

Principal-Agent problem: a theoretical view of administrative behaviour

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Abstract

Politics consist of the shifting interplay of actors with different objectives and the primacy of one or another may depend on the particular situation and shifting constraints (Katzmann, 1986, 1988). In this vein, under circumstances of different objectives and motivations, the policy process becomes more complex with issues of public interest and capture of actors in the public sphere. Trying to analyze, as Levine and Forrence suggest, why we have some outcomes and not others, this paper tries to explain the behavior of decision makers, using theoretical concepts such control, political dominance, delegation of power, etc. This research focuses on the study of bureaucracy and decision making in the public sector in the light of principal agent theory theoretical prepositions.

Keywords: *principal-agent theory, control, political dominance, delegation of power*

1. Rational Choice and decision making

A major part of the theoretical work on bureaucracy links individual actions with social and policy outcome. Thus, focusing on individual actions and motives as well as their behavior in the superior-subordinate relationship is a path to analyze the performance of organizations in all levels of policy making. It is important to note that 'the work of Progressive Era scholars arguing for a scientific approach to administration gave way to the behavioral revolution in the study of organizations' (Meier and Krause, 2003, p.3). Works written by Barnard's (1938) 'The Functions of the Executive' and Simon (1947) 'Administrative Behavior' were classic analyses which considered the individual as the unit of analyses. As Jones, Boushey and Samuel have argued 'policy is made by organizations, but organizations are

made up of interacting human decision-makers. As a consequence, any theory of organizations harbors a theory of individual choice' (Jones, Boushey, Samuel, 2006, p.39)

Considering individuals within the organization as rational actors, interested toward individual utility maximization, public choice theory borrows concepts from the economic literature to explain individual behavior in politics and policy. Trying to atomize the complex process of decision making and predict future outcomes by explaining human behavior and preferences, rational choice stress problems of constraints and utility. Scholars like Friedman (1953) described individuals as pure utility maximizers who interact with social systems. More recent scholars like Levi (1997) and Ostrom (1999) have furthered analytical concepts of human behavior and preferences to respond to the complexity of social outcomes.

In recent years the public administration and issues of control and delegation have been largely scrutinized using the explanatory power of rational choice modeling of decision making. In this line this paper considers decision makers in public policy as rational individuals who make strategic choice, upon comprehensive information and ranked preferences. 'Rational choice decision making as applied to the implementation stage of the policy process generally takes the form of principal-agent models of the bureaucracy's interactions with the legislative, executive, and judicial branches of government'(Jones, Boushey, Samuel, 2006, p.50). In this context, the valuable analytical perspective offered by the principal-agent model 'is interesting and useful only because the agent is strategic about his/her behavior' (Meier, O'Toole, Bohte, 2006, p.2).

In this vein Jones, Boushey and Samuel would go on to argue that 'while principal agent dilemmas illuminate some important aspects of bureaucratic behavior, its prominence in studies of public policy is partially an artifact of the rational choice model of behavior'(Jones, Boushey, Samuel, 2006, p.50).

Focusing on the principal agent theory, this research will demonstrate how issues which interfere decision making in the public administration like information asymmetries and moral hazards, 'are those that map neatly onto the most basic assumptions of individual utility maximization'(Jones, Boushey, Samuel, 2006, p.50).

2. Principal Agent Theory

Nowadays principal agency theory helps the research agenda to explain relations in politics and public administration. In other words it is the study of asymmetric and hierarchical relationships between constituents and legislators (Moe, 1984, Kalt and Zuppan 1990), legislators and party leaders (Cox and McCubbins,1993), the

legislature and its committees (Krehbiel, 1991; Kiewiet and McCubbins, 1991), the legislature and bureaucracies (Weingast and Moran, 1983), regulatory agencies and firms (Baron and Besanko, 1984), the Supreme Court and its relationship to lower courts (Songer, Segal, and Cameron, 1994) and to presidents' decisions to use force (Downs and Rocke, 1994).

The explanatory power of the agency theory is not used to bring into light only in the relation between the subordinate and its hierarchical superior, but it also stands as the dominant theory to explain the regulatory processes in public policy, as found in the analyses of Majone, 1994, Thatcher and Stone Sweet, 2002, Levi-Faur, 2005, Christensen and Lægveid, 2006; etc.

As Mitnick has noticed, the agency literature is now big enough to display distinctive 'schools' (Mitnick, 1984). There are distinguished three different schools and the main scholars whose work has been developed into these approaches. An early contribution has been provided by scholars such as Zimmerman, 1977, Jensen and Meckling, 1976 to develop the so-called 'Rochester school', using elements of transaction costs approach and the modern theory of the firm as analytical devices. Earlier attempts to apply theories of the firm to political relationships were dangerous (Moe, 1987). Another approach is developed by the work of Bainman (1982), combining variables of system rewards and actors' information, to develop a formal mathematical modeling to analyze the relation between principal and agent. The sociological/organizational or behavior approach developed by Mitnick, 1974; Eisenhardt, 1983; White 1983, is concerned with sociological elements of organizational behavior and concepts such as control and authority (Mitnick, 1984).

Despite the power to explain critical phenomena in public policy areas, 'principal-agent theory has both strengths and weaknesses as an analytic device for understanding public bureaucracies in a democratic system' (Meier and Krause, 2003:15). Some weaknesses of the theory are related to its limitations to goal conflict, hierarchy and equality, flexibility (Krause 1996a, 1999) and the fact that it hinders the negotiation process.

3. Principal Agent Problem

The agent is making decisions in a particular policy field on behalf of the principal who has delegated the power. Theoretically, in general terms the perfect agency would be possible in situations where there is obedience to authority, such as:

- The agent is faithfully following principal's preferences, meaning that the agent is loyal to the principal and do not deviate from what is agreed and what the principal wants;

- Despite how the agent behavior is, the principal has access to a good monitoring or supervision technology, then he or she can 'either directly observe the agent's action or can infer it from the outcome by filtering out the effect of exogenous risk' (Besley, Ghatak, 2005, p.5);
- When the organization has a good reputation and it present high credibility for the principal to extend the agency discretion;
- The dominance of Fiduciary norm. As identified by Mitnick (1974, 1975a) and Stinchcombe (1975) 'public officials are often said to operate under a special 'trust' or with a special responsibility' (Mitnick, 1984). Authors like Young and Moore (1969) and other later authors, have used 'the occurrence of fiduciary prescription to explain excesses in agent behavior and lamented the deviant behaviors that have been said to occur in its absence' (Mitnick, 1984).

Following this argument Mitnick remarks that 'as agents rarely behave exactly as their principal prefers, these deviations give rise to characteristics of 'agency problems' (Mitnick, 1984). Considering this, he lies down the question on how is the principal controlling his/her bureaucratic agents? Firstly, the principal has a valuable tool to address agency problem considering that he/she designs the agency structures, part of which incentive structures or control mechanisms are. Moreover by placing a monitoring strategy the principal has the right to sanction the agent whose activities stray from the principal's references (Mitnick,1980). Despite the strategy used, in all cases the principal assumes that the agent would shift. Analyzing particular areas of public policy, Milgram (1974) put forward the phenomenon of 'agentic shift' vis-a vis the concept of 'agentic state' in terms of bureaucratic compliance to authority's preferences.

Agent shift

'Agentic shift' or the opportunity of agents to behave differently or rarely of what principals would prefer, happens when the following criteria are met:

- the principal and the agent have objectives that are not fully aligned and that actions undertaken by the agent cannot be perfectly monitored by the principal (Besley, Ghatak, 2005, p.3) or in other words the principal and the agent have conflicting goals in preferences and interests;
- there are potential alternative sources of reward for the agent for pursuing goals that are to some extent inconsistent with the principal's (Mitnick, 1984).(e.g influence of groups of interest to the agent);

Generally speaking, when making decisions, the agent can choose either to

obey and work or shift the obligations set by the principal. 'The common original dichotomy of responses, working versus shirking, has been replaced by a more varied set of options' (Meier, O'Toole, Bohte, 2006, p.3). The decision agents to shirk depends on the existence of the monitoring and incentive measures, the performance of the monitoring strategy used by the principal (mechanisms can be in place but monitoring does not take place), the approach of the principal toward the effectiveness of the policy, the monitoring of third parties and their credibility as well as the utility the agent receives by shirking compared to working.

In a principal agent perspective, 'if the choice is to manipulate the output measure strategically, the organization has three options: lying, cutting corners, and generating biased samples' (Meier, O'Toole, Bohte, 2006, p.7). As Downs (see 'Inside the Bureaucracy') explains, lying happens when numbers are reported not in a correct way but with the purpose to make good impression. Lying is a simple method to be used by agents when shirking, however it is not convenient in cases when the monitoring system of third actors is active and intense. Cutting corners is another way of presenting positive results by maneuvering with inputs measured to generate the result. The third way, sampling bias means that the agent would preset a pool of positive examples to the principal, so that the latter would positively evaluate his/her performance (Downs, 1967).

Principal Strategy

In spite of a shirking agent, the principal faces contemporaneous issues of uncertainty and information asymmetry which limit his/her ability to reduce the principal-agent problem. As Perrow observed, 'the principal-agent model is fraught with problems of cheating, limited information, and bounded rationality in general.' (Perrow 1986, p.224). Although it comes with a cost, the principal has to overcome issues of information asymmetry and bureaucracy's uncertainty (see Bendor, Taylor, and Van Gaalen 1985 and 1987) as they grow when the probability of an agent to shift increases.

In order to avoid as much as possible the agentic shift, the principle should construct the mechanisms to continuously observe the agent's behavior and judge the outcome (decision making). In this point, what would be the mechanisms that the principal can construct to rein in the behavior of agents whose preference profiles are not in sync with their own? There is a two folded answer. The principle can:

- (a) construct the necessary incentives so that the agent will comply with his preferences;
- (b) monitor the behavior of the agent and supervise its outcome;

(a) Incentive scheme

One day Deng Xiaoping decided to take his grandson to visit Mao.
 ‘Call me granduncle’. Mao offered warmly.
 ‘Oh, I certainly couldn’t do that, Chairman Mao’, the awe-stuck child replied.
 ‘Why don’t you give him an apple?’ suggested Deng.
 No sooner had Mao done so and the boy happily chirped, ‘Oh thank you,
 Granduncle’.
 ‘You see’, said Deng, ‘what incentives can achieve.’
 (Capitalism, 1984, p.62).

In order to minimize agency failure, ‘the agent provides the service and the principal compensates the agent. The principal’s task is to develop an optimal compensation package that will attract the most capable agent, and then motivate that agent to perform services for the principal in the most efficient and productive manner’ (Dees, 1992, p.27). Until now we have acknowledged the fact that the source of the problem ‘lies in the difficulty of making the agent’s objective closely aligned to that of the principal. One of the ways to do this is thought incentive schemes, which include (a) rewards and (b) punishments (Besley, Ghatak, 2005, p.6). On the other hand we have admitted that agents are self-interested actors. When choosing between reward scheme or incentive contracts and coercive control, many theorists believe that motivation of subordinates is particularly important. This pool of scholars believes that although the subordinate might be qualified enough to make the job right, the performance varies also by his willingness to pursue principal’s best interest or to maximize his interest instead. According to Moe ‘the agent has his own interests at heart, and is induced to pursue the principal’s objective only to the extent that the incentive structure imposed in the contract renders such behavior advantageous’ (Moe, 1984, p.756). In such a way, ‘even in hierarchical institutions, much of the work of controlling subordinate behavior can be left to the subordinate’s self-interest’ (Miller, Whitford, 2007, p.214), if it is guided by the correct incentives. By doing this ‘the expense and moral ambiguity of monitoring, rulemaking, and coercion can be largely avoided’ (Miller, Whitford, 2007, p.214).

Although ‘over the past three decades, the theory has de-emphasized the power of monitoring and increased its emphasis on monetary incentives’ (Miller, Whitford, 2007, p.214), ‘yet most organizations, and in particular public agencies, rely very little on pure incentive contracts and instead use coercive mechanisms of monitoring and sanctioning that many theorists find objectionable’ (Miller, Whitford, 2007, p.213).

A theoretical debate on monitoring and motivating is raised between Alchian and Demsetz (1972) and Holmstrom (1982). The former argue that the principal’s

role is to monitor and (potentially) chastise subordinates, while Holmstrom took the radically opposed position claiming that not necessarily the principal should be focused on monitoring, rather than on prioritizing incentive schemes that police agents in a credible way. Holmstrom (1982, p.325).

As explained by Miller and Whitford (2007), there are two reasons which make incentive schemes not a solution to the PA problem, and call instead for the application of systemic monitoring and control mechanism:

- One reason is risk aversion. Due to risk aversion and information asymmetry, the efficiency of monitoring cannot be replaced by incentive schemes which are based on the observed outcome. (Harris and Raviv, 1979; Holmstrom, 1979). The incentive scheme relies on outcome-based incentives, which on their side undermine the efficiency of risk sharing by shifting risk to the agent.
- An agent may interact with a random variable to produce an outcome of value to the principal¹ (Miller, Whitford, 2007) which creates risk and variability.

(b) Monitoring and Information advantage

Good monitoring of the agent is an important and inevitable mechanism in the principal-agent relation, despite the costs it bears.

Knowing that the agent might get engaged in non-sanctioned actions due to information advantage and specialized knowledge, the principal establishes monitoring strategies. Theoretically, if politicians would possess the full information on the behavior of the agent, or if the agent would not have the expertise advantage, then information asymmetries would not exist. As Sharon Hannes (2007) stipulates, whenever one person, the agent, is required to fulfill a task for another person, the principal, the latter draws supervision strategies, which are known in the literature as monitoring and bonding. 'Monitoring is the principal's efforts to monitor what the agent is doing, to ensure that the agent pursues the

¹ For example, a tenant farmer's crop is determined jointly by his own effort and the weather. In general, we assume the probability of a good crop increases with the farmer's efforts. However, this fact does not allow the farm owner to deduce anything about the farmer's efforts from the final outcome. If there is a bad crop one year, the farmer may blame the weather, even though he himself shirked. In a good year, he may take the credit, although the weather played a large part. This is the problem of information asymmetry that is basic to principal-agency theory. The farm owner could make an investment in monitoring, so that he can pay the tenant farmer only if he works hard. However, this is usually a costly process. The problem, conceived of as the principal's problem, is to design a contract that will induce the tenant farmer to work even without monitoring and sanctions. For example, sharecropping is a form of contract in which the tenant farmer comes to share, with the owner, a strong self-interest in a successful crop. The owner can then presume a high effort on the part of the farmer without ever having to verify it.

principal's ends. Bonding in contrast, was classically understood in agency theory to refer to voluntary, largely contractual self-constraints on the agent's discretion' (Yuking, 2010, p.66).

Arguing on the best strategy to be used by the principal, scholars agree on the importance of monitoring mechanisms, however they point out few limitations, especially when compared to the incentive strategy. Limitations can be summarized as follows:

- Noll and Weingast (1987) consider that monitoring is a highly imperfect strategy of control, because it is costly (see also Meier and Krause) and it cannot detect directly issues of asymmetric information problem;
- Monitoring incur transaction costs as well as opportunity costs;
- 'The use of active monitoring, contains the stigma of punishment and generates displeasure among agents' (Brehm and Gates 1997, p. 43);

In this line, Meier and Krause argue that 'monitoring of agent behavior is a more intricate task than creating incentive structures' (Meier and Krause, 2003)

The opportunity for the agent to shirk exists due to the incomplete information that the principal has. 'Incomplete information means that principals, who wish to delegate authority to perform tasks on their behalf, have neither full nor accurate information regarding agents' actions.' (Meier and Krause, 2003, p.8). Being aware of this, the principal draws incentive scheme and monitoring instruments which try to mitigate two main problems cited in the formal literature: hidden action and hidden information. Hidden information and actions are significant part of principal-agent relations (Arrow 1985; Moe 1987, p.480–82).

Hidden Action - Moral hazard

In the literature, the hidden information is also referred to as a situation in which the principal finds it difficult to observe and control the behavior of the agent, but can judge the optimality of that behavior. This is called Moral hazard (Moe, 1983). In other words, moral hazard refers to situations where the agent does not put effort to perform as agreed. As discussed above, a way for the agent to perform is to have incentives generated from the principal. Examples of such incentive schemes are the piece rates and fixed-price contracts or profit share and bonuses. However, while the former comes with a risk for the agent, the latter comes with a cost for the principal. Having the risk that 'the agent will get 'punished' even though the fault is not his or hers the solution lies in offering an incentive scheme that lies somewhere between a completely flat salary and a sharp incentive scheme where the agent bears all risk' (Besley and Ghatak, 2005)

Directly observing the agent behavior and detecting cases of moral hazard is sometimes not convenient and many other times it faces the lack of principal's will.

In this case the principal can use proxies or surrogates for the unobservable agent behavior, even though these might be subject of imperfection (Mitnick, 1984).

Hidden Information - Adverse selection

Adverse selection refers to misinterpretation of agent's ability, as a result of not correct information provided to the principal. In contrary to the moral hazard situation, in adverse selection problems, the principal is able to observe the agent, but he faces difficulties in judging the optimality of agent's behavior. In this informational asymmetry, the agent is privy to some information² that the principal needs to make a decision in her own interest, but the agent prefers that the information be used differently.

4. Agency costs and Agency loss to avoid moral hazard and adverse selection

While the principal draws mechanisms to supervise the agent, he is aware of the information advantage that the latter has over the principal. Monitoring strategy and incentive mechanisms constructed to avoid moral hazard and adverse selection give raise to the so-called 'agency costs'. Trying to encompass the possible ways of agency failure, Jensen and Meckling (1976) divide agency costs into, (a) the monitoring (including policing) costs of the principal, (b) the bonding costs of the agent taking steps to act as the principal desires and (c) some residual loss from the less-than-perfect agency.

The principal agent model provide necessary measures to be taken in order to reduce the agency loss. In their famous paper Jensen and Meckling (1976) propose three measures which would reduce the principal agent problem. These measures are as follows:

- The principal and the agent develop and design together the contract, which establishes all leverage necessary (incentive schemes, monitoring systems) for the agent not to shirk;
- The principal monitor the agent's activity;
- The agent undertakes activities demonstrating that their actions are not harmful to the principals;

Several years later, Kiewiet and McCubbins (1991) built upon their successor's work to identify four classes of measures which would limit problems that derive

² Accountability and Principal-Agent Models_Sean Gailmardy . e.g: informational advantage lies in the selection process

from moral hazard and adverse selection. The first measure is similar to the one identified by Jensen and Meckling. Similarly, Kiewiet and McCubbins (1991) think that the joint design of the contract is a very important measure which would allow among others a number of sanctions to be added in case of non-obedience. In response to the adverse selection problem, Jensen and Meckling propose a screening and selection mechanisms that will avoid the hidden information. In line with Jensen and Meckling, they propose monitoring and reporting measures which would control the activity of the agent. Institutional checks is the fourth measure proposed by Kiewiet and McCubbins, which hinder the agent's ability to conduct damaging actions.

Principal Agent Contract

In a wider perspective, 'organizations can be seen in part as systems of contract in which agents occupy employment relations with organizational principals' (Mitnick, 1984). The contract is a crucial part of the principal-agent model, and in Eisenhardt (1989) words it is the 'unit of analyses for agency theory'. Thus the way contracts are designed poses a challenge for both the principal and the agent. As an outcome of delegation, the contract raises the question of how to write contracts which transfer the authority to agents whose performance can be measured and incentivized (Alchian, 2012) and which reduce agency loss?

As discussed, the joint design of the contract is an important measure to reduce agency loss. Despite the fact that the principal and the agent can design the contract together, this as a measure does not guarantee for the perfect agency to occur, neither can a contract be fixed as a perfect and completed document. As Milgrom and Roberts puts it 'contingencies inevitably arise [...] and when they do parties must find ways to adapt' (Milgrom and Roberts, 1992, p.128). Trying to establish the most efficient contract, Eisenhardt puts the focus on types of contracts. He distinguishes between 'a behavior-oriented contract and an outcome-oriented contract. This remains an important challenge which we will address again in the latter sessions.

5. Behavior vs. outcome control strategy

Although the principal grants the right to intervene everywhere in the system, this does not enable him to regulate all agency failures. Agency failures may be found in all operating systems of the agency (information, communication, etc.) or in the principal's ability to process and evaluate the information received. Considering this, the principal has to choose among strategies. He can invest on information

systems, which means in other words means to observe agent's behaviors. 'This requires the purchase of surveillance mechanisms such as cost accounting measures, budgeting systems, or additional layers of management' (Eisenhardt, 2013, p.136). The principal can also control the outcome of the agent's behavior. 'Such outcomes are surrogate measures for behavior' (Eisenhardt, 2013, p.136).

Both ways poses a considerable risk. The information systems requires time and is costly, while the outcome-based contracts face the risk of uncertainty, because the outcome may vary only partially on the behavior and most of the time on extraneous factors (Eisenhardt, 2013). Moreover, the outcome-based contract transfers the risk to the agent. Under such circumstances, when chooses the control strategy, the principal has to tradeoff between these two type of costs. The risk is either efficiently borne by the principal (which leaves the agent with an incentive to shirk) or is inefficiently shifted to agents in order to create incentives that overcome moral hazard' (Harris and Raviv, 1979). In this view, 'control system measures and rewards, not only motivate behavior, but also alter risk sharing patterns' (Eisenhardt, 2013, p.137).

6. Issues of control of the agency

Despite the risk of uncertainty and information asymmetry, the principal agent model still tries to give an answer to issues of control over the bureaucracy, which according to the model – is a shirking bureaucracy. As Mitnick claims, 'agency theory has begun to explore some of the ways in which principals can police agents in such institutional settings' (Mitnick, 1984).

In this vein, David Epstein states that what control tries to address is the problem of bureaucratic drift, which is in other words the deviation from what agreed and expected, the change of course in delivered outcomes. Epstein goes on the analyze two general category of control used toward the recipient of delegated authority. The first category, *ex ante* controls, concern issues of agency design while the second category is ongoing controls which concerns issues of oversight. *Ex ante* control targets issues of procedures of reporting, the agency's key constituents, standards or criteria the agency considers when promulgating regulations, the executive department will the agency be located, etc. Ongoing control is focused on instruments of congressional oversight, such as direct and indirect monitoring; juridical oversight implemented through existing administrative law (Arshaw, 1990) and presidential appointment power (Calvert, MsCubbins, Weingast, 1989, Spulber and Besanko, 1992) (Epstein, 1999).

Many other authors have classified control mechanisms as *ex ante* and *ex post* (see Hammond and Knott (1996). Others show that the political control

of the bureaucracy is better achieved either through ex ante or ex post control mechanisms. McCubbins, 1985; McCubbins, Noll, and Weingast, 1989 believe that control is achieved through ex ante mechanisms. They explain that mechanism such as legislation, administrative procedures, organizational structures and personnel are used by political actors to control their subordinates. Those who favor ex post control of the bureaucracy believe more in mechanisms such as political appointments, ongoing interactions with the bureau, and congressional oversight hearings' (Bendor and Moe, 1985; Bendor, Taylor, and Van Gaalen, 1987a; Miller and Moe, 1983b).

In McCubbins and Schwartz (1984) words mechanisms can be categorized as direct and indirect forms of control.

- 'Police-patrol oversight is the classic form and involves the direct examination by the principal of a sample of his agent's activities in order to detect and sanction drift' (Fabrizio Gilardi, 2013:5). According to Spence, police patrols represent the oversight committees whose purpose consists in supervising the agencies' activities (Spence, 1997).
- 'Fire-alarm oversight, on the other hand, is a less intrusive and less costly form of control that relies on third party signals over the agent's actions. The principal establishes a structure that enables affected third parties such as interest groups and media to report bureaucratic misbehavior' (Gilardi, 2013, p.5). After forms of noncompliance are detected by third parties, the principal may initiate an investigation, in a formal or non-formal way. .

The direct oversight or 'police patrols' bears a considerable cost for the principal as it is 'time-consuming and, because of informational asymmetries, not very effective' (Gilardi, 2013, p.10). On the other hand with the indirect oversight the principal gets the information using other sources and respond to a system built and run by someone else (interest parties, media, actors outside of the principal-agent diad, etc.). By doing this 'the politician is converted from active monitor to reactive servant, more an ombudsman than a policymaker' (McCubbins, Noll, Weingast, 1989). However the indirect form of fire alarm monitoring might sometimes bear the risk of being a non-credible source of information. However, the theoretical framework shows that many time 'politicians tend to rely more on "fire alarm" oversight, where affected third parties such as interest groups and the media monitor agency behavior and push for political action when needed' (Gilardi, 2013, p.5).

Ogul (1976) divides measures of control into formal and informal measures. For example he categorizes committee hearings as formal measures while the private meetings and telephone contacts as informal methods.

Addressing the PA problem, the principal has to find efficient and less costly mechanisms of control. Ex ante and ex post control mechanism display strengths and weakness, however if the principal makes a good combination of these mechanisms, the most effective and less costly way of supervising the agent can be revealed. To the question on what would be the most efficient mean of control to achieve policy stability, arguments favoring constraints on the flexibility of agencies (ex-ante) and oversight, rewards and debate punishment (ex post) are provided by different scholars. Many authors think that 'the most effective mean for achieving policy stability are constraints on the flexibility of agencies, rather than reliance on rewards, punishments, and oversight' (McCubbins, Noll, Weingast, 1989, p.440), while others believe that since 'all individuals seek to maximize their positions with the least-possible effort, it is necessary to establish efficient punishment and reward mechanisms so a person placed at the service of another does not deviate from the latter's objectives and interests'(Pires and Guimaraes, 2015, p.880).

Referring to the literature, main ex ante and ex post mechanisms are described in this study. However one should note that these mechanisms are not exhaustive.

Ex ante control mechanism

Design the agency. 'Mechanisms of ex-ante control enable the politicians to design the agency in order to predetermine and achieve some policy preferences' (Haruta, Radu. B, Radu.L, 2009, p.83). Designing the agency structure and granting the opportunity of redesigning it, leaves also space for political control of the agency from the principal.

Administrative procedures are an ex ante and indirect control mechanism. The principal 'see the choice of administrative structures and processes as important in assuring that agencies produce policy outcomes that [the principal] deem satisfactory' (McCubbins, Noll, Weingast, 1989, p.432).

The principal agent literature poses two assumptions on administrative procedures. One is the 'stack the deck' policy, which align agencies' decisions with political interests of their principals, including the influence of interest groups over the policy (McCubbins, Noll and Weingast, 1987 and 1989; Brawn, 1995). The second assumption is that an administrative procedure reduces politicians' uncertainty on bureaucratic agents (Brawn, 1995, Moe, 1989).

Hardwiring constrains agency decision making so that the agency's decisions reflect the intent of the politicians enacting the procedure legislation and not the preferences of future political coalitions that may have hostile policy references (Potoski, 2015, p.626). This type of problem identified as political uncertainty refer to the fear that subsequent political coalitions, who will act as future principals, will abandon the up to date policy and enact new rules. In order for this not to happen,

the coalition in power has to build “an institutional structure to create pressures on agencies that replicate the political pressures applied when the relevant legislation was enacted” (McCubbins, Noll and Weingast 1987, p.255).

Appointments as a control mechanism take part when the principal appoint the head of the public institution or other members of the board/commission. As a mechanism, its challenge rests in the number of principals that appoint the head of the bureau. If there is an appointment made by multi-principals, the effect of this control mechanism is much lower compared to when the appointment is made by a single principal. Theoretically, ‘agency members usually cannot be dismissed for reasons other than incapacity or misbehavior. This means that political principals cannot remove agency members if they disapprove their policy choices’ (Gilardi, 2001, p.12). However, in practical terms cases of dismissal are commonly found to have been taken place in disrespect of the above mentioned principals.

Budget is an effective mechanism of control which is used to limit agencies’ discretion (Moe, 1987; Huber, 2000; Huber and Shipan, 2001). When allocated to subordinate bodies, budgeting can impose sanctions and rewards to agencies, depending on the outcome. As a mechanism of control its application varies on the type of public institution it is applied. In the case of local governance bodies, this mechanism can be more efficient, while in several other public institutions budget cannot be easily used as a control mechanism.

Hybrid mechanisms (Ex ante and ex post mechanisms)

Administrative control of public institution is theoretically related to the role of courts. ‘The rightness of the administrative decision-making process is often challenged and questioned in courts by the existing affected parties’ (Haruta, Radu. B, Radu.L, 2009, p.84). Administrative control encompasses the problem of delays in legal procedures and court decisions, in the point that sometimes the court decision enter into force late enough for it to bring the supposed effects. Procedural ruling, judgments of agents’ decisions as well as statutory interpretations enable the court to impact and influence the agency. Administrative control, implemented through court system scrutiny function both as an ex-post and ex-ante mean of oversight.

Legislation can also be used both as an ex ante and ex post mechanism of control.

Ex ante control mechanism: Legislative specificity as a control mechanism refers to ‘writing into the law precisely and in a detailed way what the agency is to achieve, and how to do so’ (McCubbins, Noll, Weingast, 1989, p.440). Huber and Shipan point out that ‘legislation is potentially the most definitive set of instructions that can be given to bureaucrats with respect to the actions they must take during

policy implementation' (Huber and Shipan, 2001, p.35). They go on to offer an accurate way of distinguishing control over regulatory agencies by measuring statutory control with the length (number of words) of legislative statutes to see how superficially they looked. Moreover they argued that 'control over regulatory agencies is exercised when policies are specified in detail in legislation' (Huber and Shipan, 2001)

Ex post control mechanism: 'Enacting new laws, or even simply threatening to do so, could be a mechanism to control the bureaucracy' (Gilardi, 2001, p.13). However, Moe (1987) argues that, as a controlling tool legislation is ineffective because by threatening, the principal might seriously risk the lack of credibility. Moreover, even if the new legislation emerges, there is still the risk that the agent would ignore it and not implement it thereof. Following Moe's argument, McCubbins, Noll and Weingast (1989) also argue that principals cannot count on new legislation to sanction the agency.

Ex post control mechanism

Prior to the work of Horn and Shepsle and McNollgast, studies of political control of administrative agencies were focused on efforts to control bureaucratic behavior by ex post mechanisms. This monitoring took a variety of forms: direct oversight by congressional committees by specialized agencies such as the Congressional Budget Office and the General Accounting Office, and reliance on constituents 'fire alarm' notification (McCubbins, Noll and Weingast, 2015).

One of the most important approaches of ongoing or ex post control mechanism is the oversight. Despite many forms and venues of influence (actor who exercises the power), in the theoretical context, oversight is used as a political mean over the bureaucracy to underscore their decision. Oversight is not a linear process and it can be exercised by single or multi principals.

According to McCubbins, Noll and Weingast (1989) oversight can be applied in the following forms:

- in the context of the annual budgetary process, and occasionally as part of the reauthorization of an agency's programs;
- Congress and the President have "watchdog" agencies to monitor agency performance, such as the Office of Management and Budget and the General Accounting Office.

Re-Organization as a control mechanism happens when politicians try to control bureaucracy through threatened or actual reorganizations of departments (Huber and Shipan, 2001). This include reorganization of its department units,

staff changes, etc. It distinguishes from designing of the agency, which is an ex ante control mechanism.

Regulatory peer review is a mechanism of control used toward public institutions to detect shirking. 'In terms of its usefulness, the regulatory peer review represents an ideal instrument against the informational monopoly over analysis that one public agency could possess' (Haruta, Radu. B, Radu.L, 2009, p.83). Including mainly technical analyses, peer review aim to analyze and detect biased and selective decisions, by showing that there was no technical valid reason for that kind of analyses. It tries to uncover cases when a decision has shift an outcome that benefits a favored party, such as a client, an interest group (Shapiro and Guston, 2006).

Institutional checks is a control mechanism which implies the cases when the principal delegates the same competence to more than one agent, so that they can compete to better achieve the principal's preferences (Ferejohn 1999, p.132; Huber and Shipan 2000, p.28).

Considering the above, the research will try to answer to questions of monitor and control mechanisms used by the principal and the explanation of why certain types of control structures emerge and others don't. The issue of efficacy of these control measures is a crucial point.

7. What motivates bureaucrats: public vs. private interest?

In the principal agent model it rests an important question: What motivates an actor, being the principal or the agent, to pursue his/her own interest instead of being loyal to the public interest.

The question of intrinsic motivations of bureaucrats in public administration lies in the heart of the agent theory. Trying to provide an answer on what motivates bureaucrats Prokopijevic brings together the concepts of methodological individualism and private interest, explaining their correlation in the light of the public choice theory. Prokopijevic claim that 'if we accept the methodological individualism on which public choice theory rests, it is hard to accept the notion that the principal objective of the bureaucrats is to serve the public interest' (Prokopijevic, 2000, p.71-78). Few years later, Knott and Miller made a more specific statement on how public interest is considered by the principal-agent model. Relying on the nature of the latter, they claim that 'the principal-agent model leaves space to the elected officials to pursue their self-interest in a way that can harm the public welfare (Knott and Miller, 2005). Considering that 'all principals and agents act as rational actors for their own self-interest' (Smith, Bertozzi, 1998, p.2),

pursuing personal gain, means personal utility as a result of the public office holding (Downs, 1957, 1967).

As cornerstones of principal agent model, issues of rationality and utility make one think that politicians and bureaucrats are interested in maximizing their interest, or as Ahrens puts it 'they try to maximize resources under their control and allocate them according to their own demands' (Ahrens, 2002, p.43).

Coming up with a more explanatory approach, Down (Inside Bureaucracy, 1967) sheds light into the contextual framework of motivation of the agent behavior. In his work Down classifies types of motivations and types of behavior of bureaucrats. Downs provide a general overview on five types of motivations that give light to the self-interest instinct of the public servants: power, money income, convenience, security and prestige. Down also classifies bureaucrats in climbers, motivated by prestige and power; conservers oriented toward security; zealous, loyal bureaucrats to narrow policies; advocates, dedicated to a broader set of policies; and statesmen, loyal to the entire society.' (Down 1967).

Being the reason for moral hazard action to take part, self-interest is not a characteristic found only in agents' behavior. The literature presents the concept of 'political moral hazard' (Knott and Miller, 2008) which is found in actions undertaken by elected politicians when they act primarily on their party's interest, undermining as such the public interest. In order to address the issues the issue of political moral hazard for principals or the individual motives of agents to follow their own interest, the literature on bureaucracy provides a solution which is related to 'delegation of power', considering it the genesis of PA problem.

Is delegation a losing game in principal agent perspective?

Agency discretion depends on the extent to which the authority is delegated. There is however an ultimate step of delegation of authority, which makes the institutions become independent. An independent institutions requires different governing structure, different reporting rules as well as operates under different criteria. From the perspective of the parliamentary democracy, delegation is a familiar phenomenon but it should be mixed with accountability in order to sustain democratic. While, 'from a principal-agent perspective, giving independence equals to suicide' (Gilardi, 2001, p.10).

Characteristics of the Independent Agency

The most crucial factor to justify the creation of independent agencies is the purpose of being free from political influence, or as stated in the literature be situated "at arm's length" from elected politicians.

In doing this, theoretically politicians do not design, as in the case of dependent agencies, control mechanism or police patrol to monitor and punish independent agencies. In a sense independent agencies are free from direct control or not controllable from the government or other parties. Following this argument, while the police patrol mechanism are inappropriate to control independent agencies, fire alarm does still works out to survey, detect and publish cases of malfunction. For this to happen, independent agencies need to have a high level of transparency toward interested parties or the general public, when applicable.

In their relation to the government, independent agencies are poorly restricted to accountability procedures. As such they have small responsibilities toward the government and the parliament.

Independent agencies operate under different rules and procedures.

Being responsible for the allocation of their own budget is one of the most crucial elements to distinguish their way of operating. This reflects a different attitude especially toward the staff, long term employment, more qualified staff, etc.

Having this in mind, independent agencies integrate 'an appointment procedure where technical skills are key factors for the selection' (Gilardi, 2001, p.9). As appointment of staff is far from political selection and is based on expertise and technicality, the dismissal of staff works under the same criteria as well. Knowing this, one of priorities of independent agencies is the fact that it limits the political dismissal of staff.

Another 'difference is that independent agencies are specialized institutions, with a specific task and specific competencies [...] with narrow goals that are made explicit in the statutes establishing the agency' (Gilardi, 2001, p.9).

Referring to the literature, independence is granted in two forms, *de jure* (i.e., legal or formal) and *de facto* (i.e., practically). *De facto* independence refers to "the self-determination of agencies' preferences, and their autonomy throughout the use of regulatory competencies" (Maggetti, 2007, p.272), while *de jure* independence means that 'agencies are in some form institutionally placed outside the bureaucratic chain of command and thus not bound to follow directives from the government' (Ennsner-Jedenastik, 2015, p.3). Granting formal or *de jure* independence to an agency is a result of a variety of factors. The probability of this type of agency to emerge exists when:

- In the policy level where the need for credible policy arrangements is especially pronounced, mentioning here fields such as utilities regulation (Gilardi, 2008, p.59) or economic regulation (Wonka and Rittberger, 2010, p.744);
- As Gilardi states, formal agency independence tends to be higher in political systems with a smaller number of veto players (Gilardi, 2002, p.882);

- In policy field where the level of political uncertainty is higher, the principal is willing to allow for higher delegation of power, and to some extent independent agencies (Gilardi 2005, 2008; Wonka and Rittberger, 2010);
- The policy tradition in administration helps the politician to embrace policy for independent agents more easily. (Bianculli, Fernández-i-Marín, and Jordana, 2013);

Why do politicians agree to grant independence to an agency?

This is firstly associated with the need of spreading the notion of credibility to the public at large. Due to the belief that there will be ‘reduced politicization by institutionally isolating agencies from the direct interference of government politicians’ [the public believes that] ‘appointment of co-partisans should be a less common occurrence’ (Ennsner-Jedenastik, 2015, p.5) thus the efficiency of the agency will increase.

An indirect reason has been put forward by Thatcher (2005, p.366–368) showing that politicians make a cost-benefit calculation which might show them that benefits (higher credibility but also the potential for blame avoidance) of granting independence to an agency exceed the costs of reduced influence on regulatory matters.

Contrary to the de jure independence, which can be measured by ‘examining laws and agency statutes [...] appointments and dismissal [...], accountability requirements, autonomy over budget and staff [...]’ (Ennsner-Jedenastik, 2015, p.4), de facto independence operates under different rules. ‘The underlying rationale is that politicians will try to compensate their loss of formal powers over regulatory matters by using informal channels of influence—such as the appointment of political allies’ (Ennsner-Jedenastik, 2015, p.6). The literature as well as previous empirical studies show that ‘while granting formal independence to an agency may erect some institutional barriers to politicization, it also generates a strong incentive to appoint ideologically likeminded individuals to the agency leadership’ (Ennsner-Jedenastik, 2015). Moreover, the full independence of agencies from the elected officials is not a theoretical nor a practical option. As Moe and Caldwell 1994 point out, in parliamentary system, elected officials can anytime alter the status of an agency by passing new amendments or new legislation (Moe and Caldwell 1994).

References

- Alchian, E. (2012). Key concepts in organization theory, 1–6.
 Bendor, J. and Moe, T. (1985). An Adaptive Model of Bureaucratic Politics. *The American Political Science Review*, Vol.79, 755-774.

- Bolton, P. and Dewatripont, M. (2004). *Contract Theory*. Cambridge, MA, MIT Press.
- Calvert, R., McCubbins, M. D., & Weingast, B. R. (1989). A theory of political control and agency discretion. *American journal of political science*, 33(3).
- Dees, J. G. (1992). Principals, Agents, and Ethics, in N. E. Bowie and R. E. Freeman (Eds.), *Ethics and Agency Theory*, New York: Oxford University Press, pp. 25-58.
- Downs, A. (1967). *Inside Bureaucracy*. Boston: Little, Brown. Eisner.
- Eisenhardt, K. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14: 57-74.
- Eisenhardt, K. M. (2013). Control : Organizational and Economic Approaches *, 31(2), 134-149.
- Ennsner-Jedenastik, L. (2015). The Politicization of Regulatory Agencies: Between Partisan Influence and Formal Independence. *Journal of Public Administration Research and Theory*, Retrieved from [muv022](http://doi.org/10.1093/jopart/muv022). <http://doi.org/10.1093/jopart/muv022>
- Friedman, M. (1953). *The Methodology of Positive Economics*. In Milton Friedman, *Essays in Positive Economics*. Chicago: The University of Chicago.
- Gilardi, F. (2001, September). Principal-agent models go to Europe: Independent regulatory agencies as ultimate step of delegation. In *ECPR General Conference, Canterbury (UK)* (pp. 6-8).
- Haruta, C., Radu, B., & Liviu, R. A. D. U. (2009). The Ruling Political Class? A Theoretical Analysis of the Political Actors' Role as Major Decision Makers in the Context of the Politico-administrative Relations. *Transylvanian Review of Administrative Sciences*, 5(27), 71-88.
- Huber, J. D. (2000). Delegation to Civil Servants in Parliamentary Democracies, *European Journal of Political Research*, 37(3), pp. 397-413.
- Huber, J. D. and Lupia, A. (2001). Cabinet Instability and Delegation in Parliamentary Democracies. *American Journal of Political Science*, 37(3), pp. 18-33.
- Huber, J. D., Shipan Ch. R., and Pfahler. M. (2001). Legislatures and Statutory Control of Bureaucracy. *American Journal of Political Science*, 45(2), pp. 330-345 Jacobs.
- Jensen, MC., and Meckling, WH. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3: 305-360.
- Jones, B. D. (2001). *Politics and the Architecture of Choice: Bounded Rationality and Governance*. Chicago: The University of Chicago Press.
- Katzmann, R. A. (1990). Comments on Levine and Forrence, "Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis". *Journal of Law, Economics, & Organization*, 6, 199-202. Retrieved from <http://www.jstor.org/stable/764988>
- Kiewiet, D. R. and McCubbins, D. M. (1991). *The Logic of Delegation. Congressional Parties and the Appropriation Process*, Chicago, The University of Chicago Press.
- Knott, J. H., Miller, G. J., Knott, J. H., & Miller, G. J. (2008). *The American Review of Public Administration of Powers*. Retrieved from <http://doi.org/10.1177/0275074008317154>
- Knott, J.H. and Miller, G.J. (2008). When Ambition Checks Ambition. *Bureaucratic Trustees and the Separation of Powers*. *The American Review of Public Administration*, vol. 38, no. 4, pp. 387-411.
- Levi, M. (1997). A model, a method, and a map: Rational choice in comparative and historical analysis. *Comparative politics: Rationality, culture, and structure*, 28, 78.
- Levine, M and Forrence, J. L. (1990). Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis, *Journal of Law, Economics and Organization*, 6, 167-98.
- Maggetti, M. (2007). De facto independence after delegation: A fuzzy-set analysis. *Regulation & Governance* 1:271-294.

- McCubbins, M. D., Noll, R. G., & Weingast, B. R. (1987). Administrative procedures as instruments of political control. *Journal of Law, Economics, and Organization*, 3:243—Tr.
- McCubbins, M. D., Noll, R. G., & Weingast, B. R. (1989). Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies. *Virginia Law Review*, 75(2), 431–482. Retrieved from <http://doi.org/10.2307/1073179>
- Meier, K. J., & Krause, G. (2003). The scientific study of bureaucracy: An overview. *Politics, Policy, and Organizations: Frontiers in the Scientific Study of Bureaucracy*, 1–19. Retrieved from <http://www.pitt.edu/~gkrause/0472113178-ch1.pdf>
- Meier, K., O'Toole, L., & Bohte, J. (2006). Inside the bureaucracy: Principals, agents, and bureaucratic strategy. *Bureaucracy in a democratic state*, ed. K. Meier and L. O'Toole, 93–120.
- Milgrom, P and, Roberts, J. (1992). *Economics, Organization and Management*, Englewood Cliffs, Prentice-Hall Mitchell, Kreps.
- Miller, G. J., & Whitford, A. B. (2007). The principal's moral hazard: Constraints on the use of incentives in hierarchy. *Journal of Public Administration Research and Theory*, 17(2), 213–233. Retrieved from <http://doi.org/10.1093/jopart/mul004>
- Mitnick, B. M. (1975). The theory of agency. *Public Choice*, 24(1), 27–42.
- Mitnick, B. M. (1984). Agency problems and political institutions. Available at SSRN 2338579.
- Moe, T. M. (1987). An assessment of the positive theory of 'congressional dominance'. *Legislative Studies Quarterly*, 475–520.
- Moe, T. M., & Caldwell, M. (1994). The institutional foundations of democratic government: A comparison of presidential and parliamentary systems. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, 171–195.
- Ostrom, E. (1999a). Coping with Tragedies of the Commons. Nelson Polsby, ed., *Annual Review of Political Science* 2. Palo Alto, CA: Annual Reviews.
- Ostrom, E. (1999b). Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework. In *Theories of the Policy Process*, Paul A. Sabatier, ed. Boulder, CO: Westview.
- Pires, V., & Guimaraes, A. S. (2015). Social control of public expenditures in a multilevel principal-agent approach. *Revista de Economia Política*, 35(4), 878–894.
- Shapiro, S. and Guston, D. (2009). Procedural Control of the Bureaucracy. *Peer Review, and Epistemic Drift. Journal of Public Administration Research and Theory*, vol. 17, no. 4, pp. 535–551.
- Sharon, H. (2007). Reverse Monitoring: On the Hidden Role of Employee Stock-Based Compensation, 105 *Mich. L. Rev.* 1421, 1438–39.
- Simon, H. (1997). *Administrative Behavior. A Study of Decision-Making Processes in Administrative Organizations*, New York: The Free Press.
- Smith, R. W., & Bertozzi, M. (1998). Principals and agents: An explanatory model for public budgeting. *Journal of Public Budgeting, Accounting & Financial Management*, 10(3), 325–353.
- Spence, D. (1997). Agency Policy Making and Political Control: Modeling Away the Delegation Problem. *Journal of Public Administration Research and Theory*, vol. 7, no. 2, pp. 199–219.
- Whitford, A. B., Miller, G. J., & Bottom, W. P. (2008). Negotiated Compliance : Social Solutions to the “Principal’s Problem”

