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Determinants of the corporate decision to disclose stakeholders’ reports in France

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ABSTRACT

Although corporate social reporting has been the subject of substantial academic accounting research since two decades, literature does not possess an overall coherence (Gray et al., 1995). It can take an almost infinite range of forms. The most common are reporting in annual reports and reporting through stand-alone social reports. In addition, social reporting takes place through advertising, product packaging, conferences and company websites. The most studies were related information’s disclosed in annual reports but we concluded that it is most relevant to study other means as stakeholders’ reports. In literature, a small number of studies examine explicitly the determinants of decision to disclose stakeholders’ reports. An organisation might voluntary report information’s for many reasons in order to develop corporate image, to legitimise current activity, to distract attention from other areas, to discharge accountability, to forestall legislation (Gray and Bebbington, 2001). This study develops and empirically tests a model of the corporate decision to disclose stakeholders’ reports by French firms. The related literature is then reviewed. The first section identifies the factors influencing this decision. Literature focuses on the influence of corporate characteristics (such as size and industry grouping) and general contextual factors (such as the social, political and economic context) and the review highlights the lack of prior literature examining the influence of internal context.

In the second section, variables are then defined before a presentation of the empirical tests. This study hypothesises that the decision to disclose stakeholders’ reports is correlated with the size, the reputation of industry, the financial performance, the salience of stakeholders and the degree of internationalisation of the firm’s activity. Companies (82) used to estimate the social disclosure model are drawn from 500 major corporations that were investigated in 2000. Finally, a summary and a conclusion are presented. The results of the empirical test are of interest for several reasons. First, the significance of the model provides evidence that stakeholder theory is an appropriate foundation for empirical analyses of corporate social disclosure. Second, the results support that the salience of diffuse stakeholders, the reputation of the industry and the size of the firms are the most important factors. Third, the relationship between the degree of internationalization and the decision studied is not confirmed. Fourth, the variables that have the most effect on this decision are the reputation of industry and the salience of diffuse stakeholders. The results of this study provide strong evidence that application of stakeholder theory to empirical corporate social disclosure research can move future research in this area.

KEY WORDS

Stakeholder theory, stakeholders’ report, corporate characteristics, external factors, stakeholders
INTRODUCTION

Social and environmental disclosures by corporations have been steadily increasing in both size and complexity over the last two decades. Research attention over the years has attempted to codify, explain and understand an area of corporate activity, which appears to lie outside the conventional domains of accounting disclosure. This study develops a model of the corporate decision to disclose stakeholders’ reports (SR) based on stakeholder theory.

Freeman’s (1984) definition of a stakeholder as “any group or individual who can affect or is affected by the achievement of the organization’s objectives” is widely cited, but it offers an extremely wide field of possibilities as to who or what really is a stakeholder (Mitchell et al. 1999). We propose to distinguish between:

- Contractual stakeholders: who have a contractual relationship with the firm as stockholders, customers, suppliers and employees and others contractual stakeholders.
- Diffuse stakeholders: who can affect or are affected by the achievement of the organization’s objectives who have not necessarily an explicit contractual relationship with firm as public organizations, community, non governmental organisations, public opinion and others diffuse stakeholders.

This paper is structured as follows. The first section provides a brief review of the prior research, which has explored the determinants of social reporting, the formulation of hypothesis and the model with which this paper is principally concerned. The second presents the results and conclusions, which give support for the hypotheses.

1. PRESENTATION OF STUDY

In this section, the related literature is reviewed, the factors influencing the decision to disclose SR are identified.
1.1. Related research

Social and environmental disclosures may also take place through different media. Most researchers into such disclosure tends to focus on data contained within the corporation’s annual report, a wide range of different media may be employed: advertising, focus groups, employee councils, booklets, schools education and so forth (Zeghal and Ahmed, 1990). The phenomenon of corporate social reporting has attracted research attention from many different focus groups.

Two types of empirical studies characterise the research on social reporting of firms. The first, descriptive studies, examines the potential relationships between the extensiveness of a firm’s social disclosure and their characteristics (size, profit and industry affiliation). The second, explicative studies, proposes different determinants of the decision to disclose social and environmental informations. Our study adopts the second subject. In this context, we can distinguish three approaches: rational, conformist and moral approach.

The first approach considers that ethic attitudes are the result of a rational process of decision. So social reporting is practiced in order to fulfil organisational targets. Agency theorists have seen this phenomenon as a mean to reduce agency costs (Gray and Bebbington, 2001) and to increase profits (Anderson and Frankle, 1980; Belkaoui, 1976; Ingram, 1978; Shane and Spicer, 1983; Cochran and Wood, 1984; Moskowitz, 1972; Vance, 1975; Alexander and Buchholz, 1978; Bowman and Haire, 1975; Bragdon and Marlin, 1975; Chen and Metcalf, 1980; Fogler and Nutt, 1975; Spicer, 1978).

The second approach integrates a conformist idea and suggests that social reporting helps firms to manage the divergent interests of stakeholders (Freeman, 1984; Roberts, 1992; Tilt, 1994; Guthrie and Parker, 1990; Lerner and Fryxel, 1994; Weaver et al., 1999; Luoma and Goodstein, 1999).
The last approach is moral. There are few studies in this context. Moral issues and social values are then the origin of corporate social disclosures. Gray and Bebbington (2001) and Adams and Kuasirikun (2000) think that culture is the main factor which can justify the development of social reporting.

A lack of sufficient theoretical support for designed to explain social reporting leads to inconsistent, even contradictory, results. This study tests the ability of stakeholder theory to explain this practice. This theory appeared in recent years. The essential premises are as follows:

- The corporation has relationships with many groups of stakeholders (Freeman, 1984)
- The interests of all stakeholders have an intrinsic value and no set of interests is assumed to dominate the others (Clarkson, 1995)

It concerns essentially the nature of the relationships organisation-stakeholders and focuses on managerial decision-making (Donaldson and Preston, 1995). Freeman (1984) has discussed the dynamics of stakeholders’ influences on corporate decisions. A major role of corporate management is to assess importance of meeting stakeholder demands in order to achieve the strategic objectives of the firm. Stakeholder theory has been applied to analytical and empirical analyses of the firm and the environment in which it operates.

Donaldson and Preston (1995) have recently distinguished between normative, descriptive and instrumental stakeholder theory. This typology explicates some traits early formulations of stakeholder theory left implicit. It suggests that:

- A normative approach: firms/managers should behave in certain ways.
- An instrumental approach: certain outcomes are more likely if firms/managers behave in certain ways.
- A descriptive approach: firms/managers actually behave in certain ways.
Stakeholder theory has been hampered by almost exclusive analysis of stakeholders from the perspective of the organisation. Freeman (1984) justified consideration of stakeholders for their contribution to the strategic management of firms. According to Jones and Wick (1999), one of the essential premises of stakeholder theory is that it focuses on managerial decision-making.

The purpose of this study is to test empirically a stakeholder theory analysis of the determinants of decision to disclose SR in the French context.

1.2. Social reporting

Although corporate social reporting has been the subject of substantial academic accounting research since two decades, literature does not possess an overall coherence (Gray et al., 1995). It can take an almost infinite range of forms. The most common are reporting in annual report and reporting through stand-alone social reports. In addition, social reporting takes place through advertising, product packaging, conferences, and company websites. The most studies were related information’s disclosed in annual reports but we concluded that it is most relevant to study other means as SR. In the KPMG survey (1997), 23% of the 100 biggest firms have published SR in 1996. In France, 21% of the 100 biggest firms have SR in 2000. There was few studies which were interested in this new mean of organization-stakeholder’s communication.

1.3. Factors influencing the decision to disclose stakeholders’ reports

In literature, a small number of studies examine explicitly the determinants of decision to disclose SR. An organisation might voluntary report information for many reasons in order to develop corporate image, to legitimise current activity, to distract attention from other areas, to discharge accountability, to forestall legislation (Gray and Bebbington, 2001). Literature focuses on the influence of corporate characteristics (such as size and industry grouping) and general contextual factors (such as the social, political and economic context)
and the review highlights the lack of prior literature examining the influence of internal context.

The factors examined have been broken down into three categories: corporate characteristics, external factors and internal factors.

1.3.1. Corporate characteristics

Many recent studies of the impact of corporate characteristics on social reporting have tended to concentrate on these factors:

- Size (Fry and Hock, 1976; Trotman and Bradely, 1981; Singh and Ahuja, 1983; Ingram and Frazier, 1983; Chow and Boren, 1987; Cowen et al., 1987; Freedman and Jaggi, 1988; Belkaoui and Kaprik, 1989; Adams et al., 1995; Hackson and Milne, 1996; Ness and Mirza, 1996; Adams et al., 1998; Stanwick and Stanwick, 1998; Gray et al., 2001)
- Industry membership (Baker and Naser, 2000; Fry and Hock, 1976; Preston, 1978; Abbott and Monsen, 1979; Singh and Ahuja, 1983; Cowen et al., 1987; Freedman and Jaggi, 1988; Hackson and Milne, 1996; Ness and Mirza, 1996; Gray et al., 2001)
- Age of the firm (Singh and Ahuja, 1983).
- Capital structure (Cormier and Gordon, 2001; Ingram and Frazier, 1983; Gray et al., 2001).
1.3.2. External factors

As well as corporate characteristics, prior literature has examined the influence of external factors in which corporate disclosures are made.

- The country of origin of a company (Adams and Kuasirikun, 2000; Belkaoui and Karpik, 1989; Cowen et al., 1987; Guthrie and Parker, 1990; Ness and Mirza, 1991; Trotman and Bradley, 1981; Williams and Pei, 1999; Adams et al., 1995).
- Political and social context (Adams and Harte, 1998; Hogner, 1982).
- Economic context (Guthrie and Parker, 1989)
- Cultural context (Adams and Kuasirikun, 2000)
- Stakeholders’ pressures (Henriques and Sadorsky, 1996; Pelle, 1998; Moneva and Llena, 2001; Gamble et al., 1996; Niskala and Pretes, 1995).

1.3.3. Internal factors

There is little prior research on the internal processes of corporate ethical, social and environmental reporting or attitudes which influence decision-making.

- Presence of a corporate social reporting committee (Cowen et al., 1987; Pelle, 1998)
- Culture of the firm (Gray and Bebbington, 2001; Brenner and Molander, 1977)
- Reporting processes (Adams, 2002)

This study hypothesises that the decision to disclose SR is correlated with the size, the reputation of industry, the financial performance, the salience of stakeholders and the degree of internationalisation of the activity of the firm.

1.4. Hypotheses

This paper tests the following series of broad hypotheses:

1.4.1. Hypotheses related to corporate characteristics
The size

Company size has been suggested in several studies as a correlate of the level of corporate social responsibility activity. These studies posited that corporate size would be related to social responsibility activities because larger companies are more likely to be scrutinized by both general public and socially sensitive special interest groups. Exploring the relationship between size and social and environmental disclosures has produced somewhat more consistent results (Balkaoui and Karpik, 1989; Trotman and Bradley, 1981; Adams et al., 1995; Adams and Hart, 1998; Hackston and Milne, 1996). Singh and Ahuja (1983) find no relationship between size and social and environmental disclosures. Therefore, the following hypothesis is proposed:

H1: The size of the firm has a positive influence on the decision to disclose stakeholders’ reports.

The reputation of industry

A small number of studies has examined whether industry sector is able to explain social and environmental disclosures. Here again, the results are less than consistent. Hackston and Milne (1996) reported that disclosures are most important in high profile industries. Ness and Mirza (1991) found that this relationship holds specifically for the oil industry. These studies have used samples from the metals, oil, chemical, electronic computing, food processing, airline, and numerous other industries in analyses of corporate social disclosures either because of data availability or because of the perception that the particular industry faced unique social pressures. Most of these studies consider the industry as a dichotomy variable and don’t provide a measure for it. Other studies consider the index reputation of the CEP\(^1\), FORTUNE or KLD\(^2\). This method is used to measure corporate social responsibility, so, observers rate firms on the basis of one or more dimensions of social performance. It provides a summary about perceptions of a specific subject. But such ranking

\(^1\)CEP
\(^2\)KLD
are highly subjective and thus may vary significantly from one observer to another. We apply this method to classify some industries in France. The survey was conducted to evaluate the sensibility of twenty one industries to the social and environmental problems.

We propose that, in high index reputation industries, we find most stakeholder’s reports.

Therefore, the following hypothesis is proposed:

H2: The reputation of a firm’s industry has a positive influence on its decision to disclose stakeholders’ reports.

The financial performance

The relationship between financial performance and social and environmental disclosures is examined in many studies but researchers have not reached real consensus on the relationship between these variables.

- Positive relationship (Fry and Hock, 1976; Bowman and Haire, 1975; Preston, 1978; Bowman, 1978; Abbott and Merson, 1979; Freedman and Jaggi, 1988; Belkaoui, 1976; Anderson and Frankle, 1980; Singh and Ahuja, 1983; Shane and Spicer, 1983; Chow and Boren, 1987; Herremaus et al., 1993; Cormier and Magnan, 1996; Stanwick and Stanwick, 1998).


- No relationship (Freedman and Jaggi, 1982; Cowen et al., 1987)

Therefore, the following hypothesis is proposed:

H3: The financial performance has an influence on the decision to disclose stakeholders’ reports. The sign of this influence is not defined.

The degree of internationalisation

International comparisons indicated variations between countries (Williams and Pei, 1999; Pelle, 1998; Adams et al., 1995; 1998; Belkaoui and Karpik, 1989; Cowen et al., 1987; Guthrie and Parker, 1990)
Therefore, the following hypothesis is proposed:

H4: The degree of internationalisation has a positive influence on the decision to disclose stakeholders’ reports.

1.4.2. Hypotheses related to external factors

In the literature, some studies examine the influence of stakeholders’ pressures on the corporate decision (McGuire et al., 1988):

- On social and environmental disclosures (Roberts, 1992; Henriques and Sadorsky, 1996; Pelle, 1998; Moneva and Llena, 2001)
- On ethic programs (Weaver et al., 1999)
- On strategies (Henriques and Sadorsky, 1999)
- On social performance (McWilliams and Siegel, 2001; Ruf et al., 2001)
- On financial performance (Cornell and Shapiro, 1987; Meznar et al., 1994; Steadman, 1997; Berman et al., 1999; Becker and Potter, 2002)
- On social identity (Scott and Lane, 2000).

The salience of every group of stakeholder is evaluated with a content analysis of the annual reports and stakeholders’ reports published by French firms in 2000. First, we suggest that the salience of both contractual and diffuse stakeholders incite firms to publish SR. Second, we think that the salience of diffuse stakeholders is more reliant for this type of decision than the salience of contractual stakeholders.

Therefore, the following hypotheses are proposed:

H5: The salience of contractual stakeholders has a positive influence on the decision to disclose stakeholders’ reports.

H6: The salience of diffuse stakeholders has a positive influence on the decision to disclose stakeholders’ reports.
H7: The salience of diffuse stakeholders is more important than the salience of contractual stakeholders.

1.5. Variable definitions

The various hypotheses and variables are combined into an empirical testable model specified as follows:

\[ Y = C + b_1 \text{LOGS} + b_2 \text{LOGA} + b_3 \text{IND} + b_4 \text{RS} + b_5 \text{ROE} + b_6 \text{ROA} + b_7 \text{INT} + b_8 \text{CS} + b_9 \text{DS} \]

Where:

\( Y \): Dependant variable. It’s a binary variable.

\( C \): Constant

\( b_i \): Coefficient of the observation \( i \) in the model

\( \text{LOGS} \): size of the firm measured as the log of total sales

\( \text{LOGA} \): size of the firm measured as the log of assets

\( \text{IND} \): the reputation of industry measured as reputation index

\( \text{RS} \): Financial performance measured by the ratio: profit/sales

\( \text{ROE} \): Financial performance measured by return on earnings

\( \text{ROA} \): Financial performance measured by return on assets

\( \text{INT} \): A degree of internationalisation measured by the ratio foreign sales / total sales

\( \text{CS} \): Salience of contractual stakeholders

\( \text{DS} \): Salience of diffuse stakeholders

1.5.1. Dependant variable

The dependant variable for the publication of SR (\( Y \)) is adapted from an extensive analysis of social reporting activities of 82 major corporations in France. It’s a binary variable; with 1 if firm has a stakeholder’s report and 0 if not. So the empirical model was estimated using binary logistic regression. A simple linear regression of \( Y \) on \( x \) is not
appropriate, since among other things, the implied model of the conditional mean places inappropriate restrictions on the residuals of the model. Furthermore, the fitted value of Y from a simple linear regression is not restricted to lie between zero and one.

1.5.2. Independent variables

The independent variables used in the empirical tests represent the size, the reputation of industry, the financial performance, the salience of contractual and diffuse stakeholders and the degree of internationalisation of the firm. The proxies selected to represent these hypothesized influences on decision to disclose stakeholder’s reports are discussed in this section.

Size variables

The variables related to the size are log of total sales LOGS and log of total assets LOGA. Logarithmic transformations of the size variables are used when estimating the model. The transformations are performed because variables with observations that are large in absolute amounts can overwhelm other variables during the logistic regression iteration process.

Reputation of the industry

103 students of business administration and management were questioned about their views on the reputation of these industries. Indexes generated by this study (presented in appendix) were used to test the model. IND measures the average of scores allowed by students and professionals for the sensibility of this sector to social and environmental problems. In our sample, we classify twenty one industries (appendix 1).

Financial performance variables

Most measures of financial performance fall into two broad categories: investor’s returns (Abbott and Monsen, 1979; Bowman and Haire, 1975; Freedman and Jaggi, 1992; Bragdon and Marlin, 1972; Chen and Metcalf, 1980; Spicer, 1978; Bowman, 1978; Preston,
1976; Cowen et al., 1987; Freedman and Jaggi, 1988; Agle et al., 1999; Roberts, 1992) and accounting returns (Fry and Hock, 1976; Gray et al., 2001; Neu et al., 1998).

Measures related to market fluctuations and accounting practises are avoided. We use: ROA, Result/sales and ROE.

**Degree of internationalisation**

This variable is measured by the ratio: foreign sales/total sales.

**Stakeholders' salience**

The salience of both groups of stakeholders is evaluated with a content analysis of the disclosure of the companies in the annual and stakeholder’s reports. For each group of stakeholders:

- Contractual stakeholders: stockholders, employees, suppliers, customers and others contractual stakeholders.
- Diffuse stakeholders: public organism, non-governmental organisations, community, public opinion and others diffuse stakeholders.

The salience takes 1 if companies indicate in their annual or stakeholder’s reports that this group of stakeholder takes importance and 0 if not. So this measure can take values 0 to 5. One example is presented in appendix 2.

1.6. Sample selection and period for disclosures

Companies used to estimate the social disclosure model are drawn from 500 major corporations that were investigated in 2000. We selected the sample (82 French firms) with three criteria: the size, the industry and the social and environmental disclosures.

Data are treated with SPSS program. The results of the model tests are presented in follow.

2. RESULTS

2.1. Descriptive statistics and correlation
Descriptive statistics for the data employed in the analysis are shown in table 1 and 2. Mean, standard deviation, minimum, maximum and median values for independent are provided.

Table 3 indicated the presence of multicolinearity. Correlation between these different size measures (LOGS and LOGA) is high.

2.2. Model tests

2.2.1. Model Adjustment

Table 4 tests the joint null hypothesis that all slope coefficients except the constant are zero. This is the analog of the F-statistic in linear regression models and tests the overall significance of the model. The number in parentheses is the degrees of freedom, which is the number of restrictions under test. The null hypothesis is rejected.

From the table 5, we can conclude that the model appears significant $R^2 = 0.804$.

2.2.2. Hypotheses tests

As can be seen by analysing table 6 and 7, six hypotheses (H1, H2, H3, H5, H6 and H7) are confirmed. In the model, LOGS, LOGA, ROE and CS are significant at the 10% level. IND is significant at the 5% level and DS is significant at the 1% level. First, IND and DS have both the expected sign. So we can conclude that the reputation of industry and the salience of diffuse stakeholders are positively correlated with the decision to disclose a stakeholder report in French firms. The salience of the contractual stakeholders significant at 10%. The results also indicate that the salience of diffuse stakeholders is more important than the salience of contractual stakeholders in this context (so H7 is confirmed). Second, two size variables (LOGS and LOGA) are significant. Their signs are not stable. The third hypothesis on the influence of financial performance is supported 5% level. The significant and negative association of SR with financial performance shows that improvements in financial results is not necessarily accompanied with an improvement in publication of SR. This result is
confirmed with the negative relationship observed between the decision and the influence of the contractual stakeholders. Third, we can conclude that there is an insignificant relation between the decision to disclose SR and degree of internationalisation of the firm.

2.2.3. Margin effect

Interpretation of the coefficient values is complex by the fact that estimated coefficients from a binary model cannot be interpreted as the marginal effect on the dependent variable. Note that is weighted by a factor $f$ that depends on the values of all of the regressors in $X$. Note also that since the density function is nonnegative, the direction of the effect of a change in depends only on the sign of the coefficient. Positive values of $b$ imply that increasing $b$ will increase the probability of the response $y=1$; negative values imply the opposite.

An analysis of table 8 reveals two major results. First, the salience of diffuse stakeholders is the most important factor. Second, results indicate that salience of diffuse stakeholders and reputation of industry increase the probability to disclose a stakeholder’s report ($\exp(b) > 1$). We can also conclude that the financial performance and salience of contractual stakeholders influence negatively the decision to disclose SR. The relationship with size is not explicitly defined.

DISCUSSION AND LIMITATIONS

This study proposes a model of the decision to disclose SR in terms of size, reputation of industry, financial performance, salience of stakeholders and degree of internationalisation of the firm. In summary, the model is well specified and the effects of multicollinearity do not appear serious overall. The results of the empirical test are of interest for several reasons. First, the significance of the model provides evidence that stakeholder theory is an appropriate foundation for empirical analyses of corporate social disclosure. Second, the results support that the salience of diffuse stakeholders, the reputation of the industry and the size of the firms
are the most important factors. Third, the relationship between the degree of internationalization and the decision studied is not confirmed. Fourth, the variables which have the most effect on the probability to \( y = 1 \) are the reputation of industry and the salience of diffuse stakeholders. The results of this study provide strong evidence that applications of stakeholder theory to empirical corporate social disclosure research can move future research in this area. Various limitations point to the need for more research on the determinants of the decision to disclose stakeholder’s reports. The first limitation is related to the sample size. It is based on eighty-two firms. Future studies should attempt to incorporate a larger sample size to increase the generalizibility of the results. The second limitation concerns the different measures used. This study should be replicated to test the model in other periods, using different measures. It relied on a reputational scale for the industry and a content analysis for the salience of stakeholders. Extensive efforts were made to develop accurate proxies for these factors. The introduction of a new measure helps reduce the biases of evaluators. Researchers need to find more robust ways of measuring stakeholder effects. It may never be possible to measure this objectively. Therefore research in this area could focus on perceptions of these effects.
### Table 1: Descriptive statistics for dependent variable

<table>
<thead>
<tr>
<th></th>
<th>( Y=1 )</th>
<th>( Y=0 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>26</td>
<td>56</td>
</tr>
<tr>
<td>%</td>
<td>32.14%</td>
<td>67.86%</td>
</tr>
</tbody>
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### Table 2: Descriptive statistics for independent variables

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>LOGS</th>
<th>LOGA</th>
<th>IND</th>
<th>RS</th>
<th>ROA</th>
<th>ROE</th>
<th>INT</th>
<th>CS</th>
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<tbody>
<tr>
<td>Mean</td>
<td>15,08145</td>
<td>15,0886</td>
<td>10,14204</td>
<td>0,027918</td>
<td>0,046219</td>
<td>16,54802</td>
<td>0,369071</td>
<td>1,719512</td>
<td>2,121951</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1,716855</td>
<td>2,03405</td>
<td>3,78604</td>
<td>0,117581</td>
<td>0,104824</td>
<td>23,67809</td>
<td>0,317936</td>
<td>1,779682</td>
<td>1,550709</td>
<td></td>
</tr>
<tr>
<td>MIN</td>
<td>6,770789</td>
<td>5,198497</td>
<td>2,862745</td>
<td>-0,90013</td>
<td>-0,26705</td>
<td>-6,55</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>MAX</td>
<td>18,46622</td>
<td>18,83105</td>
<td>16,22549</td>
<td>0,21298</td>
<td>0,871683</td>
<td>158,25</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>15,2043</td>
<td>15,18212</td>
<td>11,48039</td>
<td>0,03108</td>
<td>0,03204</td>
<td>11,42</td>
<td>0,375247</td>
<td>1</td>
<td>2</td>
<td></td>
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</table>

### Table 3: Pearson correlation coefficients 2000

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>RS</th>
<th>ROE</th>
<th>LOGS</th>
<th>LOGA</th>
<th>SD</th>
<th>SC</th>
<th>IND</th>
<th>INT</th>
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<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS</td>
<td>0,3857314</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ROE</td>
<td>0,014813</td>
<td>0,0767112</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOGS</td>
<td>0,0858417</td>
<td>0,0835429</td>
<td>0,0319307</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>LOGA</td>
<td>-0,365659</td>
<td>0,014764</td>
<td>-0,104041</td>
<td>0,9037393</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0,1631174</td>
<td>-0,103894</td>
<td>0,0969894</td>
<td>0,2028121</td>
<td>0,2586737</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>0,0417496</td>
<td>0,1349209</td>
<td>0,0734605</td>
<td>0,2048805</td>
<td>0,2038697</td>
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<tr>
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<td>0,1066432</td>
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<td>0,0816408</td>
<td>0,2840223</td>
<td>0,275328</td>
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<td>0,0916831</td>
<td>0,0583957</td>
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<td>0,2337005</td>
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### Table 4: Chi - square Tests

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<tr>
<th></th>
<th>Chi-square</th>
<th>Df</th>
<th>Sig</th>
</tr>
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<tbody>
<tr>
<td>Model</td>
<td>68,388</td>
<td>9</td>
<td>0.000</td>
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### Table 5: Model Adjustment

<table>
<thead>
<tr>
<th></th>
<th>-2 Log likelihood</th>
<th>R² Cox &amp; Snell</th>
<th>R² Nagelkerke</th>
</tr>
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<tbody>
<tr>
<td>2000</td>
<td>31,730</td>
<td>0.570</td>
<td>0.804</td>
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Table 6: Hypotheses tests

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SD.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig</th>
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<tr>
<td>LOGS</td>
<td>4.068</td>
<td>2.220</td>
<td>3.358</td>
<td>1</td>
<td>0.067*</td>
</tr>
<tr>
<td>LOGA</td>
<td>-3.369</td>
<td>2.040</td>
<td>2.729</td>
<td>1</td>
<td>0.099*</td>
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<tr>
<td>IND</td>
<td>0.320</td>
<td>0.159</td>
<td>4.030</td>
<td>1</td>
<td>0.045**</td>
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<tr>
<td>ROA</td>
<td>-37.216</td>
<td>26.906</td>
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<td>0.167</td>
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<tr>
<td>RS</td>
<td>42.292</td>
<td>27.419</td>
<td>2.379</td>
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<td>0.027</td>
<td>3.902</td>
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<tr>
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<tr>
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<td>0.834</td>
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<td>0.001***</td>
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<td>Constant</td>
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<td>6.222</td>
<td>1</td>
<td>0.013**</td>
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</table>

* significant at the 10% level    ** significant at the 5% level    *** significant at the 1% level

Table 7: Hypotheses tests

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<tr>
<th>Variables</th>
<th>Sig</th>
<th>Hyp</th>
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<th>Sign</th>
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<td>H1</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>LOGA</td>
<td>S*</td>
<td>H1</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>IND</td>
<td>S**</td>
<td>H2</td>
<td>+ or -</td>
<td>+</td>
</tr>
<tr>
<td>ROA</td>
<td>NS</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>RS</td>
<td>NS</td>
<td></td>
<td>+ or -</td>
<td>+</td>
</tr>
<tr>
<td>ROE</td>
<td>S**</td>
<td>H3</td>
<td>+ or -</td>
<td>-</td>
</tr>
<tr>
<td>INT</td>
<td>NS</td>
<td></td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>CS</td>
<td>S*</td>
<td>H5 H7</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>DS</td>
<td>S***</td>
<td>H6 H7</td>
<td>+</td>
<td>+</td>
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</table>

NS no significant  *significant at the 10% level  **significant at the 5% level  *** significant at the 1% level

Table 8: Marginal effect

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<th>Exp(b)</th>
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<tbody>
<tr>
<td>LOGS</td>
<td>4.068</td>
<td>58.429</td>
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<td>LOGA</td>
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<td>1.377</td>
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<td>ROA</td>
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<td>0.000</td>
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<td>RS</td>
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<td>2.10**</td>
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<tr>
<td>ROE</td>
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<td>0.948</td>
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<td>0.098</td>
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<tr>
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<tr>
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<tr>
<td>Constant</td>
<td>-16.486</td>
<td>0.000</td>
</tr>
</tbody>
</table>

NOTES

1 Council on Economic Priorities
2 Kinder Lydenberg Domini Company
REFERENCES


Environmental Disclosures informations in European firms, PHD, Paris 9 Dauphine University?


## APPENDIX

### Appendix 1: Reputation indexes

<table>
<thead>
<tr>
<th>Industry</th>
<th>$M$</th>
<th>$SD$</th>
<th>MED</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>16.22</td>
<td>5.95</td>
<td>19</td>
<td>0</td>
<td>20</td>
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<tr>
<td>Automobile</td>
<td>15.43</td>
<td>3.95</td>
<td>16</td>
<td>4</td>
<td>20</td>
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<tr>
<td>Energy</td>
<td>13.98</td>
<td>4.88</td>
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<tr>
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<td>5.08</td>
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<td>1</td>
<td>20</td>
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<tr>
<td>Nickel</td>
<td>13.15</td>
<td>5.22</td>
<td>14</td>
<td>0</td>
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<td>1</td>
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<td>2</td>
<td>20</td>
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<td>Maintenance products</td>
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<td>19</td>
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<tr>
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<td>13</td>
<td>0</td>
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<tr>
<td>Aeronautical</td>
<td>11.88</td>
<td>4.36</td>
<td>12</td>
<td>2</td>
<td>20</td>
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<tr>
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<td>11</td>
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<td>19</td>
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<td>Electronic materials</td>
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<td>Farm produce</td>
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<td>Distribution</td>
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<tr>
<td>Catering</td>
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<td>3.41</td>
<td>3.5</td>
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<td>Services and communication</td>
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<tr>
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<td>3.73</td>
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<td>Optic</td>
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M: mean, SD: standard deviation, MED: median, Min: minimal value, Max: maximal value

### Appendix 2: Example of the salience of stakeholders: AUCHAN

<table>
<thead>
<tr>
<th>Stakeholders’ group</th>
<th>AUCHAN</th>
<th>Salience</th>
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<td>Stockholders</td>
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<td>Employees</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Costumers</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Suppliers</td>
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</tr>
<tr>
<td></td>
<td>Others</td>
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<td>Total CS</td>
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<td>Diffuse Stakeholders</td>
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<tr>
<td></td>
<td>Community</td>
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<td>Public opinion</td>
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<tr>
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<td>Others</td>
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<td>Total DS</td>
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</tbody>
</table>