

PART ONE

THEORY AND OVERVIEW

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1. THE ISSUE

The affluence of Western man is a new and unique phenomenon. In the past several centuries he has broken loose from the shackles of a world bound by abject poverty and recurring famine and has realized a quality of life which is made possible only by relative abundance. This book explains that unique historical achievement, the rise of the Western World.

Our arguments central to this book are straightforward. Efficient economic organization is the key to growth; the development of an efficient economic organization in Western Europe accounts for the rise of the West.

Efficient organization entails the establishment of institutional arrangements and property rights that create an incentive to channel individual economic effort into activities that bring the private rate of return close to the social rate of return.<sup>1</sup> In subsequent chapters we shall develop and apply a relevant model and then describe the parameter shifts which induce the institutional change. But first we must set out, in simplified form, the essential conditions for achieving economic growth and examine the difference between private and social costs and benefits.

In speaking of economic growth, we refer to a *per capita* long-run rise in income. True economic growth thus implies that the total income of society must increase more rapidly than population. A stationary state, on the other hand, produces no sustained rise in *per capita* income even though average income may rise and fall during cycles of quite long duration.

A stationary state will result when there is no inducement for individuals in the society to undertake those activities that lead to economic growth. Granted that individuals in the society may choose to ignore such positive incentives, and that in all societies some are content with their present situation; yet casual empiricism suggests that most people prefer more goods to fewer goods and act accordingly. Economic growth requires only that some part of the populace be acquisitive.

We therefore fall back on the explanation that if a society does not grow

<sup>1</sup> The private rate of return is the sum of the net receipts which the economic unit receives from undertaking an activity. The social rate of return is the total net benefit (positive or negative) that society gains from the same activity. It is the private rate of return plus the net effect of the activity upon everyone else in the society.

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it is because no incentives are provided for economic initiative. Let us examine what this means. First we must isolate the type of growth of income which results from increases in the inputs of productive factors (land, labor, capital). Such direct increments lead to overall (extensive) growth but not necessarily to increases in income per person. Two situations can precipitate the latter sort of *per capita* improvement which we designate as true economic growth. On the one hand, the actual quantities of the *per capita* factors of production may increase. On the other, an increase in efficiency on the part of one or more of the factors of production will result in growth. Such increase of productivity can come about through realization of economies of scale, because of improvements in the quality of the factors of production (better educated labor, capital embodying new technology), or because of a reduction in those market imperfections that result from uncertainty and information costs, or as a result of organizational changes that remove market imperfections.

In the past, most economic historians have heralded technological change as the major source of Western economic growth; indeed European economic history pivots around the industrial revolution. More recently, others have stressed investment in human capital as the major source of growth. Still more currently, scholars have begun to explore the growth effects of the reduction in costs of market information. There can be no doubt that each of these elements has contributed notably to growth in output. So have economies of scale, based on production for larger and larger markets. For that reason, and since we are concerned entirely with growth *per capita*, the expansion of population itself adds still another dimension to our determination of 'true' economic growth.

The previous paragraph reflects what economic historians and economists have almost universally cited as determinants of economic growth in their diagnoses of the past performance of economies. Yet the explanation clearly has a hole in it. We are left wondering: if all that is required for economic growth is investment and innovation, why have some societies missed this desirable outcome?

The answer, we contend, brings us back to the original thesis. The factors we have listed (innovation, economies of scale, education, capital accumulation, etc.) are not causes of growth; they *are* growth. This book focuses on what causes economic growth. Growth will simply not occur unless the existing economic organization is efficient. Individuals must be lured by incentives to undertake the socially desirable activities. Some mechanism must be devised to bring social and private rates of return into closer parity. Private benefits or costs are the gains or losses to an individual participant in any economic transaction. Social costs or benefits are those affecting the whole society. A discrepancy between private and social benefits or costs means that some third party or parties, without

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better off, on balance, and the solution was for a time less expensive than naval protection.

Other nations during this era protected shipping by convoy, while still others deployed naval squadrons. Ultimately piracy disappeared because of the international enforcement of property rights by navies.

Our third illustration, dealing with imperfectly stipulated property rights, comes from land policy in early modern Spain. As land became scarce with growing population, the social rate of return on improving the efficiency of agriculture rose, but the private return did not, because the Crown had previously granted to the shepherds' guild (the Mesta) exclusive rights to drive their sheep across Spain in their accustomed manner. A landowner who carefully prepared and grew a crop might expect at any moment to have it eaten or trampled by flocks of migrating sheep. In this case the ostensible owner did not have exclusive rights to his land.

These illustrations probably will have raised more questions than solutions for the curious reader. Why didn't societies develop property rights over intellectual property earlier? Why were pirates ever allowed headway? Why didn't the king of Spain abrogate the privileges of the Mesta and permit fee-simple absolute ownership of land?

In the first example, two possible answers occur. Either no way had been devised to make each shipowner pay to the inventor his share of the gains from increased safety at sea (a 'technological' limitation), or it appeared at the time that the costs of collection would exceed the benefits to be expected from a potential invention.

In the second case, bribery was initially better than piracy since the nation profited even after making the payment. Convoying was frequently found to be a still better solution. However, with the expansion of trade it ultimately became evident that the complete elimination of piracy was the cheapest alternative.

In answer to the third question, the king of Spain derived a substantial part of his revenue from the Mesta, and it was not clear that he could gain from abrogating their rights. Although the income of society would have been increased by such a change, it would appear that the Crown's own revenue from land taxes, reduced by the costs of reorganizing property rights and collecting the levies, would not, at least in the short run, have equalled the traditional revenues from the Mesta. Might the beleaguered property owners then have followed British policy by bribing the shepherds not to cross their lands? The difficulty here is the 'free-rider' problem of economics. Rallying all property owners to support such a project would involve costs greater than the expected benefits, since each individual would avoid contributing to the bribe, hoping to benefit from the contributions of all the others.

We then discover two general reasons why, historically, property rights

have not evolved to bring private returns into parity with social returns. (1) Technique may be lacking to counteract the free-rider and/or to compel third parties to bear their share of the costs of a transaction. For example, the costs of protecting individual overland traders from depredations by lords ensconced in castles overlooking the routes originally made it cheaper to bribe or pay tolls than to attempt to circumvent them, but the advent of gunpowder and the cannon eventually made such fortresses vulnerable and reduced the costs of enforcing these property rights. Right to the present day, technical problems have made it similarly difficult, and therefore costly, to develop and enforce property rights in ideas, inventions, and innovations and in some natural resources like air and water. To bring the private return closer to the social return, secrecy, rewards, prizes, copyrights and patent laws have been devised at various times; but the techniques of excluding outsiders from the benefits continue to this day to remain costly and imperfect.

(2) The costs of creating or enforcing property rights may exceed the benefits to any group or individual. The illustrations above provide cases in point. The losses from pirates or privateers may have been less than the costs of convoying or of naval attack. Similarly, in abrogating the Mesta's privileges, establishing private property in land, and enacting taxes on its income, the king of Spain would have faced not only the uncertainty of the ultimate revenue, but known costs of reorganization and collection, that exceeded the gains of undertaking such reforms.

If exclusiveness and the enforcement of accompanying property rights could be freely assured – that is, in the absence of transactions costs – the achievement of growth would be simple indeed. Everyone would reap the benefits or bear the costs of his actions. If the innovation of new techniques, methods or organizational improvements to increase output imposed costs on others, the innovator could, indeed must, compensate the losers. If he could do this and still be better off, it would be a true social improvement. However, once we return to the real world of positive transactions costs, the problems of achieving growth are more complicated, and they become still more uncertain when we recognize that adjustments must inevitably occur between the initial creation of a set of property rights and the operation of the system once those rights have been established. Property rights are always embedded in the institutional structure of a society, and the creation of new property rights demands new institutional arrangements to define and specify the way by which economic units can co-operate and compete.

We shall be particularly interested in those institutional arrangements which enable units to realize economies of scale (joint stock companies, corporations), to encourage innovation (prizes, patent laws), to improve the efficiency of factor markets (enclosures, bills of exchange, the abolition of

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serfdom), or to reduce market imperfections (insurance companies). Such institutional arrangements have served to increase efficiency. Some could be created without changing existing property rights, others involved the creation of new property rights; some were accomplished by government, others by voluntary organization.

The establishment of organization, whether governmental or voluntary, involves real costs. These tend to vary directly with the number of participants who must be brought into agreement. In the case of the voluntary organizations, withdrawal is also voluntary, but in the case of governmental organization, withdrawal can be accomplished only by migration outside the political unit. That is, a partner in a joint stock company who comes to disagree with its policies can sell his partnership and form a new joint stock company; but if he joins with others in enacting a zoning ordinance, the uses to which he can put his property are restricted, and he is not at liberty to withdraw from its provisions so long as he holds that property, or he must change the law – itself a costly proposition.

In view of such real costs, new institutional arrangements will not be set up unless the private benefits of their creation promise to exceed the costs. We should note right away two important aspects to this formulation. (1) Devising new institutional arrangements takes time, thought and effort (i.e., it is costly) but since everyone can copy the new institutional form without compensating the individual(s) who devised the new arrangement, there will be a substantial difference between private and social benefits and costs; (2) governmental solutions entail the additional cost of being stuck with the decision in the future – that is, withdrawal costs are higher than those related to voluntary organizations. Both these caveats lead us to a further discussion of government and its role in economic organization.

We can, as a first approximation, view government simply as an organization that provides protection and justice in return for revenue. That is, we pay government to establish and enforce property rights. While we can envisage that voluntary groups might protect property rights on a narrow scale, it would be hard to imagine a generalized enforcement without governmental authority. Consider the reason. Ever since nomadism gave way to agricultural settlements, man has found two ways to acquire goods and services. He could produce them, on the one hand, or steal them from someone else on the other. In the latter case, coercion was a tool to redistribute wealth and income. Threatened by marauders, the producers of goods and services responded by investing in military defense. But the building of a fortress and the enlistment of soldiers immediately raised the specter of the free-rider. Since the fortress and troops could hardly protect some villagers without protecting all, it was to each man's advantage to let his neighbor do the paying if contributions were on a voluntary basis. Thus

defense, as a classic case of a public good,<sup>2</sup> involves the problem of excluding third parties from the benefits. The most effective solution was, and continues to be, the forming of governmental authorities and taxing of all beneficiaries.

Justice and the enforcement of property rights are simply another example of a public good publicly funded. These requisites of an ordered society are typically embodied in a set of written or unwritten rules of the game. The customs of the manor, which we shall examine in the context of the medieval world, prevailed by precedent alone; written constitutions have evolved more recently. But historically such arrangements have roamed the whole spectrum from the most rudimentary (in which an absolutist ruler prevails) to detailed constitutions with clear separation of powers such as that created in 1787 in Philadelphia. These fundamental institutions reduce uncertainty by providing the basic ground rules underlying the specific or secondary institutional arrangements, which are the particular laws, rules and customs of a society.

In general, we shall observe that governments were able to define and enforce property rights at a lower cost than could voluntary groups, and that these gains became even more pronounced as markets expanded. Therefore, voluntary groups had an incentive (additional to the 'free-rider' problem) to trade revenue (taxes) in return for the rigorous definition and enforcement of property rights by government.

However, there is no guarantee that the government will find it to be in its interest to protect those property rights which encourage efficiency (i.e., raise the private rates of return on economic activities towards the social rate) as against those in which the property rights protected may thwart growth altogether. We have already seen an instance of this in the case of the Spanish Mesta. As a parallel, a prince may find short-run advantage in selling exclusive monopoly rights which may thwart innovation and factor mobility (and, therefore, growth) because he can obtain more revenue immediately from such a sale than from any other source – that is, the transaction costs of reorganizing the economic structure would exceed the immediate benefits. We shall explore the theoretical aspects of this issue in Chapter 8, since the differential success of European economies after the demise of feudalism depended on the relationships between the nation state's fiscal policy and property rights. We shall have prior occasion to explore the gradual evolution of the tax structure in the earlier years (thirteenth to fifteenth centuries) since the origins of the nation state and its pressing fiscal dilemma are to be found in those centuries.

<sup>2</sup> A public good is one which, once produced, people cannot be excluded from enjoying. If you protect a village, for example, you cannot avoid protecting all the villagers. Knowing this, each villager has an incentive to avoid paying for the village's defense. This situation is known as the free-rider problem.

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Let us summarize what has been said. Economic growth occurs if output grows faster than population. Given the described assumptions about the way people behave, economic growth will occur if property rights make it worthwhile to undertake socially productive activity. The creating, specifying and enacting of such property rights are costly, in a degree affected by the state of technology and organization. As the potential grows for private gains to exceed transaction costs, efforts will be made to establish such property rights. Governments take over the protection and enforcement of property rights because they can do so at a lower cost than private volunteer groups. However, the fiscal needs of government may induce the protection of certain property rights which hinder rather than promote growth; therefore we have no guarantee that productive institutional arrangements will emerge.

We have yet to answer the question why property rights which cannot profitably be established at one point in time will later be economically justified. Obviously the benefits from developing new institutions and property rights must have risen relative to costs so that it became profitable to innovate. Therefore an analysis of those parameters which influence the relationships between benefits and costs becomes critical to our study. The predominant parameter shift which induced the institutional innovations that account for the rise of the Western World was population growth. Let us see how it worked historically.