INSIDE AGENCY: THE RISE AND FALL OF NORTEL

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ABSTRACT

By employing the theoretical template provided by agency theory, this paper contributes a detailed clinical analysis of a large multinational Canada-headquartered telecommunications company, Nortel. Our analysis reveals a 21st century norm of usual suspects: a CEO whose compensation is well above those of his peers, a dysfunctional board of directors, acts of income smoothing to preserve the confidence of volatile investors, and revelations of financial irregularities followed by a downfall. In many ways, the spectacular rise and - sudden - fall of Nortel illustrate excesses of actors within, and contradictions of the system of corporate governance implied by the agency model. Furthermore, this case illustrates limitations of the agency framework in complex situations with short-term oriented investors.

Keywords: Agency theory, executive compensation, financial misstatement, income smoothing, stock options
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Agency theory offers management and accounting researchers a basic template outlining fundamental incentives of the key actors involved with corporate governance. The theory is defined generically as the contract wherein one party (the principal) engages another (the agent) to accept the delegation of the principal’s authority to accomplish some purpose (Jensen and Meckling, 1976). More practically, agency theory provides a simple description of basic economic incentives that exist in business relationships. Using this perspective, considerable progress has been made in that some degree of organization exists over what would otherwise be a highly diffuse and excessively pragmatic literature.

Since the rediscovery of the paradigm of the separation of ownership and control by Jensen and Meckling (1976), and Grossman and Hart (1983), many researchers - in pursuit of empirical generalizations - have focused on certain aspects of the theory, while others have examined epistemological or political perspectives (for an excellent analysis, see Kaen et al. 1988). This paper does not seek to comment on the specific successes and failures of this body of work (see reviews by Namazi, 1985; Baiman, 1982). Instead, this research suggests agency theory needs rich analysis of single companies, where the shortcomings of the probabilistic predictions of agency theory are examined in the context of a single entity. Abstracting particular measures and their statistical association with other rarified operations allows for generalization, but only by sacrificing appreciation for the rich confluence of forces that any company faces when governance is enacted. For these purposes, the power of statistical analysis can be leveraged longitudinally rather than cross-sectionally.
This paper presents an in-depth examination of Nortel Networks Corporation (Nortel); a major player in the telecommunication boom of the 1990s. The paper assesses Nortel’s rise, as well as its sudden and precipitous decline early on in the twenty-first century. More specifically, we investigate if and how four aspects of the firm’s governance contributed to its downfall: 1) executive compensation, 2) governance structure at the board level, 3) ownership structure and, 4) earnings management. For these purposes, relying on a clinical study approach, different types of archival information were studied in order to explore the rich context of agency theory thinking.

This paper contains eight subsequent sections. The first provides a thumbnail sketch of agency theory as a means of extracting specific research questions. The second outlines salient aspects of the Nortel story. This includes the facts that make the company unique and those that make it a poster child of the era. This is followed by an explanation of the data and methods. The next four sections pertain to evidence on the four research questions. In each case, historical information is juxtaposed with original empirical analyses. The paper ends with an analysis of irregularities and the downfall of Nortel, followed by a conclusion that includes consideration of the role of clinical studies in the future elaboration of agency theory.

AGENCY THEORY

Undeniably, one component of agency theory’s appeal is its elegant simplicity and origins in early social interaction (Ross, 1973). How its representation in the modern world of - unprecedented - corporate size, derivative ownership and governmental regulation came about however, is quite intricate.
Separating real control over profit-seeking affairs from owners represents important degrees of risk and potential conflict (Jensen, 1986). Efforts to align incentives of those in control with those at risk - for the consequences of action - become necessary. Agents possess varying degrees of moral hazard for being less than completely forthright stewards of principals. However, since principals are aware of these temptations, contracting efforts will be made to impose costs upon agents that are unable to signal their fiduciary adherence. Alternatively stated, agent contracts provide incentives to ensure that agents expend the desired effort and truthfully reveal the private information they may possess (Grenadier and Wang, 2005).

Grossman and Hart (1983) argue that agency problems are intensified, and the principal’s welfare diminished, when information available to the principal decreases, or the agent is in possession of special information. Similar consequences occur when the agent becomes risk averse, or the monitoring capacity of the principal decreases. Building upon ideas about shirking and monitoring explored earlier by Alchian and Demsetz (1972), various studies have sought Pareto optimal means whereby agency costs can be contractually mitigated (e.g., Kreps and Wilson, 1982; Conroy and Hughes, 1987; Demski and Kreps, 1982). A theoretical solution depends heavily upon informed self-interest in the absence of full information (Arrow, 1964) and may depend upon the trade-offs existing between the need for precision and the costs of producing precision (Verrechia, 1986). Due to various magnitudes of adverse selection and moral hazard embedded in specific situations, there is no necessary equivalence between the costs incurred by principals and the benefits realized by agents on these contracts (Denis and Denis, 1997). Aghion and Bolton (1992), Hart (1995), and Hart and Moore (1998) are
primary examples of studies that argue that complex situations are non-contractible. This is a result of the costs, complexity, or verifiability of fully conditional contracts. Hart (1995) and Hart and Moore (1998) argue that investment is not contractible, therefore the need for monitoring. A large literature has developed examining the monitoring function of the board of directors, audit committees, compensation structures, contracts, financial analysts and institutional investors, and regulatory activity.

Though primarily economic in nature, agency theory offers a rich tableau of behavioral ideas. As demonstrated by Hopwood (1974), personal motives and reactions amplify and subvert rational plans in business. Humans tend to be resourceful maximizers evaluating many dimensions of situations (Jensen, 1994) and realize that scarce human capital, often in the form of reputations, are at stake as they make flawed discretionary signals that reveal their positions. That this bears directly and consequentially upon agent compensation fuels what could be seen as a solution instrument into its own agency problem (Bebchuk and Fried, 2003).

Agency theory usually initiates its appeal with the single owner–single agent ideal type. The extent to which that representation can also meaningfully describe situations that depart substantially from this limiting model is debatable. Modern capitalism has evolved into complex permutations of ownership rights and representational capacities (e.g., Haugen and Senbet, 1981). The former includes institutional owners known to behave differently than beneficial owners of single issues contemplated by the pristine version of the theory, and also include financial analysts who act as sophisticated information gatherers and disseminators, and as a disciplining mechanism on managerial behavior.
Regulation of accounting disclosures complicates the agency model. To the extent that the information package required from publicly traded companies is set by regulation, it cannot be considered a discretionary signal by agents to owners regarding their faithfulness. Agency theory has grappled unsuccessfully with high level corporate agents possessing powers to manipulate accounting used to “keep score” through their compensation (Eaton and Rosen, 1983) and alter the nature and size of the very entity they represent (Denis and Denis, 1997; Aggarwal and Samwick, 2003). In other words, the theory does not adequately reflect that the central principal-agent relationship is contextualized by external regulation and larger equilibrium markets. Large organizations require the consideration of coalitions among hierarchically arrayed agents, wherein intra-organizational rewards such as promotion can substitute for market mediated ones (see also Arrow, 1964).

In sum, agency theory addresses the general contours of the issues for any specific company. Its ability however, to reach the specific circumstances of any consequence remains to be seen.

THE NORTEL STORY

At its peak, Nortel was a giant corporation. In July 2000, at the height of its success with a market capitalization in excess of $350 billion Canadian dollars, it accounted for more than 37 percent of the Toronto Stock Exchange Composite Index value and ranked among the largest firms in the world (Hunter, 2003).

As a diversified company focused primarily on telecommunications, Nortel seemed invincible. Commentators were pleased with its “strength across the board in its
product markets” and its focus on the fastest growing wireless and broadband communication segments (Simon, 1995). Its particular expertise – in wireless and broadband communications - allowed it to post very impressive revenue gains in product segments where it was a relative newcomer (Simon, 1996). Nortel seemed poised to exploit new Internet technologies and an expected wave of international deregulation in this sphere (Financial Times, 1995a). Using an aggressive acquisition strategy, Nortel grew quickly and well beyond North America. As a result, analysts praised what they perceived to be “solid, sustainable growth” from large R & D expenditures fueling the ‘perpetual surpassing’ of earnings expectations (Financial Times, 1995b; Morrison, 1998). Nortel’s share price more than tripled in four years. By mid-2000, it reached a peak of more than $200 Canadian dollars per share.

Starting from a strategy of being in every high-growth area in telecommunications, and benefiting from tailwinds due to regulatory and market conditions (MacDonald, 2000), Nortel tripled its sales and multiplied its pro forma operating profits several fold within five years (1996-2000). Consequently, the media proclaimed CEO John Roth a man of boldness and vision in possession of a Midas touch (Network World, 1999). This mania also spread to the analyst community, as the market grew increasingly reliant during the proliferation of the technology sector in the late 1990s. Nortel greatly increased its institutional investor ownership as more analysts hailed its performance. Analysts grew lazy in their assessments during this time. They justified high priced acquisitions such as the $US 3 billion purchase of Qtera, a firm with no sales (Alden, 1999), failed to critically scrutinize accounting changes that had revenue impacts (Morrison, 2000a) and cheerleaded questionable spin offs (Morrison, 2000b).
Meanwhile, government regulators draped the company with the Canadian flag as a symbol of national economic vitality (Kehoe, 1999). In short, everyone wanted to believe in the Nortel supernova.

Nortel’s fall from grace came swiftly and on many fronts. Beneath the unsustainable rate of growth and earnings lied massive accounting financial irregularities where results had been seriously manipulated for some time. Not only could analyst targets no longer be achieved, but good will had to be reinforced. For years, a cloud would hang over accounting results reported by Nortel, including the perennial belief that the company had “cookie jar reserves” useable to normalize results (Waters 2003). Ultimately, Nortel announced several restatements, including the largest one in Canadian history.

The accounting problems led commentators to retroactively question previously unassailable acquisitions (Morrison, 1998). Trading in Nortel stock was suspended as the trading price went into a free fall (Warn, 2001a). Before it was over, more than two thirds of Nortel’s workforce would be discharged (Morrison, 2001). Several waves of high-level corporate executives resigned, including John Roth, and Frank Dunn, the former CFO, was appointed to the helm. Investors complained that even in its downward spiral, these executives received bonuses and issued excessively optimistic projections (Warn, 2001c). Soon there would not be much left other than the lawsuits alleging issuance of misleading financial statements and blatant insider trading (Warn 2001). Nortel’s fall had been as steep as its rise. From a share price of more than $200 CDN to $0.67 CDN at its nadir, Nortel left more than 60,000 employees unemployed. Nortel continues on, now with a legacy of continuing investigations, rapid executive turnover
and empty optimism. Recently, it announced reorganizing of its basic product groups (Taylor, 2005). In the latest development, the SEC brought civil fraud charges against Frank Dunn, who has since departed, and three other former executives, for financial improprieties relating to revenue recognition, and earnings manipulations, in the 2000-2004 period (SEC, 2007). For a visual summary of Nortel performance, Figure 1 depicts the market value of Nortel over the period 1996-2003.

(Insert Figure 1 about here)

The steep rise and the dramatic fall after the year 2000 can be understood in terms of Jensen’s (2005) equity “overvaluation.” Overvaluation occurs when there is a large deviation between share price and underlying value, where there is a near impossibility in delivering to expectations. The conception is that once overvaluation occurs, it sets in motion unmanageable organizational processes. The end result is that the market exacerbates “agency” problems between managers and owners, rather than alleviating them. Specifically, market delusion prompts value destroying managerial behaviour.

“Overvaluation” was a particularly severe problem at Nortel due to augmenting factors: equity based compensation reliant on the realization of market expectations, a non-functioning board, and price pressure exerted by short-term investors. As Jensen (2005) argues, dishonesty in the earnings management game sets off irreversible forces in motion, as borrowing from future revenues necessitates even further borrowing in subsequent periods. The consequence being a total destruction of Nortel’s core value.

Evidently, the agency model did not operate very well in Nortel’s case. Separating ownership and control did not account for counterbalances that might have
checked abuses contributing to the sudden decline in fortunes of equity holders. Agency costs were either dramatically miscalculated or greatly mis-specified. The balance of this paper explores specific dimensions of this juxtaposition. Executive compensation, the governance structure (mostly at the board level), the ownership structure and earnings management comprise four typical agency theory domains.

**RESEARCH DESIGN, DATA, AND METHODS**

The paper examines a set of vignettes regarding Nortel, inspired by agency-theory, to investigate the various incentives and motivations given to Nortel’s top management, and their ensuing actions, that led to the biggest meltdown in Canadian financial markets’ history. In addition to corporate documents such as the annual report, financial statements and proxy statement, data is obtained from a variety of sources. Compustat tapes for the various financial statement data, I/B/E/S for analyst forecasts, CRSP for stock price information, Execucomp for executive compensation data, and CDA spectrum for the institutional holdings data. To comparatively asses Nortel’s various company characteristics, Nortel is compared to a control sample of firms. Specifically, sell-side financial analyst reports are examined, from where control firms are selected (the control sample is identical to A.G. Edwards’ analyst Greg Teets’ control firms). Control firms are based on two dimensions. First, large-capitalization communications equipment developers and manufacturers comprised of: Alcatel, Cisco, Ericsson, Lucent Technologies, Motorola, and Nokia. Second, specialized communications equipment manufacturers such as ADC Telecom, Adtran, Advanced Fiber Communications, Ciena, Newbridge Networks, Pairgran, Qualcomm, and Tellabs.
Wherever appropriate, comparative statistics with respect to other conglomerates are also provided. In the first set of analysis, we examine the total compensation, and total options held, held by the Nortel CEO. Next we examine the ownership structure of Nortel in terms of institutional ownership, followed by income smoothing patterns. Next we look at the propensity of Nortel to meet and beat analyst forecasts, followed by their income reporting patterns. Finally, we look at share returns around option grant dates. These above analyses are conducted in comparison to the peer group of control firms as discussed above, and more details are given in each relevant subsection. Although Nortel has a more than a 100 year history, due to space considerations, our analysis focuses on the 1997-2000 sub-period with John Roth presiding at the helm, where we provide a contextual analysis of the period leading to the financial meltdown.

EXECUTIVE COMPENSATION

Executive and owner incentive alignment is the most direct way to reduce the agency problem. Agency theorists argue that firms can mitigate both the adverse selection problem (Fama 1980; Gibbons and Murphy, 1992), and the moral hazard problem (Lambert 1983; Rogerson 1985; Murphy 1986), by tying the agent’s compensation to firm performance. Managerial incentives may not be in the best interests of owners’ calls for intelligently designed compensation structures. Remuneration aligned with unequivocal measures of corporate success is believed to reduce agency costs such as the excessive consumption of prerequisites by higher-level managers. While agency theory may clearly dictate that executive compensation is an important lever for control of agent behavior, considerable disputes exist in the literature
regarding an optimal structure for the components of total compensation (e.g., Oyer and Schaefer, 2003; Yermack, 2003; Matsumara et al. 2005; Hall and Knox, 2006; Perel, 2003; Hall and Murphy, 2003). Early studies suggest that pay to performance sensitivity tends to be excessively low (e.g., Garen, 1994; Jensen and Murphy, 1990), therefore failing to curb agency costs. Higher levels of correspondence, to the point of recency effects, have been exhibited more recently (see Matsunaga and Park, 2001).

Some researchers continue to question the basic agency proposition that incentive-based compensation has desirable consequences. Fessler (2000) offers experimental evidence suggesting pay incentives degrade certain elements of performance. Managers with such contracts could become excessively risk-adverse (Gupta and Bailey, 2001). Alternatively, incentives may also breed overconfident reaction to the vicissitudes of cash flow (Malmendier and Tate, 2005). Non-financial consequences of high compensation such as reputation (Fama, 1980) and follower attributions (Martinko and Gardner, 1987) may also create divergent behaviors, untraceable to the utility for personal wealth. Furthermore, potential goal congruence induced fails to consider the interests of all constituents (Arora and Alam, 2002).

Perhaps a more fundamental challenge is the debate as to whether performance-based compensation is actually dependent upon corporate results. Core et al. (2003) argue that the inclusion of cash pay in empirical studies of performance relationship merely serves to distort findings. Earlier, Antle and Smith (1986) observed critical non-linearities in the pay-for-performance relationship, which they attributed to an executive’s ability to hedge risk in these plans. More broadly, the substantial influence wielded by top corporate officials over their pay arrangements can have consequences
over its entire range and may be influenced in a large number of ways (Bebchuk and Fried, 2003). The extent to which executive compensation is disclosed may also be related to its magnitude (Coulton et al. 2001).

Hart (1995), and Hart and Moore (1998), argue that investment is not contractible, and effort unobservable, therefore, the optimal compensation package links compensation to various signals of executive effort. The most common signal being studied is firm stock prices (Holmstrom, 1979; Barron and Wadell, 2003), because the prevailing view is that capital markets are efficient, and that prices reflect firm fundamentals that are a consequence of the agent’s effort.

As a result, equity based compensation, and specifically stock options have been the dominant vehicle in incentive-based CEO compensation for the last quarter century. Currently, options constitute more than half of the compensation package of top corporate officials in publicly-traded corporations in the U.S. (Hall and Murphy, 2002). Stock options have become a staple in the compensation of employees well below the apex of the organizational chart by upwards of 40% of large U.S. companies (Hall and Knox, 2006). That the individual is personally enriched by the very indicator (stock price) that enriches all shareholders, and is the foremost indicator of company success would seem the epitome of goal congruence. Issuing such options has also been bolstered by very favorable accounting treatment in the U.S. where the issuance is not considered an expense.

Many writers point out that using stock options may be dysfunctional on several levels. “Accounting subsidy” for option-based compensation leads to excessive and market distorting use (Bodie et al. 2003) and exposure of their use in great corporate
collapses of the early 21st century (Enron, WorldCom, etc.) has led to speculation of its role in the prolonged market expansion and serious contraction during this time (Greenspan, 2002; Business Week, 2003). The essence of the problem is that stock options create an excessive incentive to take steps causing a brief increase in the company share price. Such a behavior by firms with higher levels of incentive options can be observed through the timing of corporate insider trading behavior (McVay et al. 2004), the higher magnitude of discretionary accruals in accounting choice (Gao and Shrieves, 2002) and the subsequent restatements of earnings (Johnson et al. 2003).

Nortel’s CEO’s compensation was higher than many firms. Figure 2 compares Nortel to the control firms, where the comparison is relatively flat initially, but from the beginning of 1999, Nortel’s CEO benefited from a threefold increase whose slope did not abate in 2000.

A more interesting comparison can be seen through the analysis of executive stock option holdings. Based on the Black-Scholes valuation method, Nortel options surpassed this benchmark in late 1997, departed from it during 1998, and exponentially increased in 1999. With the fall in Nortel stock prices and following the massive exercise of stock options, CEO option holdings decreased below to the control group at the end of 2000.
Nortel followed a compensation strategy heavily based on option compensation. Fixed salary awarded every year amounted to a bit less than, or around, $1 million a year, while short term bonuses reached $1.3 million in 1998, $4.2 million in 1999, and $5.6 million in 2000. It must be pointed out that, according to Nortel’s 2000 and 2001 proxy statements, the most heavily weighted driver for bonus compensation was revenue, followed by operating earnings per share (i.e., non-GAAP earnings). Thus, on a straight cash basis, there was strong inducement for Nortel’s CEO to engage in an unbridled growth strategy, mostly through acquisitions.\(^2\) In contrast, in a year where the Nortel CEO received a bonus of $5.6 million, the CEO of Lucent did not receive any bonus payment, and the CEO of Motorola received a meager bonus of $1.25 million.

Although the CEO of Nortel received a fat cash payment in terms of salary and bonus, these were eclipsed by the value of options awarded every year: $5m in 1998, $18m in 1999, and $33m in 2000. The analysis above falls short on two respects: first means are shown in the comparisons, masking the effect of variation in the control group. Second, the control group is based on industrial membership, but since Nortel was the industry leader, it is possibly better to compare compensation structures across a purely size-based comparison group. Comparing Nortel to each individual firm in the control group, it is found that the Nortel CEO not only had the highest total compensation for the year, but also the largest amount of stock options. Finally, comparing Nortel to a peer

\(^2\) Such large bonuses in 1998-2000 have to be contrasted with the later findings of Wilmer Cutler and Huron Consulting, the investigators retained by the special committee of the Nortel Board of Directors. According to the investigators, manipulations to provisions in 2002-2003 were deliberately undertaken in an effort to maximize returns on a new bonus plan (“Return to Profitability”) implemented by the board of directors. Such findings and other events led to the firing of Nortel’s CEO, CFO and controller in 2004. The CEO at that time, Frank Dunn, used to be CFO under John Roth (CEO between 1996 and 2001).
group based on size, defined as within 10% (larger or smaller) of Nortel’s market value for each year, the $308.5 million of options held by John Roth in 1999 was second only to the CEO of MCI.

Data suggests that the agency model did not work well when applied to Nortel’s executive compensation arrangements during its examination period. As Jensen (2005) argues, when equity is “overvalued,” option holding do not mitigate agency problems. Equity-based incentives throw “gasoline on a fire” instead of being a solution (Jensen, 2005, p.14). In retrospect, agency theory provided simplistic predictions regarding Nortel’s equity-based compensation, neither making managers part owners, and nor ensuring the desired effects from contracting on “hard” signals such as stock prices.

GOVERNANCE STRUCTURE

One of the main challenges of corporate governance is solving the agency problem (Grossman and Hart, 1983; Jensen and Meckling, 1976). From this perspective, corporate governance is often examined from an agency point of view (Aguillera and Jackson, 2003). It is predicted that agency costs can be reduced through a strong internal mechanism of control, namely, an independent board of directors composed of non-executive directors, that is nominated and elected by shareholders, and who act in preserving the interests of owners who have the means to monitor management. This section examines the internal governance structure of Nortel, and uses agency as a point of departure in examining the role of the board of directors.

Prior empirical evidence shows that an independent board of directors is effective in reducing agency costs. Although the board of directors of Nortel was independent, it
is examined along three other dimensions: board size, the presence of a financial expert, and the multiple directorships held by board members. With respect to board size, Jensen (1993), and Lipton and Lorsch (1992), reason that as board size increases, boards become less effective at monitoring management because of free-riding problems amongst directors and increased decision-making time. Yermack (1996) finds that companies with smaller boards have higher market valuations (arguing for a threshold of 9 directors per firm). Upon examination of the size of the board just prior to the downfall, it could be argued that the 12 member board was larger than that prescribed by academic studies, a characteristic that could have contributed to board dysfunction.

From a financial expertise point of view, independent board members play an important role in monitoring the financials of the firm. It has been shown that the probability of restatement is significantly lower in companies whose boards or audit committees include an independent director with financial expertise (Agrawal and Chadha, 2006). Klein (2003) finds that financial expertise reduces earnings management, and Defond et al. (2004) find that the market positively values the appointment of financial experts to the board of directors. After the fall, advocates of the Nortel board cited that it was not possible for the board to detect financial irregularities, as the board relied on management in the communication and verification of financial results (Tedesco, 2004). Nevertheless, the board was criticized where “the Board knew so little about the company’s operations that it did not even know how it made money—how revenues, expenses and profits were made, booked, adjusted and finagled” (Thain, 2004). Additionally, the company was also criticized for delaying the appointment of financial
experts to the board to handle the financial crisis. For instance, the former CEO of Royal Bank of Canada, a Chartered Accountant, was appointed only in 2001.

A further reason for board dysfunction can be attributed to the multiple obligations that non-executive board members had. The academic literature suggests that busy directors increase agency costs because they are too busy to monitor, and do not serve on important board committees (Ferris et al. 2003). Larcker et al. (2005) associate busy directorship with bad governance, and serving on 2 or more boards is considered as a “busy” directorship (Brink and Perkins, 2005). Upon examination of the Nortel board, it is seen that with the exception of one director who had only 2 directorships, the rest had on average 5.8 directorships, while four board members were already CEOs of other companies (see Thain, 2004, for a related discussion on the multiple commitments held by Nortel directors).

In sum, although agency theory predicts that appointing external board members act in reducing agency costs, the board in itself adds another “layer” of agency since if the monitors are not carrying out their duties, then who monitors the monitors. In Nortel, a dysfunctional board was privy to a large financial crisis in part because it did not possess the necessary expertise, and was too busy to monitor. Finally, it could be a possibility that large shareholdings by the board exacerbated an already dire situation. From this perspective, going beyond agency theory when addressing board issues, and looking at the social-psychological processes of interaction, critical discussion and group participation (Forbes and Milliken, 1999), and the dynamic processes of accountability (Roberts et al. 2005), could be appropriate. The latter argue that understanding governance processes necessitates going beyond agency theory, where board
performance is determined by “managing” tensions regarding board engagement, supportiveness to executives, and involved independence. The “challenge” and “support” role provided by non-executive directors, and the management of boardroom tension, ensures accountability, but more importantly, ensures “good” performance (Hendry, 2005). In the end, the agency theory predictions regarding the relationship between board characteristics and firm performance, has not been empirically validated.

OWNERSHIP STRUCTURE

In the classic agency formulation, one principal exists to monitor the agent. Although this principal is removed from the opportunity to directly observe the agent, questions pertaining to the principal’s motivation and focus are largely extraneous. Applied to modern corporate settings, unity of interests does not exist. Structure of ownership therefore, presents an important supplementary dimension.

One of the most important changes in capitalism since World War II has been the diversification of ownership interests. A large percentage of the U.S. population now owns some degree of equity in publicly-traded companies, mostly through aggregation vehicles such as pension funds, insurance companies and mutual funds. These entities, collectively referred to as institutional investors, have gained popularity for a variety of reasons including their forced savings and diversification attributes. Institutional investors offer individuals professional management and, often a particular investment strategy or restriction.

It has long been argued that institutional investors mitigate the agency problem between investors and managers. This argument has been based on the notion that large
investors, with their financial resources and political clout, have direct access to top management, influencing a variety of organizational facets. Prior research has shown that monitoring by institutional investors is both beneficial and also costly (see Shleifer and Vishny (1986), Huddart (1993), Hartzell and Starks (2003), and Almazan et al. (2006)). Some types of large institutional investors have active demands in the area of corporate governance, environmental and social performance, and affect operational decisions such as executive compensation (Hartzell and Starks 2003). Almazan et al. (2006) show that institutional monitoring affects the structure of compensation packages received by top managers, and affect the incidence of non-performing CEO replacement (Brunello et al. 2003), hence institutional investors act toward the reduction of agency costs.

However, not all classes of institutional investors mitigate agency problems. Bushee (2001) provides a useful typology of institutional investors. Whereas “dedicated” institutional investors provide market stability through a tendency to “buy and hold,” “transient” institutional investors seek short term advantages through a trading strategy featuring less commitment to fundamental value and higher turnover based on even brief price turbulence. These organizations, by virtue of the large size of their ownership blocks and their willingness to “vote with their feet,” are capable of increasing the price volatility of the underlying issues.

Astute corporate managers should understand the composition of company ownership. Since the “transient” owners arbitrage post-earnings announcement drifts (Ke and Gowda, 2005), trade on expected news (Ali et al. 2004) and are more sensitive to
negative earnings surprises (Hotchkiss and Strickland, 2002), managers are provided with no shortage of reasons to manage with a short run perspective.

Until the boom in the telecommunications industry fueled the growth of Nortel, institutional investors did not follow the company in large numbers. The sudden influx of transient investors - may have - laid the groundwork for an unusually fertile period of “second stage growth” during which most firms stagnate (Anderson and Nyborg, 2001). The extent to which institutional investors were led to Nortel by financial analysts suggests a self-fulfilling logic wherein success built firm size and in turn attracted more analyst attention (Hussain, 2000).

Studies that do not differentiate the type of institutional investors that take ownership positions, find correlations with positive aspects of corporate governance. For example, institutional investors may be more likely to demand that high quality audits be purchased (Kane and Velury, 2004) and disclosure more robust (Bushee and Noe, 2000). Furthermore, institutional ownership is inversely associated with the incidence of fraud (Sharma, 2004). However, these tendencies are consistent with a longer run ownership concern than one typically seen in the transient investor.

Agency theory provides predictions in the incentivization of the CEO in increasing the long-term value of the firm. However, if a large number of shareholders are “transient” shareholders who are focused on short-term performance, then it could be argued that the CEO has also a duty of loyalty towards current short-term shareholders. Thus, if a CEO acts to artificially drive up short-term stock price at the expense of long-run value, it could be in the interests of his current Principals. Current shareholders may prefer to incentivize the CEO for short-term stock performance, even if this results into
incentives for the CEO to manipulate earnings. The motive is simply that short-term investors prefer that the CEO pursues short-term strategies at the expense of future shareholders (Bolton et al. 2005). As suggested by Lewis (2004), short-term investors care about short-term gains in stock prices more than long-term performance, preferring a lucrative, managed performance, in lieu of an expensive truth. In the meantime, such investors astutely let managers know of their intentions.

Figure 4 charts the rise of transient institutional ownership in Nortel. Again, this is compared to the same ownership in the control group. Between 1997 and 2000, transient ownership increased fivefold, peaking at 13%. At the same time, this metric fell at comparable firms.

[Figure 4 Here]

The assumptions about the principal in agency theory became increasingly unrealistic as applied to Nortel. Although no company of any size has the type of ownership imagined in the ideal type of the theory, Nortel’s ownership did not even approximate the concerns needed for a principal interested in devoting concern to the monitoring of management. *Ceteris parabus*, changes in the structure of ownership increased pressure on Nortel management to meet the expectations of new owners, in lieu of the interests of long-term owners. The episodic ability to do so may have increased the volatility of share price. As Botosan and Plumlee (2002) suggest, attracting short-term investors can lead to volatility in stock prices, which also increases the expected return on company shares. Gaspar et al. (2005) argue that firms with short term investors are more
likely to engage in value reducing acquisition activity. The preceding fits within the Nortel story: the agency problem of “overvalued” equity problem was exacerbated by the presence of short-term investors. Agency theory that predicts the disciplining mechanism of institutional owners, also stipulates a long-horizon relationship between principal and agent. In the case of Nortel, agency did not account for the short-term incentivization provided by the “transient” institutional owners.

**EARNINGS MANAGEMENT**

Earnings manipulation in the context of agency theory has been considered as early as Lacker et al. (1989). There would be no income manipulation in the absence of agency problems (the owner cannot manipulate himself), hence earnings manipulation lies in the heart of agency theory itself. Primarily, managers perform their stewardship duties to owners by reporting results from operations and the current state of ownership. Generally accepted accounting principles (GAAP) provide a set of guidelines for this to be done without excessive ambiguity or moral hazard. In this way, agency theory underlies a large part of the mainstream accounting research on disclosure and capital market impacts (see Healy and Palepu, 2001 for a substantive review).

Contrasting the normative is a long history whereby purposeful income manipulation through accounting has been documented (Matheson, 1893; Paton, 1932; Buckmaster, 2001). That which is now known as earnings management may further an organization’s interests in negotiations with external parties, but may also represent opportunistic efforts by top management relative to corporate ownership (Christie and
Zimmerman, 1994). At its most blatant, managers can make accounting choices that maximize manager compensation.

Earnings management by corporate agents appears to be an international phenomenon varying only in its magnitude (Leuz et al. 2003, Kinnunen and Koskela, 2001). Although some of this fails to fool the market, attempts to manufacture a systematic deviation from neutral ground persist. Manipulation in a positive direction occurs with greater frequency at firms under economic duress, such as would be caused by past losses (Callen et al. 2003). Triggering circumstances interact with the specific types of accruals and manipulations that are deployed in this effort (Loh et al. 2001). However accomplished, a large number of financial executives are willing to sacrifice shareholder value to demonstrate short-run success (Graham et al. 2004).

Others argue that earnings management produces some benefits to owners. The suppression of information embedded in the unmanaged pattern of earnings is not always supportive of share prices (Arya et al. 2002). Along similar lines, special accounting charges taken by managers do not necessarily undermine the agency relationship (Wu, 1999). Income smoothing may not be such a pernicious form of management if it more accurately reflects recurring earnings potential (Zarowin, 2002). Likewise, dividend smoothing may merely reflect national norms for relations with shareholders (Rahman, 2002).

Nortel certainly had both reason and opportunity to manage earnings, cull the favor of financial analysts and “spin” the results of operations. As shown above, the compensation of key managers was heavily dependent upon company results, and prior research has argued that financial statement misstatements are related to “excessive”
options usage (Burns and Kedia, 2006; Bebchuk and Gill, 2003; Benabou and Laroque, 1992). The evidence appears to suggest that Nortel exploited the opportunity to fool the market; at least temporarily. After all, the diminishment of the “overvaluation” would induce significant costs to the managers.

Earnings Smoothing at Nortel

Again, comparisons between Nortel and the control group were made. For these purposes, total accruals were calculated as the difference between net income before extraordinary items and cash flow from operations. This allowed changes in accruals to be computed and correlated with changes in cash flows from operations. Following Myers and Skinner (1999), Leuz et al. (2003) and Zarowin (2002), earnings smoothing is calculated as the correlation between the change in accruals and the change in cash flows from operations (the correlation is calculated over a three year period). The underlying intuition is that the variability of cash flow is smoothed through the usage of accruals. Therefore, a more negative correlation would signify a smoother income stream with respect to underlying fundamentals. Usage of this proxy is desirable in the case of Nortel because of the high growth and the large number of investments, as this renders other proxies of earnings management inaccurate (see Fields et al. 2001, for a related discussion).

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3 Using an alternate income smoothing measure, that of dividing the standard deviation of income by the standard deviation of cash flows, yields essentially similar results.

4 Earnings management is also calculated using the discretionary accruals methodology of the modified Jones (1995) model. Nortel’s discretionary accruals, depending on the year, had values ranging from 5%-15% of total assets. Since Nortel was a growth firm, discretionary accruals are also calculated using the “forward looking” Jones model (Philips and Pincus, 2003) where values for discretionary accruals, ranging from 2% to 30%, are obtained. Even though the numbers obtained fit very well with predictions, they are very large, and likely to be inaccurate. Therefore, total accruals are examined without distinguishing the
Figure 5 illustrates the smoothing that occurred, consistent with the other figures, Nortel had higher degrees of income smoothing relative to the comparison group from 1997 to 2000 (a more negative correlation coefficient of between changes in accruals and cash flows indicates higher income smoothing). It is apparent that Nortel was an aggressive smoother of its earnings.

Comparing Nortel’s results to the individual firms in the control group (results unreported), we find that for the 11 control firms with sufficient data to calculate the income smoothing measures for the year 1999 (the year before the downfall), Nortel, alongside two other firms, had the highest value for the income smoothing measure. This high income smoothing measure cannot be explained by industry-wide factors as the sample of control firms is drawn from Nortel’s competitors. Even if Nortel is compared to a sample of firms drawn on the basis of size (since Nortel arguably was a conglomerate, transcending industrial characteristics), Nortel still exhibits extremely high levels of income smoothing.

Financial Analysts and Earnings Surprises

A mapping of agency theory onto the modern publicly-traded corporation is also complicated by the interposition of financial analysts. These individuals advise the ownership community on the near-term trajectory of an equity position in the target
company. The demand for financial disclosures is a consequence of agency conflicts (Healy and Palepu, 2001). Imperfect information regarding the prospects of the firm results into agency costs imposed on principal holders (Ashbaugh et al. 2004). Financial analysts in their role as sophisticated information intermediaries serve in reducing friction in capital markets, and ensure a more efficient allocation of capital. Their ability to gather, analyze, and disseminate company level information serves as a monitoring function over top management (Healy and Palepu, 2001). In addition, their expectations of firms serve as a disciplining mechanism of managerial behaviour. A good part of analysts’ influence is derived from their work on predicting future earnings. Analyst reports may increase the efficiency of the market (Weigold et al. 2000) but at the cost of increasing the stakes for all participants (Hussain, 2000). Attempts to reduce uncertainty in the future tend to crystallize that which might or should happen into that which must happen, as agents are judged.

The work of analysts, and their critical relationship with corporate managers is deeply flawed. Their economic incentives systematically make them prone to optimism regarding corporate results (Shipper, 1991; McNichols and O’Brien, 1997). Prior evidence causes some to doubt whether analysts possess or can effectively use private information or algorithms that would produce value added predictions (Byard and Shaw, 2003; Fogarty and Rodgers, 2005).

Managers facilitate the dysfunctional level of optimism surrounding corporate results by withholding bad news from them (Moses, 1990) and issuing sanguine forecasts. The latter appears strategic since they are likelier when less accountable (Rogers and Stocken, 2005). This behavior may be predicated on preserving merger and
acquisition advantage (Wall Street Journal, 1995) or personal wealth (Matsunaga and Park, 2001). Managers might be better off if they could encourage lower expectations so that earnings management would not have to be so readily availed (see also Matsumoto, 2002).

Analyst targets may merely encourage agents to work diligently in the pursuit of the best interests for their principals. To some extent, excesses in this effort might be identified and corrected by the market (Raedy et al. 2006). At the same time, their presence may distort the relationship as a truly exogenous element (Levitt, 1998).

The struggle to meet or beat analyst expectations forces a new interpretation upon Akerlof’s (1970) “market for lemons” argument in this application. Whereas previous attention focused upon disclosure quality and associated market reactions (e.g., Healy et al. 1999) or information equilibrium and the cost of capital (e.g., Zhang, 2006), future attention should be diverted into achieved reputation for attaining expectations set by the market. Achieving EPS targets has become increasingly important, judging by the increased sensitivity of share price to surprises (Brown, 2001). Avoiding negative surprises seems to be the focal point for managers in several types of earnings trajectories (Burgstahler and Dichev, 1997). Furthermore, firms with inevitable negative surprises are advantaged by “talking down” expectations early on (Bernhardt and Campello, 2002). Managers are now assessed not on their accounting choices or adequacy of their disclosures, but upon the “bottom line” of achieving expectations set by analysts. Rather than a contingent, context-specific disclosure credibility (Mercer, 2004), the market does not tolerate failure and the only “lemons” are those firms that are unable to meet expectations. To the extent that impression management has taken on greater salience,
agents’ rewards are now less coupled with a firm’s economic prospects. Thus, actual earnings are less relevant (Hoitash et al. 2002) and it is difficult to say that accounting rules have been helpful on balance (Penman, 2003).

Between 1997 and 2000, the number of analysts following Nortel tripled from 12 to 37 (I/B/E/S, 2005). This corresponds to the period most believe to be highly abusive, preceding such reforms as Sarbanes-Oxley, Reg FD, and the creation of the Public Company Accounting Oversight Board. During the sixteen quarters under study, Nortel consistently outperformed the consensus analyst estimate of future earnings. Nortel became the darling of Wall Street by just barely, but regularly, exceeding the analyst set standard and delivering consistent positive surprises. Figure 6 below graphs Nortel’s performance with respect to sell-side analyst consensus forecasts, in comparison to the control firms. According to Brown and Caylor (2004), earnings surprise is calculated as actual earnings with respect to the last I/B/E/S consensus forecast available before the earnings announcement date, divided by the stock price of the firm on the closing day of the quarter.

[Figure 6 Here]

While other Telecom firms experienced large fluctuations in their reported earnings as compared to consensus forecasts, Nortel was relatively stable, exceeding expectations consistently for all 16 quarters examined. Earnings surprises at the control group of firms better matched their definition. For these firms, surprise was more extreme and took on negative values in six quarters. Since one method by which firms
beat exceed forecasts is “managing” market expectations (Matsumoto, 2002), analyst forecasts are examined in the three months preceding the quarterly earnings announcement (results unreported). In the 16 quarters where Nortel earnings surprises are examined, forecasts are “talked down” five times in the three months prior to the earnings announcement date. In 11 of the quarters, there is no change in consensus forecasts in the last three months (in none of the quarters examined do analyst forecasts increase in the three months prior to the earnings announcement). This is evidence of “overvaluation” a la Jensen (2005), where market expectations are high ex-ante, and if the firm cannot achieve the required benchmark, forecasts are toned down (or income is manipulated) rather than the firm experiencing a negative earnings surprise.

An alternative explanation of the data could be that Nortel had a more stable earnings stream as compared to the control firms. In order to rule out this explanation, Nortel’s earnings stream is compared to the control firms by calculating the standard deviation of quarterly ROA (used as a measure of earnings variability). Unreported results indicate that Nortel ranked sixth as compared to a control group of 13 firms. It does not seem that a smoother earnings stream at Nortel contributed to its consistent beating of analyst forecasts. Finally, examining the specific composition of the control group (since it is possible that the negative earnings surprises of the control group could be caused by a few firms), from the 11 firms that have analyst forecast data for the 16 quarters under study, only 2 other firms consistently beat analyst forecasts.

Sell-side analysts were themselves bullish about Nortel’s prospects. Even after massive operational and financial problems, they kept on issuing positive (or non-

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5 Similar inferences are arrived when examining the volatility of earnings normalized by market value (instead of assets).
negative) recommendations regarding its prospects. The buy recommendations for Nortel shares proved “remarkably resilient” (Hunter, 2003). Although all financial signals implied nothing more than a “sell” recommendation, the few downgrades were either from a “strong buy” to a “buy” or from a “buy” to a “market outperform” (Hunter, 2003).

It is apparent that financial analysts did not reduce agency problems at Nortel. Increases in analyst following, and the superior information gathering and disseminating ability of financial analysts, are expected to reduce information asymmetries. This in turn enhances the monitoring of managerial behavior, and allowing for an efficient allocation of capital market resources. However, what is observed is evidence that financial analysts increased rather than decreased such agency costs. The high market expectations prompted managers to engage in an earnings management game, which then resulted in unruly behavior. At Nortel, meeting and beating analyst forecasts for 16 consecutive quarters eventually resulted into a total destruction of core-value.

**GAAP vs. Street Earnings**

The late 1990s saw a highly nuanced earnings management process. Managers were no longer passive while estimating future earnings. Practice emerged whereby key executives would announce “pro forma” EPS (or more colloquially “street earnings”). Here, announcers took liberties in the way earnings were measured, after departing from GAAP. To the extent that such pronouncements excluded non-recurring items they may have originally been useful. However, Bradshaw and Sloan (2000) demonstrate that managers used them to manage earnings and - often – disguise poor performance.
Therefore, these pronouncements could be strategic in nature. “Pro forma” earnings are measured in a methodology similar to that of Bradshaw and Sloan (2000), where quarterly EPS measures are obtained from the IBES summary files which report earnings figures on a continuing operations basis. In Figure 7, rather close harmony between numbers before 1997 suggest the absence of a managing agenda. In later years, a distinct departure occurred: “Street earnings” exceeded GAAP earnings suggesting the exclusion of income reducing special items.

[Figure 7 Here]

Nortel put no emphasis on GAAP earnings, as evidenced by the fact that Nortel’s 2000 Letter to Shareholders did not contain a single reference to GAAP earnings (loss was $3.47 billion) or Cash Flow from Operations (only $40 million, down from $1.5 billion two years earlier). The firm’s Management Discussion and Analysis (25 pages) contains only one sentence on GAAP earnings. Finally, as further evidence that the board was co-opted by management, the Letter to Shareholders was co-signed by the chairman of the board.

Subsequent restatements of income taken by Nortel cast some light on the motives of its key decision makers, and more specifically, for the excessive degree that it managed its earnings. Apparently, the higher variability of operating cash flow posed the prospect of higher risk associated with the firm’s earning potential. This allowed Nortel executives to become more predictably enriched.
Nortel used a variety of techniques to accomplish its earnings manipulation. For instance, it is now known that extremely aggressive revenue recognition techniques enhanced the growth rate appearing to exist at Nortel between 1998 and 2001. Sales for 2000 include close to $3,000,000,000 for transactions that should have been recognized in subsequent years (10% of that year’s sales and 40% of the sales growth between 1999 and 2000). The expensing of research and development costs from the companies that were purchased over these years also needs to be compared to the less favorable treatments available had the R & D been produced in-house: most of the acquisition prices were booked as goodwill and amortized over 3 to 20 years.

The scale at which accounting is a distortive influence does not seem to be well anticipated by agency theory and is exacerbated by equity markets attempting to value future income power with such ferocity that intermediaries are commissioned for these purposes. As shown by the Nortel case, there does not seem to be any effective assessment of agency costs such that skepticism about agent communication is impounded.

THE MISSING ELEMENTS

Agency theory, by legitimating the pursuit of self-interest by agents, offers a deeply cynical perspective on human behavior. However, the lack of any serious consideration of restatement in agency theory exists as an ironic juxtaposition. When is the consumption of a principal’s rightful belongings no longer a game of greed? When does it begin to take on subversive overtones? Should the failure to check agents be
blamed upon principals that do not anticipate agency costs and continuously monitor actual results?

Agency theory does imply that managers who cannot be curbed will be dismissed. This discharge seriously impairs the agent’s reputational capital, wherein the agent has an undiversified exposure. By isolating individual actors, agency theory also cannot process ideas such as an organization’s ethical climate. A large body of work points to the “tone at the top” (Kalbers and Fogarty, 1993; Rezaee, 2003) as an important element of the normative environment.

Agency theory does not possess a means to predict the irregular behaviors of key corporate officials. The economic utility embedded in agency theory does not compare favorably with a reasoned action theory that combines psychological and situational variables (see Gillett and Uddin, 2005). In fact, agents of corporations that self-identify with agency theory are less trustworthy than those that self-endorse a stewardship theory (Albrecht et al. 2004). In other words, agency theory is limited by its unwillingness to probe cognitive differences pertaining to financial irregularity proclivities.

Another issue unique to the application of agency theory to the corporate world is that corporate results are expressly tied to trading markets. Corporate agents are not as likely to commit the types of irregularities that directly affect the existing and continuing owners. Through the use of stock options, the injury caused by information asymmetries and moral hazard gets inflicted upon anonymous market participants. Motivated by executive compensation arrangements and facilitated by earnings management abilities, insider trading is a predictable outcome (Cheng and Warfield, 2005). Some evidence suggests a certain degree of abuse of position is anticipated by these security markets
(Liu and Yao, 2003) or, at the autopsy, a pattern of insider trading enforcement (Erickson et al. 2004). Even in a world not requiring absolute trust, markets need the assurance that some insiders will be punished (Beny, 2004).

The timing linking personal trading by Nortel executives and other behaviors, albeit circumstantial, is suggestive of intent. Here, the best evidence would be efforts to depress the Nortel stock price before options were issued and to elevate it thereafter (see Aboody and Kasnik, 2000; Yermack, 1997). Nortel agents controlled the flow of information to the markets and this may have been the vehicle for stock price manipulation. Hence observing stock price behavior around executive stock option provides evidence on one of the many elements available to managers in maximizing their payoffs.

In Figure 8, the share price performance around stock option grant dates is compared to market wide returns during the same period. Using the small sample randomization technique of Fortin et al. (2002), the period preceding the grant date is marked by significant negative abnormal returns (-8% for the 60 days preceding the grant date). However, these negative returns reverse themselves after option grant dates.

[Figure 8 Here]

Wilcoxon small sample tests indicate significantly lower (p < 0.05) returns 60 days before an option grant date, as compared to the 60 days after the grant date. This statistical significance is replicated using -25/+/25 and -7/+/7 time periods around option grant dates. It is interesting to see that the pattern in Figure 8 closely follows patterns that
are observed in the recent stock options backdating scandal (see Heron and Lie, 2006), where patterns obtained for Nortel mimic those of firms accused of backdating options

Starting in 2003, under pressures from its board of directors, Nortel underwent an extensive forensic accounting review. Findings from such review corroborated previous allegations of irregularities. The company fired the CEO, CFO, and controller, and alongside was the ouster of 10 top executives in 2004, and there were two major restatements covering provisions, accrued expenses, revenue recognition and the measurement of various expenses. Financial irregularities continued over prolonged periods. For example, restatements in the year 2005 and 2006 related to improperly booked revenues and pension accounting were filed. The independent review report found that “…Management “tone at the top” that conveyed the strong leadership message that earnings targets could be met through applications of accounting practices…not in accordance with GAAP…(management) exercised their judgment strategically to achieve EBT targets…” (Nortel Networks Corporation, 2003 Annual Report, Independent Review, pp. 109-111). Additionally, Nortel auditors identified five material weaknesses related to compliance, application of GAAP, lack of personnel, and a lack of awareness and accountability. Although such internal control shortcomings were identified by Deloitte in Nortel’s 2006 annual report, Deloitte provided a clean opinion on Nortel’s financial statements (Nortel annual report, 2006). Nonetheless, perhaps as a way to part with this past, Nortel ousted Deloitte as auditors in December 2006 and substituted KPMG at the May 2007 shareholder meeting (Nortel Quarterly Report, 2nd quarter 2007).

CONCLUSION
The sudden and dramatic destruction of value that occurred in Nortel’s case spread considerable pain to investors whose equity diminished, discharged employees and many others. Top managers who purposefully create over-valuation encourage expectations that cannot be sustained. Ultimately, the economics of the situation cannot be gainsaid. Nonetheless, significant wealth transfers occur along the way with some parties benefiting from the roller coaster ride of valuation.

Situations, such as Nortel, require a confluence of many circumstances to happen. Aided by lax regulation and markets that demand superstar performers, the up cycle did set internal forces in motion that could not be managed and lead inevitably to capitulation (see also Jensen, 2005). This paper has documented some of these at Nortel.

Agency theory establishes a template for the balance of power between agents and principals. The temptations created by moral hazard and information asymmetry are made well-known through this perspective. However, an examination of how poorly agency costs were understood, monitored or controlled in the Nortel case presents the distinct prospect that agency theory has little explanatory power. Agency theory may require very rigid assumptions and discrete action choices (e.g., Hofmann, 2003). Perhaps some of these limiting assumptions pertain to the distribution of ownership (see Piot, 2001). We may also need a better understanding about the relationship between accounting choice and market valuation (Joos and Plesko, 2002). At best, what we have now is highly simplistic and reductionistic.

This paper has separated four major elements of agency thinking: Executive compensation designed to create goal congruence instead offers the irresistible promise of great wealth for managers. Board governance, often put forward as a critical control
mechanism to reduce agency costs, loses effectiveness quickly when it lacks some key attributes. Modern ownership structures dissolve the principal’s diligence in the name of diversification and short-term yield chasing. Accounting, instead of providing discipline for the reporting of results, offers ample opportunity whereby results are made to seem what they are not. All of these operate within the agency Welterswang. However, since they operate simultaneously, a more comprehensive picture may be needed. Whereas others combine these elements in the hopes of designing more optimal contracts (e.g., Wu, 1999) or to create new constructs such as residual claims (Fama and Jensen, 1998), this paper argues that a striking parallel exists to garden variety financial irregularities. Reversing the tendency of agency theory to normalize the consequences of greed (even on a massive scale), this paper discredits this behavior. Agency theory makes it more difficult to see what is wrong with corporate governance and often stresses what does not need to be remedied (e.g., Holmstrom and Kaplan, 2003). A perspective of financial irregularities more fully brings actions, such as insider trading, into focus. Normative dimensions, such as unfairness, rather than being applauded for their incentive effects (see Lukas, 2004) need to be condemned. In this process, the reestablishment of professional management methods might be useful. Agency theory has no doubt been helpful in constructing a definition of managerialism as the antithesis of professionalism (i.e., Brooks, 1999).

Agency theory sits uncomfortably together with any serious conception of top managers as leaders of large and complex organizations. When CEOs and CFOs are little other than those best positioned to extract the maximum personal wealth from corporations, faith that needs to exist in the validity of organizations is lost (see Meindl,
et al. 1985). Intense scrutiny is necessary when excessive looting erodes the value creation that organizations made possible (Sutton and Galunic, 1995). Norms that would otherwise constrain the rationalization element of financial misstatements dissipate.

As a paper that focused upon a single corporation’s trajectory, obvious limitations exist. Certainly, there are elements of the Nortel story that would be more or less salient had a different corporation been in the spotlight. This paper does not attempt to measure how typical Nortel may be. The most likely scenario is that the elements combine in varying magnitudes. Every corporation has different strengths and weaknesses in its corporate governance. The former may make even innocuous devices, such as budgeting, powerful vehicles of agent control (see Hofmann, 2003). A large mis-specification may have occurred by not directly addressing organizational culture. The idea of “tone at the top” seems a tantalizing iceberg tip explaining why the large set of related behaviors that made Nortel possible did not self-correct. Unfortunately, the focus upon the economic aspects of contracting and the individual agent that is deeply embedded in agency theory puts sociological constructs beyond the pale. This may be even truer for constructs that necessitate a belief in a collective psychology, such as organizational trust (see Chen, 1997). Furthermore, though agency theorizing has begun to see boundaries established by legal regimes (e.g., Palepu et al. 2006), these institutions may also matter for anti-agency views.

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Figure 1: Quarterly Market Value of Equity of Nortel, 1993-2002

Figure 2: CEO Total Compensation
Figure 3: Value of Total Options Held by CEO

![Value of Total Options Held by CEO](chart1.png)

Figure 4: "Transient" Institutional Ownership of Nortel Shares

![Transient Institutional Ownership of Nortel Shares](chart2.png)
Figure 5: Nortel Yearly Income Smoothing

Figure 6: Nortel Earnings w.r.t. Consensus Analyst Forecasts
Figure 7: Nortel GAAP vs. Street Earnings

Figure 8: Cumulative abnormal returns around Option grant dates
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