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Institutions

Douglass C. North

Institutions are the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights). Throughout history, institutions have been devised by human beings to create order and reduce uncertainty in exchange. Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity. They evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story. Institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change towards growth, stagnation, or decline. In this essay I intend to elaborate on the role of institutions in the performance of economies and illustrate my analysis from economic history.

What makes it necessary to constrain human interaction with institutions? The issue can be most succinctly summarized in a game theoretic context. Wealth-maximizing individuals will usually find it worthwhile to cooperate with other players when the play is repeated, when they possess complete information about the other player's past performance, and when there are small numbers of players. But turn the game upside down. Cooperation is difficult to sustain when the game is not repeated (or there is an endgame), when information on the other players is lacking, and when there are large numbers of players.

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These polar extremes reflect contrasting economic settings in real life. There are many examples of simple exchange institutions that permit low cost transacting under the former conditions. But institutions that permit low cost transacting and producing in a world of specialization and division of labor require solving the problems of human cooperation under the latter conditions.

It takes resources to define and enforce exchange agreements. Even if everyone had the same objective function (like maximizing the firm's profits), transacting would take substantial resources; but in the context of individual wealth-maximizing behavior and asymmetric information about the valuable attributes of what is being exchanged (or the performance of agents), transaction costs are a critical determinant of economic performance. Institutions and the effectiveness of enforcement (together with the technology employed) determine the cost of transacting. Effective institutions raise the benefits of cooperative solutions or the costs of defection, to use game theoretic terms. In transaction cost terms, institutions reduce transaction and production costs per exchange so that the potential gains from trade are realizeable. Both political and economic institutions are essential parts of an effective institutional matrix.

The major focus of the literature on institutions and transaction costs has been on institutions as efficient solutions to problems of organization in a competitive framework (Williamson, 1975; 1985). Thus market exchange, franchising, or vertical integration are conceived in this literature as efficient solutions to the complex problems confronting entrepreneurs under various competitive conditions. Valuable as this work has been, such an approach assumes away the central concern of this essay: to explain the varied performance of economies both over time and in the current world.

How does an economy achieve the efficient, competitive markets assumed in the foregoing approach? The formal economic constraints or property rights are specified and enforced by political institutions, and the literature simply takes those as a given. But economic history is overwhelmingly a story of economies that failed to produce a set of economic rules of the game (with enforcement) that induce sustained economic growth. The central issue of economic history and of economic development is to account for the evolution of political and economic institutions that create an economic environment that induces increasing productivity.

Institutions to Capture the Gains from Trade

Many readers will be at least somewhat familiar with the idea of economic history over time as a series of staged stories. The earliest economies are thought of as local exchange within a village (or even within a simple hunting and gathering society). Gradually, trade expands beyond the village: first to the region, perhaps as a bazaar-like economy; then to longer distances, through particular caravan or shipping routes; and eventually to much of the world. At

each stage, the economy involves increasing specialization and division of labor and continuously more productive technology. This story of gradual evolution from local autarky to specialization and division of labor was derived from the German historical school. However, there is no implication in this paper that the real historical evolution of economies necessarily paralleled the sequence of stages of exchange described here.[1]

I begin with local exchange within the village or even the simple exchange of hunting and gathering societies (in which women gathered and men hunted). Specialization in this world is rudimentary and self-sufficiency characterizes most individual households. Small-scale village trade exists within a "dense" social network of informal constraints that facilitates local exchange, and the costs of transacting in this context are low. (Although the basic societal costs of tribal and village organization may be high, they will not be reflected in additional costs in the process of transacting.) People have an intimate understanding of each other, and the threat of violence is a continuous force for preserving order because of its implications for other members of society.[2]

As trade expands beyond a single village, however, the possibilities for conflict over the exchange grow. The size of the market grows and transaction costs increase sharply because the dense social network is replaced; hence, more resources must be devoted to measurement and enforcement. In the absence of a state that enforced contracts, religious precepts usually imposed standards of conduct on the players. Needless to say, their effectiveness in lowering the costs of transacting varied widely, depending on the degree to which these precepts were held to be binding.

The development of long-distance trade, perhaps through caravans or lengthy ship voyages, requires a sharp break in the characteristics of an economic structure. It entails substantial specialization in exchange by individuals whose livelihood is confined to trading and the development of trading centers, which may be temporary gathering places (as were the early fairs in Europe) or more permanent towns or cities. Some economies of scale—for example, in plantation agriculture—are characteristic of this world. Geographic specialization begins to emerge as a major characteristic and some occupational specialization is occurring as well.

The growth of long distance trade poses two distinct transaction cost problems. One is a classical problem of agency, which historically was met by

[1]In an article written many years ago (North, 1955), I pointed out that many regional economies evolved from the very beginning as export economies and built their development around the export sector. This is in comparison and in contrast to the old stage theory of history derived from the German historical school, in which the evolution was always from local autarky to gradual evolution of specialization and division of labor. It is this last pattern that is described here, even though it may not characterize the particular evolution that in fact has occurred.

[2]For an excellent summary of the anthropological literature dealing with trade in tribal societies, see Elizabeth Colson (1974).

use of kin in long-distance trade. That is, a sedentary merchant would send a relative with the cargo to negotiate sale and to obtain a return cargo. The costliness of measuring performance, the strength of kinship ties, and the price of "defection" all determined the outcome of such agreements. As the size and volume of trade grew, agency problems became an increasingly major dilemma.[3] A second problem consisted of contract negotiation and enforcement in alien parts of the world, where there is no easily available way to achieve agreement and enforce contracts. Enforcement means not only such enforcement of agreements but also protection of the goods and services en route from pirates, brigands, and so on.

The problems of enforcement en route were met by armed forces protecting the ship or caravan or by the payment of tolls or protection money to local coercive groups. Negotiation and enforcement in alien parts of the world entailed typically the development of standardized weights and measures, units of account, a medium of exchange, notaries, consuls, merchant law courts, and enclaves of foreign merchants protected by foreign princes in return for revenue. By lowering information costs and providing incentives for contract fulfillment this complex of institutions, organizations, and instruments made possible transacting and engaging in long-distance trade. A mixture of voluntary and semi-coercive bodies, or at least bodies that effectively could cause ostracism of merchants that didn't live up to agreements, enabled long-distance trade to occur.[4]

This expansion of the market entails more specialized producers. Economies of scale result in the beginnings of hierarchical producing organizations, with full-time workers working either in a central place or in a sequential production process. Towns and some central cities are emerging, and occupational distribution of the population now shows, in addition, a substantial increase in the proportion of the labor force engaged in manufacturing and in services, although the traditional preponderance in agriculture continues. These evolving stages also reflect a significant shift towards urbanization of the society.

Such societies need effective, impersonal contract enforcement, because personal ties, voluntaristic constraints, and ostracism are no longer effective as more complex and impersonal forms of exchange emerge. It is not that these personal and social alternatives are unimportant; they are still significant even in today's interdependent world. But in the absence of effective impersonal contracting, the gains from "defection" are great enough to forestall the development of complex exchange. Two illustrations deal with the creation of a

[3]Jewish traders in the Mediterranean in the 11th century "solved" the agency problem as a result of close community relationships amongst themselves that lowered information costs and enabled them to act as a group to ostracize and retaliate against agents who violated their commercial code. See Avner Greif (1989).

[4]Philip Curtin's *Cross Cultural Trade in World History* (1984) summarizes a good deal of the literature, but is short on analysis and examination of the mechanisms essential to the structure of such trade. The Cambridge Economic History, Volume III (1966), has more useful details on the organization of such trade.

capital market and with the interplay between institutions and the technology employed.

A capital market entails security of property rights over time and will simply not evolve where political rulers can arbitrarily seize assets or radically alter their value. Establishing a credible commitment to secure property rights over time requires either a ruler who exercises forebearance and restraint in using coercive force, or the shackling of the ruler's power to prevent arbitrary seizure of assets. The first alternative was seldom successful for very long in the face of the ubiquitous fiscal crises of rulers (largely as a consequence of repeated warfare). The latter entailed a fundamental restructuring of the polity such as occurred in England as a result of the Glorious Revolution of 1688, which resulted in parliamentary supremacy over the crown.[5]

The technology associated with the growth of manufacturing entailed increased fixed capital in plant and equipment, uninterrupted production, a disciplined labor force, and a developed transport network; in short, it required effective factor and product markets. Undergirding such markets are secure property rights, which entail a polity and judicial system to permit low costs contracting, flexible laws permitting a wide latitude of organizational structures, and the creation of complex governance structures to limit the problems of agency in hierarchical organizations.[6]

In the last stage, the one we observe in modern western societies, specialization has increased, agriculture requires a small percentage of the labor force, and markets have become nationwide and worldwide. Economies of scale imply large-scale organization, not only in manufacturing but also in agriculture. Everyone lives by undertaking a specialized function and relying on the vast network of interconnected parts to provide the multitude of goods and services necessary to them. The occupational distribution of the labor force shifts gradually from dominance by manufacturing to dominance, eventually, by what are characterized as services. Society is overwhelmingly urban.

In this final stage, specialization requires increasing percentages of the resources of the society to be engaged in transacting, so that the transaction sector rises to be a large percentage of gross national product. This is so because specialization in trade, finance, banking, insurance, as well as the simple coordination of economic activity, involves an increasing proportion of the labor force.[7] Of necessity, therefore, highly specialized forms of transaction organizations emerge. International specialization and division of labor requires institutions and organizations to safeguard property rights across inter-

[5]North and Weingast (1989) provide a history and analysis of the political institutions of 17th century England leading up to the Revolution of 1688 and of the consequences for the development of the English capital market.

[6]See North (1981), particularly chapter 13, and Chandler (1977). Joseph Stiglitz's (1989) essay, "Markets, Market Failures, and Development," details some of the theoretical issues.

[7]The transaction sector (that proportion of transaction costs going through the market and therefore measureable) of the U.S. economy was 25 percent of GNP in 1870 and 45 percent of GNP in 1970 (Wallis and North, 1986).

national boundaries so that capital markets (as well as other kinds of exchange) can take place with credible commitment on the part of the players.

These very schematic stages appear to merge one into another in a smooth story of evolving cooperation. But do they? Does any necessary connection move the players from less complicated to more complicated forms of exchange? At stake in this evolution is not only whether information costs and economies of scale together with the development of improved enforcement of contracts will permit and indeed encourage more complicated forms of exchange, but also whether organizations have the incentive to acquire knowledge and information that will induce them to evolve in more socially productive directions.

In fact, throughout history, there is no necessary reason for this development to occur. Indeed, most of the early forms of organization that I have mentioned in these sections still exist today in parts of the world. There still exist primitive tribal societies; the Suq (bazaar economies engaged in regional trade) still flourishes in many parts of the world; and while the caravan trade has disappeared, its demise (as well as the gradual undermining of the other two forms of "primitive" exchange) has reflected external forces rather than internal evolution. In contrast, the development of European long-distance trade initiated a sequential development of more complex forms of organization.

The remainder of this paper will examine first some seemingly primitive forms of exchange that failed to evolve and then the institutional evolution that occurred in early modern Europe. The concluding section of the paper will attempt to enunciate why some societies and exchange institutions evolve and others do not, and to apply that framework in the context of economic development in the western hemisphere during the 18th and 19th centuries.

When Institutions Do Not Evolve

In every system of exchange, economic actors have an incentive to invest their time, resources, and energy in knowledge and skills that will improve their material status. But in some primitive institutional settings, the kind of knowledge and skills that will pay off will not result in institutional evolution towards more productive economies. To illustrate this argument, I consider three primitive types of exchange—tribal society, a regional economy with bazaar trading, and the long-distance caravan trade—that are unlikely to evolve from within.

As noted earlier, exchange in a tribal society relies on a dense social network. Elizabeth Colson (1974, p. 59) describes the network this way:

> The communities in which all these people live were governed by a delicate balance of power, always endangered and never to be taken for

> granted: each person was constantly involved in securing his own position in situations where he had to show his good intentions. Usages and customs appear to be flexible and fluid given that judgement on whether or not someone has done rightly varies from case to case . . . . But this is because it is the individual who is being judged and not the crime. Under these conditions, a flouting of generally accepted standards is tantamount to a claim to illegitimate power and becomes part of the evidence against one.

The implication of Colson's analysis as well as that of Richard Posner in his account of primitive institutions (1980) is that deviance and innovation are viewed as threats to group survival.

A second form of exchange that has existed for thousands of years, and still exists today in North Africa and the Middle East is that of the Suq, where widespread and relatively impersonal exchange and relatively high costs of transacting exist.[8] The basic characteristics are a multiplicity of small-scale enterprises with as much as 40 to 50 percent of the town's labor force engaged in this exchange process; low fixed costs in terms of rent and machinery; a very finely drawn division of labor; an enormous number of small transactions, each more or less independent of the next; face to face contacts; and goods and services that are not homogeneous.

There are no institutions devoted to assembling and distributing market information; that is, no price quotations, production reports, employment agencies, consumer guides, and so on. Systems of weights and measures are intricate and incompletely standardized. Exchange skills are very elaborately developed, and are the primary determinant of who prospers in the bazaar and who does not. Haggling over terms with respect to any aspect or condition of exchange is pervasive, strenuous, and unremitting. Buying and selling are virtually undifferentiated, essentially a single activity; trading involves a continual search for specific partners, not the mere offers of goods to the general public. Regulation of disputes involves testimony by reliable witnesses to factual matters, not the weighting of competing, juridical principles. Governmental controls over marketplace activity are marginal, decentralized, and mostly rhetorical.

To summarize, the central features of the Suq are (1) high measurement costs; (2) continuous effort at clientization (the development of repeat-exchange relationships with other partners, however imperfect); and (3) intensive bargaining at every margin. In essence, the name of the game is to raise the costs of transacting to the other party to exchange. One makes money by having better information than one's adversary.

[8]There is an extensive literature on the Suq. A sophisticated analysis (on which I have relied) focused on the Suq in Sefrou, Morocco is contained in Geertz, Geertz, and Rosen (1979).

It is easy to understand why innovation would be seen to threaten survival in a tribal society but harder to understand why these "inefficient" forms of bargaining would continue in the Suq. One would anticipate, in the societies with which we are familiar, that voluntary organizations would evolve to insure against the hazards and uncertainties of such information asymmetries. But that is precisely the issue. What is missing in the Suq are the fundamental underpinnings of institutions that would make such voluntary organizations viable and profitable. These include an effective legal structure and court system to enforce contracts which in turn depend on the development of political institutions that will create such a framework. In their absence there is no incentive to alter the system.

The third form of exchange, caravan trade, illustrates the informal constraints that made trade possible in a world where protection was essential and no organized state existed. Clifford Geertz (1979, p. 137) provides a description of the caravan trades in Morocco at the turn of the century:

> In the narrow sense, a zettata (from the Berber TAZETTAT, 'a small piece of cloth') is a passage toll, a sum paid to a local power . . . for protection when crossing localities where he is such a power. But in fact it is, or more properly was, rather more than a mere payment. It was part of a whole complex of moral rituals, customs with the force of law and the weight of sanctity—centering around the guest-host, client-patron, petitioner-petitioned, exile-protector, suppliant-divinity relations—all of which are somehow of a package in rural Morocco. Entering the tribal world physically, the outreaching trader (or at least his agents) had also to enter it culturally.
>
> Despite the vast variety of particular forms through which they manifest themselves, the characteristics of protection in the Berber societies of the High and Middle Atlas are clear and constant. Protection is personal, unqualified, explicit, and conceived of as the dressing of one man in the reputation of another. The reputation may be political, moral, spiritual, or even idiosyncratic, or, often enough, all four at once. But the essential transaction is that a man who counts 'stands up and says' (*quam wa qal*, as the classical tag has it) to those to whom he counts: 'this man is mine; harm him and you insult me; insult me and you will answer for it.' Benediction (the famous *baraka*), hospitality, sanctuary, and safe passage are alike in this: they rest on the perhaps somewhat paradoxical notion that though personal identity is radically individual in both its roots and its expressions, it is not incapable of being stamped onto the self of someone else.

While tribal chieftains found it profitable to protect merchant caravans they had neither the military muscle nor the political structure to extend, develop, and enforce more permanent property rights.

Institutional Evolution in Early Modern Europe

In contrast to many primitive systems of exchange, long distance trade in early modern Europe from the 11th to the 16th centuries was a story of sequentially more complex organization that eventually led to the rise of the western world. Let me first briefly describe the innovations and then explore some of their underlying sources.[9]

Innovations that lowered transaction costs consisted of organizational changes, instruments, and specific techniques and enforcement characteristics that lowered the costs of engaging in exchange over long distances. These innovations occurred at three cost margins: (1) those that increased the mobility of capital, (2) those that lowered information costs, and (3) those that spread risk. Obviously, the categories are overlapping, but they provide a useful way to distinguish cost-reducing features of transacting. All of these innovations had their origins in earlier times; most of them were borrowed from medieval Italian city states or Islam or Byzantium and then elaborated upon.

Among the innovations that enhanced the mobility of capital were the techniques and methods evolved to evade usury laws. The variety of ingenious ways by which interest was disguised in loan contracts ranged from "penalties for late payment," to exchange rate manipulation (Lopez and Raymond, 1955, p. 163), to the early form of the mortgage; but all increased the costs of contracting. The costliness of usury laws was not only that they made the writing of contracts to disguise interests complex and cumbersome, but also that enforceability of such contracts became more problematic. As the demand for capital increased and evasion became more general, usury laws gradually broke down and rates of interest were permitted. In consequence, the costs of writing contracts and the costs of enforcing them declined.

A second innovation that improved the mobility of capital, and the one that has received the most attention, was the evolution of the bill of exchange (a dated order to pay, say 120 days after issuance, conventionally drawn by a seller against a purchaser of goods delivered) and particularly the development of techniques and instruments that allowed for its negotiability as well as for the development of discounting methods. Negotiability and discounting in turn depended on the creation of institutions that would permit their use and the development of centers where such events could occur: first in fairs, such as the Champagne fairs that played such a prominent part in economic exchange in 12th and 13th century Europe; then through banks; and finally through financial houses that could specialize in discounting. These developments were a function not only of specific institutions but also of the scale of economic activity. Increasing volume obviously made such institutional developments

[9]For a much more detailed description and analysis of the evolution of European trade see Tracy (forthcoming), particularly Volume II. For a game theoretic analysis of one aspect of this trade revival see Milgrom, North and Weingast (1990).

possible. In addition to the economies of scale necessary for the development of the bills of exchange, improved enforceability of contracts was critical, and the interrelationship between the development of accounting and auditing methods and their use as evidence in the collection of debts and in the enforcement of contracts was an important part of this process (Yamey, 1949; Watts and Zimmerman, 1983).

Still a third innovation affecting the mobility of capital arose from the problems associated with maintaining control of agents involved in long distance trade. The traditional resolution of this problem in medieval and early modern times was the use of kinship and family ties to bind agents to principals. However, as the size and scope of merchant trading empires grew, the extension of discretionary behavior to others than kin of the principal required the development of more elaborate accounting procedures for monitoring the behavior of agents.

The major developments in the area of information costs were the printing of prices of various commodities, as well as the printing of manuals that provided information on weights, measures, customs, brokerage fees, postal systems, and, particularly, the complex exchange rates between monies in Europe and the trading world. Obviously these developments were primarily a function of the volume of international trade and therefore a consequence of economies of scale.

The final innovation was the transformation of uncertainty into risk. By uncertainty, I mean here a condition wherein one cannot ascertain the probability of an event and therefore cannot arrive at a way of insuring against such an occurrence. Risk, on the other hand, implies the ability to make an actuarial determination of the likelihood of an event and hence insure against such an outcome. In the modern world, insurance and portfolio diversification are methods for converting uncertainty into risks and thereby reducing, through the provision of a hedge against variability, the costs of transacting. In the medieval and early modern world, precisely the same conversion occurred. For example, marine insurance evolved from sporadic individual contracts covering partial payments for losses to contracts issued by specialized firms. As De Roover (1945, p. 198) described:

> By the fifteenth century marine insurance was established on a secure basis. The wording of the policies had already become stereotyped and changed very little during the next three or four hundred years. ... In the sixteenth century it was already current practice to use printed forms provided with a few blank spaces for the name of the ship, the name of the master, the amount of the insurance, the premium, and a few other items that were apt to change from one contract to another.

Another example of the development of actuarial, ascertainable risk was the business organization that spread risk through either portfolio diversifica-

tion or institutions that permitted a large number of investors to engage in risky activities. For example, the commenda was a contract employed in long distance trade between a sedentary partner and an active partner who accompanied the goods. It evolved from its Jewish, Byzantine, and Muslim origins (Udovitch, 1962) through its use at the hands of Italians to the English Regulated Company and finally the Joint Stock Company, thus providing an evolutionary story of the institutionalization of risk.

These specific innovations and particular institutional instruments evolved from interplay between two fundamental economic forces: the economies of scale associated with a growing volume of trade, and the development of improved mechanisms to enforce contracts at lower costs. The causation ran both ways. That is, the increasing volume of long distance trade raised the rate of return to merchants of devising effective mechanisms for enforcing contracts. In turn, the development of such mechanisms lowered the costs of contracting and made trade more profitable, thereby increasing its volume.

The process of developing new enforcement mechanisms was a long one. While a variety of courts handled commercial disputes, it is the development of enforcement mechanisms by merchants themselves that is significant. Enforceability appears to have had its beginnings in the development of internal codes of conduct in fraternal orders of guild merchants; those who did not live up to them were threatened with ostracism. A further step was the evolution of mercantile law. Merchants carried with them in long distance trade mercantile codes of conduct, so that Pisan laws passed into the sea codes of Marseilles; Oleron and Lubeck gave laws to the north of Europe, Barcelona to the south of Europe; and from Italy came the legal principle of insurance and bills of exchange (Mitchell, 1969, p. 156).

The development of more sophisticated accounting methods and of notarial records provided evidence for ascertaining facts in disputes. The gradual blending of the voluntaristic structure of enforcement of contracts via internal merchant organizations with enforcement by the state is an important part of the story of increasing the enforceability of contracts. The long evolution of merchant law from its voluntary beginnings and the differences in resolutions that it had with both the common and Roman law are a part of the story.

The state was a major player in this whole process, and there was continuous interplay between the state's fiscal needs and its credibility in its relationships with merchants and the citizenry in general. In particular, the evolution of capital markets was critically influenced by the policies of the state, since to the extent the state was bound by commitments that it would not confiscate assets or use its coercive power to increase uncertainty in exchange, it made possible the evolution of financial institutions and the creation of more efficient capital markets. The shackling of arbitrary behavior of rulers and the development of impersonal rules that successfully bound both the state and voluntary organizations were a key part of this whole process. The development of an institutional process by which government debt could be circulated, become a

part of a regular capital market, and be funded by regular sources of taxation was also a key part (Tracy, 1985; North and Weingast, 1989).

It was in the Netherlands, Amsterdam specifically, that these diverse innovations and institutions were combined to create the predecessor of the efficient modern set of markets that make possible the growth of exchange and commerce. An open immigration policy attracted businessmen. Efficient methods of financing long distance trade were developed, as were capital markets and discounting methods in financial houses that lowered the costs of underwriting this trade. The development of techniques for spreading risk and transforming uncertainty into actuarial, ascertainable risks as well as the creation of large scale markets that allowed for lowering the costs of information, and the development of negotiable government indebtedness all were a part of this story (Barbour, 1949).

Contrasting Stories of Stability and Change

These contrasting stories of stability and change go to the heart of the puzzle of accounting for changes in the human economic condition. In the former cases, maximizing activity by the actors will not induce increments to knowledge and skills which will modify the institutional framework to induce greater productivity; in the latter case, evolution is a consistent story of incremental change induced by the private gains to be realized by productivity-raising organizational and institutional changes.

What distinguished the institutional context of western Europe from the other illustrations? The traditional answer of economic historians has been competition among the fragmented European political units accentuated by changing military technology which forced rulers to seek more revenue (by making bargains with constituents) in order to survive (North and Thomas, 1973; Jones, 1981; Rosenberg and Birdzell, 1986). That is surely part of the answer; political competition for survival in early modern Europe was certainly more acute than in other parts of the world. But it is only a partial answer. Why the contrasting results within western Europe? Why did Spain, the great power of 16th century Europe, decline while the Netherlands and England developed?

To begin to get an answer (and it is only a beginning), we need to dig deeper into two key (and related) parts of the puzzle: the relationship between the basic institutional framework, the consequent organizational structure, and institutional change; and the path dependent nature of economic change that is a consequence of the increasing returns characteristic of an institutional framework.

In the institutional accounts given earlier, the direction and form of economic activity by individuals and organizations reflected the opportunities thrown up by the basic institutional framework of customs, religious precepts,

and formal rules (and the effectiveness of enforcement). Whether we examine the organization of trade in the Suq or that in the Champagne Fairs, in each case the trader was constrained by the institutional framework, as well as the traditional constraints common to economic theory.

In each case the trader would invest in acquiring knowledge and skills to increase his wealth. But in the former case, improved knowledge and skills meant getting better information on opportunities and having greater bargaining skills than other traders, since profitable opportunities came from being better informed and being a more skilled bargainer than other traders. Neither activity induced alteration in the basic institutional framework. On the other hand, while a merchant at a medieval European Fair would certainly gain from acquiring such information and skills, he would gain also from devising ways to bond fellow merchants, to establish merchant courts, to induce princes to protect goods from brigandage in return for revenue, to devise ways to discount bills of exchange. His investment in knowledge and skills would gradually and incrementally alter the basic institutional framework.

Note that the institutional evolution entailed not only voluntary organizations that expanded trade and made exchange more productive, but also the development of the state to take over protection and enforcement of property rights as impersonal exchange made contract enforcement increasingly costly for voluntary organizations which lacked effective coercive power. Another essential part of the institutional evolution entails a shackling of the arbitrary behavior of the state over economic activity.

Path dependence is more than the incremental process of institutional evolution in which yesterday's institutional framework provides the opportunity set for today's organizations and individual entrepreneurs (political or economic). The institutional matrix consists of an interdependent web of institutions and consequent political and economic organizations that are characterized by massive increasing returns.[10] That is, the organizations owe their existence to the opportunities provided by the institutional framework. Network externalities arise because of the initial setup costs (like the de novo creation of the U.S. Constitution in 1787), the learning effects described above, coordination effects via contracts with other organizations, and adaptive expectations arising from the prevalence of contracting based on the existing institutions.

When economies do evolve, therefore, nothing about that process assures economic growth. It has commonly been the case that the incentive structure provided by the basic institutional framework creates opportunities for the consequent organizations to evolve, but the direction of their development has

[10]The concept of path dependence was developed by Brian Arthur (1988, 1989) and Paul David (1985) to explore the path of technological change. I believe the concept has equal explanatory power in helping us understand institutional change. In both cases increasing returns are the key to path dependence, but in the case of institutional change the process is more complex because of the key role of political organizations in the process.

not been to promote productivity-raising activities. Rather, private profitability has been enhanced by creating monopolies, by restricting entry and factor mobility, and by political organizations that established property rights that redistributed rather than increased income.

The contrasting histories of the Netherlands and England on the one hand and Spain on the other hand reflected the differing opportunity sets of the actors in each case. To appreciate the pervasive influence of path dependence, let us extend the historical account of Spain and England to the economic history of the New World and the striking contrast in the history of the areas north and south of the Rio Grande River.

In the case of North America, the English colonies were formed in the century when the struggle between Parliament and the Crown was coming to a head. Religious and political diversity in the mother country was paralleled in the colonies. The general development in the direction of local political control and the growth of assemblies was unambiguous. Similarly, the colonist carried over free and common socage tenure of land (fee simple ownership rights) and secure property rights in other factor and product markets.

The French and Indian War from 1755–63 is a familiar breaking point in American history. British efforts to impose a very modest tax on colonial subjects, as well as curb westward migration, produced a violent reaction that led via a series of steps, by individuals and organizations, to the Revolution, the Declaration of Independence, the Articles of Confederation, the Northwest Ordinance, and the Constitution, a sequence of institutional expressions that formed a consistent evolutionary pattern despite the precariousness of the process. While the American Revolution created the United States, post-revolutionary history is only intelligible in terms of the continuity of informal and formal institutional constraints carried over from before the Revolution and incrementally modified (Hughes, 1989).

Now turn to the Spanish (and Portuguese) case in Latin America. In the case of the Spanish Indies, conquest came at the precise time that the influence of the Castilian Cortes (parliament) was declining and the monarchy of Castile, which was the seat of power of Spain, was firmly establishing centralized bureaucratic control over Spain and the Spanish Indies.[11] The conquerors imposed a uniform religion and a uniform bureaucratic administration on an already existing agricultural society. The bureaucracy detailed every aspect of political and economic policy. There were recurrent crises over the problem of agency. Wealth-maximizing behavior by organizations and entrepreneurs (political and economic) entailed getting control of, or influence over, the bureaucratic machinery. While the nineteenth century Wars of Independence in Latin America turned out to be a struggle for control of the bureaucracy and consequent policy as between local colonial control and imperial control, nevertheless the struggle was imbued with the ideological overtones that

[11]The subsequent history of Spanish rise and decline is summarized in North and Thomas (1973).

stemmed from the American and French revolutions. Independence brought U.S.-inspired constitutions, but the results were radically different. In contrast to those of the United States, Latin American federal schemes and efforts at decentralization had one thing in common after the Revolutions. None worked. The gradual country-by-country reversion to centralized bureaucratic control characterized Latin America in the 19th century.[12]

The divergent paths established by England and Spain in the New World have not converged despite the mediating factors of common ideological influences. In the former, an institutional framework has evolved that permits complex impersonal exchange necessary to political stability as well as to capture the potential economic benefits of modern technology. In the latter, "personalistic" relationships are still the key to much of the political and economic exchange. They are the consequence of an evolving institutional framework that has produced erratic economic growth in Latin America, but neither political nor economic stability, nor realization of the potential of modern technology.

The foregoing comparative sketch probably raises more questions than it answers about institutions and the role that they play in the performance of economies. Under what conditions does a path get reversed, like the revival of Spain in modern times? What is it about informal constraints that gives them such a pervasive influence upon the long-run character of economies? What is the relationship between formal and informal constraints? How does an economy develop the informal constraints that make individuals constrain their behavior so that they make political and judicial systems effective forces for third party enforcement? Clearly we have a long way to go for complete answers, but the modern study of institutions offers the promise of dramatic new understanding of economic performance and economic change.

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[12]For a summary account of the Latin American experience, see Veliz (1980) or Glade (1969).

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