

NBER WORKING PAPER SERIES

A CONCEPTUAL FRAMEWORK FOR INTERPRETING RECORDED HUMAN
HISTORY

Douglass C North
John Joseph Wallis
Barry R. Weingast

Working Paper 12795
<http://www.nber.org/papers/w12795>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
December 2006

Spencer T. Olin Professor in Arts and Sciences, Washington University, St. Louis, and Senior Fellow,

A Conceptual Framework for Interpreting Recorded Human History
Douglass C North, John Joseph Wallis, and Barry R. Weingast
NBER Working Paper No. 12795
December 2006
JEL No. A0,K0,K22,N0,N4,N40,O1,O4,P0,P1,P16,P2

ABSTRACT

Neither economics nor political science can explain the process of modern social development. The fact that developed societies always have developed economies and developed polities suggests that the connection between economics and politics must be a fundamental part of the development process. This paper develops an integrated theory of economics and politics. We show how, beginning 10,000 years ago, limited access social orders developed that were able to control violence, provide order, and allow greater production through specialization and exchange. Limited access orders provide order by using the political system to limit economic entry to create rents, and then using the rents to stabilize the political system and limit violence. We call this type of political economy arrangement a natural state. It appears to be the natural way that human societies are organized, even in most of the contemporary world. In contrast, a handful of developed societies have developed open access social orders. In these societies, open access and entry into economic and political organizations sustains economic and political competition. Social order is sustained by competition rather than rent-creation. The key to understanding modern social development is understanding the transition from limited to open access social orders, which only a handful of countries have managed since WWII.

Douglass C North
Department of Economics
Washington University
One Brookings Drive; CB 1208
St. Louis, MO 63130
batt@artsci.wustl.edu

Barry R. Weingast
Hoover Institution &
Department of Political Science
Stanford University
Stanford, CA 94305
Weingast@stanford.edu

John Joseph Wallis
Department of Economics
University of Maryland
College Park, MD 20742
and NBER
wallis@econ.umd.edu

I Introduction

The fundamental question of economic history can be asked in two ways: how did a handful of countries achieve sustained rates of economic growth and development in the late 18th and early 19th centuries? or why have most nations failed to achieve sustained economic growth over the last three hundred years? What historical process(es) have generated institutions in a handful of countries capable of sustained economic development in the twentieth century, while most countries still fail to develop thriving markets, competitive and stable politics, and cultures that promote deep human capital accumulation for most of their populations? Economists have thoroughly documented that no one factor explains economic development – not capital accumulation, human capital, resource endowments, international trade, or geographical location to name a few prominent examples. Instead, the complex ways that societies structure human relationships – the institutions that shape economic, political, religious, and other interactions – appear to be the key to understanding why some societies are capable of sustained economic and political development (North 1981, 1990, Acemoglu, Johnson, and Robinson 2002, Greif 2005, Rodrik, Subramian, and Trebbi 2004). What are the fundamental aspects of political and economic institutions that vary across developed and non-developed societies?

We build our answer to the question on North's (1991) observation that while institutions frame all human behavior, it is through organizations that people carry out complex social interactions. Understanding human development requires understanding how institutions shape the kind of organizations available for sustainable human cooperation. Developed societies are filled with a rich variety of complicated and sophisticated organizations capable of producing

goods and services, carrying out research and development, and coordinating individual behavior on a scale never before seen in human history.

The most powerful and central organization in any society is, of course, the state. Every society has to solve the fundamental problem of providing social order. In the simplest terms, human violence must be prevented or contained. Providing order is the primary function of a state.

We sketch a conceptual framework, really the skeleton of such a framework, that illuminates the central structures enabling human societies to order themselves. Sustaining social order requires the development of a state organization capable of limiting violence, and that requires that political and economic systems work in concert. The fundamental contribution of our approach is integrating a theory of economic behavior with a theory of political behavior by demonstrating how political systems manipulate the economy in order to sustain political stability, limit violence, and provide social order.

Historically, societies have been ordered in three ways. The first social order dominated pre-recorded human history: the *primitive social order* is a kind of hunter-gatherer society. The second social order has dominated the last 10,000 years, what amounts to recorded human history: *limited access orders* solve the problem of containing violence by political manipulation of the economic system to generate rents by limiting entry to provide social stability and order. As we show, violence jeopardizes the rents, so individuals who receive rents have an incentive to suppress violence and to support the current regime. The third social order arose over the last 300 years: *open access orders* sustain social order through political and economic competition

rather than rent-creation. Open access orders have developed in about two dozen countries, and all are both economically and politically developed.

Broadening our focus to encompass economic and political systems brings out the necessity for the concept of a social order. Social orders are composed of constituent systems, such as the economic, political, military, and religious systems. Organizations are central to all aspects of social order – economic, political, religious, and social. Each of the three primary social orders – the primitive order, the limited access order, and the open access order – structure organizations in different ways. Organizations are groups of individuals, more or less directed toward a common goal. Most human activities involve a degree of cooperation among individuals and, because cooperation and coordination directly affect productivity, the ability to support complex, sophisticated organizations is central to economic growth.

The institutional structure of a society determines the kind of organizations that can be created and sustained. Primitive social orders cannot support complex organizations. Limited access societies support complex organizations, but restrict the number of complex organizations. Limited access orders create and distribute rents by limiting the ability to create organizations. Open access societies support open access to organizations. This fosters economic and political competition, and it results in a rich array of complex economic and political organizations.

The characteristic way in which a social order structures human organizations also produces predictable features of the larger society. Limited access orders exhibit systematic rent-creation, market power, privileges, and differences between elites and others; they also preclude thriving markets and long-term economic development. Open access orders exhibit

systematic competition, entry, and mobility; they also foster thriving markets and long-term economic development.

All economically developed countries are also politically developed. The source of development is the transition from a limited access to an open access society. Our framework acknowledges that political and economic systems are organically related, as they are both parts of the same social order. What we call the theory of the double balance suggests that economic and political systems both tend to be open access or to be limited access. The double balance implies that sustaining fundamental changes in either the economic or political system cannot occur without fundamental changes in the other. Understanding the forces maintaining a balance between political and economic institutions is critically important to our understanding of both the stability of the various orders and to the transition between limited and open access societies. Small wonder, then, that both development economics and the international donor community have failed to produce a formula for economic development through incremental policy changes.

In the paper that follows we first lay out the logic of how institutions develop that can control violence. We call this the natural state. The logic of the natural state implies limited access, and thus underlies the operation of a limited access order. With the natural state logic in hand, we define our concepts more carefully. We then describe limited access orders and open access orders in more detail. The final section lays out a framework for understanding the transition from limited access to open access societies. Understanding the transition is the holy grail, for it is the process of modern social development.

II. Literature

Our conceptual framework is connected to the rich literature on the political economy of development in many ways. The literature is vast, but we have four specific areas in mind. In each case we view our work as supplementing, rather than supplanting, existing ideas and empirical results. This brief review indicates some of the high points of these literatures, it is not intended to be complete or exhaustive.

Over the past two decades, the economics literature on development has exploited the availability of data on the performance of a wide group of countries over substantial periods of time to produce a wealth of studies based on cross sections and panels of countries. The work most closely related to ours builds on North, who emphasizes institutions (North 1981, 1990) and credible commitments (North and Weingast 1989, Levy and Spiller 1994, and Acemoglu and Robinson, 2005). The specific focus of Acemoglu and Robinson on how it is possible for elites to manage to share power relates directly to our ideas about the transition from limited to open access societies. The critical role played by the persistence of institutions emphasized by Acemoglu, Johnson, and Robinson (2002) and by Engerman and Sokoloff (2005) is important

phasiand bRodrik, Sub fram

stretches back in time at least as far as Coase's seminal article on "The Nature of the Firm" (1937). The theory of the firm figures prominently in NIE work, notably with Williamson (1985) and Milgrom and Roberts (1992), who among others developed the idea of credible commitments within organizations that could produce self-enforcing agreements, even in the absence of a state to enforce contracts as a third party. The core insight into the structure of the natural state obviously builds on this work.

A second line of thinking in the NIE focuses on the theory of the state, specifically North (1981, 1990), Olson (1982 and 1993), Levi (1988), and Barzel (2001). We build on their basic insights, but extend them by explicitly considering the state as an organization, which allows us to articulate how the polity and economy interact. We have, however, turned Olson's ideas about the role of organized groups on its head. The proliferation of organized groups in an open access order produces a good outcome, not a bad outcome.

A third line of thinking in the NIE relates to cognition, beliefs, and institutions. North (2005) and Grief (2005) grapple with the problem of cognition and the formation of beliefs. We touch briefly on the importance of belief formation in this paper, but it receives much greater treatment in our larger book project.

The third major area of research is economic history. The deepest vein in twentieth century economic history addresses the question of why Europe? Several different approaches point toward similar conclusions (including Landes 1999, Jones 1998, Rosenberg & Birdzell 1987, and North 1981, 1990, 2005): the presence of competition, at both the level of economic organizations and the level of states; the importance of the emergence, specification, and enforcement of property rights and institutions; the autonomy of organizations; and the

transformation from personal exchange to impersonal exchange (North 1981, Greif 2005).¹

What Jones sees as the result of political fragmentation and competition in Europe and Rosenberg & Birdzell term the autonomy of economic organizations, we see has the emergence of open access. Weber focused on identical questions in *The Protestant Ethic and the Spirit of Capitalism*, although he reached different conclusions than we do about why Europe was unique. But Weber's (1947) emphasis on the importance of organizations as central to understanding the operation of societies is very much in line with our focus on institutions and organizations. Marx (1992) termed as capitalist what we call open access, and by hypothesizing that material conditions determined political arrangements, he failed to capture both sides of the double balance. Adam Smith (1776) of course was the first advocate of an explicit and conscious open access economic order.

Our fourth and final literature is the more diffuse body of work on political development. One of the principle problems with this literature is that there is no agreement about what constitutes political development, although most agree that democracy must be a central part. Our work builds on Acemoglu and Robinson (2005) who ask why elites would choose to give up power and share it with the masses or the poor.

An enormous subset of this literature asks about the relationship between economic development and democracy. Lipset (1959) argues that economic development promotes democracy. A vast literature emphasizes the strong correlation between development and democracy (e.g., Barro 1997, Diamond 1992). But many scholars question whether this

¹Recently, economic historians have addressed the issue of why Latin America fell behind (Haber 1999), contrasting the Latin American experience with that of Western Europe.

relationship is causal. Przeworski, et al. (2000), for example, argue that democracy is no more likely to form at lower or higher levels of income, but that democracy is far *less* likely to degrade into authoritarianism at higher levels of income. In this view, the relationship not causal, but a selection effect reflecting democracy's greater likelihood of surviving in richer countries.

Finally, another huge literature in political science and economics emphasizes the importance of crony capitalism (Campos and Root 1996; Haber, Razo, and Maurer 2004), patronage networks (Scott 1972), clientelism (Huntington 1968), and more generally, of corruption (Heidenheimer, Johnston, and Levine 1989, Nye 1967, Rose-Ackerman 1979, Scott 1972, Shleifer and Vishny 1993, and Wallis 2005). Our concept of a limited access order and the natural state are generalizations of ideas about corruption.

III. The Logic of the Natural State

Our point of departure is a world of endemic violence. The anthropological literature on primitive societies suggest that most primitive societies were extremely violent.² Most modern societies experience episodic civil war and breakdown of order, and the twentieth century proved one of the bloodiest of all times. Whether the problem is the development of a social order *de novo* or whether it is the re-establishment of order in the midst of chaos, every society has to develop mechanisms to ensure or restore order. The benefits of even moderate limits on violence are large enough to gain support from most non-elites as well as elites.

²For violence in primitive societies see Keeley, *War Before Civilization*, and LeBlanc, *Contested Battles*.

We begin with a stylized problem. Imagine a population made up of many small groups and no well organized states or military forces. Some individuals specialize in violence, and all individuals must stand ready to defend their rights by force of arms. Imagine two specialists in violence living in close geographic proximity. They may provide protection to a small group of clients, but the biggest threat they face is each other. If they try to reach an agreement not to fight, the first specialist to put down his arms risks being attacked and killed by the other. Thus, it is an equilibrium outcome for both specialists to continue fighting.

The problem facing the violence specialists is their rational expectation that the other specialist will not refrain from fighting. This means that preventing violence requires that the commitment not to fight be credible on both sides. If the two specialists recognize each other's rights to land, labor, and resources they control, then a solution is possible to the problem. The two specialists agree to honor each other's property rights to all the land, labor, and capital they individually control. All of the surplus produced by their assets are rents to the specialists. Since everyone, violent and non-violent, is more productive in the absence of warfare, then the land, labor, and capital that each specialist controls produces more rents if there is peace.

If the gains from peace are large enough, both specialists will find it in their interests and within their abilities to credibly commit not to fight. By recognizing each other's rights to exploit land, labor, and capital, the two specialists create a fund of rents that enables them both to credibly commit not to fight each other. The specialists do not disarm, indeed they must maintain their military strength both to balance each other's power and to overawe their respective clients. Because their agreement not to fight produces the rents holding the agreement together, the maintenance of the agreement between the specialists requires constant attention

and adjustment as circumstances change. By virtue of their relative strength, the specialists can assign and enforce their own exclusive property rights. They create a set of incentive-compatible institutional arrangements that provide for a nascent state, for property rights, for economic growth, and for the provision of some social order.

The creation of a state by two specialists in violence highlights some aspects of states that economists have not well grasped. First, the state is inherently an organization: it is a group of individuals pursuing a mix of common and individual goals through partially coordinated action. No states are individuals. The idea of a revenue maximizing monarch or a stationary bandit as a single actor “representative agent” of the state misses the fundamental reality that all states are organizations.³

Second, the formation of the state provides a first order solution to the problem of limiting violence by inducing the most powerful members of society to create arrangements that reduce their potential gains from using violence. This form of state does not induce the powerful to disarm or refrain from threatening violence, nor does it eliminate violence. The internal structure of relationships among members of the state – the state’s industrial organization if you will – is what constrains violence.

Third, the balance of violence potential among the individual members of the state need not be perfect; this is a game where even if the winner takes all, he is often worse off than if he

³Mancur Olson’s (1993) roving and stationary bandits and Douglass North’s (1981) revenue maximizing monarchs are at the center of the two most persuasive attempts to explain the interrelated behavior of economies and politics. With all due respect, we submit that modeling the state as a single actor is inherently flawed. Unless we understand the dynamics of relationships within the organization of the state, we can never understand the interrelationship of politics and economics.

doesn't fight.⁴ Instead, a modicum of peace arises, despite the fact that the threat of violence continues to play a central and positive role in maintaining social order. The balance that enables social order to emerge is a balance that combines political, economic, and military interests.

The exclusiveness of the specialist's property rights is critical, since the glue holding the agreements between the specialists together is the rents they earn from recognizing each other's special privileges. If other violence specialists enter, they dissipate the rents, which means it is no longer possible to sustain social order.

Once such an arrangement is in place, it is immediately in the interests of the specialist/leaders to increase the productivity of the assets and people they control by encouraging trade, specialization, and the division of labor.⁵ Each leader, for example, might grant the exclusive right to regulate trade across the group border to a trade specialist. Since the trader has the exclusive right to trade, he earns rents, and the rents he earns give him a strong interest in maintaining the specialists/leaders in power. The relationship is repeated, by extension, to the formation of a set of elites who control all valuable economic, political, religious, educational, and military functions within society.

⁴If the winner could be sure that no rival would emerge, he would be better off vanquishing the other specialist, imposing peace, and reaping the gains. The catch is that another specialist in violence always arises. The key is establishing an agreement between the violence specialists where they remain armed, have a predominance of power so that no new specialists in violence arise, and maintain their incentive-compatible agreement to maintain order.

⁵Note that elites are simply defined as those who share power in the dominant coalition. In some societies elites are hereditary, but they need not be.

Each member of the elite has exclusive or privileged control over specific resources or activities. Because of the limits on entry and access enforced by the coalition of elites, each elite member earns rents from his privileges. As a result, every member of the elite has an incentive to support the current dominant coalition. The rents therefore provide an incentive-compatible commitment device among the elites to maintain their coalition. The privileges enjoyed by the elite extend farther than limits on entry. Elites are able to form organizations whose internal and external relationships can be enforced by the state. Elite organizations enjoy tremendous economic and political advantages in comparison with unorganized non-elites. Recognizing and supporting elite organizational forms, that is by providing the institutional framework within which elites (and no one else) can form organizations, is one of the most valuable privilege that elites possess. We expand on our notions about organizations in the next section. Limited access to organizational forms provides some of the largest rents holding the dominant coalition together.

We call this form of blending political and economic relationships a *natural state*. In a natural state, politics and economics are intimately intertwined. The state uses limited economic entry to generate economic rents which are used to create credible commitments among elites to support the current regime and provide order. Because the political system manipulates the economic system to produce and maintain order, it is meaningful to speak of economic and political systems as existing separately, but it is not meaningful to think of them as independent. The political system is not exogenous to the economic system, since the political system is a primary actor in the economy. Similarly, the economic system is not exogenous to the political system either, since the existence of economic rents structure political relationships.

We call this the natural state because we believe it is the natural response of human societies to the threat of endemic violence. The natural state first emerged historically about 10,000 years ago and remains the dominant form of human society today.

The natural state creates two major advantages in contrast with a primitive order, but each comes with a caveat:

1) The natural state reduces violence, producing enormous social gains. Every member of the society is better off. But there is a qualification: the natural state does not eliminate violence. The internal dynamics of the dominant coalition are based on continuous assessment of the strength of individual members. Part of what holds the natural state together is the threat of violence by coalition members. As conditions change, possible reconfigurations of the coalition enabling a different group to control the social order are always a possibility. Violence and civil war are always potential outcomes. Since the level of violence is reduced but not eliminated, every individual within the elite must be conscious of the possibility of civil war and align themselves into groups that contain potential protectors.⁶ Most elite members are not military specialists: they are traders, clergy, educators, governors, or politicians, but in a natural state every member of the elite must be aligned with a military specialist in case civil war breaks out. A natural state that provides long-term stability can provide an environment of economic growth, but there is always a caveat about the possibility of violence.

⁶This produces what appears to be an extremely common, if not universal, feature of natural states: patron/client networks. For a review of this literature with an application to 17th century France see Kettering, *Patrons, Brokers, and Clients*. For a modern, quantitative study of the role of patronage networks in new democracies see Keefer, 2004, "Democratization and Clientelism: Why are young democracies badly governed?" and Keefer and Vlaicu, 2005, "Democracy, Credibility, and Clientelism."

2) The natural state has inherent incentives to promote specialization and division of labor. The natural state provides elites with the ability to extract surplus from the land, labor, and capital they control. Elites promote specialization and division of labor as long the rents enjoyed by elites increase with social surplus. The natural state possess an inherent balance, however. Some forms of expanding specialization require increasing the degree of entry, openness, and access in the economic system. This, in turn, reduces rents, which may threaten the stability of the entire social order. The natural state therefore involves a tradeoff: the gains from greater specialization must be balanced against the threat of disorder. This tradeoff is why the natural state is a limited access social order. Specialization and division of labor is good for the dominant coalition, but only up to the point where specialization and division of labor erodes the fundamental source of social stability and limits on violence.

Limited access orders have dominated human existence for the last 10,000 years. Clearly, natural states have widely divergent internal structures. Some natural states in the recent past have verged on anarchy – e.g., most recently Chad, Sudan, and Rwanda. Others, such as the Roman, Ottoman, and Chinese Empires, were stable for centuries and produced some of the most sophisticated achievements of human history. All of these societies are or were natural states, however. All limit economic, political, and social access to generate economic rents and then use the rents to create credible commitments between elites to the existing social order.

The limited access order is a social equilibrium. The equilibria share common characteristics:

1) Control of violence through elite privileges.

- 2) Limits on access to trade.
- 3) Relatively strong property right protection for elites and relatively weak property right protection for non-elites. To the extent a natural state is characterized by the rule of law, it is for elites.
- 4) Restrictions on entry into and exit from economic, political, religious, educational, and military organizations.

IV. Concepts

We have introduced terms and concepts whose meaning will not be transparent. The key concepts are institutions, organizations, and social orders. What is common across societies in a given social order is not their culture or institutions, but the way the institutions structure and support and support organizations and how they control violence. We begin with the definition of organizations and institutions, then consider social orders.

IV.1 Competition and Rents

Competition and rents are fundamental concepts in economic theory, and they are features of human behavior present in primitive orders, limited access orders, and open access orders. When we say that the natural state provides social order by limiting entry, we do not mean to imply in any way that the natural state is not competitive! Indeed, it is the incredible dangerous reality of political competition through military means that makes the limitation of economic competition viable. What differs across the various social orders is not the presence or

absence of rents and competition, but the nature of competition and the way in which rents are created.

Rents accrue to the individual or organization that owns or controls an economic asset, when the benefit received by that asset for performing any action exceed the opportunity cost of performing the action. Rents are ubiquitous.

Rents can be created in many ways.⁷ In a perfectly competitive market, infra-marginal rents accrue to many consumers and producers. For example, Schumpeterian (1942) creative destruction implies that technological and institutional innovation frequently produce rents. The competition for rents drives competitive open access markets towards efficient outcomes. This competition also erodes sources of rents created by Schumpeterian competition. In contrast, limiting entry produces classic economic rents by reducing competition. With limited entry, firms or individuals with market power receive rents. Rents can also be created by differential access to organizational forms or resources. For example, if only one firm in an industry has access to the corporate form or special enforcement of its contracts in court, then even in a competitive market that firm earns infra-marginal rents because of lower costs. Deliberate rent-creation by governments results from differential access for individuals or organizations to the goods and services governments can provide, such as enforcement of property rights and contracts, legal systems, resource endowments, public infrastructure, and defense and police services.

⁷For a nuanced discussion of the many ways in which can be created see Khan and Jomo (2000).

Rents exist in an open access order just as they do in a limited access order. What differs is the way the political system manipulates the creation of rents in the economic system in order to order the political system. In an open access order, rents serve as an inducement to Schumpeterian competition. In a limited access order, rents exist because Schumpeterian competition is inhibited or not allowed to function.

Like rents, competition is ubiquitous. All human societies are competitive, although they vary widely in the way they channel competition. When we say that open access orders use competition to provide order, we are not implying an absence of competition in natural states. We are saying instead that competition in a natural state involves different methods and produces different outcomes than in open access orders. Open access orders reduce or eliminate the use of violence as a means of political and economic competition and, by doing so, open up the ability to compete on other margins: price, quality, or votes for example.

Violence is often a regular method of economic and political competition in natural states. The October 26, 2006 edition of the *Economist* included an article on “Bangladesh: Isn’t Democracy Wonderful?” warning of the violence likely to result from upcoming elections and the competition between the Bangladesh Nationalist Party (BNP) and the opposition party

Awarni League (AL):

If the past is any guide, many people will be killed in mob violence and targeted assassinations. The AL admits that it has distributed staves among its followers for impending battles with BNP supporters. Bangladesh's politicians have been buying up bullet-proof vests in recent weeks, according to *Bangla Patrika*, a Bengali-language newspaper. Many observers fear the army may step in.

The Bangladesh situation is competitive, but its political competition cannot be characterized by free entry and open access.

Rents and competition interact with entry and access on many dimensions in every society.

IV.2 Institutions and Organizations

Institutions are the “rules of the game” (North 1990, p **).⁸ Institutions are the patterns of interaction that govern and constrain the relationships of individuals. Defining the rules under which people interact in any society is extremely difficult. Institutions are hard to define precisely because the rules that apply include written laws, formal social conventions, informal norms of behavior, and shared beliefs about the world. We often think of institutions as constraints on the behavior of individuals as individuals; for example, if the speed limit is 60 mph how fast should I drive? But it seems equally clear and often more important for explaining human behavior that institutions structure how individuals form beliefs and opinions about how other people will behave: for example, if the speed limit is 60 mph how fast will other drivers drive? This complex of questions suggests why institutions span formal laws, informal norms of behavior, and the shared beliefs that individuals hold about the world.⁹ Individuals in a common culture hold in common ideas about how other people will behave. Cultures encompass ideas about human behavior passed on to succeeding generations through education and experience.

⁸Greif (2005) provides a more nuanced definition of institutions.

⁹The role of beliefs in institutions is tricky. Formal laws, particularly ones that are enforced, give everyone who knows about the laws common information about the world and about the behavior of other individuals. If a belief is widely shared within a population, even if it not encoded in a law or observable in day to day behavior, the belief can nonetheless shape the information that a group of people have about how other people will behave. But not all beliefs work this way. So it is inaccurate to say that beliefs are institutions, but it is sometimes appropriate to say that shared beliefs make up part of the institutional structure of a society.

All institutions, at the formal, social, or personal level, contain an important element of abstraction: they are, in part, models about the world and the people around us. This argument also implies that institutions are extremely difficult to pin down observationally. Some components of institutions are readily observable, such as formal rules, while other components are almost impossible to observe, such as shared beliefs.

In contrast, organizations are concrete; they are made up of specific groups of individuals pursuing a mix of common and individual goals through partially coordinated behavior. Organizations are flesh and blood entities. Organizations act. Because an organization coordinates its members actions, an organization's actions are more than the sum of the actions of the individuals who make it up. Of fundamental importance to economists: organizations make choices.

Institutions and organizations are easily confused. Almost all human organizations have an institutional structure. As noted, institutions are models about how people around us will behave. A primary benefit of belonging to an organization is the ability to coordinate our actions with the actions of other members of the organization. Coordination requires that individuals share a set of models about how people behave. Coordination within an organization requires that members share a set of models about how they each will behave. Because the rules, norms, and by-laws structure the relationships of an organization's members, they constitute its institutional structure. In some organizations these structures are formal; in others, they are informal.

A more accurate (and helpful) way to express this relationship is that most human organizations have institutional structures. We call those institutional structures *organizational*

forms.¹⁰ Organizational forms are the rules about how individuals within an organization are supposed to interact and how the organization and its members are supposed to interact with people outside of the organization. These organizational forms can be formal, informal, or part of the belief systems of the members. The organizational form taken by any specific organization is in part determined by the organizational forms supported by the wider society of which it is a part (e.g. partnerships and corporations in the modern world) and by the interests of the organization and its members.¹¹ We are particularly interested in the organizational forms that the wider society supports since, as we will develop shortly, natural states effectively limit access and create rents by limiting access to organizational forms.

We distinguish between two main types of organizations: adherent organizations and contractual organizations. The distinction between them is simple but profound.

Adherent organizations are characterized by self enforcing, incentive-compatible agreements among their members. Adherent organizations do not rely on third parties to enforce agreements among members. Cooperation requires that, at every point in the existence of the organization, it must be in the interests of all of the members to remain in the organization, or those individuals cease to cooperate.

Contractual organizations, on the other hand, utilize third party enforcement of contracts among their members.¹² Contractual organizations may also rely on incentive-compatible

¹⁰Organizational forms are a subset of all the institutions in a society. Not all institutions are organizational forms and all organizations are made up of more than institutional forms.

¹¹ The behavior of any human organization, however, is not determined solely by its organizational form, because every organization is made up of real human beings, not institutional abstractions.

¹²For ease of exposition we will generally refer to agreements as relationships between individuals that are incentive-compatible and self-enforcing; and contracts as relationships

agreements among members in contractual organizations (as Williamson 1985 argues for the firm). In contrast to adherent organizations, contractual organizations employ third party enforcement for some arrangements so that members can pre-commit to a subset of arrangements among themselves that may not, at every point of time, otherwise be incentive-compatible.¹³ Thus, equity markets and their third-party enforceable contracts are an important component of modern firms even if, per Williamson, much of the internal organizations of firms involves self-enforcing contracts.

The sovereignty of states implies that they are necessarily adherent organizations. States are always organizations, and the fundamental problem facing any would-be state is how to structure internal agreements among members that are incentive-compatible and self-enforcing. Violence, as we have seen, can play a role in adherent organizations, since some incentive-compatible arrangements involve the credible threat of violence by one or more members. Because of their nature, all states must include arrangements that deal with violence. Natural states are a way of matching violent individuals with economic rights to create incentives to reduce the use of violence and to increase specialization and exchange.

Once a natural state has been created, violence specialists have a comparative advantage in providing third party enforcement for a variety of organizational forms.¹⁴ One of the most valuable privileges a state can extend members of the elite is allowing them to form contractual

between individuals that may require third party enforcement. By third party enforcement we mean enforcement by an individual outside of the organization.

¹³There are a wealth of examples of both adherent and contractual organizations in the industrial organization, game theory, and political economy literature.

¹⁴See the discussion in Barzel's *Theory of the State* explaining how the state comes to have a comparative advantage in third party enforcement of contracts.

organizations whose internal arrangements the state will enforce. The state can effectively exclude non-elites from participating in many activities simply by refusing to recognize non-elite contractual organizations or to support non-elite contractual organizational forms.

The range of activities that can be undertaken by an organization depends in part on its internal structure. Modern, developed societies are literally brimming with contractual organizations. The wide range of contractual organizational forms supported by an open access social order is the key to its success as a political and economic system.

The central importance of contractual organizations raises a fundamental question about the structure of the state: who will act as a third party, and what will be its biases? Every society with contractual organizations must have an organization that provides third party enforcement (whether it uses coercion or not). That organization has to be formed from purely incentive-compatible agreements among its members. That organization, of course, is what we call the state.

IV.3 *Social Orders*

Social order encompass the political, economic, cultural, religious, military, and educational systems.¹⁵ A social order determines the characteristic organizational pattern of its constituent systems. Specifically, the social orders are distinguished by their ability to create and maintain contractual organizations. The typology of three social orders sets out five

¹⁵Social orders are not specific manifestations of particular political, economic, or other institutions. For example, neither “democracy” nor capitalism are social orders. So, for example, democracy is a political system, constitutional democracy a more specific political system, parliamentary representative democracy an even more specific political system.

intellectual tasks: models of the three social orders, a model of the transition from primitive orders to limited access orders, and a model of the transition from limited access orders to open access orders. In our larger project, the transition from limited to open access social orders is clearly the most challenging and rewarding process to understand. But first, we need to understand where that transition begins.

IV.4 Some observations about these concepts.

With concepts this general, it may be useful to be specific about what we are not saying. First, no teleology is implied by the progression from primitive to limited access to open access orders. Nothing is automatic about either transition. Three hundred years ago, when the first open access orders emerged, significant parts of the world still lived in primitive orders. The rise and fall of civilizations, large and small, suggests that progress is not linear, and regressions can occur. The twentieth century witnessed several limited access orders verge for a time on a breakdown into violent anarchy (e.g. Rwanda, Bosnia, Cambodia, and the Sudan) and some on the verge of, or in the process of, transiting from natural states to open access orders (Taiwan and South Korea spring to mind).

Second, the clean break in the conceptual framework between the three orders is not matched by a neatly observable clean break in the historical record. Primitive social orders do not just wake up one day to become limited access orders.¹⁶ Nor do limited access orders

¹⁶Anthropologists have long tried to identify “great divide” where states first appear, and we believe that this divide marks the transition from primitive orders to limited access orders. The anthropologist’s difficulties are evidence of how messy the transition is. Bands, tribes, chiefdoms, kingdoms, and states are all arrayed along the transition path.

suddenly become open access orders in a day, a month, or a year. Nevertheless, it does appear that transitions occur in a period of time that are quite short by historical standards, something on the order of fifty years or less. In the twentieth century Taiwan, South Korea, Ireland, and Spain appear to have made very rapid transitions. In the late eighteenth and early 19th century, Britain, France, the Dutch, and the United States made transitions that took roughly fifty years.

Third, it does not seem that societies are laid out historically in a gradual continuum of social orders. Substantial and significant changes occur in societies that become developed. Moreover, a “missing middle” exists between developed and non-developing societies. The cross country growth literature finds over and over again that rich countries exhibit convergence, but poor countries are not converging to rich countries. We believe that this reflects the existence of just three social orders, no more, no less. Primitive orders are demonstrably and discontinuously different from limited access orders. Limited access orders are demonstrably and discontinuously different from open access orders.

We interpret the strong and persistent difference in social structures and economic outcomes in the developed and non-developed worlds as clear evidence of the discontinuity. But the discontinuity is structural, not temporal, in the sense that societies making the transition from limited to open access must, necessarily, make a transition over a period of historical time. Transiting from one order to another (in either direction) is not easy and it does not happen frequently in history. We consider question of continuity in historical processes and discontinuity in social orders in the section dealing with the transition process.

Fourth, a wide range of specific political, economic, military, religious, educational, and other systems are possible within a given social order. For example, a natural state may exhibit a

large number of possible coalition structures, and with them associated limits on economic entry, that sustain a viable dominant coalition. Dictatorships, strong men, juntas, aristocracies, monarchies (hereditary and not), single party regimes, and representative assemblies (of the elites not the masses) all seem to represent viable internal structures for a natural state in some historical circumstances. Historically, natural states are vulnerable to internal revolutions, particularly palace coups, that change the faces of the leading elements in the dominant coalition without changing the nature of the social order. In terms of institutions, the natural state's lack of stability implies that

porstats, the aim of institutions is to generate order (of the order) in the natural state. (Jensen 1993: 233)

society the balance among political, economic, religious, military, and educational organizations is in continual flux. Individuals, groups, and organizations are always contending for power, resources, status, and other rewards. What appears to be stable, across time in individual societies, is the pattern of interaction with respect to access to organizational forms in the individual spheres of social activity.

V. Limited Access Orders

The next two sections briefly lay out the main aspects of limited access orders and open access orders, followed by a rough sketch of how societies historically have made the transition from one to the other. A brief mention is made of primitive orders and the first transition, but we focus on the last 500 years, not the last 50,000.

V.1 Limited Access Orders and the Natural State:

A primitive society is made up of many small social units, with very little specialization and division of labor. This social order also experiences a high level of violence. The creation of larger social units enables a greater level of specialization and division of labor, but greater specialization creates two problems: the emergence of specialists in violence and the need to coordinate social interaction within and among larger groups. The natural state is the specific mechanism by which both problems are solved. Historically, the natural state stretches from 10,000 years ago to the present day.

How can a society with large numbers of small social units, each with some internal specialization and division of labor, including specialists in violence, reach an agreement that enables the creation of a stable larger political unit (however organized) as well as an increase in exchange?¹⁷ The fundamental problem is creating incentive-compatible arrangements between powerful groups – where power is military, economic, or religious – that bind the interest of the groups to the continued existence of the state.

We have already described how the natural state solve these problems by creating and maintaining privileged rights to valuable resources, such as land, or valuable social interactions, such as trade or worship. We define individuals or groups who possess these rights as elites. The recognition of elite privileges creates rents to land, trade, and worship. In turn, the rents are more valuable the more stable and peaceful the society and the greater the degree of specialization and division of labor. The rents bind the interests of elites to the current dominant coalition. Any threat to the existing coalition threatens the rents of all elites, because a breakdown in social order reduces everyone's rents.¹⁸ The existence of rents also creates incentives, at the margin, for policies that increase stability and trade. In combination, this form of state creates social stability that prevents disorder by creating a set of self-enforcing agreements among elites that simultaneously create political and economic relationships within the state.

All natural states, therefore, face an ongoing dilemma of how big to make the dominant coalition. Increasing the size of the coalition gives it more power, but dilutes the rents that hold

¹⁷One can think of Greek City states around 1,000 BCE, Europe in the 10th century, or Afghanistan in the 1990s as examples of regions with many, highly fragmented, social units.

¹⁸This, of course, does not preclude factions within the elites from scheming to overthrow the current coalition, or continuous contention within the coalition over the distribution of rights and rents.

it together.¹⁹ A credible balance among interests must therefore exist within the groups that make up the dominant coalition. Elites support and maintain the state. They enforce their rights in part by threatening to withdraw from the coalition if their rights are violated. Because the state needs to maintain sufficient support to survive, the threat of elite withdrawal is a credible potential threat forces the state to honor its part of the agreements to elites. Credibility, therefore, necessarily limits how large the coalition can be. If the coalition becomes too large, it dilutes the ability of elites to threaten the natural state (and its support coalition) by withdrawal of support.

External competitors may potentially be integrated into a natural state's coalition. Boundaries of natural states are often fluid, since the possibility of incorporating an additional geographic unit into the dominant coalition is possible, as is the possibility that the existing coalition will break down into smaller units. As a result, the distinction between internal and external relations is often blurred in a natural state. Only with the rise of nation states over the last 300 years have well defined boundaries emerged throughout the world (an issue we return to below) and created a much sharper distinction between domestic and international security.²⁰

¹⁹ To model the natural state, we draw on the theory in Greif, Milgrom and Weingast (1994). We assume that increasing the size of the coalition increases the probability the state will survive, but at a declining rate: the marginal value of an additional individual's support declines as the size of the coalition rises. Expanding the coalition has three separate effects. First and most obvious, a larger coalition increases the probability of survival; second, it dissipates the rents across a wider group, lowering the average value of the coalition to its members; and third, the declining marginal value of support means that increasing the coalition lowers the costs to the state of defection. The natural state trades off the benefits of expanding the support coalition which increases the probability that the coalition survives against the costs of dissipating the rents and lowering the costs that coalition members can impose on it in the event that the state fails to honor its agreement. Too large a coalition implies that the rents are insufficient to bind particular groups to the coalition, and hence they will defect.

²⁰Over the last two hundred years, the rise of open access orders in the western world resulted in the rise of nation states with well defined boundaries (an issue discussed in the next

The distinction between the stability of a social order and the changing nature of political and economic systems should now be clearer. A limited access order is characterized by the creation of privileged access to valuable rights and activities. Those privileges are enforced by the political and military elites within the state and enjoyed by elite members of the dominant coalition. That aspect of the social structure typically does not change over time (at least from the emergence of larger social units 5,000 to 10,000 years ago up to the emergence of open access orders 300 years ago). The specific members of the dominant coalition, the particular rights and privileges created and enforced by the natural state, and the identity of the major players, however, are subject to episodic adjustment. In this sense, social orders are stable, but not static. The kaleidoscope of recorded history is largely a record of the shifting patterns of coalitions and systems within the framework of the limited access order and across the fluid geographic boundaries of the natural state.

The theory of the double balance identifies the interactive nature of the constituent systems in a social order. First, each system must have its own internal balance. In the natural state, there must be a political balance of military power and political power within the dominant coalition. Similarly there must be a balance (equilibrium) within the economic system. Second, the relationship among the systems must be balanced, hence the double balance. In the natural state, the distribution of economic assets must conform to and support the distribution of political power. In any specific society, the actual distribution of economic rents and political

section). The expansion of European power to the rest of the world in the 19th and 20th century produced a world defined by boundaries. Those boundaries persisted even after the end of colonial rule (see Tilly, *Coercion and Capital*.) Well defined national boundaries were not a feature of most states before 1700.

control must be closely related. In general, a limited access political system will be incapable of supporting an open access economic system: political control over entry inevitably undermines economic competition. Likewise, a limited access economic system is incapable of sustaining an open access political system: concentration of economic rents enable elite groups to undermine political competition.

The balance of limited access orders builds on inherent affinity in human nature for building personal relationships. Natural states are hierarchies of personal relationships. Elites hold power by virtue of their personal position in the dominant coalition. Rights are never impersonal in a natural state, they are always subject to revision (no matter how they are stated legally, if such a concept even exists in that state).

By extending the range of feasible personal relationships, the limited access order possess several major advantages over a primitive order. The first is that limited access orders provide the framework for the emergence of institutions that provide well defined property rights, if only for elites. The fundamental cohesion of the natural state arises because elites recognize each other's rights to the possession of valuable resources and activities. The mutual recognition of rights is credible because of the underlying gains from the natural state. Extending the hierarchy of relations that make up the natural state can produce more specialization and division of labor, subject to the condition such an expansion not dissipate rents. Regularizing relationships among elites may also produce more trade and a greater surplus. This leads to a prediction:

The origin of property rights and legal systems is the definition of elite rights.

The second major benefit of the natural state is the incentives it creates for the promotion of trade within and among groups and the associated increase in specialization and division of labor. The right to trade is a privilege defined by the dominant coalition, leading to another prediction:

*All natural states control trade among states.*²¹

The third major benefit of the natural state is the support it provides for organizations. Perhaps the most valuable right possessed by elites is the ability to form contractual organizations whose internal and external relations can be contractually enforced by a third party. The ability to create and support contractual organizations vastly increases the productivity of individuals in a limited access order as compared to a primitive order. The right to create organizations, however, is limited to elites, it is not available to everyone, leading to another prediction:

All natural states limit access to organizational forms.

Limiting access to organizational forms is both the key to understanding why the natural state works as a social order and is able to support so much economic development over the last 10,000 years. By supporting larger and more complex organizations, the natural state is able to raise productivity directly and capture gains from specialization and division of labor.

Conversely, limited access is also the key to understanding why the natural state impedes modern economic growth. The limitation of economic exchange to personal relationships places major limits on the productivity and performance of a limited access economy.

²¹There is a great deal of evidence that the primary activity of chieftans in nascent states identified in the political anthropology literature is control of trade. See Claessen and Skalnick (1978).

The limitations of natural states leap out when we compare them to open access orders. First, despite the limited access order's ability to promote trade, the necessity of creating rents to promote stability produces an inherent tendency for natural states to create market power and restrict competition. The difficulty in starting a t-shirt factory in Peru, documented by De Soto, is a classic example of how the natural state not only refuses to support the creation of organized economic activity but actively discourages it for non-elites.²² The "crony capitalism" common in today's developing world (Campos and Root 1996) represents another manifestation of the natural state's inherent tendency to limit access to organizational forms to members of the dominant elite.

Second, natural states face impediments to making the credible commitments necessary to protect the rights of non-elites. Non-elites cannot credibly threaten the state or coalition, because a natural state's survival does not depend on the support of non-elites. Independent of what the laws or constitution of a natural state say, non-elites cannot credibly accept promises by the state to protect their rights. Non-elites therefore make significantly smaller investments in physical and human capital than they would if their rights could be credibly guaranteed. This too limits growth in natural states.

Non-elites also employ what James Scott calls "the weapons of the weak" in order to protect what property and assets they do have. The rational peasant (non-elite) behaves in systematic ways to make it more difficult for the lord (elite) to determine whether the peasant is working hard and using resources effectively. Foot dragging, malingering, dissimulation are the

²²The De Soto cases have been extended in a series of studies carried out by the Coase Institute, as well as extensive studies done by the World Bank.

order of the day. As a result, not only are property rights poorly defined conceptually, elites deliberately raise transaction costs.²³

Within the logic of the natural state, patronage networks develop as a characteristic form of extending a modicum of protection to non-elites. Scott shows how a social system works where elite patrons are able to exploit their privileged position by providing protection to their clients. Patronage networks are a common form of social organization in today's developing world, as well as the nineteenth and early twentieth century American South and seventeenth and eighteenth century France.²⁴

The third and most debilitating weakness of natural states is that limited access prevents market prices from allocating resources between competing uses. Figure 1 gives the typical market power diagram, with constant marginal cost. The neo-classical analysis predicts that the monopolist will charge P_M , but that conclusion depends on unconstrained profit maximization by the monopolist. In a natural state, valuable privileges are used to hold the political economy system together. Rather than capturing rents by charging a high price, the possessor of a privilege may exploit it by charging a low price and allocating the resource to political allies. The seller in this market may charge any price between P_M and P_B . For example, in many non-developed countries, public water is provided at prices below cost. In return for access to water, individuals must deliver politically valuable votes or support.

²³The problem is even worse. A primary way to limit access indirectly is by raising transaction costs, so both elites and non-elites engage in behavior that deliberately raises transaction costs.

²⁴See James Scott (1987), Alston and Ferrie (1985) on the American South, and Sharon Kettering (1986) on 18th century France.

It seems counterintuitive, but a limited access order where all elites charged the monopoly price in all markets would be a far more efficient and productive society than one in which elites do not charge market clearing prices, but instead allocate goods and services at prices reflecting political advantage.²⁵ When elites charge less than market clearing prices to secure political ends, the result is that prices cannot be used for impersonal coordination of the behavior of individuals. Natural states thus cripple the price mechanism as a means to convey information about marginal benefits, marginal costs, and scarcity.

Neo-classical economists believe that prices always work to allocate resources and have done so throughout all of human history. Our perspective suggests that it is not surprising that modern economic analysis of the price mechanism did not develop until open access orders with competitive markets began to develop. Competitive use of resources have existed since the dawn of human existence, but, with a few notable exceptions (such as ancient Greece), competitive markets with prices that convey information capable of coordinating human action are a recent development.

VI. The Logic of Open Access

Where limited access orders use rent-creation to provide social order, open access orders use competition. Although all natural states limit competition in order to create rents, they cannot

²⁵This corresponds closely to Shleifer and Vishny's ideas about different forms of corruption.

suppress all competition. Similarly, all open access societies possess some rent-seeking and rent-creation.

Economic theory explains how competitive markets work, how market competition produces welfare enhancing outcomes, and how the price mechanism serves as an impersonal means of coordinating individual behavior. But neo-classical economic theory makes a set of extreme and implicit assumptions about the nature of politics and the state: competition is sustained, entry is open, property rights exist and are enforced, violence is not used to allocate resources, and (embedded in the zero transaction cost assumption) a ordered society already exists. All of these assumptions place significant restrictions on the nature of the state in ways

²⁶See Przeworski, Alvarez, Cheibub, and Limongi, 2000 for an in depth study of democracy and development. Keefer and Vlaicu also analyze why new democracies so often fail.

all very rich societies are democracies. Our framework suggests that economic and political institutions are so deeply enmeshed that identifying a causal relation is unlikely to yield a deeper understanding of the processes involved in sustaining a social order. We argue that political and economic competition help sustain one another.

The central question in an open access theory of politics is explaining how both political and economic competition are maintained. Political officials face natural pressures to create privilege and provide benefits, and many studies emphasize this rent-seeking aspect of politics (e.g., Buchanan, Tollison and Tullock 1980). What prevents these forces from transforming an open access order into a natural state? how is open access to organizations of all types sustained?

Calling on the good offices of a constitution does not provide us with an explanation. We then have to explain how the constitutional order is sustained, a question we turn to below. Political competition in an open access order requires, indeed it demands, the presence of many large, sophisticated, well organized interests that can effectively compete with one another through whatever political institutions exist.

Neo-classical economic theory, when extended to include organizations (firms), provides a compelling logic of how powerful and sophisticated interests coexist in a competitive equilibrium. Firms do not peacefully coexist. Ford, GM, Toyota, Nissan, Mercedes, and BMW engage in constant competition, but are typically incapable of wiping each other out over the short run. The dynamics of a competitive market ensure that, absent either government intervention on behalf of one competitor or economies of scale in production, markets with open access will remain open and competitive. Further, as Schumpeter emphasizes, over the long run competition consists less of competition on price than competition on new innovations and

products. Over the long run, the process of creative destruction does eliminate rival firms on entire industries. Creative destruction depends critically on open entry and support for organizational forms. The ability of entrepreneurs to perceive new opportunities to capture rents and to form organizations to capture those benefits. Critically, markets with open entry will generate economic interests within firms (and other economic actors as well) that are extremely sensitive to changes in government policies.

The main point is that market organizations have vested interests in maintaining the system that supports the protection for property rights, enforcement of contracts, and the rule of law. At the margin, politics does intervene in markets for political ends, but the fundamental

convinced that it is in their interests to concede power today and that they will live to fight another day? Our answer has three basic pieces:

Piece I: An open access order is characterized by open access to organizational forms, specifically to contractual organizational forms, that are open to all individuals who meet impersonal requirements.²⁷ Political and economic institutions allow everyone access to specific contractual and organizations forms. A vast array of organizations form to provide club-like public goods to their members.

Piece II: As Weber defines the state (1947, 156), in all open access orders the state possesses a monopoly on legitimate violence. The monopoly involves two dimensions. First, the state does not support private organizational forms for organizations that use violence. Second, the open access state suppresses alternative sources of violence. Open access orders that fail the second task typically fail to remain open access orders.²⁸

Piece III: Because the state holds monopoly control of violence, rules about when and why the state can use legitimate violence must be clearly specified and well understood. Further, the illegitimate use of violence by the state can be identified and policed by sanctions against members of the government.²⁹

²⁷In a modern open access society “access to organizational forms” is often understood as an individual right.

²⁸This does not mean that any society where the state possesses a monopoly of legitimate force is an open access order. A monopoly on violence is necessary for an open access order, not sufficient. Although most natural states attempt to monopolize the use of violence by including the most powerfully violent members of society in the dominant coalition; most fail. Open access orders successfully prohibit legitimate organizations from competing with one another through the use of violence and coercion.

²⁹The rules about legitimate use of power must be clear, typically through constitutional “bright lines” that make it clear when those in power have violated the rule.

The ability to impose sanctions on the government requires well specified, well understood, and non-violent mechanisms that enable rival groups and organization to: (a) compete for control of the state; (b) protect their rights against encroachments by both the state and other private groups; (c) to resolve disputes among groups; and (d) that these mechanisms work.

Maintaining open access, therefore, requires ensuring that the constitutional rules noted in Piece III are enforced. Many limited access orders in the world today have constitutional rules and laws that limit illegitimate violence by the state and provide secure rights and dispute resolution for private citizens, but the government fails to honor the rules and laws. How does it work in an open access order?

As Weingast (2006) analyzes, the possibility of winner-take-all outcomes in political contests implies that all successful political constitutions limit the stakes of power. That is, political competition in an open access order is usually over control of relatively small pieces of the state and its functions. Everything is not up for grabs in any specific election. A system of constitutional government is described in terms of both individual rights and various structure and processes of government that constrain governmental policymaking. But individual rights are only protected if the mechanisms of government articulated in the constitutional structure – the checks and balances and multiple veto points of a functional open access constitution – are backed by incentive-compatible commitments on the part of relevant groups in society to act to protect those rights.

Rights and constitutional structures are enforced through a range of mechanisms, some general and some specific. The most general mechanism is the consensus condition (Weingast

1997, 2006). The idea is that when citizens have the ability to react in concert to constitutional transgressions, they can threaten those in power who seek to violate the rules. Incumbents need support to survive, and a coordinated reaction that withdraws support from rulers threatens their survival. Constitutions of open access orders create focal solutions to these coordination problems that help citizens react in concert.

But citizens cannot coordinate their reactions on their own, they require the help of intermediaries – organizations. If the government violates a well understood constitution rule, then open access political constitutions rely on the coordinated action of constituted authorities and citizens to detect and punish violations of the rule. Punishment mechanisms will not be self-enforcing, however, if only members of the government can impose penalties for the violations of the constitutional rules (as is the case in a natural state). The public at large must also be capable of detecting and punishing unconstitutional behavior. This punishment is unlikely to arise through the uncoordinated actions of individuals acting as individuals, the costs of coordinating collective action are too high. Citizens, somehow, need to coordinate their coordination.

This is where Piece I comes in. Open access makes this all work. Open access societies are filled with a wide range of well organized groups. These organizations may form for any number of reasons, but whatever the reason, the existence of well organized groups provides numerous focal points for the where the concentrated effects of a government action can be evaluated and contested. Governmental actions that adversely affect a large number individuals

also show up on the radar of many organizations.³⁰ These organizations have already overcome the free rider problem through their ability to access third party enforcement of internal agreements. Some of the organizations affected may be political, some economic, and others may be purely social. But they can all respond in a coordinated manner. Any organization, whatever its original purpose, can be readily adapted to serve the political interests of its members when necessary. Indeed, this threat of political action by organizations is a major reason most natural states suppress them. An open access society with large numbers of competitive contractual organizations is therefore much better equipped to enforce a political constitution.³¹ This is the logic of open access.

Political scientists have long recognized the importance of a well developed civil society – that is, a society rich in organizations – for maintaining democracy (O’Donnell and Schmitter 1986). The existence of well organized economic interests strengthens the credible commitment of, for example, a democratically elected majority not to exploit the interests of the minority. Likewise, the existence of well organized political organizations operating in a competitive political environment strengthens the credible commitment of the state to allow open access to most forms of economic activity.

A range of more specific mechanisms also help prevent an open access order from retrogressing into a natural state through the imposition of privilege, exclusion, and rent-

³⁰This is not to say that large numbers of individuals in an open access society cannot be repressed or exploited, obviously they can. But it is very difficult to systematically repress or exploit individuals who have the right to form contractual organizations and use those organizations to contest for political or economic power.

³¹Not every citizen needs to pay attention to what the government is doing all the time. The creation of focal points in constitutions, and both political and economic organizations, enable a society to effectively monitor the behavior of the state at relatively low cost.

creation. We have already seen how competitive markets help coordinate reactions against governmental transgressions. In addition, mobile factors of production and the government's fiscal interests work against systematic encroachments on the rule of law, property rights, and the market more generally. Mobile factors of production, particularly capital and labor, tend to move from jurisdictions that provide less hospitable environments to those providing more. In a global economy, this means that countries experiencing significant increases in levels of rent-seeking and compromises of the rule of law tend to lose capital, including human capital. Similarly, most open access orders rely on broad taxes to finance governmental programs and public goods, typically income taxes or value added taxes. Broad based economic taxes imply that the government's revenue is correlated with the health of the market. Increasingly high levels of privilege and rent-seeking shrink the economy, and with it, tax revenue.

In combination, mobile factors of production and fiscal interests imply that, no matter what an incumbent government's goals, significant attempts at rent-creation by the government will shrink both the economy and tax revenue. This shrinkage implies a feedback mechanism: people are out of work; and shrinking tax revenue implies that the government cannot sustain a constant level of political benefits. Both make survival for incumbents problematic.

Finally, elections provide a fundamental check on transgressions by providing the opposition with incentives to champion the cause of those whose interests and rights the government seeks to transgress. Open access to organizations of all kinds provides a means of coordinating citizens, groups and firms, and opposition parties to contest potential transgressions.

Implications

As with the natural state, a close connection exists within open access orders between the institutional structure of the political and economic systems. A double balance of institutions and organizations characterizes all open access orders. In this way, political competition strengthens economic competition and economic competition strengthens political competition. Open access in economics implies a vibrant set of organizations to react to constitutional violations. Open access in politics also helps police the government and sustain the basic institutions necessary to maintain competitive markets, such as secure property rights and the rule of law.

The presence of competition within open access orders fosters impersonal exchange and enables the price mechanism to function. Functioning markets bring a multitude of benefits. In contrast to natural states, prices reflect scarcity. Resources are therefore able to move to their highest valued use and because prices reflect marginal costs and marginal benefits, resources can actually seek out and determine their highest valued use.

Not only do prices impersonally coordinate market exchange, changes in prices immediately signal the effects of government policies. A key way to limit the stakes of power at issue in political competition is to specifying a range of rights, including economic rights, that the government must not transgress. Part of making commitments to these rights credible is the price mechanism, which quickly conveys information to interested parties, and the existence of organizations who respond to the information. Economic rights combine with open access to foster the investment necessary for thriving markets.

Historians have long emphasized that a major aspect of long-term economic growth is the emergence of impersonal exchange (North 1981, Greif 2005). Truly competitive markets police

a wide range of cheating and opportunistic behavior. Individuals who trust that they will not be cheated at the grocery store invest far fewer resources to measuring, monitoring, and transacting in general. Put another way, impersonal exchange economies have low transaction costs.

Because they are not restricted to trading with merchants with whom they deal with repeatedly, the number of trades they engage in are larger than in a limited access order. Transaction costs throughout the system fall, and markets in general are not only supported, they operate more efficiently.

A final question to consider is why the same mechanisms that sustain an open access order do not have the same effect in a natural state. After all, natural states have markets, mobile factors of production, fiscal interests, and, often, elections and even a degree of the consensus condition. The answer is open access and competition: All these mechanisms work differently in the presence of open access and competition. Natural states limit access and exclude competitors. They make it difficult to form organizations, so they limit the range of organizations that help citizens coordinate against the government. Indeed, preventing this coordination is one reason why most natural states restrict access to organizations. Moreover, a natural state's greater control of the economy for rent-seeking purposes inhibits market mechanisms. Mobile factors of production, for example, have far less effect in countries that actively restrict out-migration of labor and capital. Control of markets also means that market prices work far less efficiently at signaling the effects of government actions. And in those natural states with elections, restrictions on organizations, free speech, and electoral competition reduce the efficacy of elections. Finally, natural states do not satisfy the consensus condition to the same degree. In combination with restrictions on organizations, limits on the consensus

³²McIlwain's *Constitutionalism: Ancient and Modern* is a classic and edifying example of how the concept of "popular consent" can be traced from the Greeks, through the Romans, the canonists, the medievalists, and the British, up to modern times. Berman's *Law and Revolution* does the same for the idea of the rule of law. Gierke's *Politics in the Middle Ages* follows the development of corporate forms. Kantorowicz's *The Kings Two Bodies*, investigates how the idea of a corporate and impersonal state evolved in Europe. In economic history Jones *The European Miracle*, builds his case for why Europe develops on the fragmentation of, and subsequent competition between, political units. Landes, *The Wealth and Poverty of Nations*, focuses on culture as a the critical determinant of why some societies develop and others do not. Rosenberg and Birdzell, *Why the West Grew Rich*, focus on a combination of technology and organization. Examples of this type of historical analysis, while finite, appear to be innumerable.

elites. These institutions begin the transition and place a natural state on what we call the *doorstep*.

The second step identifies the forces that sustain the movement of a limited access order on the doorstep toward open access. A central feature of natural states is that the size of the dominant coalition is self-limiting. Natural states generate equilibrating forces that tend to limit access. To explain how the dominant coalition expands access, we must identify how the natural state's self-limiting forces are overcome.

The third step in our argument begins with an often overlooked observation that deserves special emphasis: the same institution or mechanism may produce different outcomes in different circumstances. In particular, many institutions and mechanisms work differently depending on whether the institution is embedded in a limited access order or an open access order.

Institutions are made up of rules, behavior patterns, and beliefs. For example, a rule, such as electing a leader by majority vote of the qualified electorate, produces different results in the presence of open entry and political competition than in the presence of limited access.

An important implication of this observation is that it is more difficult to create and sustain an institution if new rules and behavior patterns have to be invented from whole cloth than if a set of existing rules and behavior patterns can be adapted to the form the new institution (Greif 2005). For example, it is generally easier to implement competitive elections in a society that already allows elections, even if the original elections are not competitive.³³ Similarly, it is

³³The presence of elections Mexico for most of the 20th century did not mean that those elections were competitive, see Haber, et al. But the presence of elections as an institutional rule has made it easier for the Mexicans to move toward competitive elections over the two last decades. They did not simultaneously have to invent the institution of elections and open access to political organizational forms, just the latter.

easier to create open access to perpetually lived corporations in a society that already sustains limited access to such corporations. The point applies to all institutions. The third step points toward identifying how the development of institutions of the natural state can be adapted to open access with a minimum amount of institutional change. Understanding the transition requires explaining how small increases in access in a natural state can somehow grow into a full blown transition.

Any explanation of the transition process must start with a natural state. Beginning with a natural state, however, imposes three specific logic requirements on our explanation. Any explanation of the transition must meet the following criteria:

LC 1) The institutions, organizations, and behavior of individuals in place at the beginning of the transition must be consistent with behavior in the natural state.

LC 2) The changes in institutions, organizations, and behavior that occur during the transition must be explained as intentional acts consistent with the interests of the dominant coalition, but the results of those changes need not be consistent with their intentions. Although members of the natural state coalition may deliberately make institutional or organizational changes, their purpose is typically not to initiate or further the transition process.

LC 3) The transition occurs in historical time through a series of reinforcing changes in institutions, systems, and individual behaviors. Incremental increases in access must be sustained by the existing political and economic systems at each step along the way.

The logical conditions, requiring that the explanation of the transition must begin with behavior consistent with the logic of the natural state, allows us to trace through a set of changes in institutions, organizations, and behavior that can support movements toward open access.

VII. 1 *The doorstep conditions and impersonal exchange*

The internal structures of every natural state typically undergoes regular, if episodic change. Regimes and dynasties rise and fall, relative prices continuously adjust, climates fluctuate, neighboring competitors appear and disappear, and boundaries and borders shift. The wide variety of possible forms that can be taken by political and economic systems within a natural state produce different economic and political outcomes.³⁴ Moreover, as the circumstances of a natural state shift, so to do these outcomes. Out of these shifting patterns, societies occasionally produce arrangements with a better chance of making the transition to open access. Historically in the west, societies in Athenian Greece, Republic Rome, and the Renaissance city-states of Northern Italy appear to have been on the doorstep of the transition, although all three failed to produce modern open access societies.

We begin our analysis of the transition by asking what are the characteristics of some natural states that make them ripe for a transition and, then, that allow them to sustain the transition?

The central feature of the transition is the development of impersonal exchange among elites. Personal exchange involves a personal, on-going relationship between the exchange parties so that repeated dealings can be a central aspect of exchange enforcement. If one party

³⁴On the economic side, Ian Morris finds using evidence from anthropometric measures and material culture that the standard of living in classical Greece may have been twice as high as in dark age Greece. Steckel and Rose's review the anthropometric evidence from the Americas, *The Backbone of History*, shows distinctly different standards of living in different societies and places. On the political side one only needs to think of the differences in political structures between Athens, Sparta, and the other Greek city states, or the differences between Venice, Florence, Genoa, Milan, and the other Italian city states to see both the variety and constantly changing structure of politics. For a specific example, Machiavelli's *The Prince* and *Discourses on Livy* document the rapidly changing political structures and fortunes of Florence at the end of the 15th century.

cheats another, they risk losing the relationship and the benefits it implies. The necessity for repeated interaction limits the range of exchanges of any one individual.

In contrast, impersonal exchange involves parties without long-term personal relationships who may make a single exchange. Impersonal exchange requires that the parties to the exchange be confident enough that their rights and obligations will be secure despite the absence of repeated dealings. Impersonal exchange therefore requires some form of third-party enforcement.

In all its systems, the natural state builds on personal exchange, personal relationships, and personal obligations. Impersonal exchange among elites in a natural state cannot develop until specific conditions are met. We call these the *doorstep conditions*. Once the doorstep conditions are in place, it is possible, but not inevitable, for impersonal exchange among elites to serve as the wedge that eventually opens access in the polity and economy.

The three doorstep conditions are:

DC 1) Rule of law for elites.

DC 2) Perpetual forms of organizations for elites (including the state itself).

DC 3) Political control of the military.

The doorstep conditions build on one another. The creation of perpetually lived organizations for elites requires the existence of rule of law for elites. The creation of political control over the military requires both elite rule of law and elite perpetual organizations. All three conditions are necessary to establish impersonal exchange within elites. We discuss each condition in turn.

DC 1) Rule of law for elites. Every natural state is an organization, a group of individuals bound together by mutual interests and threats. Their constant interaction inevitably gives rise to habits of interaction that form customary behavior and lead to the possibility of creating rules, both informal and formal, governing specific relationships within elites. Defining elite rights and adjudicating disputes among elites about their rights is a fundamental part of any natural state. The relative success of a natural state depends on the state's ability to structure sustainable relations among elites. All natural states accomplish this by identifying individuals within the elites who perform arbitration and mediation functions. In some, but by no means all, natural states, these functions become formalized into a machinery of government and justice. As we stressed earlier, the origin of property rights and legal systems is the definition of elite rights in the natural state.

Rule of law requires the establishment of a judicial system in which individuals with the appropriate legal standing have access to laws and courts whose decisions are binding and unbiased, at least with respect to elites.³⁵ Rule of law is not, of course, a binary variable; the extent and dimensions of rule of law vary continuously and from society to society.

Part of rule of law for elites involves legal support for organizational forms. Entities within society, for example, the church, are identified as enjoying certain privileges and properties as part of public law, that part of the law that structures the state. The privileges of elites are typically defined not as individual rights but as privileges associated with the particular

³⁵We mean unbiased in the sense that the laws are applied fairly, not that the laws are fair. Natural state legal systems very often distinguish between different individuals on the basis of status, so there is no sense that rule of law for elites in a natural state implies that all elites are treated the same. But rule of law for elites does imply that all individuals of a certain class or standing are treated the same within the framework of the law.

office in an organization recognized by the state. The king, the pope, the archbishops, and the earls, for example, may all enjoy privileges associated with the office that they hold.

DC 2) Perpetual forms of organizations for elites (including the state itself). A perpetually lived organization is an organization that lives beyond the life of its individual members. For example, a partnership is not a perpetual organization, since the partnership must be reformed on the death (or withdrawal) of any partner. A corporation is a perpetually lived organization because its structure allows it to live beyond the life of any and all members who create it, and no single member (excepting the obvious case of a single individual with majority control) can dissolve the corporation at will. Organizations that exist at the pleasure of the king or any leader can never be perpetually lived. Perpetual life is therefore not eternal life, but a life that is on-going.

A perpetually lived organization cannot exist in the absence of a legal system capable of enforcing rule of law regarding the organization. In legal parlance, the organization must become a “person” in the eyes of the law, capable of bearing rights and duties. Perpetual life is not a binary variable, since there are many dimensions along which perpetual organizations can be structured and allowed to exist.

It is important to grasp a fine distinction about the legal arrangements that support organizations. In general, legal systems may or may not provide an individual office holder (or the members of the organization) with the power to bind the behavior of his (their) successors. We observe many organizations that persist through time, with stable and durable internal arrangements, yet the officers and members of the organization are unable to credibly bind their successors in the future to honor obligations made today. Durability of the institutional

arrangements within an organization does not, in itself, give that organization perpetual life. A perpetual lived organization lives on beyond the lives of its members. A promise made by the organization today is a promise that will be honored in the future regardless of the identity of the individual members of the organization in the future. As a result, perpetually lived organizations require the identification of a set of organizational forms recognized by the state and courts whose organizational life extends beyond the lives of the organization's individual members.

An example may help make the difference clear. After the Roman imperium was established, the emperors often left wills detailing how their property was to be distributed among their heirs, even naming an heir as the next emperor, and part of the property of the emperor was the ability to dispose of certain government functions. The wishes of dead emperors, however, were routinely ignored by their successors. Actual successors occasionally even killed the named heir to the imperium. Many of the institutions surrounding the emperor persisted through time for many centuries. But little about the actual organizations surrounding the emperor could be said to be perpetual. An agreement with one emperor could be overturned by his successor with impunity. Indeed, a durable part of the empire's institutional structure was that the emperor was above the law, that he was sovereign, that he could not be bound by his predecessors and in turn, that he could not bind his successors.³⁶ Even though many institutions of the Roman empire persisted over a very long period, at its heart the empire was not a perpetually lived organization. Roman institutions and organizations were durable, but not

³⁶In the European debate over the nature of sovereignty and, ultimately, about the divine rights of popes and monarchs, there were several stands in the supporters of the divine rights of kings that were inconsistent with the creation of a perpetual organization for the state. One central issue was whether the King was above or below the law, which was closely related to the question of whether the kings mandate came from God or from society.

perpetually lived. Agreements made with one emperor could not necessarily be enforced against the emperor who followed.

Historically, the development of a rule of law for elites necessarily entailed, among other things, the development of legal support for elite organizational forms. Support for elite organizational forms is an integral part of the institutional structure of a mature natural state. Elite organizations within the natural state, however, are usually not perpetually lived organizations. Access to organizational forms and the rights that specific organizations enjoy are usually part of the ongoing negotiations over the distribution of rents within the dominant coalition. An organization's identity depends on the identity of its members, particularly of the member who heads it. Elite organizations may be durable, but most are not perpetually lived. As European history showed repeatedly, kings whose predecessors who had borrowed money often felt no binding legal obligations to honor their predecessors debts. Creditors in medieval Europe did not loan money to a perpetual organization, of which the king was an impersonal head, but to an organization whose particular structure and obligations varies with the identity of its members.

If a natural state that cannot credibly commit to honor its agreements beyond the lives of the current members of the dominant coalition, then it cannot credibly commit to enforce the agreements of an elite organization whose life extends beyond the lives of its members. This logic implies that the creation of perpetually lived elite organizations requires that the state itself become a perpetually lived organization. A mortal state cannot credibly commit to support perpetually lived contractual organizations; nothing about a successor state impels it to honor the

³⁷North and Weingast (1989) provide a central example of how the British state made

natural state implies that it is unlikely that a dominant coalition will allow one group or faction to control all the military resources of the coalition. The simple reason is that the factions without military resources cannot defend themselves, so that the faction controlling the military would extract all the surplus available to the coalition. That creates strong incentives for non-military factions to arm themselves and become military factions. As a result, we rarely observe a natural state in history where one group within the dominant coalition has consolidated control of the military. The main implication is that, few natural states possess a monopoly on the use of violence.

Political control of the military requires a set of conditions: the existence of an organization with control over all the military resources of the country; control over the various military assets is consolidated in that organization; and there exists a set of credible conventions that describe how force is used against coalition members. Almost always, the organization that controls the military is a political organization embedded in the larger structure of the government, such as the Joint Chiefs of Staff in the United States. Societies experiencing a civil war do not, by definition, have political control of the military. Societies in Europe under feudalism or the Middle East under the Ottomans did not have political control of the military, as armed and dangerous elements of the population were spread throughout the dominant coalition and throughout society as well.

In most natural states, control of the military is not consolidated, it is unevenly distributed throughout the dominant coalition. The ability to threaten military action is one of the credible threats that keeps the dominant coalition stable. In our sense, neither Britain nor France had political control of the military until sometime in the eighteenth century. Nor, until

then, did the monarchy in either country have a monopoly on violence or the uncontested control of the military for any substantial period of time. In both countries, a coalition of military, economic, religious and political groups maintained an uneasy balance in which civil war was always a credible threat and a regular reality.

Political control of the military is a subtle problem. Nothing precludes a faction within a natural state from taking control of the military resources. But such a natural state is very likely to be a tyranny, not a society on the doorstep. And such a state is unlikely to sustain political control of the military for long, since the factions and groups in the dominant coalition without the means to protect themselves have no reason to believe that the commitments made to them will be honored.

In most natural states the absence of political control of the military is simply a fact of life. Indeed, the ability of the natural state to contain violence depends in an important way on the balance of military power within the dominant coalition. The ability to provide a modicum of stability in the face of dispersed military power is one of the natural state's major advantages, and it usually requires a balance of dispersed military power.

As shown above in the discussion of the natural state, a society without political control of the military, non-military elite members – traders, producers, priests, educators, and others – must ally themselves with a militarily potent member of the coalition in case civil war breaks out.⁴⁰ Because contracts across these factions are vulnerable in times of violence, they are less likely to be undertaken. Natural states with elite rule of law and support for elite organizations,

⁴⁰ Europe from the end of the Roman Empire until perhaps 1700 was such a society, the Ottoman empire seems to have been such a society, as is any other society where the means of violence are widely spread through the population and control over and an ability to use violence is a critical part of obtaining membership in the dominant coalition.

but without political control of the military, limit the range of impersonal exchange among elites. Political control of the military removes this source of contractual risk and thus extends the range and scope of contracts among elites.

Because centralizing military power in a single organization poses an enormous threat to the dominant coalition, consolidated political authority is extremely unlikely in a natural state.⁴¹ In order to sustain political authority over a consolidated military, the non-military members of the dominant coalition must be credibly convinced that military force will not be used to expropriate their wealth and their rents by expelling them from the coalition. The group that controls the military must therefore be lodged within the natural state in such a way that the state controls the group's use of the military or controls the circumstances under which the group uses the military.⁴²

The mechanism(s) that enables a centralized military to credibly commit to not abuse its powers must contain two elements. First, the dominant coalition must agree about what constitutes the legitimate use of violence – that is, a constitutional agreement⁴³ – so that violation triggers a widespread reaction against the initial use of force. Second, the non-military groups must be capable of effectively disciplining the government and the military.

⁴¹Most states have multiple military organizations: army, navy, etc. Barzel (2001) argues that division of the military into branches may be a way to weaken the possibility of using the military for political purposes. But despite their branches, most states also have a mechanism of unified command that is answerable to an identifiable political authority. Every open access order has some structure for providing political control over the military, most natural states do not.

⁴²In the open access section, we identified the need for open access orders to develop clear rules about when and how the government can legitimately use violence.

⁴³This the small “c” constitution, the actual structure of the state arrangements, and not necessarily a written document.

The existence of powerful, well organized, and viable non-military organizations strengthens both of the two elements of political control of the military. Non-military organizations serve as focal points for coordinating the reaction to a non-sanctioned use of force, and non-military organizations can credibly threaten the military with economic sanctions. Sustainable political control of the military, as a result, depends on existence of powerful non-military elite organizations. The existence of those organizations in turn depends on rule of law for elites and perpetual organizations for elites. Political control of the military is the most problematic of the three doorstep conditions for societies to attain.

Implications. The doorstep conditions are at once institutional and organizational outcomes. All three conditions meet LC 1: they are consistent with the logic of the natural state. The establishment of laws and courts is the means by which the dominant coalition regularizes relations among elites.⁴⁴ Perpetually lived organizations are a natural vehicle for limiting entry and generating rents in a systematic manner.⁴⁵ By consolidating military power under control of the political system, a monopoly on violence can reduce the frequency of violence in a state.

A powerful implication of all three doorstep condition is that they greatly expand the range of specialization and exchange. Rule of law for elites extends the range of contracts and relationships among elites, allow mutual dependency to exist that could not survive without

⁴⁴In medieval Europe, the establishment of rule of law, both within the church through canon law, and in secular political units via the civil law, was based on the acceptance or reception of Roman Law as represented by the Code of Justinian. Justinian's Code provided a great example of the natural state when it stated as one of its maxims, quoted over and over by medieval scholastics, *quod principi placuit vigorem legis habet*: "What pleases the prince has the force of law."

⁴⁵The creation of the first chartered business corporations in the 16th century resulted from the British elites' desire to exploit opportunities for foreign trade within a framework of monopoly. The first business incorporation was the Russia Company, which had a monopoly on the British trade with Russia, and was owned exclusively by powerful aristocrats.

some form of legal protection. Perpetually lived organizations create more powerful organizations, so they can undertake a wider range of economic activities than non-perpetually lived ones. And political control of the military has two effects. First, it greatly reduces threats of violence, so defensive violence as protection against threats is far less likely to disrupt trade. Reducing this risk extends the range of gains from exchange, especially across factions of violence. Second, reducing threats of expropriation also increases the range of gains from exchange. In short, natural states that move to the doorstep typically become wealthier.

The three doorstep condition enable us to understand how a transition can occur in a way that satisfies LC 3, the condition that incremental changes which open access occur are incentive-compatible throughout the process. The fundamental insight is that the three doorstep conditions combine to make *impersonal exchange within the elite* possible. Natural states are typically built on hierarchies of personal relationships. As natural states grow in complexity and sophistication, individual relationships among elites are ordered by status, and status remains an individual identifying characteristic. The delineation of privileges associated with individuals of different status with specific individuals in a specific position in the hierarchy can lead to more sophisticated bodies of rules and behavior patterns that ultimately result in a legal system. Complex natural states therefore all have patronage or clientelistic structures that reflect the hierarchical structure of personal exchange.

Patronage networks, kinship groups, or ethnic organizations are rational ways to organize exchange and collective coordinated behavior in a world without rule of law or support for durable, and eventually, perpetual organizations (Greif 2005). But even in a world with rule of

law for elites and perpetual organizations for elites, these relational networks persist, and impersonal exchange is limited.

Political control of the military enables non-military elites to dispense with need to maintain personal relationships within networks tied to militarily powerful individuals. This, in turn, opens the door to expanded use of elite organizations for trade, education, and production. These new elite organizations can utilize impersonal exchange, specifically by utilizing the identity of the perpetually lived organization in exchange rather than the personal identity of the organization's members. The Bank of England or the Bank of the United States were impersonal organizations whose perpetual life as legal "persons" enabled individuals to deal with the Banks with confidence, even without any personal connection to the bankers. Once elite exchange becomes impersonal exchange, new possibilities begin to open up.

VII.2 *Transition mechanisms*

The doorstep conditions create the possibility of impersonal exchange within elites. Elite impersonal exchange, in turn, expands the set of individuals with whom elites transact and contract. The next question to address is when will the expansion of elite impersonal exchange lead to a permanent and sustainable increase in access? The central problem is explaining how the self-limiting nature of the natural state can be overcome so that access can gradually widen.

The logic of the argument follows the development of impersonal exchange among elites. The doorstep conditions fosters impersonal elite exchange which, in turn, creates incentives extend access at the margin to institutions that support impersonal exchange. For example, increasing the number of people who have access to the elite legal system increases the range of

elite contracts and hence the gains from exchange they potentially capture. When elites see this extension to their advantage, access natural states have an incentive to increase access.

Moreover, having created the institutional mechanisms for maintain rule of law among elites, natural states on the doorstep can make the necessary credible commitments to margin increases in access at relatively low cost.

Similarly, impersonal elite exchange creates indirect incentives to extend the range of organizations supported by the state to include non-elite individuals. For example, the state may create the means to honor the rights of all stockholders in a joint stock company and making shares widely tradable.

To neutralize the self-limiting tendencies of the natural state, elites must in general be better off by the expansion of access. We call the ways by which large numbers of elites benefit from widening access *transition mechanisms*. Transition mechanisms are the elements of social arrangements that can potentially make most elites better off as access opens, thus blunting the threat of reorganizing the dominant coalition. Transition mechanisms provide concrete ways in which opening access can become self-sustaining. These mechanisms are also a type of positive feedback process in which small changes generate new forces to amplify the change.

Perhaps the most important transition mechanism is the fiscal mechanism. If changes in access generate a significant fiscal return to the state, and the fiscal benefits of more open access can be shared throughout the dominant coalition, it is possible for a small change to survive. For example, in the early nineteenth century United States, all the states tightly regulated entry into banking. In the 1810's Massachusetts set up a system of taxing bank capital. The intent of the tax was to limit entry! But the state soon realized it obtained more revenue from the tax on bank

capital than from dividends on bank stock in the banks the state was trying to protect. The state decided to sell its bank stock, and proceeded to allow open entry into banking. By the early 1830s, the state of Massachusetts received over 50 percent of its revenues from the tax on bank capital and had more banks and more bank capital than any state in the country. Several New England states copied Massachusetts, and open access incorporation in banking, what is called “free banking” in the United States, began spreading widely in the 1840s.⁴⁶

We have identified three other possible transition mechanisms, and there may be more. The first is a regulatory mechanism. Regulation of economic activity is a classic way to create rents. But occasionally attempts to create rents on one margin open access on another. For example, when the fourteenth century English regulated the export of raw wool by creating a state monopoly, they also allowed open entry into wool production. Because most sheep were raised on aristocratic estates, this did not create a problem for the dominant coalition, but it opened the door for future competition.⁴⁷

The second transition mechanism is the institutions surrounding representation. The creation of methods of representation within a natural state, for example, parliament in Britain, may induce marginal increases in representation in the future that can be self-sustaining.

The third mechanism is international competition, both military and economic. Societies may find themselves in competition with another society, and the nature of that competition may provide incentives for opening access. This can occur because the appropriate military technology requires mass participation, and thus encourages marginal opening of political access

⁴⁶See Wallis, Sylla, and Legler “Taxation and Regulation of Banking.”

⁴⁷The traditional story that the enclosure movement in Britain produced a situation where sheep were eating men is a reflection of the importance of sheep raising and wool production to the dominant coalition in Britain into the 18th and 19th century.

for soldiers, as in the oft cited case of the Greek hoplites.⁴⁸ It may also occur because military competition stimulates economic development, as in the case of the British naval development in the late eighteenth century.⁴⁹ The recent economic success of China appears to be making it much easier for the dominant coalition in India to accept institutional changes that open access in India.

Tracing how these mechanisms work is a task for future theoretical development and thick history, as the transition path through each countries history will be unique in many respects.

VII. 3. *Transitions, Institutional flexibility, and the importance of the doorstep conditions*

The final important aspect of the doorstep conditions is how they enable institutional change during the transition to occur more readily. This is one of the most powerful, yet subtle aspects of being on the doorstep. We have already suggested that a key to the transition is understanding how the same institution can work differently under different circumstances, now we flesh out that assertion.

Let us begin with an example that does not apply directly to the doorstep conditions, but one that is dramatically affected by the transition: elections. The complexity of elections as an institution enables us to say that although Argentina, Mexico, Russia, and the United States all

⁴⁸For example, see the role played by the draft in broadening suffrage in Alex Keyssar *The Right to Vote*, and Margaret Levi's book on conscription, *Consent, Dissent, and Patriotism* (1997).

⁴⁹The economic changes induced by changes in the way in which British ships were provisioned, as well as the way they were built and repaired, is explored by N.A.M Rogers, *Command of the Ocean*. Of particular interest is the decision to use competitive contracting to raise the quality of provisions.

hold elections, they are not all democracies in the same way; or, put differently, elections do not mean the same thing in the four countries.

Elections work differently in the presence of political competition. The distinction holds for Argentina, Russia, Mexico, and the United States, where the presence of viable political parties and candidates has been a critical influence on how the institution of elections actually work. Similarly, open access to political and social organizations also affects elections. In other words, the presence or absence of political organizations directly affects how elections actually work. If only one political organization is supported by the state, then elections are not a mechanism capable of mobilizing political competition.

The nature and degree of competition in any society is determined by the ability of organizations to form, enter new lines of activity, and compete with each other. As we have stressed, an important element of the natural state is limiting access to organizational forms. Many, perhaps most, institutions operate differently under conditions of open access competition than they do under limited access. As a result, whether the institutional support for organizations in society allows entry has a fundamental effect on how other institutions in that society function. Following our example, allowing entry into political organizations fundamentally changes the nature of elections, even in the absence of institutional change in the structure of the elections themselves. The main implication of this argument is that opening entry on the right dimensions, even if the initial opening is small enough to be tolerated within the natural state, may change the way other institutions in the society work.

This paper is overlong already, and a detailed exposition of how the doorstep condition create institutions consistent with the natural state that are easily adapted to open access must

wait for another time. An example may suffice. The corporation is an organizational form that evolved over a long period of time. Early corporations were created explicitly to generate rents by giving one group privileged access to an organizational form, sometimes in combination with explicit limits on competition and often in return for the group providing a valuable public service. The first corporations in early modern Europe were pure natural state creations, explicitly designed to generate rents through limited entry.⁵⁰

Once the corporation had been accepted as a legitimate organizational form, however, it was actually relatively easy to make minor changes in the institution itself that had dramatic effects on the polity and economy. By the 1790s, institutional support for perpetually lived corporations was in place in England, France, the low Countries, and the United States, but in none of these countries was access to corporate forms open access in any meaningful way. It was, however, relatively easy to change one aspect of the institution: the behavioral norm regarding the number of charters that would be issued. Increasing the number of charters issued could be accomplished within the existing institutional rules, behaviors, and beliefs.⁵¹ In this way, allowing open access to corporate charters to any citizen who met minimum requirements – as occurred in the early nineteenth century Britain, France and the United States –

⁵⁰Indeed, Adam Smith criticizes corporations in his *Wealth of Nations* for precisely this reason.

⁵¹In fact, Hurst argues in his classic *The Legitimacy of the Business Corporation*, that general incorporation acts requiring open access to corporate charters in the United States did not represent a major institutional change in the United States because legislatures were already granting charters to anyone who wanted one. Hurst's conclusion is overdrawn, special charters in many lines of activity and in many states were not given to everyone who wanted one and charters sometimes did grant special privileges. Hurst is probably right that, by 1840, many charters issued by state legislatures had become standardized. See Wallis (2005), Cadman (1949), Dodd (1954), and Lamoreaux and Rosenthal (2004). For the operation of the behavior patterns in banking in the United States see Wallis, Sylla, and Legler (1994).

simultaneously eliminated the rent-creation associated with limited entry, increased the level of competition in many markets, and extended the ability of businesses to extract gains from exchange.

Inventing the idea of a limited liability, perpetually lived corporate entity from scratch would have been an enormously difficult undertaking. But in the early nineteenth century the United States, Britain, and France all adopted open access general incorporation procedures that made corporate charters widely available. This institutional change had enormous implications for the operation of the polity and economy, but it was, in itself, a relatively modest institutional change. The doorstep conditions contribute to the transition by creating institutions consistent with natural state that can be modified to operate in open access orders with only minor modifications.

VII.4 *Conclusions*

To summarize, the doorstep conditions contribute to the transition in two ways. First, the conditions make possible impersonal exchange among elites. Creating impersonal exchange among elites does not necessarily produce a transition. But to the extent that transition mechanisms enhance the positive effects of marginal increases in access to organizational forms by producing fiscal or political benefits for the dominant coalition, access can continue to open without an intention on the part of elites to create a more open system (LC 3).

Second, the doorstep conditions may lead to increased access to organizational forms among elites. The increase in access may fundamentally change the way that other institutions in the system operate. As a result, *important pieces of the transition may occur without obvious*

or overt institutional change. If an increase in access to economic or religious organizational forms takes place when the doorstep is attained or the transition proceeds, it is possible that the nature of political institutions, such as elections, will be changed.

The doorstep conditions are compatible with both limited access and open access. If institutions are in place when a society begins a transition process that can easily be adapted to open access or, if the function of other institutions are affected by increasing access, then that society faces a less difficult task in making the transition. The fundamental institutions to have in place are the doorstep conditions.⁵²

VIII. Conclusions

The conceptual framework presented in this paper presents an integrated theory of politics and economics. All developed countries in the world today have both competitive democracies and competitive market economies. This connection strongly suggests that theories of economics that take politics as exogenous and theories of politics that take economics as exogenous are incapable of explaining the process of modern social development. Our framework integrates both. It suggests three major conclusions.

First, limited access orders have been the default option for human societies over the last ten thousand years. We have termed the political and economic structure of the limited access order the natural state for a reason: it is the *natural* form of human society. The implications for

⁵²This analysis of the transition suggests that empirical observations of institutional structures during the transition, ala the current cross country studies, may be deeply misleading. If the same institution can support limited access and open access, there is a serious empirical problem to deal with.

development policy are enormous. Natural states are not failed states, they are typically not produced by evil men with evil intentions, and they are not the result of pathologies in the structure of these societies. Nothing is unnatural about natural states. And because natural states are not sick, policy medicine will not cure them.

Limited access orders manipulate the economy to produce rents and then systematically use those rents to create political stability. The result is a modicum of social order, an increase in specialization and division of labor, and economic growth. Natural states vary enormously. In terms of politics, economics, violence, and culture, some limited access orders are more successful than others. No forces inherent in the logic, social structure, or historical dynamics of limited access orders inevitably lead them to become open access orders. Because natural states have internal forces built on exclusion, privilege, and rent-creation, they are stable orders. They are therefore extremely difficult to transform.

Second, open access orders maintain open access to political, economic, and other social organizations. Access to organizations vitalizes competition in all systems, and competition sustains the social order. Economic and political systems are just as intimately connected in an open access order as in a limited access order, but the connections lie at a deeper level. In an open access order, economics appears to be independent of politics. This seeming independence is reflected both the famous classical liberal dictum about limited government and in neoclassic economic's view that markets are antecedent to government and that the government intervenes into markets. A competitive economy requires not only a state that maintains open access, entry, defines property rights, and enforces competition, it also requires a state that is capable of providing the social infrastructure that sustains perpetually lived and extremely sophisticated and

complicated organizations. The modern business enterprises and thriving modern markets cannot exist outside the institutional framework provided by open access polities.

Similarly, political scientists have ignored the critical role that a competitive open access economy plays in sustaining open access politics and competitive democracies. Modern western democracies could not exist without being embedded in competitive market economies characterized by competition as Schumpeter described it: creative destruction resulting from competition between large, well organized, and technologically innovative economic entities. Modern social science is as far from understanding how open access social orders work as they are from understanding how limited access social orders work.

Third, our perspective redefines the problem of economic development. In contrast to the perspective in modern economics, our framework suggests that economic development is not an incremental process, such as gaining more education, capital, and making marginal improvements in the rule of law. Each of these can improve a developing limited access order by moving it a bit toward the doorstep conditions, but these incremental changes can take a limited access order only so far: they are not the process of development.

The process of economic development is instead the movement from a limited access order to an open access order. This process is very difficult to engineer. Despite the massive attention to economic development by international donor agencies, only eight countries have made this transformation since WWII.⁵³ Our approach implies that development requires a transformation in society from a limited access to an open access basis. This transformation takes place through what we have called creating the doorstep conditions, which represent a radical

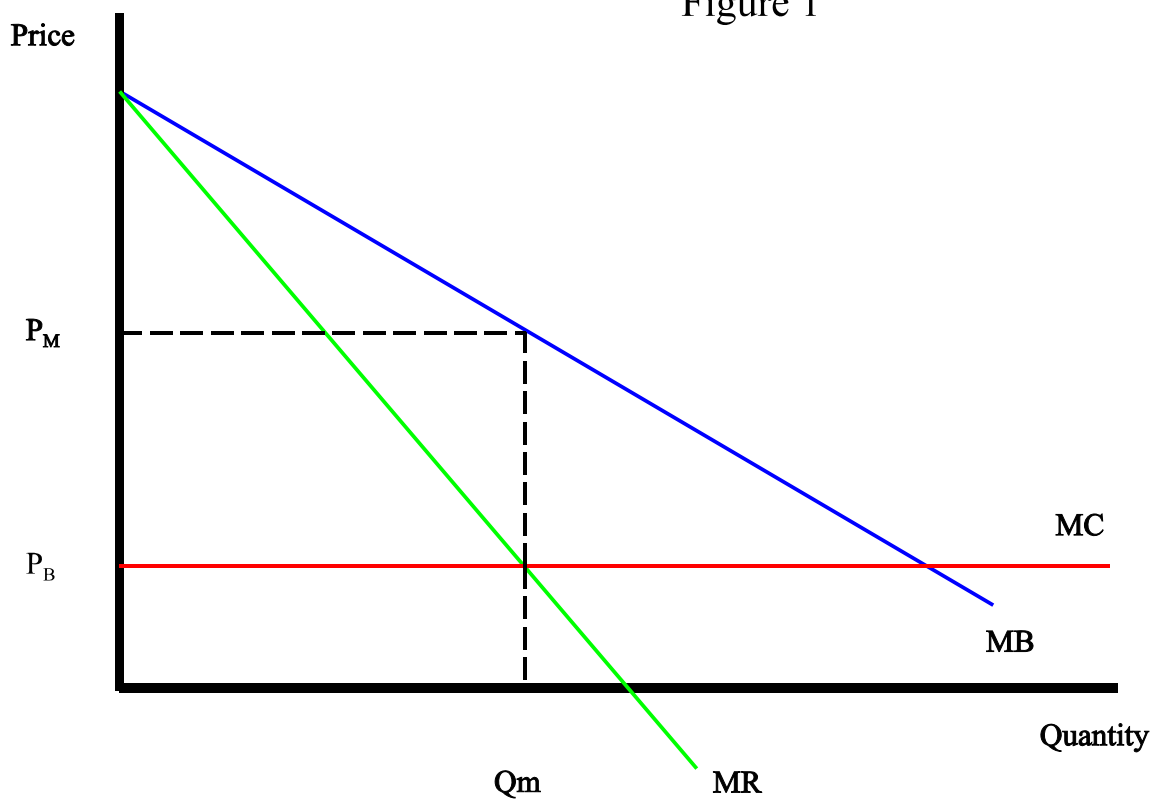
⁵³Moreover, none of these countries were the focus of international donor agencies.

change in both the state and society: rule of law for elites; perpetual life for organizations, including the state; and political control of the military. Each of these changes increases the gains from specialization and exchange; they also create mechanisms that underpin impersonal exchange. For this reason, natural state on the doorstep are wealthier. Moreover, the doorstep conditions create incentives to make incremental increases in open access that can transform a natural state on the doorstep into an open access state.

We are only beginning to understand how politics and economics interact in either limited or open access social orders. Moreover, we know even less about the transition from one social order to the other: the process of economic and political development. Until we understand the fundamental nature of social orders, we have no chance of explaining how states transition from one to the other.

Social science is the study of how human beings interact to produce the complicated social structures we all live in. It follows that our primary focus must be on organizations, how groups of people organize their relationships in durable, and eventually, perpetual forms of interaction. Organizations are the key to understanding how societies perform, and institutions are the key to understanding how organizations form and behave. Competitive economic and political societies are impossible without open access to organizational forms. Understanding how societies have managed to sustain open access to organizational forms is the heart of understanding modern development.

Figure 1



References

- Acemoglu, Daron, Simon Johnson, and James Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *Quarterly Journal of Economics*, November 2002, 117, pp. 1231-1294.
- Acemoglu, Daron, and James Robinson. 2005. *Economic Origins of Dictatorship and Democracy*. Cambridge University Press.
- Alesina, A. and D. Rodrik, 1994, "Distributive Politics and Economic Growth", *Quarterly Journal of Economics*, 109: 465-489
- Alston, Lee J. and Joseph Ferrie "Labor Costs, Paternalism, and Loyalty in Southern Agriculture: A Constraint on the Growth of the Welfare State," *Journal of Economic History*, XLV (March 1985): 95-117.
- Barro, Robert. 1996. "Democracy and Growth." *Journal of Economic Growth*. March 1996.
- Barro, Robert. 1999. "Determinants of Democracy." *Journal of Political Economy*. December 1999.
- Barzel, Yoram. *A Theory of the State*. New York: Cambridge University Press, 2001.
- Berman, Harold J. *Law and Revolution: The Formation of the Western Legal Tradition*. Cambridge, MA: Harvard University Press, 1983.
- Cadman, John W. *The Corporation in New Jersey: Business and Politics, 1791-1875*. (Cambridge; Harvard University Press, 1949).
- Campos, Jose Edgardo, and Hinton Root. 1996. *The Key to the Asian Miracle*. Washington: Brookings Institution Press.
- Claessen, Henri J.M. and Skalnik, Peter. *The Early State*. New York: Moutoun Publishers, 1978.
- Coase, Ronald. "The Nature of the Firm." *Economica*, 1937.
- Davis, John P. *Corporations: A Study of the Development of the Origin and Development of Great Business Combinations and their Relation to the Authority of the State*. (New York: Capricorn, 1961).
- Diamond, Larry. 1992. "Economic Development and Democracy Reconsidered," in Gary Marks and Larry Diamond, eds., *Reexamining Democracy*. Newbury Park: Sage Publications

- Djankov, Simeon, Edward L. Glaeser, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shliefer "The New Comparative Economics." *Journal of Comparative Economics* 31(4) (2003): 595-619.
- Dodd, Edwin Merrick, 1954. *American Business Corporations until 1860; with Special Reference to Massachusetts*. Cambridge; Harvard University Press.
- Engerman, Stanley E. and Kenneth L. Sokoloff, 2005. "Colonialism, Inequality, and Long-Run Paths of Development," NBER Working Paper 11057.
- Gellner, Ernest. *Nations and Nationalism*. Ithaca: Cornell University Press, 1983.
- Gierke, Otto. *Political Theories of the Middle Age*. Translated by F. W. Maitland. Boston: Beacon Press, 1958. (Originally published by Cambridge University Press, 1900.)
- Grief, Avner, Paul Milgrom and Barry Weingast. "Commitment, Coordination, and Enforcement: The Case of the Merchant Guilds." *Journal of Political Economy*, 102 (1994) 745-76.
- Grief, Avner. 2006. *Institutions and the Path to the Modern Economy*. New York: Cambridge University Press.
- Haber, Stephen H., Armando Razo, and Noel Maurer, 2003. *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1976-1929*. Cambridge and NY: Cambridge University Press.
- Heidenheimer, Arnold J., Michael Johnston, and Victor T. Levine. 1989. *Political Corruption: A Handbook*. New Brunswick, N.J.: Transaction.
- Hofstadter, Richard. *The Idea of a Party System*. Berkeley: University of California Press, 1969.
- Hurst, James Willard. *The Legitimacy of the Business Corporation*. Charlottesville: University of Virginia Press, 1980.
- Hurst, James Willard. *Law and the Conditions of Freedom in the Nineteenth Century United States*. Madison: University of Wisconsin Press, 1964.
- Jones, Eric *The European Miracle*. New York: Cambridge University Press, 1981.
- Kantorowicz, Ernst H. *The King's Bodies: A Study in Mediaeval Political Theology*. Princeton: Princeton University Press, 1957, 1997.

- Keefe, Philip, 2004. "Democratization and Clientelism: Why are young democracies badly governed?" Development Research Group, World Bank working paper.
- Keefe, Philip and Razvan Vlaicu 2005. "Democracy, Credibility and Clientelism" World Bank working paper 3472, January.
- Keely, Lawrence H. *War Before Civilization*. New York: Oxford University Press, 1996
- Kelly, Robert L. *The Foraging Spectrum: Diversity in Hunter-Gatherer Lifeways*. Washington: Smithsonian Institution Press, 1995.
- Kettering, Sharon. *Patrons, Brokers, and Clients in Seventeenth Century France*. New York: Oxford University Press, 1986.
- Keyssar, Alexander. *The Right to Vote*. New York: Basic Books, 2001.
- Khan, Mushtaq and Kwame Sundaram Jomo. *Rents, Rent-Seeking and Economic Development*. New York: Cambridge University Press, 2000.
- Lamoreaux, Naomi. "Partnerships, Corporations, and the Limits on Contractual Freedom in U.S. History: An Essay in Economics, Law, and Culture," in *Crossing Corporate Boundaries: History, Politics, and Culture*, in Kenneth Lipartito and David B. Sicilia, eds. (New York: Oxford University Press, 2004).
- Lamoreaux, Naomi and Jean-Laurent Rosenthal, "Legal Regime and Business's Organizational Choice." NBER Working paper 10288, February, 2004.
- LaPorta, Rafael, Simon Djankov, Ed Glaeser, F. Lopes-de-Silanes, and Andre Shleifer. "The New Comparative Economics." *Journal of Comparative Economics*, December 2003.
- LeBlanc, Steven A. *Constant Battles: The Myth of the Peaceful, Noble Savage*. New York: St. Martin's Press, 2003.
- Levi, Margaret. *Of Rule and Revenue*. Berkeley: University of California Press, 1988.
- Levi, Margaret. *Consent, Dissent, and Patriotism*. New York: Cambridge University Press, 1997.
- Levy, Brian, and Pablo T. Spiller. 1994. "Institutional Foundations of Regulatory Commitment: A Comparative Analysis of Telecommunications Regulation," *Journal of Law, Economics, and Organization*. 10: 201-46.
- Livy. *The Rise of Rome, Books 1-5*. New York: Oxford University Press, 1998.

- Landes, David *The Wealth and Poverty of Nations*. New York: W.W. Norton, 1999.
- Lipset, Seymour Martin, "Some Social Requisites of Democracy," *American Political Science Review* (March 1959), pp. 69-105.
- MacIlwain, Charles Howard. *Constitutions Ancient and Modern*. Ithaca: Cornell University Press, 1947.
- Machiavelli, Niccolo. *Discourses on Livy*. Translated by Harvey C. Mansfield and Nathan Tarcov. Chicago: University of Chicago Press, 1996.
- Machiavelli, Niccolo. *The Prince*. Edited by Quentin Skinner and Russell Price. New York: Cambridge University Press, 1988.
- Marx, Karl. *Capital*. New York: Penguin, 1992.
- Milgrom, Paul, and John Roberts. 1992. *Economics, Organization, and Management*. Englewood Cliffs, N.J.: Prentice-Hall.
- Morris, Ian. 2004. "Economic Growth in Ancient Greece," *J. of Institutional and Theoretical Economics*. (December) 160: 709-42.
- North, Douglass C. *Structure and Change in Economic History*. New York: Norton, 1981.
- North, Douglass C. *Institutions, Institutional Change, and Economic Performance*. New York: Cambridge University Press, 1990.
- North, Douglass C. *Understanding the Process of Economic Change*. Princeton: Princeton University Press, 2005.
- North, Douglass C. and Barry R. Weingast "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in 17th Century England." *Journal of Economic History*. (December 1989) 49: 803-32.
- Nye, J.S. 1967. "Corruption and Political Development: A Cost-Benefit Analysis," *American Political Science Review* (June) 61: 417-27.
- O'Donnell, Guillermo, and Philippe C. Schmitter, *Transitions from Authoritarian Rule: Tentative Conclusion about Uncertain Democracies*. Baltimore: Johns Hopkins University Press, 1986.
- Olson, Mancur. "Democracy, Dictatorship, and Development." *American Political Science Review*, (1993) 87(3): 567-75.

- Olson, Mancur. *The Rise and Decline of Nations*. New Haven: Yale University Press, 1982.
- Przeworski, Adam, Micael E. Alvarez, Jose Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990*. Cambridge University Press.
- Rodrik, Dani., A. Subramanian, and F. Trebbi, "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development" *Journal of Economic Growth*, vol. 9, no.2, June 2004.
- Rose-Ackerman, Susan. 1978. *Corruption: A Study in Political Economy*. New York: Academic Press.
- Rosenberg, Nathan and Birdzell *How the West Grew Rich*. New York: Basic Books, 1987.
- Seavoy, Ronald E. *The Origins of the American Business Corporation, 1784-1855*. Westport: Greenwood Press, 1982.
- Schumpeter, Joseph A. *Capitalism, Socialism, and Democracy*. New York: Harper Colophon, 1942.
- Scott, James C. *Weapons of the Weak*. New Haven: Yale University Press, 1987.
- Scott, James C. 1972. *Comparative Political Corruption*. Englewood Cliffs, N.J.: Prentice-Hall.
- Shleifer, Andrei, and Robert W. Vishny. 1993. "Corruption," *Quarterly J. of Economics*. (August) 103: 599-617.
- Smith, Adam. *The Wealth of Nations*, 1776.
- Steckel, Richard H. and Rose, Jerome C. *The Backbone of History: Health and Nutrition in the*

- Wallis, John Joseph. "Market Augmenting Government? The State and the Corporation in 19th Century America" in Omar Azfar and Charles Cadwell, ed. *Market-Augmenting Government: The Institutional Foundations for Prosperity*. (Ann Arbor: University of Michigan Press, 2003).
- Wallis, John Joseph, Richard Sylla, and John Legler "The Interaction of Taxation and Regulation in Nineteenth Century Banking." In Claudia Goldin and Gary Libecap, eds., *The Regulated Economy: An Historical Approach to Political Economy*, NBER, University of Chicago Press, 1994.
- Weber, Max. *The Theory of Social and Economic Organization*. New York: Free Press, 1947.
- Weber, Max. *The Protestant Ethic and the Spirit of Capitalism*. London: Routledge, 2001.
- Weingast, Barry R. 2006. "Self-Enforcing Constitutions: With An Application to Democratic Stability in America's First Century" Working Paper, Hoover Institution, November.
- Williamson, Oliver O. *The Economic Institutions of Capitalism*. New York: Free Press, 1985.