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Externalities in recruiting☆

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ABSTRACT

External recruiting at least weakly improves the quality of the pool of applicants, but the incentive implications are less clear. Using a contest model, this paper investigates the pure incentive effects of external recruiting. Our results show that if workers are heterogeneous, opening up a firm's career system may lead to a homogenization of the pool of contestants and thus encourage the firm's high-ability workers to exert more effort. If this positive effect outweighs the discouragement of low-ability workers, the firm will benefit from external recruiting. If, however, the discouragement effect dominates the homogenization effect, the firm should disregard external recruiting. In addition, product market competition may mean that opening up the career system becomes less attractive for a firm since it increases the incentives of its competitors' workers and hence strengthens the competitors.

1. Introduction

External recruiting of workers is frequently applied by firms. At first, this observation may seem puzzling since, contrary to outsiders, internal candidates have accumulated firm-specific human capital. In addition, by recruiting externally, the firm harms its reputation of honoring good performance of its workers via job promotion to higher hierarchy levels. As a consequence, career incentives of internal workers may be destroyed so that the workers optimally react by reducing their efforts or even deciding to quit. Practitioners like the human resource expert John Sullivan, former Chief Talent Officer at Agilent and responsible for over 40,000 employees, question this view. He speculates that external recruitment may have positive incentive effects: "It keeps our employees on the edge because they know they must compete against outsiders for jobs" (Sullivan, 1999). Moreover, expanding the pool of applicants by external job candidates at least weakly improves the pool's average quality and, therefore, leads to a better staffing than without external applicants.

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Whereas the last argument – improving the pool of applicants – seems indisputable, the incentive implications of external recruiting are not clear. In our paper, we use a contest model to investigate these incentive effects. In a first step, the firm decides on whether allowing external workers to apply or not and then chooses optimal contest prizes. Thereafter, the relevant pool of workers – either only internal workers or internal as well as external workers – competes for a vacant position in a recruitment contest. To focus on the pure incentive view, we assume that external candidates do not have superior talents. Thus, if a firm admits such candidates, the well-known benefit of improving the pool of applicants will not play a role.

The results of the model show when, i.e., under which conditions, a firm profits from opening up its career system to outsiders and when it does not. If the firm's current workforce is heterogeneous, a pure internal competition for vacant positions can be rather weak. For example, if workers have widely differing talents, internal career competition will be rather low since everybody knows the presumable winner. We show that allowing external workers to apply in such a situation can make the competition stronger. Expanding the pool of applicants leads to a discouragement of a firm's workforce but possibly also to a more homogeneous pool of applicants, which increases incentives. If this advantage dominates discouragement, the firm will optimally decide in favor of external recruiting. Furthermore, firms may not have enough appropriate candidates for an effective career contest (e.g., there is only one candidate that has sufficient occupational skills to fill a certain vacancy). Allowing external workers to compete for the vacant position can revive competition. However, if the discouragement effect dominates the homogenization effect, external recruitment will harm overall incentives and, therefore, be disregarded.

In the first part of the paper, we consider two firms employing heterogeneous workers. These have either a high or low ability. If a firm has to fill a vacancy and considers external recruiting, it must keep the following externalities in mind[3]: since the number of workers competing for the vacant position increases, external recruiting discourages own high- and low-ability workers. If the ability difference between the two types of workers is sufficiently large and the number of high-ability workers exceeds a critical value, the low-ability workers will be completely discouraged and remain passive. Only the high-ability workers will hence be active in the competition. These workers' incentives are boosted by the homogenization of the effective set of players. If this advantage outweighs the lost incentives of the low-ability workers, the hiring firm will admit external applicants from a pure incentive perspective. Otherwise, disregarding external candidates will be optimal for the firm.

This paper focuses exclusively on incentives. Including the quality of the recruiting decision (i.e., the ability of the worker assigned to the vacant position) would further strengthen the argument for external recruiting, even if external candidates do not have superior talents: without external candidates, both internal low-ability and internal high-ability workers may have a positive probability of being promoted. If, as in the situation described above, allowing external workers to apply discourages low-ability workers, the vacant position is certain to be filled with a high-ability worker.

Our results offer some testable implications with regard to inside promotion versus outside recruiting. Given our findings, we expect that firms with a more homogeneous workforce will less likely need to rely on external recruiting since internal competition for promotion is already strong. A more homogeneous workforce could, for instance, be the result of extensive screening in the recruiting of junior employees. Industries like top management consulting and large law firms are well known for their scrutiny in entry-level screening. We thus expect to find less recruitment from outside in these industries, a prediction supported by empirical evidence (see, e.g., Wilkins and Gulati (1998) on promotion-to-partnership tournaments in large law firms). Furthermore, our model predicts that an outsider who enters the firm should have a higher ability than the average inside worker. The reason is that only high-ability external workers will enter the competition, while inside the firm there are both, low- and high-ability workers. There exists anecdotal evidence that, indeed, external recruits are, on average, more productive than internal hires (see, e.g., Baker et al., 1994). In addition, we offer testable predictions regarding the influence of skill development and discuss recruitment strategies for different hierarchical levels.

In the final part of the paper, we address those externalities in recruiting that arise if firms serve the same product market. If the two firms, A and B, compete for the same customers but only firm A has a vacant position, this firm is less likely to allow for external applications compared to the basic model with separate product markets. Under product market competition, opening up A's career system to external workers generates a positive externality for the other firm, B. The workforce of firm B receives incentives for free, which makes B a stronger competitor to A in the product market. Consequently, external recruiting becomes less attractive for firm A.

Our theoretical result predicts that hiring from outside will be less frequent if product market competition is more intense. This theoretical finding is supported by the empirical study of Bayo-Moriones and Ortín-Ángel (2006), who analyze the recruitment and promotion decisions of 653 Spanish firms. They find that the degree of competition has a positive and statistically highly significant impact on the use of internal promotions. The authors conclude: "Further theoretical research is needed to understand why product market competition so strongly enhances the use of internal promotions" (p. 466). Our model offers a possible explanation: firms focus on internal promotions under intense product market competition to avoid positive externalities on rival firms.

[3] See Konrad (2009), Chapter 5, on other externalities in contests.