# 5 On the need to extend the tournament theory of compensation through insights from status research

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Whatever organizational theory one considers, organization and management are viewed as means to motivate and coordinate individuals most efficiently so as to direct all their competences and efforts to the organization's goals. For instance, early concepts such as scientific management proposed selecting the best workers, assigning them to the most appropriate tasks, and using money as a predominant motivator (e.g., Locke, 1982). Despite fierce criticism, especially from advocates of the human relations movement, monetary incentives are still considered by scholars and practitioners alike as prime motivators of individual behavior and performance. Studies and publications focusing – on the one hand – on single problems and issues of motivating workers and managers by means of money to work hard, and rewarding them for their productive contribution, or – on the other hand – on developing the optimal compensation schemes are overwhelming.

Explaining existing compensation structures, analyzing normative properties of alternative compensation schemes, and determining efficient executive compensation systems are at the centre of personnel and organizational economics (e.g., Lazear, 1999; Encinosa, Gaynorb, and Rebitzer, 2007; Lazear and Shaw, 2007). This literature analyzes the motivational effects of compensation and reward systems at the organizational level, and predominantly emphasizes the need to increase shareholder interests by defining and applying optimal employment contracts and efficient pay structures (e.g., Becker and Huselid, 1992). Of special interest among new institutional economists and organizational theorists is the theory of tournaments, as it provides a rigorous formal model to explain the phenomenon of disproportionate executive compensation, for instance.

The basic ideas and the concept of tournament theory have been elaborated by Lazear and Rosen (1981). In order to overcome inherent problems of incentive contracts based upon *absolute* levels of individual performance, i.e., defining and monitoring clear performance measures at high cost regarding effort and output independent of external shocks (e.g., Baker, 1992), the authors propose using *relative* performance in rank-order tournaments. Under certain assumptions it is shown that competitive tournaments and respective prizes are frequently more efficient and superior to traditional pay-for-performance compensation schemes, as they not only motivate the targeted manager or management level, but all employees of subordinate levels that strive for promotion. Thus, it is proposed to substitute salaries contingent upon absolute output levels by predetermined prizes for winners and losers of periodic tournaments according to the rank order of contestants (Lazear and Rosen, 1981; Lazear and Shaw, 2007, pp. 94ff.), similar to the medieval knight tournaments and today's sport tournaments (e.g., tennis and golf). Tournament theory has found broad acceptance, particularly among economists, because of its formal rigidity and testability and has been further elaborated on (early contributions, e.g., by Green and Stokey, 1983; Nalebuff and Stiglitz, 1983; Rosen, 1986; and Bhattacharya and Guasch, 1988). Although a lack of tests has been initially acknowledged (e.g., O'Reilly, Main, and Crystal, 1988; Becker and Huselid, 1992; Main, O'Reilly, and Wade, 1993), tournament theory received at least some empirical support in various contexts – frequently sport events and experimental studies – over the years (e.g., Rosenbaum, 1979; Bull, Schotter, and Weigelt, 1987; Ehrenberg and Bognanno, 1990; Gibbs, 1994; Eriksson, 1999; Conyon and Sadler, 2001).

Tournament theory, embedded in neoinstitutional theory and principal-agent reasoning, has been predominantly applied to explain and to justify the grading of salaries and disproportionately high chief executive officer (CEO) compensation. As it provides a logical and to some extent empirically confirmed justification of salary differentials, tournament theory falls victim to a more general criticism of excessive executive compensation (e.g., Byrne and Bongiorno, 1995; McCall, 2004). Triggered by corporate scandals, mismanagement, and bankruptcies in the course of the recent economic crisis, corporate governance practices and especially compensation of CEOs and senior managers have been publicly disputed, and income caps have been called for (e.g., Solomon and Meckler, 2009). However, applying tournament theory to executive compensation is also criticized for its improper argumentation by analogy to sports tournaments (Rees, 1992) or due to inaccurate tests regarding its relevance (Gibbs, 1994). Moreover, from the beginning it has been fundamentally questioned with regard to its simplistic assumptions and models, which do not match reality. Interestingly, this questioning has emanated not only in behavioral sciences, but also from economists such as Baker, Jensen, and Murphy (1988, pp. 600ff.), whose concluding statement reads as follows:

> Ultimately, it may be that psychologists, behaviorists, human resource consultants, and personnel executives understand something about human behavior and motivation that is not yet captured in our economic models. Alternatively, it could be that practitioners are adopting policies that sacrifice organizational efficiency for egalitarian pay systems. If one of these reasons explains the gap between economic theory and compensation practices, then either there are intellectual profits or organizational efficiencies to be gained by focusing attention on the compensation puzzles we have outlined. We believe both kinds of profit opportunities will materialize (p. 615).

This – in principle – open view contrasts starkly with Lazear's perspective, who believes that "economics provides a rigorous and in many cases better way to think about these human resource questions than do the more sociological and psychological approaches" (1999, p. 200).

Most probably, one has to assume that there is no "either – or" rather than the opportunity to mutually advance different disciplines, research streams, and theories (Washington and Zajac, 2005). There is a great overlap regarding structural and conceptual foundations of tournament theory and status research. Central to both concepts are hierarchical orders and their impact on human behavior. Tournaments are based on relative performance assessments, and status is in any case the expression of relative esteem. Attempts to win a tournament are not only motivated by the monetary value of the prize, but also by the pure status effect (e.g., the Ashes in Cricket, the Sydney to Hobart Yacht Race, the Ironman Triathlon in Hawaii or the Nobel Prize). Winners of tournaments improve their status, which is sometimes more important (e.g., being engraved on a challenge cup) than the monetary prize that may come with it. The gained status may allow the winner to reap additional monetary profits (e.g., own fashion labels) or non-monetary benefits (e.g., exclusive club membership). Thus, one might ask to what extent research questions addressed and insights generated by status researchers from various disciplines are adopted by tournament theorists. In particular, it may be of interest to learn whether striving for status has been explicitly considered by tournament theory with regard to its possible substitutive or complementary effect on monetary incentives. In addition, to what extent do tournament theorists reflect and test their recommendations (i.e., an increase in number of contestants or an increase in organizational levels from tournaments) against practical limitations and reverse organizational developments such as downsizing? As status research has highlighted the motivational importance of procedural aspects such as the process of bestowing status, the question arises as to whether this has also been considered by tournament theorists. However, beyond such a stock-taking review it might have a stimulating effect for future research and corporate practice to emphasize insights from status research that may extend and advance our understanding of organizational tournaments.

Therefore, the main objective of this contribution is to show how and to what extent important insights derived from research on organizational status (a) have been applied by tournament theory, (b) may help to further develop and enrich tournament theory in order to better explain organizational practices, as well as (c) provide practitioners with more appropriate principles to design and efficiently implement competitive tournaments as a means of improving organizational effectiveness.

The chapter is structured as follows. First, the relevant literature that centers on tournament theory will be reviewed. Beyond simply repeating the main assumptions and basic models, important extensions, particularly with regard to integrating crucial factors such as emotions (Kräkel, 2008) or status (Moldovanu, Sela, and Shi, 2007), are reviewed, recommendations and empirical tests are summarized, and criticism is substantiated. Second, it will be shown how insights from interdisciplinary research on status may offer answers to relevant aspects of this criticism or may direct organizations that make use of tournaments toward important issues that improve its efficiency and effectiveness. Finally, results and implications for future research and management practice are summarized.

## Tournament theory – stratification and competition

### *Rank-order tournaments and promotion-based compensation*

Although some predecessors may be identified (e.g., Rosenbaum, 1979) tournament theory has its seeds in the seminal work of Lazear and Rosen (1981) and in extensions elaborated by Rosen (1986). In search of optimal labor contracts that ensure maximum effort by employees while minimizing non-marginal monitoring costs on the part of the employer, economists propose substituting traditional compensations schemes that link wages to input or output units (e.g., piece rates) for rank-order payment schemes, if monitoring is difficult or not reliable (Lazear and Rosen, 1981; Rosen, 1986; Anabtawi, 2005). In order to understand the underlying approach and rationale, it is necessary to emphasize that tournament theory has its roots in neoinstitutional economic thinking, especially agency theory (Holmström, 1979; Carmichael, 1983; Rees, 1985; Shapiro, 2005). Acknowledging bounded rationality, tournament theory assumes (a) the existence of economic actors that opportunistically try to maximize their individual utility, (b) money as a predominant motive, and (c) information asymmetry in favor of the agent. Under such premises, risk-averse employees, i.e., agents, will seize any opportunity to exploit risk-neutral supervisors and shareholders, i.e., principals, if they are not monitored, sanctioned, or aligned with the interests of the principal. If monitoring costs have to be accounted for, economic reasoning expects rational assessment and maximization of the principal's utility function, i.e., weighing monitoring benefits (e.g., well-performing employees), and monitoring costs. Given these assumptions, tournament theorists argue that compensating agents based on relative rank-orders tournaments, i.e., promotion-based remuneration, is economically superior to other compensation schemes "in the presence of costly monitoring of workers' efforts and output" (Lazear and Rosen, 1981, pp. 841ff.), and in the presence of externalities such as technical breakdowns or economic cycles that affect their efforts and output (Gibbs, 1994).

Applying tournaments as a means of compensating and motivating employees in organizations implies the existence of some sort of hierarchy or ranks, i.e., promotion opportunities, and attractive prizes and rewards for winners. For a single period or tournament the motivation and effort of a contestant is mainly determined by two factors: the individual valuation of the promised reward (prize offer) and the individual expectation (probability) of winning the prize. The latter depends on the amount of skill and effort exerted (Anabtawi, 2005), the number and quality of competing contestants, and a random element of chance (Lazear and Rosen, 1981), which has been further elaborated as "noise" by Lazear (1998, pp. 231–236). Rosen (1986) extended the original one-stage model into a model that accounts for *n* sequential elimination rounds, i.e., multiple promotions. His model and subsequent calculation refers to tennis tournaments as a proxy for career games in order to determine optimum prize or inter-rank spreads across organizational levels (e.g., Lambert, Larcker, and Weigelt, 1993). Under the conditions of sequential elimination tournaments it is formally demonstrated that for risk-neutral managers, prize spreads increase linearly until the final round, i.e., running for CEO, while for risk-averse managers, prize spreads have to follow a convex function (pp. 440ff.). Other important predictions derived from tournament reasoning are: (a) the larger the prize the more effort and performance are exerted, (b) motivation and effort reach a maximum if the chance of winning is uniformly distributed, while they decrease if the chance of winning declines (probability $\rightarrow 0$) or improves (probability $\rightarrow 1$), (c) due to an infinite horizon of future competitions, the prize of becoming a CEO has to be particularly large (Gibbs, 1994). As difficulties of monitoring absolute effort and outcomes are fundamental preconditions of applying tournament theory, empirical proof of the "tournament based compensation system"–"individual effort" link is characterized as anachronistic (Lazear, 1998, p. 241) or difficult (Gibbs, 1994). Nevertheless, there are some studies that prove predictions with regard to sports (e.g., Ehrenberg and Bognanno, 1990; Becker and Huselid, 1992), experimental settings (Bull *et al.*, 1987), and the corporate world (e.g., Conyon and Sadler, 2001).

## Criticism and limitations

However, other studies report findings that contradict tournament theory predictions (e.g., O'Reilly, Main, and Crystal, 1988; Ariely *et al.*, 2009). These inconsistencies fuel criticism that refers to the irreconcilable differences between sports and executive compensation (e.g., Rees, 1992) and improper simplifications of organizational reality (e.g., Baker *et al.*, 1988; Gibbs, 1994). While any theory has to simplify reality to produce generalizable predictions, it has to withstand the assessment of its prediction quality and practical applicability. In other words, simplicity alone does not make a good theory – what does is a theory's explanatory and normative reliability with regard to the phenomena it pretends to predict. The following paragraphs detail major criticisms and respective limitations of tournament theories of executive compensation.

*Basic criticism*. Lazear and Rosen's tournament model (1981) and later extensions have been fundamentally criticized for their inherent tendency "to mask complexity" (Baker *et al.*, 1988, p. 600), which is a friendly glossing-over for the term "oversimplification," i.e., negligence of important variables and interdependencies, that leads to equivocal explanations and recommendations. However, as it is not possible to elaborate every aspect of criticism of tournament theory published in scholarly literature here, the following section will focus on issues that address stratification, competition, and prizes in order to clarify possible extensions based on the interdisciplinary research on status within organizations.

As briefly mentioned above, tournament theory stands in the tradition of new institutional economics and its fundamental assumptions. Accordingly, most studies, like the seminal work by Lazear and Rosen (1981), follow a highly formalized approach to deriving general conclusions and recommendations with regard to optimum labor contracts, superior design of organizational incentive structures (e.g., Green and Stokey, 1983), or contract production (Knoeber, 1989; Knoeber and Thurman, 1994). Most economists do not criticize the basic model, its assumptions, and applicability within organizational contexts, but rather extend it by introducing, for instance, multiple agents (Green and Stokey, 1983), multiple elimination tournaments (Rosen, 1986; Leeds, 1988), or by modeling contests (O'Keeffe, Viscusi, and Zeckhauser, 1984), for example, to avoid "Yes-Men" behavior (Cummins and Nyman, 2007). More fundamental criticism comes from a few economists who challenge its advantageousness over other compensation schemes and/or its organizational applicability (e.g., Dye, 1984; Baker *et al.*, 1988; Rees, 1992; Gibbs 1994).

Moreover, originators and advocates of rank-order tournaments as a means of motivating managers to show an optimum level of effort and performance predominantly build an analogy with sports tournaments: "The theory is easily described using the metaphor of a tennis match. Consider a tennis match between Agassi and Sampras" (Lazear, 1998, p. 225). "For analytical tractability and simplicity, the ideas are best revealed by a paired-comparison structure, as in a tennis-ladder. The tournament begins with $2^N$ players and proceeds sequentially through N stages" (Rosen, 1986, p. 702). However, as pointed out by a few discerning economists, the analogy of promotion-based compensation schemes with sport tournaments falls short for several reasons (see Table 5.1).

While this criticism also empirically questions proofs that refer to sport tournaments, it is still rooted in economic reasoning (e.g., rationality, utility maximization, monetary rewards). Therefore, not surprisingly, alternative compensation schemes (e.g., Baker *et al.*, 1988) or alterations of the original models are proposed so as to overcome single tournament limitations. Examples of the latter approach are proposals to increase prize spreads in order to account for external entrants, i.e., inter-firm and inter-tournament mobility (Anabtawi, 2005), introducing handicaps to adjust for heterogeneous contestants (O'Keeffe *et al.*, 1984), preventing uncooperative behavior by decreasing chances of interference among contestants (Lazear, 1995, pp. 35ff.), or responding to the problem of abetting the Peter Principle (Lazear, 2004).

For whatever reason, there is – to my best knowledge – no comprehensive debate about or criticism of tournament theory among social scientists, especially from disciplines such as psychology, sociology, or organizational behavior. Apparently, personnel economics and behavioral science-based human resource management widely ignore each other and seem to predominately cultivate two separate worlds. This comes as a surprise as both disciplines have the same research subject and objective, particularly to increase organizational efficiency by explaining human behavior and steering individual motivation. Tournament theory deals with prizes (i.e., monetary motivators), structures (i.e., multi-level elimination tournaments and rank-orders), and processes (i.e., competition among contestants) as means of maximizing individual effort and performance for the sake of the organization. Strikingly, status research within the context of

**Table 5.1** ***Important limitations to the analogy between sports and organizational compensation tournaments***

| Feature | Sport tournaments | Organizational tournaments | Exemplary sources |
|---|---|---|---|
| *Homogeneity of contestants with regard to abilities and skills* | Rather homogeneous (e.g., invited PGA players) to ensure attractive competition (e.g., closer races have greater prizes) | Often rather heterogeneous (e.g., different age, gender, education, experience, firm-specific knowledge) | Dye (1984)<br>Gibbs (1994)<br>Rees (1992) |
| *Structure and stability of tournament* | Deterministic organization (e.g., number of rounds and stages, fixed slots, elimination rules, and prizes)<br>As a rule no entrants at later stages of the tournament; in any case fixed number of contestants | Flexible organization (e.g., variation of career paths, random slots, ambiguous rules, no elimination except for up-or-out policies, partly negotiable prizes/salaries)<br>frequent openness to external contestants at different stages, i.e., variable number of contestants | Dye (1984)<br>Gibbs (1994) |
| *Quantification of utility function* | Relatively easy | Very difficult or impossible | Rees (1992) |
| *Rules and requirements on subsequent stages* | Identical | Different (i.e., best performer at a lower level may not be the best candidate for the next) stage) | Baker *et al.* (1988)<br>Rees (1992) |

| | | | |
|---|---|---|---|
| *Observability and measurability of effort and performance* | Rather easy (e.g., unforced errors) and without delay | Rather difficult with long lags between effort and success | Baker *et al.* (1988)<br>Dye (1984) |
| *Impact and observability of opportunism, cheating and collusion* | Low impact as long as attractive competition is not endangered<br>Rather easy to monitor and to sanction | High impact as collaboration and team products supplement competition among employees<br>Rather difficult to monitor and sanction (e.g., politicking, "yes men") | Anabtawi (2005)<br>Baker *et al.* (1988)<br>Dye (1984)<br>Main *et al.* (1993) |
| *Success factor(s)* | Primarily abilities, disposition, and effort of all competing contestants<br>competition | Contestants for a open position and non-contestants (e.g., blue-collar workers)<br>Collaboration even among contestants | Rees (1992) |
| *Need to motivate losers* | No, as contestants may enter the soon to follow next tournament at the opening round | Yes, as most passed over candidates are demotivated and stay within the organization or may take an external promotion option because of infrequent promotion opportunities | Anabtawi (2005)<br>Baker *et al.* (1988)<br>Dye (1984)<br>Gibbs (1994)<br>Rees (1992) |

organizations is concerned with rather similar issues, for instance, the individual strive for status (e.g., Huberman, Loch, and Öncüler, 2003), the development and shaping of formal and informal status structures (e.g., Ridgeway and Walker, 1995), and the existence of status competition and its impact on group performance (e.g., Loch, Huberman, and Stout, 2000). A closer look reveals that there are some minor indications within the economic literature that status may have an impact on the design of organizational tournaments and that promotion-based compensation systems relying on status may supplement money as a relevant motive: "While few would dispute the importance of money, it is the status derived from it that may be most important, and this is known through a process of social comparison" (Main *et al.*, 1993, p. 624).

*Assessing attempts to integrate status.* A few economists have responded to calls for analyzing tournaments with prizes other than money by either treating status as part of the individual utility function (e.g., Fershtman and Weiss, 1993; Fershtman, Murphy, and Weiss, 1996) or – most recently – by modeling a pure status case, i.e., status as sole motive, and a case where status is a direct result of the monetary prize a contestant may win (Moldovanu *et al.*, 2007). While the first approach shows substitution effects between occupational status and wages as well as – to some extent economically negative – adverse selection problems, the second approach claims that the "model offers a convenient framework for the study of the various implications of concerns for social status on organizational design" (Moldovanu *et al.*, 2007, p. 355).

Moldovanu *et al.* formalize the decision problem of a principal who wants to maximize total output of his or her agents by designing an optimal status hierarchy based upon restrictive assumptions. For the chosen assumptions the authors show: (a) "that for any distribution of abilities, the top category in any optimal partition must contain a single agent," (b) "Given a partition in status classes, adding a new element to an arbitrary class may, in fact, reduce output," with the exception that homogeneous entrants at the lowest status class are beneficial, (c) "A proliferation of status classes is optimal if the distribution of abilities has an increasing failure (or hazard) rate," i.e., the more professional the contestants, the greater a proliferation of job titles and status, (d) "whenever there are transaction costs attached to finer partitions, the coarsest possible nontrivial partition may be ultimately optimal," and (e) for the case of status deriving purely from monetary prizes, the optimal structure is always two classes, of which "the top class consisting of the single most productive agent and the lower class containing all other agents who get paid just enough to keep them in the contest" (Moldovanu *et al.*, 2007, pp. 341ff.)

While the fact that economics and tournament theory are aware of the impact of status is commendable, the explanatory power of the attempts mentioned above is rather limited due to two main reasons. First, the degree of simplification which is needed to derive formal equations for rational decision-makers, be it individuals participating in a tournament or principals designing the optimal status classes. For instance, considering status as a discrete factor of an individual utility function appears not to be too enlightening because it may turn out to be a "fudge" factor that makes it possible to explain any possible phenomena (e.g., Leibenstein, 1986; Postlewaite, 1998). Similarly, assuming a deterministic and equal relation between effort and output, assuming simultaneously submitted efforts, or assuming abilities as private information of each candidate (e.g., Moldovanu *et al.*, 2007) facilitate formal equations and definite solutions, but do not match the real phenomenon that authors pretend to explain. Second, tournament theory is restricted to status as an end and to structuring rank-order systems, and neglects procedural aspects such as the importance of the process of awarding status, i.e., promotions (e.g., Ferris, Buckley, and Allen, 1992), temporal issues like the expected timeframe for receiving a promotion after being passed over, and contextual factors like labour markets and legal environments. Thus, one has to doubt that it is only the relative strengths of monetary incentives versus striving for status that determines optimal promotion and rank-order tournaments, and that this explains and justifies extremely high CEO salaries as stated by Moldovanu *et al.* (2007).

*Conclusion.* Explanations and recommendations based upon tournament theory are plausible and consequential within its system of a highly-restrictive set of assumptions. While economists argue that these assumptions are beneficial and comply with "Godfrey Hardy's dictum whereby good science must, at least, provide some 'decent' distance between assumptions and results" (Moldovanu *et al.*, 2007, p. 344), the dark side, i.e., the danger of basing decisions on theories that differ from reality, is frequently concealed. For instance, tournament theory is predominately used to justify and to perpetuate salary spreads and absurdly high CEO compensation packages, because it seems to explain the phenomenon, despite striking deviations from its underlying assumptions.

By applying insights from status research, the narrow perspective of tournament theory will be broadened with regard to four important issues that show the value of status in understanding organizational compensation. Within the first section, the extent to which non-monetary motives and incentives contribute to an actor's willingness to participate in organizational tournaments and to exert extra effort, in order to derive more efficient promotion-based compensation schemes, will be analyzed. The second section will highlight the fact that designing organizational hierarchies has to account for several organizational objectives, some of which may contradict recommendations derived from purely economic rank-order tournaments. The third section will examine the impact of the tournament process upon the tournament results and the organizational efficiency. Finally, in the fourth section the possible conflict that originates from the fact that tournament theory unilaterally builds upon individual competition, whereas many organizations are designed to foster inter-individual collaboration, is highlighted.

## Value of status in understanding organizational compensation

### *Beyond money – striving for status*

The underlying assumption of tournament theory is that contestants, e.g., employees in any organization, are ultimately motivated by monetary incentives to increase their effort and performance or output. Accordingly, exerting oneself and competing for promotion, i.e., climbing the career ladder and achieving higher organizational status, should depend purely on the money that is linked to it (directly and indirectly by being further promoted). Consequently, striving for status is seen as being motivated by the monetary gains related to a higher status or its instrumentality in generating monetary advantages (e.g., advertisement campaigns). As such an assumption contradicts even the most basic motivation theories one finds in any textbook on organizational behavior or human resource management (e.g., McClelland's [1961] theory of needs), one has to elaborate the factors that motivate people to strive for status, i.e., try to win a rank-order tournament, in a more psychologically complete way.

Within the interdisciplinary research on status, two distinct individual motives for the aspiration to reach a certain status are distinguished. Human beings view status as a means to an end or as an end in itself. Status is instrumental, i.e., a means to achieve other ends, if employees strive for promotion, i.e., status, in order to receive a higher salary and other monetary benefits. However, money is just one end. Other ends are status symbols which are tied to a certain status and can be handed over at award ceremonies (Berger *et al.*, 1998; English, 2005) whether tangible like office location or company car (Zalesny and Farace, 1987) or intangible like the deference of co-workers and privileges (Weber, 1922, p. 305). Status symbols are an important motive for people to outperform others, because of their signaling power that leads to a favorable perception by others (Ridgeway, 1991) and boosts the self-esteem of their owners (Sachdev and Bourhis, 1987). Winning a tournament can produce – independently of the winner's prize – valuable signals that may put additional resources such as talents, customers, capital, or social networks at the disposal of the winner (see Chapter 1 for a long list of the benefits of having higher status). Another means to an end is the hierarchical authority organizations assign to management positions, not only because the position holder can exert power over subordinates, but also with regard to the discretion and freedom it provides. Brass (1984) has shown that there is a strong relationship between organizational positions and their influence regarding important decisions. Based upon their position within the organizational hierarchy, high-ranked employees are able to enforce their will on to lower-rank employees and to govern them, leading to an increase in their own discretion (Finkelstein, 1992). Notably, senior managers and CEOs can use their high status to control for instance strategic decisions of their company (*ibid.*) as well as their own severance packages (Wade, O'Reilly, and Chandratat, 1990). Table 5.2 provides an overview of selected studies that explain different issues and ways for status to become a means to an end.

While one may argue that many of the aforementioned examples prove that striving for status has only one reason, which is money, the variety of tangible and intangible motives impedes formalization and general solutions. If a person's motivation is dominated by the need

Table 5.2 *Studies emphasizing status as a means to an end*

| Authors | Ends status for which may be exploited |
| --- | --- |
| Ahuja, Galletta, and Carley (2003) | High status improves – under certain circumstances – chances of scientists to publish |
| Aquino, Grover, Bradfield, and Allen (1999) | Individuals of high status less frequently fall prey to harassments than comparable individuals of low status |
| Ball and Eckel (1996) | Individuals of high status achieve better results in negotiations |
| Ball and Eckel (1998) | High-status individuals earn more, all else equal, than low-status individuals |
| Ball, Eckel, Grossman, and Zame (2001) | Actors of high status reach higher prices as sellers and pay less as buyers |
| Okamoto and Smith-Lovin (2001) | High status enables to change the subject and consequently to exert influence within group discussions |
| Owens (2000) | Group members with high status are more likely to use dominating tactics such as interruptions and threatening gestures to control group participation and attention |
| Thye (2000) | As part of negotiations individuals of high status receive more resources, their own resources are perceived as more valuable, and they are privileged transaction partners |

for power or by the wish to be a respected member of an exclusive club, he or she will demonstrate any necessary effort and performance to become a CEO, even if the compensation package is significantly lower than that pre-calculated by tournament theory. Furthermore, social recognition associated with status and status symbols such as job titles, desirable parking spaces, or office equipment are comparatively cheap motivation factors (Loch, Yaziji, and Langen, 2001; Stajkovic and Luthans, 2001). Taking this perspective, it is more than likely that firms and shareholders alike sustain substantial financial losses resulting from paying their executives irrational, i.e., needlessly high, salaries.

In addition, there is an ongoing discussion among researchers of organizational status as to whether status is an end in itself, i.e., that participating in and especially winning a tournament is an intrinsic value by itself that provides satisfaction and thus motivation for contestants (Waldron, 1998; Loch *et al.*, 2000). It might be argued that the human need for recognition, esteem, and positive differentiation from others supports the claim that status is an end in itself (Rijsman, 1983; Rege, 2008). Empirical studies show that people value relative ranking with regard to peers more than absolute income (e.g., Solnick and Hemenway, 1998; Huberman *et al.*, 2003). They waive potential income (e.g., a higher base salary, higher paying investors) in favor of reaching a higher status (e.g., belonging to a special group, being aligned with more prestigious venture capitalists) that wins them recognition and reputation among relevant judges (Hsu, 2004; Almenberg and Dreber, 2009). According to Frank (1985) employees have waived parts of their rightful monetary compensation in favor of lower-ranked group members in order to ensure their appreciation and in order to safeguard their higher status.

The fact that various motives determine striving for status and thus the willingness to participate in rank-order tournaments begs the question of how this may influence insights derived from tournament theory, which relies solely on monetary motives. However, scientific research has not come up with consolidated results regarding the motivational impact of different incentives, i.e., stimuli (Stajkovic and Luthans, 2001, p. 580). In particular, the relevance and interdependencies of status versus monetary incentives have not been researched sufficiently (Weiss and Fershtman, 1998). As a result, there are no basic insights as to whether absolute prizes, i.e., salary spreads, between two hierarchical levels, status symbols, or status in itself motivate employees. Instead, some scholars argue that the motivational impact of these motives depends on contingencies and especially on individual characteristics (e.g., Bandura, 1977; Goddeeris, 1988; Stajkovic and Luthans, 2001). This also applies for money. People have different attitudes and opinions regarding both money (Solnick and Hemenway, 1998; Mitchell and Mickel, 1999) and status (Huberman *et al.*, 2003), to say nothing of the variety of behavior induced by cultural and institutional differences (e.g., Zelizer, 1997). Yet, beyond the absolute value of tournament prizes, whether money or status, one may analyze trade-offs.

Money, status symbols, and privileges have a diminishing marginal utility like any other good that satisfies personal needs (e.g., Rabin, 2000). Additionally, we can assume substitutability between these incentives. Salaries of senior managers allow for consumption and for acquiring certain status symbols (e.g., sports cars, luxury villas). Similarly, they may use their organizational status and respective privileges to achieve things such as club memberships or admission to exclusive schools for their children; things that are less dependent on income than on belonging to a special class. The motivational power of money decreases for holders of highly-ranked positions within an organization that have accumulated significant income while climbing the career ladder. According to recommendations derived from tournament theory, companies have to offer disproportionately larger increases in prize spreads in order to compensate for this loss of motivation to expend effort and to participate in future tournaments (Rosen, 1986). Assuming increasing marginal costs for the abovementioned incentives, it seems to be rational to substitute money with status, status symbols, and status-based privileges.

## Rank-orders and hierarchies – more than motivational instruments

According to personnel economics and tournament theory, organizational hierarchies mainly serve to motivate employees – particularly managers at all organizational levels – to exert maximum effort and performance in the service of company objectives and shareholder interests. Consequently, relevant variables such as (a) the number and homogeneity of contestants, i.e., employees, (b) the number of tournaments, i.e., hierarchical levels, and (c) prizes, i.e., salary increases, are optimized with regard to maximize output at the lowest cost (e.g., monitoring). As a result, tournament theory recommends increases in homogeneity among contestants, to reduce "noise," i.e., internal and external uncertainties, to increase salary spreads (particularly at the top of the firm's hierarchy), to fill the highest rank with just one person, and to proliferate stratification, i.e., to maintain as many organizational (or prize) levels as possible (e.g., Lazear, 1998; Moldovanu *et al.*, 2007). With regard to the optimal number of contestants, an appropriate probability to win the tournament has to be considered (Orrison, Schotter, and Weigelt, 2004). Apparently, applying these assumptions and recommendations results in a large and stable organization of many hierarchical levels that operates in a rather static environment, which allows the organization to continuously grow.[1] However, with rare and rather shallow exceptions (e.g., Lazear, 1998, pp. 238–241), interdependencies between different dimensions of organizational structures and normative recommendations derived from tournament theory, as well as their respective impact on organizational efficiency, have not been elaborated by these theorists. Instead of addressing business trends that run counter to the abovementioned requirements such as organizational downsizing or the uncertainty in turbulent markets, an overly simplistic compensation magic bullet is offered. Because these real markets and organizational trends ultimately increase noise and reduce the individual probability of winning the tournament, they are assumed to require a further increase in the prize, in the salary spreads, in order to further maximize the effort exerted by contestants (Bognanno, 1994; Lazear, 1998). In this regard, an empirical study provided some evidence that firms with low promotion rates and limited upward mobility have comparatively larger salary spreads (Leonard, 1990).

Apparently, tournament theory neglects other, partly conflicting objectives that determine an optimal organizational structure. Without repeating and reviewing the broad and rich literature about organizational theories, organizational design, and organizational behavior here, organizations are effective means to attract and pool scarce resources (e.g., the resource-based view – Wernerfelt, 1984) and an efficient alternative to markets with regard to coordinating specialized work (e.g., transaction cost theory – Williamson, 1981). From the perspective of resource dependency theory (Pfeffer and Salancik, 1978), an organization is mainly shaped by its competitive environment and hence by its effective control of strategic resources. If CEOs and senior managers are a strategic resource, i.e., scarce and difficult to substitute or copy, the need to pay competitive salaries may provide another explanation for significant spreads at the top levels of the firm. However, more importantly, the different theories elucidate the need to view hierarchies and organizational structure as means of fulfilling different purposes beyond purely motivating managers to exert effort. As a result, the rather simple formalization of rank-order tournaments has to give way to the challenge of a complex optimization problem.

How may research about organizational status contribute to extend tournament theory? First of all, it is necessary to note that status research suffers from similar problems, i.e., for status and status symbols to be effective motivational instruments, the number of hierarchical levels and rank-order tournaments has to be increased. Downsizing organizations and flattening hierarchies result in fewer promotion prospects and in fewer formal career opportunities – the probability of winning a tournament is shrinking because there are almost no tournaments. Consequently, promotion-based motivation becomes less effective, leading either to frustration induced by long waiting periods or to increased employee turnover, which may not be in the best interests of the firm. However, utilizing insights from status research may at least partially solve the motivation problem while avoiding a significant increase in salary spreads. Accordingly, additional formal status hierarchies beside the flattened management hierarchy may be established. Respective examples are the "100 Percent Club" (Norwest Corporation Financial Services) or the "Top Elite Club" (AGF Insurance) mentioned by Auriol and Renault (1999). Universities that have limited hierarchical levels from assistant professor to tenured professor make use of parallel status hierarchies and rankings based on individual achievements regarding research (e.g., publications, funds) and teaching. Combining these additional rank-orders with status symbols such as titles (e.g., Senator in the case of 3M), forms of recognition (e.g., displays, award ceremonies), or challenge trophies that cannot be bought but have to be awarded may motivate extra effort at much lower cost than increasing the salary spread (Greenberg and Ornstein, 1983). Additionally, such technical or specialist career tracks may better match both the specific needs of the organization and the variety of motives of different groups of employees. A fact often overlooked by economists is that people are not motivated solely by monetary or promotion, the prize they may gain at the end of a tournament, but also by the tournament itself and the circumstances of the award ceremony, i.e., procedural issues (e.g., Lambert *et al.*, 1993, p. 456). Accordingly, implementing different forms of intra-organizational tournaments may stimulate additional efforts (e.g., top researcher, top lecturer, top fundraiser of the year).

## Tournament processes – who wins depends not only on who competes, but how

Research on status adds to our knowledge about organizational compensation beyond tournament theory by highlighting the relevance of processes as supplements of structure. Tournament theory – even extensions as provided by Moldovanu *et al*., 2007 – considers only the starting conditions of a tournament (e.g., number of contestants, stages, prizes) and its results. The process itself is rather neglected (Lambert *et al.* 1993, p. 456). Consequently, determinants and issues of the tournament process that may impact its efficiency are also neglected. While tournament theory assumes that all contestants play against an anonymous market and are not able to interact with and influence their opponents' chances to compete (Lazear and Rosen, 1981, p. 101), reality seems to be at odds with this assumption. Tennis and golf players and even (US) National Football League or National Basketball Association teams compete against each other using a limited set of clear rules in a highly-monitored environment that leaves little room for hidden characteristics, action, or intention, such as doping and bribery. Apparently, organizational reality differs considerably from this kind of sports tournaments. It is not noise, i.e., luck alone, that biases organizational tournaments and rank-order promotion systems, but rather it is the existence of multiple interdependencies. Management tasks are predominately team products or at least dependent on the input of internal and external contributors. Team products, lack of transparency, ambiguous assessment criteria, interdependencies as well as externalities offer many opportunities to influence the chances of oneself and others to win the tournament.

Power, for instance, may be exploited to manipulate the outcome of organizational promotion tournaments (Bratton, 2005). Status is an important source of power and exercise of influence. Organizational members that hold a high status, e.g., senior managers, frequently have the legitimate authority to monitor, assist, or encourage organizational members with lower status regarding their motivation and effort to win a certain tournament, i.e., being promoted (Finkelstein, 1992, pp. 508ff.). Empowerment related to achieved status provides its holder with additional sources of power such as budget, access to scarce resources, information, or participation in critical decision-making processes (Pfeffer, 1981). Graffin *et al.*(2008) found evidence for the fact that there are spill-over effects from high-status CEOs, so called star CEOs, on their subordinates insofar as the latter receive higher average compensation and are more likely to become CEOs themselves. Assuming further that employees of a certain organizational level competing for a position on the next level are heterogeneous with regard to their informal status and their status of expertise, even if they are of equal capabilities and skills, there is ample reason to predict that high-status contestants will opportunistically exploit their status. On the one hand, they may openly or covertly enforce contestants of lower status to withdraw or to reduce their effort by threatening them in order to increase their own chances of winning. On the other hand, high-status contestants may even design the tournament in their own favor. High-status employees are able – due to interdependencies – to influence higher authorities in favor of their own promotion (Wade *et al.*, 1990). And even if one does not assume direct influence of high-status actors, there is evidence "that status makes a significant difference in the tournament selection process" (Washington and Zajac, 2005, p. 294), i.e., who is seen as eligible and who is not.

However, people with low status may attempt to impact promotion-related decisions by holders of high status through social influence tactics like collaboration and friendliness (Stahelski and Paynton, 1995). A good example is that of young scholars, who try to become part of high-status faculties or collaborate with high-status faculty members in order to increase their chances of publishing in reputed academic journals, which will subsequently increase their probability of being promoted and receiving tenure. Although their performance may be lower than that of contestants who try to publish innovative ideas on their own, the likelihood that they will win the competition for an academic position is enhanced. Furthermore, it could be argued that such behavior will impair the overall goals of the research community, as it frequently leads to perpetuating old paradigms rather than propelling scientific breakthroughs. Additionally, lower-status people like those with less capability may use unfair means, may cheat, and may use sabotage to increase their chances of winning a tournament based on relative performance (Chen, 2003). Especially in highly-competitive contexts with tournament structures that have winner-take-all characteristics (Frank, 1995), these seem to spur attempts to circumvent existing rules, norms, and ethical standards and to make use of illegitimate means, as small relative differences lead to huge benefits for the winners (e.g., Lazear, 1989). Even scientific and research societies – though equipped with fundamental ethics of scientific rigor, incorruptibility, and honesty – are not free of misconduct. Highly-publicized examples of this are fake reports of a scientific breakthrough that shocked the scientific community (e.g., Einhorn and Arnst, 2006; Jia, 2006). However, science in so called developed countries is far from being less impacted from academic or scientific misconduct, as past studies have proved already (e.g., Armstrong, 1983). Hence, there is some evidence that rank-order tournaments and promotion-based incentive systems may produce dysfunctional behavior that runs counter to the intended objectives, especially in non-deterministic contexts (Nippa and Markoczy, 2007).

Instead of an overt competition among rather homogeneous contestants not influenced by non-contestants, organizational promotion is most likely influenced by personal networks, affiliation, and cliques. Acknowledging gratitude for being promoted through the support of co-workers or knowing of their loyalty, promoted employees will frequently use their new status and respective power to get their supporters promoted as well. Additionally, status has an impact on negative affectivity and violence in the workplace which biases organizational tournaments, probabilities of being promoted, and hence individual performance (Aquino *et al.*, 1999).

Consequently, tournaments suffer from the fact that rather heterogeneous contestants entwined in several social networks of varying status fight with different weapons. Imagine the outcome of a medieval tournament where one knight sits on a donkey but armed with a musket faces his opponent on a war-horse directing a lance on him while team members stroll around looking for opportunities to trick the rivals. As a result the tournament is neither efficient nor does it produce the right winner. On the one hand, influential, powerful, scheming, and cheating actors will not have to exert effort and – more importantly – do not contribute to the objectives of the organization (Loch *et al.*, 2000). On the other hand, the chances that employees who stick to predetermined rules and perform independently will win diminish. If these employees perceive or believe that there is no fair competition, i.e., a fight with unequal weapons, they will either adjust, which turns out to be even more counter-productive for the organization ("cheating is infectious" – Ariely, 2009) or they will reduce their effort according to insights from equity theory (e.g., Adams, 1963) or expectancy theory (e.g., Vroom, 1964).

If power and the exercise of influence induced by status differences within an organization frequently lead to biases regarding the true ranking of contestants and subsequently demotivation among those who believe they are being treated unfairly, how can organizations counter these effects? First, like proposals based upon tournament theory, they may try to increase homogeneity among contestants, i.e., reduce status differences. While this might be possible with formal status, it appears to be rather difficult with various forms of informal status hierarchies. In any case, it presumes a positivistic belief that societies and organizations can be shaped and designed at will. Yet, as a result of interdependencies, complexity, and dynamism, many variables defy management control. The same is true with the second approach, which tries to suppress any irregular influence of contestants on the structure and process of the tournament. However, organizational promotion tournaments in most cases require measures of performance other than probing whether the tennis ball was on or behind the line. While it may be easy to determine the best salesperson based upon annual sales or profit, it is naïve to believe that promotions at the senior management level are free from contextual impacts and subjective appraisals (e.g., Judge and Ferris, 1993). In a study of factors influencing compensation systems authored by Encinosa *et al.* (2007, p. 204), only seventeen percent of all respondents reported having a formal policy or explicit guidelines on expected productivity of group members. Hence, rank-order tournaments and promotion-based motivation in complex organizations frequently suffer from ambiguity and manipulation.

The efficiency of tournament-based incentive schemes is not only impeded by status, power, influence, and fairness, but is also significantly influenced by another procedural aspect, i.e., performance feedback. While feedback on individual performance is commonly perceived as increasing work performance, the contrary is the case with tournament incentive schemes. Providing feedback on individual performance during the tournament "causes mean performance to deteriorate," for several reasons highlighted by Hannan, Krishnan, and Newman (2008, p. 911).

## Competition versus collaboration – key mediator of performance impacts of status

Tournament theory implicitly assumes that organizations profit exclusively from competition among their employees. Therefore, fueling competition among contestants for a higher rank or position leads to an increase in individual effort, i.e., less shirking and laziness, which results in optimal performance for the employer. However, as mentioned above, competition among employees runs counter to teamwork, knowledge sharing, empowerment, and providing support for co-workers. As research on status has frequently analyzed the striving for status-performance link, reviewing these studies may also add to our knowledge about organizational compensation and motivation.

However, there are no clear and consistent results so far. Studying the effect of high status on the performance of individuals, Ball and Eckel (1996) found that people with higher status gain significantly greater benefits within and from negotiation processes than their lower-status counterparts. These results are in line with findings of Ball *et al.* (2001), who examined the impact of status on market performance. Belliveau, O'Reilly, and Wade (1996) investigated the influence of status on the compensation of CEOs and showed that CEOs received significantly higher compensation if their status is higher than that of the compensation chair. Additionally, Okamoto and Smith-Lovin (2001) emphasize the advantage of superior status within negotiation processes, and report that discussants with relatively high status had a strong influence on the process and result of group discussions. However, contrary to these positive effects, Spataro (2002) reports a negative impact on the individual work performance for individuals possessing high status, especially if they have to work with someone of lower rank. Empirical studies regarding individuals possessing a low status basically report reverse findings (see Ball and Eckel, 1996; Belliveau *et al.*, 1996; and Ball *et al.*, 2001). Spataro's (2002) work on behavioral and performance changes of high- and low-status individuals within collaborative situations reports performance improvements for the low-status individuals and less effort from the high-status individuals.

In search of an explanation for these ambiguous results, the degree of competitiveness, i.e., the question of whether the organizational context is characterized by competitive or cooperative activities and behavior, appears to be a key mediator. The starting point here is to recall the perspective of status as an economic resource, i.e., as a means to an end (Berger *et al.*, 1977; Podolny, 1993; Ball *et al.*, 2001). Thus, status will be used in order to achieve its possessor's goals like any other resource. Assuming, in accordance with the main economic theories, that all economic actors act in their own interests, try to maximize their own utilities, and are opportunistic, it becomes an open question as to whether these actors will be competitive or collaborative. Applying this distinction to the findings regarding the behavior of high-status owners leads to the following explanations.

*Competitive behavior.* Two preconditions characterize an organizational context as competitive (versus collaborative): (1) high-ranking owners receive abnormal rents compared to low-status actors, and (2) there is an ongoing struggle for positions among group members. Under such assumptions, those of high status will not show signs of cooperative, collaborative behavior while interacting with counterparts that have lower status. This kind of competitive environment and behavior seems to match, for example, the studies of Ball and Eckel (1996), Ball *et al.* (2001), and the experimental setting of Podolny (1993). Even situations described by Belliveau *et al.* (1996) can be characterized as competitive, because CEOs and compensation chairs should not act cooperatively in compensation negotiations. Furthermore, the conditions described in the studies of Turner and Brown (1978), Sachdev and Bourhis (1987), and Cadinu and Reggiori (2002) also indicate a rather competitive situation.

*Collaborative behavior.* In cooperative or collaborative situations, those of high status do not receive significant rents compared to low-status actors and there is no struggle for positions. Thus, high-ranking owners regard the interests and objectives of lower-status subjects while interacting with them. Interestingly, such a condition of a "competition-free" environment seems only to be the case for the study of Spataro (2002), which basically analyzed people that worked together on a joint task.

Apparently, this distinction of whether an organization relies on and fosters competition or collaboration among its employees provides new insights regarding conflicting findings provided by status research. From this perspective, high status – respectively rank-order tournaments – enables individuals, groups, and organizations to increase their performance under competitive conditions. Under collaborative conditions, performance, which is highly dependent on cooperation, suffers; conversely, those of low status are able to enhance their performance under cooperative conditions, whereas competitive conditions create counter-productive forces leading to an erosion of performance.

Thus, applying insights from research on organizational status sheds light on the appropriateness of using rank-order tournaments within organizations. Organizations that rely on collaboration as well as on employee loyalty and retention should avoid or use rank-order tournaments with caution, while those with tasks that require independent effort from employees can benefit from highly competitive tournaments for distributions of promotions and monetary prizes. While, not surprisingly, professional service firms are frequent users of sophisticated tournament systems,[2] it turns out to be wise, i.e., efficient, for them to also find ways to maintain a minimum of collaborative behavior, for example, by integrating respective criteria into the individual assessment.

## Conclusion

Despite the fact that tournaments and promotion-based incentive systems exert strong motivational effects on employees, one has to conclude that their impact on organizational efficiency is highly overstated. The optimism of major advocates of economic tournament theory, most prominently Edward Lazear, regarding its applicability and superiority in generating the optimal labor contracts finds no support after leaving the narrow world of thought-experiments with its restrictive assumptions and misleading analogy to sports tournaments. Inducing and maintaining motivation to perform and exert effort at a maximum level through implementation of rank-order tournaments within organizations grabs one's attention due to its affinity to well-known sports events and its utility for deducing unequivocal solutions based upon formalization and mathematical calculation. However, its implementation in organizations is at the very least risky, if not in many cases counter-productive. While the economic benefit of rank-order tournaments within organizational contexts, i.e., its motivational impact, has not been measured directly,[3] there are several indications of hidden costs and ineffectiveness.

First, research in the field of organizational status has shown that people strive for status even if it is not linked to monetary resources or if they have to waive a monetary advantage (Almenberg and Dreber, 2009). Additionally, offering status and status symbols frequently turns out to be of lower cost than raising salaries. In the light of a diminishing marginal utility of money – like any other motive – it seems completely irrational to focus on just one motive, i.e., money, and to offer disproportionately high management salaries.

Second, tournament theory requires a high degree of homogeneity and stability of contestants, organizational structures, and processes to be effective. Lazear (1998) points out that rank-order tournaments not only motivate senior managers competing for promotions to the executive suite or long-time faculty seeking tenure, but also motivate junior managers and faculty. Yet, it is important to emphasize important side conditions. Lower-level employees are only motivated by tournaments on the "champion league level" if they perceive a realistic chance of also becoming eligible. Within large organizations this may be the exception rather than the rule. It is difficult to determine all of the actual participants of any "executive board" tournament (O'Reilly, Main, and Crystal, 1988, p. 260). Instead of one clear-cut management rank-order tournament, organizations offer different career paths leading to the top (e.g., sales and marketing, research and development, auditing) that have different rules and requirements. Research in the field of organizational status highlights the fact that various rank-orders, formal and informal, exist within an organization, which may all be used to motivate employees.

Third, tournament theory assumes or proposes independence of contestants (Lazear 1989), i.e., promotion depends exclusively or predominantly on the individual performance in comparison to other individuals, as in tennis or golf tournaments or car racing. However, instead of lone fighters, most organizations are based upon teamwork and efficient production of team products (Main *et al.*, 1993). Motivating employees to focus on their own career and the next promotion may even fuel opportunistic behavior and erode the willingness to collaborate, such as exchanging important information, especially among executives (e.g., Dye, 1984; Siegel and Hambrick, 2005). This tendency may be countered by assessing collaborative behavior or including co-workers in performance evaluations; however, this opens the field to power and influence tactics that run contrary to the organizational objectives. Consequently, it must be assumed that many CEOs and executive board members are not those who possess the best competencies to run the firm or those who have been the best performers at each previous organizational rank in the best interests of the firm, but those that have shown Machiavellian behavior and are mainly driven by extrinsic motivators.

Thus, tournament theory creates adverse human behavior such as collusion (Bandiera, Barankay, and Rasul, 2005) rather than preventing it. Tournament theory may enjoy great popularity because it seems to explain on a rational basis incomprehensibly high management compensations that are increasingly perceived as unfair and unethical by members of society. However, there is some evidence that the theory is abused to legitimize a fact that has other causes because it is in the best interests of these highly-paid actors. Status research sheds a different light on possible causes of such comparatively high executive compensation: interdependencies, formal and informal organizational processes, and the benefits of high status within organizations. Future research might profitably investigate how insights from status research may be even better translated into clear propositions and recommendations similar to the highly formal approach of economic tournament theory.

## Notes

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1 Baker *et al.* (1988) mention the need for organizational growth as an important precondition of tournaments to be effective. While the problem may be reduced by up-or-out rules that allow for recruiting new entrants on lower levels due to elimination of those who did not succeed, the practicability of other assumptions have not been debated explicitly. Yet, requiring low "noise" translates into internal and external certainty, i.e., organizational routines and stability, and the proliferation of hierarchical levels translates into "steep" organizational structures. Both may not be in line with interests of most organizations and their stakeholders.

2 It is noteworthy to add that professional service firms match other organizational requirements for efficiently applying rank-order tournaments such as rather steep hierarchies, comparatively clear performance measures, and also firm growth.

3 In the sense of asking employees how much they care for promotion, for money linked to a promotion, for further career chances and its monetary equivalent, or a willingness to participate in tournaments while controlling for other motives and theoretical explanations. Becker and Huselid (1988, p. 349) mention a more basic "Catch-22" problem, as tournaments structures are proposed for contexts where measuring individual performance is difficult: "A test of tournament incentive effects thus requires that greater performance be elicited when the participant knows that he or she cannot be accurately evaluated at any particular point in time."

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