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Understanding employee preferences for investing in employer stock: evidence from France

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ABSTRACT

In this paper, we add to the growing literature on defined contribution plans that invest in employer stock by examining employee preferences for employer stock over other investment alternatives. Existing work has focused on actual or self-reported investment behavior rather than employee preferences. In addition, we broaden the range of possible explanations for investment behavior by developing a set of hypotheses based on research in behavioral economics, organizational psychology, and existing research on other forms of employee ownership. We test our hypotheses by analyzing original data on employee preferences in a sample of 900 employees in four French companies. These results suggest that employees do not see stock ownership exclusively as a financial investment. On the contrary, when stock ownership is presented by top management as a management practice aimed at developing a common corporate culture, sharing common goals and interests, and empowering employees, they appear to be more willing to invest in their company.

INTRODUCTION

The incidence of employee ownership plans continues to increase in a number of regions across the globe. According to the European Federation for Employee Stock Ownership (EFES), between 2006 and 2010, the number of employee stockholders in large, publicly traded companies in Europe has grown from 8.5 to 9.6 million, and the percentage of large companies with broad-based stock ownership plans has grown from 46.1% to 53.7% (EFES 2011). In the US, according to the National Center for Employee Ownership (NCEO), more than 13.7 million employees participated in 11,400 broad-based equity plans (NCEO 2011). The most significant recent development has been the growth in the number of firms in China that have set up employee-ownership plans as part of the country's transition to a more market-based economy (Chiu, 2003; Chiu, Hui, & Lai, 2007), with academic studies of this phenomenon quickly following (Chi & Han, 2008; Liu, Lin, & Lin, 2009).

In most countries, there are a number of legal mechanisms through which firms can allow employees to acquire stock. These plans differ along a number of dimensions, including their tax and accounting treatment, whether employees own stock directly, whether employees purchase stock with their own funds or the company purchases shares for them, and whether employees make decisions about participating and how much they invest. Although plans in which firms fully fund employee acquisitions of stock, such as employee stock ownership plans (ESOPs) in the US and ESOP-like plans in the UK, remain common, there is a growing worldwide trend toward defined contribution saving plans in which investment decisions are made by the plan participants themselves (Benartzi & Thaler, 2002; Kaarsemaker, Pendleton, & Poutsma, 2009).

In the US, the primary way through which this occurs is the 401(k) plan, which allows a company to provide its own stock as an investment option or use it as a way to match the financial investment from the employee. 401k plans are the most common form of employee ownership in publicly-traded companies (NCEO, 2011). In France, employees can choose whether or not to participate in stock ownership offerings and how much money they want to invest (within certain limits), and can also decide to invest their profit or gain sharing bonuses in employee ownership funds or in diversified funds. The Save As You Earn (SAYE) plan in the UK is another popular combined savings and stock option plan in which employees decide how much to invest and the length of the savings period. At the end of the period, they can either take the lump sum or exercise their SAYE options. Finally, employee ownership systems in Korea and Taiwan also require some employee decisions, both in terms of the purchase and sale of shares (Cin, Han, & Smith, 2003). In fact, in both countries, the law stipulates that when companies issue new stock, they should reserve for their employees the right to purchase up to 10% (Korea) or up to 10 to 15% (Taiwan) of the newly issued shares of stock. Moreover, employees must keep their shares for a minimum of seven years in Korea. In addition, Taiwan offers the possibility of an employee stock ownership plan similar to the US 401K in which employees contribute part of their monthly salary to purchase company stock (Cin et al., 2003).

Why do employees choose to participate in employee ownership plans? How do they decide how much to invest in their company's shares vs other investment possibilities, and when to sell their shares? Markowitz's portfolio selection theory (Markowitz, 1952) suggests that an employee's investments in the stock of their employer should be only one element among others within a diversified portfolio characterized by a minimum level of risk for a desired level of anticipated returns. Until recently, there has been no objectively determined rule or threshold that defines employee over- investment in their employer's stock. Pendleton (2010b) has suggested that a concentration of savings of more than 25% in employer's shares constitutes a strong concentration, and Benartzi and colleagues (Benartzi, Thaler, Utkus, & Cass, 2008) consider 20% of employer's stock to constitute a "concentrated equity position."

Another threshold is found in the US Employee Retirement Income Security Act of 1974 (ERISA) which explicitly limits the holdings of employer stock to 10% for defined benefit pension plan assets (Choi, Laibson, & Madrian, 2006). Recently, applying the methodology he employed in the development of portfolio selection theory (for which he won the Nobel Prize in Economics), Markowitz has determined that the optimal percent of company stock in an otherwise diversified portfolio is 8.33% although: “a higher (investment) in the neighborhood of 10 or even 15 percent, would not be imprudent” (Blasi, Kruse, & Markowitz, 2010; Markowitz, Blasi, & Kruse, 2009, p.103). However, when given the opportunity, employees tend to over-invest in the stock of their employers (Benartzi, 2001; Blasi, Kruse et al., 2010; Meulbroek, 2005; Pendleton, 2010b). For example, Benartzi and colleagues (2007) show that in many US companies, it is common for employees to have significant portions of their retirement investments in their employer’s stock with extreme cases like Procter & Gamble, Pfizer or General Electric, were the company stock represented more than 70% of the retirement plan assets in 2003. The same phenomenon also happens in the UK, where a quarter of employee shareholders report that they hold half or more of their savings in company shares (Pendleton, 2010b). Finally, according to the Association Française de Gestion Financière (the French association for financial management), 40% of the total amount of funds allocated in French employee saving plans were held in employee ownership funds in 2009.

Why might employees over-invest in stock of their company? One reason could be the distinct advantages offered by some employee ownership mechanisms, such as preferential tax treatment relative to other investments, the ability to purchase stock at a discount, and matching contributions from the company. These factors could balance out the cost of under-diversification. However, empirical evidence suggests that this is not the case (Benartzi et al., 2008; Meulbroek, 2005).

The first studies addressing this issue were done in the context of 401k plans in the US (Agnew, Balduzzi, & Sunden, 2003; Benartzi, 2001; Choi et al., 2006; Huberman & Sengmueller, 2004). These studies highlight the importance of insights from behavioral economics regarding how people employ heuristics when making investment choices, as well as the influence of individual level characteristics such as wealth, gender, age, and risk aversion on investments in 401k plans. This work has been further extended to the European context to examine employee decisions about employee share ownership in France and the UK.

Although the literature has illuminated important forces shaping employee decisions regarding participation and investing in pension and employee stock plans, there remain important gaps in our understanding that this study contributes to fill. In fact, most of existing research has focused on actual participation and investments in these plans and authors could only use socio demographic data as determinants. However, of greater importance are the ways by which companies can influence employee investment preferences i.e. that variables reflecting management practices are particularly interesting determinants of employee behavior. Moreover, using survey data allows the study of employee attitudes and values as determinants of ownership preferences. In that respect, our study differs from Pendleton's (2010a) study by the use of additional determinants such as turnover intention, the quality of EO-related information, participation in decisions that comes from employee ownership and management's philosophical commitment to EO. Finally, this is the first survey-based study of the determinants of employee investment preferences in the French context.

More precisely, we analyze original data on employee preferences for investing in employer stock relative to other investments in a sample of 900 employees in four French companies. In contrast to existing research, our dependent variable is not actual investment behaviour, but preferences for investing in employer stock. While this is a limit of all survey research, past evidence shows that actual behaviour highly correlates with preferences (Chandon, Morwitz, & Reinartz, 2005). In addition, we broaden the range of possible explanations for these preferences by developing a set of hypotheses based on research in behavioral economics, organizational psychology, and existing research on other forms of employee ownership to examine the relative influence of different types of explanations for employee attitudes towards investing in the stock of their employers.

Expanding on the existing work is not just important for developing our theoretical frameworks regarding employee investment behavior, but may have important managerial implications. Much work has revealed that employee ownership can have positive effects on employee work attitudes and behaviors (Gamble, Culpepper, & Blubaugh, 2002; Klein, 1987; Kruse & Blasi, 1995) and corporate performance overall (Blasi, Freeman, Mackin, & Kruse, 2010; Wu, Su, & Lee, 2008). In addition, employees choosing to invest in their employer's stock can be seen as a signal of trust in and commitment to the company (Caramelli, 2011).Turning to the negative impacts, excessive concentration of savings in the employer's shares is risky as the popular example of Enron has shown. Benartzi and colleagues, (Benartzi et al., 2008). Finally, top management can use employee ownership to entrench themselves into their positions because employee shareholders' votes are believed to be controlled by top management (Chaplinsky & Niehaus, 1994; Gamble, 2000; Park & Song, 1995) although Delaware corporate law in the US now forces managers whose public corporations are headquartered there to have employee ownership plans voted confidentially through a third party at arm's-length from management. Gaining a better understanding of the factors that influence employee decisions about participation and investing in employee share ownership plans therefore, can help firms and HR managers design better plans.

CHAPITRE 1. THEORETICAL BACKGROUND AND HYPOTHESES

In this section, we briefly review the existing research on the employee investment behavior concerning their employer's stock and then, we develop our hypotheses regarding the factors that influence employee preferences for investing in stock of their employers. We draw upon work in behavioral economics and organizational psychology, as well as research on other forms of employee ownership.

As previously suggested, research on the employee investment behavior concerning the employer shares has been first performed in the context of the 401(k) plans in the US. Based on both survey and secondary data, this literature had tried to identify the determinants of both the participation decision and the contribution level for the participants and, more broadly, to explain the reasons for the employee investment concentration in employer stock in their savings plans. These results highlighted three main sets of determinants of employee behavior: some refer to psychological biases (Benartzi & Thaler, 2001, 2007), some refer to the characteristics of the plan design such as the number of funds (Benartzi & Thaler, 2001), and some concern some demographic characteristics like marital status, earnings, age and gender (Agnew et al., 2003).

Lately, employee investment behavior in savings plans has been studied in France and the UK in the context of employee stock ownership plans. Degeorge et al. (2004) for example, analyzed the behavior of over 200,000 participants in the context of the privatization of a French firm and found that women were more likely to participate in the stock offering but that men invested higher amounts, that risk aversion was negatively associated with the willingness to participate in the stock plan, and that wealthier workers were also more likely to participate in the plan. Aubert and Rapp (2010) analyzed the investment behavior of 44,649 employees of a French bank during an employee stock offering and found that older employees, less risk aversive employees, and wealthier employees were more likely to participate in the offer. They also found that employees with higher levels of firm-specific human capital (proxied by tenure) and more educated employees were more likely to participate. Finally, Pendleton (2010b, 2010a), using survey data of employees of three large companies, analyzed the determinants of employee participation in a SAYE plan, the amount invested, and the concentration of savings in the employer's shares. He confirmed previous findings that older workers, women, and wealthier employees had higher concentrations of employer stock in their portfolios, and also found that an employee's organizational commitment was positively associated with concentration in share ownership (but not of the amount invested), and the likelihood of participating in a SAYE plan.

In this study, we assess a complementary set of predictors of employee preferences for investing in the employer's stock: some concern employee individual characteristics such has behavioral heuristics, values, and attitudes towards the employer, while other concern employer management practices.

Employee heuristics

One of the primary determinants of investment behavior researched by behavioral economists include different heuristics that people use to make investment decisions. This work suggests that employee decisions for investing in their company stock over other investment options may be related to two of the heuristics identified by Tversky and Kahneman (1974). First, the *representativeness* heuristic suggests that investors will believe that past returns will be representative of future returns, even if the latter are largely unpredictable. This suggests that employees with the opportunity to invest in employer stock will evaluate this investment in similar terms. In the context of US 401(k) plans, for example, Benartzi (2001) and Huberman and Sengmueller (2004) found that employees tended to excessively extrapolate future stock returns from past returns and to allocate to their company's stock account a percentage of their discretionary contribution that was related to past stock performance. We therefore predict that:

> *Hypothesis 1: Perceived past returns to employer stock are positively related with employee preferences for employer stock.*

Second, the *familiarity* heuristic suggests that investors will tend to invest in the stocks of the companies they know best and in stocks they have purchased in the past. Support for the use of this heuristic in the context of employer stock has been empirically documented in different studies showing that when employees are asked to invest money in different assets in the context of savings plans, they tend to over invest in their company's stock (Benartzi, 2001; Blasi, Kruse et al., 2010; Meulbroek, 2005; Pendleton, 2010b). For example, Aubert & Rapp (2010) found a large concentration of investment in employer shares and that employees who already own stocks in their company invested more in their employer's stock than those who had not previously owned employer stock. The underlying mechanism is that individuals tend to prefer the known over the unknown. We therefore predict that:

> *Hypothesis 2: The length of time an employee has owned employer shares is positively associated with employee preferences for employer stock.*

Risk aversion

Employee ownership is generally considered a risky investment (Kuvaas, 2003; Sparrow, 2002) because an employee invests both human and financial capital in the same company and because it is a performance-based form of compensation. Therefore, we can expect that attitudes towards employee ownership partly depend on an employee's perception of risk and uncertainty. Using data collected from more than 40,000 employee surveys from 14 US firms, Blasi et al. (2010) found that employees with a high level of economic insecurity were less likely to be motivated by various forms of employee ownership, less likely to have positive attitudes towards it, and less likely to want more of it. Using the same dataset, Kurtulus, Kruse, and Blasi (2011) further demonstrated the connection between risk and compensation by examining the alignment of an employee's risk preferences and the riskiness of their compensation. They found a positive relationship between this alignment and such outcomes as job satisfaction, loyalty and motivation at work. Hence, employee attitudes towards risk are likely to have an impact on their preferences for investing in employer stock. Therefore:

> *Hypothesis 3: Risk aversion is negatively associated with employee preferences for employer stock.*

Employee work attitudes

A number of studies in organizational psychology and human resource management have examined the relationship between employee ownership and work attitudes (Buchko, 1993; Gamble et al., 2002; Pendleton, 2001). Although the primary focus on this work has been the influence of employee ownership on attitudinal outcomes, some authors (Keef, 1994; Klein & Hall, 1988) found that work attitudes may influence preferences for investing in employer stock in the case of investment decisions. Klein and Hall (1988), for example, found that employees who were more committed to the organization were more satisfied with their ESOPs, and Keef (1994) found that employees with better work attitudes were less likely to sell their company shares. Companies usually consider the success of employee stock offerings as an indicator of their employees satisfaction and commitment towards their company (Caramelli, 2011). This was confirmed by Pendleton (2010b) who found that commitment was a significant determinant of concentration in employer stock in a survey-based study of companies in the UK. Also, Cohen (2009) evaluated the effect of loyalty on investment in company stock in the context of US 401(k) plans, and found that more loyal employees invested more in company stock than less loyal employees. Overall, employee attitudes towards their company likely influence employee attitudes towards their company's stock. More employees who have great levels of satisfaction with, commitment to, and loyalty towards their employers are more likely to invest money in their companies. Therefore:

Hypothesis 4a: Organizational commitment is positively associated with employee preferences for employer stock.

Hypothesis 4b: Employee turnover intention is negatively associated with employee preferences for employer stock.

Employee ownership information, management's philosophical commitment, and participation in decision-making

Employee ownership plans that require employees to make investment choices are often complex and difficult to understand for employees, even for those working in the banking industry or with a background in finance. Similarly, educating and informing employees about stock ownership plans is challenging for companies. Past research suggests that employees are more likely to invest in their company stock if they receive accurate and in-depth information about stock ownership. For example, (Degeorge, Jenter, Moel, & Tufano, 2004) found that information, advice, and support about an employee stock purchase plan were a main determinant of employee investment decisions. Also, Klein & Hall (1988) found that the communications related to an ESOP correlated with the employee satisfaction toward the ESOP. Companies can differ in how they provide information about their employee ownership plans both quantitatively (i.e., amount and frequency of information) and qualitatively (how the information is presented). We therefore predict that:

Hypothesis 5: The quality of the information on employee ownership is positively associated with employee preferences for employer stock.

In addition to the quality of communication efforts, we predict that management's views of employee ownership can influence employee preferences for employer stock. Companies implement employee ownership plans for different reasons, including tax and financial benefits, and as part of a broader human resource management strategy. Many scholars have suggested that management's philosophical commitment to employee ownership, defined as the extent to which management sees employee ownership as a part of the company's overall culture, human relations policy, and/or commitment to employees (Rosen, Klein, & Young, 1986; Rousseau & Shperling, 2003), can have a significant influence on employee satisfaction with an ESOP (Klein, 1987), work attitudes and behaviors (Gamble et al., 2002; Klein, 1987), and the rights that stock ownership provides to employees (Pierce, Rubenfeld, & Morgan, 1991). If employees believe that management is genuinely committed to employee ownership as a different way to manage the company, employees will react more positively to the plan. We can apply this fundamental insight to employee preferences for employer stock: the more that employees perceive management to be committed to employee ownership, the more the employees will tend to overvalue their company's stock in their portfolio, relative to other investment options. Alternatively, the less the management's philosophical commitment to employee ownership, the more the employees will perceive their employer's stock as merely a financial asset similar to other companies' stock and consider it as one element among others in their portfolio. Therefore:

> *Hypothesis 6: Management's philosophical commitment to employee ownership is positively associated with employee preferences for employer stock.*

Often, when management's philosophical commitment to employee ownership is strong, the firm provides employee stockholders with some participation in decision-making rights. For example, Gamble and colleagues (Gamble et al., 2002) found a very high correlation (.73) between the perceived employer commitment to employee stock ownership and the employee perceived ESOP-related empowerment, and Klein (1987) found that companies with a strong employee ownership philosophy were more likely to give the employees full voting rights. Participative decision-making has been advocated by some of the most prominent organizational psychologists and theorists (e.g., Argyris (1964), Likert

(1961), March and Simon (1958), and McGregor (1960)) as a means of improving both the performance and satisfaction of employees. In fact, as suggested by French and colleagues, (J. R. French, Israel, & As, 1960, p.5) participation in decision-making implies that workers are intelligent, competent, and valued partners. Thus, participation directly affects employee perceptions of being valued, the perception of common goals, and cooperation, and satisfies such important needs such as the need for recognition and appreciation and the need for independence. For these reasons it is generally acknowledged that participation in decisions is desired by employees (Alutto & Acito, 1974; Hofstede, 1980; Mitchell, 1973). We therefore suggest that the extent to which employees perceive stock ownership as providing some rights to participate in decision making might influence employee preference for their company's stock. In fact, our hypothesis is that if the employer's stock provides the employees with potential financial rewards *as well as* potential rights in the decision-making process, the employees will prefer their employer's stock over other possible investments which would provide them with *only* financial returns.

> *Hypothesis 7: Employee participation in decisions as a consequence of employee ownership is positively associated with employee preferences for employer stock.*

DATA AND METHODS

We test these hypotheses on a sample of 900 employees in four French companies. The most common form of employee ownership in France is known as a *Plan d'Epargne d'Entreprise* (PEE), which is a deferred collective employee benefit plan giving employees the possibility to invest in different funds, including fund invested fully or mainly in the company's stock (called an employee ownership fund), and other more or less risky diversified funds. Employees chose into which funds to invest their savings. Employee stock ownership is generally called "indirect" through these plans because the fund is the legal owner of the stocks, and the employees do not directly exercise the voting rights related to the stock. The voting rights are exercised by the president of a supervisory council. Half of this council is of members appointed by the management, and half of members elected by the employee stockholders themselves or appointed by trade unions. However, the president of the council is always a representative of the employee stockholders.

Employees can invest in one or more of these funds in three primary ways. First, they can make regular payments up to 25% of annual compensation. The regular payments can benefit from company's matching contributions, which are limited to 8% of the annual ceiling for the calculation of social contributions. Second, they can reinvest profit-sharing and/or gain-sharing bonuses in one or more funds, and can receive matching contributions from their employer. Third, they can purchase their employer's shares when companies propose specific "employee stock offerings." Depending on the company, these offerings can be set up regularly, such as every year or every two years, or occur not according to any fixed schedule. In these plans, employees benefit from a purchase price that is usually discounted by about 20% and from a matching contribution from their employer. For all three types of investment avenues, employees receive preferential tax treatment if they keep the shares for at least five years. Note that some companies use to limit matching contribution to investments in employee ownership funds, which was the case of all the companies in our sample.

In terms of corporate governance, above the supervisory council, which votes collectively the shares owned by the employees, employee shareholders are also often represented on the board of directors. In fact, a French law passed in 2006 on this matter, requires that employees must at least have one representative on the company board if employees own more than 3% of the equity capital of a listed company. These representatives can be directly appointed by the top management or elected by employee shareholders themselves. Therefore, in contrast to most employee share plans in large, listed companies in the US or the UK, French employee share ownership provides employee shareholders with some control rights. This is important because a combination of repeated employee stock offerings and matching contributions limited to payments in the employee ownership funds can easily lead to a concentration of savings in the employer's shares.

Procedure and participants

The data used in the present study were collected as part of a larger international project designed to examine the impact of employee ownership on corporate performance and employee attitudes in a multinational context. A self-administered web survey was created that initially contained items representing measures of employee ownership-related perceptions, employee work attitudes, and demographic information. The participants in the study were employees mainly from four large multinationals headquartered in France. Among these companies, two are among the largest banks in France, one operates in the telecommunication industry, and one in the electronics industry. A web survey was distributed to 5,000 employees by e-mail, who could choose between five versions of the survey written in different languages: French, Italian, Spanish, British and American English. The response rate was about 25%. A total of 1,517 questionnaires were collected in June and July 2006. The data used in the present study include only French employees who have declared owning some stock in their company. Overall, among the 900 respondents, 92% were male, and 84.6% of the sample was comprised of men aged 40 or above. Education levels were quite heterogeneous, with 30% of respondents having no college degree, about 30% having an undergraduate degree, and around 30% having a graduate degree. The hierarchical level within the organization was high on average, with around 30% constituting *trained professionals,* more than 30% constituting *managers of one or more subordinates,* and around 20% constituting *managers of one or more managers*. Finally, the representation by functions was quite balanced: 20% for sales, 16% for financial services, more than 15% for marketing, 12% for IT, and 10% for administrative services. Missing data were imputed by maximum likelihood estimation, as it is implemented by the EM algorithm in the SPSS Missing Values option.

Measures

We developed original measures for all the variables except for widely researched variables such as organizational commitment and turnover intention. Five-point Likert scales (1=strongly agree, 5=strongly disagree) were used for the measure of latent constructs.

Dependant Variable

Preference for Employee Ownership is defined as the extent to which employees tend to purchase or keep stock of their companies when they have other choices at their disposal. Sample items are: “When there is an employee stock purchase plan offering in my company, I usually participate in it” and “I usually sell my company’s stock as soon as I can.”

Independent Variables

Perceived past returns concerned the employee perceived returns of the company stock owned by the employee, and was measured with a single item: 1= dropped dramatically to 5= increased significantly.

Seniority in stock ownership was assessed with a single item concerning the number of years the employees reported to be stockholders in their company (1=less than 1 year, to 6= more than 10 years.)

Uncertainty avoidance was defined by Hofstede as the extent to which people feel either uncomfortable or comfortable in unstructured situations, where unstructured situations are defined as “novel, unknown, surprising, or different from usual” (Hofstede & Bond, 1988, p.11). Individuals in cultures with high uncertainty avoidance are described as being more risk aversive and less tolerant to ambiguities and deviations from norms (Aycan, Kanungo, & Sinha, 1999; Hofstede, 1984). Some sample items are: “Generally speaking, I like to take risks” and “(It is important for me to) have an element of variety and adventure in my job”. In this study, we used uncertainty avoidance as a measure of risk aversion.

Perceived management’s philosophical commitment to EO is defined as the extent to which the management sees EO as a part of the company’s overall culture, human relations policy, and/or commitment to employees (Rosen et al., 1986, p.64). Sample items are: “(My company has implemented employee ownership) because employee stock ownership is a part of my company’s corporate culture” or “To increase employees’ interest in the company’s success”.

Employee perceived participation in decision making as a consequence of EO is defined as the extent to which employees believe that employee stockholders have some say in the company’s decision-making process - both directly through voting rights - or indirectly through representatives. Sample items include: “Thanks to employee stock-ownership, employees are better represented in the decision-making bodies of the company.” and “Employee stock ownership does not give the employees any right in the decision-making of the company.”

Perceived quality of the information related to stock ownership concerned the employee assessment of the quality of the information they received on stock ownership and of their interest for this information. Sample items are: “The documents I receive about my stock are too complicated, I cannot fully understand what they say” or “Generally speaking, I don’t read the documents the company sends me about my company stock.”

Affective organizational commitment is defined as the “employee emotional attachment to, identification with, and involvement in the organization” (Meyer & Allen, 1997). We used the six-item form of the Meyer and colleagues’ scale (Meyer, Allen, & Smith, 1993).

Turnover Intention is defined as the employee intention to quit the company. The three-item scale developed by Pendleton et al. (1998) were used to measure turnover intention.

Control Variables

There are different demographic characteristics likely to have an effect on employee preferences for employee ownership. Men are usually considered to be less risk aversive than women (Agnew et al., 2003) and more self-confident, which would lead men to invest more in risky assets (Barber & Odean, 2001). Since employee ownership can be considered a risky investment, male employees are usually expected to be more willing to invest in their company’s stock (Aubert & Rapp, 2010; Degeorge et al., 2004). However, we did not include gender as a control variable because 92% of the individuals in our sample were men. The effect of age on the attitude toward employee ownership is not obvious. One might expect older employees to have higher financial assets and to be less willing to “save” money for the future. However, younger employees have lower salaries and higher propensity to consume. Existing evidence from France and the UK suggests that age has a negative effect on the employee investment in their employer’s stock even if the relationship has been found not to be linear (Aubert & Rapp, 2010; Degeorge et al., 2004; Pendleton, 2010b). Employee salary, education level, and hierarchical level are also likely to positively determine ownership preferences. In fact, managers are likely more interested in owning company shares than low level employees because they often feel a stronger relationship between their own activity and corporate performance. Moreover, highly educated employees are more likely to understand the information concerning stock ownership and therefore to be more willing to participate in the offers. For these reasons, we measured and statistically controlled for age (1=under 25, 2=25-29, 3=30-39, 4=40-49, 5=over 50), education (measured in completed years of university), hierarchical level (1= unskilled or semi-skilled manual worker to 7=manager of one or more managers), and monthly salary (1= less than 1000$ a month to 6=more than 5000$ a month).

Data analysis

Validity and reliability of measures

Because most of our measures were newly developed, we have followed standard procedures for scale development and validation (Churchill, 1979; De Vellis, 2003; Hinkin, 1995). Items were derived from interviews with ten employee shareholders working in French multinationals, and were first factor-analyzed to test whether they showed the hypothesized factor structure, and items failing to show convergent validity were dropped (Campbell & Fiske, 1959; Hair Jr., Black, Babin, Anderson, & Tatham, 2006). We then performed confirmatory factor analysis to establish the final version of the scales and coefficient alpha was used to assess the scales' reliability. Following the recommendations of Podsakoff and colleagues (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003) and Conway and Lance (2010) we tried to limit common method biases in different ways. First, social desirability was limited by ensuring respondent anonymity. Second, we used reversed items to limit nay- or yea-saying bias. Third, items were randomized, meaning that they appeared in a different order for each respondent. This was aimed at limiting consistency motif and the halo effect.

Test of research hypotheses

The research hypotheses were tested by using a series of hierarchical multiple regressions. Control variables were first entered in a block, followed by the independent variables as a second block.

CHAPITRE 2. RESULTS

Psychometric properties of the measures

We used two criteria for determining the appropriateness of the exploratory factor model: Eigenvalue (>. 1.00) and communality (> .20). The factor matrices were rotated to 'simple structure' using oblique rotation (promax), because some factors were expected to have intercorrelations. Convergent validity was ensured by dropping items that failed to load in excess of .30 on any factor and discriminatory validity at item level was ensured by dropping items with high loadings (>.3) on more than one factor (Hair Jr. et al., 2006; Peter, 1981). The resulting factor solution is presented in Table 1. The solution shows that all items loaded appropriately as we expected except for one item of the Commitment scale ("I would be very happy to spend the rest of my career in this company") which loaded on the "Turnover Intention" factor. Because the item's content actually concerns the employee intention to stay in the company, we decided to inverse its score and keep it as part of the Turnover Intention's scale. The results of the CFA seven-factor model specifying the seven latent variables of this study provided good fit (χ^2= 883.72, df=384, GFI=0.94, CFI=0.93, RMSEA=0.038), and the modification indexes were generally low (<21). These results provide evidence of the construct distinctiveness of the factors under study. Finally, all seven latent variables showed acceptable reliability, as assessed by coefficients alpha ranging from 0.70 to 0.83.

(Insert Table 1 about here)

Descriptive statistics

Table 2 shows means, standard deviations and intercorrelations among the respondents' characteristics, work attitudes, and stock ownership-related perceptions. According to Table 2, *preference for employee ownership* positively correlate with seniority in stock ownership ($r=0.20$, $p<0.01$), perceived past returns ($r=0.30$, $p<0.01$), compensation ($r=0.24$, $p<0.01$), the hierarchical level ($r=0.17$, $p<0.01$), management's philosophical commitment to employee ownership ($r=0.39$, $p<0.01$), organizational commitment ($r=0.28$, $p<0.01$), the quality of the employee ownership information ($r=0.31$, $p<0.01$), and the participation in decision-making rights resulting from employee ownership ($r=0.17$, $p<0.01$). Also, *preference for employee ownership* negatively correlates with turnover intention ($r=-0.17$, $p<0.01$), and uncertainty avoidance ($r=0.09$, $p<0.01$).

(Insert Table 2 about here)

Tests of research hypotheses

Among the four control variables, only the compensation ($\beta=0.26$, $p<0.001$) and the education level ($\beta=-0.14$, $p<0.001$) significantly correlated with *preference for employee ownership*. However, contrary to what has been found in previous research, age, and the hierarchical level did not correlate with *preference for employee ownership*, even if the correlation was significant for the hierarchical level in the correlations matrix ($r=0.17$, $p.< 0.05$). For age the explanation relies certainly upon the fact that our sample is mainly aged over 40 years and does not contain enough variance for this variable.

(Insert Table 3 about here)

To test our research hypotheses, we conducted a series of hierarchical regression analyses. As shown in Table 3, we find support for hypothesis 1. In fact, past perceived returns positively correlated with *preference for employee ownership,* (β=0.18, p<0.001). Hypothesis 2 was also supported with a positive correlation between seniority in employee ownership and *preference for employee ownership* (β=0.13, p<0.001). However, we found no support for Hypothesis 3 that more risk aversive employees were less likely to prefer employer stock once we added in the control variables. Although we found support for Hypothesis 4a that employees who were more committed to the organization had higher preferences for employer stock (β=0.14, p<0.001), there was no relation between turnover intention and *preference for employee ownership* after control variables were taken into account. Hence, Hypothesis 4b was not supported. Hypotheses 5 and 6 were confirmed as the quality of EO-related information (β=0.18, p<0.001) and the perceived management's philosophical commitment to EO (β=0.20, p<0.001) were both positively correlated with *preference for employee ownership*. Finally, Hypothesis 7 was not supported as perceived participation in decisions as a consequence of employee ownership correlated insignificantly with *preference for employee ownership* after controlling for gender, age, the education level, salary and hierarchical level.

CHAPITRE 3. DISCUSSION AND CONCLUSION

Due to the worldwide growth in defined contribution saving plans, in which investment decisions are made by plan participants, scholars have begun to study the determinants of employee investment decisions, first in the context of the US 401k plans, and then in the context of French employee stock purchase plans and SAYE plans in the UK. These studies, based on actual investment data or self-reported data on employee portfolios, have investigated a number of individual employee characteristics and employee attitudes toward as possible determinants of investment behavior. In this study, we have extended this work by examining a different, but related outcome, employee preferences for their employer stock, which ultimately drive the decisions shaping actual investment outcomes. In addition, although we have tested some of the relationships found in past studies, we have also examined the effect of such variables as the *perceived quality of the information related to stock ownership*, the *employee perceived participation in decision making as a consequence of EO*, and the *employee perceived management's philosophical commitment to EO.*

Our results show that the representativeness and familiarity heuristics have a positive influence on employee preferences for employer stock. However, employees do not rely exclusively upon such financial considerations when deciding whether to purchase and keep their company's stock. Their commitment to their company, the quality of information provided by the company about the investment opportunities, and the company's commitment to the concept of employee ownership also positively influence employee preferences for employer stock. These results suggest that employees may not see stock ownership exclusively as a financial investment. On the contrary, when stock ownership is presented by top management as a management practice aimed at developing a common corporate culture, sharing common goals and interests, and empowering employees, they appear to be more willing to invest in their company.

These core findings that financial motivations are neither the only nor the strongest determinant of employee preferences is in line with a large literature on employee ownership. Twenty five years ago, French (1987) and French and Rosenstein (1984) were among the first scholars wondering whether employee stock ownership was only a financial investment or was also an actual and desired mechanism of control. In further studies, the competing forces of the extrinsic effects of employee ownership (related to the financial rewards) and instrumental effects of employee ownership (related to participation in decision-making) (Klein, 1987) have been studied in a number of countries and organizational settings. This work provides a strong case that employee ownership leads to better employee outcomes if it is *both* financially rewarding *and* if it provides the employees with some rights in the decision making process (Buchko, 1993; Gamble et al., 2002).

Contrary to what we expected, however, educational level, hierarchical level within the organization, and uncertainty avoidance are all not significantly related to ownership preferences. We propose two explanations for these results. First, it is important to keep in mind that a majority of the surveyed employees worked in banks, and that the average hierarchical level was high. These are individuals who are more aware of many existing investment possibilities. On the contrary, less educated and lower level employees may be more willing to invest in their company shares because they are not familiar with other investment possibilities outside their company. Another explanation is that, contrary to what we hypothesized, employees do not perceive investing in their company's shares as risky. This could be explained by the familiarity heuristic which is confirmed here by the positive correlation between *seniority in stock ownership* and *ownership preferences*. Moreover, the level of uncertainty avoidance among respondents and its standard deviation were generally low (M=2.04/5, SD=0.60), meaning that the variance between respondents was also low.

Another unexpected result concerns the low correlation between perceived participation in decisions and ownership preferences, which became nonsignificant after entering control variables. Again, this result could be explained by the fact that the perceived level of participation in decisions was low on average (M=2.29/5) and that having few companies and a majority of respondents working in two companies, the available variance was low and therefore failed to explain ownership preferences. The same reasoning could be made for the unexpected result concerning *turnover intentions*. Again, the means and standard deviations for turnover intentions were low (M=2.01/5; SD=0.78). This is common in France where the labor market lacks flexibility and where employees rarely move from one company to another. Moreover, when employees leave their company, they can transfer their savings account to the new company if it has the same savings scheme.

This study expands existing knowledge of the determinants of the employee investments in their company stock. From past studies, we knew that some individual employee characteristics such as age, gender, educational and hierarchical levels, compensation and seniority, affect the employee investment behaviour. Some of these determinants have been confirmed in this study. Another set of determinants of preferences for employer stock that we examined were employee attitudes towards the corporation. The results confirm that affective commitment was a determinant of ownership preferences. A third group of determinants concerns employee cultural values and personality traits. Only risk aversion has been studied to date, but other traits and values are certainly worth investigating. For example Caramelli and Briole (2006) suggested that individualism, power distance, and masculinity were also likely to determine the employee attitudes towards stock ownership. A final group of determinants concerns how employee ownership is set up and presented by the companies to employees. Our results show that the quality of information and communication concerning employee ownership is a key determinant of ownership preferences. This is even more important when employees have to choose among several investment options and it can be difficult for them to clearly understand the rationale and stakes of the different available choices. Most importantly, this study is the first one empirically suggesting that when stock ownership is presented as a mere financial investment, employees are more likely to consider it as an element of a financial portfolio among others, i.e. to less concentrate their investments in their employer's stock. On the contrary, when employee ownership in presented as an element of the human resource strategy, employees are more likely to overvalue their company's stock.

The results of this study have different implications for managers who deal with employee ownership plans in which employees have investment decisions to make. First, information is a key element. Informing employees about stock ownership plans is challenging because there usually are compulsory legal regulations that make the information difficult for employees to understand. Also, multinationals have to deal with translations and cultural differences in effectively informing employees worldwide. Finally, companies that are committed to the concept of employee ownership should inform employees about their commitment by including a message from the top management and possibly the CEO him/herself, explaining how employee ownership is viewed by the company. The best moments for communicating are usually at the time of the employee stock offerings when companies can communicate broadly about stock ownership and employees likely pay more attention to these issues.

Our results also confirm that employees tend to excessively extrapolate from past returns (Benartzi, 2001). This result clearly calls for the implementation of programs of education for employees. Many French companies hesitate to implement an employee stock offering after a heavy drop in their stock price because they expect a low participation rate (Caramelli, 2011), even if this is, financially speaking, irrational. Educating employees about the basics of corporate and market economics would certainly lead to more rational and informed employee decisions. Finally, our results have also confirmed Pendleton's (2010a) finding that more affectively committed employees were more likely to invest in their company's shares. Therefore, companies are right when they consider the participation rate to stock offerings as an indicator of employee commitment.

We conclude by acknowledging the limitations of the study and highlighting further research avenues that should be explored. First, causal inferences between ownership preferences and its determinants must be made with caution because the data used in this study are cross-sectional. For example, it is possible that the causal relationship between ownership preferences and affective commitment is actually inverted, with ownership preferences leading to more ownership and more ownership leading to more commitment. Second, the data we analyze are self-reported and can be subject to errors and response biases even if our tests showed good validity and reliability of measures. In addition, our sample of respondents included employees working mainly in two companies of the banking sector. Individuals who agreed to participate in the survey can be particularly interested in stock ownership and therefore not representative of the whole population. Also, employees working in financial institutions may be more educated about financial issues than employees working in other industries, and therefore, non-representative. Moreover, our sample was mostly composed of managerial males, and only examined employees in French multinationals, so generalizing our findings to other settings should be done with some caution. It is likely that gender and national and cultural differences are also key drivers of employee preferences.

These limitations clearly call for further research on the determinants of employee investments in their company stock. More precisely, we need to collect data from a large number of companies in order to have variance in such key variables as information, management's commitment to employee ownership or past returns. We also need more cross-national studies. Finally, other facets of commitment, such as continuance and normative commitment (Meyer & Allen, 1991) could be studied in future research, as well as other attitudes towards the company such as job satisfaction or organizational justice.

REFERENCES

Agnew, J., Balduzzi, P., & Sunden, A. (2003). Portfolio choice and trading in a large 401 (k) plan. *The American Economic Review, 93*(1), 193-215.

Alutto, J. A., & Acito, F. (1974). Decisional participation and sources of job satisfaction: A study of manufactural personnel. *The Academy of Management Journal, 17*(1), pp.160-167.

Argyris, C. (1964). Integrating the individual and the organization. In Wiley (Ed.). New York.

Aubert, N., & Rapp, T. (2010). Employee's investment behaviors in a company based savings plan. *Finance, 31*(1), 5-32.

Aycan, Z., Kanungo, R. N., & Sinha, B. P. (1999). Organizational culture and human resource management practices: The model of culture fit. *Journal of Cross-Cultural Psychology, 30*(4), 501-526.

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics, 116*(1), 261-292.

Benartzi, S. (2001). Excessive extrapolation and the allocation of 401(k) accounts to company stock. *Journal of Finance, 56*(5), 1747-1764.

Benartzi, S., & Thaler, R. H. (2001). Naive diversification strategies in defined contribution saving plans. *The American Economic Review, 91*(1), 79-98.

Benartzi, S., & Thaler, R. H. (2002). How much is investor autonomy worth? *Journal of Finance, 57*(4), 1593-1616.

Benartzi, S., & Thaler, R. H. (2007). Heuristics and biases in retirement savings behavior. *Journal of Economic Perspectives, 21*(3), 81-104.

Benartzi, S., Thaler, R. H., Utkus, P., & Cass, R. (2008). Company stock, market rationality, and legal reform, *University of Chicago Law School*.

Benartzi, S., Thaler, R. H., Utkus, S. P., & Sunstein, C. R. (2007). The law and economics of company stock in 401 (k) plans. *Journal of Law and Economics, 50*(1), 45-79.

Blasi, J. R., Freeman, R., Mackin, C., & Kruse, D. L. (2010). Creating a bigger pie? The effects of employee ownership, profit sharing, and stock options on workplace performance. In D. Kruse, R. Freeman & J. R. Blasi (Eds.), *Shared Capitalism at Work: Employee Ownership, Profit and Gain Sharing, and Broad-Based Stock Options* (pp. 139-166). Chicago: The University of Chicago Press.

Blasi, J. R., Kruse, D. L., & Markowitz, H. M. (2010). Risk and lack of diversification under employee ownership and shared capitalism. In D. L. Kruse, R. B. Freeman & J. R. Blasi (Eds.), *Shared capitalism at work: Employee ownership, profit and gain sharing, and broad-based stock options*. Chicago: University of Chicago Press.

Buchko, A. A. (1993). The effects of employee ownership on employee attitudes: an integrated causal model and path analysis. *Journal of Management Studies, 30*(4), 633-657.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*, 81-105.

Caramelli, M. (2011). Employee ownership and corporate performance: Towards unlocking the black box. In E. Carberry (Ed.), *Employee ownership and shared capitalism: New directions and debates for the 21st century*. Ithaca: ILR Press, Cornell University Press.

Caramelli, M., & Briole, A. (2006). Employee stock ownership and job attitudes: Does culture matter? *Human Resource Management Review, 17*, 290-304.

Chandon, P., Morwitz, V. G., & Reinartz, W. J. (2005). Do intentions really predict behavior? Self-generated validity effects in survey research. *Journal of Marketing*, 1-14.

Chaplinsky, S., & Niehaus, G. (1994). The role of ESOPs in takeover contests. *Journal of Finance, 49*(4), 1451-1470.

Chi, N. W., & Han, T. S. (2008). Exploring the linkages between formal ownership and psychological ownership for the organization: The mediating role of organizational justice. *Journal of Occupational and Organizational Psychology, 81*(4), 691-711.

Chiu, C. K. (2003). Employee stock ownership plans and organizational integration among workers in the people's republic of China. *Human Resource Management Review, 13*, 407-421.

Chiu, C. K., Hui, C. H., & Lai, G. W. F. (2007). Psychological ownership and organizational optimism amid China's corporate transformation: Effects of an employee ownership scheme and a management-dominated board. *The International Journal of Human Resource Management, 18*(2), 303-320.

Choi, J. J., Laibson, D. I., & Madrian, B. C. (2006). Are empowerment and education enough? Underdiversification in 401 (k) plans. *Brookings Papers on Economic Activity, 2005*(2), 151-213.

Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research, 16*(1), 64-73.

Cin, B., Han, T. S., & Smith, S. C. (2003). A tale of two tigers: Employee financial participation in Korea and Taiwan. *International Journal of Human Resource Management, 14*(6), 920-941.

Cohen, L. (2009). Loyalty-based portfolio choice. *Review of Financial Studies, 22*(3), 1213.

Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology, 25*(3), 325-334.

De Vellis, R. F. (2003). *Scale development, theory and applications* (Vol. 26). Thousand Oaks: Sage.

Degeorge, F., Jenter, D., Moel, A., & Tufano, P. (2004). Selling company shares to reluctant employees: France Télécom's experience. *Journal of Financial Economics, 71*(1), 169-202.

French, J. R., Israel, J., & As, D. (1960). An experiment on participation in a norwegian factory: Interpersonal dimensions of decision-making. *Human Relations, 13*, 3-19.

French, L. J. (1987). Employee perspectives on stock ownership: Financial investment or mechanism of control ? *Academy of Management Review, 12*(3), 427-435.

French, L. J., & Rosenstein, J. (1984). Employee ownership, work attitudes, and power relationships. *Academy of Management Journal, 27*(4), 861-869.

Gamble, J. E. (2000). Management commitment to innovation and ESOP stock concentration. *Journal of Business Venturing, 15*, 433-447.

Gamble, J. E., Culpepper, R. A., & Blubaugh, M. (2002). ESOPs and employee attitudes: The importance of empowerment and financial value. *Personnel Review, 31*(1), 9-26.

Hair Jr., J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ, USA: Pearson.

Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management, 21*(5), 967-988.

Hofstede, G. (1980). Motivation, leadership and organization: Do American theories apply abroad? *Organizational Dynamics, 9*(1), 42-64.

Hofstede, G. (1984). The cultural relativity of the quality of life concept. *Academy of Management Review, 9*(3), 389-398.

Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics, 16*(4), 5-22.

Huberman, G., & Sengmueller, P. (2004). Performance and employer stock in 401 (k) plans. *Review of Finance, 8*(3), 403.

Kaarsemaker, E., Pendleton, A., & Poutsma, E. (2009). Employee share ownership plans: A review: University of York, The York Management School.

Keef, S. P. (1994). Employee share ownership and job attitudes: The effects of share sale. *Asia Pacific Journal of Management, 1*(1), 91-102.

Klein, K. (1987). Employee stock ownership and employee attitudes: A test of three models. *Journal of Applied Psychology Monographs, 72*(2), 319-332.

Klein, K., & Hall, R. J. (1988). Correlates of employee satisfaction with stock ownership: Who likes an ESOP most? *Journal of Applied Psychology, 73*(4), 630-638.

Kruse, D. L., & Blasi, J. R. (1995). *Employee ownership, attitudes and firm performance*.Unpublished manuscript, Cambridge, USA.

Kuvaas, B. (2003). Employee ownership and affective organizational commitment: Employees' perceptions of fairness and their preference for company shares over cash. *Scandinavian Journal of Management, 19*(2), 193-212.

Likert, R. (1961). *New patterns of management*. New York: McGraw Hill.

Liu, N. C., Lin, A., & Lin, C. H. (2009). Why do employees hold their vested stocks while they can sell them? *The International Journal of Human Resource Management, 20*(1), 148-163.

March, J., & Simon, H. (1958). *Organizations*. New York: John Wiley.

Markowitz, H. M. (1952). Portfolio selection. *Journal of Finance, 7*, 77-91.

Markowitz, H. M., Blasi, J. R., & Kruse, D. L. (2009). Employee stock ownership and diversification. *Annals of Operations Research, 176*, 95-107.

Mc Gregor, D. (1960). *The human side of enterprise*. New York: McGraw Hill.

Meulbroek, L. K. (2005). Company stock in pension plans: How costly is it. *Journal of Law and Economics, 48*, 443-474.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89.

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace*. Thousand Oaks, USA: Sage.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*(4), 538-551.

Mitchell, T. R. (1973). Motivation and participation: An integration. *Academy of Management Journal*, *16*(4), 670-679.

NCEO. (2011). A statistical profile of employee ownership. *Accessed in April, 2011, http://www.nceo.org/main/article.php/id/2/*.

Park, S., & Song, M. H. (1995). Employee stock ownership plans, firm performance and monitoring by outside blockholders. *Financial Management*, *24*(4), 52-65.

Pendleton, A. (2001). *Employee ownership, participation and governance: A study of ESOPs in the UK*. London, New York: Routledge.

Pendleton, A. (2010a). Employee participation in employee share ownership: An evaluation of the factors associated with participation and contributions in save as you earn plans. *British Journal of Management, 21*(2), 555-570.

Pendleton, A. (2010b). Employee share ownership and investment concentration: which employee shareholders fail to diversify? *Human Resource Management Journal, 20*(2), 157-174.

Pendleton, A., Wilson, N., & Wright, M. (1998). The perception and effects of share ownership: Empirical evidence from employee buy-outs. *British Journal of Industrial Relations, 36*(1), 99-123.

Peter, J. P. (1981). Construct Validity: A review of basic issues and marketing practices. *Journal of Marketing Research, 18*, 133-145.

Pierce, J. L., Rubenfeld, S. A., & Morgan, S. (1991). Employee ownership: A conceptual model of process and effects. *Academy of Management Review, 26*(2), 121-144.

Podsakoff, P. M., Mackenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

Rosen, C., Klein, K. J., & Young, K. M. (1986). *Employee ownership in America, the equity solution*. USA: Lexington Books.

Rousseau, D. M., & Shperling, Z. (2003). Pieces of the action: Ownership and the changing employment relationship. *Academy of Management Review, 28*(4), 553-570.

Sparrow, P. (2002). The psychological consequences of employee ownership: On the role of risk, reward, identity and personality. In C. Cooper & D. Rousseau (Eds.), *Trends in Organisational Behaviour* (Vol. 6). London: Wiley.

Wu, H. L., Su, W. C., & Lee, C. Y. (2008). Employee ownership motivation and individual risk-taking behaviour: a cross-level analysis of Taiwan's privatized enterprises. *The International Journal of Human Resource Management, 19*(12), 2311-2331.

Table 1 *Exploratory factor analysis and coefficients alpha for latent constructs*

	Factors				
	1	2	3	4	5
employees' interest in the company's success	**.86**	.00	-.03	-.03	-.10
loyees a common goal	**.85**	-.08	-.01	-.01	-.03
employee work motivation	**.83**	.00	-.08	-.02	.01
ployee stock ownership is a part of my company's corporate culture	**.51**	.03	.10	-.01	.08
y company, to show that it values its employees	**.49**	.15	.05	.01	.08
ny has a great deal of personal meaning to me	.00	**.73**	.01	.03	-.02
l "emotionally attached" to this company	-.04	**.69**	-.10	-.05	.00
l a strong sense of belonging to my company	.03	**.65**	.03	-.03	-.02
l like "part of the family" at my company	-.03	**.61**	-.02	.00	.12
as if this company's problems are my own	.15	**.49**	.12	.08	-.03
s an employee stock purchase plan offering in my company, I usually participate in it	.01	-.01	**.85**	-.05	-.06
ly participate in the next employee stock offering plan	-.01	-.03	**.79**	.04	.03
eaking, I prefer to re-invest my profit-sharing bonus in *stock* of my company.	-.07	.04	**.51**	-.04	.00
ssible, I invest in *stock* of my company	.06	.04	**.37**	.07	.05
my company's *stock* as soon as I can	.02	-.04	**.37**	.01	-.05
llenging and varied life	.03	.01	-.09	**.82**	-.01
xciting and stimulating life	.01	-.02	.01	**.78**	.00
ement of variety and adventure in my job	-.04	-.01	.02	**.61**	-.02
peaking, I like to take risks	-.07	.00	.08	**.45**	.03
f the employee shareholders have no influence on the decisions that are made within the	-.06	.03	-.03	.02	**.86**
do not hold enough stock to have an influence in the company's decisions.	-.02	.01	-.02	0,00	**.64**
tock-ownership does not give the employees any right in the decision-making of the	.06	.02	-.01	-0,04	**.60**
ents I receive about my *stock* are too complicated, I cannot fully understand them.	.03	.03	-.09	-0,02	-.03
rstand anything about the company's employee ownership plan	.00	-.03	.09	0,03	-.07
understood how the voting rights of employee stockholders work	-.04	-.01	.02	0,01	.12
peaking, I don't read the documents the company sends me about my company stock	-.03	.17	.00	0,02	-.07
tion I receive about my voting right as a stockholder is clear and easy to understand	.09	-.12	.09	0,03	.15
bly look for a new job within the next year	.01	.09	-.01	0,03	.00
k about leaving this company	-.03	-.12	-.01	-0,07	.02
very happy to spend the rest of my career in this company.	.00	-.27	-.04	-0,02	.06
ffered a similar job with another company, I would accept it	.02	-.28	.00	0,07	-.03
	.84	.78	.70	.75	.74

Table 2 *Means, standard deviations and intercorrelations among variables*

Variables	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1 Seniority in stock ownership	5.09	1.12								
2 Perceived past returns	4.46	0.82	.20**							
3 Compensation	4.36	1.12	-.03	.04**						
4 Gender	1.08	0.27	-.16**	-.14**	-.14**					
5 Age	6.88	0.86	.36**	.11**	.07*	-,35**				
6 Education level	2.99	2.19	-.14**	-.05	.52**	.02	-.11**			
7 Hierarchical level	4.49	1.16	.07*	.07*	.60**	-.16**	.13**	.34**		
8 Philosophical commitment to EO	3.54	0.84	.07*	.18**	.24**	.05	-.04	.07	.15**	
9 Commitment	3.52	0.82	.09*	.10**	.07*	-.02	.06	-.10**	.10**	.41**
10 Preference for EO	3.89	0.70	.20**	.30**	.24**	-.04	.00	.02	.17**	.39**
11 Uncertainty avoidance	2.04	0.60	.09**	-.02	-.17**	-.01	.06	-.06	-.18**	-.10**
12 Information	3.82	0.74	.08*	.19**	.14**	-.10**	.08*	.06	.13**	.25**
13 Turnover Intention	2.01	0.78	-.10**	-.19**	.01	.11**	-.19**	.20**	-.04	-.22**
14 Participation in decision-making	2.29	0.89	-.01	.11**	-0.06	.02	-.04	.05	.03	.32**

Notes: *p < 0.05; **p < 0.01; ***p < 0.001; all other correlations are insignificant.

Table 3 Results for hierarchical multiple regression for preference for employee ownership

Steps	*Predictors*	*Ownership Preferences*	
1	*Control Variables*	*Model 1[a]*	*Model 2[a]*
	Age	-.04	-.01
	Educational Level	-.14***	-.05
	Hierarchical Level	.06	-.04
	Compensation	.26***	.11**
2	*Independent Variables*		
	Perceived past returns		.18***
	Seniority in stock ownership		.13***
	Philosophical commitment to EO		.20***
	Commitment		.14***
	Turnover Intention		.00
	Information Quality		.18***
	Participation in Decision Making		-.01
	Uncertainty Avoidance		.04
	F	12.07***	22.21***
	R^2	.06	.28
	R^2 change		.21
	F change		25.58***

Notes: Model statistics are betas; * p<.05, ** p<.01, *** p<.001