CORPORATE GOVERNANCE RELATIONSHIPS AND VALUE CREATION: AUTHORITY COMBINED WITH RESPONSABILITY

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Object and motivation of the paper

The goal of this paper is to try to describe and formalize the CG relationships according to the changing nature of the firm (strongly based on the human capital) as analysed by the contributions of Zingales (1998), Rajan-Zingales (1998, 2000 and 2001) Bradley et al (2000).

The paper is based on the interpretation of the CG relationships under the lenses of the managerial capabilities (Teece 1990) and incomplete contract approach (Hart 1995), trying to integrate the *incomplete contract prospective* and the *capabilities prospective*

Presentation

- Related literature and contest
- Problems of analysis
- Concept of Corporate Governance: authority and responsibility
- Corporate Governance relationships
- Representation of the model
- Example

Supporting literature

Efficient allocation of resources

Invisible hand of the price mechanism

Visible hand of managerial authority

- Coase (1937) taught us that using the market has its costs, and firm alleviate these costs by substituing the price mechanism with the exercise of authority. The theory shows that a defining feature of the corporation is the substitution of informative market prices with authority (Coase 1937). Coase argued that “the firm is a set of conscious power in an ocean of unconscious cooperation”. The cooperation in the modern corporation has to be guided by authority which addresses the firm’s activities (coordination effect) - (Arrow, 1974).

- As topic of this paper, *Corporate Governance* is the study of how this authority is allocated and exercised and, above all, about how there is an allocation of authority on a subject combined with the need of protection and safeguard of the interest of all the others stakeholders.

Corporate Governance Relationships components

The three main components related to the CG are (Zingales 1998):

- the definition of the firm's goal, referred to the entity called firm for the common shared benefits of all the stakeholder;
- the efficient allocation of authority ex-ante;
- the efficient distribution of the surplus and reallocation of authority ex-post.

Intellectual Capital of the Management (ICM)

Now that the nature of the firm is changed, what was unexplained in the neoclassical approach – the quality of the management – has become a critical asset (Zingales, 2000).

The source of power in the firm is changed as well (Rajan and Zingales 2000). It is no more based on the ownership of physical assets. The power of ownership is severely limited by the crucial role of the management's capabilities, that can quit the work's relationship and take with him his human capital.

The *Intellectual Capital of the Management (hereafter ICM), as inalienable asset, is a set of competences and managerial capabilities essential to formulate and implement innovative strategies and new investment's projects*, which makes the firm able to better answer to the different contingencies, providing new growth opportunities and sustaining the value creation.

Corporate Governance Relationships

The agency problem faced by the CG has become broader and now it refers to the capabilities to enhance and maintain the most valuable resources, the human capital, inside the firm (Zingales, 1998).

It is still important the incentive problem on which the previous agency literature focused on but there is another point of view to observe it. Under the incomplete contract approach it is relevant to find the source of incentive:

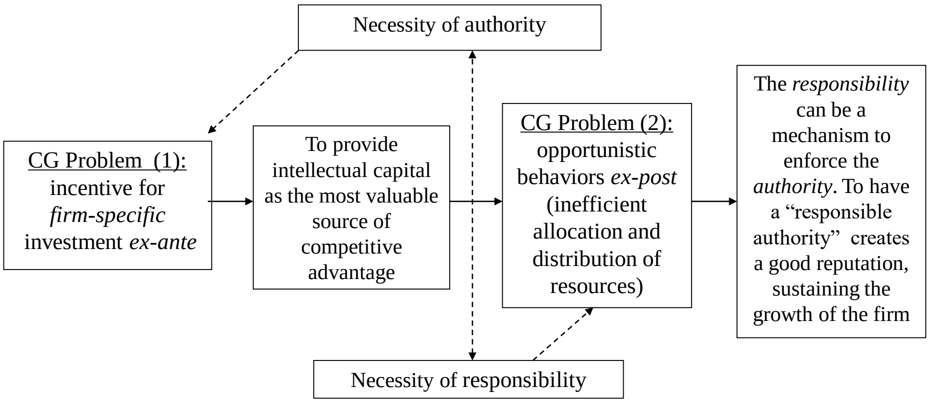
- to apply, ex-ante, for firm-specific investment of the manager in the firm activities;
- to tie the human capital, and his innovation and managerial capabilities at the company, to guide the firms in its contingencies.

Firm Value = Asset in place + Growth opportunities
(Myers 1977)

Growth opportunities ➔ to identify and catch

Growth opportunities ➔ depend from managerial competences and discrectionary

Corporate Governance (CG) problems



Timing of the CG problems object of analysis in the model

Object: trying to suggest the most efficient source of Incentive ex-ante and the best mechanism to avoid opportunistic behaviors ex-post

It is possible to explain the CG relationships through their two components highlighted by Arrow (1974) and Barca (1994) but also Williamson (1985): Authority A(x) and Responsibility R(x), with x = ICM (intellectual capital of the management)

$$\text{CG relationships} = f_{IMC}\,[A(x)\,,\,R(x)]$$

Corporate Governance relationships

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$$\textbf{CG relationships} = f_{ICM}\,[A(x), R(x)], \quad \text{with } x = ICM$$

***Authority* is described as a "return to skills" the manager gets by his firm-specific investment.** *It is a real and contingent power to control the firm's resources and influence part or the entire firm due to the intellectual capital developed by the manager (ICM).*

Deduction 1: *the level of authority is positively related with the level of ICM and increases exponentially with marginal increment of ICM.*

***Responsibility* is defined as a commitment of the manager to create incremental streams of return thanks to the intellectual capital developed.**

Deduction 2: *the level of responsibility is positively related to the intellectual capital and increases logarithmically for marginal increase of ICM.*

Authority

The level of authority given to M is low for low level of IMC (which can be provided by many managers) and, instead is *exponentially* higher because of the exponential relevance of the IMC for the creation of value.

$$A(x) = A(IMC) = \beta_0 + \beta_1 \, e^{x}$$

Responsibility

The return streams increase, marginally, less than the increase of IMC. This because increase of IMC generates a lot of *growth opportunities* compared to return streams. If the risk-return profile of the firm's investors is fixed, when the value of the firm is based, most of the part, on growth opportunities, the value of the streams of return might decrease because its volatility increases. The relation between protection and safety of the stakeholders (Responsibility) and innovation and managerial capabilities (IMC) can be represented as a logarithmical function, because it comes after, later, the first order priority in the M's mind (increase his power) and is equal to:

$$R_{(IMC)} = R_{(x)} = \delta_0 + \delta_1 \log(x)$$

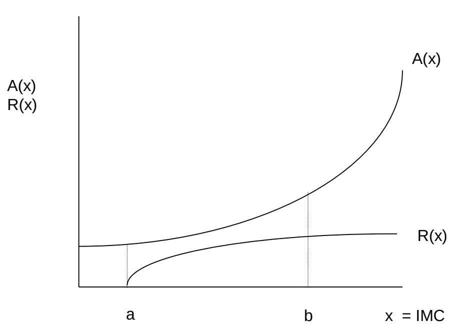
Come viene definito il manager

- Il titolo di **direttore generale** (manager) è attribuito in molte organizzazioni, pubbliche e private, ad un manager, di solito un dirigente, con autorità e responsabilità estesa all'intera organizzazione e quindi appartenente al *senior management*. (Wikipedia)

Corporate Governance relationships

Deduction 3: *to maximize the value of the CG relationships it needs to minimize the distance between R(x) and A(x).*

$$\underset{x}{\mathrm{Min}}\{[\beta_0 + \beta_1 \ e^{x}] - [(\delta_0 + \delta_1 \log(x)]$$



After the threshold *b*, marginal increment of IMC involves more authority for M. Here it is possible to see the *dark side of privileged access* to critical resources: *excess power-seeking*.

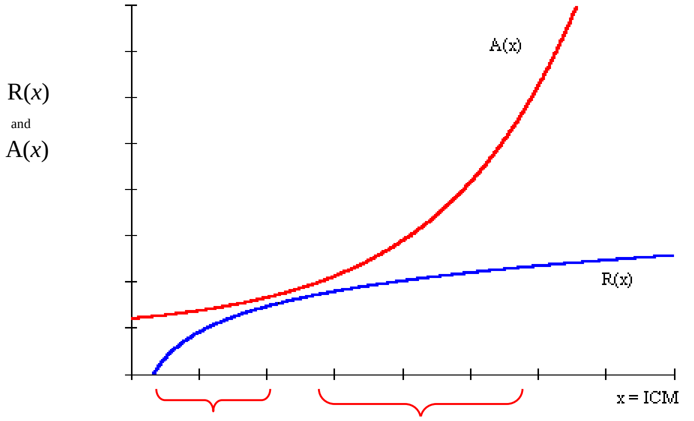
Comparison with the nuclear and coulomb's forces

As in this physic case, in the firm's contest, arguing by analogy, there are two forces: one which attracts authority and responsibility (***incentive effect***) and another which tends to diverge these two (***agency effect***).

The electric and strong nuclear forces operate in different way according with the distance; in the firm's contest incentive effect and agency effect operate according with the level of IMC. If the too high level of IMC cause a wide distance between authority and responsibility the CG relationship breaks down and the firm's activities doesn't create value anymore.

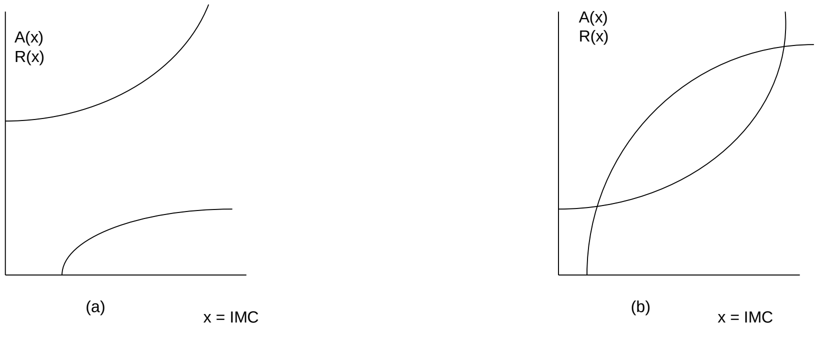
Corporate Governance relationships

Deduction 3: *to maximize the value of the CG relationships it needs to minimize the distance between R(x) and A(x).*



Incentive effect of giving authority.

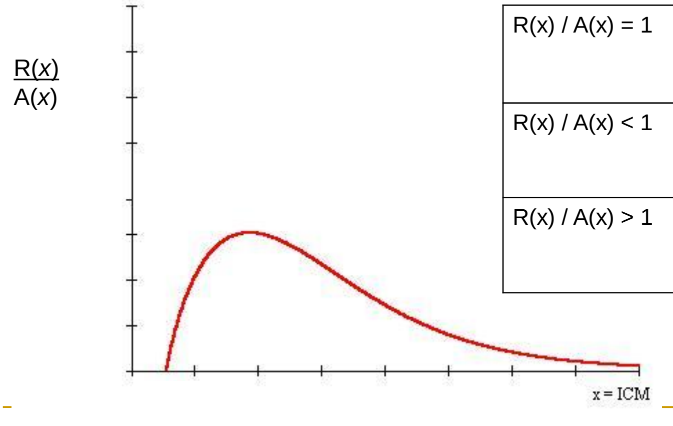
Opportunistic effect of excess authority.
Trade-off between Authority and Responsibility



Efficient Corporate Governance relationships

The link between the allocation of authority with the role of the responsibility is central in creating good CG relationships and, at the end, to create value.

Deduction 4: *the maximization of the CG relationships permit to maximize the value of the firm providing the optimal incentive, allocation of resources and distribution of value.*



R(x) / A(x) = 1	Optimal level of authority and responsibility
R(x) / A(x) < 1	The role of the manager is strong
R(x) / A(x) > 1	The role of the shareholder is strong

CG relationship and value creation

It is traditional in the theory of the firm to define the production opportunity set, available to the firm in terms of its boundary – the maximum attainable set of output quantities for various input quantities, given the state of technology and knowledge. This boundary is the production function of the firm.

Firm value = *f* (economic resources available)

In the neoclassical model the firm is just a black box.

Now the source of competitive advantage and value creation is the **innovation and managerial capabilities** (the capability of M to elaborate a particular innovative strategy or project, building the future of the firm as active subject and creating growth opportunity).

Firm value = f_{IMC} (economic resources available, corporate governance relationship)

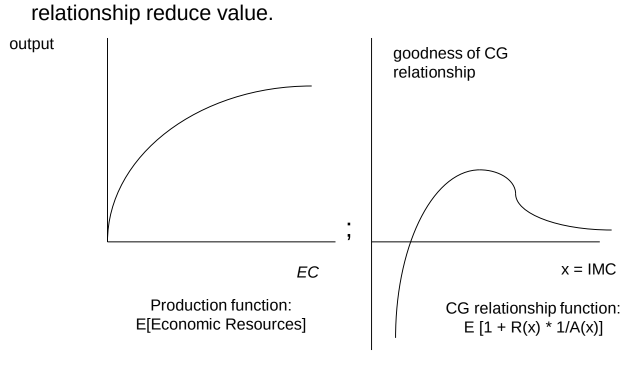
corporate governance relationship (capabilities to improves the efficient combination and allocation of physical and human assets to fit different interests and constraints and create value – see definition in Zingales, 1998).

The first order Firm objective's function (1)

MaxE{*ER* * [1 + R(x) * 1/A(x)]}

MaxE{ *ER* * [1 + (β_0 + β_1 e ^{x}] – [δ_0 + δ_1 log (*x*)]}

This means that until a certain level of IMC the convergence of A(x) and R(x) enhance the value of the economic resources, but after a certain threshold a bad CG relationship reduce value.



Conclusion

Under this perspective, the problems of contractual incompleteness in the economic relations are solved through an appropriate allocation of authority and responsibility (according to the level of intellectual capital developed by the manager).

In high-complex environments (where the ICM is the source of competitive advantage), the best incentive is to recognize and reward the manager for the level of intellectual capital developed and, at the same time, the best mechanism to control for opportunistic behaviors (excess discretion) is to improve the corporate responsibility of the manager.

The interaction between authority and responsibility solve ex-ante problems of hold-up and ex-post problem of moral hazard