Legitimacy of Executive Compensation Plans:  
A Preliminary Study of French Laypersons' Acceptability  

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Drawing on corporate social responsibility (CSR) theory we investigated laypersons acceptability of senior executive compensation plans. We identified base salary, performance related bonus, fringe benefits, pension plans and compensation protection as relevant factors of compensation plans. The method was an application of information integration theory (IIT). Results are that high acceptability is a consequence of a low base salary in the optimal context provided by the other factors. Performance based bonuses did not play a very important role. Exploratory analysis finds two patterns of points of views among participants. Practical and theoretical implications of our study are drawn.

Recently, people have been concerned with the high levels of chief executive compensations. Quite frequently, executive compensations become controversial. Are these compensations excessive? What justifies these compensations? Justification of such large sums of compensations is traditionally linked to value creation (Jensen & Murphy, 1990b). And in fact a significant portion of the rise in executive compensation results from exercising stock options, which were quite valuable when stock prices, rose. Yet, ordinary working-class people are regularly outraged by news about executives with seemingly unlimited paychecks.

This study was set up to inquire how French people judge the acceptability of executive compensations as a function of the variables that are used to calculate compensations in large companies. The following sections introduce the reasons for moderating acceptability from a corporate

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social responsibility (CSR) perspective. Then discuss relevant literature on compensation constituents and moral cognition.

**Why acceptability matters**

Acceptable compensations are morally superior. Dominant corporate social responsibility theorists hold the view that firms are, at least to some extent, accountable to society (Crane, 2008). CSR in practice means the voluntary contribution of businesses to sustainable development that goes beyond the legal requirements\(^2\). From this perspective, a company with executive compensations systems acceptable to laypeople acts more socially responsible than others.

Acceptable compensations can benefit to business. Even though it is controversial whether the motivation for CSR should be economic or normative (Wühle, 2007)\(^3\) scholars have argued that a voluntary, non-normative implementation of CSR increases benefits for the company itself. The reason given for this increase in benefits is the creation and valuation of intangible assets, such as trust, reputation, employee motivation and customer satisfaction.

In the case of executive compensation it can be argued that it influences intangible economic variables because it is linked to workers' pay fairness perceptions (Marcos & Sales, 2006). The argument is as follows: People evaluate the fairness of their own pay, in large parts through comparisons with others (Dornstein, 1989). Since pay fairness is linked to employee outcomes (Shaw, 2001; Cowherd & Levine, 1992) and counterproductive behavior at work (Cohen-Charash & Mueller, 2007), executive pay that is perceived as unacceptable can directly harm a companies profits.

**Executive compensation**

We assume that from a laypersons' perspective it is dispensable whether, the "incentive zone" bonus curve follows a linear, a convex, or a concave function and focus on the constituents of compensation. Executive compensation packages are typically composed of (1) base salary, (2)

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\(^2\) We omit a detailed discussion of the terms corporate citizenship, sustainable business, and responsible business which make similar claims.

\(^3\) The normative approach justifies regulatory pressure from governments and transnational institutions that require social responsibility from corporations, whereas the economically motivated approach, however, tries to establish an intrinsic motivation of companies for the implementation of CSR.
Executive compensation

annual incentives or bonuses, (3) long-term incentives, (4) executive perquisites, (5) executive benefits (e.g., health insurance, life insurance, and pension plans) and (6) compensation protections (Kalinski, 2007; Murphy, 1998).

Base salaries are the fixed part of executive compensation. They are typically determined through benchmarking, based primarily on general industry surveys and supplemented by detailed analysis of peer firms. Firm size is traditionally an important determinant of base salary. For small sized firms in France the mean base salary is €51,281. Since this part is fixed it is particularly attractive to risk adverse executives.

Virtually all for profit companies offer an annual bonus plan, paid annually based on a single year's performance. Those annual bonuses are largely explicit with a limited role for discretion. The most prevalent performance measure, as reported by surveys, is company earnings. Other measures include, EBIT, EVA, Sales, Customer satisfactions and stock price (Murphy, 1998).

Long term incentives are mainly contracts which give the executive the right to buy a share of stock at a specified price after a pre-specified period. Those options are typically non-tradable and become exercisable over time. A majority of US grants have five to ten year terms for their major part. The main purpose of these contracts is to give an incentive for a long term management approach.

In addition to monetary compensation, executives receive different types of perquisites. Such executive perks include the luxurious office, the executive dining room, special parking, use of a company airplane, company paid membership in high-class country clubs and associations, and executive travel arrangements. Many companies even offer executives tax-free personal perks, including such things as free access to company property, free legal counseling, free home repairs and improvements, and expenses for vacation homes or boats (Kalinski, 2007).

Since executives seek security after retirement, pension plans have also become part of compensation negotiations. Having lived with high revenues for several years during their active years, executives are eager to keep those revenues. Advantageous pension schemes have been designed that allow executives to perceive a fixed percentage of their salary after retiring.

Another part of compensation schemes is the so called compensation protection or golden parachute a protection plan for executives in the event that they are forced out of the organization. Such severance frequently
results from a merger or hostile takeover of the company. The golden parachute is a significant one-time sum to the departing executive.

**Peoples' views**

Previous studies have shown that peoples' judgments of complex situations involving multiple pieces of information follow sets of rules used to combine each piece of information in a psychological integration process first described by Anderson's IIT (Anderson, 1982). This information integration process is documented in numerous everyday judgments (see Anderson (2008) for a review of situations), but also specifically for moral decisions in medical ethics (Teisseyre, Vanraet, Sorum, & Mullet, 2010; Munoz Sastre, Peccarisi, Legrain, Mullet, & Sorum, 2007; Frileux, Munoz Sastre, Antonini, Mullet, & Sorum, 2004), conflict resolution (Kpanake & Mullet, 2005), and legal situations (Kpanake, Dassa, Sorum, & Mullet, 2013). To the best of our knowledge this study is the first to investigate executive compensations, and to a larger extent business ethics.

Our prediction is that the integration process that participants use to combine information about all components of executive compensations is a complex one. The term complex, expresses the view that we expected the different pieces of information about executive compensation to interact.

Studies on moral issues involving acceptability judgments have shown that different points of views exist in many cases. Kamble, Ahmed, Sorum, and Mullet (2013), for example, have investigated the acceptability of actively ending the lives of newborns with genetic defects amongst populations from India and Kuwait. Using cluster analysis techniques they identified four groups of people using different rules for their judgment. Those rules could, at least in parts, be attached to religious ideologies present in the two countries. Another study has identified two clusters in judgments of the acceptability of physician assisted suicide (PAS) Kpanake et al. (2013). One judged PAS always unacceptable, whereas the other made judgments depending on the circumstances. In a second step those clusters were then analyzed in relation to two populations: Lay people and health professionals.

Based on those findings our second prediction is that French peoples' views on executive compensation acceptability can be segmented in groups. Each group would follow distinct rules to combine the variables that constitute a compensation plan. We further speculate that these views can be linked to ideological and/or moral conceptions.

In a nutshell, our study aims at revealing the rules laypersons use to judge the acceptability of executive compensations. In a second step we aim
to reveal the underlying moral positions of these general rules. Our results provide corporate social responsibility practitioners and theorists with socially acceptable designs of executive compensation schemes.

**METHOD**

As in the many studies conducted in the field of empirical ethics (see Kpanake & Mullet, 2011; Nann et al., 2012; Teisseyre, Mullet, & Sorum, 2005), the method was an application of Functional Measurement (Anderson, 2008). The study was approved by the Ethics and Work laboratory of the Institute for Advanced Studies, Paris, France.

**Participants.** The participants were unpaid volunteers recruited and tested by one student trained in the application of Anderson's methodology. Participants were contacted individually, explained the study, and asked to participate. Subsequently, the experimenter obtained informed consent and arranged when to administer the experiment. Of the 92 persons contacted, 53 (57.6%) participated (M_{Age} = 23; 29 women, 24 men).

**Materials.** The material consisted of 54 cards. The vignettes were composed according to a three within-subject factor design: Base Salary (€30,000, €60,000, €90,000) * Bonus (2%, 4%, 6% of annual turnover, or 2% 1 year + 2% 5 year average turnover) * Supplementary benefits (All small, High fringe benefits, high fringe + pension plan, High fringe + pension plan + compensation protection), 3 * 4 * 4.

Under each vignette was the question, "To what extent do you think that such a bonus policy is acceptable?" The rating scale was a 10-point scale with a left-hand anchor of "Certainly not" (1) and a right-hand anchor of "Certainly yes" (10). An example vignette is the following:

*Mr Ramolin is CEG of Sanobi company (≈ 12,000 workers, in France and the rest of the world). His base salary is €30,000. In addition, he receives 2% of the annual turnover. This bonus is calculated on the turnover in the previous year. There is no bonus calculated on a longer timeframe that would incentivize a sustainable management approach. He has only little fringe benefits (a company car). He has an average manager's pension plan. In case of early departure, he would receive a bonus of only €50,000.*
The cards were arranged by chance and in a different order for each participant. The participants answered additional questions about age, gender, and educational level.

**Procedure.** The site was either a vacant room at the university. Each person was tested individually. The session had two phases. In the familiarization phase, the experimenter explained what was expected, and presented each participant with 18 vignettes taken from the complete set. For each vignette, the participant read it out loud, was reminded by the experimenter of the items of information in the vignette, and then made an acceptability rating by putting a mark on the rating scale. After completing the 18 ratings, the participant was allowed to look back at his or her ratings and to compare and change them. In the experimental phase, each participant gave ratings for the whole set of 36 vignettes, working at his or her own pace, but was no longer allowed to look back at and change previous responses. In both phases, the experimenter made certain that each participant was able to grasp all the necessary information before making a rating.

The participants took 20 to 40 minutes to complete both phases. The experimental phase went quickly because they were already familiar with the task and the material. Participants knew in advance how long the experiment would last. They did neither complain about the number of vignettes they were required to evaluate, nor about the credibility of the proposed situations. They then completed the questionnaires.

**RESULTS**

For each of the 54 scenarios in the experimental phase, the distance was measured between the left anchor (0) and each answer, given on the rating scale. All subsequent analysis was based on these measures of distance. The overall mean value of all the ratings was 4.46; that is, close to the center of the response scale. The lowest mean rating, 1.88, and the highest mean rating, 7.54, were quite distant from the possible minimal and maximal answers (1 and 10). There was thus neither ceiling nor floor effect to complicate the interpretation of the results. In all subsequent analysis age and gender were controlled for.

To analyze the general pattern of acceptability judgments we conducted a multivariate analysis of variance on the raw data. The design was Base salary * Bonus * Extras, 3 * 4 * 4. Because of the multiplicity of comparisons, the significance level was set at .05.
All three factors had significant effects (see Table 1). A lower base salary was more acceptable. Post-hoc analyses, using the Tukey honestly significant difference test, showed that the mean acceptability value observed when the base salary of a CEO was €30.000, acceptability was greater (M 5.65, SD .19), then when it was €60.000 (M 4.52, SD .1) and €90.000 (M 3.47, SD .11).

![Figure 1](image)

Figure 1: Overall people find compensations with a little base salary and few extras most acceptable. Increasing extras and base salary continually deteriorates acceptability.

Extras were also a significant factor of CEO compensation acceptability, p < .001. Mean acceptability was greatest when there were only little extra compensations (M 5.9, SD .12). When large fringe benefits (M 4.8, SD .13), large fringe benefits and a generous pension plan (M 4.2,
SD .10), large fringe benefits, a generous pension plan and a compensation protection (M 3.15, SD .15) were added acceptability continually decreased. Performance based bonuses were significant, p < .001 but accounted for little variance. When the performance bonus was 2% of turnover, mean acceptability was highest (M 4.79, SD .11). It was lowest when performance bonus was 6% of turnover (M 4.32, SD .10).

However, the difference in means is only .47. The 2% 1 year + 2% 5 year sustainable bonuses were both not different from the other conditions in post-hoc analysis.

Four interaction effects were significant (cf. Table 1). The highest interaction effect involved all three factors and is shown in Figure 1. When there was a little base salary, a small performance based bonus and few extras; acceptability was highest (M 7.55, SD .16). It was lowest when €90,000, 6% and large extras were granted to executives. However the opacity of the interactions (for example the effect of a long term bonus is reversed, when base salary is high, fringe benefits and pension plans are granted) makes interpretation intricate.

Table 1: Repeated-measures analysis of variance with Effect Sizes.

<table>
<thead>
<tr>
<th>Factor</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Salary</td>
<td>(2/104)</td>
<td>1012.53</td>
<td>74.72</td>
<td>.001</td>
<td>0.58</td>
</tr>
<tr>
<td>Performance bonus</td>
<td>(3/156)</td>
<td>24.96</td>
<td>6.18</td>
<td>.001</td>
<td>0.11</td>
</tr>
<tr>
<td>Extra</td>
<td>(3/156)</td>
<td>853.7</td>
<td>146.43</td>
<td>.001</td>
<td>0.74</td>
</tr>
<tr>
<td>Base Salary*Performance bonus</td>
<td>(6/312)</td>
<td>4.64</td>
<td>2.43</td>
<td>.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Base Salary*Extra</td>
<td>(6/312)</td>
<td>4.82</td>
<td>5.08</td>
<td>.001</td>
<td>0.09</td>
</tr>
<tr>
<td>Performance bonus*Extra</td>
<td>(9/468)</td>
<td>6.19</td>
<td>6.95</td>
<td>.001</td>
<td>0.12</td>
</tr>
<tr>
<td>Base Salary*Performance bonus</td>
<td>(18/936)</td>
<td>3.68</td>
<td>4.12</td>
<td>.001</td>
<td>0.07</td>
</tr>
</tbody>
</table>

This kind of pattern is most likely due to the presence of multiple ideologies. That is the different groups of participants follow separate, eventually conflicting rules during the information integration process. Recent research has revealed such pattern in many areas related to ethical questions (Kpanake & Mullet, 2011; Nann et al., 2012; Kamble, Sorum, & Mullet, 2012) and we shall address this issue in the second part of our analysis.
Two points of view

In order to identify groupings of participants, a cluster analysis was performed on the raw data in accordance with Hofmans and Mullet (2011) recommendations. That is, we used $k$-means clustering (Euclidean distances), a nonhierarchical centroid based method. This technique uses all data points and, moreover, is less susceptible to outliers and the distance measure used than hierarchical cluster techniques.

Two clusters of participants were identified. They are shown in Figure 2, with mean acceptability rating pooled across levels of base salary and extras. Responses of the first cluster were mostly on the left hand side of the scale (M 4.13, SD .09). This cluster is shown in the left panel of Figure 2. It was named "Mainly Depends on Extras" because participants primarily respond to the extras that executives receive. Acceptability ratings in the two most favorable scenarios were the only ones that were slightly above the midpoint of the acceptability scale (M 6.43 and M 6.18). It did not matter to them whether the base salary was €30.000 or €60.000. Only very high base salaries are considered less acceptable. When there were large fringe benefits a generous pension plan and a compensation protection, acceptability never was greater than 2.63.

The second clusters' acceptability judgments were well dispersed above and below the midpoint. This cluster is shown in the right panel of Figure 2. It was named "Mainly Depends on Base Salary" because participants in this cluster mostly react to information about the base salary. When the base salary is small the compensation is always acceptable, independently from the extras. However, if the base salary exceeds €60.000 there cannot be any high extra compensation. In this case mean acceptability ratings are even lower than when there is a small base salary with all extra benefits. When base salary is €90.000 the compensation is always unacceptable.

These visual impressions were confirmed by a multivariate analysis of variance, conducted on the raw data including Cluster as a between subjects factor. The design was "Cluster" * Base Salary * Performance Bonus * Extras 2 * 3 * 4 * 4. Significant coefficients are reported in Table 2, F(18/918) 3.5, p < .001.

Linking compensations to sustainability

Some companies have also started to implement business ethics scholars' recommendation of linking executive pay to the achievement of
sustainability related goals. For example, a bonus can only be granted if the company has reduced its' CO$_2$ emissions to a predefined level.

Figure 2: Acceptability ratings of the two clusters (left and right panel).

Research on peoples' judgments of pro-social behavior, however, paints a mixed picture. On the one hand it is believed to be a signaling device, in the sense that it is socially valued and individuals or companies can polish their image through pro-social actions (Anik, Aknin, Norton, & Dunn, 2009; Ariely, Bracha, & Meier, 2009). On the other hand there seems to be a crowding out effect if the pro-social behavior is done for the wrong reason, namely financial gains (Bénabou & Tirole, 2010). Marketers call those negative effects of pro-social behavior if people attribute it to profit motives a green backlash (Crane, 2000).
Because those results are not directly concerned with executive compensation, and only little is known about why and when people attribute pro-social behavior to profit motives, we have no prediction as to the acceptability of executive compensations in firms that behave pro-socially.

**Table 2: Results of the multivariate analysis of variance: Cluster (2) x Base Salary (3) x Performance Bonus (4) x Extras (4).** Cluster was introduced as an in between variable, base salary, performance bonus, and extras as repeated measures. Non significant coefficients are omitted.

<table>
<thead>
<tr>
<th>Factor</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster</td>
<td>(3/156)</td>
<td>2729.65</td>
<td>93.41</td>
<td>.001</td>
<td>0.83</td>
</tr>
<tr>
<td>Base salary</td>
<td>(2/104)</td>
<td>343.86</td>
<td>19.42</td>
<td>.001</td>
<td>0.26</td>
</tr>
<tr>
<td>Base salary*Cluster</td>
<td>(3/156)</td>
<td>130.32</td>
<td>6.89</td>
<td>.001</td>
<td>0.29</td>
</tr>
<tr>
<td>Extra</td>
<td>(2/104)</td>
<td>471.21</td>
<td>40.39</td>
<td>.001</td>
<td>0.42</td>
</tr>
<tr>
<td>Extra bonus*Cluster</td>
<td>(6/312)</td>
<td>58.94</td>
<td>5.33</td>
<td>.001</td>
<td>0.22</td>
</tr>
<tr>
<td>Performance bonus</td>
<td>(2/104)</td>
<td>461.41</td>
<td>18.87</td>
<td>.001</td>
<td>0.25</td>
</tr>
<tr>
<td>Performance bonus*Cluster</td>
<td>(3/156)</td>
<td>101.78</td>
<td>4.20</td>
<td>.01</td>
<td>0.18</td>
</tr>
<tr>
<td>Base salary*Extra bonus</td>
<td>(2/104)</td>
<td>14.41</td>
<td>6.32</td>
<td>.001</td>
<td>0.09</td>
</tr>
<tr>
<td>Base salary*Performance bonus</td>
<td>(2/104)</td>
<td>17.14</td>
<td>9.42</td>
<td>.001</td>
<td>0.14</td>
</tr>
<tr>
<td>Base salary<em>Performance bonus</em>Cluster</td>
<td>(3/156)</td>
<td>10.96</td>
<td>5.96</td>
<td>.001</td>
<td>0.24</td>
</tr>
<tr>
<td>Extra bonus<em>Performance bonus</em>Cluster</td>
<td>(6/312)</td>
<td>5.42</td>
<td>2.12</td>
<td>.001</td>
<td>0.12</td>
</tr>
</tbody>
</table>

To explore the eventual influence of corporate pro-social behavior on executive compensations six vignettes of the design were duplicated. Then supplementary information stating that the company is a leader in sustainability and has considerably reduced CO² emission was added. Accordingly all scenarios were judged twice by participants once with and once without the socially responsible behavior of the firm.

To test whether socially responsible behavior from firms makes executive compensations more acceptable we conducted a paired sample t-test comparing the overall means of the six scenarios that included the CO² story to the mean of the six scenarios that did not. However this analysis did not reveal any differences, p .483.

Analysis of variance was conducted to explore inequality in variances between groups. The design was "Cluster" x CSR, 2 x 2. A significant interaction was found, F(1,51) 20.48, p < .001. It is show in Figure 3. Cluster 1 judges the acceptability of executive compensations more acceptable in companies that are leaders in corporate social responsibility.
and CO\textsuperscript{2} emission reduction (M 5.13) than in regular companies, p < .0. This is not the case for cluster 2, ns. Overall, Cluster 1 had higher mean acceptability, p < .001.

DISCUSSION

Layperson acceptance of executive compensations was best explained by the general context provided through the amount of the base salary and extras. Further, we detected individual differences between respondents views, expressed through distinct integration rules. When the whole sample was considered, for each extra that was removed from the compensation plan the acceptability judgments increased by the same amount. A lower amount of the executives’ base salary added to acceptability. Surprisingly, the importance of the performance-based bonus was weakest, and did not seem to follow a consistent pattern.

Exploratory analysis revealed the presence of two groups of participants using distinct rules to integrate information about executive compensation. The "Mainly Depends on Extras" group found that compensations were more acceptable when there were fewer extras. The "Mainly Depends on Base Salary" thinks that executive compensations are more acceptable when the base salary is smaller. As compared to the first group they think that €30,000 and €60,000 are not equally acceptable. Extras seem less important for this group.

This study has several limitations. First, the group of participants was a convenience sample of moderate size, and the participants were recruited on Toulouse universities campus, and thus relatively well educated. Second, the participants answered questions about scenarios and not to real situations. The use of vignettes is, however, useful as it permits statistical analysis that reveal how people weigh and combine information when formulating their judgments. Third, only the major components of executive compensations were considered while others were held constant. Additional studies should also be conducted on larger and more diversified samples, eventually from other countries. Considering supplementary characteristics of remuneration situations might allow to reveal more than two groups with different views on executive compensation as found in medical ethics (Kamble et al., 2012; Nann et al., 2012; Teisseyre et al., 2005), corporate social responsibility (Devinney, Auger, & Eckhardt, 2010), and socially responsible investments (Hoepner & McMillan, 2009).

Exploratory analysis further revealed different views on the question whether executive compensation should be linked to sustainability
performance. The first group of participants, those who have generally lowered acceptability, does not think that executives with a good sustainability track record should receive extra considerations. Their compensation plans are judged exactly the same as the ones of their less responsible peers. The second group, people with generally higher acceptability of executive compensation, does think that executives of socially responsible firms are more acceptable.

![Figure 3](attachment:image.png)

**Figure 3.** Corporate social responsibility slightly increases acceptability of executive compensations for people that base their judgments mainly on the base salary.

Economists have long found that it's not how much you pay but how (Jensen & Murphy, 1990a). However their analysis has mostly concerned the mechanics of incentive structures and in how far interests of the firm are equal to the executive interests. Our analysis qualifies this finding by
providing preliminary evidence that the acceptability of executive compensation is not only concerned with the nominal amount of the compensation, but also with the compensation policy of a company, i.e. the variable we have manipulated.

Our findings are relevant for academics and practitioners of corporate social responsibility. Workers perception of pay fairness is linked to many factors, such as employee theft, job satisfaction and product quality (Morand & Merriman, 2012), that are relevant in organizational management. Therefore, practitioners are encouraged to be alert to individual differences about compensation plans in a companies' code of conduct (Crane, 2008). Further, a particular attention should be devoted to the interplay of the base salary and supplementary attentions granted to executives.

Another issue is the question of responsibility for implementing socially responsible compensation plans. Scholars have discussed whether stakeholders, the interest groups to whom companies are accountable, are a restrained group of people. Are companies only accountable to people directly linked to the company, or in a wider sense, to any group who is affected by the corporation (Freeman, 1984). In the former case, the responsibility for socially acceptable compensations would become an issue of public policy measures such as salary caps. Thus government legislation on compensations could be another socially relevant aspect for peoples' views.

The field of corporate social responsibility will find in our study preliminary guidance towards a democratic approach to socially responsible compensation plan design. Indeed, most theoretical approaches admit that firms do have obligations (Jones, 1980; Evan & Freeman, 1988), duties Carroll (1991) and responsibilities (Wood, 1991) for social problems. Nevertheless most theories have failed, so far, to develop a practical framework for the integration of a correct view of human nature, business, and society, and the relationship between business and society (Crane, 2008). Our findings are a first step towards such a democratic view.

REFERENCES


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