors in their demand for reliable information (Jackson *et al.*, 2004).

- Last, but not least, information disclosure to workers provides their representatives with information that might be valuable in collective bargaining. Although the net effect on wage is open to debate,[ii] both theory and evidence strongly suggest that information sharing tends to shorten and ease the negotiation process and decrease the probability of a strike (Morishima, 1991).

In sum, both workers and (ultimately) economic efficiency should benefit from a decrease in information asymmetry with management.[iii] Accordingly, although shareholders and workers interests might be opposed considering the distribution of economic value added, this is not the case in terms of information. It is likely that both parts align their interests *vis-à-vis* management, sharing a common interest in greater disclosure (Kostant, 1999; Jackson *et al.*, 2004).

Our empirical analysis used French enterprise data. The French case is interesting for at least two reasons:

- On one hand, evolution of the French model of corporate governance has been particularly dramatic over the 1995-2005 period, with the growing presence of investment funds (Anglo-Saxon and French) in the equity capital of listed companies and far-reaching transformations in securities and corporate law. In particular, between 2001 and 2003, a new regulation on information disclosure was developed for listed companies, largely along the lines of the financial disclosure requirements of the U.S. Securities and Exchange Commission (S.E.C.) model. Therefore, France constitutes a noticeable opportunity to highlight (broadly defined) institutional transformations in the corporate sector and the way these transformations have impacted labor and industrial relations inside firms.
- On the other hand, we took advantage of a large data set that allowed us to consider the quality of information communicated to workers in details. The REPONSE survey, conducted in 1998 and 2004 by the Research and Statistics Department of the French Ministry of Labor (DARES), has, to a large degree, been modeled on WERS (the Workplace Employment Relations Survey carried out in the U.K.). It aims to provide an account of the state of employment relations and working life inside French workplaces. Both in 1998 and 2004, the surveyed sample is representative of establishments with 20 workers or more in the French productive sector, excluding the agricultural and the public sectors. In each establishment, one senior manager *and* one employee representative were questioned on a large range of topics, including industrial relations, labor organization, firm ownership and the competitive environment. As such, this survey generates an 'employer-employee representative' linked dataset.[iv] In this paper, we took full advantage of this particular design by using answers from these two different types of actors.

Our findings might be summarized as follows. Workers in listed companies have access, in the mid-2000s, to extra information in comparison to workers employed in non-listed firms, controlling for a large set of observable characteristics at the firm and workforce levels. This (cross-sectional) evidence is robust to a battery of tests, whereas an instrumental variables approach supports an interpretation in terms of causality. We interpret this evidence as a side effect resulting from strong transparency requirements towards shareholders faced by managers in listed firms. Coherent with this interpretation, we also observe that this extra information runs directly from managers to workers rather than through the mediation of worker representatives and mostly concerns strategic aspects of business conduct, rather than topics more directly connected to the shop floor (such as employment prospects). Last, but not least, we find no such evidence in 1998, before a series of regulatory changes increased the disclosure requirements for listed firms: by the end of the 1990s, being employed in a listed company is not associated with better information at the workplace.

The article is ordered as follows. Part 2 sets out the relationships between disclosure requirements and worker access to information in listed companies in greater detail. Part 3 presents the dataset and the empirical strategy. Part 4 discusses the main findings, and part 5 concludes.

Information disclosure in listed companies: the (evolving) French model

In the U.S., and from a legal point of view, the difference between listed and non-listed companies in terms of disclosure is clear-cut. Listed companies are subject to the federal securities regulation of the S.E.C., which has had the primary objective, since its creation by the Securities Exchange Act in 1934, to ensure that investors and shareholders have the information necessary to make accurate decisions (Brown, 2007). Toward this end, the S.E.C. provides listed companies with high standards of information reporting and disclosure, perceived as the core of an effective control of corporate executives in a situation of separation of ownership and control (Berle and Means, 1932). In contrast, corporate governance in private companies is only regulated by state law, which does not provide a coherent, strong disclosure regime. This dichotomy has become stronger since the early 2000s, with the surfacing of multiple high profile corporate scandals and bankruptcies. Although institutional investors were putting pressure on corporate executives for greater transparency, regulators strengthened disclosure requirements as a perceived solution to managerial abuses. A conspicuous example is the Sarbanes-Oxley Act of 2002, with the principal objective of protecting and enhancing the financial disclosure integrity of listed companies. In addition, listed companies are more and more inclined to 'voluntarily' disclose information, so as to please investors and secure the value of their shares.

In France, and generally in continental Europe, the situation was, until the beginning of the 2000s, quite different. Stock markets were usually less active, with a lower degree of separation between ownership and control (Faccio and Lang, 2002). Hence, corporate governance regulation was not as inclined to protect minority shareholders from managerial abuses.[v] Informational needs by minority shareholders and investors were not considered as important as they are in the U.S., and corporate disclosure regimes were far less comprehensive. In relation, and considering the French case, the regulator was traditionally reluctant to make a distinction between listed and non-listed firms, rather discriminating between companies on the basis of their legal statute (*Société anonyme*, *Société en nom collectif*, etc.).[vi] Accordingly, there was, once again traditionally, no specific regulation for listed companies in terms of reporting and disclosure. A listed *Société anonyme* did not face different, higher disclosure requirements in comparison to a private one whose shares are freely transferable, yet not traded on a regulated market.

A second important difference regarding corporate governance was, and still is, worker involvement, with a range of mechanisms designed to sustain the collective voice of workers in continental Europe (Rebérioux, 2002), contrary to the U.S. In particular, the workforce has information and consultation rights provided by labor laws, through unions (in Italy and

Sweden) or, more often, through a representative body, usually the works council. France is a good example of those information rights, with a comprehensive regime of disclosure to the benefit of the works council (*comité d'entreprise*).[vii] For example, article L2323-6 of the Labor code states the following: « *the works council is informed and consulted on issues that concern labor organization, management and general business conduct and, in particular, on the decisions that might affect the volume and the structure of the workforce, employment and working conditions and training* » (translated). Article L2323-8 also requires corporate officers to transmit to the works council the whole set of documents that have been disclosed to shareholders, both in and out of general meetings.

In sum, the two models are opposites, with strong disclosure requirements for minority shareholders in one case, and for workers in the other. However, this distinction between the Anglo-American and European continental models of corporate governance is progressively being overturned. The shift of the continental European model of shareholding towards the Anglo-Saxon model is now widely discussed in the comparative literature (see, for example, Hansmann and Kraakman, 2001).

Concerning France, a dramatic growth in stock market capitalization took place over the last 15 years, mostly because of the increasing presence of financial investors, both resident and non-resident. Tirole (2006) estimated that one-third of the capital of French listed companies was held by non-residents in 2002. In 2005, for the largest companies (included in the CAC40), 46.4% of the equity capital was held by non-residents, with more than 20% by British and U.S. funds looking for international diversification of their portfolios (Poulain, 2006). This increase in the power of minority shareholders in the equity capital of French companies has been accompanied by a decline in blockholdings, a sharp increase in the equity-based part of executive remuneration and a rise in the proportion of independent directors at the board level. The entry of new investors has also put pressure on listed companies to adopt a more open form of communication. In parallel, important changes in securities law and, to a lesser extent, in corporate law, have strongly enhanced minority shareholder protection (Lele and Siems, 2006). Arguably, information disclosure is the area that has experienced the deepest transformation. By doing so, a specific regulation for listed companies has developed, largely along the lines of the financial disclosure requirements of the U.S. S.E.C. model.

The distinction between listed and non-listed firms has been clearly adopted by the French regulator since the beginning of the 2000s, at odds with the traditional approach. The first step was the "New Economic Regulation" (N.E.R.) Act of May 2001, which forced listed companies, and only them, to disclose a *Rapport de gestion* (business report) yearly, including a document on the general situation of the company and its expected evolution, as well as a document detailing how social and environmental consequences of corporate activity are dealt with. Concerning executive remuneration, the N.E.R. Act increased transparency for all of the *Sociétés anonymes*, whether or not the shares are traded on a regulated market. However, the Financial Security Law (August 2001) soon restricted this obligation to listed *Sociétés anonymes* only.

In summary, managers in French listed companies have experienced, over the last 15 years, a strong pressure by minority shareholders and regulators for greater and better reporting as a direct consequence of the financialization process. We may conjecture that this evolution has improved worker (and not just shareholder) information for at least two reasons. First, and most directly, works councils have the right to receive all of the (periodic and ongoing) information communicated to shareholders (see *supra*). Second, and more broadly, the fact that corporate executives have to disclose (and therefore process and 'build') information for shareholders allegedly decreases the cost of communicating this information to workers. If true, however, one may anticipate that this extra information is slightly different from what is usually addressed by labor law and communicated by managers. This information should concern strategic dimensions of the firm's future global position, rather than 'shop floor-related' issues such as organizational and technical changes or employment prospects. In sum, although there were no reasons to posit any differences in terms of information access between workers in listed and private companies in the 1980s or 1990s, it is likely that workers employed in listed firms now have richer and better information on a range of topics related to the firm's strategy.

Data and empirical strategy

Data and dependant variables (worker information)

The REPONSE survey comes in waves of cross-sectional data, where the same firms are not necessarily sampled wave after wave. In each establishment, one executive officer (manager) is questioned in a face-to-face interview on a large range of topics regarding industrial relations and labor organization, as well as competitive environment. The survey also entails an interview with an employee representative (when existing), such that this survey generates an 'employer-employee representative' linked dataset.

In 2004, the data was initially collected from 2930 managers and 1970 employee representatives. We drop workplaces belonging to (non-profit) associations because they present highly specific patterns of employment and industrial relations. We end up with a dataset, thereafter referred as 'Sample 1', of 2503 establishments where a manager representative was interviewed. A second dataset, thereafter referred as 'Sample 2', includes 1607 establishments where one manager *and* one worker representative were interviewed. We also use the 1998 survey that provides similar linked employer-employee representative data. For 1998, 'Sample 1' and 'Sample 2' include 2380 and 1244 establishments, respectively.

For each sample, information on industry and the socio-demographic characteristics of the workforce is drawn from the DADS (*Déclaration Administrative de Données Sociales*), a matched employer-employee administrative dataset constructed from social security records.

To evaluate the quality of information communicated to workers (the dependent variable), we use in 2004 two sets of questions from the two different questionnaires:

- The manager is asked whether or not the information disclosed to workers is frequent. This information covers a range of seven different topics: (i) the strategic orientation of the firm, (ii) the economic situation of the firm, (iii) the social and environmental consequences of the firm's activities, (iv) the employment prospects at the establishment or firm level, (v) wage prospects, (vi) training opportunities and (vii) organizational or technological change.
- The worker representative is asked whether or not the information he/she receives is satisfying; the question covers the same set of items as the manager questions.

In 1998, similar questions are raised, albeit with one difference: the item 'social and environmental consequences' does not exist.[viii] Summary statistics (using REPONSE sampling weight) for these variables are presented in Tables A1 and A2 for 2004 and 1998, respectively (see Appendix).

In 2004, we observe that for both managers and worker representatives, the topics 'environmental and social consequences' and 'wage prospects' rank low in terms of information sharing, whereas 'economic situation' and 'training' are considered to be the most transparent. The same is true in 1998, with a common assessment of both employers and worker representatives opposing 'wage prospects' on one side and 'economic situation' and 'training' on the other side. Looking at differences between listed and non-listed firms, we observe that information is much more frequent in listed companies according to managers in 2004. In 1998, the same difference between listed and non-listed firms is perceptible according to managers. Interestingly, there is no such difference between listed and non-listed establishments according to worker representatives either in 1998 or 2004. Note, however, that a multiplicity of compounding factors may be at stake here, so a multivariate analysis is required before reaching conclusion on the relations between listing and information sharing.

Empirical strategy

Logit models are used to estimate the (logarithm of the) odds-ratio of the information as satisfying or frequent in the establishment according to the respondent:

$$\ln (P_{j,k} / 1 - P_{j,k}) = \alpha + X_j \beta + \phi \, listed_j + \varepsilon_j$$

where $P_{j,k}$ is the probability for the respondent in establishment j to estimate that information on topic $k = \{1,\ldots,7\}$ is frequent or satisfying ($y_{j,k} = 1$). X_j is a vector of control variables including respondent's individual characteristics, workplace characteristics, and firm characteristics (see *infra*). *listed* is a dummy variable that takes the value of 1 if the establishment j belongs to a listed firm (or is directly listed), 0 otherwise. ε_j is the independent and identically distributed random noise. The models are unweighted: as such, they provide within-sample estimates rather than population estimates.[ix]

The previous analysis makes no attempt to account for the potential endogeneity of a stock market listing with respect to worker information. Although there is *a priori* no reason to suspect a reverse causality, it is clear that listing is not random. Accordingly, one might suppose that some unobserved omitted characteristics of the firm would imply both a greater propensity to communicate information to workers and a higher probability to get listed on a regulated market.

A common procedure to alleviate endogeneity concerns is to have an instrumental variable estimation approach. We use the extent of the market as an instrument: firms that compete on the global, international market, rather than at the national or local level, are more likely to be listed because stock market listing enables them to raise a large amount of equity capital. At the same time, there is no reason to suppose that the extent of the market *per se* has any direct effect on worker information. Our instrumental variable model is based on a recursive bivariate probit estimation (e.g., Greene, 2003) as both our regressor (listing) and outcome variables (information quality) are binary. In the first stage, we estimate the odd-ratio of being listed on a set of regressors including our instrument (*market size*). The second stage estimates the odd-ratio of delivering frequent information incorporating the predicted probability of listing among regressors. Estimations are simultaneous to account for the possible correlation between residuals.

Control variables

At the firm-level, we control for the size (number of employees). At the establishment-level, we control for the size (number of employees), age and state of the market over the three years preceding the survey (growth, stable or decline). Concerning the industry, we first use an indicator that distinguishes between 16 different positions (Naf 16). However, because industries might be an important determinant of industrial relations while being correlated with stock market listing, we also control, in alternative models, for an 85 positions indicator (Naf 85) and for a 3-digit indicator when possible (185 positions). By doing so, we intend to hone in closely enough to industry characteristics: firms within narrowly defined industries should *a priori* choose similar production and organization methods and have similar workforce compositions, thereby permitting better observation of the conditional effects of stock market listing.

The characteristics of the workforce are taken into account through the structure of occupational groups (proportion of managers, supervisors and technicians), the proportion of employees aged under 40 and the proportion of women. Concerning industrial relations at the establishment level, the French legal system allows distinguishing two types of worker representatives.[x] First, those directly elected by their colleagues (who are potentially, but not necessarily, union members). As such, they participate in various consultative bodies: workplace delegate (*délégué du personnel*), works councils (*comité d'entreprise*) or equivalent and health, safety and improvement of working conditions committee (c*omité d'hygiène, de sécurité et des conditions de travail*). Second, union delegates are those directly nominated by unions. They are the only ones entitled to participate in negotiations with employer representatives. We therefore introduce two dummy variables: one indicating the presence of an elected worker representative body, the other indicating the presence of a union deleguates, both at the establishment level.

For 1998, the same variables are used, with two exceptions (no information available): the age structure of the workforce at the establishment level and the 3-digit industry indicator. Summary statistics for the firm and workplace characteristics are presented in Appendix Table A3 for 2004 and 1998. The proportion of establishments belonging to a listed firm is very stable between the two dates, with 26.3% in 2004 and 25.4% in 1998.

We also introduce individual-level information into the regressions to characterize the respondent, *i.e.*, the interviewed manager (function and tenure) or the worker representative (mandate as representative,[xi] union membership, occupation and tenure). Summary statistics for individual characteristics are available upon request.

Estimation results

Manager questionnaire, 2004

Table 1 shows that there is a positive, significant conditional correlation between being listed and the quality of information when considering managerial assessment in 2004. Looking at model 1 (logit estimation, 16 positions industry dummy), we observe that, except for wage prospects, all of the point estimates are significant at the 1, 5 or 10% levels. This global correlation between listing and information frequency is robust to a narrower definition of industries (85 positions instead of 16, in model 2). As an ultimate check regarding sector, we also control in an alternative specification with a 3-digit indicator: the point estimates are very similar to model 2, and for all items, the level of statistical significance is unchanged. [xii] Accordingly, industry differences between listed and non-listed firms do not drive our results. Overall, this correlation is more pronounced for four items: the strategy, the economic situation of the firm, the environmental and social consequences of the firm's activities and training opportunities. Interestingly, these items are those of greatest interest to financial investors, with the noticeable exception of training. As such, they are directly covered by information disclosure requirements in corporate law. In contrast, information sharing is less intense regarding shop-floor related issues (employment and wage prospects, organizational and technological changes).

INSERT TABLE 1 ABOUT HERE

Model 3 in Table 1 presents estimates of the listing effects on worker information derived from the instrumental variable approach. In all of the regressions, the instrument performs well, with a first stage conditional correlation (between market size and listing) significant at the 1% level. The results confirm the view that listed companies better inform their workers. Compared with models 1 and 2, the significance level (and point estimates) of the instrumental variable estimations are increased. Once again, information of direct interest to financial investors (firm's strategy, economic situation and environmental and social consequences of its activity) stands out as being particularly related to stock market listing. Wage prospects is the only item for which listing has no impact on information regardless of the estimation method.

Worker representative questionnaire, 2004

Estimations from the worker representative questionnaire (see Table 2) display very different results. Only two items out of seven exhibit a significant positive conditional correlation between listing and worker representative's assessment of information quality: strategy and economic situation (model 1). Relations for these two items are significant at the 5 and 10% levels. With a more precise industry dummy (with 85 positions, see model 2), a third positive relation appears between listing and environmental and social consequences of the firm's activity, albeit with a low level of significance. Once again, the three topics of main interest to shareholders and investors stand out. When running IV estimations (see model 3), no significant relation persists. Here, we even find four point estimates to be negative (albeit not significant at the conventional level). In a nutshell, worker representatives do not consider information to be more satisfying in listed companies.

INSERT TABLE 2 ABOUT HERE

The difference in the managerial assessment is striking. To check whether these differences are driven by the differences in the sample sizes, we re-run the estimations considering managerial answers in sample 2 (establishments where one manager and one worker representative are interviewed). Model (4) in Table 1 presents the results of this estimation, with a 16 positions industry dummy. These results are very similar to the previous ones: according to managers, worker information is much better or frequent in listed companies. The gap in worker representative's responses remains.

Manager questionnaire, 1998

Estimations run on the 2004 cross-section survey are replicated with the 1998 survey. Information disclosure to workers is estimated successively through the manager and the worker representative questionnaires, where questions strictly similar to 2004 were posed.

Table 3 gives the estimation results for the manager questionnaire. The difference with 2004 is salient: the conditional correlation between information frequency and listing is not significant for five items out of six. A positive relation only holds for information on the firm's strategy. Using a 16 or 85 positions dummy for sector (models 1 and 2, respectively) does not make any difference.[xiii] Implementing instrumental variable estimations confirms the conclusion: we do not find any statistical relations between listing and information quality, regardless of the item (model 3 in Table 3).[xiv]

INSERT TABLE 3 ABOUT HERE

Worker representative questionnaire, 1998

Upon running parallel estimations on worker representative's assessment of the quality of information they receive (Table 4), we find, once again, important differences with 2004. Although we have evidence of positive, sometimes significant, point estimates for listing in 2004, we observe in 1998 that the coefficients are all negative (with the exception of training), with two out of six being significantly negative (for employment prospects and organizational and technical changes).[xv] Just as before, we have re-estimated the managerial answers to this reduced sample (see Model 4, Table 3). Again, we do not find much correlation between stock market listing and information quality in 1998, according to managers. We are therefore led to the conclusion that being listed tends to *deteriorate* information quality.

INSERT TABLE 4 ABOUT HERE

Summary

Our empirical analysis on cross-sections yields the following conclusion: the frequency/quality of information in listed firms is estimated to be (much) lower in 1998 than in 2004. According to managers, there is no correlation between listing and information sharing in 1998, but a positive relationship six years later. According to worker representatives, there is a negative correlation in 1998 that disappeared in 2004. We therefore document a modification of the conditional correlation between listing and worker information over time, from a non-existent or negative relation to a positive one. The empirical analysis is not performed on a panel, but the two cross-sections are designed so as to be representative of the productive sector at each point in time. Cross-sectional analysis, together with the instrumental variables approach, therefore supports the hypothesis that there has been a change in the way listing impacts information disclosure to workers. Because of stock market pressure and regulatory changes, worker information has improved in listed companies between 1998 and 2004, but not in private ones.

Conclusion

Demand for greater and better information disclosure in listed companies is a key component of the financialization process in the U.S. and in Europe. *A priori*, workers are likely to support these requirements: as a non-rival good, information may be used by all stakeholders to better control corporate executives and firm strategy. Using an 'employer-employee representative' linked dataset representative of the French productive sector, we find that worker information has improved in listed companies between 1998 and 2004, but not in private ones. Although we observe no positive conditional correlation between stock market listing and information frequency or quality in 1998, we document a positive correlation in 2004. Further, our empirical strategy supports an interpretation in terms of causality, with stock market listing leading to higher information sharing with employees. We interpret the difference between 1998 and 2004 as a side effect of the dramatic changes in the French corporate governance model over the period, notably the increased presence of financial investors in the equity capital of listed companies and new information disclosure requirements. Finally, our estimations provide a comparison between employer and employee representative's points of views for a given year. Our interpretation of the gap between the two is that this extra information flows directly from managers to workers rather than being mediated by employee representatives.

Although this analysis highlights a positive aspect of the financialization process for labor, it also conveys a rather critical appraisal of another important aspect of this process: the development of leveraged buyout (or 'LBO') transactions, which typically entail the acquisition of control by one or more specialist financial firms over a formerly listed company by means of intensive recourse to borrowed funds. LBOs expanded in significance throughout the 1980s to become a relatively mainstream practice of U.S. corporate finance by the end of the decade. The first decade of the 21st century witnessed the onset of a larger-scale and more globalized LBO movement, against the background of very low interest rates, buoyant equity markets after they had recovered from the ICT crash.

Trade unions in the U.S. and in Europe usually worry about the implications of private equity/LBOs, pointing to the lack of transparency of private equity as compared to a listed company. By virtue of their de-listed status, private equity-controlled firms are exempt from public company disclosure requirements. Our analysis stresses the fact that this exemption is not neutral for workers: they may lose a significant part of the information they were able to gather beforehand. This analysis supports the idea of a possible 'accountability deficit' within the private equity sector, whereby the activities of firms can be effectively 'veiled' from worker inspection by means of removing their securities from the stock market.

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TABLES

Table 1 - Estimation results for the manager survey, REPONSE 2004

Point estimates for ‘Listed’

	Model (1)	Model (2)	Model (3)	Model (4)
Strategy	0.275*** (0.096)	0.215** (0.101)	1.109*** (0,217)	0.338*** (0.119)
Economic situation	0.343*** (0.102)	0.354*** (0.108)	0.979*** (0,366)	0.303** (0.128)
Envir. & social consequences	0.271*** (0.098)	0.251** (0.104)	1.062*** (0,240)	0.393*** (0.120)
Employment prospects	0.173* (0.094)	0.150 (0.099)	1.030*** (0,328)	0.191 (0.117)
Wage prospects	0.066 (0.093)	0.110 (0.098)	0.138 (0,403)	0.169 (0.114)
Training opportunities	0.250** (0.101)	0.250** (0.106)	0.921*** (0,338)	0.271** (0.168)
Org. & techn. changes	0.201** (0.094)	0.188* (0.099)	0.586* (0,351)	0.168 (0.116)
Estimation method	*logit*	*logit*	*biprobit (IV)*	*logit*
Sample	*1 (2,503 obs.)*	*1 (2,503 obs.)*	*1 (2,503 obs.)*	*2 (1,607 obs.)*
Sector dummy	*Naf 16*	*Naf 85*	*Naf 16*	*Naf 16*

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 2004 REPONSE survey, manager representative questionnaire, Dares.

Significance level: ***p<0.01, **p<0.05, *p<0.1

Reading: first line, model (1): regression with information on strategy as dependant variable, and a logit estimation together with a naf 16 sector dummy yields a point estimate of 0.275 for ‘Listed’.

Notes: (a) Each line corresponds to a given item as a dependent variable. (b) Each column presents the results of a different regression model. (c) Standard errors in parentheses. (d) Controls include industry, establishment size and age, firm size, activity (growth, stable, decline), % women, % white collar, % of employees aged under 40, presence of union representative, presence of elected worker representatives, function of the interviewed manager, tenure of the interviewed manager

Table 2 - Estimation results for the worker representative survey, REPONSE 2004

Point estimates for 'Listed'

	Model (1)	Model (2)	Model (3)
Strategy	0.285**	0.318**	-0.024
	(0.122)	(0.131)	(0.587)
Economic situation	0.215*	0.282**	-0.200
	(0.125)	(0.134)	(0.602)
Envir. & social consequences	0.187	0.229*	0.168
	(0.118)	(0.127)	(0.516)
Employment prospects	0.104	0.117	-0.542
	(0.122)	(0.131)	(0.551)
Wage prospects	0.145	0.191	-0.321
	(0.125)	(0.135)	(0.558)
Training opportunities	-0.036	-0.054	0.408
	(0.119)	(0.128)	(0.537)
Org. & techn. changes	0.095	0.138	0.096
	(0.119)	(0.127)	(0.591)
Estimation method	*logit*	*logit*	*biprobit (IV)*
Sample	*2 (1,607 obs.)*	*2 (1,607 obs.)*	*2 (1,607 obs.)*
Sector dummy	*Naf 16*	*Naf 85*	*Naf 16*

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 2004 REPONSE survey, worker representative questionnaire, Dares.

Significance level: ***p<0.01, **p<0.05, *p<0.1

Reading: first line, model (1): regression with information on strategy as a dependant variable, and a logit estimation together with a naf 16 sector dummy yields a point estimate of 0.285 for 'Listed'.

Notes: (a) Each line corresponds to a given item as a dependent variable. (b) Each column presents the results of a different regression model. (c) Standard errors in parentheses. (d) Controls include industry, establishment size and age, firm size, activity (growth, stable, decline), % women, % white collar, % of employees aged under 40, presence of union representative, function of the interviewed worker representative (iwr), union affiliation of the iwr, occupation and tenure of the iwr.

Table 3 - Estimation results for the manager survey, REPONSE 1998 Point estimates for 'Listed'				
	Model (1)	Model (2)	Model (3)	Model (4)
Strategy	0.232** (0.101)	0.280*** (0.107)	-0.313 (0.770)	0.306** (0.134)
Economic situation	0.114 (0.103)	0.092 (0.109)	-0.879 (0.594)	0.201 (0.137)
Employment prospects	0.034 (0.100)	0.079 (0.105)	-0.020 (0.619)	0.039 (0.134)
Wage prospects	0.079 (0.100)	0.027 (0.106)	-0.512 (0.822)	0.115 (0.134)
Training opportunities	-0.008 (0.109)	-0.101 (0.114)	-0.598 (0.664)	-0.102 (0.146)
Org. & techn. changes	0.088 (0.100)	0.061 (0.104)	-0.212 (0.585)	0.119 (0.134)
Estimation method	*logit*	*logit*	*biprobit (IV)*	*logit*
Sample	*1 (2,380 obs.)*	*1 (2,380 obs.)*	*1 (2,380 obs.)*	*2 (1,244 obs.)*
Sector dummy	*Naf 16*	*Naf 85*	*Naf 16*	*Naf 16*

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 1998 REPONSE survey, manager representative questionnaire, Dares.

Significance level: ***p<0.01, **p<0.05, *p<0.1

Reading: first line, model (1): regression with information on strategy as a dependant variable, and a logit estimation together with a naf 16 sector dummy yields a point estimate of 0.232 for 'Listed'.

Notes: (a) Each line corresponds to a given item as a dependent variable. (b) Each column presents the results of a different regression model. (c) Standard errors in parentheses. (d) Controls include industry, establishment size and age, firm size, activity (growth, stable, decline), % women, % white collar, presence of union representative, presence of elected worker representatives, function of the interviewed manager, tenure of the interviewed manager.

Table 4 - Estimation results for the worker representative survey, REPONSE 1998

Point estimates for 'Listed'

	Model (1)	Model (2)
Strategy	-0.162 (0.142)	-0.234 (0.153)
Economic situation	-0.083 (0.151)	-0.146 (0.163)
Employment prospects	-0.260* (0.144)	-0.291* (0.155)
Wage prospects	-0.004 (0.144)	-0.040 (0.154)
Training opportunities	0.165 (0.149)	0.116 (0.159)
Org. & techn. changes	-0.240* (0.138)	-0.351** (0.148)
Estimation method	*logit*	*logit*
Sample	*2 (1,244 obs.)*	*2 (1,244 obs.)*
Sector dummy	*Naf 16*	*Naf 85*

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 1998 REPONSE survey, worker representative questionnaire, Dares.

Significance level: ***p<0.01, **p<0.05, *p<0.1

Reading: first line, model (1): regression with information on strategy as a dependant variable, and a logit estimation together with a naf 16 sector dummy yields a point estimate of -0.162 for 'Listed'.

Notes: (a) Each line corresponds to a given item as a dependent variable. (b) Each column presents the results of a different regression model. (c) Standard errors in parentheses. (d) Controls include industry, establishment size and age, firm size, activity (growth, stable, decline), % women, % white collar, presence of union representative, function of the interviewed worker representative (iwr), union affiliation of the iwr, occupation and tenure of the iwr.

APPENDIX

Table A1 - Worker information in 2004
Means (%) of variables

Manager questionnaire (sample 1)			
% of establishments where information is frequent			
	Total 2,503 obs	Listed 1,061 obs	Non-listed 1,442 obs
Strategy	45.91	55.41	42.52
Economic situation	55.52	66.26	51.69
Envir. & social consequences	27.39	33.78	25.11
Employment prospects	43.01	51.47	39.99
Wage prospects	42.84	47.98	41.01
Training opportunities	59.76	71.42	55.61
Org. & techn. changes	41.74	46.47	40.06
Worker representative questionnaire (sample 2)			
% of establishments where information is satisfying			
	Total 1,607 obs	Listed 738 obs	Non-listed 869 obs
Strategy	55.30	58.78	54.21
Economic situation	63.83	68.54	61.76
Envir. & social consequences	44.83	48.86	43.06
Employment prospects	47.65	48.76	47.16
Wage prospects	33.65	33.20	33.84
Training opportunities	57.95	60.70	56.74
Org. & techn. changes	49.92	48.83	50.40

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 2004 REPONSE survey, manager representative and worker representative questionnaires, Dares.

Note: all variables are weighted by REPONSE sampling weights.

Table A2 - Worker information in 1998

Means (%) of variables

Manager questionnaire (sample 1)			
% of establishments where information is frequent			
	Total 2,380 obs	Listed 932 obs	Non-listed 1,448 obs
Strategy	44.23	54.81	40.64
Economic situation	52.55	62.79	49.07
Employment prospects	42.16	48.24	40.09
Wage prospects	38.57	45.92	36.08
Training opportunities	65.60	72.93	63.12
Org. & techn. changes	50.67	56.33	48.75
Worker representative questionnaire (sample 2)			
% of establishments where information is satisfying			
	Total 1,244 obs	Listed 542 obs	Non-listed 702 obs
Strategy	50.56	50.86	50.42
Economic situation	66.02	70.69	63.90
Employment prospects	52.96	47.68	55.36
Wage prospects	34.92	33.40	35.61
Training opportunities	64.78	68.91	62.90
Org. & techn. changes	59.09	57.67	59.73

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 1998 REPONSE survey, manager representative and worker representative questionnaires, Dares.

Note: all variables are weighted by REPONSE sampling weights.

Table A3 - Firm and establishment characteristics

Means (%) of variables in 2004 and 1998 (Sample 1)

	2004 2,503 obs.	1998 2,380 obs.
Listed	26.27	25.36
Establishment size		
from 20 to 50	63.75	64.66
from 50 to 100	19.72	18.66
from 100 to 200	9.60	10.10
from 200 to 500	5.43	5.01
more than 500	1.50	1.57
Firm size		
Only one estab.	48.56	47.01
less than 200	23.41	17.06
from 200 to 500	6.46	8.26
from 500 to 1000	4.37	4.80
more than 1000	17.20	22.86
Establishment age		
less than 10 years	14.16	30.89
10 to 50 years	67.91	58.28
more than 50 years	17.93	10.83
State of the market		
Growth	57.58	54.19
Stable	27.15	30.36
Decline	15.28	15.45
Union delegate in the estab.	36.36	34.30
Elected worker representative in the estab.	75.04	73.36
Proportion of women		
less than 15%	27.40	35.32
15 to 60%	51.48	39.07
more than 60%	21.12	19.35
miss	-	6.26
Proportion of managers, supervisors and technicians		
less than 15%	29.91	23.79
15 to 30%	26.34	28.84
30 to 50%	18.09	14.04
more than 50%	25.65	12.76
miss	-	20.57
Proportion of employees aged under 40		
less than 40%	18.08	-
40 to 70%	52.40	-
more than 70%	29.52	-

Source: Establishments of 20 employees or more in the private sector (excluding agricultural sector). 1998 and 2004 REPONSE surveys, manager representative questionnaire, Dares. Workforce characteristics are drawn from the DADS, INSEE.

Note: all variables are weighted by REPONSE sampling weights.

Notes

[i] The intensive use of performance-related pay in listed companies pursuing shareholder-value-based management strategies is a common finding of these studies: individual and collective bonus schemes tend to align workers' incentives with those of the firm, and also increase the flexibility of business cost structures over time, something valuable in terms of financial management.

[ii] By increasing the identification of workers with firm goals, information sharing may lead employees to accept more moderate wage increases. It is, however, possible that such disclosure improves labor's bargaining power, thereby increasing the union's ability to deliver a high wage settlement for its membership.

[iii] Kalmi and Kauhanen (2008) provide indirect evidence of this effect: on a cross-section of 3,600 Finish workers, they found that information sharing (defined here as being informed about changes at work at the planning stage) was significantly associated with a lower level of stress and a higher level of job satisfaction.

[iv] The survey also contains a worker questionnaire that is of no use for our study.

[v] The main issue was the protection of minority shareholders from abuses by large blockholders (see Enriques and Volpin, 2007).

[vi] The French corporate law offers a menu of companies or statutes that differ in terms of director duties, creditor rights, shareholder protection, transferability of shares, etc. Some of these forms are authorized to list their shares on a regulated market, whereas others are not. The main (but not unique) vehicle for quotation is the *Société anonyme*, even though a majority of them are not listed.

[vii] A *comité d'entreprise* is required in all firms with 50 or more employees.

[viii] The item was introduced in the 2004 survey precisely to gauge the effect on workers of the new 2001 regulation on reporting (see *supra*), forcing listed companies to report on the environmental and social impact of their activity.

[ix] Following Reiter, Zanutto and Hunter (2005), we introduce the variables that have been used to build the weights as regressors, namely establishment size and sector.

[x] See Goetschy and Jobert (2004) for a comprehensive presentation of the French employment relations system.

[xi] We distinguish between workplace delegate, member of a works councils or equivalent and member of a health, safety and improvement of working conditions committee.

[xii] Results are not reported here but are available upon request.

[xiii] As noted earlier, these estimations are strictly similar to those run in 2004, but with one exception: we do not have, in 1998, the proportion of the workforce aged under 40. To check whether this difference may account for the difference in results between the two periods, we have re-run our 2004 estimations excluding the age structure of the workforce: the results still indicate a very significant correlation between listing and information frequency. Results are available upon request.

[xiv] Note that two of the biprobit estimations (economic situation and training) yield a weak correlation with endogeneity: in the probit estimation of being listed, the level of significance for the instrumental variable is rather low.

[xv] The instrument's performance is quite low (non-significant first stage correlation); consequently, we choose not to report instrumental variable estimations here.