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## Relational Signalling and the Rise of CEO Compensation "...It is Not Just About Money, It is About What the Money Says..."

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## Relational Signalling and the Rise of CEO Compensation “...It is Not Just About Money, It is About What the Money Says...”



Kees van Veen, Rafael Wittek

The continuous rise in CEO compensation over the past few decades has been attributed either to efficient labor market processes (efficient market theories) or to corporate governance failures leading to insufficient control of boards over CEOs (managerial power theories). We argue that both approaches are incomplete and fail to explain why executive compensation remained stable for almost forty years, before it suddenly started to increase in the early 1980s. We present an alternative framework that complements both approaches, relational signalling theory. It conceives the transactions between boards and CEOs as a “gift exchange relationship” and explains the consistent use of premiums on top of reservation wages as an inherent element of the exchange. We argue that the sudden and subsequently continuous rise of CEO compensation is due to a major change in the signalling environment caused by the requirement to publicly disclose prerequisites, introduced by the SEC in 1977.

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### Introduction

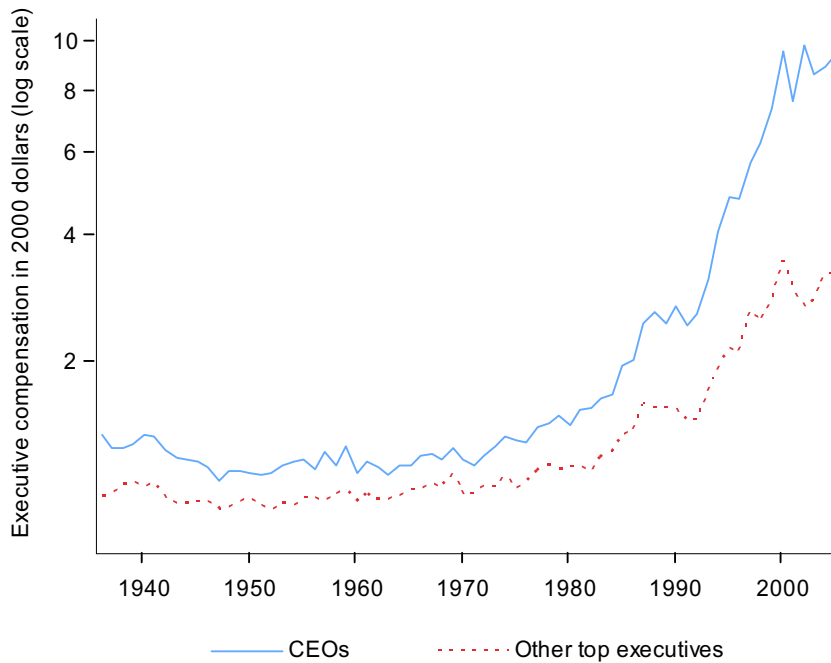
Since the beginning of the 1980s, CEO compensation levels have risen dramatically in both absolute and relative numbers. This rise is especially obvious in the U.S., where companies have to disclose CEO's compensation packages. As can be seen in [Figure 1](#), CEO compensation levels were quite stable in the period 1940–1970. After that, they quickly started to rise, and they have continued to do so until today ([Frydman and Saks, 2010](#)). Other sources report similar trends concerning the absolute compensation levels ([Walsh, 2008](#)): “...the average CEO in the S&P 500 made \$14.2 million in 2007.” And, relatively speaking: “...the average CEO made 42 times the average worker's salary in 1980, the ratio increased to 107 in 1990 and 525 in 2000. The latest data (for 2006) put the ratio at 364.” According to the New York Times, the compensation levels in the USA soared again in 2010, after a short decrease in 2009 caused by the financial crisis<sup>1</sup>. Although these enormous leaps might be most prominent in the USA, the same phenomenon can also be observed in other countries (i.e., [Van Uffelen, 2008](#); [Van der Laan et al., 2010](#); [Conyon and Schwalbach, 2000](#)).

Insight into the mechanisms behind this trend is important to understand the labor market of top executives ([Filatotchev and Boyd, 2009](#); [Van Ees et al., 2009](#)), the underlying board processes ([Tosi and Gomez-Mejia, 1989](#)), and more general legitimacy issues concerning “excessive” executive compensation and rising inequalities. As a result, an extensive debate has unfolded concerning the question of why these compensation levels have been rising so drastically in a relatively short period<sup>2</sup>.

Two prominent explanations dominate this debate. First, efficient market theories (EMT) consider the rise of CEO pay as a natural consequence of fluctuations in supply and demand on the executive labor market: boards react to an increased shortage of executive skills ([Murphy and Zábojník, 2004](#)) or increase their efforts to control the CEO ([Hermalin, 2005](#)). Second, the managerial power theory (MPT), most prominently represented by [Bebchuk and Fried \(2006\)](#), insists that failing corporate governance is the root cause of the rise in compensation levels. Corporate governance systems incorporate an unbalanced power distribution in the board, which creates opportunities for powerful CEOs to dominate the negotiations about their own compensation. In their bargaining efforts with the CEO, boards fail in their attempts to prevent excessive compensation packages even though that is what shareholders expect them to do.

<sup>1</sup> New York Times, <http://www.nytimes.com/2011/04/10/business/10comp.html> (accessed 17 May 2011).

<sup>2</sup> In the Web of Science, until 1980, an average of one publication a year had the words “executive compensation” or “CEO pay” or “CEO compensation” in the title. In the thirty years that followed, this figure gradually increased to thirty in 2011.



**Figure 1.** Median Compensation of CEOs and Other Top Officers from 1936 to 2005

Figure 1 shows the median level of total compensation in a sample of the three highest-paid officers in the largest 50 firms in 1940, 1960 and 1990 (for a total of 101 firms). Firms are selected according to total sales in 1960 and 1990, and according to market value in 1940. Compensation data is hand-collected for all available years from 1936 to 1992; the S&P ExecuComp database is used to extend the data to 2005 (Frydman and Saks, 2010). Total compensation is composed of salary, bonuses, long-term bonus payments (including grants of restricted stock), and stock option grants (valued using Black-Scholes). The CEO is identified as the president of the company in firms where the CEO title is not used. "Other top officers" include any executives among the three highest paid who are not the CEO. All dollar values are in inflation-adjusted 2000 dollars

Both approaches provide competing explanations for organizational governance and boardroom processes in general and the rise in compensation levels during the past decades in particular. However, we argue that, although these conditions might be sufficient, they are not necessary to explain the upward trend. We argue that both are incomplete and fail to resolve important puzzles in the field. For example, both have difficulties in explaining why compensation levels a) remained stable for almost forty years (from 1940 to 1979), and b) suddenly increased and continued to rise in the thirty-year period that followed (from 1980 to 2010). Hence, an alternative theoretical perspective is needed that is able to explain *both* the long-term stability and the sudden and ongoing rise of CEO compensation developments.

*Relational signalling theory (RST)* provides such an alternative by delivering a powerful explanation for these phenomena. Not only because it incorporates an alternative labor market dynamic that pushes compensation levels up. Unlike earlier approaches, it delivers an explanation for the relative stability of compensation levels in the period 1940–1979 and the sudden upward break around 1980. Relational signalling theory defines compensation packages not so much as a monetary arm's-length transaction, but as one part of a necessary and ongoing gift exchange relationship between the board and the CEO. In such a dyadic gift exchange relationship, it is not only the absolute size of a compensation package that matters but also its signalling value. Put differently, in the illustrative words of an interviewed board member in the UK: "it's not just about money; it is about what the money says" (Perkins and Hendry, 2005).

Consequently, RST suggests that it was a change in the signalling environment that triggered the sudden and still-ongoing rise in CEO pay: the legal requirement for public disclosure of CEO *perquisites*, as introduced by the SEC in its release No. 5856 on August 18, 1977 (*pay* disclosure for top executives of publicly traded companies had already become enforceable in 1934; for a detailed reconstruction, see Conyon et al., 2013). We argue that up until then, boards used non-monetary perquisites to signal their commitment to the CEO. These perquisites were difficult to compare between CEOs yet costly enough to the company to be used as a relational signal. After that date, perquisites were publicly disclosed, which made them highly comparable. In order to credibly signal their commitment through gift giving, boards had little other options than to increase the size of the compensation in such a way that it compared favorably to compensation packages for similar companies. It is the increasing importance of the status value of the compensation package that pushed compensation levels above market wages and fuels their continuing upward trend.

Our study makes three distinct contributions to the CEO compensation debate. First, we introduce a new perspective for the analysis of corporate governance and especially the CEO compensation debate. The relational signalling perspective relates to earlier suggestions that signalling matters to corporate governance (i.e., Connelly et al., 2011) and to the exchange relationship between the board and the CEO (i.e., O'Reilly and Main, 2010). However, RST offers a more advanced

theoretical argumentation, which makes our second contribution possible: we add a novel explanation for both the long-term stability and the subsequent rise in CEO pay. Whereas EMT and MPT have problems explaining both stability and change in the CEO market over time, RST specifies clearly the conditions under which both can happen. Interestingly, RST does not exclude earlier explanations (e.g., shortage of qualified candidates, powerful CEOs). From an RST perspective, these theories specify sufficient conditions that make CEO pay rise, but these conditions are not necessary to make it happen. Finally, we derive two propositions and illustrate the possible empirical application of RST.

The usefulness of a new theoretical perspective depends on its ability to derive new hypotheses, to resolve inconsistencies, to close gaps, or to show the contingencies between different approaches (Boyd et al., 2011). In order to demonstrate that RST meets these requirements, the present article is structured as follows. The next section briefly introduces signalling theory. Sections 3 and 4 briefly summarize the main assumptions of the two major lines of arguments: efficient market and managerial power theory. Section 5 elaborates on the link between relational signalling and CEO compensation. Section 6 elaborates two theoretical propositions and applies them to historical data. Section 7 discusses the strengths and limitations of the framework. The final section draws conclusions.

## Signalling theory

*Signalling* is a key governance mechanism in situations of information asymmetry between two or more parties (Gambetta, 2011; Gambetta and Bacharach, 2001). Such asymmetries arise where reliable and valid information about hidden qualities (e.g., skills, performance) and/or the intentions (e.g., motivation) of the signaler is unavailable or difficult to observe for the receiver (Six et al., 2010; Stiglitz, 2000). Quality refers to the “underlying, unobservable ability of the signaler to fulfill the needs or demands of an outsider observing the signal.” Reliable signals can at least partly solve this information asymmetry. For example, in Spence’s (1973) pioneering work on job market signalling, educational credentials signal a job candidate’s productive capacity that is difficult to observe otherwise.

Signalling theory has been applied before in the context of management and corporate governance (Connelly et al., 2011). This literature as well as other institutional explanations (Fiss and Zajac, 2006) conceives CEO compensation levels and packages as reputational signals to the *outside* world, mainly investors. Here, the hidden quality is the degree to which a company complies with good governance principles (Certo, 2003; Certo et al., 2001; Filatotchev and Bishop, 2002). For example, a compensation package with a high performance-related component signals a company’s responsiveness to market demands (Lund, 2012).

In Relational Signalling Theory (Lindenberg, 2003), the hidden quality underlying the information asymmetry is the degree to which the signaler is (still) committed to building or maintaining a mutually beneficial relationship with the receiver of the signal (Wittek, 1999). Relational signalling ideas have been used in labor market studies to explain employee performance, commitment and compliance. For example, efficiency wages have been interpreted as costly and credible signals of an employer’s interest in building a durable cooperative relationship with employees. The resulting gift exchange mechanism (Akerlof, 1986) triggers compliance and commitment in employees who reciprocate with higher performance. Here, we apply relational signalling theory to signalling processes between the board and the CEO. We suggest that the amount, type and structure of compensation represents a possible route through which the board can signal commitment to and elicit high performance from the CEO. Offering above-market-wage compensation reflects the board’s attempt to credibly signal its intention to build or maintain a sustainable and mutually beneficial collaborative relation with the (candidate) CEO. The pressure to offer compensation above the market level is inherent in the specific expectations of an exchange relationship between a CEO (candidate) and the board.

However, before discussing the precise details of RST, a brief overview of existing theories will be given. Since several excellent and detailed reviews of current theories are already available (Bognanno, 2014; Conyon, 2006; Devers et al., 2007; Otten, 2007), our systematic outline of the “efficient market” and the “managerial power” theory will be brief. Subsequently, we will add a systematic discussion of the relational signalling theory. We use five key elements of the signalling process (Connelly et al., 2011) to structure each outline: the board as the signaler, the CEO as the receiver, the relationship between the board and the CEO, the broader (labor market) context as the signalling environment, and the compensation package as the outcome of interest. For each of these elements, we reconstruct the major assumptions each theory makes concerning preferences, beliefs and constraints as well as behavioral, relational and performance outcomes. Table 1 provides a comparative summary.

## The efficient market theory and CEO compensation

Efficient Market Theories<sup>3</sup> (EMT) consider the rise of CEO pay as a natural consequence of fluctuations in supply and demand on the executive labor market: boards react to an increasing shortage of executive skills (Murphy and Zábojník, 2004) or pay a price for their increased efforts to control the CEO (Hermalin, 2005). The efficient market approach dominated the discussion about executive compensation until the late 1990s. Its main thrust is that the labor market for top executives works efficiently (i.e., Gabaix and Landier, 2008). EMT and its subsequent refinements through principal-agent

<sup>3</sup> We use the term “efficient market theory” as an overarching category that is rooted in the mainstream neo-classical market theory as well as its subsequent refinements through principal-agent and optimal contracting approaches (Otten, 2007).

**Table 1**  
Three models of CEO compensation

		Relational Signalling	Efficient Market	Managerial Power
Board	Main problem	Signal credible commitment to CEO	Information asymmetry vis-a-vis CEO	Power dependence vis-a-vis CEO
	Main strategy	Costly signalling from board to CEO	Incentive alignment between board and CEO	Comply to social pressure from CEO
CEO	Main motivation	Status and recognition seeking; sensitive to social reciprocity obligations and incentive alignment	Selfish rent seeking, sensitive to incentive alignment, not sensitive to social reciprocity obligations	Selfish rent seeking, not sensitive to incentive alignment or social reciprocity obligations
	Main strategy	Seeks cues signalling credible commitment from the board	Seeks highest offer	Seeks highest offer; uses position to extract rents from company
	Performance effects	Performs for company according to quality of relation with Board; performance and shareholder value increase with the positive signalling value of the gift	Performs for company according to incentives from Board; performance and shareholder value increase with size of incentives	No systematic link between compensation level, performance and shareholder value
Board-CEO relationship	Main Type Monitoring	Trust relation Perceived as negative signal, causes distrust	Arm's-length market transaction Necessary element of contract enforcement	Power-dependence relation Not effective.
Labour market context	Main characteristic	Part of signalling environment affecting costs and status value of signals	Scarce skills affecting "price" of CEOs	Governance failure affecting power balance between CEO and Board
	Public disclosure	Important as root cause of increasing compensation levels	Important as a condition for increasing the efficiency of the labour market	Important as it reduces power imbalance towards the CEO
Compensation package	Main type Main determinant	Monetary and/or non-monetary Relational signalling from Board to CEO	Monetary Optimal contracting between Board and CEO	Monetary and non-monetary Informal pressure from CEO on Board

and optimal contracting approaches (Otten, 2007) are used to explain both existing compensation levels and compensation packages (Jensen and Meckling, 1976). The main argument is as follows.

*The board*

Boards represent the interests of shareholders; they know the contribution of possible CEO qualities and his or her reservation wage. Their major challenge is to resolve the *information deficit* with regard to the real qualities and/or performance of the (candidate) CEO. Boards attempt to temper this information deficit through incentive alignment (optimal contracts) and monitoring. The compensation package offered is a function of these parameters. Agency approaches relaxed these assumptions, pointing towards ex-ante and ex-post information and motivation problems: the board does not know the quality of the candidate, and his or her performance is difficult to establish ex-ante. This creates problems in selecting the right candidate (adverse selection) and in monitoring performance (moral hazard). To solve these agency problems, "optimal" contracts need to be designed which align the interests of both contract parties.

*The CEO*

The CEO is a profit-maximizing rent-seeker who will accept the offer of the highest bidder. Agency approaches add the assumption that CEOs have an information advantage vis-à-vis the board, are risk averse, are subject to moral hazard during the selection stage and have a tendency to shirk once they get the position. Contracts will align incentives between shareholders and CEOs and lead to a clear relationship between the size of the compensation package, CEO performance, and shareholder value.

*The board-CEO relationship*

Control of the CEO can be achieved through incentive alignment by the optimal ex-ante design of contracts. The need for trust disappears because the contract sufficiently motivates CEOs to perform at the highest level. Ex post monitoring remains necessary to assess CEO performance as part of a performance evaluation system. In fact, since incentives to shirk are eliminated, the CEO has an interest in establishing and maintaining a refined performance appraisal routine. Consequently, the specific aspects of the contract determine the effort levels. Efficient market theory defines the board-CEO relationship in terms of arm's-length contracts in which the cooperative board-CEO relationship is absent.

### *The labor market context*

Rising compensation levels are the result of secular trends and changes in the broader market environment. Frequently used explanations are that a) the last few decades show a catch-up (Jensen and Murphy, 1990) because CEO compensation levels were too low in previous periods; b) market booms lead to a shortage of experienced CEOs, and the resulting increasing demand for CEO talent in these “superstar” labormarkets, in turn, lead to higher compensation levels; c) general managerial skills became more valuable, resulting in stronger competition for external CEOs (Murphy and Zábojník, 2004); and, d) higher risk of CEO dismissal due to strengthened corporate governance arrangements needs to be offset by higher compensation levels (Hermalin, 2005). Efficient market explanations trace the root cause of rising CEO compensation to changing market conditions. They need change in supply and/or demand for certain executive skills in order to substantiate the continuous and massive rise over the last few decades. Social and cognitive embeddedness as a relevant condition of a contract does not matter since a contract reflects market forces.

### *The compensation package*

CEO pay is part of a purely economic “arm’s-length” relationship between the company and the CEO. The contractual partners are guided by the desire to maximise their own material benefits. Consequently, the total size of the compensation package of an individual candidate is a function of the opportunity costs of this candidate on the CEO labormarket. In agency approaches, the design of the compensation packages is also relevant as an incentive structure that is supposed to align the interests of candidate and shareholders. Agency and optimal contracting models have generated a substantial amount of research on contract design and much less on compensation levels. However, these theories also had a “performative effect” (MacKenzie, 2006): compensation consultants used the theories to design real CEO contracts (Zajac and Westphal, 1996) and to legitimise existing trends in the market. In the U.S.A. they even form the basis for corporate law rules governing the subject (Bebchuk and Fried, 2006). Since the 1980s, equity-based and other performance-based payment structures have become more widespread, cover larger parts of CEO contracts, and are firmly legitimised by these theories.

## **Managerial power theory and CEO compensation**

In contrast, *managerial power theory* (MPT), most prominently represented by Bebchuk and Fried (2006), insists that the root cause of rising compensation levels is failing corporate governance. They argue that governance failures lead to power imbalances in the boardroom with CEOs dominating the negotiations about their own compensation. In their bargaining efforts, boards fail in their attempts to prevent excessive compensation packages even though that is what shareholders expect them to do. The managerial power approach, meanwhile, has often been put to the test, as a recent meta-analytic review showed. It identified 219 empirical studies on the link between managerial power and compensation in the United States (Van Essen et al., 2015). The main argument is as follows.

### *The board*

The key issue for the board is its power dependence on a CEO. Since the CEO can withhold rewards for board directors (e.g., re-appointments), the board’s dependence is structural, making its members susceptible to social pressure from the CEO. Managerial power explanations stress that the interests of boards and shareholders are not necessarily aligned. Consequently, agency problems between shareholders and boards are more prominent than agency problems between boards and CEOs. CEOs dominate the board at the expense of shareholders. As a result, existing contracts generate weaker incentives for CEOs than assumed by the efficient market explanations. Where agency explanations emphasise information asymmetry between board and CEO, managerial power explanations stress the power asymmetry in this relationship, with the board clearly being in a dependence relationship. Board members have both material and social reasons to go along with the contractual demands from CEOs. First, CEOs influence their future re-election, they manage resources that might be beneficial in the future, and the personal costs to board members of governance failure are typically low as they usually only own a small number of shares. Second, board members will often feel “a sense of obligation and loyalty to the CEO” (Bebchuk and Fried, 2006, 11).

### *The CEO*

CEOs are mainly interested in their own monetary gains. When negotiating a (new) compensation package, CEOs seem primarily motivated to greedily increase their material benefits. Managerial power theory assumes self-interested actors, so CEOs will exploit their power by maximizing their compensation and minimizing their efforts, and neither social nor moral obligations temper this process. Because of the unequal power relationship on the board, they are essentially hard to motivate or to steer. As a result, the link between the compensation package and CEO effort is weak, if not absent. Characteristics of CEO compensation packages will not relate to an increase in shareholder value.

### *The board-CEO relationship*

The board-CEO relationship goes beyond the arm's-length contracts of the efficient market theory. Formal control rests with the board, but it is actually the CEO who dominates the board in an informal sense. The board has no means of effectively controlling the CEO (neither ex-ante by incentive alignment, nor ex-post by monitoring and performance evaluations). The incompleteness of contracts creates a control gap in the relationship. How the board envisions its subordinate role does not affect the motivation of the CEO. Neither control nor trust issues in the board-CEO relationship matter, because of the skewed power distribution.

### *The labor market context*

Corporate governance systems have structural deficiencies which give CEOs considerable power over the outcomes of the negotiation processes with the board (Grabke-Rundell and Gomez-Mejia, 2002). Board members and (candidate) CEOs are part of a personal, micro-sociological system in which the position of the CEO dominates important aspects board members value. The CEO exploits the resulting dependency relationship to increase his or her personal benefit. On top of that, both board members and candidates are quite often part of a business elite network that shares objectives, acts as a collective and is made up of social ties carrying mutual obligations (Carroll, 2010; Domhoff, 2006; Mills, 1956). Members know each other (in)directly, and in the near future they will have to cooperate collegially. As a result, they understand and sympathise with the candidate since they are often (former) CEOs themselves. Being part of this "inner circle" (Useem, 1984) stimulates the creation of mutually beneficial relationships at the expense of outside groups such as anonymous shareholders. The managerial power theory predicts negotiation outcomes will not reflect an efficient labor market with optimal contracting but instead suit the preferences of the candidate. Hence, corporate governance systems are seriously flawed at the company level, which results in increasingly excessive compensation for greedy CEOs at the expense of shareholders. Compensation levels continue to rise because of this structural imbalance.

### *The compensation package*

Anonymous arm's-length contracting is hypothetical and does not exist in real-life boardrooms. Instead, because of the CEO's power advantage and the social nature of the ties to individual board members (Grabke-Rundell and Gomez-Mejia, 2002), CEOs can dominate the negotiations about their compensation package, which pushes compensation levels upward. Monitoring is ineffective.

## **Relational signalling and CEO compensation**

RST has a different view of the relationship between board and CEO. It stresses the necessity of a cooperative relationship between the two parties and focuses on the dynamics between them. The compensation package itself is part of a larger set of options boards have to signal their intentions to the (candidate) CEO. This makes the role of the wider signalling environment more important, which includes the role of compensation packages of other CEOs. Similar to MPT, relational signalling theory has a keen eye for the social dynamics between the two exchange partners. In both theories, the root cause of the rising compensation levels lies within this relationship. However, where MPT focuses on shortcomings in corporate governance systems, RST sees the rise in compensation as an unintended macro consequence resulting from socially rational interactions at the micro level. In detail, the argument goes as follows.

### *The board*

The board's main problem is to signal credible commitment to a candidate CEO and to develop a long-term cooperative relationship. As a consequence, the rise in CEO compensation is inherent in the exchange relationship. With regard to their selection and remuneration tasks, boards face three major challenges: attracting talented (new) CEOs, retaining good CEOs (Khurana, 2001), and building as well as maintaining a good, long-term personal work relationship with the CEO (Roberts et al., 2005; Shen, 2005). These are challenges, as the board must lure potential candidates with secure positions who must choose an unknown situation in another company. From the perspective of the candidate CEO, three unobservable intentions of the new board are most relevant: their true degree of commitment to the new candidate (e.g., in times of crisis), their trust in the candidates' expertise and competence (e.g., when facing criticism by shareholders), and their true intention to maintain a collaborative relationship. To what extent will the CEO be able to count on the support of the board? How committed is this board to retaining the CEO considering the increasing dismissal rates as a result of tightening corporate governance regimes (Hoskisson et al., 2009)? RST suggests that boards that are able to transmit credible information about their unobservable qualities will be more likely to attract and retain their preferred candidates as well as to maintain cooperative board-CEO relationships.

## The CEO

The candidate is the receiver of the signal<sup>4</sup>. Contrary to the other theories, the candidate CEO will evaluate a compensation package not only with regard to its monetary value but also with regard to its potential underlying non-monetary value: what does the offer say about the board's commitment and trust, and how does it compare in terms of status to what is offered to other CEOs? When relational signals are credible and legitimate, they will trigger a gift exchange mechanism. Gifts elicit the normative obligation to be repaid. These reciprocity expectations will increase the CEO's commitment to the company beyond the financial incentive of the compensation package itself. Once the position has been accepted, the signal will trigger higher levels of intelligent effort, cooperation and commitment to the company (Lindenberg, 2003; Mühlau, 2000). This entails CEOs searching for cues that can help to evaluate a board's true commitment. Money is only one aspect of the exchange relationship. A CEO also interprets a compensation package from a relational perspective. Hence, in those situations where CEOs perceive above-market salaries and/or other perks as positive relational signals, their efforts will be high, resulting in higher shareholder value. CEOs mainly evaluate the relational signals of an offer. The signalling value of the size of the gift is highly context-dependent. It matters a lot for a CEO whether the offer is in line with what (s)he considers relevant reference categories consisting of "comparable" CEOs (DiPrete et al., 2010). Commitment to a contract or a relationship is likely to decay over time unless ongoing relational signalling constantly reinforces it (Wittek et al., 2003). Consequently, signing a contract constitutes the first step in a signalling process. To elicit sustained cooperation, relational signalling needs to continue. Hence, to explain the variation in performance differences of CEOs, it is necessary to look at relational signalling processes beyond the remuneration package as specified in the contract and consider the relational gifts over time.

### The board-CEO relationship

Similar to EMT, RST assumes that contracts are incomplete. This makes it impossible for the board to specify all future potential contingencies a new CEO might face. However, unlike EMT, RST builds on psychological contract reasoning (Kidder and Buchholtz, 2002; O'Reilly and Main, 2010) according to which the exchange between boards and CEOs creates mutual normative expectations and implies a relational contract (i.e., a trust relationship) in which money is not the main motivator for CEOs (O'Reilly and Main, 2010). Boards need to create a normative commitment from a CEO candidate to make sure a mutually beneficial exchange relationship will be realized. Offering a relational gift to the candidate can trigger this normative commitment.<sup>5</sup> As a result, the relationship between board and CEO is driven by reciprocity expectations and normative obligations. A side effect of this trust relationship is that it makes stringent monitoring of a CEO by a board problematic: control signals distrust to the CEO and will damage his or her normative commitment.

### The labor market context

The labor market context defines the signalling environment, thereby setting the stage for relational signalling between the board and the CEO. At the same time, these signalling processes affect the wider labor market context. Three processes are particularly important here.

First, the labor market shapes the material and immaterial *costs of the signal* for the board. The credibility of a signal increases with its costs, both in material and immaterial terms. For a board, the size of a compensation package is an important element in the signalling process. From a monetary perspective, a larger package implies higher material cost, but its relative impact on the cost function of the company may be close to negligible. However, a larger package comes with an extra symbolic cost. The size and composition of a CEO's compensation package can be subject to severe criticism by shareholders and the public (the outrage factor). Ironically, outside criticism might be costly in terms of the board's public reputation; it can simultaneously increase the gift's internal value towards the CEO. A CEO who receives premium compensation despite massive public or shareholder outrage will interpret this as a strong relational signal from the board.

Second, the labor market context defines the *status value of the relational signal*. Where information about CEO compensation is publicly available, the credibility of a relational signal depends on how the size of the compensation package compares to that of other CEOs. The status value depends on which high-status reference group is chosen to determine the compensation level (DiPrete et al., 2010). It communicates to candidate CEOs in which "league" the board considers them to be capable of playing or into what league the candidate is supposed to take the company in the near future. It also reaffirms the board's own self-definition of the company's position in the status hierarchy in the market (Podolny, 1993). Given the strong tendency towards social comparison and sensitivity for status (Brennan and Pettit, 2006), this symbolic dimension of the signal is likely to play a vital role in a (candidate) CEO's decision as to whether to join or stay in the company or switch to another one.

<sup>4</sup> Other receivers of the signal being the general public and other players in the market: boards and CEOs of other companies, as well as shareholders.

<sup>5</sup> Note, however, that compared to psychological contract reasoning, RST comes to a different conclusion with regard to the relationship between pay for performance and relational contracts. Whereas psychological contract theory expects crowding out of intrinsic motivation and therefore predicts a negative effect (O'Reilly and Main, 2010), RST argues that pay can have a positive effect on trust if it is conceived as a relational signal.



Third, relational signalling as such will not drive compensation levels upwards: gifts to candidates can be provided in multiple, even non-monetary, ways without their having much effect on the market. However, to the degree that gifts become public knowledge and their value becomes comparable in monetary terms, the logic of costly signalling will drive compensation levels upwards. Both the board and the candidates will assess current reservation wages and compensation levels offered for similar positions in similar companies. To send a relational signal to the candidate, boards add a gift on top of the reservation wage and will offer a compensation package that is higher than what the market suggests. Once established, the new compensation package (including the gift) will become public knowledge. Other boards will integrate this outcome in their assessment of the reservation wage for their positions, and again add another layer of relational gifts. As a result, compensation levels will rise. Whereas adding such gift premiums is a perfectly reasonable strategy from the perspective of a board, they translate into a permanent upward pressure on the market level because of their effect on how other boards perceive the reservation wages.

RST suggests that the exchange between boards and CEOs has structural characteristics that drive up compensation levels. The need to lure potential candidates, and to establish a cooperative relationship, makes it socially rational to offer candidates a costly gift that covers their reservation wage *plus* a premium to signal good intentions. The premium is supposed to trigger the necessary normative commitment of the CEO. Additionally, if compensation levels are made public, it increases the status of the CEO and of the board, but also leads to a continuous upward pressure on compensation levels in the labor market.

In summary, RST traces the root of the upward pressure to a change in the institutional environment (the requirement to disclose perquisites, in addition to other elements of CEO compensation) in combination with processes inherent in social exchange relationships.

### The compensation package

Boards have a wide variety of possible signalling devices — contracts are only part of the signalling process. The compensation package is part of a more complex social relationship between the company and the CEO. It defines the psychological contract (Kidder and Buchholtz, 2002; O'Reilly and Main, 2010). Similar to the managerial power theory, RST emphasizes that the package is part of the dyadic relationship. However, RST does not assume a unilateral dependence relationship in which one party is dominant over the other. As long as the compensation package contains a *costly gift* above the reservation wage, it signals the board's true commitment to a candidate. This signal motivates a candidate to accept a job offer and/or elicits stewardship behaviour by the CEO (Davis et al., 1997).

Compensation packages can become (parts of) a relational signal if they match at least the candidate's reservation wage and if they credibly communicate the board's trust in and commitment to the candidate (Akerlof, 1986). This can be achieved if part of the compensation is perceived as a "gift." Gifts are resources or services that are voluntarily provided by one party and are usually costly for the gift giver. Such gifts activate reciprocity obligations (Gouldner, 1960) and trigger a *normative commitment* from the receiver (Mühlau and Lindenberg, 2003). This commitment goes beyond the contractually specified terms of the employment relationship. A durable dyadic relationship between a board and a CEO governed by trust and "weak solidarity" norms is the result (Lindenberg, 1988). The consistent and repeated provision of gifts signals an ongoing mutual commitment to the relationship. Hence, relational signals are an important device for expressing the willingness for a long-term, stable, and cooperative relationship, which will be reciprocated with the trust of the agent when the expected efforts are expended (Lindenberg, 1988). As a result, it is rational for boards to offer a compensation level that equals the estimated market value of the candidate *plus* an extra premium as a gift in order to establish a good relationship. The compensation level of a new CEO is part of a broader gift exchange. By offering a premium on top of the reservation wage, the board signals its good intentions to a candidate and its willingness to establish or maintain a mutually beneficial cooperative relationship.

Figure 2 provides a graphical summary of a relational signalling explanation of CEO compensation.

### Towards theoretical propositions: two applications

In this section, we illustrate the power of a relational signalling approach by elaborating two exemplary and empirically testable propositions. They deviate from the other two theories. We focus on a) changes in the long-term trends in compensation levels, and b) the choice of the compensation peer group.

#### Proposition 1: long-term trends in executive compensation

One of the puzzles related to CEO compensation is that it remained relatively stable between the 1930s and the late 1970s (not exceeding \$1 million, measured in year 2000 dollars) but started to accelerate upwards ever since then (Frydman and Jenter, 2010; see Figure 1). A proper theory of rising compensation levels should be capable of explaining *both* this historical stability and its sudden increase. Was there equilibrium in the market for CEOs for such a long time, as EMT would suggest? Or, were CEOs less dominant vis-à-vis the board during that period, as would follow from MPT? Both explanations have problems in explaining either the long-term stability before the 1980s or the sudden break combined with the upward trend after 1980 (see also Frydman and Saks, 2010).

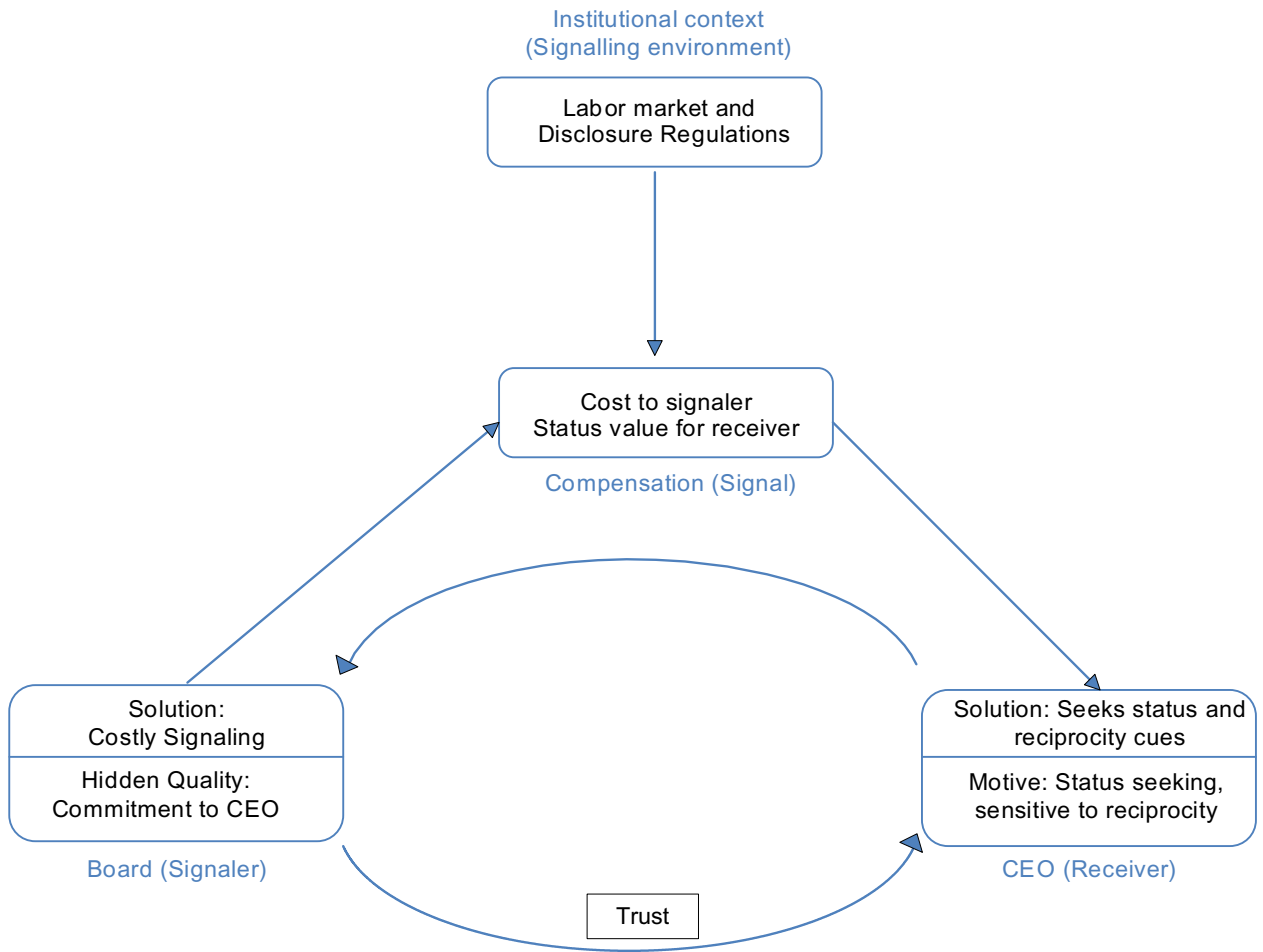


Figure 2. Relational signaling and CEO compensation

RST neither focuses on changes in market equilibria nor on sudden changes in power relations between the board and the CEO. RST would look first at possible changes in the signalling environment around the date that the levels start to rise. It would focus on the gift that boards offer to candidate CEOs in order to develop an exchange relationship. Essentially, the gift is not about money. It is the gesture of the board that creates the signal. RST does not specify the nature of the gift as long as it is costly to the board. When compensation levels are relatively *stable* over time, RST would suggest that candidates are offered their reservation wages but that relational signalling is achieved by other, non-monetary, means such as a variety of perquisites. In order to explain a moment when compensation levels suddenly start to rise after a long period of stability, RST points to two relevant conditions. First, compensation levels, including the relational gift, should become completely public and visible to all actors in the market. Second, non-monetary gifts should become less interesting at that point in time, and will be replaced by a monetary gift on top of the reservation wage. Taken together, relational signalling would be the same over the complete period, but the means that boards use to signal have changed. When gifts become public and are monetized, RST predicts that compensation will suddenly start to rise and continue to rise even when other possible drivers are absent.

Applied to the existing evidence (see Figure 1), RST expects that the gift was non-monetary before compensation levels began to rise at the beginning of the 1980s. In the stable period before 1980, the relational gift was translated into non-monetary perquisites such as company planes, company cars, chauffeurs, membership in exclusive country clubs, tax services and other “fat cat” elements. Notably, RST clearly deviates here from the other explanations. From the perspective of agency modeling and optimal contracting, offering perquisites to CEOs is an unnecessary expropriation of company resources at the expense of shareholders (Jensen and Meckling, 1976). Perquisites are seen as a form of “stealth compensation” and are defined as an unsolved agency problem. From the managerial power point of view, perquisites on top of the monetary compensation package are seen as corporate governance failure and an expression of CEO power using company resources for personal purposes.

For RST, however, using perquisites would be neither anomalous nor problematic but a potential and efficient means that boards use on top of paying the reservation wage (Henderson and Spindler, 2004). Using perquisites instead of a monetary premium within the dyadic exchange relationship has an important consequence for the market as a whole. In general, perquisites are not publicly known and are harder for the outside world to compare in terms of monetary value. So the perquisites do have a status value but are hard for the outside world to express in monetary terms. This lack of comparability of the gifts reduces, if not eliminates, the upward pressure in the market as a whole. Boards only need to offer the reservation wages to a candidate, and as a result they are not collectively lured into an upward-bidding process. *Ceteris paribus*, this results in a rather stable market with constant compensation levels for CEOs that are accomplished with a variety of interesting gifts.

So what happened around 1980 in the U.S., when compensation levels suddenly started to rise? A number of mutually related changes in the signalling environment are relevant to understand this event. To start with, shareholders kept their eye on the money and began to perceive perquisites more and more as a form of misappropriation of shareholder value (e.g., Jensen and Meckling, 1976). Probably more important, the SEC started to require that perquisites given to top executives should be disclosed (SEC Release No. 5856, 18 August 1977). As McGahran (1988, 27) described in detail, this culminated into the requirement that "... additional management remuneration information on personal benefits [should] be disclosed in a specified tabular format and be included in registration statements, periodic reports, and proxy or information statements." This act was further amended "... to provide a separation of options and rights exercised from benefits (perquisites) received for the fiscal year ending in 1980" (ibid). These new rulings by the SEC had two implications. First, boards were forced to make information about the nature and size of perquisites "paid" to CEOs publicly available to any relevant party that was interested. Second, the size of the gift became monetized which made the relational gifts offered to CEOs in different companies highly comparable as well. As a result, the non-monetary gifts lost their symbolic value and became part of the monetary exchange.

Until the changes of the SEC rulings, the IRS required executives to report benefits that they received from their employers as income to the extent that these benefits were for the executive's personal use. However, the IRS was unable to enforce these rules, as the average manager did not disclose this information (again, see McGahran, 1988). The new SEC ruling, however, made it possible for the IRS to use this new public information and to implement this Internal Revenue Code, Section 61, of 1954. This reduced the attractiveness of perquisites as a relational signal relative to monetary compensation. So, the second condition, the decreasing attractiveness of perquisites, seems to have emerged during the same period of time.

As a result of these two developments, boards were faced with a dilemma in two ways. They were pressured into turning their non-monetary gifts into monetary value, and at the same time were forced to make their gifts public, even though these were an essential element in the exchange relationship with the CEO. Considering their monetary focus, shareholders would not like the size of the perquisite packages. However, as RST argues, eliminating perquisite packages would have a destructive effect on the signalling process. So boards are forced to search for alternative signalling means. This can take two forms. First, boards can hide their gifts from shareholder scrutiny by not fully disclosing the perquisites or the compensation package, a problem that has been observed ever since and has been addressed in the literature (e.g., Bebchuk and Fried, 2006). Second, boards can turn the non-monetary gifts into monetary gifts by paying a premium on top of the reservation wage. From the perspective of the individual board, the second option is the more attractive as it is legal and easy to introduce. However, there is an unintended consequence of this board decision beyond the micro level of the board. This choice creates a benchmarking problem on the market, where the compensation package (including the gift) of one CEO becomes a higher reservation wage for all others. Every relevant party observes that compensation levels that were originally defined as reservation wages start to rise suddenly. Once reservation wages rise, other boards have to add more relational signalling on top of this new compensation level, and so on...

To summarize, RST hypothesizes that compensation levels were stable when boards used money to pay the reservation wage of a candidate and perquisites for relational signalling purposes. Once shareholders pressured boards into reducing the use of perquisites, non-monetary gifts turned into monetary gifts, and led to increasing compensation levels. Empirically, this trend was also observed in the U.S. during the period 1987–1999: "The slow downward trend in most perk offerings is notable given that pay has been increasing substantially over this period" (Rajan and Wulf, 2006).

#### *Proposition 2: benchmark groups in executive compensation*

On December 15, 2006, another disclosure requirement for U.S. companies came into effect (SEC, 2006). It states that companies have to reveal the benchmark companies they use when determining the pay of a CEO. In a recent paper, DiPrete et al. (2010) analyse how the social influence processes triggered by this requirement result in an upward drift of CEO compensation (Albuquerque et al., 2013; Laschever, 2013). They argue that the composition of this set of benchmark companies takes place under uncertainty. Since the compensation packages of other CEOs are publicly disclosed in the U.S., boards can view them. However, there is no information about the relative position of their own companies vis-à-vis other companies. Boards have to develop a list of companies which they perceive as equal in status and relevant for benchmarking compensation levels. When each individual company chooses a set of benchmark companies, together they create a virtual network of benchmark companies (either through compensation consultants or, since 2006, through the SEC files in the

U.S.). The definition of the set of benchmark companies by each individual company creates, on a collective level, a comparative network of companies.

DiPrete et al. (2010) show how this comparative network stimulates the upward pressures in the CEO market. They demonstrate how even small changes in the labor market for CEOs can substantially drive up compensation levels. When even just a few boards “leapfrog” the size of the compensation package of other companies, the effect spreads massively as a result of the comparative network. Relatively isolated local incidents affect the benchmarks of all other companies directly, which sequentially redefines how other boards define their own environments. As a result, the market is very sensitive to this “contextual compensation drift”. The magnitude of this effect is so large that just a local shortage of qualified candidates or a few local failures of the corporate governance will be sufficient to push compensation levels upward.

DiPrete et al. (2010) suggest that boards have a tendency to select a “biased sample” set of benchmark companies that is favorable to the candidate CEO. The tendency to use upwardly biased samples has been confirmed empirically (Faulkender and Yang, 2010). This raises the question: why would boards choose such an obvious and public upward bias? The efficient market theory has difficulties in explaining this, as the value of the CEO can easily be covered by the variable elements of the contracts. Skewed benchmarking is not necessary. From a managerial power perspective, composing a biased benchmark would be a rather public way of showing that a board is sensitive to CEO pressure. As biases are subject to shareholder scrutiny, why wouldn't boards try to hide the fact that they are sensitive to CEO pressure in less obvious ways?

RST offers an alternative explanation as to why boards would choose an upward bias in the set of benchmark companies. To begin with, if the board did *not* choose an upward bias, the set of benchmark companies would be close to the reservation wage of the candidate CEO. A relational signal would be lacking and the commitment of the new CEO would be instrumental. However, by including an upward bias in the composition, boards create a powerful relational signal to a candidate CEO. By integrating an upward bias in the selection, boards signal that they consider the candidate to have better qualities than his or her direct peers in comparable companies, and signal the status level they assume the candidate has. In this way, they stress that they regard a candidate as being highly qualified and a serious partner. Simultaneously, this upward bias implies a strategic commitment to what the board expects the company to achieve in the near future (ironically, on behalf of the shareholders). The choice of an upward-biased set of benchmark companies signals a commitment to the candidate, but is also a signal about what is expected in the near future.

According to RST, the biased sample is itself a symbolic gift, because it creates status value for the candidate, and implicitly sets a norm relating to where the company should go. Simultaneously, the biased sample translates into a compensation level above the reservation wage of the candidate. So, the bias not only creates status value for a candidate, but it also includes the necessary relational gift. In a virtual comparative network of benchmark companies, this tendency of individual boards leads to a continuous increase in the compensation levels in the total network. Hence, from an RST perspective, a biased set of benchmark companies delivers status value and improves cooperation between the board and the CEO. The subsequent rise in compensation levels is an unintended consequence at market level.

## Discussion

RST enhances our understanding of the upward pressure on CEO compensation in at least four ways. First, unlike the efficient market theory, RST does not require assumptions about changes in the quality distributions of candidates or scarcity of managerial talent in the labor market. Even if candidates' qualities were mediocre, RST would predict a rise in compensation levels where compensation is public knowledge.

Second, RST can explain both the optimal aspects of contracts as well as empirical deviations from optimal contracts, such as “stealth compensation”. The theory shifts the attention from the controlling aspect of governance to the conditions for and processes of initiating and maintaining cooperative relationships. As long as the contract serves the latter purpose, the details of the contract can vary over time, and are not really the key issue to understand. A positive relational signal is what matters. Contractual details are less relevant.

Third, rather than being the result of governance failure, increasing compensation levels are the unintended consequence of a *socially rational* attempt to govern the cooperative relationship between board and CEO. This process is difficult to stop. The irony is that condemnation and disapproval by shareholders and the public at large will only serve to make the relational signal from the board to the CEO more valuable. The price of the signal makes it more, rather than less, valuable as a reliable indicator of the true intentions of the board. Additionally, the greed of powerful CEO candidates is not a necessary assumption of the RST. Even if candidates are not greedy, boards themselves will tend to send signals above reservation wages. Hence, any changes in the laws and corporate governance codes to stop the rise in compensation levels can only have marginal effects as long as the signalling environment remains intact.

Fourth, RST complements rather than competes with earlier explanations. In fact, it further strengthens their predictions. For instance, an emerging shortage of managerial talent on the labor market makes it even more relevant for a board to send credible relational signals (by raising the compensation levels). Similarly, in accordance with the managerial power argument, boards need to send relational signals to dominant candidate CEOs by agreeing to their excessive demands. However, even when CEOs are not dominating the board/executive relationship, boards still have good reasons to pay a premium above the reservation wage of the candidate.

We have attempted to demonstrate the strong potential of a relational signalling approach, and suggest that it provides fruitful directions for future research. Two avenues are particularly promising. First, it is necessary to test the hypothesis

empirically in order to support the main thrust of the approach. Although relational signalling has been tested in other contexts, and our hypotheses might look plausible, a proper empirical test in the CEO market is necessary. Second, there is plenty of room for further theoretical development. For instance, the nature of the gift offers opportunities to incorporate other aspects of the exchange relationship in the theory. Here, we have only used a dichotomy between monetary gifts and perquisites, and accepted other contextual issues as constant. However, there is more to explore. For instance, boards can vary in the strategic discretion they grant to candidate CEOs. Offering a strategic *carte blanche* may not be what shareholders want, but it is a strong signal to the candidate CEO. Relatedly, boards can offer CEOs a more or less “diligent” board (Hermalin, 2005). Low levels of board control can be seen as a gift of the board and signal trust towards the candidate.

Another interesting area would be differences in CEO compensation in different countries. Relational signals might have different meanings in different institutional contexts. For instance, according to an analysis of 2004–2006 data (Hall, 2009), Japanese CEOs at the top 100 largest companies by market capitalization earn an average of \$1.5 million, compared to \$13.2 million earned by American CEOs of big companies. Both countries have a very different CEO labor market and different corporate governance systems. In Japan, seniority and loyalty are valued much more, which creates a different need in terms of relational signalling. Additionally, CEOs in Japan rarely get fired and also do not receive high bonuses for top performance. Apparently, Japanese CEO compensation seems much less about the money, which raises new questions about the signalling context in which their compensation packages develop.

### Conclusions and practical consequences

Overall, RST delivers a powerful approach for understanding both the long-term stability and subsequently increasing levels of CEO compensation. First, the theory is capable of explaining the rise in compensation in a more parsimonious way, because it makes fewer assumptions about corporate governance systems, CEO intentions, and qualities of boards and CEOs alike. Second, the theory is capable of incorporating a wider set of empirical observations, which are seen as “deviations”, “failures” or “anomalies” by the other approaches. Finally, RST is not directly at odds with other explanations, but can enhance their explanatory power. Efficient market and managerial power theories specify conditions under which the need for relational signalling becomes even stronger.

In terms of its practical implications, RST suggests that boards need these costly signals and as a result are unable to stop the continuous increase in compensation levels. The practical consequences in terms of policy recommendations could be severe. First of all, demanding a further increase in the public transparency of contracts would make compensation levels even more comparable. RST suggests that such stringent corporate governance systems would not help much. Boards would continue to add premiums that would again push up compensation levels. In fact, only a *less* transparent market would be able to stop the process because it would reduce the visible status effect of compensation levels. Second, tightening corporate governance rules to balance the power distribution between boards and CEOs might reduce the steepness of the upward trend but would not stop it. Offering wage premiums to CEOs does not reflect a failure of corporate governance, but is a socially efficient means of creating and maintaining CEO commitment. In line with this argument, pressure from shareholders on boards to reduce compensation levels could work against their own interests. Lowering compensation levels can create negative reinforcing cycles of collaboration, which would probably not create shareholder value. Third, shareholders could try to standardize the compensation levels. For example, they could develop a normative framework that defines “reasonable compensation levels” for different types of CEO positions. Such norms would increase pressure on the boards to stay within its limits. However, the specific characteristics of boards, companies and candidates make each negotiation highly idiosyncratic and would not stop the process. Even if different “pay level leagues” were defined, boards would tend to differentiate upwards in order to send the proper signals.

Strictly speaking, RST offers only one suggestion for decreasing the unintended external costs of increasing compensation levels. Relational signalling is built on the notion of “gift exchange”. Presently, the board offers a gift to the CEO in terms of a monetary premium. However, this premium is essentially a symbolic signal, although it has monetary value. This drives up market prices and is increasingly subject to public discontent and even outrage, especially since the public only looks at the monetary value without considering the signalling aspect. In order to restore some balance, only an alternative status system for CEOs might reduce the present pressures. According to RST, boards are not able to do much. However, CEOs could voluntarily and publicly use the symbolic gift part of their payments for purposes outside their personal interest. This return gift could, for instance, consist of a voluntary and public donation (announced *ex-ante*) to an outside public charity (preferably in line with the CSR-related goals of the company, if available). This solution would keep the relational signalling system between the board and the CEO intact. CEOs could decide how “greedy” they want to appear in the eyes of the public, and disruptive effects on the public opinion could be reduced through the collective benefits of public charities. Finally, these donations could turn negative sentiments about high compensation levels into a positive contribution to the image of the company in general. Such donations, announced publicly and *ex-ante*, could create a new and symbolic status hierarchy among CEOs. A well-known example is “The Given Pledge”, where billionaires such as Warren Buffet and Bill Gates promise to donate their wealth to philanthropic foundations. Interestingly enough, the symbolic value of the money involved can increase even further, CEO status gets a less monetary dimension, and the monetary value of the premium is used for public good. This, however, is not enforceable by any means and would require a mental change of all participants in this process: shareholders, boards and CEOs. However, for now, such thoughts probably remain interesting mainly as a theoretical deduction rather than reflecting a practical solution.

## References

- Akerlof, G.A., 1986. Labor contracts as partial gift exchange. In: Akerlof, G.A., Yellen, J.L. (Eds.), *Efficiency Wage Models of the Labor Market*. Cambridge University Press, New York and Melbourne, pp. 66–92.
- Albuquerque, A.M., De Franco, G., Verdi, R.S., 2013. Peer choice in CEO compensation. *Journal of Financial Economics* 108 (1), 160–181.
- Bebchuk, L.A., Fried, J.M., 2006. Pay without performance: overview of the issues. *Academy of Management Perspectives* 20 (1), 5–24.
- Bognanno, M.M., 2014. Efficient Markets, Managerial Power, and CEO Compensation: CEO Pay, often contentious is the Result of many Forces. IZA World of Labor. <<http://dx.doi.org/10.15185/izawol.34>>.
- Boyd, B.K., Haynes, K.T., Zona, F., 2011. Dimensions of CEO-board relations. *Journal of Management Studies* 48 (8), 1892–1923.
- Brennan, G., Pettit, P., 2006. *The Economy of Esteem: An Essay on Civil and Political Society*. Oxford University Press, Oxford.
- Carroll, W.K., 2010. The Making of a Transnational Capitalist Class: Corporate Power in the 21st Century. Zed Books, London.
- Certo, S.T., 2003. Influencing initial public offering investors with prestige: signalling with board structures. *Academy of Management Review* 28 (3), 432–446.
- Certo, S.T., Daily, C.M., Dalton, D.R., 2001. Signalling firm value through board structure: an investigation of initial public offerings. *Entrepreneurship: Theory & Practice* 26 (2), 33–50.
- Connelly, B., Certo, S.T., Ireland, R.D., Reutzel, C.R., 2011. Signalling theory: a review and assessment. *Journal of Management* 37 (1), 39–76.
- Conyon, M., Fernandes, N., Ferreira, M., Matos, P., Murphy, K.J., 2013. The executive compensation controversy: a transatlantic analysis. In: Boeri, T., Lucifora, C., Murphy, K. (Eds.), *Executive Remuneration and Employee Performance-Related Pay: A Transatlantic Perspective*. Oxford University Press, Oxford.
- Conyon, M.J., 2006. Executive compensation and incentives. *Academy of Management Perspectives* 20 (1), 25–44.
- Conyon, M.J., Schwalbach, J., 2000. Executive compensation: evidence from the UK and Germany. *Long Range Planning* 33 (4), 504–526.
- Davis, J.H., Schoorman, F.D., Donaldson, L., 1997. Toward a stewardship theory of management. *Academy of Management Review* 22 (1), 20–47.
- Devers, C.E., Cannella, A.A., Jr., Reilly, G.P., Yoder, M.E., 2007. Executive compensation: a multidisciplinary review of recent developments. *Journal of Management* 33 (6), 1016–1072.
- DiPrete, T.A., Eirich, G.M., Pittinsky, M., 2010. Compensation benchmarking, leapfrogs, and the surge in executive pay. *American Journal of Sociology* 115 (6), 1671–1712.
- Domhoff, G.W., 2006. *Who Rules America?* McGraw-Hill, New York.
- Faulkender, M., Yang, J., 2010. Inside the black box: the role and composition of compensation peer groups. *Journal of Financial Economics* 96 (2), 257–270.
- Filatovchev, I., Bishop, K., 2002. Board composition, share ownership, and ‘underpricing’ of U.K. IPO firms. *Strategic Management Journal* 23 (10), 941–955.
- Filatovchev, I., Boyd, B.K., 2009. Taking stock of corporate governance research while looking to the future. *Corporate Governance: An International Review* 17 (3), 257–265.
- Fiss, P.C., Zajac, E.J., 2006. The symbolic management of strategic change: sensegiving via framing and decoupling. *Academy of Management Journal* 49 (6), 1173–1193.
- Frydman, C., Jenter, D., 2010. CEO compensation. *Annual Review of Financial Economics* 2, 75–102.
- Frydman, C., Saks, R.E., 2010. Executive compensation: a new view from a long-term perspective, 1936–2005. *Review of Financial Studies* 23 (5), 2099–2138.
- Gabaix, X., Landier, A., 2008. Why has CEO pay increased so much? *Quarterly Journal of Economics* 123 (1), 49–100.
- Gambetta, D., 2011. Signalling. In: Hedstrom, P., Bearman, P. (Eds.), *Oxford Handbook of Analytical Sociology*. Oxford University Press, Oxford.
- Gambetta, D., Bacharach, M., 2001. Trust in signs. In: Cook, K.S. (Ed.), *Trust in Society*. Russell Sage Foundation, New York, pp. 148–184.
- Gouldner, A., 1960. The norm of reciprocity: a preliminary statement. *American Sociological Review* 25 (2), 161–178.
- Grabke-Rundell, A., Gomez-Mejia, L.R., 2002. Power as a determinant of executive compensation. *Human Resource Management Review* 12 (1), 3–23.
- Hall, K., 2009. No Outcry About CEO Pay in Japan. *Bloomberg Business Week Global Economics*. <[http://www.businessweek.com/globalbiz/content/feb2009/gb20090210\\_949408.htm](http://www.businessweek.com/globalbiz/content/feb2009/gb20090210_949408.htm)> (accessed 04.12.14.).
- Henderson, M.T., Spindler, J.C., 2004. Corporate heroism: a defense of perks, executive loans, and conspicuous consumption. *Georgetown Law Journal* 93 (1885), 1835–1883.
- Hermalin, B.E., 2005. Trends in corporate governance. *Journal of Finance* 60 (5), 2351–2384.
- Hoskisson, R.E., Castleton, M.W., Withers, M.C., 2009. Complementarity in monitoring and bonding: more intense monitoring leads to higher executive compensation. *Academy of Management Perspectives* 23 (2), 57–74.
- Jensen, M.C., Meckling, W.H., 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4), 305–360.
- Jensen, M.C., Murphy, K.J., 1990. Performance pay and top-management incentives. *Journal of Political Economy* 98 (2), 225–264.
- Khurana, R., 2001. Finding the right CEO: why boards often make poor choices. *MIT Sloan Management Review* 43 (1), 91–95.
- Kidder, D.L., Buchholtz, A.K., 2002. Can excess bring success? CEO compensation and the psychological contract. *Human Resource Management Review* 12 (4), 599–617.
- Laschever, R.A., 2013. Keeping up with CEO Jones: benchmarking and executive compensation. *Journal of Economic Behavior & Organization* 93, 78–100.
- Lindenberg, S., 1988. Contractual relations and weak solidarity: the behavioral basis of restraints on gain-maximization. *Journal of Institutional and Theoretical Economics* 144 (1), 39–58.
- Lindenberg, S., 2003. Governance seen from a framing point of view: the employment relationship and relational signalling. In: Nootboom, B., Six, F. (Eds.), *The Trust Process in Organizations, Empirical Studies of the Determinants and the Process of Trust Development*. Edward Elgar, London, pp. 37–57.
- Lund, A., 2012. Compensation as signalling. *Florida Law Review* 64, 591.
- MacKenzie, D., 2006. Is economics performative? Option theory and the construction of derivatives markets. *Journal of the History of Economic Thought* 28 (1), 29–55.
- McGahran, K.T., 1988. SEC disclosure regulation management prerequisites. *Accounting Review* 63 (1), 23.
- Mills, C.W., 1956. *The Power Elite*. Oxford University Press, New York.
- Murphy, K.J., Zábojník, J., 2004. CEO pay and appointments: a market-based explanation for recent trends. *American Economic Review* 94 (2), 192–196.
- Mühlau, P., 2000. The governance of the employment relation. A relational signaling perspective (Doctoral dissertation). University of Groningen.
- Mühlau, P., Lindenberg, S., 2003. Efficiency wages: signals or incentives? An empirical study of the relationship between wage and commitment. *Journal of Management and Governance* 7 (4), 385–400.
- O’Reilly, C.A., Main, B.G.M., 2010. Economic and psychological perspectives on CEO compensation: a review and synthesis. *Industrial & Corporate Change* 19 (3), 675–712.
- Otten, J., 2007. Theories on executive pay: A literature overview and critical assessment. Munich Personal RePEc Archive.
- Perkins, S.J., Hendry, C., 2005. Ordering top pay: interpreting the signals. *Journal of Management Studies* 42 (7), 1443–1468.
- Podolny, J.M., 1993. A status-based model of market competition. *American Journal of Sociology* 98 (4), 829–872.
- Rajan, R.G., Wulf, J., 2006. Are perks purely managerial excess? *Journal of Financial Economics* 79 (1), 1–33.
- Roberts, J., McNulty, T., Stiles, P., 2005. Beyond agency conceptions of the work of the non-executive director: creating accountability in the boardroom. *British Journal of Management* 16 (1), 5–26.
- Shen, W., 2005. Improve board effectiveness: the need for incentives. *British Journal of Management* 16 (1), 81–89.
- Six, F., Nootboom, B., Hoogendoorn, A., 2010. Actions that build interpersonal trust: a relational signalling perspective. *Review of Social Economy* 68 (3), 285–315.
- Spence, M., 1973. Job market signalling. *Quarterly Journal of Economics* 87 (3), 355–374.
- Stiglitz, J.E., 2000. The contributions of the economics of information to twentieth century economics. *Quarterly Journal of Economics* 115 (4), 1441–1478.

- Tosi, J., Gomez-Mejia, L.R., 1989. The decoupling of CEO pay and performance: an agency theory perspective. *Administrative Science Quarterly* 34 (2), 169–189.
- Useem, M., 1984. *The Inner Circle: Large Corporations and the Rise of Business Political Activity in the U.S. and the U.K.* Oxford University Press, Oxford.
- Van der Laan, G., Van Ees, H., Van Witteloostuijn, A., 2010. Is pay related to performance in the Netherlands? An analysis of Dutch executive compensation, 2002–2006. *De Economist* 158 (2), 123–149.
- Van Ees, H., Gabriësson, J., Huse, M., 2009. Toward a behavioral theory of boards and corporate governance. *Corporate Governance: An International Review* 17 (3), 307–319.
- Van Essen, M., Otten, J., Carberry, E.J., 2015. Assessing managerial power theory: a meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management* 41 (1), 164–202.
- Van Uffelen, X., 2008. *Het Grote Graaien: 25 jaar Topsalarissen in Nederland*. J.M. Meulenhof BV, Amsterdam.
- Walsh, J.P., 2008. CEO compensation and the responsibilities of the business scholar to society. *Academy of Management Perspectives* 22 (2), 26–33.
- Wittek, R., Van Duijn, M., Snijders, T.A., 2003. Frame decay, informal power, and the escalation of social control in a management team: a relational signaling perspective. *Research in the Sociology of Organizations* 20, 355–380.
- Wittek, R.P.M., 1999. *Interdependence and Informal Control in Organizations*. ThelaThesis, Amsterdam.
- Zajac, E.J., Westphal, J.D., 1996. Director reputation, CEO-board power, and the dynamics of board interlocks. *Administrative Science Quarterly* 41 (3), 507–529.

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