

Research Statement
Patrick L. McClelland
School of Business, University of Kansas
pmcc11@ku.edu

“To be fair, no one should earn more than 5 times the ordinary worker.” - Plato

Motivation. As an outgrowth of research on top manager compensation (e.g. Finkelstein & Boyd, 1998; Hambrick & Finkelstein, 1995), top management team (TMT) pay dispersion is a topic of growing interest (e.g. Bloom & Michel, 2002; Carpenter & Sanders, 2004; Li et al., 2005). In my opinion, the attention paid to this stream of research is timely, relevant, and important. At no other time has Plato’s maxim been as violated as it is today. According to a recent AFL-CIO survey, the CEOs of major U.S. corporations earned \$10,000,000 in 2002 with \$8,000,000 of that taken home as guaranteed salary. In comparison to the average hourly worker, relative CEO pay has skyrocketed from 42X in 1980 to 531X in 2000. In comparison to their British and Canadian counterparts, CEOs of major U.S. corporations also do exceedingly well. British CEOs earn 25X the ordinary British worker while Canadian CEOs earn 23 times the average Canadian worker.

Background - TMT Pay Dispersion. As a starting point, work in pay dispersion is traditionally based on tournament theory (Lazear & Rosen, 1981). Tournament theory argues that large pay differentials within organizations not only serve to attract talented (and, ambitious) candidates, but to motivate them to perform at high levels once within the firm. In this sense, the internal labor market is seen as a tournament with pay growing over time neither in a smooth and linear progression nor as a result of investments in human capital, but rather as function of pay leaps that accompany promotion. In this sense larger pay differentials are seen as a tournament “prize” to be garnered by the winner of the competition for promotion. Lazear & Rosen (1981) argued that tournaments serve to act as optimal monitoring mechanisms in contexts characterized by agency problems in which worker output is not readily available to analysis. In as much, the authors argued that tournaments would be a suitable mechanism used as a substitute to direct monitoring.

Empirical research has verified the presence of tournaments and convex hierarchical level and pay dispersion relationships in various organizational contexts (Gerhart & Rynes, 2003). Li et al. (2005) found support for tournament theory in a test of TMT pay structures. The authors tested the relationship between pay dispersion and financial performance (measured by *Tobin’s Q* and *ROE*) in contexts characterized by

agency problems (high R&D and advertising intensity). They found hierarchical pay structures to be associated with higher levels of firm financial performance.

Conversely, significant evidence continues to mount against the normative claims of tournament theory. For example, in a study of 100+ business units, Cowherd & Levine (1992) found egalitarian pay structures to be associated with product quality. In a study of academic faculty, Pfeffer & Langton (1993) found hierarchical pay structures to be associated with lower job satisfaction, lower levels of collaboration, and lower performance. In a study of baseball team and player performance, Bloom (1999) found hierarchical pay structures to be associated with lower levels of performance in both. Among top-level executives, Bloom & Michel (2002) found hierarchical pay structures to be associated with higher turnover and shorter tenure. And, Carpenter & Sanders (2004) found multinational financial performance to be inversely related to hierarchical pay structures. Generally, the evidence found in contradiction of tournament theory predictions is couched in equity and relative deprivation theories (Gerhart & Rynes, 2003; Guthrie, 2006; Miller, 1981) pay dispersion/performance link remains an open line of inquiry:

- 1) What are the performance consequences of hierarchical pay structures at the TMT level?

Although much of the extant work in pay dispersion has focused on the performance consequences, some researchers have begun to unearth its antecedents. For example, hierarchical pay structures have been associated with investment opportunities (Bloom & Michel, 2002), the number of a firm's businesses (Henderson & Fredrickson, 2001), environmental instability (Bloom & Michel, 2002), and the number of competitors in the compensation tournament (Conyon et al., 2001). However, these new findings suggest that much remains to be ascertained. According to Bloom & Michel (2002), one area in which future research is needed is in identifying the contextual factors that yield hierarchical pay structures:

- 2) What are the contextual factors that serve as antecedents?

TMT Pay Dispersion and Financial Performance. Mixed performance results imply a non-monotonic relationship between TMT pay dispersion and financial performance. Additionally, Lazear (1989) argued that while tournament competition has its benefits (e.g. higher individual performance), they are limited. While competition will yield high performance, too much competition will result in lower levels of collaboration, and perhaps sabotage on the part of tournament competitors (Pfeffer & Langton, 1993). In

as much, it is reasonable to hypothesize a curvilinear relationship between TMT pay dispersion and financial performance where pay dispersion and financial performance is non-monotonic:

Hypothesis 1: At very low and very high levels, pay dispersion will be associated with low financial performance (inverted-U)

Moderating Effect of Collaboration. Additionally, the relationship between TMT pay dispersion and financial performance is expected to be moderated by the degree to which TMT members must cooperate/collaborate in order to perform at high levels given the demands of the task environment. Carpenter & Sanders (2004) found that the relationship between hierarchical pay structures and the performance of multinationals is moderated by the degree to which collaboration and cooperation are required among the top management team. Hence, it is reasonable to hypothesize:

Hypothesis 2: The relationship between pay dispersion and financial performance will be (negatively) moderated by the information-processing demands of the environment

While researchers continue to amass empirical results regarding the pay dispersion-performance relationship, relatively little is known about the context in which pay structures arise.

CEO Power. Finkelstein (1992) defined managerial power as the capacity of an individual to exert their will. Power is multidimensional with elements related to structure, prestige, expertise, and ownership. To the extent that power across the top management team is not asymmetrically distributed, it is likely that a powerful manager will be better able to exert his/her will. Recent empirical evidence points to the statistically significant and economically relevant effects of CEO power. Smith et al. (2005) found that asymmetries in the distribution of TMT power have important performance consequences. For example, a TMT is more likely to be associated with high financial performance when the CEO is less dominant-counterbalanced by a TMT member with significant experience. Additionally, Adams et al. (2005) found that companies in which the CEO has power over the Board of Directors and the TMT are more likely to experience greater volatility in their stock returns (a proxy for firm-specific risk). In an effort to identify how powerful CEOs affect TMT functioning, Peterson et al. (2002) found that the power of a CEO's personality impacts the dynamics of the TMT with performance consequences. Given that a dominant CEO has the capacity to exert his/her will in relation to other members of the firm's strategic leadership

structure, it is reasonable to assert that powerful CEOs also possess the capacity to construct pay structure to their benefit:

Hypothesis 3: Hierarchical pay structures (higher pay dispersion) will be positively associated with CEO power

Managerial Discretion. Managerial power cannot be exercised without restraint. Organizational and external environments serve to limit the latitude with which managers may act (Finkelstein & Hambrick, 1990). As a result, a manager's power is only one part of the tension that exists between exerting one's will and the constraints that serve to limit the ability to do so. In support of their managerial discretion hypothesis, Finkelstein & Hambrick (1990) found that executive tenure was positively related to strategic persistence in high-discretion contexts. Similarly, Haleblan & Finkelstein (1993) found that CEO dominance was associated with firm performance in high-discretion environments. Likewise, Datta et al. (2003) found that replacement CEOs are more likely to reduce strategic persistence, but in high discretion industries only. This body of empirical findings supports the notion that CEOs will be better able to exert their will when the environment allows the latitude of action with which to do so. Managerial discretion has also been used as a moderator to test relationships involving CEO compensation. Finkelstein & Boyd (1998) found that CEO compensation was positively associated with firm-level discretion. And, Wright et al. (2002) found that CEO compensation is linked to firm financial performance in low discretion environments only and with firm size in high discretion environments. Given the ability of CEOs to exert their will more so in environments that convey greater latitude, it is reasonable to assert:

Hypothesis 4: The link between CEO power and pay dispersion will be strongest in high discretion firms

Methodology. Firms will be drawn from the *Fortune 1000* for year t . Inclusion in analysis will be determined by way subsequent randomization (Finkelstein & Boyd, 1998). Data will come from secondary sources including *Compustat*, *ExecuComp*, firm proxy statements, the *Dun & Bradstreet Corporate Reference Book*, and *Who's Who in Finance and Industry*. The data will be cross-sectional with time lags over a 3-year period ($t-1, t, t+1$).

Latent constructs will be defined in accordance with standard practices in structured equation modeling. *Firm financial performance* will be defined as a latent construct for which three measures will be drawn: *distance from analyst expectations* (Puffer & Weintrop, 1991?); *relative industry performance*; and *firm-*

specific risk (a firm's beta coefficient). *TMT Pay Dispersion* will be defined as a latent construct for which three measures will be calculated: a *gini-coefficient*; the *ratio of the CEO's pay to that of the 2nd-highest TMT member*; the *ratio of the CEO's pay to that of the lowest TMT member* (Bloom & Michel, 2002). *CEO Power* will be constructed as a second-order latent construct for which four first-order constructs will be defined. *Structural Power* will be comprised of the *number of titles held by the CEO* and *whether the CEO is also the Chairman of the Board*. *Expert Power* will be comprised of the *number of functional areas in which the CEO has experience*, *organizational tenure*, and *whether the CEO has an advanced degree*. *Prestige Power* will be comprised of the *number of corporate boards on which the CEO is a director*, the *number of non-profit boards on which the CEO is a director*, and *whether the CEO has an elite education*. *Ownership Power* will be comprised of the *percentage of outstanding shares held by the CEO*, the *percentage of outstanding shares held by the CEO's family*, and *whether the CEO is the founder or a member of the founding family*. *Discretion* will be constructed a second-order latent construct for which two first-order latent constructs will be constructed. Following Finkelstein & Boyd (1998), *Firm-level Discretion* will be comprised of *capital intensity*, *R&D intensity*, and *advertising intensity*. *Discretionary Governance* will be comprised of the *percentage of outsiders appointed to the Board by the CEO*, the *number of CEOs on the compensation committee* (O'Reilly et al., 1988), *ownership diffusion* (complement of the percentage of shares held by institutions), and *leverage freedom* (complement of the debt-to-assets ratio).

Analytical Techniques. I intend to use structured equation modeling in my analyses for two main reasons. First, structured equation modeling allows for the construction of latent variables comprised of several measures designed to map to a construct's space. In as much, latent regression allows for the reduction of measurement error. Second, structured equation modeling will be preceded by a test of the theoretical model, which will allow for the simultaneous testing of convergent and discriminant validity using confirmatory factor analysis.