Does Employee Ownership Benefit Value Creation? The Case of France (2001–2005)

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Abstract: This paper is focused on employee ownership. It examines the employee ownership role in value creation. Based on a sample of 163 French companies, our study measures the impact of employee share ownership on value creation for both shareholders and stakeholders. Only companies with a sustained employee ownership policy over a five-year period (from 2001 to 2005), as defined by the French Federation of Employee and Former Employee Shareholders (FAS), have been considered. The results indicate that employee share ownership has influence neither on shareholders' nor on stakeholders' value creation.

Keywords: employee ownership, value creation, corporate governance, shareholders, stakeholders.

Introduction

Employee share ownership involves employees owning a proportion of their company's shares, which are often purchased or subscribed on preferential terms (discounted prices, additional contribution paid by the company), in connection with share offer operations that may be restricted to them (e.g. an employee share ownership plan or a corporate savings plan). Employee Ownership of their company's shares, either individually or collectively, has undergone a remarkable development in France[1] in recent decades, as in the United States[2], encouraged by several successive changes in legislation. Only the law of the 30th of December 2006 has simplified the process of awarding bonus shares within companies. This law promoted the development of employee participation and share ownership.

Employee share ownership has a specific position within the corporate governance debate. Defined as the network of relationships linking several parties in defining corporate strategy and determining company performance (Caby and Hirigoyen, 2005), governance raises a recurrent question related to power-sharing (Thiveaud, 1994). It refers indeed to the degree of latitude enjoyed by the company's managers. This latitude depends on the power they wield, the decisions they make, and the control exercised over these decisions[3].

A traditional view of governance, giving precedence to shareholders' interests in the strategic decision-making process, has long prevailed. Nevertheless, a more recent view has gradually emerged. This approach deals with *stakeholder governance* which takes into account the interests of all stakeholders; especially employees, creditors, customers and suppliers (Bendixen and Abratt, 2007).

This shifting perspective has to be linked to a growing interest in corporate social responsibility and business ethics (Fukukawa et *al*., 2007). In order to strengthen relationships with its stakeholders, firms have to pay attention to the different contributors needs. Naturally, they are numerous, diverse and all of them cannot represent a significant weight in terms of retribution (Cyert and March, 1963). One of the stakeholders that have been neglected in firm's governance appears to be employees. Due to economic crisis, global competition and the necessity to cope with shareholders' interests or customers' satisfaction, employees are exposed to greater pressure, than many other contributors, in spite of their deep intrinsic value. Hence, analysing value creation's repartition resulting from employee share ownership encompasses an ethical dimension (Hummels, 1998; Stieb, 2009).

The aim of this research is to determine whether a sustained employee share ownership policy, as defined by the French Federation of Employee and Former Employee Shareholders (FAS)[4], constitutes a factor in value creation. We therefore adopt, as theoretical references, shareholder governance and stakeholder governance. In fact, employee share ownership may represent a factor in value creation in favour of shareholders and stakeholders.

The sample adopted is based on 163 quoted French companies of which 28 have a significant employee share ownership (ESOP≥3% of total shares). According to us, this study is original for two reasons. First, it examines a *managerial tool* that still being misunderstood on an empirical level in spite of undergoing a significant development. It is especially the case in France. It will be particularly interesting to compare the results obtained on French companies with those related to Anglo-Saxon context. Second, our study enriches the debate on corporate governance since it *focuses on value creation* regarding both shareholder and stakeholder theory. In fact, this concept is still being studied only in a shareholder theory framework.

This paper offers an analysis of theoretical and empirical frameworks references in order to point out the role played by employee ownership within value creation (1). After defining methodology and variables adopted (2), it empirically examines and discusses hypotheses identified through theoretical analysis (3).

1. Theoretical background

The analysis paradigm of value creation is tending to evolve which lead to consider employee share ownership from a stakeholder governance perspective. However, the empirical literature on the effects of employee ownership policy produced contrasting results.

1.1. Employee share ownership and value creation paradigm upgrade

A detailed analysis of the influence of employee ownership on value creation requires differentiating first between shares owned by company's top managers and shares owned by employees. It seems important second to point out the governance upgrade, which is moving from a shareholder to a stakeholder perspective.

From the viewpoint of shareholder governance, only share ownership of top managers may be justified at a conceptual level by the agency theory focused on the divergence of interests and information asymmetry between the various actors involved in the company, particularly shareholders and managers. The agency costs resulting from this are supposed to be limited, notably through the managers' involvement in the company's share ownership and management. Holmström (1979) noted that company managers enjoy considerable latitude leading them to define an investment policy that might not maximise the firm's value, due to the asymmetry of information characterising their relationship with the shareholders. He suggested to use one or more measurements of organisational performance to appraise the non-observable actions of managers and to index a part of their remuneration on this performance. Jensen and Meckling (1976) highlight a positive correlation between the ownership rights enjoyed by company managers, i.e. their participation in the share capital, and the company's value. More recently, Aubert et *al*. (2009) have found an analytical solution that shows that, under some assumptions, it is possible to find an optimal level of company stock distribution that ensures an optimal level of profit for the company.

Nevertheless, the transition from a single viewpoint of the firm to a pluralist conception emphasises the limits of this framework of analysis (Larcker et *al*., 2005). Without necessarily rejecting the principle of maximization of shareholder value (Lazonick and O'Sullivan, 2000; Gugler et *al*., 2003; Denglos, 2008), raises the question of a heightened recognition of the predominant role played by specific human capital. In fact, the agency model focuses on shareholders/manager relationships by assigning a secondary importance to other stakeholders in the company, whereas current developments emphasise the diversity of interests involved within the framework of the stakeholder theory (Freeman, 1984; Hill and Jones, 1992; Clarkson, 1995). A growing number of authors are expressing a wish to achieve a balance between the interests of the firm's various stakeholders. It deals with actors incurring a risk regarding to the outcome of firm's activities (Clarkson, 1995), either in a direct concern (employees, creditors, customers, suppliers, government) or a secondary concern (special interest groups and the media), and that of capital contributors. The value is then assessed more broadly via a pluralist vision of the company. Thus, the aim is no longer to maximise shareholder value, but rather the firm's total or global value (Fama, 1978; Blair, 1996).

However, the view that sees the company as a place to maximise the firm's value for all its stakeholders, despite its significant analytical contribution, remains fairly vague and difficult to measure. One of the main difficulties lies in the problems linked to defining a specific objective function for the company, which may be a source of managerial opportunism (Jensen, 2001).

To face this difficulty, Hirigoyen and Caby (1998) explore similar conceptual steps based on the notion of specific assets (Williamson, 1985). The idea is that the company's development rests on two particular resources: the capital introduced by shareholders and the skills of employees. In fact, the firm constitutes a combination of specific capital and specific labour (Aoki, 1984) and a node of specific investments (Rajan and Zingales, 1998). Whereas the role of the shareholders, under these circumstances, is to choose the most effective coalition of employees (Rajan and Zingales, 1998), Blair (1997) distinguishes two types of risks supported by specific human capital. It concerns first the risk for the rent and quasi-rent generated by human capital to be expropriated *ex post* by the other firm's stakeholders. It deals second with the current value of specific human capital that might fluctuate in the future, either because the skills might no longer be useful to the firm, or because the firm no longer generates sufficient rents. Under these circumstances, it is important for the global risk to be limited or at least remunerated, because there is a risk that the specific capital will disappear, which would then penalise all stakeholders. Risk remuneration leads to the employees being regarded as residual creditors, like the shareholders, of the value created for their benefit if the wages received are higher than their opportunity cost (Parrat, 1999). Blair

(1997) suggests remunerating the risk by employee ownership, as remunerating employees with shares may be a mechanism to encourage and protect investments in specific human capital. The idea is that share ownership by employees gives them certain rights of control and simultaneously aligns their interests with external shareholders' interests. Studying employee ownership from a stakeholder governance perspective seems to be appropriate to enrich the debate on employee ownership.

1.2. The role of employee share ownership from a stakeholder governance perspective

In the context of stakeholder governance, employee ownership has a formal role exerted *via* employee participation in the firm's representation and decision-making and an informal role by establishing a trust regime.

By encouraging staff to become involved in the firm's representation and decision-making, employee ownership may influence not only the agency relationship between shareholders and managers, but also the relationship between managers and employees, which shows that recognition of the human capital specific to the firm is not incompatible with the traditional view of the company (Jensen and Meckling, 1995). Generally speaking, institutional participation in the executive or the supervisory board enables the employees to protect their specific investment in human capital.

Aoki (1984) and Williamson (1985) note that employee representation enables them to share important information, notably in the field of organisation of labour and collective bargaining. This is especially the case during periods of economic difficulty which are a source of heightened efforts or even sacrifices for them. Smith (1991) believes that the institutional participation of employees in executive or supervisory boards limits the asymmetry of information, which might force managers to abandon certain opportunistic behaviours. In specific terms, the power of shareholders employees, beyond the percentage of voting rights they hold, is measured not only by their ability to influence the decisions taken at ordinary and extraordinary general meetings, but also by their participation in the election of members of executive or supervisory board (Desbrières, 1997). At general meetings, as shareholders they can pretend to information, and are able to benefit from information exchanges with external shareholders. They also have the possibility to create or join a coalition to oppose the decisions made by the majority and the managers. As directors appointed by the ordinary general meeting, shareholders employees enjoy an appropriate position to defend their own interests and especially to protect their specific investments. Desbrières (1997) also notes that having employees, as shareholders, on the board is more interesting than their only institutional participation. In fact, the control they then exert depends on the value of their share portfolio and is not affected by collective bargaining considerations linked to the way they have been appointed. As a result, it helps to reduce the power differential between the managers and the other stakeholders, thus favouring the emergence of a co-operative coalition. Nevertheless, several analyses tend to put the role of employee ownership into perspective. In fact, Jensen and Meckling (1979) believe that institutional representation of employees is a source of inefficiency, as self-managed firms, since their economic horizon differs from that of investments. The efficacy characterising the control exercised by shareholder employees appears to be conditioned by their degree of independence from the managers who might pursue an entrenchment strategy and then will offer shareholder employees more implicit contracts than those offered to employees who are not shareholders (Desbrières, 1997).

Furthermore, employee ownership may encourage the establishment of a trust regime within companies that introduce it. Employee share ownership may be regarded as a determining factor in organisational capital (d'Arcimoles and Trébucq, 2003) which is defined as a resource reflecting the nature of social relations within the firm. Organisational capital has two components: *associability* (i.e. the participants' willingness and ability to subordinate their individual aims associated actions to the collective aims and actions related) and *trust* (Leana and Van Buren, 1999). The anticipated effects of an improvement in organisational capital are an increase in involvement levels, flexibility of labour, collective organisation and intellectual capital within the firm (Leana and Van Buren, 1999).

Trust "*appears to be a particular mechanism for regulating the various transactions that the company pursues with its various partners"* (Charreaux, 1998). In the etymological sense, trust expresses the willingness to rely on a partner and implicates to go beyond the behavioural assumption of opportunism, which still widely predominates in finance (Bradach and Eccles, 1989; Frank, 1993; Orbell et *al*., 1994). By leading to the "*creation of trust capital, which is collectively owned by the firm and the various partners*", trust appears to contribute to stakeholder value creation (Liu et *al*., 1998). It relaxes in particular the control constraints and reduces the cost of control mechanisms exerted by the various stakeholders (Charreaux, 1998).

Hence, it appears as important to analyse what elements are likely to be involved in establishing an atmosphere of trust, and to examine whether employee share ownership has a role among these mechanisms. While establishing such an atmosphere in an agency situation appears to be the most profitable solution both for shareholders and the other stakeholders (Canella, 1995), it also seems to be hardest to apply as the ambition is to strengthen "*the* *specific investment in capital to the firm*" (Hirigoyen and Pichard-Stamford, 1998). The hypotheses of strengthening trust based relationship between partners by offering shares to employees may nevertheless be considered. By awarding shares to employees, the shareholders, who may in some circumstances agree a dilution of their shares, demonstrate the confidence allotted to employees. Offering employees the opportunity to become shareholders in the company is a recognition proof of the role they play within the organisation, the skills applied and the quality of the provided services. This reflects not only a financial recompense for the efforts, but also a desire to involve them in the firm's destiny and to create a community of interest. By becoming shareholders, the employees are also demonstrating their confidence in the firm's future. Awarding shares or share options to employees might, in these circumstances, involve the creation of specific human capital, as trust facilitates "*the emergence of investment proposals from employees*" (Charreaux, 1998).

The relationships between internal and external partners also need to be included. By expressing the confidence both of managers and employees in the future of their firm, a share ownership policy may also give rise to feelings of trust among the company's financial partners or suppliers, and thus contribute to stakeholder value creation. Nevertheless, while conceptual recommendations regarding the relationship between employees share ownership and value creation offer numerous prospects for analysis, empirical checks of the arguments put forward still appear uncertain and contradictory.

1.3. The incompleteness and contradictions of empirical literature on employee ownership and value creation relationship

Two series of studies have endeavoured to measure the impact of employee share ownership on performance. The first one focuses their analysis on performance in accounting terms and the second one examines the impact on stock-market performance.

In the first category, some studies question the positive effects of employee shareholder arrangements. Thus, the General Accounting Office (1986) did not detect any effects exerted on performance by Employee Stock Ownership Plans (ESOP), unless share ownership was combined with participative management. Likewise, Bloom (1986), who analysed the results of 609 firms that had introduced an employee share ownership program, did not find any positive effects on the company's economic performance. In the same way, Faleye et *al*. (2006) found a negative influence of employee ownership on investment, risk taking, growth and creation of new jobs.

Nevertheless, other authors reach more encouraging conclusions, especially regarding the impact on productivity. One study that is admittedly old, but constitutes a key reference work, was performed by Conte and Tannenbaum (1978) in the United States and Canada on 87 cooperatives. The authors reach the conclusion that companies practising employee share ownership have a greater profit-making capacity than traditional companies of a similar size and in comparable sectors, even though the statistical significance is low and it is difficult to establish a causal link. Conte and Svejnar (1988) show that employees share ownership has a positive impact on company productivity, even though this effect is tending to become less marked with the rising percentage of shareholder employees. Kruse (1992) also emphasises that employees share ownership practised within American companies has a positive impact on productivity. This result seems to be lower than profit-sharing schemes while developing positively and rapidly over the years. Productivity is not the only indicator that appears to be positively influenced by employee share ownership, according to the empirical literature. In one of the most significant study to date of the performance of ESOPs in closely held companies, Kruse and Blasi (2000) found that ESOPs increase sales, employment, and sales/employee by about 2.3% to 2.4% per year. Moreover, ESOP companies are also more likely to still in business several years later. Stretcher et *al*. (2006) looked at 196 publicly traded U.S. ESOP companies during the years 1998 through 2004. The ESOP companies had *returns on assets* that were higher than the matched non-ESOP companies in all seven years, *net profit margins* that were higher in all of the five years (where comparable data were available) and *better operating cash flows* in three of the five years (where data were available). Sengupta (2008) has shown that higher productivity is observed in those workplaces where unions coexist with employee share ownership schemes. Guedri and Hollandts (2008) have examined the impact of employee stock ownership and board employee representation on firm performance. Results drawn from a longitudinal analysis of a sample of 230 French firms over the period 2000-2005 provide support for an inverted U-shaped relationship between employee ownership and accounting-based performance measures; however, this relationship is not supported when a market-based performance measure is used. Following this study, Ginglinger et *al.*, (2011) have explained that employee representation on corporate boards appears to be a value enhancing factor in the case of directors elected by employee shareholders.

In the second category, the studies are not unanimous. Mehran (1995), relying on a random sample of 153 firms from the industrial sector observed between 1979 and 1980, indicates that those companies in which the managers' remuneration is relatively sensitive to their own performance, perform significantly better, whatever the measurement method adopted; the same applies, more specifically, to firms whose managers are remunerated through shares and stock-options. It is accepted that managerial incentives have a favourable impact on the firm's efficiency and in particular on its stock-market performance. This improved stock-market performance over the long term also appears to be confirmed in the short term. Chang (1990) specifically examined the impact on shareholders wealth of opening up ESOP, by carrying out an event study on 165 announcements, most of which were made after 1983. Across the sample, the mean abnormal rate of return for the announcement period is 3.66% and the hypotheses of no effect on shareholders wealth has been rejected at the 1% threshold. Studies performed on ESOP serving LBO operation, and adopted only to serve employees' interests (excluding any LBO operation and without any defensive character), do not produce any fundamental different results. The positive stock-market reaction was also confirmed by Davidson and Worrell (1994), on a sample of 48 companies, with abnormal rates of return showing a 2.64% rise over the period D-1/D and a 1.73% rise over the period D/D+20. Kim and Ouimet (2008) also found that ESOPs have a positive effect on company value. Using Tobin's Q, they found that ESOPs led to an 8.12% increase in company valuation relative to the industry median. ESOPs companies with less than 5% ownership showed a valuation increase of 16% relative to the industry median.

Nevertheless, it is possible to observe that shareholders wealth creation is neither systematic, nor necessarily sustained. Thus, Chang (1990) explains that ESOP adopted for defensive reasons (as an antitakeover mechanism) produce opposite effects, with the abnormal rate of return becoming negative. Davidson and Worrell (1994) note that the announcement effect becomes less marked after two years and the improved stock-market performance disappears before this term.

The results observed in Anglo-Saxon countries, although contrasting, can probably be explained by the development of shareholders practices within their companies. Certainly, in the United States there has been strong and steady growth in employee share ownership since the first law governing ESOP plans was passed several decades ago. On the other hand, the development of employee ownership in France has been less marked. Here, a certain degree of reserve regarding share ownership may be observed, as capitalist culture is less strongly ingrained than in Anglo-Saxon countries. In France, employee share ownership is viewed more as a way to encourage long-term savings, which is a step taken by individuals, and is encouraged by the mechanism of top-up contributions paid by companies. This cultural difference constitutes an additional incentive for testing the impact of employee share ownership on value creation in the French context, not just in terms of its shareholder dimension but also its stakeholder dimension.

Whereas the influence of employee share ownership on shareholder value creation remains tenuous, the impact on stakeholder value creation still constitutes a virgin field for investigation. The object of this research is specifically to enhance our knowledge of the relationship between employee ownership and value creation through testing the following hypotheses:

H1: *Employee share ownership positively influences shareholder value creation*.

H2: *Employee share ownership positively influences stakeholder value creation*.

2. Research method

The developed methodology is associated to a global sample of 163 quoted French companies. The aim is to measure the influence on value creation of a significant employee share ownership policy, as defined by FAS, over a five-year period, from 2001 to 2005. Bivaried and multivaried analysis have been used for this purpose.

2.1. Data collection

The study was based on companies belonging to the SBF 250 index at 31 December 2005, since these companies pursue a particularly active employee share ownership policy, as defined by FAS.

Nevertheless, this sample was subject to several restrictions, and as a result, several categories of companies were withdrawn:

- Companies that were not permanently quoted over the five-year period adopted for the study, i.e. from 2001 to 2005 (companies that were floated on the stock market or, conversely, delisted during the period in question; companies that were either in a state of insolvency or had been placed by the courts under administration);

- Banks, lending institutions, finance companies, insurance companies, holding companies and real-estate companies given their specific financial characteristics;

- Companies presenting negative value added for one of the financial years during the period. In fact, measuring the distribution of negative value added would, by definition, be meaningless, as only wealth created can be distributed among the various stakeholders.

A number of other companies were eliminated regarding missing data. Hence, the global sample integrates 163 firms.

Our intention was to employ a pairing method which involves the creation of two samples: one made up of companies with the characteristics being studied and the other not, and to compare the results on each of these sub-samples. Unfortunately, this ambition was rapidly compromised, as it would have resulted in a risk of substantial methodological bias. In fact, it was impossible to identify with certainty which companies had employee shareholders and which did not. An important number of firms seem not to have employee ownership apparently in the financial databases. Nevertheless, some of these companies are suitable to develop an employee ownership as suggested by annual reports without précising any quantification. Only the principle of the existence of participation in the share capital by company employees is sometimes mentioned, without going into more detail. Pairing up companies under such circumstances would have been relatively meaningless. Consequently, we chose to compare companies with a sustained employee share ownership policy – i.e. those belonging to the Employee Share Ownership Index [Indice de l'Actionnariat Salarié (IAS)] developed by FAS[5] – with all of the companies making up the SBF 250 index, excepted the IAS's firms.

2.2. Variable measurement

We tried hard to find original ways to operationalise the variables, especially the dependant variable: value creation.

2.2.1. The dependant variable: value creation

At first, shareholder value creation was adopted as a dependant variable. It was assessed using a stock-market value added indicator, inspired by Stewart's Market Value Added method (1991), which measures the wealth creation accumulated by the company based on all of the funds committed by investors. A simplified version of the indicator was adopted because of difficulties in accessing data. It was indeed necessary to prevent any methodological distortions linked to the accounting reprocessing or adjustment operations recommended by Stewart. The relative market value added in 2005, relating the difference between the market value and book value of the capital employed to the book value of this capital, was calculated and incorporated into the study.

Using a more innovative approach, we then focused on stakeholder value creation measurement which led us to face an operationalisation problem that is difficult to resolve (Charreaux, 2007). Desbrières and Charreaux (1998) propose a measurement of stakeholder value, based on a global estimation of the revenue created by the firm in relation to the various stakeholders and not just the shareholders. This stakeholder value is based on measuring the value created by the difference between sales valued at the opportunity price and the sum of opportunity costs for the various contributors of resources. The manager creates value if the difference between sales at opportunity prices and opportunity costs is positive. Hence, in order to enhance value creation, the manager should act simultaneously on opportunity prices (which depends on the degree of customers' dependence on the firm, and may thus be positively influenced by a high level of innovation) and opportunity costs (a decrease of these costs may involve a lower level of remuneration required by lenders due to a lower risk or involve a stakeholder agreement with suppliers). Nevertheless, this measure of stakeholder value creation is still limited. In fact, according to Charreaux and Desbrières (1998), it is not totally quantifiable giving the difficulty to identify opportunity costs and prices for all stakeholders.

In the context of this research, *value added distribution*, in the accounting sense, was then adopted as a dependant variable, after market value added. Indeed, the value problem inevitably implicates identification of beneficiaries of the value created and its distribution. Value added expresses the creation or increase in value that the company brings to goods and services emanating from third parties. It corresponds to the difference between the year production and consumption of goods and services provided by third parties to achieve this production[6]. The distribution of value added in favour of various partners for whom it is possible to measure the value allotted using financial documents (as employees, creditors, the State and shareholders) was considered in spite of the bias concerning the measure objective of the created value.

For *employees*, we measured the proportion of value added absorbed by wages, salaries and social-security costs, plus employees' participation in the fruits of expansion. For *creditors*, we measured the proportion of value added devoted to paying interest and similar charges. *State* value creation, was measured by the proportion of value added devoted to paying taxes, duties and similar payments plus profit tax. *Shareholders value creation* was lastly estimated by the proportion of value added paid as dividends to shareholders (dividends paid on N+1 in terms of absolute value, for year N). This variable complements the "*market value added*" variable which specifically takes into account gains made on the basis of trends in share prices.

Although imperfect, as they do not include the opportunity costs borne by the various stakeholders, these various measurements, as an innovative approach to operationalize stakeholder value creation, were necessary to capture the effect they intend to present in the absence of any alternative measurements.

2.2.2. Explanatory variables

Several categories of explanatory variables were included in the study: employee share ownership variable, financial and economic variables, and control variables (size and sector of activity) in order to study the factors determining value creation.

- The employee share ownership variable

In theory, there are various ways to measure an employee share ownership policy. The first may be the percentage of capital owned by the employees. Unfortunately, the financial databases are singularly lacking in accuracy when it comes to this variable, and in most cases, provide only fairly approximate figures. Another measurement method involves the number of employees' shareholders to the company's total workforce. However, in addition to the fact that this type of information is not systematically outspread, the lack of a uniform calculation method from one company to another would have impaired the accuracy of the information thus gathered. In fact, some companies use the total workforce in France as the basis for calculation, while others use the total workforce at the international level.

Under these circumstances, in the absence of reliable alternative measurements, we chose to adopt a binary variable, drawing a distinction between companies with a nonexistent or low level of employee share ownership and companies pursuing an active policy in this area, as defined by FAS. The sample of experimental companies adopted was composed of 163 companies belonging to the IAS index; the only representative index of the companies with strong employee stock ownership in France. These companies meet the following three conditions:

- They are listed and belong to the SBF 250 index;
- They have shareholders employees who own more than 3% of the company's capital;
- They have at least 25% of their workforce as shareholder employees.

Each of these last two criteria taken in isolation would not be sufficient to define employee share ownership levels as significant. The 3% threshold for share-capital ownership by employees may appear relatively low but it becomes more significant, according to us, when associated to the requirement for the company to have 25% of its employees as shareholders. Furthermore, the 3% of share-capital criterion must be considered in light of the level of development of employee share ownership in France, which is more limited than in the United States, for example.

Only 28 companies met these conditions when IAS index was launched and their number reaches 37 at the end of 2005.

- Financial and economic variables

Two representative variables, *investment policy* and *financing policy*, were used to understand the value creation process. Investments were apprehended via expenditure on tangible fixed assets compared to average net sales, over the period 2001-2005. Debt was measured using the financial debts/equity ratio. Rappaport (1986) and Copeland et *al*. (1991) recommend using firms' levels of activity and margin as determining variables of shareholder value creation. Thus, growth in net sales over the period 2001-2005 and gross operating margin, corresponding to the ratio of earnings before interest, tax, depreciation and amortisation (EBITDA) to net sales (average level over the period 2001-2005), were also included in the analysis.

- Shareholding structure

The aim of the shareholding structure variable is to take into account the influence of shareholder quality on value creation. From this point of view, two categories of companies were distinguished, owned-managed/family firms and managerial/controlled companies. Owned-managed and family-owned companies were defined using a quantitative criterion based on two threshold levels: every company in which at least 20% of the share capital was controlled either directly or indirectly by one or more individuals, belonging or not to the same family, was deemed to be an owned-managed and family-owned company[7]. However, in order to be realistic, firms in which at least 10% of the share capital was controlled either directly or indirectly by one or more individuals, belonging or not to the same family, provided that this owned-managed and family-owned shareholding represented a majority of the capital were also, by extension, deemed to be owned-managed and family-owned companies. Conversely, any companies that did not meet these criteria were considered to be managerial or controlled companies.

- Size and sector of activity

In order to gain a comparative vision of the companies' performance from a strictly financial point of view, and, by extension of value creation, it is essential to take the effects of their size and sector of activity into account. A smaller size may indeed result in shareholders exercising greater control over the managers' actions. The *size* variable was operationalised using the logarithm of total assets (average value over the period 2001-2005). Companies' value creation also has to be assessed in relation to the performance of the sector overall. This variable was therefore taken into account in the form of grouping the firms making up the sample into two categories: those belonging to the industrial sector and those belonging to the commercial and service sector[8].

It would have been relevant in addition to take into account intermediate or moderating variables, like employee participation in the firm's representation and decision-making structures, or even the atmosphere of trust developed thanks to the employee stock ownership. However, operationalising these variables raises considerable difficulties, requiring the implementation of a qualitative methodology (in particular by questionnaires and interviews) exceeding the possibilities of investigation of this research but which must be considered in the future.

Table No. 1 provides a summary of all the variables used in the study.

[TABLE 1]

2.3. Research design and model specification

Shareholder and stakeholder value creation were first analysed using a linear regression. Based on the hypothesis formulated and the related explanatory and control variables, the model used was as follows:

$$VC = b_0 + b_1 IAS + b_2 INV + b_3 DEBT + b_4 ACTI + b_5 MARG + b_6 OWN + b_7 SIZE + b_8 SECTOR$$

With VC= MVA (model 1), SHAR (model 2), EMP (model 3), STATE (model 4), CRED (model 5).

Stakeholder value creation was then analysed using bivaried tests. Due to the non-normality of the value added distribution data, Mann-Whitney's U test, conducted in the presence of independent samples to compare the responses to an ordinal variable provided by two or more parts of the sample, was used to compare value added distribution methods between the experimental companies (members of IAS index) and control companies (not members of IAS index).

3. Results and discussion

We present first the sample's main characteristics and second the empirical analyses of the hypothesis.

3.1. Descriptive statistics

The 163 companies making up the sample mainly belong to the commercial and service sector (over 64%), followed by the industrial sector (nearly 36%). The companies considered represent the various size categories, but for the most part are large companies: 48.50% of the sample is made up of companies with over 5000 employees and 36.20% with over 10000 employees. This result should be compared with the membership of the SBF 250 index of all the companies making up the sample. Among the 163 companies, 28 belong to the IAS[9].

[TABLE 2.1/TABLE 2.2]

The following table also presents a number of descriptive statistics measured on the global sample.

[TABLE 3]

3.2. The influence absence of a sustained employee share ownership policy on value creation

The regression models analyse the impact on shareholder and stakeholder value creation of IAS index membership associated to other explanatory variables of value creation. The models used explain the relative market value added and the relative value added for stakeholders. The R_2 coefficients lie between 0.306 and 0.330, and the adjustment quality of the models is high (F between 6,298 and 9,187, $p<0.01$) excepted for model 5 (creditors). Hence, our comments will only focus on the first 4 models.

An examination of the various coefficients shows that the association between IAS index membership and shareholder / stakeholder value creation is weakly significant ($p<0.10$). Whenever those coefficients appear as significant (models 2 and 4), the observed relationship is opposed to the expected one. The idea that sustained employee share ownership contributes to value creation, notably by reducing conflicts and agency costs, thus appears to be refuted. Does it mean that investment in employee ownership policy does not necessarily serve shareholder's interests? This might confirm the hypotheses according to which executives use employee ownership probably to entrench themselves by favouring their own interest thus disadvantaging the shareholders' one, while offering little motivation for employees (Nasar, 1989; Desbrières, 1997; Pugh et *al.*, 1999; d'Arcimoles and Trébucq, 2003). Nevertheless, this result appears to confirm the previous contrasted (Bloom, 1986; Davidson and Worrell, 1994) results about the effects of employee ownership on companies' value creation.

The impact of investment policy in terms of tangible assets appears to be negative both on market value added ($p<0.01$) and shareholder value ($p<0.01$). Investment is then a value creation factor on long term and implicates decrease of the dividend distribution and apparently market value added on short term.

Debt appears to be negatively related to shareholder and state value creation ($p<0.10$). The more important is the level of debt, the less are dividends and taxes. This does not corroborate agency theory which considers debt as a mean to control CEO's by leading them to find out free cash flows benefiting *in fine* to shareholders value creation.

At the same time, the models emphasise the impact of the operating margin rate and activity, as prescribed by the theory. The influence of this variable is statistically significant, at the 1% threshold. These two explanatory variables confirm that only shareholders and the state have priority in benefiting from the activity and the gross operating margin growth at the expense of employees interests in term of value creation. These results indicate that companies benefit from substitutive mechanisms, accounting and market performance, to allot incentives to employees. In this case, when the operating margin level is high, employees benefit from accounted added value.

Lastly, the negative influence of size on value creation appears to be statistically significant ($p<0.01$), as does that of the managed-owned and family nature of the ownership structure ($p<0.1$). In fact, family firms are well known for promoting self-financing and being focused on middle long term orientation. The coefficients concerning the other variables do not appear to be statistically significant.

[TABLE 4]

These results contradict the theoretical arguments concerning the effects of employee ownership policies on financial performance and shareholder value creation. They seem to contradict the results of empirical researches that identify a superior stock-market performance achieved by ESOP companies over medium/long term (Mehran, 1995) and to a lesser extent, studies underlying a favourable reaction by the markets to ESOP announcements (Chang, 1990; Davidson and Worrell, 1994). However, they are consistent with other studies, as Trébucq (2002), without necessarily contradicting those that find a superior level of performance- admittedly assessed on the basis of book values – but only at moderate levels of employee share ownership (Dondi, 1992).

It is true that the sample and research design of this manuscript are not identical to those of prior research which makes delicate comparisons. Moreover many studies emphasise the contingent nature of employee ownership depending on the company's capital structure, the implementation context of the employee ownership policy or the managers' desires to entrench themselves, as established, for example, in the American market by Chaplinsky and Niehaus (1994) and Pugh et *al.* (2000). Several reasons may actually explain why a sustained employee share ownership policy cannot enhance value creation. First of all, shareholder employees, whose contribution can never be considered as granted *a priori*, may become an element of social risk, defined as the variability part of the economic results linked to human resources and their management (d'Arcimoles and Trébucq, 2003). Second, the arrangement may give rise to a number of costs related to the creation and management of the company's social capital; as the *development and maintenance costs* (in terms of training, working conditions, maintaining an organisational surplus justified by the job security), the *innovation and opportunity costs* (organisational capital may constitute an obstacle to innovation if the standards underpinning it become inertia factors), *the costs of dysfunction and misuse of power* (as the company's share capital may encourage individuals and the powers in place to put down entrenchment strategies) (d'Arcimoles and Trébucq, 2003). These various factors appear to explain why employee share ownership tends to have limited effects.

Extending the analysis towards stakeholder value creation does not yield any more convincing results. The Mann-Whitney test does not reveal any statistically significant difference in value added distribution, between companies that belong to the IAS index and the rest even though the mean distribution in favour of employees seems *a priori* higher in the sample of experimental companies.

[TABLE 5]

It is therefore impossible to conclude that pursuing an employee share ownership policy exercises an influence on value added distribution, either in favour of shareholders or employees. As far as the latter are concerned, participation in the company's share capital and possible participation, either directly or indirectly, in the decision-making and representation bodies, do not appear to be an instrument available to the workforce thus enabling it to influence value added distribution in terms of wages or participative remunerations.

Stakeholder governance, which is regarded by the literature as the only mechanism that can firstly strip out the agency costs of the 20th century's managerial economy, and secondly, define the purpose of power and the relationships between 21st century actors (Hirigoyen, 1997), leaves a number of questions unanswered, as the present research appears to show. Whereas employee share ownership is perceived as a way to enhance a society of co-contractors and the development of stakeholder governance, we acknowledge that this is not in fact translated by a change in value added distribution in favour of employees. Thus, a number of questions raises while some studies stress that employee share ownership has a positive effect on productivity and performance indicators, which might be expected to lead to redistribution among those who have contributed to the wealth creation.

Consequently to the various tests performed, the H1 and H2 hypotheses of the research are thus not verified.

Conclusion

The study - admittedly only partial - of the relationship between employees share ownership policy and value creation provides results that do not confirm *a priori* the announced potential benefits of employee ownership. The statistical tests carried out reveal that a sustained employee share ownership policy, as defined by FAS, does not result in higher value creation, whether viewed from the shareholder or stakeholder theory. Consequently, the policy of involving company employees in the share capital does not lead to a greater redistribution of wealth in favour of employees, whether in terms of stock-market value, dividends or book value (Faleye et *al*., 2006).

The results are not surprising. The research in the United States comes to a very definite conclusion: the combination of ownership and participative management is an only powerful competitive tool (Rosen, 2011). The findings apply most to closely held (unlisted) companies. The relationship between ESOPs and corporate performance in listed companies is ambiguous largely because most of these plans, like the French plans, hold relatively small amounts of shares and have little integration with corporate culture. So employee ownership needs to be substantial and to be paired with high-involvement work-level management (Rosen, 2011).

Caution is still required in the interpretation of these results, particularly regarding the number of companies making up the sample, the proportion of share capital necessary to identify employee share ownership (3%) and the study period adopted (five years). It is difficult, in the French context, to ascertain the exact percentage of companies' share capital that is owned by employees including companies that have recourse to public offerings. Moreover, the amount of public information available is usually limited and the data provided by FAS constitutes one of the few sources available, in addition to the difficulty to cope with the globalised and fragmented information published in company annual reports. A more thorough knowledge of the composition of the shareholding structure of all quoted French companies would have enabled us to broaden the sample both in terms of number of companies studied and the temporal scope of investigation. This would have boosted the external validity of the results. In addition, the studied period -2001/2005- is characterised by an environment of uncertainty on the stock market. However, basing on a 5-year temporal scope of analysis smoothed out the most erratic fluctuations over the period. Following a significant fall between 2001 and 2002, the SBF 250 index which comprises the 250 main listed securities in France experienced a net recovery over the period 2003-2005. Moreover, although economic growth was moderate, it was positive over the period as a whole in France. This was also the case for accounting added value which rose by 1.60% per annum on average between 2001 and 2005.

Regarding the limited answers brought by our empirical analysis, it would be necessarily to apprehend more effectively the context and the organisational costs linked to an employee ownership policy set up, and to put it into perspective against the social policy pursued by the company. The unresolved question concerns the relationship between employee ownership policy and company performance: is the former a cause or a consequence of the latter? Do companies encourage their employees to participate in their share capital in order to improve their performance or does achieving a satisfactory performance represent a precondition for putting in place an employee share ownership arrangement?

According to us, a final question should be asked about whether corporate governance can be improved by combining the statuses of shareholders and employees, by assessing the opportunity for employees to also be shareholders in their company, and by apprehending in particular the consequences of this lesser degree of diversification on the management of their human and financial capital. While employee ownership offers a glimpse of promising development prospects for companies, it also opens up equally interesting researches perspectives.

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[1] According to a study performed by the Research Unit for Employee Share Ownership in Europe [*Observatoire de l'actionnariat salarié en Europe*] (2001), in collaboration with Euronext and the AFG-ASFFI, nearly one third of French companies listed on a regulated market, i.e. 251 of the 791 companies observed, have employee shareholders. 50% of the companies making up the SBF 250 index are concerned. The survey reveals that companies with employee shareholders represent 87% of the stock-market capitalisation of regulated markets, and the value of shares owned by employees amounts to around 40 billion euros, i.e. 2.6% of the stock-market capitalisation of the 791 companies listed.

[2] According to Blasi et *al*. (2003), 24 million employees were concerned by an employee share ownership arrangement in 2002.

[3] See Shleifer and Vishny (1997) and Tirole (2001).

[4] FAS represents the two million employees and former employees shareholders in France. It groups together the associations that have been created within companies over the past 20 years. On 22 October 1999, FAS launched an index of employee share ownership schemes (IAS), made up of listed companies developing a particularly active employee share ownership policy, which is published at weekly intervals. Following a suspension in May 2002, it resumed its weekly publications on 7 June 2004, recreating the listings. The conditions that companies must meet in order to belong to this index are set out below.

[5] See below.

[6] On the by-nature income statement format, value added is equivalent to the sum of gross trading profit and profit on raw materials used, less other goods and services purchased from third parties by-nature. For the by-function income statement format, value added is equivalent to the sum of EBIT, depreciation, amortisation and

impairment losses on fixed assets, personnel expenses, and taxes other than corporate income tax. Value added is useful in understanding the sector and constitutes a measure of the integration of the company in the sector.

[7] See, for example, Article L233-16 of the Commercial Code: "*A significant influence on the management and financial policy of a business is assumed to be exercised where a company owns, either directly or indirectly, a share equal to at least one fifth of the voting rights of this business*".

[8] Grouping companies into two categories, according to their sector of activity, may appear simplistic, but can seemingly be justified insofar as the sector of activity is a simple control variable.

[9] In relation to the 37 companies making up the IAS at the end of 2005, the difference being explained by removing companies from the financial and insurance sectors.

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Table No. 1
Summary presentation of the variables of the study

	Variables to be explained: shareholder and stakeholder value creation
MVA	***Market value added:*** (Market value of capital employed-book value of capital employed)/book value of capital employed (2005) (*)
EMPL	***Share of value added allotted to employees*** (wages, salaries and social-security costs+employee participation)/value added (2001-2005 average)
STATE	***Share of value added allotted to the State*** (taxes, duties and similar payments+profits tax)/value added (2001-2005 average)
CRED	***Share of value added allotted to creditors*** (interest and similar charges)/value added (2001-2005 average)
SHAR	***Share of value added allotted to shareholders*** dividends/value added (2001-2005 average)
	Explanatory and control variables
IAS	***Membership of the IAS index*** 0=company not belonging to the IAS 1=company belonging to the IAS - listed in the CAC 40, SBF 120 or SBF 250 index - employee share ownership representing more than 3% of the capital -at least 25% of the workforce are shareholder employees
INV	***Investment policy*** Investment in tangible fixed assets/net sales (2001-2005 average)
DEBT	***Debt policy*** Financial debts/shareholder's equity (2001-2005 average)
ACTI	***Activity level*** Growth in net sales (2001-2005)
MARG	***Gross operating margin*** EBITDA/ net sales (2001-2005 average)
OWN	***Share ownership variables*** 0=company that is not owned-managed or family-owned 1=owned-managed and family-owned company Owned-managed and family-owned company: more than 20% (or 10%) of the capital owned by one or more individuals, whether or not linked by family ties.

SIZE	***Size*** Total assets logarithm (2001-2005 average)
SECTOR	***Sector of activity*** 0=industry, 1=commerce+services

*Market value of capital employed: stock-market capitalisation +book value of other sources of financing (minority interests+provisions for liabilities and charges+ financial debts)
Book value of capital employed: equity capital+minority interests+provisions for liabilities and charges+ financial debts

Table No. 2.1 Characteristics of the sample

Sectors of Activity	N	%	Workforce	N	%
Industry	58	35.60	Under 1,000	36	22.10
Commerce+services	105	64.40	Between 1,000 and 4,999	48	29.40
			Between 5,000 and 9,999	20	12.30
			Over 10,000 employees	59	36.20
Total	163	100	Total	163	100

Table 2.2: Sample of firms

	IAS	Non IAS	Total
Number of firms*	28	135	163

*All firms belong to SBF 250

Table No. 3
Descriptive statistics of the global sample (163 companies)

Variables	Mean	Min	Max	SD
MVA	1528.72	78.63	6059.62	1197.51
EMPL	64.26	4.87	189.88	25.80
STATE	8.32	0.04	78.90	8.81
CRED	6.22	0.14	61.00	8.52
SHAR	6.07	0	163.33	15.28
INV	6.35	0	76.60	10.29
DEBT	102.09	0.01	1190.03	144.72
ACTI	38.57	-78.22	445.84	72.96
MARG	147.51	-11.71	68.23	104.54

Table No. 4 Explanatory analysis of shareholder and stakeholder value creation

Variables	Model 1 MVA	Model 2 SHAR	Model 3 EMPL
Constant	48.474***	-0.171	0.974***
	(6.676)	(-1.618)	(5.421)
IAS	-0.025	-0.139*	0.107
	(-0.348)	(-1,708)	(1.285)
INV	-0.386***	-0.337***	0.124
	(-4.556)	(-3.368)	(1.197)
DEBT	-0.263***	-0.144*	-0.09
	(-3.668)	(-1.740)	(-0.112)
ACTI	-0.003	0.331***	-0.140*
	(-0.047)	(4,071)	(-1.671)
MARG	0.306***	0.374***	-0.553***
	(3.607)	(3,757)	(-5.422)
OWN	-0.143*	-0.173**	0.039
	(-1.966)	(-2.119)	(0.466)
SIZE	-0.369***	0.221***	-0.113
	(-4.809)	(2.615)	(-1.306)
SECTOR	0.103	-0.153*	0.162**
	(1.448)	(-1.915)	(1.991)
F	9.187***	6,922***	6.298***
R^2	0.330	0.327	0.306
R^2 adjusted	0.294	0.280	0.258

*p<0.10 **p<0.05 ***p<0.01

The values in brackets correspond to the student's "t"

Table No. 4 Explanatory analysis of shareholder and stakeholder value creation

Variables	Model 4 STATE	Model 5 CRED
Constant	0.021*	-0.06
	(0.344)	(-0.092)
IAS	-0.145*	-0.056
	(-1.771)	(-0.599)
INV	-0.389***	-0.091
	(-3.884)	(-0.801)
DEBT	-0.164**	0.115
	(-1.979)	(1.229)
ACTI	0.254***	-0.015
	(3,118)	(-0.158)
MARG	0.448***	0.173
	(4.480)	(1.512)
OWN	-0.105	-0.219**
	(-1.279)	(-2.347)
SIZE	0.108	0.138
	(1.273)	(1.446)
SECTOR	-0.199**	-0.105
	(-2.481)	(-1.153)
F	6.600***	1.990*
R^2	0.313	0.122
R^2 adjusted	0.265	0.061

*p<0.10 **p<0.05 ***p<0.01

The values in brackets correspond to the student's "t"

Table No. 5 Comparative measurement of value added distribution
(expressed as a percentage)
(experimental companies [IAS index]/control companies [not part of IAS index])
Mann-Whitney U test

	Experimental companies	Control companies	z (Mann-Whitney)
Employees' share	70.56%	63.00%	-1.633
State's share	6.07%	8.76%	-1.699*
Creditors' share	6.62%	6.14%	-0.178
Shareholders' share	3.83%	6.52%	-0.602
***/**/* significant respectively at the thresholds of 1%, 5% and 10%			

Appendix - Composition of the sample

Air France-KLM (IAS)	Flo (Groupe)	Pharmagest Interactive SA
Air Liquide SA	France Telecom (IAS)	Pierre & Vacances
Alain Afflelou SA	GFI Informatique SA	Plastic Omnium SA
Alcatel-Lucent	GL Events SA	Publicis Groupe SA
Ales Groupe SA	Gascogne (IAS)	Radiall SA
Alstom SA	Gaumont SA	Rallye SA
Alten SA	Generale De Sante	Remy Cointreau
Altran Technologies SA	Geodis SA (IAS)	Renault SA (IAS)
Assystem	GiFi SA	Rhodia SA (IAS)
Atos Origin SA	Groupe Open SA	Rodriguez Group SA
Audika SA	Groupe Partouche SA	Rubis
Avanquest Software S.A. (IAS)	Guerbet SA (IAS)	SEB SA (IAS)
Avenir Telecom	Guyenne & Gascogne	SII SA
Bains de mer & Monaco	Haulotte Group	SUEZ SA
Beneteau SA	Havas Sa	Safran SA (IAS)
Bic	Hermes International	Saint Gobain (IAS)
Boiron SA (IAS)	Hi Media	Samse SA
Bollore SA	Ilog SA	Sanofi-Aventis SA
Bonduelle SA (IAS)	Imerys SA	Sartorius Stedim Biotech
Bongrain SA	Ims Int Met Serv	SA
Bouygues SA (IAS)	Ingenico SA	Schneider Electric SA
Bricorama SA	Inter Parfums SA	(IAS)
Bull SA	Ipsos SA	Seche Environnement
Business Objects Sa	JC Decaux SA	Sechilienne Sidec
CGG Veritas	Jet Multimedia SA	Sodexho Alliance SA
Camaieu	LACIE SA	Sopra Group
Canal +	LDC SA	Sperian Protection
Cap Gemini SA	Lafarge SA	Spir Communication SA
Carbone Lorraine	Lafuma SA	Stallergenes S.A.
Carrefour SA	Lagardere	Stef Tfe (IAS)
Carrere Group SA	Latecoere SA (IAS)	Steria (Groupe) (IAS)
Cegid Group	Laurent Perrier SA	Stmicroelectronics
Chargeurs SA	Lectra SA	Sucriere De Pithiviers Le
Ciments Francais SA	Linedata Services SA	Synergie SA
Clarins S.A.	(IAS)	Technip SA
Club Mediterranee	Lisi SA	Teleperformance SA
Cnim	Lvmh	Television Francaise 1
Compagnie des Alpes (CDA)	M6 Metropole Television	(TF1) (IAS)
(IAS)	Maisons France Confort	Thales (IAS)
Cs Communication & Systems	SA	Thermador Groupe
Danone	Manitou	Thomson SA
Dassault Systemes	Manutan International SA	Tonnellerie Francois freres
Delachaux S.A	Maurel Et Prom	Total SA (IAS)
Derichebourg	Metrologic Group	Trigano SA
Devoteam SA	Michelin	Ubi Soft Entert.
Eads (IAS)	Montupet Sa	VM Materiaux SA (IAS)
Eiffage SA (IAS)	Mr Bricolage SA	VRANKEN POMMERY
Eramet SA	Neopost SA	MONOPOLE
Essilor Intl (IAS)	Nexans SA	Valeo SA

Etam Developpement Euro Disney Eurotunnel Exel Industries Faurecia SA Fininfo SA Fleury Michon SA	Norbert Dentressangle SA Oberthur Card Systems SA Oreal (L') PPR SA PSB Industries SA Pernod Ricard SA Petit Forestier SA Peugeot SA	Vallourec SA Veolia Environnement SA Vilmorin et Cie Vinci SA (IAS) Virbac Vivendi Wendel ZODIAC SA