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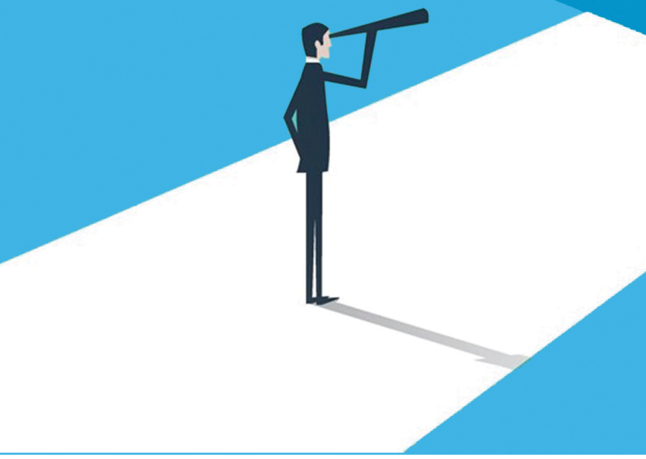

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36. What is behind the choice of the quality of Legality rating by Italian private firms?

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Abstract
Legality rating (LR) is an under-investigated topic, due to its recent introduction. Moreover, it is difficult to interpret univocally the LR and to frame it within a well-defined theoretical framework. However, since a few years, data are available to be empirically analysed. To explain the reasons leading to the choice of companies' LR quality, we aim to investigate the determinants of LR through an econometric analysis that includes governance and economic variables. The requirements that allow to obtain a high LR must only be verified and not evaluated, so that firms that require the LR already know their future score. However, our hypothesis is that companies require LR to signal their good behaviour to reach or maintain their legitimacy or to divert attention from an unsatisfactory economic and financial situation. To address this issue, we use a unique sample of 1,104 Italian private firms that obtained a LR in 2016. Focusing on governance variables, we find that board size, ownership concentration and family-owned companies and cooperatives are positively related to quality of LR. As to economic variables, Roa is negatively related to quality of LR. These results show that where the governance features make the firms more inclined to look after its reputation the LR is higher. The LR, rather than encouraging the respect for the principles of legality, principally makes to emerge companies that already behave in a virtuous manner, i.e. firms tend to report a behaviour they already hold rather than modify it according to the objective of obtaining the LR.

Keywords: Business Ethics, Corporate Social Responsibility, Legality Rating, SMEs, Italy, Legitimacy Theory, Corporate Governance, Profitability Analysis.

1. Introduction
Recently, a new relevant, voluntary ethical rating has been introduced in Italy by law, the so-called legal rating (hereinafter LR). The LR aims not only to fight against corruption and illegal practices, but also to promote ethical behaviour of the firms. Between 2012 and 2014 the Italian Parliament and the government by an inter-ministerial decree set out criteria to assign the LR (recognized by Italian Competition Authority – ICA) and to take it in account when firms granting of public financing and access to credit. The law identifies some objective requirements that a firm must respect to obtain the LR (as it will be better explained in the next section) and the firm already knows if it hold them or not at the time of the request. For these reasons, the LR could be considered as a sort of standard for the firms. In this sense, the LR can promote legal behaviour as well as ISO 14001 can promote adequate environmental management systems, or SA8000 can contribute to create a safe and healthy workplace environment. LR can be also considered a corporate social responsibility (CSR) standard since legality is one aspect of the social behaviour of the firms. According to Carroll (1991), indeed, the legal responsibility is considered the second block (after the economic responsibility) of the CSR pyramid: “legal responsibilities reflect a view of codified ethics in the sense that they embody basic notions of fair operations as established by our lawmakers” (Carrol, 1991: 41). In general, CSR standard can have a relevant signalling role in terms of communicating behaviours or characteristics difficult to observe (Rasche, 2011; Moratis, 2016). Regardless of the relevance of ethical reasons and pragmatic implications (for instance, the access to credit), it is not clear which drivers may influence the firm's decision to request a given level of LR, and particularly to signal that it has reached high standards of legality. Starting from the above considerations, we pose the following research questions: why do private companies decide to signal their LR? What are the main determinants of the quality of LR in Italian private companies? Adopting a pragmatic approach to explain the relation between firms' characteristics and LR, this paper aims to explore financial and corporate governance antecedents of the quality of the LR by testing the hypothesis that firms decide to request a LR in the attempt to signal legality to their stakeholder and/or to obtain or maintain legitimacy. To address this issue, we used a unique sample of 1,104 Italian private firms that obtained a LR in 2016 focusing on governance and financial variables.

There is no existing research to date as to LR, with the exception of Ginesti et al. (2018), who examine a sample of 452 non-listed companies in order to investigate if human capital efficiency is a key driver of corporate reputation, proxied by the LR. There are different reasons why LR and its determinants is an under-investigated topic. A first reason is due to its fresh introduction, so that only recently data are available to be empirically analysed. A second reason could be related to the difficulty to univocally interpret the LR and to frame it within a well-defined theoretical framework, thus risking to perform only descriptive studies. Indeed, LR can be interpreted according to different approaches, each of which allows to understand important facets.

We contribute to the literature on responsible behaviour and social standard certifications by exploring a new tool using a pragmatic approach, and so doing we aim to provide policy-makers and institutional authorities with a deeper understanding of the real determinants of LR, thus contributing to improve legality and ethics in performing business. In particular, few studies have been carried out about the decision to request a social certification as a strategy to obtain legitimacy (Berkout et al. 2008; Muller et al., 2009).

This paper is structured as follows. The next section describes the research context analyzing the main characteristics of LR; Section 3 presents the theoretical background and hypotheses development; Section 4 describes the method used and illustrates the findings; Section 5 presents a discussion and provides some conclusions.

2. Research context: The Italian Legality Rating

On 15 November 2012, the Italian Parliament approved the Implementation Regulations for the LR, a new tool designed to increase the competitiveness of Italian companies by promoting ethically sustainable development. The rating is a certification issued by the ICA to companies that have submitted the application, declaring themselves to be in full compliance with the specific industry regulations.

The LR is designed to increase the competitiveness of lawful companies by supporting their ethical and honest initiatives. The LR ranges from a minimum score of one star to a maximum score of three stars, and it is awarded by the ICA on the base of information directly provided by the company and further verified through cross-checks with data owned by the public administration.

In order to be eligible for the minimum score of *one-star-LR* a firm must fulfil the following requirements:

1. The entrepreneur and other relevant individuals must not be the recipients of preventive and/or precautionary measures, nor must they be convicted for tax-related crimes. They must not be addressed by judicial sentences for mafia, nor must they be involved with mafia activities of any sort. The firm must not have been submitted to compulsory administration, nor must it have been convicted for administrative wrongdoings;
2. firms must not have been convicted for serious crimes related to anti-trust, for breaching the code of consumption, for not respecting norms about safety and security of the working place, or for not complying with the obligations towards employees and collaborators as for remunerations, contributions, insurance responsibilities, and fiscal matters. Moreover, the firm must not have been under scrutiny for declaring less income than what verified, for having experienced revocations of public funds that were not duly paid back by the firm itself, or for not having paid taxes. Likewise, the enterprise must not have received any sanction by the ICA implying the prohibition either to sign contracts with the public administration, or to participate to auctions for public procurement.

More requirements are needed for firms to be rated with two or three stars of LR, such as:

1. Complying with the Legality Protocol signed by the Ministry of Internal Affairs and the Italian Industrial Federation, with its guidelines for implementation, and with the Protocol signed by the Ministry of Internal Affairs and the Association of Cooperatives together with local prefectures and trade associations;
2. Using traceable payment methods also to process financial transactions whose amounts are lower than the threshold stated by the law;
3. Adopting an organizational framework apt to the conformity control as stated by the law;
4. Adopting processes that grant the CSR;
5. Being registered to lists of entities that are not prone to mafia infiltrations;
6. Endorsing the ethical codes of self-regulation that are defined by trade associations;
7. Having in place organizational frameworks to prevent and contrast corruption.

Denunciations of crimes by the entrepreneur and her family and collaborators, if followed by legal penal consequences, shall be hold in high esteem.

The LR lasts two years since its release, and it can be renewed upon request. As an additional element of transparency and reliability, the list of companies to which the LR has been assigned is continuously updated and published on the ICA website. In addition, the Decree of 20 February 2014, n. 57 defines the methods according to which banks and public administrations are required to consider the legal rating in granting loans to companies. As is known, the achievement of legal rating requires certain standards that are not necessarily based on economic performances and that, therefore, can also be obtained when the profitability indicators prove to be worse than past or than those of comparable companies. The achievement of a LR obliges the public administrations to attribute to these companies the preference in the ranking for the granting of loans, the attribution of an additional score or the reserve of a share of the allocated financial resources. This occurs as a result of the quality of LR obtained.

3. Theoretical background and hypotheses development

3.1 Theoretical background

Although formally defined as a rating, in reality the LR is more properly associated with a social certification based on a related standard. Indeed, in the case of the social rating an agency assigns a score to a company based on pre-established criteria and a discretionary assessment. On the contrary, a social certification is obtained by a firm if a third-party authority verifies the compliance with specific requirements (Christmann and Taylor, 2006; Mueller et al., 2009; Rasche, 2010). According to the McIntosh et al. (2003)'s classification, the LR could be considered a behavioural standard, that is a standard defining clearly what a firm can or cannot do (Schwartz and Tilling, 2009). In the case of LR, instead, ICA assigns the score based mainly on the possession of objectively verifiable requirements (illustrated in the previous section) and not on a discretionary assessment. The firms are able to know in advance what their rating will be, already knowing which requirements are met to obtain a certain level of LR (one, two or three stars, and other intermediate levels). The request by a firm to obtain the LR could be considered as a sort of self-regulation by which the State try to "create order without law" (Terlaak, 2007: 968), that is addressing behaviours towards desirable expectations relying upon the social or economic sanctions in case of non-compliance with required standards (North, 1990).

Given the LR structure, features and the benefits provided by the law, we can distinguish two different approaches to the voluntary request and quality of LR: compliance/pragmatic and strategic. According to a compliance or pragmatic approach, the firms decide to request the LR only to take advantage of the benefits provided by law, such as a better access to bank's credit and some advantages in calls for public funding. In this stream, LR could be considered as a part of a growing tendency of public government to take a leading role in trying to address the social and ethical behaviour of firms (Scherer and Palazzo, 2011; Buhmann, 2016). Determining a set of incentives to make convenient a behaviour can reduce the risk that a self-regulation can fail to guarantee an ethical approach of the firms (Csaszar, 2013; Calderon et al., 2018). Thus, in a logic of compliance firms are interested in obtain the LR and not in its degree (i.e., high or low quality).

On the contrary, according to a strategic approach, firms are not only interested to achieve the rating but also to obtain a high score. Two theoretical explanations can illustrate this approach. From a first point of view, the respect of the principle of legality can be considered as a socially responsible behaviour. In specific socio-economic contexts characterized by widespread illegality and strong presence of organized crime in terms of relations with legal companies, certifying behaviours that conform to high levels of legality can have great social importance. Therefore, promoting the idea that it is possible to run an entrepreneurial activity respecting the laws can be considered as a socially responsible behaviour. Some scholars have pointed out that socially responsible behaviour can be explained by a mix of ethical but also pragmatic motivations including the economic conditions of the company and the possible benefits deriving from behaviour (Crilly et al., 2008; La Rosa et al., 2018). In particular, social standards and certifications being usually linked to business operation can contribute to create value for the firms signalling a behaviour potentially able to guarantee reputational advantages (Moratis, 2016). Following this perspective, a firm uses a social certification to signal to their stakeholders those positive characteristics hard to be observed as a social responsible behaviour (Davila et al. 2003; Terlaak, 2007; Moratis, 2016). Requesting the LR and obtaining a high score could be a manner to close an information asymmetry (Akerlof, 1970). Indeed, the social responsibility or also the legal integrity of a firm are very difficult aspects to evaluate, representing a sort of credence attribute impossible to assess a priori (Etilé and Teyssier, 2012). The social certification is a manner to signal the social behaviour of the firm to mitigate the information asymmetry. This approach could also be linked to a strategy to hide negative behaviour by signalling a positive aspect (Mcwilliams et al., 2006).

From a second point of view, a strategic approach could be linked to the interpretation of LR as a useful tool to maintain or obtain legitimacy. Legitimacy is considered "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman 1995: 574). With reference to other types of certifications, previous studies have shown how they can contribute to the achievement of legitimacy (Mueller et al. 2009; Richards et al., 2017). Some authors have told about an *actional approach* to legitimacy, namely when it is achieved through a communication process consisting of policies and

actions (De Blasio, 2007; Boyd, 2000). Obtaining a high LR could be interpreted as part of this communication process by a symbolic or rhetoric strategy rather than to be the more effective tool to change behaviour (Pfeffer, 1981; Ashforth and Gibbs, 1990; Jacobsson, 2000). In particular, a national social certification can contribute to obtain a sort of “local” legitimacy that is related to the stakeholder operating in the local environment in which the firm acts (Husted et al., 2016).
In this paper, through empirical analysis, we will try to test if these possible theoretical explanations are verified. In order to study a complex phenomenon like LR is more appropriate using more theoretical approaches, rather than only one main theory (Tagesson et al., 2009).

3.2 Hypotheses development
Based on the above theoretical background our general hypothesis of research is that a firm is interested in signaling high quality of LR to hide negative behaviour (McWilliams et al., 2006) and to maintain or obtain legitimacy and consensus towards stakeholders using the LR as an actional approach (De Blasio, 2007; Boyd, 2000). In the attempt to verify this theoretical approach, we suggest some hypotheses related to governance and financial variables.
Concerning the governance, one important variable is the size of the board of directors, a crucial factor able to influence the performance of the firm (Coles et al., 2008). In particular, a larger board has been associated to a better orientation towards achieving legitimacy and strengthening reputation (Johnson and Greening 1999; Pfeffer and Salancik 1978). In addition, corporate governance literature emphasized a strong correlation between board size and firm reputation (Musteen et al., 2010; Baselga-Pascual et al., 2018). Therefore, a larger board should be more oriented to signal the legal integrity of the firms to obtain the legitimacy of the local environment. For these reasons, our first hypothesis is as follows:
H1: Board size of Italian private companies is positively correlated to the quality of LR.
According to the Upper Echelon Theory (Hambrick and Mason, 1984), the demographic characteristics of most relevant decision-makers can influence corporate choices (Huang, 2013). Thus, a second governance variable is the gender of the ultimate major owner. In particular, the characteristics of the owner can affect the performance or the decision of a firm (La Porta et al., 1999). In literature, social role theory affirms the different behaviours of men and women following to stereotypes and beliefs linked to the social roles they occupy (Eagly, 1987). According to social roles theory women are often associated with specific personality traits as empathy or caring, and are considered more social-oriented while men are considered more focused (Eagly and Wood, 1991). In this perspective, if the ultimate major owner is a woman, she could be more interested in signal a good behaviour to achieve a good reputation and to obtain social legitimacy. Based on these arguments, our hypothesis is as follows:
H2: The presence of a female ultimate major owner in Italian private companies is positively related to the quality of LR.
Another variable that could affect the quality of the LR is the ownership type (La Porta et al., 1999). Indeed, the social legitimacy and reputation depends on the values and identity of the ownership (Swanson, 2008). Usually, the family firms have a strong propensity to have a good reputation in society because this is linked to the family name (Berrone et al., 2010). For these reasons, our hypothesis is as follows.
H3a: Italian private family-owned companies are positively correlated with the quality of their LR.
Multinational companies are criticized for the ways they achieve profit (Edwards et al., 2007), due to the numerous cases of corruption, pollution or exploitation of children’s labour to which they are associated. These factors induce them to demonstrate their commitment to CSR. Moreover, foreign companies hold greater knowledge, experience and capacity deriving from operating in international markets (Fernández and Nieto, 2006), which can result in greater sensitivity to single country’s institutional changes, like the introduction of the LR in Italy. It is therefore reasonable to expect that the LR adopted by foreign-owned companies will be better:
H3b: Italian private foreign-owned companies are positively correlated with the quality of their LR.
The fundamental characteristic of cooperatives, namely organizational democracy (Rothschild and Whitt, 1989), generates strong incentives and motivation among workers within the organization. Cooperatives, through their ownership structure, internalize the connections with the suppliers that provide most of the critical resources. The result is a greater identity and commitment towards the cooperative. Using this strategy based on a strong relationship with their partner-suppliers to obtain resources from the environment, the cooperative form is less affected by environmental shocks, by the probability of failure and it competes better with other organizational forms (Núñez-Nickel and Moyano-Fuentes, 2004). The cooperatives do not compete, however, on profitability, but on legitimacy, since more legitimacy implies a greater number of members and more resources. Although the participatory democracy typical of its governmental structure could hinder the internal hierarchy and the fundamental strategic leadership to achieve adequate levels of efficiency and to create agency costs (Rao and

Neilsen, 1992), we believe that cooperatives are naturally oriented towards CSR and, therefore, they aim to achieve higher LR:
H3c: Italian private cooperative companies are positively correlated with the quality of their LR.
Also the ownership concentration is a crucial factor when we consider the attitude of firms to signals its responsible behaviour. When the ownership is concentrated in a low number of shareholders the reputation and legitimacy of the firms becomes strongly related to the name of the ultimate owners (Barnea and Rubin, 2010). Thus, our fourth hypothesis is:
H4: Italian private companies' ownership concentration is positively related to quality of their LR.
Previous studies have already shown the existence of a positive relationship between economic and social performances (Orlitzky, Schmidt and Rynes, 2003). In particular, according to the Slack Resource Theory (Waddock and Graves, 1997), we should hypothesize that companies with high economic performance invest more in CSR, as a consequence of the more solid financial endowment.
However, the achievement of the legal rating may be pursued also by companies showing poor economic performance. In fact, LR may foster the realization of economic and non-economic benefits: the reputational advantage deriving from the increase in market share and from the acquisition of new customers may improve also the financial situation (Alwi et al., 2017).
Despite the possible arising of new costs and requirements (for example, for the implementation and monitoring of the 231 model; CSR processes, and so on) and therefore the assumption of new risks (March and Shapira, 1992), bad performing companies could aim to adopt a high quality legal rating, to improve their economic situation.
In that sense, the strategic use of the LR to hide other negative aspects implies that also some financial variables can influence the decision to make public their behavior in terms of legality. For this reason, our fifth hypothesis is:
H5a: Italian private companies' profitability is negatively related to quality of their LR.
Although devoted to other kind of topic, literature recalls the role of the social and historic performance in determining some companies' strategic decisions (Gomez-Meija et al., 2018). Specifically, the (social and historic) economic performances are capable of addressing corporate strategies. From this point of view, it can be hypothesized that companies that have an unsatisfactory profitability (both from a historical point of view and towards direct rivals) may find the idea of being able to signal their good behaviour in order to remedy the result obtained.
Indeed, according to the "behavioural risk theory" (Cyert and March, 1963), when the performance is lower than the levels of historical aspiration (i.e. compared to previous years) and / or social (with respect to sector competitors), companies can search for new solutions, aiming to restore or improve corporate performance (Nelson and Winter, 1982). Moreover, these solutions can be risky, because they require some initial expenses and further increase the uncertainty of future income flows (Chatterjee et al., 2003). Therefore, past performance as well as social performance influences corporate behaviour, because it is used as a benchmark for define problems in terms of potential gains or losses (Kahneman and Tversky, 1979). In these circumstances, the institutional mechanism that guides entrepreneurial behavior is market competition and, in particular, the risk of leaving it, while mimetic isomorphism is attributable to the uncertainty that companies with low economic performance have, with respect to the past and to need of being aligned with the competitors.
Thus it is possible to integrate the above research hypothesis, on the negative relationship between economic performance and quality of the legal rating, with two further research hypotheses related to the economic determinants of the quality of the legal rating in these terms:
H5b: Italian private companies with lower levels of economic performance than historical ones adopt a high quality of LR.
H5c: Italian private companies with lower levels of economic performance than those of their industry competitors (i.e. social performance) adopt a higher quality of LR.
High levels of debt increase the risk of bankruptcy (Ross, 1977) or, in any case, worsen the company's financial situation, hindering the implementation of the elements constituting the legal rating. Again, however, faced with the risk of default, companies could be induced to adopt the LR in order to achieve greater and better access to loan capital. So, following this reasoning our hypothesis is:
H6: The risk of bankruptcy in Italian private companies is positively related to the LR.
Even the level of debt was analysed in order to explain the social behavior (Barnea and Rubin, 2010). It is considered to be negatively correlated to social behavior, because a high level of debt limits the amount of cash flow available to undertake investments in CSR activities (Zwiebel, 1996). Moreover, when the weight of financial costs, associated with high indebtedness, is particularly heavy, the company could try to reduce the incidence by resorting to some mechanisms - such as the adoption of a high quality legal rating - that could improve information asymmetry with credit institutions. Thus, in this case our hypothesis will be:

H7: The interest/sales is positively related to the quality of LR.

4. Method

4.1 Sample building, econometric model, and variable description

For the construction of the sample, we started from the population of companies with LR, as reported on the ICA website. At the drawing date (11 May 2018), there were 5,531 companies with an assigned or renewed LR (we excluded companies with revoked, suspended or cancelled LR). In order to analyse the determinants of the quality of LR, we looked at all companies with LR assigned in 2016 and we matched this number with the database used to extract accounting and governance data, which was AIDA (Bureau van Djyk). We looked at both the previous year (2015) and the previous three-year period (2013-2015) to 2016. The initial sample was therefore composed of 1,104 companies, equal to 20% of the population of companies with LR at the date of extraction. Companies with a LR but that were not present on AIDA were excluded, as well as companies with an IFRS financial statements and inactive companies (i.e. bankruptcy or default). Our final sample size was of 1,049 companies. Table 1 shows the sample construction process above described.

Table 1. Sample building.

	# companies	%
Population of companies with LR at 11 May 2018	5,531	100
Initial sample size: companies with LR assigned through 2016	1,104	20
Criteria for dropping		
– companies not included in AIDA	28	2.5
– companies with IFRS financial statements	24	2.2
– default or bankruptcy companies	3	0.3
Final sample size	1,049	95

The econometric model adopted is the following:

$$LR_{i2016} = \beta_0 + \beta_1 Firm\ Age_{i2015} + \beta_2 Firm\ Size_{i2015} + \beta_3 Website_{i2015} + \beta_4 Regional\ quality_{i2013} + \beta_5 Industry\ fixed\ effects + \beta_6 Board\ Size_{i2015} + \beta_7 Gender_i + \beta_8 Family_i + \beta_9 Cooperative_i + \beta_{10} Foreign_i + \beta_{11} Ownership\ Concentration_{i2015} + \beta_{12} Roa_{i2015} + \beta_{13} Olhson_{i2015} + \beta_{14} Interests\ on\ sales_{i2015} + \varepsilon_{i2015} \quad (1)$$

The variable Roa for the year 2015 is then replaced by the historical Roa and the social Roa. Given the "nested" nature of the data (companies within regions and sectors) we adopted a linear hierarchical model (HLM). All models were estimated using the *Stata®13* "mixed" command. In order to reduce the problems of endogeneity, all independent variables were measured in 2015, i.e. in the previous year to that of LR attribution. This allowed us to assume that the dependent variable related to the quality of the LR is determined by the predictors and the control variables, thus excluding the possibility of reverse causality. All variables are described in table 2.

Table 2. Variable description.

Variable name	Variable description
LR	Ratio between the company's score (ranging between 1 and 7) and the maximum value of 7. Source: AGCM
Control variables	
Firm Age	Natural logarithm of the number of years since company foundation to 2015. Source: AIDA
Firm Size	Natural logarithm of the number of employees. Source: AIDA
Website	Dummy variable taking a value of 1 if the company has a website, 0 otherwise. Source: AIDA
Regional quality	*European Quality of Government Index* on citizens' perception and experience about corruption, fairness and public services quality at 2013. Source: *The Quality of Government Institute.*
Governance variables (Source: AIDA)	
Board Size	Natural logarithm of the number of directors.
Gender	Dummy variable assuming a value of 1 if the ultimate major owner is a female, 0 otherwise
Ownership type	Ultimate ownership type identified by the following dummy variables: family, foreign, cooperative (reference category: "other").

Ownership concentration	Ultimate ownership concentration of the major shareholder (set to zero for cooperatives).
Financial variables (Source: AIDA)	
Roa	Return on assets.
Historical Roa	Absolute value of the difference between Roa 2015 and Roa 2014 if this difference is negative, 0 otherwise.
Social Roa	Absolute value of the difference between company's Roa and the industry median Roa if this difference is negative, 0 otherwise.
Ohlson	Ohlson-score on default risk.
Interests on sales	Percentage of interests on sales.

4.2 Results

Figure 1 shows the descriptive statistics of all the variables included in the regression model (1). Companies of the sample have an average age of 24 years, thus Italian SMEs interested in LR appear to be young; the majority of companies has a website; they have on average 3 directors seating on the board; a high concentration of ownership (about 75%); there is a prevalence of family firms; low presence of women as major shareholder and an average Roa of 5%. The Pearson correlation matrix shows the LR to be correlated significantly and positively to firm size, board size, both foreign-owned and cooperative ownership, whereas significant and negative correlations are related to family firms, ownership concentration, and financial variables (i.e. Roa, Olhson-score and the percentage of interests on sales). Correlations between independent variables do not create any collinearity problems, as confirmed also by the VIF analysis.

Table 3 shows results of HLM (1). Model 1, includes only control variables, which are statistically significant as to company age (younger companies show higher LR) and firm size (larger companies have higher LR). Model 2 is our complete model of equation (1), introducing all independent variables. Particularly, in models from 2 to 5, we include only sectors that were significant in model 1 or that had a particular relevance in relation to the request for LR. Industries with lower interest towards the quality of LR is trade, whereas a greater interest stems from building and water supply sector, given that companies operating in these sectors have to contract with the public administration.

Among governance factors, the board of directors positively impacts on the quality of LR. As to ownership structures, family businesses show lower LR, whereas both foreign-owned and cooperative companies show higher ones. Similarly, ownership concentration is positively related to the quality of LR, while there is no role for the gender of ultimate majority shareholder.

As to financial variables, a statistically significant and negative coefficient of Roa means that companies with bad economic performance in 2015 obtained a higher LR in 2016. The reasons are clear, given that these companies try to fight against their poor performance by requesting a higher LR, that can lead to the economic and reputational benefits associated with it. In model 3, we introduce a quadratic term of Roa, which is significant and positive. Although the size of the effect is very low, the high significance demonstrates the existence of a non-linear U-shaped relationship, so that the highest LR are achieved not only by companies with low Roa (i.e. negative Roa), but also by companies with very high Roa, which can rely on excellent income performance to support the costs connected to the fulfilment of a higher number of requirements related to the LR.

Models 4 and 5 replace Roa (as to 2015) with social Roa and historical Roa, as above defined. In both cases, the relationship is statistically significant and positive, thus confirming the contribution of the company's economic performance in explaining the quality of LR: a worsening of the social or historical Roa leads to higher LR, with a slight stronger effect for the first compared to the second one.

We also note a significant role played by the Ohlson-score, our proxy for corporate default risk. Companies with a higher score are only able to obtain lower LR. It is likely that these companies are in serious financial troubles and they seek to access to the benefits associated with the LR (in particular, bank credit and public financing), but are not able to bear the costs related to the discretionary requirements leading to a higher LR.

Figure 1. Descriptive Statistics.

	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. LR	3.05	1.59															
2. Firm Age	23.96	14.89	.02														
3. Firm Size (.000)	18.400	40.100	.28*	.33*													
4. Website	.58	.49	.03	.36*	.26*												
5. Regional quality	34.28	13.11	.00	.09*	.04	.16*											
6. Board size	2.95	2.29	.19*	.21*	.37*	.17*	.26*										
7. Gender	.15	.36	-.03	-.00	-.05	-.01	.04	.02									
8. Family	.54	.50	-.19*	.17*	.00	.08*	-.04	-.19*	.01								
9. Cooperative	.11	.32	.16*	.09*	.09*	-.02	.10*	.50*	.07*	-.39*							
10. Foreign	.05	.22	.24*	-.14*	.09*	-.06*	.08*	.06	-.04	-.25*	-.08*						
11. Concentration	.75	.35	-.10*	-.05	-.04	-.03	-.10*	-.50*	-.01	.50*	-.70*	.11*					
12. Current Roa	5.09	6.50	-.12*	.00	-.08*	.06	-.01	-.13*	-.02	.02	-.12*	-.04	.09*				
13. Social Roa	1.49	2.80	.15*	-.08*	-.03	-.09*	.04	.09*	.00	-.05	.07*	.14*	-.04	-.65*			
14. Historical Roa	1.61	4.64	.08*	-.02	-.03	-.00	-.00	.06*	.06	-.05	.05	.03	-.05	-.19*	.42*		
15. Ohlson	-4.85	1.60	-.13*	-.29*	-.38*	-.15*	-.11*	-.15*	-.01	-.02	-.02	-.07*	-.03	-.41*	.19*	.01	
16. Interest on sales	1.22	1.47	-.03	.02	.08*	-.01	-.12*	-.07*	-.01	.09*	-.09*	-.07*	.09*	-.19*	.03	-.05	.28*

* = *p-value<.05.*

Table 3. HLM results of LR on governance and financial variables.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Control variables	Only Controls	Roa	Roa^2	Social Roa	Historical Roa
Firm Age	-.008**	-.006	-.004	-.004	-.001
	(-1.98)	(-.96)	(-.60)	(-.63)	(-.21)
Firm Size	.057***	.046***	.048***	.048***	.050***
	(1.04)	(5.99)	(7.21)	(6.59)	(7.18)
Website	.012	.020*	.022*	.021*	.016
	(1.21)	(1.78)	(1.86)	(1.82)	(1.37)
Regional qual.	.001	.000	.000	.000	.001
	(.67)	(.27)	(.26)	(.24)	(.37)
Industry	All				
Trade		-.082***	-.078***	-.078***	-.080***
		(-4.27)	(-4.08)	(-4.19)	(-4.07)
Building		.054**	.055***	.056***	.051**
		(2.53)	(2.65)	(2.74)	(2.31)
Water		.106***	.110***	.104***	.104***
		(2.76)	(2.83)	(2.73)	(2.69)
Energy		.145	.139	.155	.156
		(1.25)	(1.29)	(1.38)	(1.34)
Renting		.124***	.125***	.123***	.119***
		(7.23)	(6.98)	(6.91)	(6.64)
Governance variables					
Board Size		.008**	.007**	.007**	.007*
		(2.28)	(2.17)	(2.18)	(1.94)
Gender		-.009	-.005	-.008	-.01
		(-.50)	(-.34)	(-.45)	(-.58)
Family		-.025*	-.024*	-.025*	-.023
		(-1.87)	(-1.79)	(-1.86)	(-1.63)
Cooperative		.075**	.075**	.077**	.076**
		(2.16)	(2.13)	(2.2)	(2.23)
Foreign		.091***	.088***	.084***	.101***
		(3.35)	(3.46)	(3.36)	(3.67)
Ownership concentration		.041**	.037*	.038*	.034
		(2.03)	(1.74)	(1.84)	(1.25)
Financial variables					

Roa		-.002***	-.004***		
		(-2.80)	(-3.23)		
Roa^2			.000**		
			(2.46)		
Social Roa				.007**	
				(2.31)	
Historical Roa					.003***
					(2.65)
Olhson		-.006**	-.007**	-.006**	-.006**
		(-2.18)	(-2.36)	(-2.05)	(-2.16)
Interests/sales		-.010**	-.008*	-.008	-.004
		(-2.07)	(-1.67)	(-1.56)	(-.98)
Constant	-.442***	-.377***	-.404***	-.425***	-.440***
	(-3.54)	(-2.92)	(-3.45)	(-3.49)	(-3.58)
Log pseudo-likelihood	236.58	260.99	265.63	263.75	261.53

****, **, *, Statistically significant at level of .01, .05, .1 Z-statistics between brackets.*

Overall, governance and financial variables all contribute to defining the quality of the LR, although some of them show a sign of the relation opposed to expected one. A significant role is played also by the economic sectors, while the contribution of regional differences is not supported. Table 4 summarizes our results in terms of sign and significance of the relationship investigated.

Table 4. Summary of the hypotheses testing.

Research hypotheses		Expected Sign	Sign of the relation	Significance	Decision
H1	BoD size	+	+	**	Accept
H2	CEO gender	+	-	No	Reject
H3a	Family ownership	+	-	*	Reject
H3b	Foreign ownership	+	+	***	Accept
H3c	Social cooperative	+	+	**	Accept
H4	Ownership concentration	+	+	**	Accept
H5a	Current performance	-	-	***	Accept
H5b	Historical performance	-	-	***	Accept
H5c	Social performance	-	-	**	Accept
H6a	Interests expenses	+	-	**	Reject
H6b	Default risk	+	-	**	Reject

****, **, *, Statistically significant at level of .01, .05, .1*

To verify the robustness of our results we performed a battery of robustness tests. First, alternative regression model specifications were adopted, such as ordinal logistic analysis and tobit analysis, specifying our dependent variable as between 1 and 7, as well as an OLS regression model with errors standards grouped by company. Secondly, an average of the three-year period 2013-2015 of financial variables was used in replacement of 2015 values. The analyses were also replicated by eliminating sectors and regions with a smaller number of companies. Furthermore, regional quality was replaced by either regional dummies or area dummies (i.e. Centre, North, and South Italy). Finally, the robustness of some variables was verified, replacing the total assets with the number of employees as a proxy for the company size as well as the Ohlson-score was replaced by the index of financial independence. In all the cases, our main results were confirmed.

5. Discussion and conclusion

The aim of this paper was to investigate the determinants of the LR through an econometric analysis that includes both governance and financial variables. This analysis was intended to explain the reasons that can lead a company to the decision to communicate its level of legality and ethics. The requirements that allow to obtain a high LR are mainly objective, that is, they must only be verified and not subjected to an evaluation process. For this reason, generally, firms that require the LR already know the score they will get. Therefore, our hypothesis was that companies require LR as a tool to signal their good behaviour in order to reach / maintain their legitimacy or to divert attention from an unsatisfactory economic / financial situation (Boyd, 2000; McWilliams et al., 2006; De Blasio, 2007).

The results of the empirical analysis satisfactorily confirm our hypotheses. As to governance variables, the H1 hypotheses on the board size, the H4 on ownership concentration and partially the H3 on ownership type are confirmed. These results show that where the governance features make the firms more inclined to looking

after its reputation and legitimacy, even from a socially responsible behaviour point of view, the LR reaches higher scores, confirming that the choice to communicate the level of legality is of symbolic nature.
With reference to the financial variables, the analysis confirms exactly the hypothesis H5 that concerns the negative correlation between profitability and LR, while the hypotheses H6 and H7, which concern the risk of bankruptcy and the relationship between interest and sales, are not confirmed. Therefore, we can say that firms with low profitability levels are interested in demonstrating a higher LR because in this way they can try to signal a positive aspect that can contribute to giving a better representation of the firm situation. On the contrary, H6 and H7 are not confirmed, probably because of the benefits that the Decree of 20 February 2014, n. 57 grants to firms obtaining the LR, i.e. better access to credit and preference in the ranking for the granting of loans. In this manner, the opportunity to get convenient funding conditions by the LR represents a way to foster the restoring of a satisfactory profitability. Therefore, under certain levels of profitability, on the other hand, we can assume that the company, not being able to demonstrate satisfactory levels of profitability to potential creditors, decides to resort to alternative ways to obtain financing.
Summarizing, the results lead to the assertion that the LR rather than encouraging the respect for the principles of legality, for the most part, only makes to emerge those companies that already behave in a virtuous manner. Firms tend only to report a behaviour they already hold rather than modify it according to the objective of obtaining the LR. These results can have important implications of policies because they can lead to consider with great caution the idea that LR can really contribute to a change in corporate behaviour.
The paper contributes to the literature on social standards and certifications by showing how the LR request can respond to strategic needs. With reference to this topic, the future research lines can be different, among which, for example: the analysis of the effect of the rating on profitability; a qualitative analysis of the ethical and cultural reasons that can lead to the choice of requesting the LR.

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