

DeVaro, Jed

Article

Internal hiring or external recruitment?

IZA World of Labor

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: DeVaro, Jed (2016) : Internal hiring or external recruitment?, IZA World of Labor, ISSN 2054-9571, Institute for the Study of Labor (IZA), Bonn, <https://doi.org/10.15185/izawol.237>

This Version is available at:

<https://hdl.handle.net/10419/148462>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

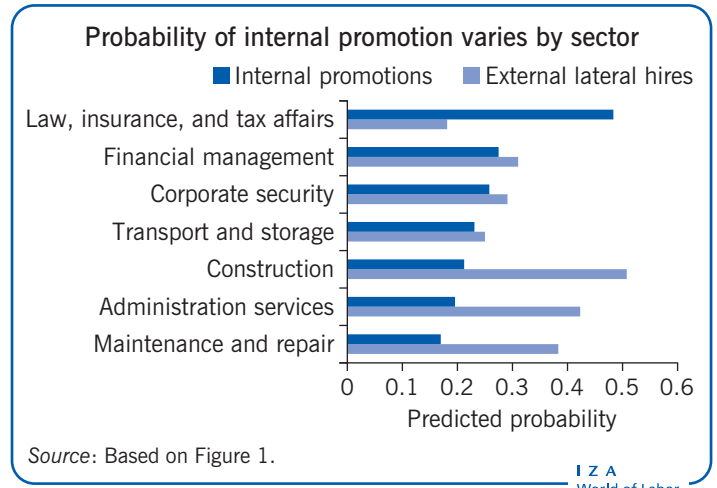
Internal hiring or external recruitment?

The efficacy of internal or external hiring hinges on other policies that a firm uses simultaneously

Keywords: internal promotion, external recruitment, lateral transfers, hiring

ELEVATOR PITCH

Hiring is one of a firm’s most important decisions. When an employer fills a vacancy with one of its own workers (through promotion or lateral transfer), it forgoes the opportunity to fill the position with a new hire from outside the firm. Although both internal and external hiring methods are used, firms frequently have a bias favoring insiders. Internal and external hires differ in observable characteristics (such as skill levels), as do the employers making each type of hiring decision. Understanding those differences helps employers design and manage hiring policies that are appropriate for their organizations.



KEY FINDINGS

Pros

- + Internal hiring has low downside risk because there is little uncertainty about productivity.
- + As a smaller pool of competitors means that effort is more likely to be rewarded with promotions, internal hiring creates strong incentives for workers.
- + Internal hiring encourages the development of specialized knowledge and skills because workers anticipate long careers with the firm.
- + A firm can productively reallocate its workforce across job levels through internal hiring.
- + Internal hiring at one job level creates new vacancies, strengthening incentives at lower levels.

Cons

- Internal hiring has less upside potential than external hiring because there is little uncertainty about productivity.
- A firm’s workers might grow complacent and lazy without the prospect of external hiring.
- Internal hiring limits the infusion of new knowledge and ideas into the firm.
- Internal hiring restricts the size of the applicant pool.
- The new vacancies created in a firm by internal hiring are associated with additional recruitment, screening, orientation, and training costs.

AUTHOR’S MAIN MESSAGE

In deciding whether to hire from within or outside the firm, employers should consider the nature and level of the job, characteristics of the firm and industry, and a firm’s system of human resource management policies, such as intensive recruitment and screening policies and training. Internal hiring should be preferred to external hiring when knowledge and skills specific to the firm are important, when promotions are crucial for motivating current workers, when the costs of a hiring mistake are particularly large, and when an additional vacancy (created when a worker switches jobs internally) is not too costly.

MOTIVATION

Hiring is one of the most important decisions that organizations regularly make. When choosing between internal and external hiring, managers need to consider their own organizational environment, since some environments favor one method over the other. Other relevant factors include the nature of the job and its level within the organization, characteristics of the firm and industry, and the interaction of internal and external hiring policies and other practices in a firm's human resources management system. Hiring practices are also relevant for an organization's retention policies, because one firm's poached manager is another firm's external hire. Whether the job is a promotion or a lateral transfer is also relevant. This overview of what is (and is not) known empirically about internal and external hiring can equip managers to design and manage effective hiring policies in their organizations.

DISCUSSION OF PROS AND CONS

In 2014, *Harvard Business Review* published a list of the world's 100 best-performing chief executive officers (CEOs) [1]. Among the top ten CEOs on that list, internal promotion is more prevalent than external recruiting, but both methods are used.

These patterns are not unique to the top ten CEOs. They also pertain to other CEOs and high-level managers. Managerial and professional jobs are more commonly filled through internal promotions or lateral moves than through external promotions or lateral moves. There is a better balance between internal and external hiring in lower-skilled jobs (such as clerical and expert workers), suggesting that the bias toward internal hiring rises along with the level in the job hierarchy. The fact that internal promotions are more prevalent than external hiring but that both are observed suggests that there are pros and cons to internal hiring, with the context influencing which dominate.

The theory of internal and external hiring

An obvious reason to prefer insiders is that they understand the company and its organizational culture and have developed skills that are specific to the organization. Those skills tend to induce long-lasting employment relationships between workers and employers because the uniquely productive employment relationship benefits both parties. Moreover, both parties' expectations that the employment relationship will last stokes the desire to invest in further developing these skills. Also, when hiring insiders, the level of uncertainty is lower, which makes a disastrous hire less likely. That consideration is particularly important when the organizational costs of a bad hire are high.

Other rationales for internal hiring concern incentives. If workers know that they need to outperform only their internal peers (as opposed to a vast pool of potential external hires) to win a promotion, a bit of extra effort can meaningfully increase their chance of victory. In contrast, also having to outperform an unspecified number of external applicants is discouraging, and additional effort may not seem worthwhile. Employers might then bias promotion competitions in favor of insiders [2]. However, while strengthening incentives, such handicapping increases the chance of making an inferior promotion.

Thus, there is tension between using promotions to create incentives for workers and using them to match workers to jobs as efficiently as possible [3]. Sometimes the two objectives

conflict. For example, promoting the best-performing professor in a college to dean might be good for incentives (because the highest performer wins the promotion) but bad for efficient job assignment (because the best performer as a professor might not be the best suited for the dean's job). Thus, even though workers have already invested considerable effort with an eye toward winning a promotion, this concern for efficiency may tempt an employer to pass over the top performer in favor of an external hire, because the larger external candidate pool can allow the firm to find a better match. Anticipating such "reneging," workers might not exert much effort. But because workers would have greater motivation if they were confident that the employer was committed to an internal hiring policy, employers might want to establish and adhere to internal hiring policies [4].

However, worker motivation driven by considerations of promotion may not always be in the employer's best interest. For example, employees may underperform on the tasks most relevant to their current job and overperform on the skills relevant to a higher-level position to which they aspire. To discourage such behavior, employers could shrink the difference in compensation between the worker's current job and the higher-level management job, which should lower the cost of hiring externally rather than promoting internally [5].

External recruitment also has advantages. It brings fresh ideas to an organization. Outsiders are not enmeshed in organizational politics, making them less susceptible to unproductive influences by peers and subordinates. The pool of potential job candidates is larger for external recruitment, particularly if the firm is willing to cast a wide net and invest heavily in complementary recruitment and screening strategies. As relatively unknown quantities, external hires have strong upside potential, so an external hire could turn out to be a superstar, making external hiring worth the risk. Finally, though rarely mentioned, external hiring fills one vacancy without creating another, whereas internal hiring creates a cascade of new vacancies along the job hierarchy.

The threat of external hiring may also prevent workers from becoming complacent. This point may seem at odds with the argument that internal hiring policies strengthen worker incentives (because exerting a bit more effort will improve promotion chances more than if the worker were competing equally with outsiders as well as insiders). But the two considerations can coexist without contradiction. In some organizations, workers can collude to share some of the gains of a promotion. Consider a small department with a handful of people who have known each other and worked together for years. There may be an understanding, perhaps unspoken, that the worker who is promoted will treat the others with particular generosity. Such an understanding effectively reduces the size of the "prize" that accompanies promotion and may lead to some complacency on everyone's part. Shaking things up through the prospect of an external hire may induce greater effort. In contrast, in organizations where workers are less personally connected, there is little risk of collusion and therefore less need for external hiring.

Empirical evidence on internal and external hiring

Much of the empirical research on internal and external hiring simply documents their relative prevalence, describes how observable characteristics differ between internal and external hires, and identifies the types of firms that tend to rely heavily on internal hiring [6], [7], [8]. The empirical evidence covers a variety of contexts (different countries, occupations, and so on), and these differences should be kept in mind when drawing conclusions.

Other empirical research offers evidence for or against a particular theoretical prediction related to internal and external hiring. Some findings are consistent with a particular theoretical motivation for internal hiring. It is important to understand that a combination of motivations may be at work and that the empirical evidence usually does not assess the relative importance of multiple motivations occurring simultaneously. The different theoretical perspectives highlighted above mean that it is not always easy to interpret empirical evidence on the merits of internal and external hiring because different theories may be consistent with the same empirical fact, and indeed different theories may have been developed precisely to explain the same fact. But knowing the facts is important even when they permit multiple interpretations.

Routes for entering (and re-entering) firms and jobs

Recent empirical evidence on the routes workers follow to enter new jobs comes from a large Finnish panel data set (including firms and workers) for 1981–2012 from the Confederation of Finnish Industries, the central organization of employer associations in Finland [7]. Manufacturing industries are heavily represented. The data include 78,654 person-year observations for 55,103 unique individuals employed in 1,126 firms. For example, a person who graduated from college in 1994 and took a first job in that year and switched to a new job in 2001 would contribute two observations to the data sample.

The data show that the most common way to enter a new job is via an external lateral move, in which a worker changes firms but not job levels. These moves account for 32% of new job entries. The second and third most common ways are internal promotions (25%) and internal lateral moves (28%). External promotions are infrequent (4%). Internal demotions account for more than 8% of entries into new jobs (or more than 11% if external demotions are included). Re-entrants (workers who left to work for another firm and then returned) account for 12% of external promotions, 17% of external lateral transfers, and 11% of external demotions [7].

Of workers who remain in their current firm (and job) in a given year, 15% experience some type of job transition the following year. About 20% of workers who are internally promoted in one year experience some type of further job transition in the next year. The percentage is similar for external recruits who move laterally in a given year, at just over 18% [7].

Job history and the internal or external hiring decision

The Finnish data reveal that the number of prior job titles, number of prior firms, and number of prior promotions are all lower for internally promoted workers than for external hires who move laterally. However, average job performance (prior to the transfer) is higher for internally promoted workers [7].

Research using Danish registry data reveals that having a greater number of prior roles in the same firm results in a higher probability of internal promotion to a top executive position. The comparison holds constant educational attainment, gender, age, current occupation, tenure, general work experience, and the total number of roles (internal and externally) [9]. A similar result is found for external recruits with a greater breadth of internal experience: the number of prior internal roles relates positively to the probability

of achieving an external promotion to a top executive position. Thus, acquiring a greater breadth of internal skills improves a worker's prospects for promotion both internally and externally, at least at the top executive level.

External hiring occurs at all job levels but becomes less likely in top positions

Empirical evidence generally shows that external and internal hiring occur at all levels of a job hierarchy but that the prevalence of internal hiring increases at higher levels. For example, in the Finnish data, internal hires account for 19% of hires at the fifth job level from the top but 48% at the top of the hierarchy [10]. Moreover, linked worker-firm panel data from Sweden show that internal promotions or transfers are used to fill 43% of positions at the lowest of five job levels but 88% for the highest job level [11].

Biased promotion contests for CEOs: Handicapping external candidates

One theoretical rationale for internal hiring is that firms bias promotion competitions (particularly at the higher ranks of the organization) against external candidates, to preserve incentives for the internal candidates. Thus, external candidates are hired only when they are considerably better than insiders. Empirical evidence consistently shows that external hires look better on paper than internal hires [6], [7], [12]. If an internal and an external prospect look similar on paper, employers generally go for the internal worker, meaning an external applicant's record must exhibit a large margin of superiority to secure the position. This result is consistent with external hires facing a handicap when evaluated alongside internal workers. Compared with internal hires, external hires are older and have more experience and education. (Theoretical rationales for external hires having stronger credentials than insiders are offered in [2] and [4].)

The relevant evidence on the handicaps imposed on external candidates is from a sample of 1,035 CEO successions between 1974 and 1995 in large US firms (Forbes 800 firms) [3]. Firms heavily favor internal hiring for CEOs. The study defines internal promotions as successions in which the new CEO was employed for more than a year in the same firm before being promoted to CEO. External promotions accounted for just 187 of the 1,035 cases (18%).

The study focuses on the magnitude of the handicap imposed on external candidates, arguing that it should be highest when internal candidates are more comparable to each other, when internal candidates are less comparable to external candidates, and when there are more inside candidates. Firms are separated into two categories according to whether or not they have a "product or line of business organizational structure" [3]. If they do, this is interpreted as a situation in which internal candidates are more comparable to each other. A measure of firm similarity in the industry is used to assess worker similarity: if firms are similar, internal and external CEOs are likely to be similar. The basic idea is that when two firms in an industry are very similar, the unpredictable events that affect one are more likely to affect the other than if the two firms are very different, and this consideration affects hiring strategies and therefore the types of workers the firms employ. Finally, firms with more supervisory employees are more likely to choose an insider. All three predictions are empirically supported, which is consistent with firms handicapping external candidates in CEO contests.

Future promotion prospects

If externally hired workers for a given job level are of higher quality than internally promoted workers at that job level, externally hired workers should have brighter promotion prospects within the firm. Empirical evidence on this issue comes from the personnel records of workers in a single US financial institution from 1986 to 1994 [12]. The study finds that if two workers, one externally recruited and the other internally promoted, have the same job tenure and grade level (as measured by the “market salary” for the job in question), the externally hired worker is more likely to get promoted and to experience a greater number of further promotions. These effects diminish at higher job levels.

The challenges of measuring the relevant variables to be held constant when making the empirical comparison between internal hires and external recruits complicate the interpretation of results. For example, workers who are externally recruited from a lateral position in another firm spent some time in that job level at their original firm, but the data cover only time spent in the new firm and not in the previous one. When two workers, one internally promoted and the other externally recruited, are compared in the data, their time at the job level can be accurately measured only for the internal worker. So if the previous firm offers a greater chance of future promotion, that could reflect more experience in the job level for the external recruit. The amount of relevant experience could be determined with data that track workers across firms, enabling information from the prior employer to be observed [7], [9], [10].

The preceding empirical comparison helps to discriminate among competing theories. The finding that external recruits have better future promotion prospects is consistent with using internal hiring to create strong incentives for a firm’s workers, but it is not implied by other theories. For example, if internal hiring occurs only because of greater “inside knowledge” that gives internal hires a productivity advantage over external recruits, this should not imply better future promotion prospects for external recruits.

Larger (and more “bottom-heavy”) firms do more internal hiring

An established empirical finding is that large firms are more likely than small firms to hire CEOs internally. Recent UK evidence corroborates that result for non-executives and further shows that the shape of the job hierarchy matters as well as the number of workers. Companies with more “bottom-heavy” hierarchies (with many workers distributed at the lower levels of the job hierarchy and few at the top) exhibit a greater tendency to hire internally [8].

Training policies complement internal hiring

An internal hiring policy may complement other human resource practices, in particular those associated with encouraging long worker tenure. A natural example is training. A key advantage of internal hiring is that internally hired workers have accumulated knowledge and skills that are particularly valued at their own firm but not at others. Some of those skills may be acquired as a result of their firms’ training policies. Recent empirical evidence is consistent with the hypothesis that training policies and internal hiring policies are complementary in some firms. Evidence from a 2004 cross-section of British establishments reveals that larger, more bottom-heavy employers were more likely to rely on internal hiring policies and, simultaneously, to do more training [8].

Worker incentives provide a further rationale for a positive relationship between internal hiring and training. Restricting promotion competitions entirely, or mostly, to insiders creates incentives to work hard, since a bit of extra effort leads to a meaningful increase in the chance of promotion if a worker is competing only against other insiders. The same logic that applies to effort also applies to training. At least some of the training focuses on skills that are valuable at the current firm but that would be less so elsewhere. If the firm has a policy of hiring mostly insiders, this creates a strong incentive for workers to undertake such training, because workers know that such efforts have a better chance of being rewarded with an internal promotion. In that context, training opportunities are, at least in part, investments workers make to increase their future career prospects.

Influence of industrial sector and job title on internal hiring

Empirical evidence on the influence of specific industrial sectors on the internal hiring decision is provided by an analysis of a sample of Spanish industrial plants surveyed in 1997 [13]. The surveyed group was a representative sample of more than 6,000 Spanish manufacturing plants with 50 or more workers in a dozen sectors. Usable information was obtained from 653 plants.

The industry categories exhibiting the greatest use of internal promotion were textiles; dressmaking, leather, and footwear; wood and cork; paper, publishing, and graphic arts; metallurgy and mechanical product manufacturing; and a residual group called “various manufacturing industries.” Those exhibiting the least use of internal promotion were chemicals, machinery and mechanical equipment, and non-metallic mineral products.

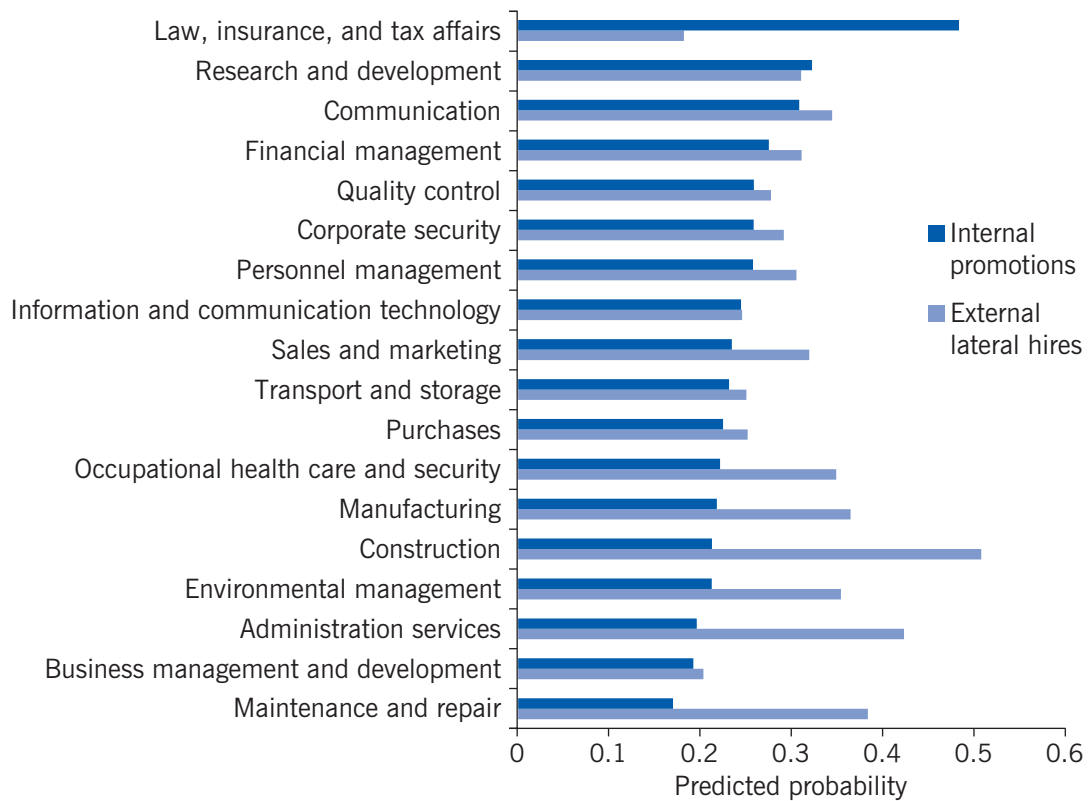
In the Finnish panel data set for 1981–2012, the pattern across job titles in the probability of internal promotion in the next year differs considerably from that of an external lateral move [7]. These differences are displayed in Figure 1.

LIMITATIONS AND GAPS

A limitation of the empirical research on internal and external hiring policies is that it is hard to get a firm sense of the consequences of these policies without something akin to a scientific experiment, and such an experiment would be difficult to design or identify (for example, arranging for a firm to make an abrupt shift from an external hiring policy to an internal hiring policy or vice versa).

To appreciate the difficulties, contrast internal and external hiring policies with policies involving incentive pay (such as a switch from hourly pay to piece rates, a change in the generosity of an existing piece rate, or a switch from individual to team-based bonuses). Compensation policies are easily and precisely measured; either a firm uses incentive pay for a certain worker group or it does not, and if it does, the terms of the plan can be easily measured. But it is harder to identify an internal hiring policy. Most firms use a blend of internal and external hiring, and even within a firm there may be considerable variation in the degree of internal hiring across different job titles, as suggested in Figure 1. An internal hiring policy may be thought of as a handicapping system that biases hiring decisions in favor of insiders. But how strong does the bias have to be before the firm can be said to use an internal hiring policy? Moreover, firms rarely make abrupt, dramatic changes in the degree to which they favor insiders, whereas abrupt and major changes in incentive pay and other compensation policies are not unusual.

Figure 1. Predicted probability of internal promotions and external lateral hires, by job titles



Source: Based on DeVaro, J., A. Kauhanen, and N. Valmari. "Internal and external hiring: The role of prior job assignments." Paper presented at the Fourth SOLE-EALE World Meeting, Montréal, Canada, June 26–28, 2015 [7].

For these reasons, empirical research has revealed the organizational consequences of various changes in the compensation system (particularly those involving incentive pay) but has been unable to exploit similar methodologies in the area of internal and external hiring.

A further limitation of research on this topic is that empirical work has not revealed much about the relative importance of various motivations for internal hiring. Several theoretical arguments have been presented to rationalize internal hiring policies, but their relative importance remains an open empirical question. As noted, it can be anticipated that multiple motivations for internal hiring policies may apply simultaneously.

SUMMARY AND POLICY ADVICE

Evidence from a variety of empirical contexts consistently shows a hiring bias in favor of insiders that intensifies at higher levels of the job hierarchy. Empirical evidence is less clear on the relative importance of the motivations for internal hiring that have been proposed in theoretical work. These motivations can be expected to differ by firm and job characteristics, so that the right strategy for a particular firm depends on its context and situation. Thus, the people charged with designing hiring strategies for their firm should be aware that there is considerable heterogeneity in hiring strategies by industry and job type.

Nonetheless, some general principles can be suggested. The relative value of internal hiring is higher when firms rely heavily on promotions (as opposed to other policies such as incentive compensation) to motivate workers and when specialized knowledge and skills that apply mostly to the firm in question (and that are less valuable elsewhere) are crucial for productivity.

There is less uncertainty about the productivity of internal than of external hires. Thus, external hires tend to have greater upside potential but also greater downside potential. The cost of making a big mistake in hiring, therefore, bears heavily on the internal or external hiring decision. The short-term inconvenience of externally hiring a secretary ill-fit for the job is rather easily fixed, but an incompetent externally hired CEO could inflict enormous damage. Employers should consider, therefore, how resilient the organization would be to the costs imposed by a bad hire.

Empirical work suggests that the efficacy of internal or external hiring hinges on other policies also in place. Firms that invest heavily in recruitment and screening or that are trying to staff jobs in which the productivity of applicants can be assessed quickly and reliably (such as vacancies in an orchestra) may find external hiring appealing. Put another way, firms that rely heavily on external hiring should consider investing heavily in recruitment and screening activities to better weed out the bad hires that are more likely under external recruitment.

A final word of policy advice concerns a point that is often neglected in the literature. Internal hiring decisions should be made with careful consideration of their implications elsewhere in the job ladder, particularly at the lower levels. When a vacancy is filled by internal promotion, either the firm's personnel shrinks by one or a second vacancy is created, so that a sequence of internal promotions creates a cascade of vacancies down the job ladder. Although the sequence of new vacancies has the benefit of creating incentives throughout the ranks of the organization, there are clear costs attached to new vacancies. Promoting some workers internally may be unappealing because they are simply too good in their current job to pull them out of it, a phenomenon known as "Putt's Law" [5]. The greatest chief financial officer (CFO) in a firm's history might be rewarded with a promotion to CEO, but then the firm has lost the greatest CFO in its history. A related point concerns complementarities in settings where team production is important; an internal promotion might undermine a high-productivity team by removing one of its key members.

Acknowledgments

The author thanks two anonymous referees and the IZA World of Labor editors for helpful comments and suggestions on earlier drafts. He also thanks Hugh Cassidy, Hodaka Morita, and Mike Waldman for helpful comments. Previous work of the author contains a larger number of background references for the material presented here and has been used intensively in all major parts of this article [5], [7], [8].

Competing interests

The IZA World of Labor project is committed to the *IZA Guiding Principles of Research Integrity*. The author declares to have observed these principles.

© Jed DeVaro

REFERENCES

Further reading

- Bidwell, M. "Paying more to get less: The effects of external hiring versus internal mobility." *Administrative Science Quarterly* 56:3 (2011): 369–407.
- Gibbons, R., and M. Waldman. "Careers in organizations: Theory and evidence." In: Card, D., and O. Ashenfelter (eds). *Handbook of Labor Economics, Volume 3*. Amsterdam: North Holland, 1999; pp. 2373–2437.

Key references

- [1] *Harvard Business Review*. "The best-performing CEOs in the world." *Harvard Business Review*, November 2014.
- [2] Chan, W. "External recruitment versus internal promotion." *Journal of Labor Economics* 14:4 (1996): 555–570.
- [3] Tsoulouhas, T., C. R. Knoeber, and A. Agrawal. "Contests to become CEO: Incentives, selection and handicaps." *Economic Theory* 30:2 (2007): 195–221.
- [4] Waldman, M. "Ex ante versus ex post optimal promotion rules: The case of internal promotion." *Economic Inquiry* 41:1 (2003): 27–41.
- [5] DeVaro, J., and O. Gürtler. "Strategic shirking in promotion tournaments." *Journal of Law, Economics, and Organization* (Forthcoming).
- [6] Baker, G., M. Gibbs, and B. Holmström. "The internal economics of the firm: Evidence from personnel data." *Quarterly Journal of Economics* 109:4 (1994): 881–919.
- [7] DeVaro, J., A. Kauhanen, and N. Valmari. "Internal and external hiring: The role of prior job assignments." Paper presented at the Fourth SOLE-EALE World Meeting, Montréal, Canada, June 26–28, 2015.
- [8] DeVaro, J., and H. Morita. "Internal promotion and external recruitment: A theoretical and empirical analysis." *Journal of Labor Economics* 31:2 (2013): 227–269.
- [9] Frederiksen, A., and T. Kato. *Human Capital and Career Success: Evidence from Linked Employer-Employee Data*. IZA Discussion Paper No. 5764, 2011.
- [10] Kauhanen, A., and S. Napari. "Career and wage dynamics: Evidence from linked employer-employee data." In: Polachek, S. W., and K. Tatsiramos (eds). *Research in Labor Economics*, Volume 36. Bingley: Emerald, 2012; pp. 35–76.
- [11] Lazear, E., and P. Oyer. "The structure of wages and internal mobility." *American Economic Review* 94:2 (2004): 212–216.
- [12] Chan, W. "External recruitment and intrafirm mobility." *Economic Inquiry* 44:1 (2006): 169–184.
- [13] Bayo-Moriones, A., and P. Ortin-Angel. "Internal promotion versus external recruitment in industrial plants in Spain." *Industrial and Labor Relations Review* 59:3 (2006): 451–470.

Online extras

The **full reference list** for this article is available from:

<http://wol.iza.org/articles/internal-hiring-or-external-recruitment>

View the **evidence map** for this article:

<http://wol.iza.org/articles/internal-hiring-or-external-recruitment/map>