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Corporate culture and identity investment in an industry equilibrium☆

Victor Hiller[a], Thierry Verdier[b,*]

[a] *Université Paris II – LEMMA, 4 rue Blaise Desgoffe, 75006 Paris, France*
[b] *PSE-Ecole des Ponts-ParisTech, 48 Boulevard Jourdan, 75014 Paris, France*

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ABSTRACT

We explore the two-way relationship between corporate culture and market structure. We emphasize two market dimensions through which firms interact: the product market where goods are sold and the labor market where managers are hired. We model the firm's principal–agent relationship by assuming that managers may be socialized to a corporate identity that leads them to behave more in concert with the profit maximizing goals of the firm (i.e. a corporate culture). We first analyse the optimal incentive scheme and corporate culture investment at the firm level. Then we consider the industry equilibrium with free entry and market clearing for managerial labor. We discuss how industry characteristics (market size effects), global market integration or technological shocks affect the pattern of equilibrium corporate cultural choices across firms.

1. Introduction

A common view among corporate executives and business professionals is the idea that corporate culture is a significant determinant of organization behavior and performance. Examples such as HP philosophy or Google's culture are often pinned down in the media to illustrate how business successes and failures may be attributed to specific organizational culture. The business literature also abounds in books and case studies showing how corporate culture evolves and affects corporate performance (see for instance Deal and Kennedy, 1982; Schein, 1986, 1992, 1999; Kotter and Heskett, 1992; Collins and Porras, 2004; Want, 2007).

Parallel to the popular attention given to this issue, economists have recently started to provide formal models to explain the formation and persistence of a firm's culture and how it constitutes a key element of management strategy and firm's

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* Corresponding author at: Paris School of Economics, 48 Boulevard Jourdan, 75014 Paris, France. Tel.: +33 1 43 13 63 08.
E-mail addresses: victor.hiller@u-paris2.fr (V. Hiller), verdier@pse.ens.fr (T. Verdier).

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performance.[1] Along this line of research a firm's culture is defined as shared beliefs and preferences among members of one organization, in particular, between the bottom and the top of the hierarchy. This cultural homogeneity helps to solve coordination problems and incentive issues within the firm by getting closer views and aspirations of employees and/or by aligning these aspirations with firm's objectives (see Hermalin, 2001 for an extensive survey). Still, the common approach of these models is to consider the perspective of one specific organization, taking as exogenous the evolution of its business environment or market structure.[2] In reality though, competitive forces exerted in a given economic environment are themselves the result of interactions between various organizations, each of them choosing its own organizational culture to solve internal incentive problems. In such a context, each organization's decision to adopt a particular corporate culture strategy depends on other organizations' choices and the market environment is itself endogenous to the aggregation of these choices. In turn, market conditions, by shaping profit opportunities, may influence the organizational culture that firms' owners are likely to promote. This effect of market environment and industry characteristics on organizational culture is regularly put forward in the business and management studies literatures (see, for instance, Chorn, 1991; Gordon, 1991; Burke and Litwin, 1992 or Langevoort, 2006). The main contribution of our article is to formalize this argument and to explore the feedback effects of corporate culture choices on market structures at the industry level.

We emphasize two natural market dimensions through which firms interact: the product market where they sell their goods and the managerial labor market where they hire their managers. We investigate how these two market dimensions interfere with the equilibrium choice of corporate culture at the firm level. To do this, we develop a simple model where firms compete both on the product and the managerial labor market. On the good market side, each firm sells a differentiated product under monopolistic Dixit-Stiglitz type of competition. On the labor market side, firms bid for managers in a competitive manner, given a fixed pool of available managers.

Internally, each firm faces a moral hazard problem with its manager. In order to obtain the appropriate managerial action, the firm needs to implement an incentive scheme. Building on the insights of Akerlof and Kranton (2005), we incorporate an "identity notion" of corporate culture in this firm's principal–agent relationship. According to this view, a manager perceives himself as part of different social categorizations, each of them associated with some prescribed behavior reflecting an "ideal" that should be fulfilled when identifying to the categorization. Through socialization investments, corporate culture is then modeled as a process that affects the structure of these social categorizations. Specifically, it creates a specific categorization to which managers identify with the organization and adopt its respective goals. In the present context, we assume that managers may be socialized to a corporate identity that leads them to behave more or less aligned with the profit maximizing goals of the firm.[3]

In such a framework, we first analyze the optimal incentive scheme and corporate culture investment that an isolated firm chooses, given the profile of profit opportunities available on the good market and the degree of competition for managers on the managerial labor market. Then we consider the equilibrium in the differentiated good industry and in the managerial labor market. This allows us to discuss how industry characteristics (as product market and managerial labor market sizes) affect the pattern of equilibrium corporate cultural choices across firms in the industry.

More specifically, at the firm level, the typical incentive contract depends on two elements. First, there is the issue of how much should the firm incentivize managers to work hard. This is related to the benefits coming with cuts in production costs and the associated competitive advantage against competitors. Ultimately, it depends on the level of profit opportunities and the degree of competition that prevail in the product market. Second, there is the problem of the optimal form to provide such incentives to managers: high-powered monetary incentives or socialization to corporate identity. In this respect, the existence of an identity utility component crucially affects the nature of the incentive contract between the firm and the manager. Typically, at given market conditions and with risk-averse managers, corporate identity flattens the optimal managerial wage schedule and makes it less costly to incentivize managers. Indeed, a corporate identity leads a manager to feel naturally committed to the "ideal" high managerial effort. This relaxes his incentive compatibility constraint and implies a lower wage differential needed to sustain the high effort. Moreover, identification to the firm's objectives provides a direct utility benefit to the manager and relaxes also his participation constraint. For both reasons, corporate identity implies some managerial wage cost savings to the firm. Those gains have to be compared of course with the cost to invest in corporate culture. Interestingly, the larger the reservation utility level of managers and the tougher the competition on the managerial labor market, the larger the gain to smooth out monetary incentives and to reduce risk exposure to the managers. This in turn leads to larger benefits to investment in corporate culture.

[1] Despite the inherent difficulty associated to its measurement, there is also a small empirical literature trying to assess quantitatively the importance of corporate culture and its effects on corporate performance (see for instance Gordon and DiTomaso, 1992; Kotter and Heskett, 1992; Sorensen, 2002; Cronqvist et al., 2007).

[2] Two notable exceptions are Hermalin (2001) which models corporate culture diffusion in a competitive industry as similar to a technology adoption game, and Cordes et al. (2010) who model corporate cultural diffusion using an evolutionary cultural transmission model. Both cases though do not consider explicitly the internal problem of implementation of an incentive scheme inside the firm and how it explicitly interacts with market competition. Let us also mention Kosfeld and von Siemens (2011) who relate corporate culture to labor-market competition but do not consider the role of demand and competition on the product market.

[3] Brown et al. (2011) provide an empirical assessment of these mechanisms. In particular, they show that some human resources practices may help a firm to instill loyalty to its employees. This higher commitment of the workforce enhancing, in turn, the firm's performance.