

**HOW AND WHY ECONOMIES DEVELOP AND GROW: LESSONS  
FROM PREINDUSTRIAL EUROPE AND CHINA**

by

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A PROSPECTUS

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## Chapter Summaries

### PREFACE

How and why do economies develop and grow? That is certainly the most fundamental question for economics and the most important. Yet modern economics has been notably unsuccessful in providing a satisfactory answer. It is widely recognized today that two recent approaches to the question—mathematical modeling and statistical analysis—have failed to deliver the goods.

Here I try a different approach—to learn the general principles of economic development and growth from economic history. I should emphasize that my aim is not historical: I am not trying to explain historical events with the help of existing theory. Rather, my aim is theoretical: I am trying to *derive* a theory of economic development and growth *from* the historical evidence.

Economic history, then, constitutes my data. My particular sample is the economic history of preindustrial Europe. Some economic historians have seen this period as one of economic stagnation, believing that there was little economic progress before the Industrial Revolution. We shall see that they are mistaken. While economic growth was slow and uneven by modern standards, it was certainly not negligible. However, more important, this was a period of significant institutional development—both economic and political. It was this institutional development that made the Industrial Revolution possible.

This period of European economic history is particularly suitable to my purpose. Economic and political arrangements were relatively simple, making them much easier to understand. The extended length of time—almost a millennium—makes it possible to observe long-run processes working themselves out.

Having derived a theory of development and growth from the evidence of this sample, I will put my theory to test ‘out of sample’ on the economic history of preindustrial China. That is, I will attempt to make sense of the Chinese experience purely in terms of the theory already developed from the European data. We shall see that it is quite possible to do so.

My intention throughout is to develop and to elucidate general principles. While I will provide illustrations and examples, I leave an exhaustive discussion of the historical evidence to a second, much more extensive, work that is currently in preparation.

My intended audience is the interested general reader no less than the professional economist, historian or political scientist. The book will be written in plain English, with no math or jargon. The argument will be self-contained: no prior knowledge of economics will be assumed. Historical examples and illustrations will be used extensively: for obvious reasons they are largely omitted from this prospectus.

### **CHAPTER 1. A THEORY OF ECONOMIC DEVELOPMENT AND GROWTH**

The theory that emerges from the historical data begins with the observation that there are three distinct ways that people can make a living:

1. *production*: the creation of goods and services.
2. *commerce*: trading for a profit the goods and services that others produce.
3. *predation*: taking by force the goods and services that others produce or trade.

This division is particularly clear in the preindustrial period, because each of these activities was then the province of a distinct group. Production was largely the domain of small-scale family enterprise. Commerce was in the hands of merchants who specialized in trading. Predation was mostly the work of governments (as we shall see, governments also performed other functions, including protecting against predation).

It is useful to define economic growth as the increasing productivity of those engaged in production. Our theory of growth, then, consists of two related propositions:

Proposition 1. *Commerce promotes growth; predation inhibits it.*

Commerce promotes growth through the expansion of the market, which exposes producers to new opportunities and to increased competition. The response is a productivity-enhancing reorganization of production. This in turn induces technological progress. Predation inhibits growth directly by discouraging production and by impeding its reorganization. It also inhibits growth indirectly by discouraging commerce and so hindering the expansion of the market.

Proposition 2. *Limit predation (get government right), and growth takes care of itself.*

The process of growth is self-sustaining. Expansion of the market transforms production and raises incomes. This in turn creates new opportunities for commerce, further expansion of the market, additional reorganization, more technological progress, and so on. This process continues indefinitely so long as nothing stops it. Economic growth continued in Europe, because—uniquely in history—Europe developed a form of government that allowed it to continue.

This theory of development and growth is essentially an elaboration and extension of that of Adam Smith. It also overlaps with the ideas of many contemporary economists and historians. I include a full discussion of the similarities and differences in Appendix B.

## CHAPTER 2. EXPANSION OF THE MARKET

Expansion of the market is at the heart of the process of economic development and growth. It is therefore essential to understand how and why it takes place. Expansion of the market is driven by the efforts of merchants to make a profit. Consequently, whether or not the market expands to include a particular kind of trade will depend on its potential profitability. This in turn will depend on differences in the prices at which goods can be bought and sold and on the cost of actually carrying out the trade.

The cost of trading in preindustrial Europe was determined by the nature of production. Small-scale production and the resulting heterogeneity of output made it necessary for buyers to examine goods before they purchased them. This meant that commerce had to take the form of venturing—purchase by the merchant in one place for resale somewhere else (production to order was rare). Moreover, because transportation was slow, there was a long delay between purchase and subsequent resale. The cost of trading, therefore, consisted of four components:

*information costs*: the cost of finding potentially profitable trades

*transportation costs*: the cost of getting goods from A to B

*transactions costs*: the cost of dealing with sellers and purchasers

*financing costs*: the cost of taking a position in the goods in question

All of these trading costs increased with distance. The resulting gradient of trading costs created a hierarchy of trade. At the top, where trading costs were highest, trade was

limited to high-value, low-bulk items such as silks, spices, and bullion. Lower down, trade expanded to include lower-value and bulkier goods such as grain and other foodstuffs, industrial raw materials, and cheaper manufactures.

Expansion of the market at the top of the hierarchy of trade and at the bottom contributed in quite different ways to economic growth. At the top expansion stimulated the manufacture of luxury goods and spurred reorganization and technical progress geared to improving quality. It also spread new goods and techniques from one part of Europe to another or brought them to Europe from elsewhere. Lower down the hierarchy, expansion of the market stimulated the production of mass-market goods and the kind of reorganization and technological progress that was geared to lowering cost.

The expansion of the market was a self-reinforcing process. Trade raised the incomes of producers, merchants, and governments alike. Moreover, increased economic opportunity stimulated population growth, and expanding commerce and manufacturing increased urbanization. All these together combined to stimulate demand. Rising demand, falling costs and the introduction of new goods created new opportunities for the expansion of the market. At the same time, reorganization and technological progress within commerce itself lowered trading costs, and this further stimulated expansion of the market.

### **CHAPTER 3. THE REORGANIZATION OF PRODUCTION**

Expansion of the market fostered economic growth mainly by inducing a productivity-enhancing reorganization of production. The expanding market raised some prices for producers and lowered others, changing the most profitable mix of inputs and outputs. It also increased the scale of production and changed the desired qualities of products. All of these factors led to changes in how production was organized. Moreover, increasing the scale of production often required external financing and this too dictated changes in forms of organization to meet the needs of creditors. Sometimes producers themselves were responsible for reorganization, but often it was the result of merchant initiative.

In agriculture, changing relative output prices induced regional or local specialization according to comparative advantage, stemming either from differences in growing conditions or from differences in transportation costs. Exposure to the market raised the

value of land, encouraging its more efficient utilization. This generally meant reorganizing the units of production: subsistence farming and demesne agriculture gave way to family farms producing for the market. The family farm was financed through a variety of leasing arrangements. The rising value of land also led to extensive land development within western Europe and colonization outside its boundaries—these too required financing.

In industry, growing inter-zone trade in luxury textiles necessitated both the expansion of output and improvement in quality control. As a result, manufacturing migrated from rural households to urban workshops. The new urban location facilitated an increasing division of labor, with individual workshops specializing in particular sub-processes. Over time, as labor costs rose in the towns, the less skilled sub-processes were outsourced back to the country. Merchants coordinated this increasingly complex industrial structure, marketed the final product, procured the necessary inputs (often from a distance), and provided most of the financing.

The organization of production took on a similar canonical form both in agriculture and in industry. There was geographical specialization according to comparative advantage. The basic unit of production was the small, specialized family enterprise. Groups of small enterprises captured economies of scale and addressed externalities through association—in villages and guilds respectively. Merchants integrated and largely financed the entire structure.

#### **CHAPTER 4. TECHNOLOGICAL PROGRESS**

Technological progress, although slow by today's standards, was an important contributor to economic growth. It was not, however, an independent cause but rather a consequence of the expansion of the market and of the reorganization of production. 'New' technologies that had often been around for decades or centuries were taken up only when changing economic circumstances made them profitable. If the rate of technological progress was slow it was not for want of inventions or discoveries: it was because the expansion of the market was itself slow.

Merchants, always keen to exploit opportunities for profit, played a vital role in the process of technological progress. It was they who brought new technologies from one place to another and it was often they who were willing and able to bear the risks of

trying something new. Cities played a central role too by providing an ideal environment for the generation of new products and processes—low internal and external trading costs, the availability of a wide range of skills, and ready access to financing.

In agriculture, technological progress was often linked with intensification—the application of larger amounts of labor and capital to a given amount of land. Intensification not only increased output, as one would expect, but also raised productivity. It did this by allowing the cultivation of different, more profitable crops and by stimulating the development of new implements and the selective breeding of crops and livestock. New crops from Asia and the Americas, brought to Europe by the expansion of the market, also contributed to rising productivity.

In manufacturing, technological progress was closely associated with mechanization. The degree of mechanization was limited not by the ability to invent new machines, but by the economics of their use. Mechanization had two effects: it lowered labor costs and also, at least initially, worsened the quality of the product. Consequently, so long as manufacturing was largely limited to luxury goods, mechanization held little appeal: quality was crucial, cost much less so. However, matters changed once levels of income rose enough to support a mass market for relatively cheap goods. Now it was cost that mattered most, with quality being less important. For example, compared to traditional methods the spinning wheel produced woolen yarn more cheaply but of inferior quality. Although the spinning wheel had long been used for cotton (where it actually improved the quality of yarn), its use for wool had to await the development of a market for cheaper woolens. Similarly, blast furnaces produced cheaper but lower-quality iron and came into widespread use only when a market developed for cheap iron goods.

## **CHAPTER 5. TRADING COSTS AND THE DEVELOPMENT OF COMMERCE**

Expansion of the market drove economic growth; falling trading costs drove expansion of the market. The long-run trend of trading costs throughout the period was downwards. This was a result of continuing commercial development—of reorganization and technological progress within the structure of commerce itself.

The structure of commerce had to address several basic concerns inherent in the process of trading. The most pressing was predation. Commerce was particularly exposed to predation: goods on the move were vulnerable to bandits, pirates, and—especially—

governments. Sometimes, increases in predation raised trading costs to a level that inhibited or even reversed market expansion. Such major increases were generally a consequence of war.

Another major concern for those engaged in commerce was reliance—depending on others to do as they had promised. Merchants could avoid this problem entirely by traveling with their goods themselves, financing their operations exclusively out of their own capital, and selling only for cash. However, such restrictions severely limited their scale of operations and so their profits. To operate on a larger scale, they had to rely on representatives, to finance their ventures with borrowed money, and to sell on credit. These practices all involved reliance.

Yet another important concern was the rivalry for trade. While it mattered little for the economy as a whole which particular merchant or group of merchants mediated a given trade, it mattered a great deal to the merchants concerned. Moreover, a merchant's ability to strike a favorable bargain with buyers and sellers was limited by competition or potential competition from other merchants. A great deal of merchant effort was therefore devoted to gaining access to markets and to denying such access to rivals.

The commercial structure addressed all these concerns. Merchant associations provided their members with protection against predation, addressed problems of reliance by providing systems of order, and furthered the interests of their members in the rivalry for trade. Trading centers—commercial cities and fairs—protected merchants from predation locally and sometimes along access routes; they provided systems of order (the Law Merchant); and, if they chose to do so, they could favor one group of merchants over another in the rivalry for trade. Trading centers also lowered trading costs by concentrating trading in space and time. This reduced the cost of information, improved liquidity, and justified investment in trading infrastructure. Governments protected merchants against predation—by others. They also provide systems of order (as did the Church). For a consideration, governments were also willing to help merchants or groups of merchants in the rivalry for trade.

The expansion of the market promoted productivity-enhancing reorganization and technological progress in commerce, just as it did in production. Improvements in organization and in technology lowered transportation costs. New forms of business

organization enabled merchants to mobilize external financing and to operate on a larger scale (with better diversification and greater geographic scope). Specialized financial and commercial intermediaries (merchant banks and commission agents respectively) provided more effective solutions to the reliance problems of financing and representation. As a result of government predation in trading centers and the preferential treatment there of some merchants over others, a considerable amount of trading moved 'off-market'. Competition from off-market trading forced trading centers to become more open and efficient.

Commercial development, as it relates to reliance, can be seen as a process of increasing *formalization*. Informal trading is direct trading between the parties concerned. It works well enough among parties that know one another, but it is difficult among strangers because of problems of reliance. Formal trading addresses these problems by interposing between ultimate buyers and sellers specialized intermediaries and organized markets. Such 'trust intermediaries' facilitate trading among strangers and are therefore essential for the expansion of the market.

## **CHAPTER 6. FINANCIAL DEVELOPMENT**

Formalization was especially important in finance. A variety of intermediaries and markets differentiated themselves from the general commercial structure to specialize in financial functions—facilitating payments, lending, and trade in risk.

It was the payments function rather than lending that provided the primary stimulus for the development of finance. The inadequacy of the coinage, in terms both of quality and quantity, led to the development of deposit banks that made it possible for traders to settle without the use of coin. The costs of transporting coin or bullion from one trading center to another and of having to convert it into the local currency led to the development of merchant banks which enabled traders to remit funds without incurring these costs.

Since the smooth functioning of payments and remittance required facilities for borrowing and lending, deposit banks and merchants banks became lending intermediaries. Merchant banks played a far more important role in this respect, expanding the financial market to accommodate not only commercial but also non-commercial borrowers and lenders. They also extended the market geographically,

creating an international network that integrated finance across Europe; this tended to equalize interest rates.

The market for long-term debt originated outside the commercial sector, with North and South developing different instruments. Northern Europe developed forms of annuity (*rentes*), secured initially by land and later by municipal tax revenues. Southern Europe developed a different instrument backed by municipal tax revenues—an early form of securitization (the *monte*). The South also developed short-term equity instruments for financing commerce and industry. The financial system created markets where all these instruments could be traded. The resulting liquidity made them more attractive to lenders and so lowered the cost to borrowers.

Financial formalization facilitated financial transactions among strangers. It also facilitated *trading* among strangers, because it permitted a separation of the financial aspects of a transaction from the trading proper. Financial formalization also had the effect of expanding financial markets—both geographically and in terms of participation. As a result, the level of interest rates declined throughout the period. The increasing availability of commercial finance, and its reduced cost, made it possible for merchants to finance the reorganization of production that we have already noted. As we shall see, financial formalization also had an enormous impact on the development of government, which soon became a major borrower.

## CHAPTER 7. THE ECONOMICS OF GOVERNMENT

Commerce promotes economic growth; predation inhibits it. In preindustrial Europe, predation was mostly the work of governments. But governments played a major role too in protecting against predation. Indeed, there were two distinct types of government—one growing out of predation, the other growing out of protection against predation.

*Predatory government* came into being when a group of ‘rulers’ took over a territory by force for the purpose of exaction. *Associational government* was created when the inhabitants of a territory formed an association for the joint control and exercise of force—primarily to protect themselves against predation. Preindustrial Europe was an overlapping patchwork of these two types of government. The governments of kings and lords were essentially predatory; those of cities and villages, essentially associational.

A predatory government used its command of force to hold and to expand its territory, to exact resources from it, and to ‘sell’ its subjects force-based services. Such services included the provision of peace (protection from predation by others) and of order (addressing problems of reliance), as well as various forms of market intervention. Because of the benefits of scale in warfare, predatory governments tended to consolidate into ever larger units.

Associational governments engaged in much the same activities but for somewhat different reasons. For cities, the rivalry for trade was a dominant concern, which they pursued by every means possible—including war. Cities had less interest in acquiring territory for its own sake. However, the same benefits of scale in warfare inevitably led to the consolidation and expansion of the territories they controlled. Since associational governments needed to finance their activities, they too engaged in exaction.

In their organization, both types of government had to rely on representatives. Rulers had to employ officials to execute their will throughout their territories. Citizens had to appoint leaders to make decisions in their name on matters of public policy. Inevitably, officials and leaders used the powers delegated to them in their own interest rather than in the interest of those they represented. Systems of administration and of governance evolved to mitigate the resulting problems of reliance.

Both types of government waged war, and both came to depend increasingly on borrowing to finance it. Success in war required not only adequate resources but also the ability to mobilize those resources quickly. A less wealthy government possessing better liquidity could therefore hold its own against one that was more wealthy but less liquid. Borrowing provided liquidity, but it was subject to a problem of reliance: to be able to borrow, governments had to convince potential lenders that they would repay.

War created an urgent need for resources, but rulers in preindustrial Europe were limited in their ability to exact resources from their territories. They faced constitutional constraints, which they could not ignore because of their military weakness relative to their subjects. They were also constrained by the inadequacies of their systems of administration. Consequently, the exigencies of war frequently placed them in the distasteful position of having to ask their subjects for their consent and cooperation. To facilitate communication with their subjects, rulers across Europe established

representative assemblies. These assemblies were able, to varying degrees, to negotiate the amount and form of new exaction and to obtain various rights and privileges in exchange for their cooperation.

## **CHAPTER 8. THE IMPACT OF GOVERNMENT ON THE ECONOMY**

Governments had an impact on their economies, both intentionally and unintentionally, through the various ways they employed force and exercised coercion. These included the waging of war, exaction, internal control, the provision of peace and order, and market intervention.

Predatory governments waged war to hold and to expand their territories; associational governments did so to protect their territories or to further their interests in the rivalry for trade. War was directly destructive—sometimes deliberately so as adversaries sought to deprive each other of resources. However, since war was on a relatively small scale in this period, the extent of direct destruction was generally limited. Far greater economic damage was generally caused by war-related disruptions of trade: the resulting contraction of markets lowered productivity even more than their expansion had raised it. The greatest damage, however, came not from war itself but from how it was financed.

The financing of war was the principal reason for exaction. Exaction took a variety of forms—arbitrary seizure, taxation, the creation and exploitation of monopolies, and debasement of the coinage. These different forms differed in the economic damage they caused: taxation was on the whole the least harmful and debasement the most. Associational governments were more sensitive to the economic damage and predatory governments less so—although the existence of representative assemblies tended to increase the sensitivity of the latter. Sensitive or not, the pressure of war forced governments to resort to increasingly harmful forms of exaction. Governments that were able to borrow, however, had less need to do so.

Estimates of the net cash revenue of central governments—typically 5-10% of the value of total output—suggest that the total burden of exaction was modest. But this is misleading. To those numbers we must add substantial exaction in kind, the exactions of other categories of government (lords, cities, and the Church), and the considerable share

(probably a majority) of central government exaction that was pocketed by the agents who collected it. The total burden on the populace was often crushing.

Government efforts to maintain internal control affected the economy mainly through their impact on association. Rulers' attitudes to association were ambivalent. They saw associations as a potentially useful instruments of indirect administration, but they also saw them as potential organizers of sedition and rebellion. Consequently, stronger rulers tended to dispense with their assistance and to co-opt them or to suppress them entirely. Restricting association greatly hindered economic development, since association played a vital role in organizing and reorganizing production and commerce. Associational governments, naturally, had a more benign view of associations and provided an environment conducive to their creation.

A lack of peace and order was harmful to economic activity in much the same way as exaction. Predatory governments provided peace and order both to increase their revenue and to enhance their legitimacy. Associational governments, and other forms of association, did so as primary functions of joint action. As the power of rulers increased throughout the period, rulers tended to displace other providers of peace and order. This had some advantages, such as benefits of scale and specialization and impartial order for foreigners. But it also had a fundamental disadvantage: ruler law was not designed to facilitate economic interaction but rather to further the economic and political interests of the ruler—for example, by enforcing tax laws and by protecting government-created monopolies.

Predatory and associational government differed in their motives for economic intervention. For predatory government, economic intervention was a source of revenue or a direct means to support the waging of war. For associational governments, it was a means of furthering the economic interests of its citizens—or at least the interests of the governing elite. Despite these differences in motive, both types of government engaged in much the same sorts of policy. Both controlled commerce to enhance its legibility, making it easier to collect taxes and to enforce regulations. Both intervened to ensure an adequate and secure supply of food and raw materials. Both engaged in monopolization. Both interfered with the free movement of coin and bullion. These interventions, even

those that were well-intentioned, were in the main self-defeating and harmful. The harm, however, was mitigated by their general ineffectiveness.

## **CHAPTER 9. THE EVOLUTION OF GOVERNMENT IN PREINDUSTRIAL EUROPE**

We have seen how government affected economic development and growth. But economic development and growth in turn affected the evolution of government. The many individual governments of preindustrial Europe, both predatory and associational, were constantly at war with one another. Their success in war depended largely on the resources they commanded and on their ability to mobilize them—that is, on their economic strength. This interdependence of government and economy created a complex dynamic process. As we trace this process, our purpose is to understand the forces at work, not to explain the outcome. While those forces certainly contributed to the outcome, they did not determine it: much depended on chance.

Within the overall process, several distinct dynamics were at work. First, since larger economies were generally able to mobilize more resources, there was an overall tendency towards *consolidation*, with larger entities swallowing up smaller ones. This created a problem for the viability of associational government, because it did not scale up well. Large associational government tended to degenerate into predatory government.

Second, since war—especially the financing of war—had a propensity to destroy the economic base that supported it, the process exhibited a certain *cyclicity*. A period of general peace would allow economic development and growth to proceed. The resulting prosperity would provide governments with the resources they needed to go to war. The ensuing conflicts would weaken economies to the point where governments were forced to cease hostilities. The peace that followed would permit the resumption of economic growth.

Preindustrial Europe experienced two such cycles. Comparative peace and rapid economic growth during the ‘Commercial Revolution’ of the twelfth and thirteenth centuries was followed by a period of widespread war and economic contraction in the long fourteenth century. The return of peace in mid-fifteenth century saw a resumption of rapid economic growth. This in turn financed a new round of increasingly severe wars that brought about the ‘crisis of the seventeenth century’.

The third dynamic was *selection*. Governments varied significantly in the harm they did their economies when mobilizing resources for war. A government that did less harm had a considerable advantage: it could mobilize more resources from a given economic base, and it could sustain its military efforts for longer, outlasting its adversaries. Here, associational governments had the edge. Being more sensitive to the economic consequences of their actions, they tended to avoid the more harmful forms of exaction. Even more important, associational governments were far better able to borrow.

We take up our story in the eleventh century, at the beginning of the first political-economic cycle. At that time, government was highly fragmented. Predatory government was feudal in nature. The king at the center of government was usually weak, his vassal lords relatively strong. The Church, with its universal presence and its great wealth, was an important factor in the balance of power. In this environment, by playing off one party against another, cities were able to achieve varying degrees of independence under their own associational governments.

The economies of Europe were initially largely *tribute economies*. That is, they were economies in which specialized predators (kings, lords, and the Church) engaged in exaction directly from producers. In such an economy, specialized traders play a relatively marginal role. During the Commercial Revolution, however, there was a significant expansion of the market in parts of Europe. The resulting commercialization of the tribute economy in those areas led to rapid economic growth.

The wars that followed during the long fourteenth century led to consolidation, creating a system of larger, stronger, and more centralized states. The fiscal pressures of war transformed the nature of predatory government, with representative assemblies emerging all over Europe. Independent cities consolidated into a smaller number of city-centered territorial states. Pressure for a more effective military led to its general commercialization and reorganization. This resulted in significant technological progress—most notably in the development of firearms.

The second political-economic cycle began in the mid-fifteenth century with a period of renewed peace and growth. During this period, financial development accelerated. When war broke out again in the sixteenth century, the conditions were very different from what they had been at the beginning of the first wave of wars in the long fourteenth

century. The nature of political regimes and of military technology had changed significantly. However, perhaps the most important change from our point of view was the greatly enhanced ability of governments to borrow. The new financial markets, originally developed to serve commerce and production, enabled governments to finance their wars on credit.

The wars of the second political-economic cycle again transformed the nature of government, producing two new types of political regime—the imperial state and the associational state. Predatory governments, most notably France and Spain, proved to be untrustworthy borrowers. Having destroyed their credit by defaulting on their debts, they were forced to rely increasingly on other expedients to provide them with the cash they needed—especially tax farming and the sale of offices. These practices created a new predatory class—the *predatory bureaucracy*. The resulting bureaucracies controlled *imperial states*. These were large, loosely integrated groups of territories within which representative assemblies and associational governments were either suppressed or absorbed into the bureaucracy.

Associational government was weakened in the imperial states, and in the city-centered territorial states it was increasingly degenerating into tyranny. However, just when it seemed about to disappear, associational government emerged in a new and stronger form. The Dutch revolt created a new type of associational government—the *associational state*. This was organized as an association of associations, with representative assemblies providing the constituent associational governments at city and province levels with a vehicle for joint action—especially in national defense. This new structure solved the scale problem of associational government while retaining the advantages of less harmful exaction and a superior ability to borrow.

These two new types of political regime provided very different economic environments. The imperial state, with its large and corrupt bureaucracy, imposed a heavy burden of exaction, intervened extensively and arbitrarily in its economy, and suppressed and undermined association. The associational state engaged in less harmful exaction, less extensive and less arbitrary intervention (since it was mediated by the political process), and allowed association to thrive.

The wars of the subsequent centuries saw a struggle between these two types of political regime. The more favorable economic environment of the associational state proved ultimately to be decisive.

## CHAPTER 10. CHINA

Having studied economic development and growth and its interaction with government in preindustrial Europe, we now turn to preindustrial China. Our goal is to see whether China's history can be adequately understood in terms of the same principles we have already identified.

In China, the evolution of government followed a very different path. The familiar advantages of scale in warfare led there too to consolidation. However, in China the process continued until only a single state remained encompassing the whole space—a *universal empire*. This universal empire, first established under the Qin in 221 BCE, went through successive cycles of fragmentation and reconstitution. In contrast, in Europe, once universal empire had fragmented in the fifth century with the fall of Rome, it was never again reconstituted. With the rise of a form of associational government powerful enough to hold its own against larger predatory governments, scale was no longer decisive, and the process of consolidation never again reached its ultimate conclusion.

The repeated reestablishment of a universal empire in China had far-reaching implications for its political and economic development. Universal empire meant an absence of competition among governments. There was therefore no pressure for government to evolve into a form more conducive to economic development and growth. Neither was there any pressure for an economically efficient fiscal system or for an effective military. Because of its overwhelming power, the state had no need to negotiate with its subjects—so no representative assemblies and no subjects' rights.

China's fiscal system depended primarily on tribute collected directly from producers. Since an all-powerful state cannot credibly borrow or sell off its assets, the fiscal system had great difficulty mobilizing resources in an emergency. Once its stockpiles of goods and money ran out, the government was forced to resort to such harmful expedients as sharp increases in exaction and inflationary finance. This lack of flexibility meant that relatively minor external challenges, when they did occur, were

capable of precipitating severe fiscal crisis, widespread internal unrest, and dynastic collapse.

Universal empire created a highly unfavorable economic environment. The collection of tribute and the maintenance of internal control required an extensive and costly bureaucracy. With no constraints on the power of the state, the level of exaction was high and its form destructive. Economic intervention was extensive, not least because of the corruption revenue that it provided to the bureaucracy. Intervention could be extremely harmful—the most notable example being the prolonged prohibition of maritime trade. The government did not permit association except for some limited forms based on kinship.

The economic environment improved considerably in periods of fragmentation—most notably during the Tang-Song transition from the late eighth to late tenth centuries. It also improved when the state began to ‘wither away’ from the late fifteenth century under the late Ming and Qing dynasties. Indeed, only when the state was absent or weak did China enjoy some measure of economic development and growth.

For most of China’s history the market economy was very limited. The continuing dominance of the tribute economy—with tribute often collected in kind—left little space for market activity. In addition, restriction of association and the total absence before the eighteenth century of associational government in the cities made formalization of trading and finance impossible. Consequently, trading and finance remained informal until relatively late, which hampered transactions among strangers. Only in the eighteenth and nineteenth centuries did commercial and financial development begin to approach the levels attained in Europe some six centuries earlier. As just one consequence of its delayed financial development, interest rates in China did not exhibit the long-term downward trend they did in Europe.

Because of the small proportion of total output mediated by the market and because trading costs remained high, internal trade never became the motor of economic growth that it did in parts of Europe. In general, Chinese cities were centers of administration and control rather than of commerce and production. The capital was huge, much larger than any contemporary European city, because it was where much of the tribute was consumed. Tribute-funded demand from the government could provide stimulus to the

market economy. It did so most notably in the eleventh century with the amazing, but temporary, development of iron and steel industries in northern China. The stimulating effect of foreign trade, when it was permitted, could also be dramatic—for example, in Fujian during the Song and Yuan periods and in the Yangtze delta from the late sixteenth century. The low rate of urbanization and the relatively poor peasantry (because heavily taxed) meant that levels of disposable income never rose to a point where long-distance internal trade in low-cost manufactures became profitable.

The limited expansion of the market, except in the few cases where it was driven either by government demand or foreign trade, meant correspondingly little reorganization of production to raise productivity. The movement of textile manufacturing from the country to the cities took place in China only in the late Ming in response to foreign trade—centuries after it had happened in Europe. Despite a number of promising early inventions, there was consequently little technological progress in manufacturing—especially of the cost-reducing kind. Agriculture, in contrast, did make considerable advances. Intensification and technological progress were driven by urban demand, as in Europe, and occasionally by exports and by within-region trade, especially in Fujian and the southern Yangtze delta.

Some historians have recently claimed that the economy of China in 1800 was comparable to that of contemporary Europe. They base this claim primarily on a comparisons of levels of income. The gap, however, was far greater than such a comparison suggests: in terms of its political, commercial, and financial development, China lagged Europe by centuries. By 1800, however, China was at last beginning to make progress in all of these areas.

The experience of preindustrial China is therefore quite comprehensible in terms of the principles we have identified from a study of preindustrial Europe. Indeed, in many ways, universal empire in China can be seen as the European imperial state carried to its logical conclusion. The consequences for economic development and growth are much as one would expect.

## CHAPTER 11. WHAT HAVE WE LEARNED?

To recall our theory: commerce promotes growth, predation retards it; get government right (limit predation), and growth takes care of itself. We have filled in some of the details about how commerce promotes growth, and about how predation retards it. We have seen what is involved in getting government right.

Several themes run through our story. Organization is central to everything—to production, commerce, and government alike. Cities play a pivotal role in economic and political development. Competition—among producers, traders, and governments—is essential for progress.

What have we learned about history? We have seen some of the forces that shape it, but we have not explained, or tried to explain, specific outcomes. There was nothing inevitable, for example, about the sequence of events in Europe: matters could easily have turned out otherwise. Today, Napoleon VIII could be ruling the European Empire (and its extensions in the Americas), while his subjects regarded with envy the economic success of the states of the Chinese Union. Neither have we reached the end of history. The forces of commerce and of predation are still very much at work.

### APPENDIX A. CULTURE

The theoretical framework developed here makes it relatively easy to integrate culture into the analysis. The social technology of a society consists of two parts: forms of organization (structures of interaction) and cultures (systems of shared beliefs and values that guide behavior within those structures). As a result of prolonged interaction, any group will evolve a culture. A given society will therefore have as many cultures as it has groups of interaction. ‘The’ culture of a society is generally the culture of the dominant elite.

Each of our three basic activities—production, commerce, and predation—gives rise to a characteristic culture that facilitates the interaction of those engaged in it. The culture of predation will, for example, value loyalty and obedience. It will abhor contact with strangers or involvement in trading as potential sources of disloyalty. The culture of commerce, in contrast, will exhibit openness to strangers—potential trading partners—and will value honesty and initiative. In societies dominated by predatory elites, whether

warrior or bureaucratic, ‘the’ culture will be a predator culture. In societies dominated by commercial elites, ‘the’ culture will be a commercial culture.

So (a) culture is a vital part of a society’s social technology, with significant implications for its economic productivity, and (b) it is endogenous to the process of economic and political development. Seen in this light, cultural explanations of differences in economic development and growth are only partially correct. Culture is certainly important, but it is not an independent factor that can be invoked to explain such differences.

### **APPENDIX B. ECONOMICS**

The foregoing analysis sheds some light on the lack of success of mainstream economics in understanding economic development and growth.

Mainstream theory focuses on production and generally ignores commerce and predation. With respect to production itself it focuses on physical technology to the exclusion of ‘social technology’ (organization). It sees improvement in physical technology as the primary, and largely exogenous, determinant of growth (in its absence, economies are thought to be caught in a Malthusian trap). In contrast, I have tried to demonstrate that commerce and predation are economic activities worthy of our attention, and that it is impossible to understand the evolution of production without taking them into account. The primary mechanism of economic growth is changing organization, which induces technological progress. The latter is therefore endogenous.

Mainstream empirical work casts a broader net than mainstream theory. It seeks correlations in cross-country data between economic growth and a variety of political, institutional, and cultural variables. However, it lacks a coherent conceptual framework that would enable it to make sense of these correlations. For example, researchers have found a correlation between economic growth and type of religion (say Protestant versus Catholic). In terms of our analysis, it seems plausible that this correlation reflects common origin rather than causation. The economically successful associational states tended to be Protestant (an associational, bottom-up religion) while the economically less successful imperial states tended to be Catholic (an authoritarian, top-down religion). But it was not Protestantism that made associational states economically successful nor Catholicism that explained the lack of success of imperial states.

Elements of the theory presented here are to be found in the work of many other students of the history of economic development and growth. Integration of the political with the economic is central to the work of, among others, Douglass North, John Wallis and Barry Weingast, Eric Jones, Mancur Olson, Yoram Barzel, Alan Macfarlane, and William McNeill. Authors who have discussed the importance for development and growth of 'Smithian' forces (the expansion of the market and improving organization) include George Grantham, John Munro, Karl Gunnar Persson, Stephan R. Epstein, Philip Hoffman, Jan de Vries, Richard Nelson, and Jane Jacobs. I have borrowed liberally from all of them. It is, of course, all in Smith.