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Employee ownership and firm performance: A variance decomposition analysis of European firms

Kyoung Yong Kim [a,*], Pankaj C. Patel [b]

[a] City University of Hong Kong, Department of Management, College of Business, Kowloon Tong, Hong Kong
[b] Villanova University, Department of Management and Operations, Villanova School of Business, Villanova, PA 19085, United States

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ABSTRACT

Employee ownership is of increasing interest to researchers, policymakers, and firms. Findings on the influence of employee ownership on performance, however, remain mixed, possibly due to differences in institutional/cultural factors, period-effects, between-industry differences, and firm-specific heterogeneity. To further shed light on performance gains from employee ownership attributable to the relative effects of country, year, industry, and firm, we draw on a sample of 12,648 firm-years from 1797 European firms from 2006 to 2014. We find that while the relative variance explained by employee ownership is not statistically significant, its joint effects with country, year, industry, or firm explain 2.25%, 0.12%, 0.51%, and 4.16% of variance in ROA, respectively. Similar effects are observed for workforce productivity as an outcome. These findings suggest that contextual factors, especially in line with previous research, firm-related factors are important for the effective utilization of employee ownership. This study has implications for strategic human capital theory and practitioners.

1. Introduction

The influence of the nature of ownership on firm performance is an often studied phenomenon in strategic management. Past studies have focused on the influence of executive (Core & Larcker, 2002), government (Xia & Walker, 2015), family (Silva & Majluf, 2008; Villalonga & Amit, 2006), institutional (Chaganti & Damanpour, 1991; Velury & Jenkins, 2006), and venture capital (Fitza, Matusik, & Mosakowski, 2009) ownership on firm performance. Different types of ownerships elicit variegated organizational strategies and behaviors, that in turn, influence firm performance. We aim to explore the relative variance explained by country, year, industry, and firm for an important but an overlooked form of ownership in strategic human capital theory, employee ownership. We define employee ownership as the amount of company stock that employees own in their company.

Both past (Doucouliagos, 1995; Lewin, Mitchell, & Zaidi, 1997) and recent (O'Boyle, Patel, & Gonzalez, 2016) meta-analyses on employee ownership and firm performance have found small but significant effect sizes. Given the small effect sizes, it is essential to investigate further to determine whether these small effects are attributable to strategic human capital within the firm or to cross-country, cross-period, or cross-industry differences. Given the widespread prevalence of employee ownership, if the relative effects of country or industry are greater than the firm effects, then the efforts in implementing employee ownership practices in a firm may have limited returns, or gains from employee ownership may be explained by country or industry membership and not by the strategic human capital in a firm.

Explaining relative variance explained by country, year, industry, and firm in the employee ownership-firm performance relationship is theoretically important because employee ownership is particularly salient from the strategic human resource management perspective (e.g., Robinson & Zhang, 2005). Employee owners, according to strategic human capital theory, significantly influence strategic discourse in a firm. Aggregate employee stock ownership at the firm level is linked to higher growth, as measured by Tobin's Q (Sesil, Kroumova, Kruse, & Blasi, 2007), innovation success (Yanadori & Marler, 2006), and improved performance of leveraged buyouts (Wright, Robbie, Thompson, & Starkey, 1994). While a small amount of stock held at the individual employee-level may not directly affect firm performance, it primes ecology of behaviors across different levels in the firm to have a cumulative effect on performance. As is evident in strategic human capital theory, employee ownership increases the share of residual rights on firm assets to increase motivation to develop and leverage firm-specific human capital. Studies have consistently found that employee ownership is positively associated with higher profitability and productivity (e.g., Kruse, Freeman, & Blasi, 2010). Past research, however, also suggests that the effectiveness of employee ownership may depend on country, public versus private ownership, and period effects (e.g., Dube & Freeman, 2010; O'Boyle et al., 2016).

* Corresponding author.
E-mail addresses: kimky.yong@cityu.edu.hk (K.Y. Kim), pankaj.patel@villanova.edu (P.C. Patel).

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This research is also practically relevant. In Europe, 19% of private sector employees own company stock, and in 2014, employees in public firms held 2.99% (€266 billion) of shareholder capital. While the percentage of employee ownership could be construed as being too small to have a prominent effect on firm performance, a 2010 study by the National Center for Employee Ownership (NCEO) reported that the average balance in employee ownership plans in the U.S. is $55,836. In the current sample of 2509 large firms in 31 European countries, 35 million employees in 2014 owned €301 billion in company assets (EFES, 2015); or €8600 per employee, which is approximately 14% of the median household wealth of €62,196 in Europe during 2014 (Suisse, 2014). The prevalence of employee ownership plans further begs the question of whether performance gains in employee ownership are attributable to strategic human capital in the firm or to differences resulting from country- or industry-related differences. Thus, in this study we examine the relative effect of employee ownership on performance using country, year, industry, and firm as key contextual factors.

2. Theoretical background

Employee ownership is increasingly prevalent in industrialized countries. There has been a significant growth in employee ownership plans across North America, the United Kingdom, Japan, and the European Union (Kruse et al., 2010; Pierce, Rubenfeld, & Morgan, 1991; Rousseau & Shperling, 2003). The increasing popularity of employee ownership is based on the expectation that employee ownership improves firm performance. Employee ownership is important to strategic human capital through the lenses of agency theory, property rights, and the resource-based view (RBV). We briefly discuss each of these theoretical areas below.

Agency theory highlights incentive and monitoring costs resulting from a misalignment of goals between principals and agents (Eisenhardt, 1989). In the context of employee ownership, employees often have goals that are not aligned with those of the principals. Due to the discretion that employees have in their work, employees' (agents') behaviors are self-serving at times and are not necessarily in concert with business owners' (principals') goals as agreed upon in their contracts. Employee ownership, by increasing motivation and incentives, increasingly aligns employees' interests with those of the principal(s) (Wagner, Parker, & Christiansen, 2003). As employees share gains from firm profits (directly through profit sharing or indirectly through an increase in stock prices), firms with employee ownership can effectively utilize their human resources and realize higher performance.

A property right refers to “a claim that is legally enforceable and socially supported” (Rousseau & Shperling, 2003, p. 555). Property rights under employee ownership refer to the residual control rights (i.e., equity ownership) that provide incentives for employees to invest in firm-specific human capital (Robinson & Zhang, 2005). Accumulation of firm-specific human capital across different levels contributes to firm performance (Crook, Todd, Combs, Woehr, & Ketchen, 2011).

RBV proposes valuable, rare, imperfectly imitable, and non-substitutable resources result in sustainable competitive advantage (Barney, 1991). Among the organizational resources (e.g., physical, human, financial), the importance of human capital has been emphasized in strategic human capital theory. Employee ownership is salient to developing socially complex human resources that are difficult to imitate and path dependent (Lippman & Rumelt, 1982; Ployhart, 2012). Employee ownership allows employees to have greater control over job tasks and increased participation in decision making. Employee ownership also promotes favorable attitudes toward the firm, elicits pro-social behaviors (Wagner et al., 2003), and infuses psychological ownership, which is “a sense of possession of the organization” (Wagner et al., 2003, p. 849) that strengthens identification with the firm (Mael & Ashforth, 1992). Employees with greater sense of ownership are concerned about their firm's long-term goals and objectives and work harder to improve their job performance.

Overall, the agency theory, property rights framework, and RBV all suggest that employee ownership increases employees' effort and motivation to improve their firm performance (Kim & Ouimet, 2014; Robinson & Wilson, 2006). While studies on employee ownership from a variety of disciplines draw on different theoretical frameworks, we rely on strategic human capital theory as a theoretical lens to explain the link between employee ownership and firm performance, and to explore contextual factors of firm, period, country, and industry.

3. Hypothesis development

Despite the small, positive effect of employee ownership on firm performance in meta-analyses (Doucouliagos, 1995; Lewin et al., 1997; O'Boyle et al., 2016), findings across studies are mixed (e.g., Pierce & Rodgers, 2004). Some have found a positive effect of employee ownership on firm performance (e.g., Robinson & Wilson, 2006), but others have found a nonsignificant or negative effect (e.g., Blasi, Conte, & Kruse, 1996). For example, Sesil et al. (2007) found that employee ownership was positively associated with workforce productivity but not significantly related to ROA. They also found that firms with an employee ownership scheme for more than half of their employees actually had lower ROA than those without an employee ownership scheme.

The small positive association found in the meta-analyses (Doucouliagos, 1995; Lewin et al., 1997; O'Boyle et al., 2016), as well as mixed empirical evidence (e.g., Sesil et al., 2007) and theoretical argumentation (e.g., Robinson & Zhang, 2005; Wagner et al., 2003) call the application of strategic human capital theory to employee ownership into question because an essential argument in the employee ownership literature is the effective utilization of human capital through employee ownership. If the broader meta-analytic evidence suggests a small and positive association, and findings remain mixed, the question is whether strategic human capital is a relevant lens to examine and argue for the positive association between employee ownership and firm performance. To assess the relevance of strategic human capital theory, we ask whether the positive association could be explained by institutional and cultural differences, cross-period effects, and between-industry variation (e.g., Dube & Freeman, 2010) or is driven more by firm-specific effects.

Systematic differences in cultural and institutional conditions across countries could explain variations in the influence of employee ownership on performance (Caramelli & Briole, 2007). For example, the effect of employee ownership on performance in socialist societies could be different than in capitalist societies. The effects of employee ownership could also be weaker in collectivistic societies. Similarly, systematic differences across industries could make employee ownership more or less relevant. In labor-intensive or highly innovative industries, strategic human capital could be more valuable than in capital intensive or slow clockspeed industries. Therefore, gains from employee ownership may be attributable to cross-country or between-industry variation and not to firm-specific differences in human capital.

To motivate the proposed variance decomposition analysis, based on the prior studies we discuss country, cross-period, industry, and firm effects in detail below.

3.1. Country-level effects

The prevalence of employee ownership varies across institutional and cultural settings. The cultural and institutional setting in Europe has traditionally allowed for greater inclusivity of workers. In Italy, France, and Spain, employee ownership is widespread, whereas in Scandinavian countries, fewer firms have active employee ownership plans (Jones & Mygind, 1999). After separation from the communist bloc, employee ownership facilitated a transition to privatization of Eastern