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The firm as the locus of social comparisons: Standard promotion practices versus up-or-out☆

Emmanuelle Auriol[a], Guido Friebel[b,*], Frauke von Bieberstein[c]

[a] *Toulouse School of Economics, CEPR, France*
[b] *Goethe University Frankfurt, CEPR, IZA, Germany*
[c] *University of Bern, Switzerland*

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ABSTRACT

We suggest a parsimonious dynamic agency model in which workers have status concerns. A firm is a promotion hierarchy in which a worker's status depends on past performance. We investigate the optimality of two types of promotion hierarchies: (i) standard promotion practices, where agents have a job guarantee, and (ii) "up-or-out", in which agents are fired when unsuccessful. We show that up-or-out is optimal if success is difficult to achieve. When success is less hard to achieve, standard promotion practices are optimal provided the payoffs associated with success are moderate. Otherwise, up-or-out is, again, optimal.

1. Introduction

Status is an important determinant for human behavior, a proposition supported by psychologists and economists alike (e.g., Frank, 1985; Huberman et al., 2004; Moldovanu et al., 2007). Status concerns are particularly important at work; people spend much of their time at the workplace, and their behavior at work is an important determinant of an economy's efficiency. The goal of gaining higher status in an organization motivates people to work hard for long periods of time; examples from the academic world, law firms, investment banks, and consulting firms abound. Making partner at a law firm, or getting tenure in a university provides much stronger motivation than just getting a wage rise.

Barnard (1938, p. 145), the first modern management theorist, was well aware of the relevance of status for motivation and the necessity to provide both monetary rewards and status: *"Even in strictly commercial organizations, where it is least supposed to be true, money without distinction, prestige, position, is so utterly ineffective that it is rare that greater income can be*

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* Corresponding author at: Goethe University Frankfurt, Grueneburgplatz 1, 60323 Frankfurt am Main, Germany. Tel.: +49 6979834826.
E-mail address: gfriebel@wiwi.uni-frankfurt.de (G. Friebel).

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made to serve even temporarily as an inducement if accompanied by suppression of prestige." Drucker (1954, p. 154) expressed similar thoughts: "*But financial rewards are not enough. People, whether managers or workers, whether in business or outside, need rewards of prestige and pride.*" Indeed, most organizations do not only provide monetary incentives, but they also allocate status between workers by giving them awards, office space, company cars, and, arguably most importantly, promotions. Some of these attributes also provide material benefits or affect working conditions, whereas others are purely symbolic and are valued for the social or psychological benefits they entail. While we acknowledge all of these factors, for the sake of clarity and tractability, in this paper we focus on the non-material sources of status.

Despite the prominence of status concerns and the widespread use of promotions as a way to differentiate people's status, there are relatively few papers in economics investigating the design of organizations and incentive contracts in the presence of status concerns (Auriol and Renault, 2001, 2008; Moldovanu et al., 2007; Besley and Ghatak, 2008; Marino and Ozbas, 2011).[1]

Our paper builds on Auriol and Renault (2001, 2008). Auriol and Renault (2008) propose a general representation of preferences over social status and income where both tend to reinforce each other. Given these preferences, they show that a principal who can commit will always offer minimum rewards (both in status and money) to junior employees. Juniors will be incentivized to work only through the perspective of promotion. Auriol and Renault (2001) take a particular example of this general framework to derive closed form solutions of the optimal incentive contract. In these papers, though, workers are homogeneous and do not get fired, even if they are unsuccessful. In reality, workers differ in their productivity and people may get fired. In the present paper, we allow for such firing policies as part of the optimal hierarchy, and compare what has been called "standard promotion practices" with the "up-or-out system".

Going back to Doeringer and Piore (1971), in firms employing standard promotion practices incentives are given through promotions and wages are associated to job titles (see for instance, Baker et al., 1994). "Up-or-out" exposes employees to more risk and steeper incentives. Employees work for some years as juniors with the explicit or implicit understanding that upon completion of this phase, they will either be promoted or will have to leave the firm.

We derive the two promotion hierarchies as solutions to a simple dynamic agency model, describe their properties in terms of profits, wages paid to juniors and seniors, and the ratio between them, the implied span of control. We determine when one or the other is optimal and generate some empirical predictions. We also consider heterogeneous workers and endogenize workers' outside options by considering self-employment opportunities.

An important literature has looked at the rationale for firms to maintain standard promotion practices,[2] and up-or-out has attracted much attention among economists as well.[3] As in Lazear and Rosen (1981) or in Malcomson (1984), much of the literature on promotion hierarchies argues that tournaments solve contracting issues related to non-verifiable or hardly measurable output.

Our model is also a tournament model, because successful workers receive increases in wages and status, but we do not rely on restrictions on the contractibility of output: output is verifiable and measurable on a cardinal scale. Indeed, in many sectors in which up-or-out is applied, measures of individual output are observable and verifiable. For instance, in academia, publications and citations of a researcher are easily verifiable. Although these might be imperfect measures of productivity, they are employed as a proxy for individual output and are not only used as the basis for promotion decisions taken by universities, but also for the allocation of public funds (e.g. in Germany and the UK). Similar measures are available for the record of investment bankers (the return on the funds invested or the profits generated) or lawyers (size and frequency of cases won, or clients acquired).

In our model, there is one large firm that offers workers either standard promotion practices, or up-or-out. Workers can choose to be self-employed or to work in the large firm. Three different employment forms are hence generated from the same model: self-employment, standard promotion practices, and up-or-out systems. By working in the promotion hierarchy, workers receive the opportunity of gaining additional status. The firm allocates status among workers by means of job titles or ranks. For incentive purposes, all juniors enjoy the same low status and successful agents receive a large increase in status through promotions. In equilibrium, only high-productivity agents enter the large firm and as everyone exerts the same effort, workers take a status gamble. Self-employment, in which there is no reallocation of status,[4] is preferred by less productive workers, because they have little to gain from competing for status and incentive pay with more productive types. Note that in our framework we do not consider highly visible entrepreneurs like Bill Gates and Mark Zuckerberg, who are the principals of large corporations. Instead, we have in mind self-employed entrepreneurs with low

[1] Status in Auriol and Renault (2001, 2008) and Besley and Ghatak (2008) is different from Moldovanu et al. (2007), in which money is the source of status. As we are interested in organizational design, it is natural to focus on rank in a hierarchy as the source for status.

[2] For surveys of the theoretical and empirical literature, see Gibbons and Waldman (1999), and Waldman (2009).

[3] Below we review the relationship to the following papers: Demougin and Siow (1994), O'Flaherty and Siow (1995), Kahn and Huberman (1988), Waldman (1990), Ghosh and Waldman (2010).

[4] Notice that we are not saying that there are no social status concerns of self-employed, as the market for Rolex or Porsche demonstrates. However, such external symbols are different from the internal status symbols like promotions. Internal status can be controlled by the firm and is, consequently, an element of organizational design, which is the focus of our paper.