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# **CSR** and wage

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University of Evry Val d'Essonne, SDS Seminar, June 18, 2015

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- 1984, Edward Freeman develops the concept of stakeholders.
- Minimizing risks.
- Optimizing overall performance.
- Firms' long term interest management.

- Caroll 1979: Wealth production is also a social activity.
- The entrepreneur is responsible before the stakeholders.
- Wealth creation activity: Positive external effects/Negative external effects.
- These negative effects are a cost for the whole society.
- It may be the case that the market equilibrium does not match the Pareto optimal one.
- CSR will move market equilibrium to a Pareto-optimal one.

# Policy:

- ISO 26000 : 2010
- European Commission Agenda 2020
- Law NRE (Nouvelles Regulations Economiques –New Economic Regulation) in France adopted in 2001, → Grenelle 1 (2009), Grenelle 2 (2010).
- RSE Plateform in France (Prime minister office): September
   2013

- INTRODUCTION
- Effect over firms profitability
- Report RSE, France Strategie: Benhamou, Crifo, Diaye 2016
- 13%
- Crifo, Diaye, Pekovic, 2016.
- "Corporate Social Responsibility and Firm Performance: An Empirical Analysis of the Quantity-Quality Trade-off on French Data". International Journal of Production Economics, 171 (3): 405-416.

- Griffin, J. J., & Mahon, J. F. 1997. The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. Business and Society, 36, 5–31.
- Orlitsky M., Schmidt F.L., Rynes S.L. (2003), "Corporate social and financial performance: a meta-analysis", Organization Studies, vol. 24, no.3, 403-441.
- Allouche J., Laroche P. (2005), "A meta-analytical investigation of the relationship between corporate social and financial performance". Revue de Gestion des Resources Humaines, 57, 18–41.
- Margolis, J., Elfenbein, H., Walsh, J. (2009). Does it pay to be good? A
  meta-analysis and direction of research on the relationship between
  corporate social and financial performance. Harvard University Working
  Paper.

- No financial penalty
- May be a financial gain
- Be careful about reasoning in terms of causality.
- Correlation.
- The correlation between CSR and firm performance is not linear:
   U-shape
  - Barnett M.L., Salomon R.M. (2012), "Does it pay to be really good? addressing the shape of the relationship between social and financial performance", Strategic Management Journal, 33(11), p.1304–1320.

- Effect on employees wage?
  - Investigated theoretically.
  - Only one empirical paper: Nyborg and Zhang, 2013

- INTRODUCTION
- Effect on employees wage ?
- The rarity of papers on this topic is mainly due to
- the scarcity of databases which are large and include both information about workers' wages and the CSR related practices of the firms in which they work.

- INTRODUCTION
- Effect on employees wage ?
- Theory:
- Positive effect of CSR on wage: combination of "Cake effect" and firms' CSR behavior
- Positive link between CSR and economic performance of companies that should result in employees of CSR companies have higher wages, for a combination of "cake" bigger to be shared between the various stakeholders and a more equitable sharing mode of this cake (because the company is CSR).

- INTRODUCTION
- Effect on employees wage?
- Theory:
- Negative effect of CSR on wage: Assortative matching effect (Benabou and Tirole, Besley and Ghatak)
- An assortative matching process takes place between employees who go to CSR and CSR business enterprises that receive them.
- In other words, these employees are of a certain type and include intrinsically motivated.
- Therefore, they do not need to be strongly encouraged monetarily.

- INTRODUCTION
- Effect on employees wage?
- Theory:
- Both effects (effect of equitable sharing and effect of selective matching) oppose and the object of this article is to know which one outweighs the other.

#### • The ECMOSS:

- Annual Survey of the Cost of Labor and the Wage Structure (ECMOSS) for 2006.
- It concerns establishments employing at least 10 workers, in which small samples of employees were randomly selected.
- For each employee in the sample, the labor force section of the survey provides information about his socio-demographic, employment characteristics and the structure of his total earnings.
- Representative population of French firms from all business sectors except agriculture, forestry and fishing.

### • The ECMOSS:

- For each employee in the sample,
- the labor force section of the survey provides information about his
- socio-demographic,
- employment characteristics
- and the structure of his total earnings.
- For the establishment, the data set includes information about size, sector, the ways the wages are updated, etc..

• The ECMOSS:

• The ECMOSS 2006 survey includes 13,985 establishments belonging to 11,116 firms and includes 118,241 employees.

## • The ECMOSS:

• (i) full time workers, (ii) who have a permanent contract, (iii) who have worked 360 days in 2006, (iv) who are less than 55 years old, and (v) with an annual gross wage reported by their employers different from zero.

#### • The ECMOSS:

- We exclude from the data
- (i) chief executive officers, traders and artisans (because they may, because of their positions, extract the most benefits from wages),
- (ii) workers with less than one year's experience (because their total wage may artificially be weaker than workers with more than one year's experience, all other things being equal)
- (ii) employees earning a base wage less than €15,000 a year which corresponds to the legal minimal wage in 2006, and
- (iv) 80 employees earning a base wage more than €150,000 a year (0.17% of our initial sample).

• The ECMOSS:

• Finally, we get a sample including 42,780 employees.

#### • The COI:

- Employer survey of the French Organizational Changes and Computerization's (COI) 2006 survey.
- 13790 firms, with at least 20 employees, belonging to the private sector.
- Representative population of French firms from all business sectors except agriculture, forestry and fishing.
- The EAE:
- Annual Enterprise Survey (2003, 2006).
- Information on export volumes and profitability.
- The Merged data set: 18089 employees.
- We remove firms with missing or negative profit.

	Dimension					
Green		HR	Customer & Supplier			
•	Environmental standard or ethics label	<ul> <li>the firm had central databases for human resource, training in 2003;</li> <li>the firm has an internal department focused on human resource, training since 2003;</li> <li>the firm has an internal department focused on human resource, training since 2003;</li> <li>the firm used internet for employees learning or training in 2003.</li> <li>Improving or keeping workers abilities is a strategic issue.</li> </ul>	<ul> <li>•the firm used labeling tools for goods and services in 2003;</li> <li>•the firm was engaged in the deliver or supply of goods or services to a fixed deadline in 2003;</li> <li>•the firm had a contact or call centre for clients in 2003;</li> <li>•the firm adopted integrated IT-CRM in 2003;</li> <li>•the main client demanded firm to comply with a quality standard or quality control procedure in 2003;</li> <li>•the firm used tools to study client expectations, behaviour or satisfaction in 2003;</li> <li>•the firm had had internal departments focused on improving safety and environmental issues since 2003;</li> <li>•the firm had signed contracts or was engaged with some suppliers in long term relationships in 2003;</li> <li>•on the firm's demand, the main supplier complied with a quality standard or quality control procedure in 2003;</li> <li>•the main supplier had an IT system (for orders, invoices, etc.) linked to that of the firm's in 2003;</li> <li>•the firm was registered according to ISO 9000 standard.</li> </ul>			

- THE SCR VARIABLES: Much ado about nothing?
- Our CSR variables may seem less complete than those based on extrafinancial scores: VIGEO, KLD.
- Our approach does not include dimensions such as :
  - human rights,
  - governance
  - and societal commitment.
- We do not have such information in our database.

- THE SCR VARIABLES: Much ado about nothing?
- We are mainly oriented towards stakeholder associated CSR practices.

- Three main advantages in using the COI survey:
  - Measuring of CSR directly through a CSR performance measure,
  - A CSR performance measure for 10,293 firms which are representative of French firms. As a consequence, we expect more precise estimates.
  - Information about firms' production function.

- THE SCR VARIABLES: Much ado about nothing?
- We have matched the COI survey with the Vigeo dataset and it appears that 21 firms are in both datasets.
- Within these 21 firms, we checked for the link between our CSR construction and the Vigeo ratings.
- We found that our CSR construction includes a part of the information conveyed by the Vigeo ratings.

- THE SCR VARIABLES: Much ado about nothing?
- Why we do not use the new "Enquête sur le Developpement Durable 2011" which is a large database (about 11000 firms) including CSR information.
- Main Reason:
- There is no information about firms' production function in the EDD survey.

### THE WAGE VARIABLE

- Base wage is computed as total gross annual wage minus remuneration of paid leave and overtime, bonuses and various supplements.
- Total wage is computed as the sum of total gross annual wage, employee savings plans, profit sharing, and employer's contribution to employee savings plans and to pensions as well as other nonspecified compensations.

c. Simultaneous Equations Model:

$$\begin{cases} (a) \ Y_1 = \alpha_1 + \beta_1 X_1 + \delta_1 Z_1 + \mu_1 \\ (b) \ Y_2^* = \alpha_2 + \beta_2 X_2 + \gamma_2 Y_1 + \mu_2 \end{cases}$$

- where Y\*<sub>2</sub> represents wage variable; Y<sub>1</sub> is the **binary** corporate and social responsibility practice;
- $X_1$  and  $X_2$  are the vectors of exogenous variables;
- Z<sub>1</sub> represents the vector of exclusion variables.

•  $X_1$  and  $X_2$ :

- Age, education, seniority, occupation, working hours,
- size,
- being a part of a holding group,
- profit
- exporting activities (ratio export by sales),

- $X_1$  and  $X_2$ :
  - R&D strategy (Related to its R&D activities in 2003, the firm collaborated with (1) private businesses or laboratories or (2) Centre for National Scientific Research, universities or other public organizations),
  - Business sector: consumption goods; equipment goods; intermediate goods and energy; construction; sales; transport; financial and real-estate activities; and services to firms.

- Why Z<sub>1</sub> ?:
  - To identify the model
  - Variables that explain the probability of the firm investing in CSR but are not correlated with the error term of employee wage.

# • THE RESULTS

	BASIC	TOTAL	WAGE
	WAGE	WAGE	PREMIUM
WHOLE SAMPLE	0.126***	ns	-1.664***

<sup>(\*), (\*\*), (\*\*\*)</sup> indicate parameter significance at the 10, 5 and 1 per cent level, respectively. ns means non-significant.

THANKS