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Markets, Institutions, and Transaction Costs: the Endogeneity of Governance

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Abstract

Much of the literature contrasts the dynamics of free markets with the 'political' dynamics of governance. This dichotomy leaves us blind to the empirical observation central to institutional economics: that complex market systems and institutions of governance cannot be found apart. Even as an analytical distinction, binary market-hierarchy distinctions obscure the ways in which interaction among real-world economic agents is constitutive of the wider processes of formal and informal governance that shape the terms of competition in the first place. Institutional economics has explored the relationship between markets and firms, governance institutions and economic performance, and why societies choose inefficient institutions, among other crucial questions in political economy. Yet we have no theory of the precise relationship between market exchange and patterns of governance, nor of how the change in one is related to change in the other. Building on the seminal insights of Coase, this paper theorises how and why economic interactions generate institutions of governance in the first place. Extending the crucial insights of institutional economics, this paper demonstrates in theoretical terms how the interactive utility-maximising behaviour of economic agents generates both formal and informal institutions and processes of governance from regulation to dispute settlement. Conflict and competition in market interaction combined with transaction cost dynamics lead to mutually beneficial co-ordination mechanisms and the emergence of order essential to the continuity of market exchange. Thus the broader patterns of institutionalised coordination we characterise as governance are endogenous to the self-interested and rational utilitymaximising behaviour of economic agents in a market setting.

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Markets, Institutions, and Transaction Costs: the Endogeneity of Governance

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The crisis has done much to expose gaps in our understanding of markets and their governance. Institutional economics has made important advances in exploring (among other issues) the relationships between markets and firms (Williamson 2002), between the institutions of governance and successful economic development (Olson 1982; North 1990a, 1991; Rodrik, Subramanian and Trebbi 2004; Acemoglu et al 2005), and how societies choose efficient or dysfunctional institutions of governance over time with commensurate effects on economic performance (North 1990b; Acemoglu 2003; Acemoglu and Robinson 2012; North, Wallis and Weingast 2009; Acemoglu, Reed, and Robinson 2014). Somewhat less attention has been devoted to explaining why patterns of market exchange and institutions of governance emerge together as they do, and how their dynamic relationship to each other might be explained. Acemoglu et al (2005: 451; 463-4) among others have drawn attention to the endogeneity of governance to market processes and how they might vary in relation to each other, but have not explained in theoretical terms how and why this is the case. If institutions vary across comparative cases in relation to successful outcomes in terms of economic development, why is this so? How do we explain the nature of the relationship between institutions of governance and patterns of interaction in the market?

Building on the original insights of Ronald Coase (1937), this article contributes to our theoretical understanding of this state-market relationship. The starting point is two empirical observations: i) that systems of market exchange are not to be found apart from

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institutions of some sort,¹ and ii) that the terms of competition as 'rules' in the market are shaped as much by the political as by the economic strategies and resources of firms and of other economic agents (see e.g. Fligstein 2001). Market systems thus range in nature from the highly competition-oriented to more collusive and/or regulated systems. These observations should provide an in-built exhortation to theorists to develop concepts which better theorise the relationships between governance and the market, and thus understand the real world we live in.

The article is organised as follows. Section one defines the nature of the problem through a brief survey of the literature that focuses on the interdependencies between markets as patterns of transactions and institutions of governance. The aim is to demonstrate the need for a theory that explains the nature and dynamics of this relationship. Section two builds on the transaction cost approach employed by Coase (1937), supplemented by the literature that focuses on the collusive nature of economic agents and rent-seeking. The argument is that the transaction cost approach that explains the existence of firms can also be employed to demonstrate how the institutions of governance emerge as an integral element of patterns of market exchange among agents. Section three operationalizes the theory across 'three orders' of governance, providing support for and illustrations of its contentions from the literature. The theory shows how the development of these institutions, apparently external to the patterns of exchange in the market, is actually endogenous to the utility-maximising behaviour of economic agents.

¹As has been firmly established by both the transaction cost and the contractarian literatures. For a survey of the former, see Macher and Richman (2008). On 'constitutional' approaches in the contractarian tradition see among others Buchanan (1975; 1987); Brennan and Buchanan (1985); Persson and Tabellini (2003).

1. The Literature

The idea that there are important interdependencies between the institutions of governance and the functioning of the market is certainly not new. The Classical political economists were well aware of the symbiosis between the two (Smith 1937(1776); Caparaso and Levine 1992). Disciplinary specialisation subsequently led economics to focus on increasingly abstract formalisations of Smith's central idea that an economy might operate in an orderly fashion free of external intervention: "Sometimes, indeed, it seems as though economists conceive of their subject as being concerned only with the pricing system and that anything outside of this is considered no part of their business (Coase 1992: 714)." Thus much of the economics literature became concerned with explaining markets as a spontaneous extension of human propensities and freedoms (Leube and Zlabinger 1985; Hayek 1949, 1960). The standard neo-classical notion emerged - that economic competition operates in relation to the deployment of management skills, product innovation, and relative factor costs in the strategies of firms, and its effect is measured in terms of competing prices relative to quality, tastes/utility functions, and income levels among consumers in the market.

This vision in much of the literature yields a conceptual dichotomy between the market as exchange, versus governance anchored in institutions as hierarchies. The benefits of free trade and competitive markets are typically contrasted with the negative effects of their polar opposites: regulation, protectionism, or monopoly. Free competition arises spontaneously from the interaction of market agents, and restrictions to competition are typically exogenous, imposed by arbitrary political authorities or other forms of interference in the market mechanism. Free competition represents the smooth and self-regulatory functioning of the market, despite the lingering possibility of private restraints to competition through monopoly or oligopoly. State intervention at the domestic level and protectionism at the border represent the dysfunctional role played by political intervention. The struggle for the

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free market as a system of allocation is a struggle against politics. This dichotomy in turn assumes that the model of the competitive economy "is a reasonably accurate description of reality (Arrow and Debreu 1954:265)" and that conditions can be specified which correspond to a wide variety of actual situations under which a competitive economy tends towards equilibrium (p. 266), a form of spontaneous order.

It is of course not so that institutions and collective action were ever entirely left out. A definition and enforcement of property rights is typically understood to constitute a "minimal degree of collectivization" providing limits to the private disposition of resources that is a necessary condition for a world of purely private choice or "pure *laissez-faire* organization (Buchanan and Tullock 1962: 46-7)." Yet developments in the discipline relegated institutions to a role essentially external to the pattern of exchange carried out by economic agents. Both Arrow and Williamson argued that market and non-market processes, while fundamentally different, are potential if imperfect substitutes for each other. Arrow (1974: 15-43) argued that organisation and institutions emerge as substitutes for market allocation when the price system fails for a range of reasons: "The functional role of organisations is to take advantage of the superior productivity of joint actions (ibid., p. 53)." Therefore, "we may take the very existence of an organisation with a need for co-ordination as evidence of the infeasibility or at least the inefficiency of the price system," economising the transmission and handling of information (p. 69).

This may involve a range of trade-offs in terms of efficiency, especially because organisations sometimes prove less than adaptable over time. If transaction costs prove too high, the situation will block the formation of markets in the absence of other forms of institutions. Williamson (1975, 1985) argued that institutions emerge as efficient solutions to the problem of high transaction costs: non-market forms of organisation may emerge to assume the function of allocating scarce resources more efficiently than decentralized

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exchange. This renders each essentially a substitute for the other ("alternative contracting modes," Williamson 1975:253), although each remains a very different *kind* of allocative process in and of itself.

There therefore remained in the economics literature a strong presumption that governance interferes with the market, resulting in costs in terms of inefficiencies and welfare losses. What happened in the market and the economic domain remained conceptually different, separate in nature, from what happens in the process of governance: what firms do when they compete with each other is fundamentally different in nature – has different motivations and origins – from what political and other institutions do when they make decisions concerning allocation and distribution. This sits uneasily with the empirical observation that governance and market exchange appear so closely intertwined. It fits even less well with the insight that better institutions of governance appear to correlate to better functioning markets and economic performance (North 1990a; Acemoglu and Robinson 2012) and that economic and institutional development tend to go together (Greif 2006; North, Wallis, and Weingast 2009).

Anne Krueger's classic article (1974) on rent-seeking behaviour² in relation to import licensing is representative of this ambivalence: "government *restrictions* upon economic activity are pervasive facts of life," (p. 291, italics added) she states in her first sentence, implying that if the market were left to its own devices, these restrictions would be less in evidence.³ She goes on to recognise that some producer groups may well *benefit* from the rents associated with this same state intervention, which logically implies that such rentseeking is competitive in important ways; her focus is on the costs which this interference

² See also Gordon Tullock (1967) on inefficient policies and rent-seeking incentives.

³Although the argument in this article is that this is an unlikely real-world outcome.

with the market mechanism implies.⁴ Thus these very economic agents deploy resources and compete (Krueger 1974: 292-3) to establish forms of intervention which interfere in the very market mechanism in which they are involved.⁵

In conclusion, much of the post-war literature that might be loosely labelled institutional economics and public choice/contractarian clearly recognises an apparent interdependence between the process of market exchange and the institutions of governance in empirical observation, but this association is not properly explained by the literature in theoretical terms. Behaviour that is part of what economic agents do is somehow not explicitly understood as part of market interaction, and the emergence of economic and political institutions is theorised as causally exogenous to the functioning of market exchange itself. It remains a paradox as to how competitive rent-seeking is part of the economic game, yet interferes with the market of which it is part.

2. Bridging the Gap: Coase and the Emergence of Institutional Economics

This article develops the theoretical grounds for resolving this apparent governance-market paradox such as to reconcile the apparently contrasting dynamics of each. It does so by arguing that the differences between markets and governance are more apparent than real, and that the two processes are fundamentally part of the same phenomenon of inter-agent competition. The causes of each lie in the same interactive process of agent utility maximisation. On the whole and for perfectly sensible reasons, the dynamics of each have been theorised and researched separately since the emergence of the neo-classical approach.

⁴And, furthermore, these costs represent a higher 'deadweight loss' in the presence of competitive rentseeking for import licenses than when import restrictions are applied in the absence of this rent-seeking behaviour, with considerable implications for the development process (Krueger 1974: 299; 302).

⁵Krueger argues convincingly that this rent-seeking activity is not carried out by separate economic entities, and sees rent-seeking as one part of economic behaviour along with production and distribution. She also draws attention (pp. 302-03) to the potential political and social costs of widespread policy-based rent-seeking as the primary route to gain.

The case argued here is certainly not that the separate study of each should cease. Yet there is much to gain in such an exercise and it may be considered a fundamental task of contemporary political economy to enhance our understanding of the governance-market relationship by doing so.

The analysis in the previous section of this article showed that despite a preferential focus on the phenomenon of exchange, economics is full of concern for the interdependence of markets and the institutions of governance. Determining what constitutes optimal regulation and public policy fuels much debate. Arguably this concern is the residue of the broad classical political economy of Smith and Ricardo and, as demonstrated above, this residue keeps popping up in economic theory as well. This section demonstrates the ways in which the emergence of public choice and institutional economics approaches have begun to unravel the paradox exposed above. In doing so it draws on the contributions of three strands of literature that challenge the standard view.⁶ First it explores the literature on the collusive elements of agent behaviour: monopoly, rents, and regulation. The central point drawn from this analysis is that collusion and co-operation are as much a part of agent utility-maximising behaviour under conditions of competition as the deployment of resources and skills against rival agents. It then draws attention to key conclusions of the contractarian approach associated with Buchannan and the debates in the public choice school: that achieving an "ordered market" is more difficult than presumed under 'standard' assumptions (Buchanan 2008: 66) and that variations in institutions and rules matter to market outcomes (Buchanan 1987: 250). Thirdly, beginning with Coase (1937), the article focuses on the transaction cost literature that tells us why organisation emerges in a context of market competition and extends this to our understanding of governance. The discussion does not masquerade as an

⁶I use 'standard' in the sense employed by Oliver Williamson (2005),by which he essentially refers to the neoclassical approach; see also Williamson 1985.

exhaustive survey but does aim to make a point. The argument here is that the transaction cost logic that leads to the emergence of the firm as an organisation is the same that leads to the emergence of both co-operative and hierarchical institutions of governance.

a) Collusion and Competition

As noted above, Ann Krueger argued persuasively that competition among agents may result in behaviour that interferes in the free functioning of the market mechanism in which agents are involved. These insights are reflected in the contemporary literature on rent-seeking (Congleton *et al* 2008) to which Krueger made such an important contribution. This literature first and foremost draws attention to the high social costs of rent-seeking behaviour for the broader public relative to the results of competitive markets (Tullock 1967; 1990; Posner 1975; see Congleton *et al* 2008a). The public choice and regulation literature in turn elaborated the conditions under which government policies might regularly produce economically inefficient outcomes (Stigler 1971; Posner 1975; Peltzman 1976, 1989). Rentseeking is thus potentially highly beneficial for some, but costly for society as a whole.

However, this literature arguably *also*, if not always consciously, challenges the view that the benefits of economic openness necessarily arise spontaneously from the interaction of market agents, whereas restrictions to competition result from arbitrary impositions that remain exogenous to the pattern of transactions. Restrictions to competition, particularly if they can be achieved on a durable basis, are inherent to the incentives pursued by economic agents and thus rent-seeking and collusion is firmly established as an element of the utility-maximising behaviour of economic agents. A lot less has been made of this point, yet such an insight has deep roots in classical political economy as the historical antecedent of modern economics. Adam Smith (1937 (1776): 250) argued persuasively that business has an inherent tendency to seek to "widen the market and narrow the competition." In this sense, and based on his own empirical observations, he contrasted the interests of mercantile and

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manufacturing classes with those of the broader public, including labour, consumers, and the state. Here he hit upon an important characteristic of markets and the way they work: the agents most intimately associated with market transactions and support for markets as allocative devices are those most likely to interfere with their effective functioning and overall efficiency.

Utility-maximising behaviour under conditions of economic rivalry may prove as collusive as it is competitive. As Arrow (1974: 42) points out, the "usual" economic analysis argues that collusive agreements are unstable because there are always preferable allocative deals for at least some of the participants. He goes on to correct that view by paraphrasing Smith: "members of a common trade find it easier to communicate with each other...[thus] it may well be that the exchange of information leading to a collusive agreement among producers of one commodity is much cheaper than that needed to achieve a blocking coalition. Hence, the collective agreement may in fact be stable (ibid., p. 42)." It is a pity that much contemporary economic theory does not take more notice of the insights which these passages in Smith reveal about the nature of markets, and the relationship of market processes to various forms of political processes, or what is commonly called 'governance.' "...[C]ollective action can extend the domain of individual rationality. Collective action is a means of power, a means by which individuals can more fully realise their individual values (Arrow 1974: 16)."⁷

The principal impact of the point is a challenge to the spontaneous order and efficiency arguments about markets. Instead markets appear as institutions which do not necessarily

⁷In other words, collusive and co-operative behaviour which leads to the substitution of market exchanges by institutional co-operation and/or hierarchies (or the reverse) should not be regarded as outside the bounds of utility-maximising behaviour and economic rationality. Just as concepts of bounded rationality introduced context, organisational culture, and other sorts of "constraints" on rationality into the picture (Aoki 2001: 13), the point here is that given positive transaction costs, uncertainties of various kinds, and the dilemmas of collective action, the competitive, collusive and hierarchical aspects of utility-maximising behaviour in conditions of economic rivalry are rational; see Williamson (1985: 44-6).

tend towards equilibrium or continuity, peopled as they are by rent-seeking agents whose rational utility-maximising motive detects little interest in competing regularly with others if they can help it (Fligstein 2001: 15-20). Rent-seeking and its inefficiencies are not limited to cases of government intervention and may indeed occur just as frequently inside the hierarchies of firms or any centralised organisation (Milgrom and Roberts 1990: 86-7). Furthermore, the costs to agents of pursuing this 'policy rent-seeking' is apparently far lower than the private benefits it produces (Tullock 1990: 199-201).⁸ Agents will seek to institutionalise the benefits of rents if they can do so: "…without institutional constraints, self-interested behaviour will prevent complex exchange… (North 1990c: 189)."

In short, if the benefits of markets as specific forms of allocation and distribution are to be achieved, then the institutions of governance in society must aim to underpin and enforce some form of competitive outcome. Agent utility maximisation only produces Pareto efficient outcomes under specific conditions assumed by the 'standard' model. In this sense governance is all about the market, and the market is a broad and complex form of governance based on a series of equally complex institutions for regulating conflict amongst the constituent elements of society. If the interests of private agents might impair the proper functioning of market exchange, then understanding the conditions under which markets might function optimally, and how these conditions might be achieved, becomes a problem for the literature.

⁸ Although Tullock (1990: 199-205) goes on to argue that in the end, the actual net benefit or 'profit' to the beneficiaries of the rents *may* be outweighed by the costs of the production inefficiencies it implies for these same producers and the public. He appears to reserve judgement on this point.

b). Private Interests and Public Choices: Rules of the Game and Economic 'Constitutions' This literature focuses our attention on the 'rules of the game', how they are produced, and how collective choices relate to the private preferences of individual agents or clubs. It also permits an examination of what sorts of outcomes might be generated by different sorts of rules. The literature characterised as the contractarian or 'constitutional' approach, attributable above all to James Buchanan, casts yet more light on the institutions of governance that are so ubiquitous in relation to systems of market exchange.

Buchanan and Tullock (1962) were among the first to elaborate systematically a clear relationship between the choices of interacting utility-maximisers and collective social bargains. Collective choice is the way in which the differences and conflicting interests among interdependent agents might be reconciled, and the competitive exchange process of markets provide an analogy as to how this might take place, defining the line at which individuals might exchange the domain of private choice for the benefits of collective action (Buchanan and Tullock 1962: 4-5). "The most reasonable assumption about human behaviour ... is that the same basic values motivate individuals" in exchanges made for 'economic' gain and the definition of the common good (p. 19) such that "we might assume that the representative or average individual acts on the basis of the same overall value scale when he participates in market activity and political activity (pp. 19-20)."⁹ In this way, governance choices are a particular form of 'exchange', quite simply part of 'more' (p. 29) wherein mutual gains are possible (p. 23). This process establishes bargains that represent collective choices on the nature of the market or other forms of governance and social order. Once established, these institutionalised outcomes - the contractarian 'rules of the game' or 'economic constitution' - in turn shape the options and competitive behaviour of agents as

⁹ Indeed Boulding (1969: 4) argues convincingly that the dynamic preference structures of economic and social choice are part of a process of human learning and of the development of common values.

well as distributional outcomes. These bargains may differ across collective entities with a multitude of outcomes possible (Buchanan 1975: 227), and such outcomes need not be optimal. Institutions matter, and we need to understand the "working properties of alternative sets of rules (Buchanan 1987: 250)."

This argument enables us to understand that the collectively-established rules of the market and its supporting institutions might produce more or less desirable outcomes relative to the broader welfare of the community. How the rules are set and by whom/for whom becomes an important focus of enquiry, linking us back to the discussion of rent-seeking and the plurality of agent utility functions: the human being who seeks 'more' in the making of institutional and rule-setting choices is one and the same as s/he who makes the choices of advantage in exchange (Buchanan and Tullock 1962: 21), and this cuts both ways. Utility functions are not reducible to single, universal constants even for individual goods,¹⁰ so 'social' or collective goods will likewise have complex utility functions.¹¹

To summarise the implications of this literature for the argument, if collusive rent-seeking behaviour is inherent to competition among economic agents, then these same agents are by their nature involved in the choices that lead to the establishment of the rules of the game.

"When standard assumptions are not descriptive, the simple exchange process will not generate efficient results, and more complex arrangements may be called for" [wherein] "... the costs of reaching agreement may be acknowledged to be prohibitively high. This suggests, in turn, that rules or institutions for reaching collective or group decisions may be preselected at some constitutional stage of 'trade' (Buchanan 1975: 227)."

A myriad of outcomes are possible as "agents seek to secure collectively their own privately defined objectives that cannot be efficiently secured through simple market exchanges

¹⁰ Boulding (1969) asserts that if our tastes and therefore utility functions are learned preferences (pp. 1-2), then individual utility functions are also interdependent with those of others and dynamic over time (p. 6). In this sense they depend on human interactions, including exchange. Sacconi and Faillo (2010) posit an 'enlarged' utility function in situations of reciprocal conformity to specified norms. Utility also derives from the properties or characteristics of different types of goods themselves, which are often multiple representing 'joint' outputs (Lancaster 1966); utility also may vary in relation to the information available to agents on particular goods and their qualities (Barzel 1982).

¹¹ In turn, institutions permit bounded-rational agents with complex utility functions to 'economise' on the information processing required for decision-making, thus co-ordinating their beliefs (Aoki 2001:13).

(Buchanan 1987: 246)." It may prove more efficient to produce certain benefits as collective goods in exclusionary club-like patterns of co-operation (Buchanan 1965), what Williamson calls 'private ordering' (2002: 172). Given that all complex contracts are necessarily incomplete and will require adjustment to complexity over time (Williamson 2002: 174-6), collective choices may also emerge that minimise insider benefits and better address the broader public interest. This of course leads to North's question as to the conditions under which "the competitive structure induces increasing economic efficiency or stagnation (North 2005: 1; see also North, Wallis and Weingast 2009; Dixit 1996)."

Yet the literature so far still maintains a clear distinction between institutions of governance as the 'rules of the game', and the process of market exchange as such, whatever their mutual effects the one on the other: "Politics is a structure of complex exchange among individuals [seeking] to secure collectively their own privately defined objectives that cannot be efficiently secured through simple market exchanges (Buchanan 1987: 246)." It also begs the question as to precisely how and why exchange-based competition generates these corresponding institutions of governance or 'rules of the game' in the first place. Yet the argument "that economic and political aspects are additively separable in their effects – that one can analyse each separately and then find the total effect ... does not appear to be a useful compromise (Dixit 1996: 150)." The next sub-section thus focuses on the transaction cost literature to systematically explain how exchange and the emergence of institutions are part of the same process, and thus that governance is endogenous to private competition among agents engaged in market exchange. Section three will then elaborate how this argument may be used to theorise the emergence of institutions familiar to us as regulation, rules of the game, dispute settlement and government itself.

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c) Transaction Cost Approaches

John R. Commons¹² identified the transaction as the basic unit of activity, and thus focus of analysis, in market exchange. As demonstrated above, market exchange involves mutually interdependent agents competing for 'more' wherein the continuity of exchange and the stabilisation of expectations over time are dependent on some form of co-ordination and therefore order. Thus this basic unit of activity "contain[s] in itself the three principles of conflict, mutuality, and order (Commons 1932: 4)." These three principles are fully analogous to the dynamics of competition, collusion, and the challenges of collective action resulting in 'rules of the game' analysed in the literature above. The challenges that these principles present for actors and therefore for the continuity of exchange must be resolved if markets are to function. Ronald Coase (1937: 389-92) went on to argue that this basic unit, the transaction, always involves costs to the participant agents involved, which came to be labelled 'transaction costs'.¹³ These costs may be saved or reduced by internalising them in an organised hierarchy or firm. This organisational hierarchy allocates resources in a manner that contrasts starkly with the de-centralised allocation process of the price mechanism. Firms will emerge and grow to the extent that they are more efficient at dealing with transaction costs than the market exchange that they supersede (pp. 393-7).

If firms emerge because "there is a cost of using the price mechanism (p. 390)," the continuity of market exchange by definition depends upon the interaction of these two alternative forms of co-ordination. Coase was in this way the first to propose that the neo-classical assumption of zero transaction costs led to a necessary failure¹⁴ to understand the role of firms as "islands of conscious power," as planned organisations (Ibid. p. 388): a

¹² J.R. Commons (1932: 4); my initial introduction to this early article is acknowledged, with thanks, to Williamson (2010).

¹³ Macher and Richman (2008: 3-5), Williamson (2002: 175; 2010), North (1990c: 184-88); Dixit (1996: 54 ff); and of course Coase (1937) elaborate on the notion of transaction costs and what they entail.

¹⁴ See Demsetz (2011) for an argument that takes fundamental issue with Coase's principal claims concerning neo-classical theory.

theory of the market had to account for both the co-ordinating functions of the price mechanism *and* the co-ordinating functions of the entrepreneur or manager (p. 389). The emergence of these hierarchical institutions reduces transaction costs and ensures the continuity of exchange in two ways: i) adaptation to the market and the organisation of the continuity of exchange takes place via co-operative behaviour *within* firms as organisations, and ii) through ongoing contractual relationships *among* firms to reduce uncertainty and process necessary market information "for which continuity of the relationship is a source of value" (Williamson 2005: 2). In this sense, the emergence of hierarchical institutions is a direct result of the functioning of the market: adaptations in the market are consciously coordinated by management hierarchies. According to Williamson (2005: 4, who in turn cites Hayek and the organisational theorist Barnard), "To the widely celebrated 'marvel of the market' (Hayek) [was] therefore joined the hitherto scorned marvel of hierarchy (Barnard)" wherein adaptation and innovation is a product of both. The firm came to be understood as a "governance structure" (Williamson 2002) wholly interdependent with, derived from, and central to the functioning of market exchange.

The emerging institutional economics literature thus challenged the neo-classical paradigm and began to focus explicitly on how markets actually work relative to both firms and 'rules of the game',¹⁵ exploring the outcomes of different forms of market exchange and the broader relationship between institutionalised patterns of governance and co-ordinated market exchange (Williamson 1975, 2010; Olson 1982; North 1990a, 1991; Baron 1995; North, Wallis, and Weingast 2009; Acemoglu 2005; Acemoglu *et al* 2005; Macher and Richman 2008), including in the domain of corporate governance (Morck *et al* 2004; Berglöf and

¹⁵ The literature on market failure posed similar challenges and also had ramifications for our understanding of the relationship between market exchange, firms, and institutions of governance; see e.g. Akerlof's classic article "The Market for 'Lemons'" (1970) and also Stiglitz (2000), both on problems of information and uncertainty with their implications for economic institutions; in turn Williamson (1971) links market failure to vertical integration in firms.

Claessens, 2006). Once it has been established that firms as governance structures emerge as an integral part of the dynamics of exchange, and it is clear that the price mechanism generates collusive forms of co-ordination that are far from 'market-like' with a range of interacting collective or individual agents, this leaves open important questions: is the firm the only institutional form that emerges from the transaction cost dilemma? If not, what *other* forms of co-ordination among the heterodox range of agents will emerge as a result of their interaction in market exchange and the pattern of transaction costs involved? The argument here is there is something much more generic going on that the literature implies but does not explicitly recognise.

There is no reason or evidence to presuppose that the motivations that led to the formation of firms as organisations would not lead firms to co-ordinate among themselves in very non-market ways as well,¹⁶ while still maintaining their separate and indeed competitive identities as economic agents. This is precisely what the literature on rent-seeking and the rules of the game suggests to us that they are most likely to do. The transaction cost problem tells us that market exchange can only work consistently if the agents involved can resolve the tensions of their conflicts of interest (competition and rivalry), their mutual dependence, and their need for order (information and stabilisation of expectations across incomplete contracts) to a degree necessary to permit the continuity of exchange. In short, we should *expect* markets to produce institutionalised patterns of co-ordination, and we should not be at all surprised when the complexities of collective action are often enough resolved in club-like, exclusionary ways. Outcomes maximising the collective interests of all can only be expected to the extent that private goods or club solutions are prevented either by the superior efficiency alternative of market exchange which they have superseded, or some other organisational principle prevents them from co-ordinating freely in the first place.

¹⁶ With results that may or may not aid the cause of efficiency.

So Williamson's notion of the 'economics of governance' (2005: 1) resolves problems of interactive complexity wherein uncertainties and collective action problems are an integral part of the costs of operating in competitive markets. These other forms of co-operative and/or associational behaviour *among* firms/agents also require explanation, and the explanation is the same as the logic of the firm as an organisation. The emergence of a range of hierarchical and/or more co-operative forms of collusion or 'governance' is once again integral to maximising the rational self-interest of economic agents.

There develops a dynamic driven by the complexity of contracting and exchange and the functional requirements of continuity in the market. Williamson's logic implies that as patterns of market interaction become more complex, for example in terms of scale and across market sectors as the configuration of interdependent agents become more heterogeneous, uncertainties and therefore the cost of maintaining the continuity of transactions under conditions of competition increase. Transaction costs become higher and co-ordination problems more pervasive. As complex contracts increasingly reveal themselves as "unavoidably incomplete," agents must adapt through "efforts to craft governance structure supports for contractual relations.... (Williamson 2002: 174; see also Macher and Richman 2008; Dixit 1996: 20; 53)," implying a correspondence between rising transaction costs and the need for institutions for the co-operative resolution of collective action dilemmas. "Simple market exchange thus gives way to the complexity of credible contracting, which includes penalties for premature termination, mechanisms for information disclosure and verification, specialized dispute settlement procedures, and the like (Williamson 2002: 176)."

Thus a high performance economic system simultaneously displays the adaptive properties of both markets and hierarchies (pp. 175-6). North points to a similar relationship between the complexity of exchange and the need for institutionalized forms of enforcement and third

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party retaliation (1990c: 188-9). "The greater the specialization ... the more weight must be put on reliable institutions that allow individuals to engage in complex contracting with a minimum of uncertainty ... (p. 192)." In turn North, Wallis and Weingast (2009: 150-154) point to the institutional 'doorstep conditions' necessary for a transition from simple or 'personal' exchange to complex patterns of 'impersonal exchange' that "requires some form of third party enforcement (North, Wallis and Weingast 2006: 52)."

Once again, overcoming the transaction cost problem of market exchange and the existence of viable institutions of governance go together. The literature identifies a triangular pattern of functional dynamics that produces the conflict-mutuality of interests-order principles identified by Commons. "People's preferences typically do not agree because efficiency and distribution cannot be separated (Acemoglu *et al* 2005: 451)." A variable heterogeneity of agent interests and thus utility functions is continuously interdependent with variation in the complexity of contracts (incompleteness issue) and the complexity, scale, and intensity of exchange. As Ostrom argued, a range of institutionalised forms of co-ordination that may resolve transaction cost and collective action problems is possible: institutional diversity is a response to agent heterogeneity and value-pluralism among agents wrestling with conflict, mutuality and the need for order. This institutional variation is in turn is likely to affect patterns of interaction across the political economy and broader social whole (Ostrom 2010; Aligica 2013).

d) Conclusion

The literature maintains a clear dichotomy between the dynamics of exchange and the domain of the institutions of governance and government. The distinction between private versus public ordering typically serves to support the notion that political equilibrium is most likely to produce unpalatable results (Dixit 1996: 18). At the same time, the transaction cost approach informs us that the continuity of complex *competitive* market exchange is not

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possible without the generation of institutions of economic governance and without the supporting role of external institutions of enforcement and dispute settlement. There is no 'economy' without a suitable 'economic constitution' and this necessarily implies a benign interdependence between functioning political institutions and the benefits of market exchange. Yet it cannot be that the requirements of market exchange necessarily generate the very institutions of governance that in turn obfuscate the functioning of the former, and that we therefore treat their dynamics as dichotomous. Agent interaction must produce an institutional order that is compatible with their individual rationality and successfully copes with their collective problem of complexity (Aoki et al 2012). So the overall effect of the three strands of literature is to seriously blur the boundary between the private domain of exchange and the collusive domain of governance. Instead, variation in patterns of market exchange and agent heterogeneity must be linked to institutional variation and diversity, some of which may maximise welfare across the collectivity and most of which patently will not. We can respond better to the call of Alt and Shepsle of some time ago (1990: 17) to better understand the diversity of institutions with the theoretical tools available to us, thus recognising the 'indivisibilities' of agent utility functions (Olson 1990). An account of the purely economic followed by one of the purely political calculus not a solution (Dixit 1996: 150-151) because competing economic agents clearly lie behind both. A more elegant theoretical conclusion must be possible that implies the essential interdependence of social choice, and that is the argument here. This problem is the focus of section three.

3. The Endogeneity of Governance: a theory of the state-market condominium

This section will theorise three distinct forms or 'orders' of governance that emerge successively as a direct result of the functioning of complex patterns of market exchange. It will go on to explain the dynamics of shifts across these orders and how they relate to each other. The starting point is obviously Coase's account of the firm superseding the price mechanism as a system of co-ordination of dynamic geometry and scale in relation to the costs of using the price mechanism and the complexity of exchange and transaction costs of the market (Coase 1937). Economic efficiency depends much on how these institutional arrangements, and the result is the institutional structure of production (Coase 1992). The clear implication is that institutional variation is to be expected given the variation in economic sectors and thus in patterns of exchange in relation to the level of transaction costs. Williamson took the analysis beyond the firm with his notion of 'economic governance'. This private ordering of the market "entails efforts by the immediate parties to a transaction to align incentives and to craft governance structures that are better attuned to their exchange needs (Williamson 2002: 172)." This 'private ordering of the market' may be labelled as 'First Order' governance, and remains distinct from the legal order of the state¹⁷ and deals principally with the short-term bargaining costs among independent agents, many of which become firms as a result (Milgrom and Roberts 1990: 58).

The transaction cost principle can be extended to demonstrate that a broader pattern of institutionalised co-operative behaviours is also endogenous to the self-interested and rational utility-maximising preferences of agents. Williamson's logic implies that as patterns of market interaction become more complex, for example across market sectors or factor markets or involving distance, uncertainties and therefore the cost of maintaining the continuity of transactions under conditions of competition increase. If these rising transaction costs are to be reduced, this provides incentives for a more sophisticated 'Second Order' of governance over time, beyond the organisational structures of firms alone. Membership remains voluntary, and these associational institutions remain essentially in the

¹⁷ Institutions that Williamson understands to be exogenous to market exchange, in contrast to the argument here.

private domain, but there is a system of collective authority and (potentially) enforcement *external* to the economic agent or the firm itself, and to which they voluntarily submit. Members contribute financially to the system at the same time as they help compete to determine the way it works and in whose interest. The very reason why transaction costs lead to the emergence of firms is the same reason that complex market systems generate institutions superior to the constituents of the market themselves.

There are numerous examples. Coase himself points out (1992: 718) that while economists often characterise securities exchanges as examples of perfect competition, these private institutions "regulate in great detail the activities of traders.... What can be traded, when..., the terms of settlement, are all laid down by the authorities of the exchange...in effect a private law." These quasi-legal institutions underpin the efficiency and operations of the exchange by dramatically lowering the costs of transactions, or they would not exist.¹⁸

As the stock market example suggests, in Second Order governance involves co-operative and/or perhaps collusive behaviour derived from rent seeking utility functions that attenuate or otherwise shape the terms on which agents compete among themselves, and there are many empirical examples (Macher and Richman 2008). Soft law (Brummer 2012), private industry standards and regulation (Mattli and Büthe 2003; 2011), and diverse forms of selfregulation are likewise observably integral to the operation of markets in which transaction costs are greater than zero. Private ordering often includes its own systems of arbitration, even in the international domain (Dezalay and Garth 1995; 1998). Understanding the role of more independent, 'state-like' forms of institutions is no longer a major step because they perform many similar functions and operate in similar ways. The observable overlap between First and Second Orders implies similar continuity between the private Second

¹⁸ They may also involve highly exclusionary memberships and collusive forms of market interaction, as did many stock markets prior to 'de-regulation'.

Order and the domain of the state and the law: property rights, legal dispute settlement, the monetary system, or taxation to pay for collective goods. Institutional economics consistently portrays this Third Order governance as constituting a dynamic distinct from that of market exchange,¹⁹ yet this 'Third Order' of governance *also* serves to reduce uncertainties, deal with complexity, resolve collective action problems, and thereby ensure the continuity of the market. Why should they be thought of separately if they perform the same functions if under conditions of greater complexity and thus higher transaction costs? That institutions of the Third Order might prove highly dysfunctional and exclusionary in terms of general welfare and efficiency makes them no different from dysfunctional private or firm-based forms of governance.²⁰

The proposition here is that just as agents in the market invest in Second Order institutions, they also contract into the co-operative and often collusive institutions of the state that simultaneously establish rules of the game (Buchanan and Tullock 1962; Brennan and Buchanan 1985) in the analytically (but not empirically) distinguishable political and economic domains. Agents face incentives to take the extra step where transaction costs are high, and the benefits of Third Order governance considerable. North (1990a, 1991), Coase (1960, 1992), Acemoglu and his several co-authors (e.g. Acemoglu *et al* 2005; Acemoglu and Robinson 2012) all have moved us a step closer by explicitly acknowledging the role of formal political institutions, law and regulation and the problem of dealing with social costs. The complexity and costs of market interaction increases substantially across factor constituency divides. In order to function, the market indeed requires the establishment and

¹⁹ Dixit (1996), Aoki (2001), and especially Acemoglu *et al.* (2005: 451) go so far as to suggest that "political institutions are also endogenous." Even thought Aoki and in particular Dixit cast doubt on the viability of political-economic dichotomy, these scholars nonetheless opt to maintain a clear distinction between the nature of economic versus political institutions and the exercise of political power to shape economic institutions. This article seeks in contrast to offer a causal explanation of the 'missing link' between the two: how endogenous Second and Third Order governance is a necessary condition of *and derives from* market exchange.

²⁰ Coase himself (1960: 17) suggests that though far from costless, government may be able to "get some things done at a lower cost than could a private organization"

enforcement of specific types of relationships across a diversity of agents (capital, consumers, labour).

Incentives may prove insufficient, so why might agents cede their *autonomy* to the Third Order and thus eliminate the exit option? Second Order governance is directly controlled and organised by self-interested parties to the market and there is always a notional exit option. Second Order institutions therefore best provide private (if collective) 'club' goods. As Olson (1971) pointed out, genuinely public goods will tend to be consistently under-provided in large-scale complex settings, and free rider problems will ultimately frustrate collective provision in the absence of some form of coercion (Olson 1971, chs. 1-2). As market complexity and the dilemmas of collective action increase transaction costs, Second Order institutions may prove increasingly ineffective in managing relationships in or outside their limited membership. Where partners are also independent rivals, defection and the associated institutional instability mean that transaction costs remain potentially high, and costly uncertainty abounds. The contractual parties will choose Second Order private solutions only as long as the conflicts of interest and associated transaction costs of resolving them remain acceptable.

Third Order forms of institutionalised governance can resolve these difficulties because vested with superior authority.²¹ Furthermore, as Krueger has already established, the political and legal institutions of Third Order governance are *permeable* to a range of interests (if not perfectly or indeed certainly not *equally* so; see Bonica *et al* 2013, 111-118), and (partial) capture is an ever-present possibility. Policy rent seeking utility-maximisers and their Second Order constituencies compete to determine the nature of collective goods provision and the terms of competition under the law, thereby influencing distributional

²¹ But you cannot get rid of it once you have got it, and the argument here is that under conditions of complexity it is endogenous anyway, so they always travel in pairs.

outcomes as well. This is particularly the case when one admits that the market consists not only of firms, but also of consumers and labour representing different factor and distributional constituencies. In this way social compromises reducing the conflicts of interest and transaction costs of labour and goods markets can be achieved and enforced. These institutions evolve in relation to the rival constituent interests in the market, though some constituencies are likely to prove far more influential than others. Thus the legal system and regulatory provisions of government are endogenous to the way the market functions.

We can summarise the theory as follows. The collusive tendencies of competing agents to seek to "widen the market and narrow the competition" (Smith (1937 (1776): 250) does not put an end to either competitive inter-agent conflict, nor to their independence as actors, nor to their need for order if mutual benefits are to result. Agent preferences exist along a *continuum* from the closed and club-like to the "open access" norm of North, Wallis, and Weingast (2009). Shifts along the continuum are better for some agents than for others, irrespective of the 'public good'. Variation among competing utility functions combined with increasing transaction costs that come with interactive complexity will yield simultaneous dynamic variation in patterns of exchange and in rules of the game, and thus movement along the continuum. Still, the agents that economic theory associates with market allocation remain those most likely to interfere with their effective functioning, and this applies equally the competitive-collusive behaviour of land or labour as distinctive factor constituencies as it does to firms as such.²²

There emerges in relation to the level of transaction costs and interactive complexity a 'marginal propensity to collude' that simultaneously generates the dynamics of firms and the

²² As North, Wallis and Weingast argue, even at the most open-market end of the spectrum, rentseeking and rent-creation will persist to some degree. The stability of openness thus in turn depends "on a corresponding open access on the political side (2006: 37)" that favours the 'mutuality' dynamics of a more liberal order. The argument here takes this one step further to demonstrate that the economic and political 'sides' are analytical distinctions that obscure a single process.

dynamics of governance of the Second and Third Orders. The question becomes what sort of 'economic constitution' might be generated by what sort of competitive dynamics of exchange, given that each actor enters the game with a distinct set of private preferences. If utility functions vary relative to the complexity of exchange, then outcomes will depend on the economic activity involved and the extent to which complex, cross-factor market and thus 'impersonal' versus simple patterns of exchange predominate. As agents pursue their preferences and realise competitive and distributional advantages over their rivals in a setting of increasing market complexity, their interaction will generate patterns of governance across the three orders of governance. Each, competition/free trade vs. regulation/protection, represents contrasting preferences of different clubs in the economy; each is a governance solution peculiar to particular utility maximisers or constituencies thereof in specific *circumstances.* The theory thus demonstrates how and why the institutions of governance are necessarily endogenous to the functioning of the market. Of course once in place, the rules of the game of either Second or Third Order governance, and in reality a combination of both as the one is a further derivation of the other, will have important effects on the formation of future preferences because they affect the terms on which agents compete with each other in the first place. Yet the institutions of both orders remain permeable to (coalitions/clubs of) agents.²³ The theory thus hypothesises reflexively that conflict over the terms of competition generates changes in actor preferences concerning the institutions of regulation and governance, and that the outcome of conflict over divergent actor preferences concerning governance and regulation across orders of governance generates changes in market structures. In short, conflict and competition in market interaction combined with the

 $^{^{23}}$ Such that degrees of openness (permeability) will affect outcomes; see North, Wallis and Weingast (2009), yet the openness of democracy may not be enough to prevent the risk of elite-based dominance or policy capture (Bonica *et al* 2013).

transaction cost problem lead to mutually beneficial co-ordination mechanisms and the emergence of order essential to the continuity of market exchange.

This argument may be formalised in a very simple fashion, adapting to some considerable degree the notion of agent preference ordering of Buchanan and Tullock (1962: ch. 5). If following Commons' lead a transaction contains the principles of conflict, mutuality, and order, then the objective of the individual agent involves minimising the transaction costs (Tc) related to completing the transactions involved in the achievement of 'more' across a range of (potentially complex) interacting agent utility functions. Following both Coase (1937) and Buchanan and Tullock, agents face a trade-off between the cost advantages of preserving their autonomy in competition with rivals and a propensity to collude to overcome a given level of transaction costs. The marginal propensity to 'collude' (MPC) thus represents the incentive to seek collaborative solutions to co-ordination problems so as to facilitate the benefits of exchange. This propensity will be directly related to the level and nature of the transaction costs in a particular market segment, in turn determined by factors such as market complexity and the extent of collective action problems. The theory of the firm informs us (Coase 1937) that collusive forms of co-ordination may also have costs to agents relative to the benefits of market exchange at a particular level of interactive complexity. Thus we encounter the neo-classical assumption of transaction costs Tc = 0which would consistently produce market exchange solutions because the MPC would be either zero or too low to perceive any benefits in non-market forms of co-ordination. The transaction cost literature argues we should focus on cases closer to reality where Tc > 0across the three orders of the state-market condominium.

As transaction costs rise relative to interactive complexity, we expect the marginal propensity of interacting agents to seek more collusive forms of co-ordination (MPC) to rise as well, without which the benefits of exchange are increasingly unachievable. To

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understand whether and how this results in 'pure' market exchange versus institution-based solutions to co-ordination problems, we need to begin with potential variation in the preference sets of individual agents (Table 1) and then proceed to examine how these interacting preference sets aggregate into contrasting outcomes at the macro level (Figure 1). Agents may be an individual in the labour market or a consumer or retailer buying and selling goods, or a firm engaged in production. Following Buchanan and Tullock (1962: 49-60), each agent will estimate the transaction costs they face relative to their preference for purely individualistic agent interaction as private market exchange (m) versus alternative forms of more interdependent co-ordination (g as Second Order governance and G as Third Order governance solutions). Agents aim simultaneously to minimise both transaction costs and the costs of interdependence. This yields a utility function that determines the marginal propensity to collude for each agent and the preferred solution to co-ordination problems born of the particular level of transaction costs perceived as prevailing. There emerge six possibilities across the entire range of potential transactions:

Table 1:	Agent preference orderings		
1.	$m \le g < G$	4.	g < G < m
2.	m < G < g	5.	G < m < g
3.	g < m < G	6.	G < g < m

Preferences will depend on the resources of agents relative to competitors, as well as on the complexity of the interactions and thus the level of transaction costs they face, and the cost of interdependent solutions in relation to outcomes that preserve agent autonomy. In this sense these individual preference orderings will prove dynamic in relation to the nature of the

activity and pattern of exchange as interaction results in a combination of more-or-less coordination in the rules of the game that affect the terms of competition, and as the challenges of competition and co-ordination faced by individual agents change over time. Agent solution sets must resolve the tension between the principles of conflict, mutuality, and order.

The pattern of costs perceived by agents through preference orderings 1 and 2 both yield a first preference for market interchange (although the agents may already be organised as firms). The difference is that in ordering 1 the agent in question prefers as a second-best option a Second Order private governance 'g' solution that preserves an exit option relative to a Third Order solution. If a market solution is not available because of the way preferences aggregate overall, the agent with ordering 2 is less confident than its rival of its capacity to achieve its goals in a context of private governance and thus prefers G as a second option to enforce particular rules of the game on all. The agent opting for ordering 2 thus has a slightly higher marginal propensity to collude in terms of preferred second-best solutions, yet still prefers a market solution overall. In preference orderings 3 and 4 the agent perceives the cost of Second Order g to be lower than the two alternatives m and G. Should, through the aggregation process, the first-best option of private Second Order g prove unattainable then the agent preferring ordering 3 perceives the costs of interdependence as higher than in scenario 4. Agents opting for preference orderings 5 and 6 perceive Third Order G as the least costly option for the agent in question. Transaction costs and market complexity are high and thus the marginal propensity to collude is commensurately higher and thus the costs of interdependence are in each case perceived as lower than in orderings 1-4, again with important differences in second-best options.

In any of the six cases, the second preference in principle only matters as the preferences of other agents become clear and thus an aggregate solution emerges that requires agents to abandon their first-best option. These options however are not the less relevant for being

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second, and the choice of second-best preference options reveals much about the nature of the agent as well as real-world solutions we might expect and the dynamics of change over time. If there are is a prevalence of agents with preference orderings 4 as opposed to 3, this is more likely to yield g or G as solutions -- especially if there is also a prevalence of agents opting for the first-best preference G under orderings 5 and 6. Analytically speaking there are thus two notional 'moments' at which the second and third preferences of agents might matter. The first is an essentially abstract moment at which a given set of agents devoid of *ex ante* preferences interact for the first time. It is likely that initial preference orderings would emphasise autonomy and agents would seek to avoid the costs of interdependence but these initial preference orderings would not prove stable. Agents would assess their utility functions and resources, those of their rivals, and the potential complexity of interaction and therefore the costs of interdependence, and thus arrive at the preferred solutions to the conflict-mutuality-order trinity.

Thus an agent preferring option 3 seeks a system of private club-like co-ordination, but does not wish to cede autonomy to a third-party third order G. The agent choosing option 4 prefers as a second-best option the dispute settlement and enforcement capacity of the Third Order to the risks of open competition with rivals. Over time the 'rules of the game' would emerge through the iterative dynamics of interaction and this abstract state of affairs would give way to the second 'moment' wherein agents have developed *ex-ante* preferences yet face shifting dynamics of interaction with their rivals. Institutional path-dependency would begin to play a role with vested interests disposing of institutionalised resources that affect the options of others. Thus under option 5 the agent prefers the level of co-ordination and order provided by government G, possibility because the (e.g. market-based) rules of the game set by G are beneficial, but in the absence of this solution to conflict, mutuality, and order decentralised market interaction would be preferable to the terms of competition that might

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be set by the potential private clubs that the state is keeping in check. In contrast, the agent preferring option 6 may as a second option become part of a bid for private regulatory goods, and thus prefers this private governance solution yet certainly does not wish to compete with rivals in an open system of market transactions.

Let us now turn to the aggregate picture that emerges as a result of the two notional 'moments' that are in reality continuous interactive dynamics among agents. This brings us to Figure 1 below. The origin m is where Tc = 0 and notionally represents the neo-classical assumption wherein the aggregate preferences of individual agents for pure market forms of exchange would prevail.²⁴ Thus under these notional conditions the MPC would be too low to induce non-market forms of co-ordination: no firms, no private clubs, in short no governance, would emerge. Rising transaction costs Tc on the horizontal axis correlate via the aggregation of agent preference orderings to an increasing propensity to collude and realise different forms of governance solutions. As one moves along the Tc horizontal axis, there is a corresponding and interrelated upward move on the vertical axis as interacting agents adjust their preference orderings, and more precisely their propensity to collude, in relation to the growing complexity of exchange and consequent rising transaction costs. In this way, f represents the aggregate preferences for the firm as governance; g represents a preference for second order institutions, and G represents a preference for 'third-party' government. All of these preferences involve Tc > m and thus MPC > 0. The aggregate preference ordering for the First Order is that the costs of f < g < G. Increasing transaction costs born of market scale and complexity will increasingly generate agent preference reordering and thus threshold conditions for a new equilibrium solution. Second Order governance implies that the interdependence costs of f + g relative to a given level of Tc

²⁴ And such a scenario is essentially discounted if one argues, as in the institutional economics tradition, that Tc are always greater than 0.

remain < G; Third Order aggregate preferences imply that the interdependence costs of f + g> the loss of autonomy under G.²⁵



The step from one order to the next represents a more efficient aggregate outcome for the defined group of agents involved a given pattern of transactions. There are interesting examples in the literature such as organised crime (Skarbek 2010) or piracy (Leeson 2007). Leeson compares the relative efficiency of the hierarchically-organised 17th and 18th century merchant fleets of the great trading companies, which we would see as First Order

²⁵ In turn Second Order g and Third Order G are, like firms that may become multinational, dynamic and may emerge in layers over time, as in federal states or forms of regional co-operation. Where market scale and interactional complexity exceed the scope of, for example, national-level governance institutions, the efficacy of governance in ensuring the continuity of exchange may also come into question. The same dynamics of agent preference re-ordering thus by implication may also lead to forms of cross-jurisdictional Ig (international or perhaps more accurately 'transnational' private governance as in Dezalay and Garth 1995; 1998) or IG intergovernmental co-operative institutions of governance and exchange (and most likely a mix thereof), but this is beyond the scope of this article.

governance or firms, to the de-centralised and highly equal and democratic forms of equally private governance found on pirate ships. Each faced a different economic or 'market' challenge and therefore a contrasting set of trade-offs between autonomy and interdependence/Tc to MPC, leading to different forms of governance institutions. Pirate organisation would in this context qualify as Second Order private governance, and Leeson argues (2007: 1076-1088) that the benefits in terms of shared booty yielded by pirate ship organisations was likely superior for the seafarer 'agents' involved to that realised as wages on merchant vessels.²⁶ Furthermore, he assembles much evidence that poorly paid merchant seamen indeed (despite risking, if caught, the death penalty for doing so) took the step to join a pirate organisation, thus engaging *ex ante* in the pirate constitution and a new form of governance.²⁷ Of course neither pirate ships nor competing national monopoly mercantile companies that frequently sponsored plunder of their rivals by (sometimes state-sanctioned) privateer 'proto pirates' (Leeson 2007: 1052; 1079-1082) was an efficient solution to commerce in general. When it came to organising the complexities of merchant trade on a global scale with its greater heterogeneity of agents and higher level of transaction costs, there was a step to big-G governance to rid territorial waters and eventually the high seas of pirates altogether and to attenuate inter-firm rivalries and promote competition, providing third party enforcement for an emerging law of the sea and the (originally) privatelygenerated *lex mercatoria* of the middle ages. The key distinction between g versus G is the jump to third party enforcement external to the agents themselves.²⁸ What these examples allow us to see is how different governance solutions depend on variation in the configuration

²⁶ Though the firm-based organization was undoubtedly more beneficial for the company owners, so the particular configuration of 'agents' matters here.

²⁷ Another rather more benign example of Second Order governance is Greif's private-order contract enforcement of the mediaeval Maghribi Jewish traders' coalition that also operated successfully in the absence of a legal sanction (Greif 2006: 58-90).

²⁸ And thus the difference is essentially a qualitative distinction, and G solutions will only cluster close to the curve to the extent that for example 'property rights institutions' also succeed in constraining those who control the 'state' (Acemoglu and Robinson 2005) as an example of Third Order institutions of governance.

of agents and variation in the scale of transactional complexity wherein efficiency and distribution prove inseparable to the aggregation of agent preference orderings and the eventual outcome.

The curve itself represents an optimal aggregate relationship between the level of transaction costs faced by the range of interacting agents and the marginal propensity of the same to collude such as to produce transactional efficiency and continuity of exchange. At each point on the curve, the marginal propensity to collude rises in relation to the level of transaction costs faced by interacting agents in a way that remains compatible with the continuity of exchange and the benefits of functioning markets. In this sense the curve represents ideal-typical solutions wherein the aggregate trade-offs among agents yield the level and quality of institutional development required to facilitate successful market systems and "open access" (North, Wallis, and Weingast 2009) or "inclusive" (Acemoglu and Robinson 2012) market order political economies. Furthermore, the closer to the curve that aggregate solutions emerge over time, the more likely it will be that through path-dependency a virtuous circle of preference orderings aggregating into benign market-governance combinations asserts itself as transactional complexity increases over time.²⁹

Yet the optimal path maximising welfare across the economy is of course far from the only possible equilibrium outcome. Solutions above and below the line are less benign,

²⁹ And therefore this implies the need for a theory of endogenous institutional change as well; see for example Weingast 1996; Greif and Laitin 2004; Crouch and Farrell 2004; Greif 2006: 158-186 - but this is beyond the scope of this article. Nonetheless, the extent to which the more optimal solutions along or close to the curve ought also to be the more 'self-enforcing' and also 'self-*re*inforcing' (Greif 2006: 15-17; Greif and Laitin 2004) would eventually help explain why successful political economies diverge from the less successful to an apparently accelerating degree over time, and why it might be difficult to establish an economy's 'doorstep conditions' (North, Wallis, and Weingast 2009) and thus place on the curve in the first place. This does not of course exclude the possibility that bad equilibria, well away from the curve, might also be self-enforcing and indeed reinforcing, nor that a 'good' equilibrium might not regress towards the bad over time. Puga and Trefler (2014) explore the instability of this relationship between patterns of market exchange and governance in post-13th century Venice. What took place was "a fundamental shift in society away from one characterized by political, economic, and social mobility and toward one of political immobility, economic polarization, and social stratification (802)" that eventually combined political closure with extreme inequality, social stratification, and a decline in the importance of Venetian maritime trade. A benign relationship between markets and institutions of governance is far from straightforward, as the literature reveals.

representing an array of 'bad' equilibria. Solutions below the line would represent a suboptimal pattern of market exchange where the continuity of the market will break down under the pressure of the competing self-interest of interacting agents. Neither conflict nor mutuality nor order are (jointly or severally) properly realised. We characterise this as market failure – institutions are inadequate to the task of ensuring the continuity of transactions. In the zone below the curve represented by f < g < G, firms are too fragmented and lack the information and other resources to ensure the continuity of contracts. In the zones represented by f + g < G and by f + g > G market failure results from inadequate institutional strength and depth to provide the co-ordination required to ensure continuity of the market.

The area above the line represents sub-optimal governance scenarios that emerge from the aggregate preferences of agents. In the zone f < g < G oligopoly or monopoly create rents for dominant firms, and there is a lack of institutions of governance to enforce competition. In the zone represented by f + g < G forms of private governance among agents prevent openness and market entry and club goods predominate. In the zone f + g > G above the curve, predatory forms of exclusionary government or policy capture scenarios predominate that prevent the functioning of efficient market exchange.

4. Conclusion

This article demonstrates how and why the dynamics of transaction costs, that explain the necessary co-existence of firms with markets, also explain the relationship of market exchange to institutions of governance and the patterns of variation that emerges along the competition-collusion continuum that we observe in the real world of governance-market interdependence. The literature firstly tells us that collusion is a key constituent of agent utility functions and a natural and necessary element of systems of market interaction. A

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wide variety of governance-market solutions is possible, and in terms of efficiency and economic development some will work better than others. Much will depend on the nature of the agents and firms involved and of course also on the nature and quality of governance across the three orders that resolve the dilemmas generated by the complexity of interaction represented by rising transaction costs and collective action problems.

The argument may be summarised as follows. Rivalries among economic agents principally concern the terms upon which each will compete with the other, with agents focussed on maximising respective utility functions. This concerns both rivalries among sets of like economic agents (e.g. sets of firms or workers in competition with each other) and rivalries across the land-labour-capital-consumer constituency divides, where in the scale of patterns of exchange may also vary. Rivalry among economic agents involves as much collusive as competitive behaviour, with rent seeking both endemic and, for particular agents, often enough perceived as more utility-maximising than would be open competition. In this sense, rivalry among agents does not always lead to open competition, and collusion-based co-operative processes are one way to resolve a range of transaction cost problems. These range from continuity of exchange in the market, to the provision of the collective and public goods which resolve collective action problems, and controlling free rider behaviour.

Forms of organisation and associational behaviours emerge as a result, beginning with the emergence of the firm. These institutions may be classified as First, Second, and Third Order governance and emerge in relation to the (rising) level of transaction costs and the complexity of market interaction. These patterns of governance both resolve conflicts and facilitate co-operation, though they may involve aggregate-level costs along with costs to individual agents. Contrasting forms of market and institutional development or 'rules of the game' correspond to political-institutional compromises based on the aggregate preferences of interacting agents. Logically, this means that the terms of competition are affected not only

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by the competitive deployment of 'economic' resources in the market, but also (and sometimes principally) through the (institutionalised) deployment of political resources in line with agent preferences. This provides a further incentive for ongoing investment in the institutions of governance in a situation of economic competition. Economic agents are involved in the simultaneous deployment of both political and economic resources, which means that there is a fundamental unity between political and economic aspects of rivalry among agents.

Preferences depend upon the sort of agent, their resulting perceived self-interest expressed as a utility function, and their real economic and political resources and position in the broader market for production and distribution. These preferences are a function of the (institutionalised but potentially dynamic) position of agents in the market, of their corresponding capacities simultaneously to deploy a range of economic and institutional resources, and (eventually) of institutionalised patterns of behaviour by vested interests. What is efficient for some is not always for others, and preferences coexist on a continuum between open competition and collusion, with neither pole ever being reached in the realworld. Each point on the competition/free trade-regulation/protection continuum represents a governance solution for particular constituent interests. The institutionalisation of firstmover preferences and the phenomenon of path dependency makes it highly likely that a 'bad equilibrium' producing poor economic outcomes may persist for some time. Institutions are permeable, but likely more so to first-movers than to new entrants.

This theory hypothesises reflexively that the dynamics of competitive interaction in the market generate both the economic strategies of actors and their preferences concerning regulation and governance, and that the outcome of conflict over divergent actor preferences concerning governance and regulation in turn generates changes in market structures. Changes in preferences concerning governance therefore are intimately bound up with

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changes in and preferences concerning market structure. The distinction between the economic domain of 'markets' and the domain of governance inhabited by the state and government breaks down, and should be replaced by the notion of a *state-market condominium*. In practical terms, while real-world outcomes may well be measured as more or less efficient in relation to theoretical norms, 'efficiency' in this sense is no less abstract than the ideal of perfect competition. Following Acemoglu *et al* (2005: 451) but taking the point both further and more seriously, issues of efficiency and distribution are "inseparable": if what is efficient for some may not be for others, then efficiency should be understood in *relative* terms. Policy-makers will need to engage in normative choices as to whose version of efficiency should prevail, and to maximise the range of constituencies for which particular solutions are seen as efficient. This is a central task of Third Order governance. Establishing (relatively) open systems of competition-based rivalry may be one solution to this 'public interest' problem. As North (1991: 109) maintains, eventually even the state itself had to be shackled to prevent arbitrariness.

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