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Abstract

The genuine problem of governance is one that pays equal attention to both incentive and knowledge issues in private and public contexts. This work brings together Austrian, Public Choice and theory of the firm insights to address such problem. By taking into account incentives and knowledge, it proposes a framework that accommodates comparisons not just of kind (firm or market), but also of degree (e.g., among different types of internal organization). Moreover, although the suggested framework derives from considerations about private governance, it equally accommodates public and private settings. (89 words.)

Key Words

Governance, Political Economy, Rent Creation, Rent Seeking, Theory of the Firm

JEL Codes

D20, H00, L20

1. Introduction

In *Parchment, Guns and Constitutional Order* – a compact and insightful political economy essay – Richard Wagner (1993) reminds us that the so-called problem of governance boils down to the skillful administration of two fundamental elements: incentives and knowledge. Because self-interest cannot be eliminated completely from human nature, the purpose of a well-functioning governance structure is basically to steer self-interest in the right direction. But in order to do so such structure cannot focus just on governing either incentives or knowledge: in order to steer self-interest in the right direction, such structure must focus on governing both elements simultaneously. In essence, Wagner proposes that a well-functioning governance structure is one where the knowledge relevant to a task and the incentives to act on that same knowledge are aligned. Wagner's important proposition therefore defines *the* governance problem, the main concern of this paper.

Wagner's proposition is made with particular attention to the governance of the public sphere. It generalizes the notion that it is not sufficient to have rules on *parchment* – i.e., the constitution – for democracy. What we need is also competition among different private interests – *guns* – to minimize the abuse or capture of parchment. Checks-and-balances are not limited to the familiar rules of democracy through the constitution. The checks-and-balances of genuine democracy are also those promoting the natural rivalry of the market process that spontaneously guides self-interest in the right direction. Hence, the general notion is that we need both knowledge (parchment) and incentives (guns) to attain and maintain well-functioning governance through time.

The premise of Wagner's proposition is that most of the literature on public governance has focused mainly on issues of incentive-alignment to the detriment of the study of how productive knowledge is employed and can be channeled to complement the workings of a society founded on classical liberal principles. In this sense, incentives are not just about minimizing deadweight losses, but also about stimulating the discovery of previously unknown opportunities, especially novel value-creating knowledge. Accordingly, incentives and knowledge are inherently inseparable. The motivation of Wagner's essay is thus basically to correct an imbalance in the study of public governance. Here, we have the same motivation, but we take up the perspective of private governance. By re-directing attention to the knowledge aspects of the theory of the firm, we hope to sketch the contours of the problem of governance in more general terms. More specifically, we want to move a first conceptual step beyond Coase's (1937) spectrum between firm and market by introducing a framework emphasizing the importance of knowledge as well as incentives. Coase's familiar spectrum sees the firm on one side and the market on the other compared according to the minimization of transaction costs. By taking into account incentives and knowledge, this work instead proposes a framework to make comparisons among a greater variety of governance structures. Our proposed framework accommodates comparisons not just of kind like Coase (firm or market), but also of degree (e.g., among different types of internal organization). Moreover, although our suggested distinction derives from considerations about private governance, it equally accommodates public and private settings. To achieve our objective, we will ultimately walk a familiar trail: we will rely – and expand upon – Hayek's (1948 *passim*) insights about knowledge. At the same time, a less familiar interpretation of Coase (1937) will also come in handy. But before making our case it is useful to quickly relate knowledge and incentives to the theory of the firm literature.

2. Rent creation, rent seeking, and the theory of the firm

Wagner's proposition about the centrality of both knowledge and incentives to address governance contains, explicitly or otherwise, both Austrian School and Public Choice elements. It contains Austrian elements because it emphasizes how democratic governance must be accompanied by market relationships – by a decentralized means of exchange with a well-defined and functioning legal system – that assure the right to productive entrepreneurship. It contains Public Choice elements because it underscores how the constitution cannot in itself govern and discipline unproductive entrepreneurship. Hence, from the Austrian School comes the emphasis on *rent creation*, whereas from Public Choice comes the emphasis on *rent seeking*.[1]

Though the scaffolding of Wagner's proposition owes as much to Public Choice as to the Austrian School, it is fundamentally a proposition of Classical Political Economy. The classical political economists in fact recognized two important forces in determining political economy outcomes: self-interest, which can vary from egoism to

[1] On both notions, see Buchanan (1980).

malevolence, leading to incentive problems; and ignorance, which is tantamount to knowledge problems.[2]

Consider John Stuart Mill's assertion about public governance. "The positive evils and dangers of the representative, as of every other form of government, may be reduced to two heads: first, general ignorance and incapacity … in the controlling body; secondly, the danger of its being under the influence of interests not identical with the general welfare of the community" (Mill, 1851, webbed version). And Adam Smith, of course, earlier made a similar point about limits of cognition and benevolence in the realm of private governance, viz., about the corporation, or, as it was called at the time, the joint stock company.

> The trade of a joint stock company is always managed by a court of directors. This court, indeed, is frequently subject, in many respects, to the control of a general court of proprietors. But the greater part of those proprietors seldom pretend to *understand* anything of the business of the company … . The directors of such companies, however, being the managers rather of other people's money than of their own, it cannot well be expected that they should watch over it with the same anxious *vigilance* with which the partners in a private copartnery frequently watch over their own (Smith 1776, webbed version, emphasis added).

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[2] Boettke and Lopez (2002, p. 112) characterize the Austrian School and Public Choice as follows.

> ... Austrian and public choice economics often differ regarding the role of information in the polity. A common way to express this difference is with reference to the twin assumptions of benevolence and omniscience on the part of ... decision-makers ... Public choice economics... challenged the benevolence assumption, but left the omniscient assumption alone ...On the other hand, Austrian political economy, challenges the omniscience assumption, but continues to be reluctant to relax benevolence... In simplest terms, a combined Austrian-public choice approach to political economy would relax both assumptions ...

In our view, this characterization of "a combined Austrian-Public Choice approach" is coextensive with the approach of the classical political economists (and hence of Wagner too), which considers both incentives and knowledge as indissoluble. Indeed, in his colorful retrospective Wagner (2004, p. 60) tells us that in its earlier, Charlottesville years Public Choice could have been called "Postclassical Political Economy."

Notwithstanding the emphasis on both incentives and knowledge already present in the writings of the classical political economists, similarly to the analysis of the public sphere, the field of the theory of the firm also has seen a great deal of energy and attention dedicated to the problem of incentives rather than knowledge. The field has mostly tried to address the issue of how internal organization can generate high-powered incentives to minimize rent seeking, rather than the issue about how internal organization can create rent from novel knowledge combinatorics.

Most of the post-Coase (1937) literature on the economics of organization in fact takes production issues as exogenous, emphasizing how the firm merely exists to create credible commitments. Thus Langlois and Foss (1999, p. 202) note that seldom "if ever have economists of organization considered" that governance structures "may play the role not (only) of constraining … rent-seeking behavior but (also) of" generating "possibilities for" rent creating "behavior in the first place."

For instance, the post-1975 Williamson transaction cost approach basically regards how firms change scope in order to prevent tussles for quasi-rents in bilateral monopoly situations generated by nonfungible assets (*inter alia*, Klein, Crawford and Alchian 1978; Williamson 1985). Similarly, incomplete contract theory mostly focuses on the allocation of residual rights of control in order to generate and maintain incentives for cooperation among parties (e.g., Grossman and Hart 1986). In this regard, as Gibbons (2005) more recently has shown with reference to some of Williamson's work, it is actually possible to formalize this literature by explicitly using Tullock's (1980) rent-seeking model.

At the same time, we must be mindful not to overstate our case. For example, Williamson's early work (e.g., 1971, 1975) placed considerable emphasis on adaptation to uncertainty for purposes of rent creation in addition to rent-seeking. As Gibbons (2005, p. 208) reminds us, "Williamson (1971) … contained key ideas for the rent-seeking theory of the firm, but this remarkable paper also hinted at an adaptation theory of the firm… ." And in *Markets and Hierarchies* Williamson (1975, Chs 1, 4 and 5) further elaborates the issue of adaptation by employing Simon's familiar notions of bounded rationality and of the employment relationship (Simon 1951) as well as Hayekian knowledge problems. In this sense, Williamson does share common ground with the classical political economists who emphasize both knowledge and incentives.

This "classical" Williamson originates from an interpretation of Coase (1937) that was later underemphasized. A more careful reading of "The Nature of the Firm" indeed shows that Coase too had not lost track of knowledge, and that actually issues of adaptation for the purpose of rent creation were likewise at the heart of his analysis. "A firm is likely … to emerge" because "the difficulty of forecasting" about some transactions related to its structure of production is more difficult outside its boundaries – i.e., in the market – than inside them. "When the direction of resources" is internalized in the effort to leverage on contingencies, "that relationship which I term the 'firm' may be obtained" (Coase 1937, pp. 391-2). It is basically this less-known interpretation of the original Coasean story – which suggests that the firm concerns the alignment and coordination of different expectations and knowledge – that we pick up here (Langlois and Foss 1999).

The unmistakable emphasis in the theory of the firm literature subsequent to Williamson (1975) has seen the problem of governance as mainly about obviating rent seeking rather than stimulating rent creation. No doubt, these rent seeking theories have provided important insights and useful guiding principles. Who would question, for example, that transaction costs tied to negative externalities have a non-negligible impact on governance? And yet, we equally must be aware of the flip-side, namely, that positive externalities also have a non-negligible impact on governance. Thus, notwithstanding their important findings – especially about how to realign incentives – the rent-seeking theories do not at the same time consider the Coasean firm as an instrument for the generation of productive contexts, most notably rules of the game and division of labor and knowledge arrangements for both production and exchange of goods, labor, physical and intellectual capital, services, etc. Moreover, that it is in the attempt to generate rent creation that rent-seeking may emerge, rather than the other way around. It is in this other original Coasean connection – namely, in the attempt to reintroduce the rent creation aspect of the problem of governance – that Austrian insights can be useful.

Although not fully absorbed by the so-called mainstream in economics but more so in cognate disciplines such as strategic management, today Austrian insights are actually used by a *variety* of theories of the firm (competence, evolutionary, resource-based, etc.). More precisely, a variety of theories of the firm use the Austrian notions of knowledge dispersion, entrepreneurship, and economic change to explain why firm boundaries, especially vertical ones, are not constant over time.

Perhaps the most developed of these Austrian-influenced theories – and perhaps the closest to an Austrian theory of the firm proper – is the capability one.[3] Capabilities are production knowledge. They are the organizational "knowledge, experience and skills" (Richardson 1972, p. 888) of "time and place" (Hayek 1948, Ch. 4) necessary to transform inputs into outputs at efficient cost. If knowledge is dispersed, difficult to transfer and idiosyncratic, then capability theory points out that even assuming an identical technological structure of production – which can indeed be rendered in terms of a common production function – production overheads may in actual fact differ. In this view – analogously to the flexibility one of Coase – shifting organizational boundaries rest on a knowledge explanation as well. Vertical integration originates from communication problems during instances of economic change. An entrepreneur may be forced to integrate because his usual production partners may not be able to fully grasp an innovative idea that he is trying to pursue. In this way, vertical integration economizes on communication costs (e.g., Silver 1984).

As a result, making sure that everyone is on the same page means also, for example, that if communication of expectations is better defined about production objectives, shirking may not obtain. So, it is possible to face a capabilities or knowledge alignment question that is logically prior to (but clearly does not necessarily exclude) that of perverse incentive alignment. Thus, by emphasizing knowledge issues in production what capability theory has been trying to do is actually to direct attention to a simple

[3] Germane contributions are, *inter alia*, Foss (1994), Dulbecco and Garrouste (1999), Yu (1999), and Sautet (2000); see also Garzarelli (2008).

matter, namely, that a firm is an entrepreneurial institution with the purpose of organizing, engendering, and exploiting knowledge for rent creation.

3. Generalizing the problem of governance

We are now in a position to better address our question. How can we conceptually generalize, in light of the suggested equal importance of knowledge and incentives, the problem of governance?

The more familiar interpretation of Coase (1937) led many, in one way or another, to envision a twofold governance world. On the one hand, we have the market, where the invisible hand governs price and quantity relations directed towards no specific end; on the other, we have the firm, where a visible hand governs through authority a multitude of relations directed towards a specific end. One arguably common reading of Coase (1937) therefore implies that the problem of governance has its solutions at polar extremes (firm or market?), and that, residually, comparative institutional assessments of feasible governance alternatives (Coase 1960) are merely about these extremes as well.

The Hayekian contribution of Jensen and Meckling (1992), however, indicates that matters are less black and white. Extending Hayek's (1948 *passim*) well-known insights about knowledge, they assert that efficacious governance must solve two different kinds of problems: "the rights assignment problem (determining who should exercise a decision right), and the control or agency problem (how to ensure that self-interested decision agents exercise their rights in a way that contributes to the organizational objective).” Efficacious governance then requires that the appropriate knowledge and decision rights dovetail, or, as they like to say, *co-locate*. As hinted from the outset, the ways that such co-location of rights to act and knowledge can take place are fundamentally two: one “is by moving the knowledge to those with the decision rights; the other is by moving the decision rights to those with the knowledge” (Jensen and Meckling 1992, p. 253).

We may think of these two available options to address the co-location problem as being the *institutional constraints* of the problem of governance. In other words, the possible co-locations of rights and knowledge – whether from rights to knowledge to act or vice versa – define the possible variants of (private as well as public) governance. Given such constraints, one “efficiency” criterion to evaluate different governance structures on a “comparative” basis may reside in their relative ability to facilitate co-location of knowledge and decision-making. Let us attempt to unpack this criterion further by extending a heuristic framework first proposed by Garzarelli (2006).

The most immediate illustration that comes to mind of a governance structure that co-locates decision rights to knowledge is the market. The market permits one to sell or exchange the decision rights that accompany his or her knowledge to act. This is not possible in internal organization. For example, an employee, bureaucrat or politician cannot (legally) sell (or exchange) his or her job (the employment bundle of rights, which include decision rights over assigned tasks) to someone else and capture proceeds from such alienation. At the same time, the market allows to search for a specific product or service demanded. We can shop around until we find the light bulb, insurance policy or bread loaf that we like. Thus one can search until the decision rights co-locate with the appropriate knowledge. The upshot is that in a market the division of labor among the actors is defined not by central design, but spontaneously through the various interactions of the actors involved.

Another, less immediate illustration of a governance structure that co-locates decision rights to knowledge is voluntary production, such as open source, the production of science (including the related practice of refereeing), and hobbyist and online collaboration (e.g., stamp collecting, Wikipedia). For example, by drawing on Cheung (1983) Langlois and Garzarelli (2008) show how voluntary open source software production can be likened to a spontaneously coordinated factor market, for although participants self-select their contributions, the contributions come directly in the form of effort rather than of effort embodied in a product. That is, we do not have, for instance, a spot market in day labor where day laborers don't choose what they work on; rather, we have a division of labor where individuals do sometimes produce specific products in the end, but in the context of spontaneously adding effort to a larger product, not making a product on spec.

The production of science is not too different from that of voluntary open source (Garzarelli and Fontanella 2011, in press). Scientific communities have organized themselves in a voluntary fashion at least since the late sixteenth century when inquiry replaced secrecy, social cooperation replaced individual isolation, and spontaneous coordination replaced top-down planned design and control (David, e.g., 2004). In addition, in most cases we decide what topics we fancy working on, and the decisions made need not be particularly founded on a 'best fit' for those topics as opposed to an interest in them. Similarly, we often form research teams spontaneously for different projects, and we participate in networks and belong to 'invisible colleges' according to shared research topics and fields. To ensure the fit of what we do within the broader literature, we must posses, and need to convey, a sense of the broader structure of the scientific research program within which we are operating. In this regard, new PhDs are often less clear about the broader architecture of their discipline than the more experienced researchers. And just as, for example, open source development communities examine the robustness of submitted code, so too do peers of academia when refereeing papers submitted to journals and conferences. In both organizational modes, knowledge is shared, suggestions for improvement made, learning opportunities created among colleagues, and contributions are more about spontaneously supplying effort to a big project rather than about making a product according to some predefined blueprint.[4]

At the same time, the co-location of knowledge to decision rights can instead take place in various ways in internal organization. That is, there are several other governance structures that co-locate knowledge to decision rights, implying that in this case the difference among governance structures resides more in the degree of decision right autonomy rather than in the direction of the co-location per se. For instance, we may have that the ultimate decision rights are strongly centralized, such as in the case of Fordist production (a rigid vertical organization of the division of labor) or of a unitary form of

[4] A perspective that has much in common with the comparative institutional approach to scientific enterprise as recently put forth by McQuade and Butos (e.g., 2003).

government. This can take place because the knowledge that needs to be transmitted among the actors is not (or believed to be not) large in quantity and the tasks that need to be performed are well-defined and not complicated. Even in cases where tasks are more complicated but still well-defined, centralized division of labor is still feasible. The point here is that the ultimate decision rights stay on top of the hierarchy, notwithstanding the fact that a few basic rights are distributed along the way.

But within the co-location of knowledge to decision rights institutional constraint – what we term the internal organization option – there are also more decentralized alternatives available. One straightforward illustration is a strategic network alliance composed of different firms that desire to share some know-how. In this case ultimate decision rights are present both across and within the allied firms. For example, allied automobile firms may for a period of time share the ultimate decision rights about which common chassis design to adopt for a line of their automobile models. Simultaneously, however, the manufactures have the ultimate decision rights to pursue different individual strategic plans, as actually occurred in the case of FIAT, Renault, Saab, and Volvo in Europe some years ago.

A patent example in the domain of public governance is fiscal federalism. As long as the objectives of local jurisdictions do not, for example, conflict with those established by the federal constitution, in this governance structure some knowledge to ultimate decision rights to act is delegated to the local jurisdictions to try to assure that the federation's marginal social benefits equal marginal cost. When such cost-benefit equality is not maintained through time because of, e.g., an environmental externality, it may be necessary to experiment with multiple knowledge to rights co-location solutions in order to return to the cost-benefit equality. Differently put, it may be necessary to try out multiple degrees of decentralization/centralization.

Unlike the most common interpretation of Coase (1937), the governance spectrum is not a binary variable or an "all or nothing" trade-off (centralize or decentralize?). Rather, similarly to the less-known Austrian-flavored interpretation of Coase we have a series of trade-offs among a variety of governance structures, which include the firm and the market among others. Consider Figure 1. The right-hand box contains a series of internal organization options identified according to the institutional co-location constraint of knowledge to rights to act. This allows us to distinguish internal organization, such as the firm, various hybrids, and the state, from, e.g., the market where the institutional co-location moves in the opposite direction. Moreover, within the same box, we are able to compare internal organization according to how centralized/decentralized its co-location is. For example, we may be able to compare two firms according to their amount of centralization; similarly for states. This is different from comparing governance structures according to decentralization/centralization *as such,* which, according to this framework, is only one aspect of the problem. Thus, the rights to knowledge to act and the knowledge to rights to act distinction is a useful heuristic expedient to characterize the governance problem in a more general fashion. For it allows us to make distinctions of degree as well as of kind both within and across governance structures.

Notice that, not too differently from the mechanism of Coase (1960), the left-hand box of Figure 1 suggests that the more a right becomes alienable, the more likely we are to operate under a governance structure that is able to communicate the value of the right in every point in time. And if this is the case, then the incentives for the possessor of the right to act to use it competently are crowded in automatically. There is a complementary aspect. If incentives are crowded in automatically, then some cognitive attention is spontaneously redirected from limiting perverse incentives towards other tasks, such as being "alert" to new entrepreneurial opportunities (Kirzner 1973). Hence, the natural indivisibility of incentives (guns) and knowledge (parchment) that checks and balances rent creation and rent seeking.

Figure 1: Co-location Options and Governance Structures

	RIGHTS TO KNOWLEDGE	KNOWLEDGE TO RIGHTS
GOVERNANCE STRUCTURES	Market and voluntary production (e.g., collective invention, hobbies, open source, professions, refereeing, science).	Various types of internal organization (e.g., Apple, Department of Defense, fiscal federalism, Microsoft, strategic alliance, unitary state, university).

But the (Austrian) lesson from parchment also teaches that we are fallible individuals because of our limited cognition, suggesting that good governance is ultimately a "discovery procedure" (Hayek 1978). Or, to put the same point in Public Choice terms, good governance is not – cannot be – planned (Langlois 1995), but is rather "defined in the process of its emergence" (Buchanan 1982). No matter how one phrases it, however, the lesson from parchment accords with the less-explored flexibility interpretation of Coase (1937) where the firm is a governance structure for the creation of options, including the option of restructuring its own means and ends framework in the face of evolutionary necessity.

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