Why Competitive Markets Aren't Self-Actuating:
The Political Economy of Open Access

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This paper is not just a first draft, it is an incomplete first draft. The last three sections are just sketches of what I hope to fill out later. My apologies.

Markets are ubiquitous in recorded human history, but until recently markets tended to be subordinate to other social institutions and thriving, open, competitive markets were the exception rather than the rule. Why? In their brief for this conference, Eric Brousseau and Jean-Michel Glachant point out that at least six categories of actors interact simultaneously on three levels to produce the social frameworks that manufacture markets. Taking their brief as a starting point, this paper assumes that markets are complicated social institutions comprised of elements that are intentionally and unintentionally designed; that market institutions persist over time only if the dynamic relationships between political, economic, and legal interests and institutions provide incentives for social actors to maintain specific markets; and finally, the power of markets to coordinate behavior and allocate resources may be used for purposes other than maximizing social welfare through gains from trade, and so how we evaluate the "efficiency" of any set of market arrangements should not necessarily be limited to the internal operation of markets.

The paper builds on two unoriginal insights. First, markets are always embedded in organizations. At one extreme markets may be embodied in a single formal organization that creates and sustains the market and a marketplace, like modern stock or commodity exchanges. Medieval European cities, for example, often organized and operated markets. In these limiting cases, the organization that makes the market exists independently of the market participants. In most markets, however, the market structure results from the interaction of several or many organizations. For example, the market for automobiles is created by a small number of large producers. A company like Ford is a player in the larger market for cars. But Ford also, in its internal structure, creates a market for car parts, car designs, and a host of associated goods and services. The market for cars is deeply embedded in the organizations that produce and sell cars.

Williamson's neat distinction between markets and hierarchies and Coase's penetrating question about the boundaries of the firm become a bit fuzzy here: Ford is both a hierarchy and a market simultaneously. The organizations in which markets are embedded may be private, public, or a mixture; the organizations may operate for profit or not; and the organizations may be focused on markets, like or stock exchange or Ford, or markets may be peripheral to the organizations main goals, like the Catholic church in medieval Europe or many modern governments.

Second, all markets are connected to other markets. Conceptually we often posit a market for a single commodity or service, like the market for cars. In reality, the market for cars is linked to the markets for metals, plastics, electronics, glass, and rubber; linked to the market for machine tools and used cars; linked to markets for land and buildings; and linked to markets for short and long term credit, equities, and other financial instruments. In neo-classical economics it is the ability of the price mechanism to signal costs and benefits that enables all of these markets to simultaneously coordinate market participants in widely dispersed and apparently independent lines of endeavor.

Neither of these insights is original and both are slightly off the main lines of thinking about markets in institutional economics.[1] Nonetheless, their combination generates new insights into the dynamic relationships between the social institutions that manufacture markets. The sections that follow first layout a way of thinking about how societies use organizations to

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[1]Institutional economics sees markets as the interaction of individual actors (even if those actors are legal persons that represent an organization). Institutions make possible contractual forms which are available to the actors at some cost . Political organizations frame the possible contracts and finance enforcement resources, including courts, which are charged with interpreting the contractual rules, guiding enforcement, and applying penalties in cases of contractual breach. Contracts are not costless and neither is transacting, but contracts provide tools that individual actors can use to shape their relationships. Markets are usually treated in isolation, *ceteris paribus*.

structure social order by creating incentives for powerful and dangerous individuals to cooperate, drawing on the framework of North, Wallis, and Weingast (2009, hereafter NWW). Next, the connectedness of markets is exploited to show how organizations that promote markets can serve as conduits for structuring incentives within and between powerful organizations and their leadership, even in societies where access to both organizations and markets is limited. This section provides an answer to the question posed in the paper title, why competitive markets are not self-actuating. The social forces that support the emergence of markets on a larger scale, generating economic growth through higher productivity and gains from specialization and division of labor, inherently generate counter forces that limit access to organizations and, therefore, to some aspects of markets. The counter forces are part of the dynamic relationship between politics and economics in most societies (what NWW call natural states).

The third section returns to organizations and describes how societies can move to institutions that allow more open access to organizations and the tools that support organizations. Because markets are embedded in organizations, opening access to organizations has a direct and dramatic effect on markets. Schumpeterian creative destruction becomes the norm, rather than the exception, of dynamic change over time within markets where organizations are free to form, enter, and exit. The fourth section goes back to the connectedness of markets and traces how the interconnectedness of markets can generate Schumpeterian creative destruction in politics when interconnected open access markets are able to shape and coordinate interests and incentives of actors beyond the immediate control (and manipulation) of the political system. These two sections combined show how thriving competitive economic markets require thriving competitive political systems, and vice versa, revealing some of the dynamic relationships between politics and economics.

The final section comes back to the relationship between markets and organizations, specifically with respect to public and private/public organizations that effect markets. Open access competition in markets does not eliminate the opportunity or incentives for political manipulation of the organizations that deal with markets. Again, it appears that open access markets are not self-actuating. That is, competitive markets do not automatically generate patterns of economic interest that inherently lead political actors to maintain open access markets. This last section opens some speculation into the political institutions and organizations necessary to sustain open access markets.

2. Order, Organizations, and Coalitions

Human societies rarely exceeded sizes of 100 people for any sustained period of time until about 10,000 years ago. It seems safe to say that while trade between groups certainly occurred, markets are a development of larger societies and are an integral part of the way in which larger societies capture gains from specialization, division of labor, and trade. The first question to ask, therefore, is how societies managed to organize or reorganize themselves to sustain larger scales, since larger scale is a prerequisite for markets. This section lays out a simple version of the conceptual framework of NWW, which situates the problem of social scale in the context of violence.[2]

NWW begin their analysis in a world of small societies of 50 to 100 people in which individuals base trust on personal interaction, and ask how, in a world where violence is a viable option, some individuals can deal with dangerous and potentially violent individuals with some degree of confidence. They begin with specialists in violence, who mistrust one another, and

[2]See NWW, chapter 2. This exposition follows Wallis, 2009.

will not lay down their arms and coexist because they believe such behavior will lead the other specialist to destroy or enslave them. Armed conflict is the equilibrium outcome. Their solution, in simple terms, is for the violence specialists agree to divide the land, labor, and capital in their world between themselves and agree to enforce each other's privileged access to their resources. If the difference in the value of the rents they earn from their privileges under conditions of peace rather than violence are large enough, then each specialist can credibly believe that the other will not fight. The specialists remain armed and dangerous and can credibly threaten the people around them to ensure each other's rights.

The arrangement is represented graphically in Figure 1, where A and B are the two violence specialists, the horizontal ellipse represents the arrangement between the specialists that create their organization/institution. The vertical ellipses represent the arrangements the specialists have with the labor, land, capital, and resources they control: their "clients," the a's and b's. The horizontal arrangement between the specialists is made credible by the vertical arrangements. The rents the specialists receive from controlling their client organizations enable them to credibly commit to one another, since the rents are reduced if cooperation fails and the specialists fight. There is a reciprocal effect. The existence of the agreement between the specialists enables each of them to better structure their client organizations, because they can call on each other for external support. The specialist's organization is what NWW call the "dominant coalition."

Organizations are groups of people with shared interests and goals. An *adherent organization* is one where all of the members have an interest in cooperating with each other (on the relevant dimensions of the organized activity) at all points in time. In an adherent organization interests are structured in such a way that all individuals have an interest in belonging to the organization, even if their interest result from being coerced. Adherent organizations are institutions, where the elements of formal rules, informal rules, norms, and shared beliefs coordinates the organization.

In contrast, a *contractual organization* is one where relationships between the group members are not inherently self sustaining, and the group maintains itself only through the presence (or potential presence) of an external third party. The third party may enforce relationships within the organization or between the organization and other external parties.[3]

In Figure 1, the horizontal relationships between the violence specialists create an adherent organization. The vertical relationships between the violence specialists and their clients are contractual organizations because they rely on the external presence of the other violence specialists. The vertical organizations might be organized as kin groups, ethnic groups, patron-client networks, or crime families. The combination of multiple organizations, the "organization of organizations," mitigates the problem of violence between the really dangerous people, the violence specialists, creates credible commitments between the specialists by structuring their interests, and creates a modicum of belief that the specialists and their clients share a common interests because the specialists have a claim on the output of their clients. The figure is a very simple representation. In a functioning society, elites in the dominant coalition include economic, political, religious, and educational specialists (elites) whose privileged positions create rents that ensure their cooperation with the dominant coalition and create the organizations through which the goods and services produced by the population can be

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[3] In Greif's terms the organization is only an institutional element, since it depends on other institutional elements to sustain its integrity.

mobilized and redistributed.[4]

There is a strong presumption that the relationship between A and B will be asymmetric rather than symmetric, since it is the unique privileges that each possesses that make their agreement credible. Likewise, the clients of A not only are likely to be organized in a way that differs from the clients of B, it is very important to A and B that their clients not be interchangeable, since that threatens the agreement between A and B to respect each other's resources. The key to the whole arrangement is that the rents A and B derive from their organizations enable them to credibly commit to one another. The interests created by these organizations must interlock, that is, the ability of A and B to form organizations depends on their coordination and cooperation, since the vertical/contractual organizations are structured by the third-party enforcement of the dominant coalition.

Each one of the organizations possesses it own institutional rules. The development of the rules exhibits several characteristics. First, at the level of the specialists in the dominant coalition, their ongoing relationship may lead to regularities in their actions that become norms, then informal rules, and finally formal rules. The form these institutions take is governed by the relationship between the specialists. Those institutions are dynamic and subject to changes in any of the parameters effecting the situation of the members of the coalition. There are two kinds of institutions and institutional rules: the ones that regulate the relationships among the specialists and the ones that regulate relationships between the specialists and the organizations they head. By necessity, the institutional rules must apply to each of the specialists individually, that is, the rules apply uniquely to each one of the specialists and identify his personal

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[4]North, Wallis, and Weingast, 2009, chapter 2. Earle, 1997 and 2003, and Johnson and Earle 2000, provide a series of anthropological examples of how chiefs come to power and the scale of society increases by the systematic manipulation of economic interests.

characteristics and shape his unique interests.[5] These rules are subject to dynamic renegotiation whenever the underlying circumstances of any of the powerful players changes.

The most valuable privilege members of the dominant coalition enjoy is the exclusive ability to form organizations. A primary source of rents within the coalition is the ability to use the third party services of the dominant coalition to enforce arrangements within the organizations of the coalition members. The rents created by those exclusive privileges are part of the glue holding the agreements between the specialists together. Limiting access to external support for contractual organizations creates rents and shape the interests of the players in the coalition. At the same time, the institutional structure gives leaders of organizations tools to shape the interests of their clients.[6] The nature of the (vertical) client organizations is critical to the whole structure. Because the specialists can call on the dominant coalition to enforce agreements within their client organizations, those organizations are contractual. The dominant coalition as a group, therefore, has a lever to use over an individual member by withdrawing third-party services, a tool to help coordinate the dominant coalition. By denying those tools to non-sanctioned organizations, the coalition is able to limit organized opposition and better secure their own rents in a way that strengthens coordination.

The entire complex of organizations creates a set of incentives and interests for powerful individuals leading to cooperative outcomes. Organizations occupy the central place in this

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[5] The rules that the dominant coalition will enforce within each of the organizations are therefore different as well.

[6] The leaders control positive access to higher levels of the society and can wield negative sanctions by calling on the violence and coercive power of the coalition. For example, in Alston and Ferrie's description of patronage in the post-bellum American South or Kettering's account of patronage in 17th century France the ability of elites to control access to the courts and to intercede on behalf of clients is a powerful coordinator of interests within the patron-client networks.

process and limiting access to organizations shapes interests. Organizations are a primary driver of both the shape of institutions and their change over time. Cooperation cannot be sustained unless powerful individuals believe that cooperation is in the interest of other powerful individuals. Organizations structure interests and so facilitate cooperation.

3. Market Connections, Rent Creation, and the Political Economy of Dominant Coalitions

Figure 1 is too simple a society. The dominant coalition is never made up of just violence specialists. The whole point of the coalition is to create an interlocking set of rents and that requires other specialists -- economic, political, and religious at the very least – to mobilize and distribute the rents. It cannot be over emphasized that the creation of organizations that enable larger societies to form immediately creates the possibility of increasing productivity through specialization and division of labor. Once powerful individuals establish a social organization capable of sustaining a larger society, they have strong interests to promote trade and markets.

Figure 2 portrays a slightly more realistic dominant coalition with four players. There are two violence specialists, A and B, two economic specialists (traders) A_t and B_t, and their associated client networks. A_t and B_t are part of the dominant coalition, they enjoy rents from the control of a function, trade, to which access is limited, and the existence of those rents ties them into the dominant coalition and creates incentives for them to support the coalition. A_t and B_t are also specialists who are able to exploit a comparative advantage in trade that stems from their position in the coalition. A_t and B_t are also market makers. They are able to draw on their position within the coalition to socially and physically create and administer markets and market places.[7] Perhaps even more important, A_t and B_t are able to draw on by $\mathcal{A}$ and $\mathcal{B}$ to provide third-party enforcement of agreements. Not only are A_t and B_t able to access enforcement of agreements between themselves, A_t and B_t can enforce agreements between a's and b's as well.

There seems to be little or no doubt in the historical record that when larger societies form trade is an integral part of the social structure, that trade is always controlled by the dominant coalition, and that some individuals within the social hierarchy enjoy privileged positions with respect to trade and markets.[8] As Earle puts it when discussing the emergence of chiefdoms (groups of over 200 or so):

> In chiefdoms, control over production and exchange of subsistence and wealth creates the basis for political power... Economic power is based on the ability to restrict access to key productive resources or consumptive goods... Control over exchange permits the extension of economic control over broader regions,... The real significance of economic power may be that the material flows through the political economy can be used by the chief to nurture and sustain the alternative power sources..." (1997: 7)

The point is not to quibble about which came first, larger societies, social hierarchies, or trade and markets, but to acknowledge that all three elements of societies appear together in the historical record. Over historical time they have been intrinsically linked. Their simultaneous relationship, their endogeniety, is not in question, but instead forms the basis for thinking about the dynamics of their relationship.

Two aspects of their relationship deserve our attention. The first is that the use of trade,

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[7]By "socially" create markets I mean that the market makers are able to structure repeated interactions of individuals, including rules, laws, norms, and courts; by "physically" creating markets I mean that they literally invest in the physical infrastructure, including market places, transportation, and storage facilities, that enable exchange to take place over larger stretches of time and space.

[8]For studies of "pristine" civilizations, that is the first large civilizations that arouse without a geographic predecessor in Mesopotamia, Egypt, India, China, Meso America, and South American, see Service (1975) and Trigger (2003). For the anthropological record on the emergence of larger societies see Earle (1997 and 2003) and Johnson and Earle (2000).

markets, and economic privileges to create economic rents that are then used to secure more stable political coalitions and social order turns the way we often think about limits on access and markets on its head. Limits on entry, both in terms of entry of organizations that make markets and in terms of market participants, typically reduces the efficiency of markets. In the case of natural states, however, the first requirement for markets is a large enough society with some measure of order. Without a system that manipulates economic rents to coordinate powerful individuals and groups, the formation of a stable coalition that can provide the political underpinnings of market exchange is impossible (or hindered), and so markets do not come into being at all or exist at a much simpler level. We have to be careful here not to refer to the dominant coalition as a political organization that is independent from economic organizations, since the close integration of economics and politics glues the coalition together. The ability of the dominant coalition to provide a modicum of peace and physical security, as well as third-party enforcement of arrangements and agreements within the coalition depends on manipulating economic rents. At the same time, the ability of markets and organizations to generate rents depends on the provision of those services by the coalition.

The second aspect is the interconnectedness of markets. The market for wheat is connected to the market for land, the market for transportation services, and the market for bread. The stability of the relationship between the players within the dominant coalition depends on the fact that the actions of one player effect the other: if one is violent both lose rents. The expansion of markets is both a way to increase rents and to coordinate the interests of elites. If the dominant coalition includes individuals with privileged access to or control of land, border crossings, ships, bakeries, and markets then a well functioning market for wheat means changes in circumstances that effect the price of wheat effect all of those elites and their interests, simultaneously. By promoting the formation of markets, elites directly raise the productivity of the assets they control at the same time that they are able to better coordinate incentives within the dominant coalition. The benefit does not come without a cost, however. At times, markets may transmit signals to elites that move their interests in directions that reduce cooperation rather than increase it.

The foregoing provides a basic answer to the question posed by this paper: why aren't competitive markets self-actuating? The answer has to do with social dynamics. Markets require a larger social structure in order to function. The dynamic relationships between powerful individuals that makes a larger social structure requires the creation of economic rents that can be used to coordinate the incentives of political actors. The existence of a natural state, with a dominant coalition of powerful individuals and organizations, creates strong incentives for the coalition to support the formation of some organizations within the coalition that promote trade and establish markets. At one visible extreme, organizations are created whose primary function is to provide and sustain markets, e.g. medieval towns. The ability to form such an organization is limited in a natural state by two forces. The dominant coalition will actively suppress competing organizations that attempt to form markets, but more importantly, only the sanctioned organization has access to the third-party enforcement services of the coalition. Any upstart organization, even if it is not actively suppressed, will operate at a fundamental disadvantage with respect to the sanctioned market.

Perhaps the most studied and documented systems of political-economic organizations supporting trade is the late medieval and early modern system of interregional and inter-urban trade in Europe. As western Europe began recovering in the 12^{th} century from the latest wave of external invasions, the feudal system, which linked military power with control of land and agriculture, also gave rise to a network of privileged trading elites. The privilege of conducting markets that served intra-regional trade was part of the local dominant coalitions, often including the church as well as powerful local lords. The ability to establish a market place, set a market day, and provide protection for individual who traveled to and from the market within a given area was important to expanding the scope of trade and division of labor.[9] The ability to establish a market carried with it the privilege of charging for admission to the market, fees on transactions, and fees for third-party adjudication or arbitration of disputes. Market places grew to market towns. Fortified places became centers of administrative, religious, and economic activity.

Providing a measure of security for markets was an integral part of the coalition structure, for markets generated rents and resources that both held the coalition together. Successful mobilization of resources within an area controlled by a coalition gave the coalition an advantage when dealing with neighboring groups. Successful coalitions were able to increase their geographic scope, either by conquest or integration of neighboring groups. The history of Europe, however, does not reflect a sustained march towards bigger and more integrated social units. Instead, the geographic scale and scope of elements in European society rose and fell with changing circumstances and with the organization abilities of their dominant coalitions. Economies and markets are part, but only part, of the changing patterns. Politics, economics, religion, and the military were all always important, at specific times and places one factor might come to dominate.

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[9]The "Peace of God" movement in the 10th and 11th century was an element in a new relationship between civil and religious authorities, in which the church recognized the legitimacy of local (and higher) leaders, withdrew from the active use of violence, and received protection and immunity (imperfect) from the depredation of the local military power. See Duby 1978 and particularly 1981 for the Peace of God movement.

Markets did better in societies capable of increasing the organizational resources available to elites. The ability of an elite group to form a contractual organization that could call on the third-party enforcement of the larger coalition was a major source elite rents. Third-party enforcement included rules, laws, and passive institutions as well as active arbitration, mediation, or adjudication of disputes. The kind of third-party enforcement that organizations could utilize was determined by the sophistication of institutional arrangements within the dominant coalition. Some societies were better at supporting different types of organizations than others. Places like the Italian city states and the Low Countries, were better at sustaining organizations that provided markets and external trade, but those coalitions struggled, at times, to maintain political and military organizations that were capable of defending against external aggression and limiting internal division. Creation of economic wealth did not, by itself, prove a panacea for all the problems of organizing a sustainable larger society.

I want to draw particular attention to the dynamics of third-party enforcement. In Figures 1 and 2, the kind of contracts and agreements that can be reached within the vertical/contractual organizations (and between organizations) depends on the nature of relationships within the horizontal/adherent organization of the dominant coalition. Simultaneously, the relationships within the dominant coalition depend on the nature of rents produced by the client organizations. The kind of third-party enforcement that can be provided by the coalition is not independent from the nature of constituent social organizations.

Understanding how political authorities can credibly commit to provide unbiased third-party enforcement of contracts and agreements is one of the foundational elements of institutional economics. In North's 1990 book, he defines two types of impersonal exchange, the second is "impersonal exchange with third-party enforcement. It [impersonal exchange with third party enforcement] has been the critical underpinning of successful modern economies involved in the complex contracting necessary for modern economic growth."[10] "The inevitable conclusion that one arrives at is that complex contracting that would allow one to capture the gains from trade in a world of impersonal exchange must be accompanied by some form of third-party enforcement." (p. 57) Modern manufactured markets require unbiased, third-party enforcement.

The problem of credible third-party enforcement, which includes the state obeying its own rules, has been approached in a number of different ways, but many share the same basic structure. Rather than thinking about economic elites as part of the dominant coalition, as in figure 2, traders are conceptualized as an autonomous group who have an ongoing relationships with political leaders. The political leaders are usually identified as individuals who have a choice to honor their commitment to enforce rules and respect property, or to defect and take a large one period gain.[11] The ability of the traders to react to defections by the leader/protector/ruler is critical to imposing future costs, and therefore ensuring a credible

[10]The quotation is from page 35. The discussion of the three types of exchange -- personal exchange; impersonal exchange supported by kinship, bonding, hostages or religion; and impersonal exchange supported by third-party enforcement is the conclusion to the chapter on "A transaction costs theory of exchange" pp. 27-35. In Wallis, 2009, I have drawn the distinction between anonymous relationships and impersonal relationships (including exchange relationships). Anonymous relationships occurs between people who do not know each other personally, but are nonetheless able to place each other in a larger social context. Impersonal relationships also require a larger social context, but occur when everyone in that context is treated the same. The kind of unbiased third-party enforcement of contracts that North is calling forth in the quoted passage is the kind of third-party enforcement that treats everyone the same, that applies to all individuals regardless of their social standing. The distinction between anonymous and impersonal relationship has not been adequately drawn in the institutional literature.

[11]The simple problem is maximizing the net present value of the leaders/protectors revenue stream over time. The logic is laid out in North's (1981) neoclassical theory of the state, Olson's (1993) stationary bandit, and Bates's (2001 and 2008) simple protection model.

commitment, which lies at the root of Greif, Milgrom, and Weingast's (1994) analysis of medieval trade between towns. If a the military protector of a town defects and expropriates the wealth of the traders in the town, the traders react by no longer trading in that town, the lost future revenue creates incentives for the protector to honor is agreement.

The folk theorem logic of this approach leads to a conceptualization of the third-party problem depicted in Figure 3. Here, the military coalition of A and B is a disctinctly different organization than the organization of the traders, A_t and B_t.[12] The problem of third-party enforcement and support for markets becomes a bargaining problem between the protector(s) and the traders. Nothing about the organization of the protectors matters, indeed the identities of the protectors are usually collapsed into a single leader.

Separating the protectors and the traders makes the problem of third-enforcement more tractable. Charles Tilly used the same approach in his book, Coercion, Capital, and European States: 990-1992. Tilly separates the military elites from the commercial elites, and explicitly collapses the military elites into a single actor representing the "state."[13] In Tilly's model, governments exist to make war, and their behavior is shaped by how best to mobilize,

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[12]Grief's (2006) community responsibility system is an explanation of how the adherent organization of traders, A_t and B_t, can be incentive compatible and self-sustaining. The system, however, depends on the pre-existence of cities and, in effect, takes the adherent organization of the military as exogenous.

[13]"In the interests of compact presentation, I will likewise resort to metonymy and reification on page after page. Metonymy, in that I will repeatedly speak of "rulers," "kings," and "sovereigns" as if they represented a state's decision-making apparatus, thus reducing to a single point a complex, contingent set of social relations. Metonymy, in that cities actually stand for regional networks of production and trade in which the large settlements are focal points. Reification, in that I will time and again impute a unitary interest, rationale, capacity, and action to a state, a ruling class, or the people subject to their joint control. Without a simplifying model employing metonymy and reification, we have no hope of identifying the main connections in the process of state formation." Tilly, 1992: 34.

coordinate, and deploy resources to win wars. Tilly employs the folk theorem logic: social and economic development ensues when political/military leaders find it in their interest to provide security to the cities in order to obtain more resources with which to fight. In societies where too much power lies on the side of coercion, the possibility for growth promoting arrangements is limited. In societies where capital possess too much power, however, the possibilities for political development are limited. In the few societies where the distribution of capital and coercion is appropriately balanced, as in England and France, it was possible to consolidate the military, increase political sophistication, and promote political and economic development simultaneously.

As a conceptual device, this way of thinking about the state as a single actor and then posing the problem of the state's credible commitment to exchange revenue (or other resources) for protection and third-party enforcement has been a powerful tool. But it is a tool with limits. In figures 1 and 2, the self-enforcing relationships between members of the dominant coalition that make the coalition an adherent organization depend critically on the nature of the rents each member derives from their client organizations. Change the rules that the client organizations can draw on and the nature of rents within the coalition must change. Capital and Coercion are not independent, they are mutually dependent at a very fine grained level.

Moreover, the connectedness of markets plays a crucial role in coordinating rents throughout the dominant coalition. In most of Europe after 1500, the interest of landowners, military leaders (who were often landowners), and commercial interests were closely linked. English wool provides a well researched example. English landowners grazed sheep who produced wool that was sold, sometimes through a government monopoly, on the continent. English commercial policy with respect to wool affected English merchants as well as foreign merchants doing business in London; the price of wool affected the value of land which would capitalize the returns from raising sheep; and changes in the value of land directly affected the interests of landowners who were directly represented in the House of Lords and the House of Commons. Markets were an integral part of the mechanism that maintained a balance of interests within the English system. Sometimes that system led to imbalance and the result was Civil War.

It is no surprise, then, that the development of more sophisticated financial markets in 18th century Britain was tied closely to the development of more sophisticated organizations to deal in financial instruments. Of particular importance were the debts and obligations of the government (which I hope Larry Neal will be talking about). The rise of formally incorporated banks, insurance companies, and other financial intermediaries was an integral part of the growing complexity of the British financial system, borrowing innovations and capital from the Dutch.[14] As financial markets developed, they transformed markets for other goods and services as well. Indeed, the ability of financial markets to coordinate interests over a wider range of activities was one of the key elements of Whig political theory in Britain and, by association, in the United States and France.

The market for public debt and public obligations lay near the heart of the financial system, alongside the development of short term financial instruments like bills of exchange. As both the short and long term instruments became more impersonal, the ability of the financial to

[14]Dickson, 1967 and Neal 1993 are the standard sources, and since Larry is commenting on this paper, I'll look to him to help me fill in the references. I should also note that many financial intermediaries were organized as partnerships rather than corporations, so this is not a history that relies only on corporate organizations.

mobilize liquidity for both short and long term debts was enhanced.[15] Growing interconnections between financial assets and financial markets, however, meant the interests of asset holders were affected by wider movements in the polity and economy that affected the assets (think of the recent financial crisis). As more people came to hold public debt, for example, more people acquired a direct interest in the current, indeed day to day, operation of the government. Whig critics of the Hanoverian monarchies, argued that by spreading ownership of government assets, including government debt and stock in chartered companies like the Bank of England and the South Sea Company, to members of Parliament and other influential figures, the King was able to suborn the independence of Parliament. As the economic interests of MP's became more closely linked to government credit, the King and his ministers were more easily able to manipulate the Parliament. The fear that the British constitution was being corrupted by the growth of financial markets was extremely powerful in the 18th century.[16]

18th century British politicians, particularly Walpole, were rediscovering yet again the power of markets to coordinate interests within the dominant coalition. One of the most articulate statements came from the new American Republic and its Treasury Secretary, Alexander Hamilton, when he argued that the United States should have both a national government debt and a national bank that serviced that debt and acted as the financial agent of

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[15]The details are fascinating, if you are a financial historian. The key institutions were large and diverse institutions that were able to hold long term financial assets, like government debt, as well as deal in bundles of short term assets. This is what the Bank of England did in its discounting operations. By doing so, the financial system was able to maintain liquid markets for both short and long term assets, both public and private. Around the larger institutions, a host of smaller specialized firms and traders that specialized in specific assets or arrangements filled out the market structure.

[16]For the British side see Pocock 1975 and Robbins 1959, for the American side see Bailyn 1967 and Wood 1969.

the government because "If all the public creditors receive their dues from one source... their interests will be the same. And having the same interests, they will unite in support of the fiscal arrangements of the government."[17]

The British and Americans were not alone in recognizing the importance of finance as a tool for coordinating the dominant coalition. Drelichman and Voth show that the Spanish monarchy in the same period, noted for its frequent defaults and renegotiations, were nonetheless able to raise a very large amount of capital by utilizing a network of powerful individuals whose ability as lenders to ensure repayment depended on their ability to bring political and social pressure on the monarchy. France's fiscal system was even more embedded in a network of corporate enterprises, many of which were public including courts, city governments, and tax farmers. Positions in these corporations was transferrable and the monarchy had the ability to raise funds through loans from the corporations.[18] The British and American systems were noteworthy not for their reliance on powerful lenders who could discipline the monarchy by non-financial means, but by the increasing use of impersonal financial markets as part of a network of influences that disciplined the polity.

4. Open Access, Organizations, and Open Markets

The changing nature of financial markets in the 18th and 19th century, not just in Britain and the United States, but throughout western Europe, was intimately connected with the

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[17]"Report on the Public Credit" *American State Papers, Finance*, Vol I, p. 15. See Ferguson, *Power of the Purse*, for an analysis of how constitutional issues and the public debt interacted in Hamilton's thinking.

[18]See Bonney 1981 for the fiscal system itself and Doyle 1998 for the larger system of venal office holding.

development of new organizations in those markets: banks, insurance companies, newspapers, and specialized traders and brokers. Parallel to financial market development were the expansion of markets for existing as well as new goods and services, e.g. wool and cotton textiles. The history of these markets and their growth cannot be told without recounting the development of firms within those markets. Likewise, the history of new, larger, more sophisticated firms cannot be told without recounting the development of larger, more integrated markets for goods and services. Alfred Chandler's work exemplifies the connection between firms and markets, not as substitutes for one another, but as complements.

The growth of firms and markets tends to be written from the perspective of firms and markets. The 19th century witnessed not just an efflorescence of firms and markets, but also a profound transition in the way in which the larger society supported organizations. By the mid to late 19th century in Britain, France, and the United States, (with the Dutch, Swiss, and others as well) the ability to organize a formal organization had become widespread throughout the body of "citizens" (however defined). The emergence of open access societies, in NWW terms, was grounded on making the social tools, particularly third-party enforcement of agreements and contracts, available to any citizen. Explaining how this transition occurred is not the subject of this paper, but the implications for markets cannot be understated. Two sets of forces were set in motion, one set within the economy that are the subject of this section, and another within the polity that are the subject of the next section. These forces were not independent, indeed they were so closely related that their dynamic interaction undergirds the institutional dynamics of open access.

Opening access to economic organizations produced Schumpeterian creative destruction. In *Capitalism, Socialism, and Democracy*, Schumpeter frames the question of modern economic development as understanding how competitive markets can be sustained in the presence of large, dominant firms. His answer that firms compete as intensively on the margin of innovation rather than on the margin of price, is not only a deep insight into the nature of a competitive market economy, it also inadvertently highlights the importance of open access. Schumpeterian creative destruction depends on more than economic entry, it critically depends on economic organization. In order for entrepreneurs to compete on the innovation margin, they must be able to access social tools, third-party enforcement, that enable them to form large organizations. The essence of the firms is not contract, it is innovation, but without the contractual forms innovation will be still born. In most societies, resources will simply not be invested in innovation.

What also changed was the nature of third-party enforcement, both for organizations and individuals. In a natural state, third-party enforcement is available to elites, but it depends on being an elite. In open access, the political and judicial system are able to credibly provide *impersonal* third-party enforcement. That is, all citizens have access to a set of social tools, the contractual forms, and organizational forms. Open access is not universal access, not everyone is a citizen and there may still be unique privileges. But across a wide spectrum of activities, third-party enforcement is available impersonally.

5. Open access, the nature of interests, and political competition

The critical question for markets is not just why large firms emerged. As Chandler argues, large firms dominated industries where technological reasons for large scale drove the emergence of larger enterprises. Where those technological imperatives were absent, scale did not inevitably follow.[19] Nonetheless, integrated markets for many products and services

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[19]See Atack for an evaluation of Chandler’s arguments about scale and technology.

(remember that transportation is a service) emerged in the 19^{th} century, even when the optimal scale of production remained small. Open access to economic organization, and the associated open access to economic markets, was not tied just to scale.

How did political systems maintain open economic access? Particularly, how did they manufacture markets in which entry was allowed, yet competition and the struggle for rents did not lead to political manipulation of the market? The forces pressing for rent creation are surely as alive and active in modern open access societies as they are in limited access societies, how are they resisted?

One part of the answer is the political implications of Schumpeterian creative destruction. Schumpeter got the politics wrong, his protective political strata that sheltered the emerging market entrepreneurs did not ultimately close off the growth of capitalism (at least not yet). Instead, opening economic access produced a much more dynamic and unpredictable constellation of economic interests. In effect, while open access did not preclude the political system from creating rents, it did prevent the political system from predicting and manipulating where new economic interests would arise and the erosion of existing Schumpeterian (contestable) rents. New political players constantly appeared, fueled by new economic interests that could not have been predicted a decade before (think Microsoft, Google, etc.) If we think of politics as the selection of ruling coalition out of the set of political players (a democratic, majority rule legislature is a specific case), then Arrow's impossibility theorem will always apply. Any coalition can be subverted by the outsider's offering marginal coalition members a better deal in a new coalition. What creative economic destruction adds to the picture is a constantly evolving set of economic interests that are, almost by definition, located in the "out" part of the coalition. The existing coalition cannot predict where new interest will arise and cannot effectively close new interests off without limiting access. The provision of impersonal third-party enforcement played a critical role, since impersonal rules applied equally to organizations that had not yet been formed. Open economic access, therefore, plays a central part in maintaining open political access and political competition.

The existence of impersonal rules also changes the dynamics of politics. In a natural state, rules apply differently to different organizations and individuals. The dynamics of political interaction reflect this: the rules that are supported for each organization depend on the interaction of the rules with the dynamics of the dominant coalition. In open access, in contrast, impersonal rules apply to everyone, so the dynamics of reaching a political consensus about an impersonal rule involves a decision about rules that apply to everyone.

NWW emphasize the importance of the connectedness of markets for maintaining political competition as well. Open and competitive markets create information about costs and benefits that is available to everyone in the market(s). Since markets are inherently connected, political actions that adversely effect actors in one part of the economy, will produce market signals in other parts of the economy. The incentives to coordinate political action, and the role of the market in coordinating action, play an important, and endogenous, role in keeping markets open. At the same time, the provision of impersonal rules significantly lower the costs of dealing with individuals over space and time, because on some contractual dimensions the rules can be accessed and applied impersonally, no matter who the contracting parties are.

Private organizations are not the only organizations that matter in any society, public organizations are also affected by open access. As a delineating boundary, the terms public and private are too stark, since many of the organizations that effect the operation of markets share elements of both public and private organizations. Namely, the provision of public goods that are shared by all market participants and the use of excludable dimensions of those goods to derive private returns from access. So, for example, markets produce information like prices that can be made more or less widely available to market participants. Private ownership of that information generates rents for market insiders, but making the information more public by publishing daily (or hourly, minute, by the second) prices and exchange volumes can increase the value of the market to all participants sufficiently to overcome the incentives to keep the information private. Whether the organization(s) that provide the information are private, public/private, or public the organizations face a similar set of problems with regard to accuracy and conflicting incentives.

The provision of market regulations and legal enforcement has never been an exclusively public or private affair. One sure conclusion is that simply making open access to markets available to everyone does not solve the problem of how to organize the market. Private organizations can be fraught with incentive problems, the well understood conflicting interests of insiders and outsiders. Public organizations have their well understood problems as well, including the ever present threat that the political system will attempt to manipulate market rules to create rents that can be used to bind a political coalition together.

It would be naive in the extreme to assume that simply opening access solves all of these problems.

6. Implications

What then is the benefit of open access and what does it tell us about manufacturing markets?

The sophistication of any society with respect to social exchange, whether that exchange is market based or not, depends in large part on the kind of readily understood forms of interaction that individuals can engage in. In a formal and legal sense, a bill of exchange, a corporate charter, or a futures contract are forms of social exchange that may or may not be enforceable in the courts. Just so are marriages, kin networks, property relationships, whether they are formal or informal, enforced by courts or by social pressure.

The movement of societies from limited to open access requires the formalization of some forms of social exchange. Formalization is not necessary because it is more efficient, formalization is necessary because the only way open access can actually work is if a large number of people, citizens, have the ability to access the same social tools (forms of exchange) no matter who they are. Most relationships in an open access society never make use of the formal mechanisms of enforcement, but all relationships exist in the shadow of those mechanisms.

The same social tools, however, work much differently in an open access society than in a limited access society. The structure of markets is never independent of the nature of entry. Given the same form of legal contracts, a market in an open access society will work better than a market in a limited access society. This will be both because economic entry will make the economic market work more efficiently, and because open entry will generate political forces that make the political use and enforcement of the contracts more transparent and less biased.

Impersonality is a pervasive feature of institutions in open access orders, while it is a rarity in natural states. Again, impersonal rules change the dynamics of both economic relationships and the dynamics of the political process. How markets work in a society capable of sustaining impersonal rules is fundamentally different than in a society without impersonal rules. The engineering requirements for manufactured markets, as a result, is quite different.

Manufacturing markets is largely a matter of creating social tools: forms of social interaction that the larger society will sustain or enforce. Some tools are available to everyone. Other tools are explicitly available only to certain individuals, even in open access societies. Social dynamics -- the political, economic, and legal dynamics of market institutions – are a function of both the tools that are available and their distribution of access to the tools.

The challenge of manufacturing markets is not just understanding how the tools work, but understanding that the tools work differently in different environments and that the tools themselves shape the environment. Open access works better as a overall form of social organization by creating mutually reinforcing dynamics in the political and economic systems. These dynamics both create and sustain entry and competition, and they do so by unleashing organizations. The challenge is encouraging a network of organizations, public, private, and a combination of the two, that manage to accommodate economic and political competition at the same time that some technical institutions are not subject to active manipulation. If limited economic interests are able to access the political system to create rents for narrow groups, and if political competition is incapable of resisting or reversing those efforts, then open access cannot be maintained and thriving markets become impossible to sustain. Understanding those dynamics is at least, if not more, important than understanding the technical details of how market institutions work.

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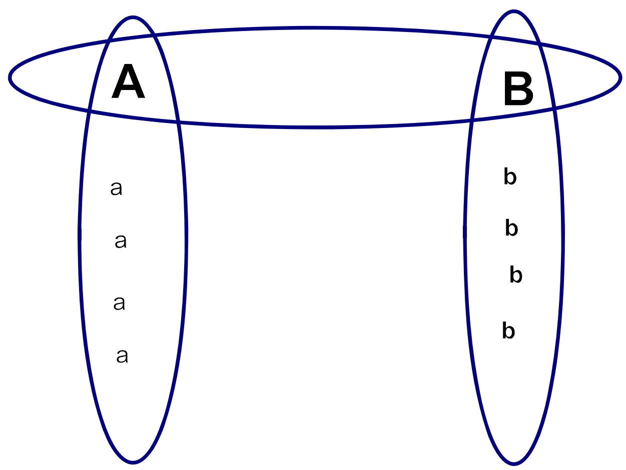
Figure 1



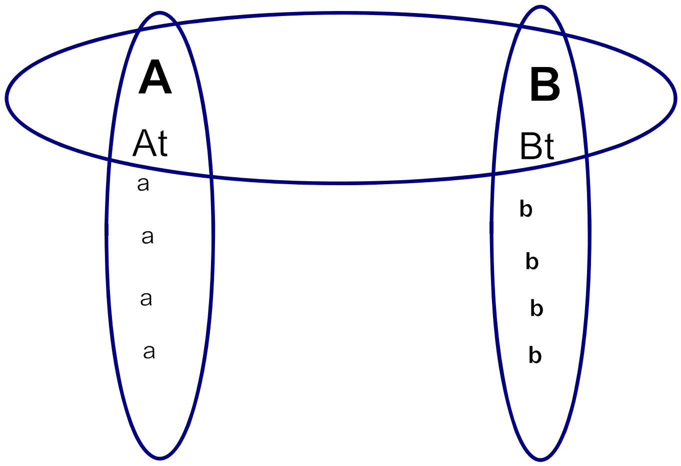


Figure 2

Figure 3