The Rise and Fall of the Manorial System: A Theoretical Model

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EUROPEAN economic history has always been concerned with the grand theme of the rise of the Western World. Sometimes this is put in terms of the transition from feudalism to capitalism and, if a Marxian dialectician is present, eventually to socialism. The literature is essentially the product of historians and as such is particularistic. No consistent theoretical foundation runs through it, except perhaps the Marxian one. The result is a chaotic output for which generalization is difficult, and in which bits and scraps of evidence are proffered for almost every specific explanation. This has helped the Marxist explanation to survive since, despite its evident shortcomings, it does provide a single path through the wilderness of medieval and modern European economic history.

One can now do better—much better. Application of the tools used by the new economic historian in analyzing the American experience offers equal promise for Europe. As in the case of America, the toolbox has thus far provided better equipment for the demolition of existing interpretations—certainly an important task in the case of the European literature—than for the construction of alternative hypotheses and explanations. However, recent extensions of economic theory into the economics of property rights and institutional change[1] offer new promise to the economist concerned with

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We have deliberately omitted extensive bibliographical citation of the historical evidence. The article is essentially concerned with developing a theoretical explanation, and our citations mostly provide background for the theory. In the last section only do we provide some historical citation because legal history will be less familiar to the reader.

[1] James M. Buchanan and Gordon Tullock, *The Calculus of Consent* (Ann Arbor: University of Michigan Press, 1967); Anthony Downs, *An Economic Theory of Democracy* (New York: Harper and Row, 1957); William J. Baumol, *Welfare Economics and the Theory of the State* (London: Longmans, Green and Co., 1952); Harold Demsetz, "Some Aspects of Property Rights," *Journal of Law and Economics*, IX (Oct. 1966); Harold Demsetz, "The Exchange and Enforcement of Property Rights," *Journal of Law and Economics*, VII (Oct. 1964).

long-run economic change. Certainly, he can only have been frustrated by the conventional blunt tools of the economist that were formerly his only recourse for study of past experience.

A beginning has been made in applying these tools to American and European economic history in two recent articles.[2] This essay not only extends the analysis but also applies an economic theory of contracts to produce a model of the manorial system and an explanation of its rise and fall. At stake here is more than simply an explanation for the decay of an archaic system. No sustained economic growth could be set in motion until fundamental institutional developments created or simulated or approximated private property in land and a free labor market. An economic analysis of the decline and fall of the manorial system is, therefore, a necessary stepping stone for any explanation for the growth of the Western World.

At this point we shall anticipate some of our future argument in order to distinguish our model from that developed by Evsey Domar.[3] Domar considers serfdom, like slavery, to have been a form of involuntary servitude. His explanation for the existence of involuntary servitude in Eastern Europe and North America is more convincing than for the existence and decline of serfdom in Western Europe—a case for which he admits (p. 28) his explanation is less than satisfactory. The reason why Domar's explanation fails is that serfdom in Western Europe was essentially not an exploitative arrangement where lords "owned" labor as in North America, or as it developed in Eastern Europe. Serfdom in Western Europe was essentially a contractual arrangement where labor services were exchanged for the public good of protection and justice.[4] The Western European serf, while born to a contract specifying the kind and extent of his obligations which he could not change without the lord's permission, was in fact also generally protected from arbitrary changes in the terms of the contract by

[2] Lance Davis and Douglass C. North, "Institutional Change and American Economic Growth: A First Step Towards a Theory of Institutional Innovation," THE JOURNAL OF ECONOMIC HISTORY, XXX, 1 (Mar. 1970), 131-49; Douglass C. North and Robert P. Thomas, "An Economic Theory of the Growth of the Western World," *Economic History Review*, 2nd. ser., XXIII, 1 (April 1970).

[3] Evsey Domar, "The Causes of Slavery or Serfdom: A Hypothesis," THE JOURNAL OF ECONOMIC HISTORY, XXX, 1 (March 1970).

[4] A contract is a mutual agreement between parties involved in governing a transaction—usually in the form of a payment for a specified consideration. An essential part of a contract is that it cannot be unilaterally changed by either party.

the lord as a consequence of the customs of the manor. This is clearly different from the case of a North American slave or the eventual position of the Eastern European serf.

In the latter case, serfdom in Eastern Europe may initially have been consistent with our definition, but as the lords acquired power to make unilateral changes in the contract, the serf's status was in effect changed to that of a *de facto* slave. Thus, while our definition of serfdom involves a specific kind of contractual relationship which could be changed only by both parties, a slave by our definition has no *legal* control over decision-making with respect either to his labor or to his income stream. Since the rise of an organized market economy appears essential for the viability of slavery as an institutional arrangement, the path of development described below differs essentially from the Eastern European case because in the latter the central political power of the state effectively prevented lords from competing for labor. In contrast, a decentralized political structure with small areas of coercive enforcement thwarted effective collusion by the lord in Western Europe and made possible a rudimentary labor market. Even in Norman England, the most centralized of feudal areas, the political power of the state was severely limited, as the Great Charter amply attests.

Slavery was always more profitable than free labor or serfs when the following conditions existed: (1) a market economy, (2) profitable opportunities to produce those types of economic activities where the costs of supervision to reduce shirking were low, and (3) where the costs of enforcing property rights in human beings were low. It should be kept in mind that the output of slaves as is often alleged is not necessarily lower than free labor under the above conditions because the laborer is not free to make the labor-leisure choice and therefore lower productivity per hour may be more than made up by the length of the workday that the slave is forced to accept.[5] Therefore, the key to Domar's dilemma is the existence of a central coercive authority which keeps lords from competing for labor (that is, keeps enforcement costs low). In the absence of such a central coercive authority a contractual arrangement involving labor will exist. This essay is an analysis of such contractual arrangements in the manor of Western Europe and an

[5] See Robert Fogel, "The Relative Efficiency of Slavery: A Comparison of Northern and Southern Agriculture in 1860," *Explorations in Economic History*, VIII, 3 (Spring 1971).

explanation of the way the contractual arrangements of the classic manor gave way to a free labor market and private property in land.

In subsequent sections of this article, we shall (1) describe the characteristics of the manorial system, contrasting them with conditions in 1500 and specify the initial conditions of our model; (2) briefly delineate the elements of our theory; (3) apply the theory in the context of the initial conditions to specify a model of the classic manorial system; (4) identify the parameter shifts that caused the system to change and analyze the resultant intermediate institutional arrangements, the cumulation of which ultimately led to the decline of the manorial system; and (5) in conclusion, show how this response induced a set of basic changes in property and personal rights which, in fact, inaugurated a new system of social and economic organization quite distinct from the classic feudal-manorial pattern which preceded it.

I

There is general agreement that in Western Europe the feudal world and, more specifically, the manorial system were in an advanced state of decay by the end of the fifteenth century. Some authors date its decline even earlier, placing it generally in the fourteenth century; some are so specific as to pinpoint the years of the Great Plague, 1347-1351, as the beginning of the end. Certainly, by 1500 the arrangements typical of the manorial system (and the feudal world) had been fundamentally altered, as witness the following developments:

(1) The feudal relationship within the manor was between lord and serf. In exchange for protection and justice, the main obligation of the serf was to provide the lord with a stipulated quantity of labor services; also often required were minor amounts of specified goods, and/or some other forms of remuneration.[6] By the sixteenth century in Western Europe this had yielded to a relationship between a landlord, on the one hand, and tenants, wage earners, sharecroppers, or independent yeoman farmers on the other.

(2) An uncodified body of traditional law composed the "cus-

[6] One of the more colorful examples of a peasant obligation, the authors have discovered, was the obligation of one serf annually for his lord's benefit to give ". . . a leap, a fart, and a jump."

tom of the manor" which governed manorial relationships and obligations: included were such topics as the way land changed hands, the common rights of the lord and his serfs to the use of pasture and wasteland, and the nature and extent of mutual obligations. These customs were rapidly being replaced by an impersonal body of law which explicitly defined property and personal rights.

(3) The self-sufficient manor typical of the high Middle Ages increasingly was giving way to a specialized group of farms producing for the market.

(4) In a larger context, the feudal society of the early Middle Ages was characterized by isolated manors spread over relatively unpopulated expanses of Western Europe and maintaining only tenuous ties to any central political authority. Superseding this arrangement came a more dense pattern of settlement, the growth of towns, an upsurge of trade, and the growing authority of political units substantially larger than a single manor.

However, even the above generalizations about manorialism and feudalism are open to exceptions. Some parts of Europe never experienced the traditional manorial system; in Eastern Europe what has been inappropriately termed feudalism was emerging during the same period that feudalism was declining in the West.[7] While feudalism was in full flower in the West, the Italian cities of Venice, Genoa, Pisa, Florence, Amalfi, and others had already established a highly developed urban and commercial society which was nonfeudal in character. The many detailed published studies of individual manors and localities appear, in total, to demonstrate some diversity of economic arrangements within the manorial system itself. Such exceptions have encouraged particularistic approaches by economic historians and have made suspect the broader generalizations by Marxists and others. Nevertheless, there does exist

[7] Some students of the Middle Ages may feel that we play loosely with our use of the words feudalism and manorialism. Feudalism is often used to denote the relationships among the nobility and manorialism to denote the relationship between lords and serfs. We view feudalism to have been a fiscal system involving a contractual relationship whereby public goods, such as protection and justice, were provided in exchange in the main for labor obligations. In this paper we concentrate on the relationship between lord and serf—manorialism—but we believe that the same theoretical model can also be applied to explain the larger social framework of feudalism, and we have frequently used the term feudalism interchangeably with manorialism in this article.

a general view of what constituted the classical manor and how these conditions changed.

The model that we shall advance provides a general explanation for the accepted view which, by taking into account the peculiarities of local areas and regions, can also account for the diverse evidence accumulated. We limit the analysis to the classical manorial system as it existed in Western Europe, and particularly in England. This approach can be generalized, however, to encompass those broader problems encountered when dealing with the rise of Western Europe, which must be left out in this brief essay.[8]

An economic historian must step into history at some point to specify the conditions that existed when his analytical problem begins. We enter into the tenth century—a time, most scholars believe, during which the manorial system was the dominant method of economic organization in Western Europe.[9]

Any understanding of the manor as an economic system must take into account three essential descriptive elements.

(1) Much of Western Europe was still unsettled; land of arable quality was freely abundant.

(2) Population was sparsely scattered through the area in small villages, but was growing.

(3) Centuries of wars and invasions had destroyed or severely weakened the central political authority inherited from the Roman Empire. Chaos reigned over much of the area, with only a residue of military prowess and possession of armaments separating the ruling classes from the laborers.

The following initial conditions derive from these elements: (1) Law generally existed only within the settled areas, a condition that severely limited trade and commerce. Goods were generally less mobile than labor—that is, subject to higher transaction costs. (2) Land, while freely abundant, was valuable only when combined with labor and with protection and justice. (3) Labor ex-

[8] See the forthcoming book by North and Thomas, *The Rise of the Western World: A New Economic History.*

[9] While substantial differences appear between manors at any point in time in terms of the nature and extent of the serf's obligations, a generally accepted view of the direction of change does exist. This view is primarily due to the research of M. M. Postan, "The Chronology of Labour Services," *Transactions of the Royal Historical Society,* 4th ser., XX, pp. 169-93. (See also *Cambridge Economic History of Europe,* I, pp. 549-632.) Our article attempts to explain the chronology that Postan describes. The chronology for France and Germany is not so well established, hence is less discussed in this article.

hibited constant costs when combined with land to produce goods, because of the abundance of land. (4) Because a knight and castle are indivisible, the provision of protection was subject to the traditional u-shaped cost curve of economic theory.

Some economics of the manor immediately become apparent when the traditional tools of price theory are employed. The nature of the cost function involved in providing protection, in conjunction with some mobility of labor, determines in theory, for example, the size of a manor. Therefore, as population continues to grow, new manors will eventually be formed when, as a result of population growth in any manor, the marginal cost of providing protection exceeds the value of the lord's share of the marginal product of labor. A frontier movement—or the expansion of settled areas—is therefore the necessary result of a continuous growth in population.

However, these are not the major type of questions the economic historian asks about the manor. The essential point to be resolved is why the manor provided a unique contractual arrangement—why were labor dues exchanged for protection and justice? It is necessary to employ a theory of contractual arrangements to grapple with this problem.

II

While all the ramifications of a theory of contracts have yet to be worked out, enough elements have been developed to provide a promising model.[10] The theory has evolved in the context of a market economy, but that fact does not vitiate the usefulness of the model when the theory is modified to take account of the conditions of the period we are investigating.

Every transaction in product or factor markets involves the outright or partial transfer of rights which in modern times we call property rights. Typically, in the modern world the specification of such a transfer is defined by a contract. Therefore, a theory of contracts is concerned with the structure, organization, transfer, and enforcement of property rights. In previous work it has been shown that with a given structure of property rights and a market

[10] Steven N. S. Cheung, *The Theory of Tenacy* (Chicago: University of Chicago Press, 1969), and Cheung, "The Structure of a Contract and the Theory of a Non-Exclusive Resource," *The Journal of Law and Economics, XIII* (April 1970), 49-70.

economy, agricultural contracts will vary as a result of a desire to share natural risk and because transaction costs differ with different physical attributes of inputs and outputs; because institutional arrangements differ; and because different contracts require varying efforts in enforcement and negotiation.[11]

The three categories of contracts in agriculture—a fixed rent contract, a fixed wage contract, and a share contract—have been analyzed previously on an *a priori* basis as to their efficiency under various conditions. The form of the share contract that has been analyzed in the literature is the sharing of output, or sharecropping. Historically, another form of the share contract—the sharing of inputs—has been important, as in the case of the manor. Fixed rents or fixed wages seem within the constraints of the analysis to involve lower transactions costs but no dispersion of risk between the parties. The crop-share contract involves higher transactions costs but allows the sharing of risks. The sharing of inputs, on the other hand, while it also allows the dispersion of risk, involves transactions costs so much higher than the sharing of outputs that it is seldom if ever employed in the modern world.

These results, however, crucially depend upon the existence of a market economy and upon the existence of private property rights. In the absence of an organized product market, a situation typical of the high Middle Ages, the relative ranking of the four possible contractual arrangements is altered. The general absence of a market requires that along with other necessary elements of any agreement the consumption bundle must also be negotiated in any fixed rent, fixed wage, or crop sharing contract—an expensive procedure due to the uncertainty inherent in the production of agricultural goods. The substantial natural variation in the size of output makes the periodic determination of the relative prices of various outputs a difficult matter while at the same time necessitating some agreement as to acceptable substitutions for the specified goods. In the general absence of an organized market, the major difficulty is to agree on the rate at which other goods might be substituted.

We can better understand this point if we consider a case where the output is known with certainty. The output is uniquely determined by the production function and the quantity of inputs; it

[11] Cheung, *Theory*, ch. iv.

is then relatively inexpensive to vary the consumption bundle, since the rate of exchange of one product for another is easily determined. However, where the size of outputs associated with a given level of inputs is uncertain, the determination of relative prices reduces, in the absence of an organized market economy, to a bilateral bargaining situation—the most expensive form of market organization.

The necessity to negotiate the consumption bundle on the classical manor thus substantially increased the transactions costs associated with any of the other three contemporally observed contractual arrangements in agriculture. The sharing of inputs, however, avoided this cost by allowing each participant to grow the product-mix he preferred without the agreement of the other party. Later in this article we shall contend that in the general absence of a market economy this advantage was sufficient to overcome the inherent disadvantages of this contractual form.

The existing theory of contracts has also been formulated within an implicit structure of property rights. Our objective is to widen the analysis to explore specifically how the structure of property rights has evolved. To do this, we must add to this theory from the more general model of institutional change developed by Davis and North, and by North and Thomas. In this model, the contractual arrangements described above are secondary institutional arrangements—that is, they are developed within the context of an existing basic set of decision rules and property rights comprising fundamental institutional arrangements. Such fundamental arrangements may be specified in a formal constitution, may exist as a body of common law or (as in the case of the manor) as a set of customary practices, or some combination of the three. While there is clearly some overlap between these two levels of institutional arrangements,[12] the most obvious difference is that it is far more costly to alter the fundamental than the secondary arrangements and that historically this has been the intention of the framers of constitutions as well as the *raison d'etre* for the sanctity with which basic manorial customs were regarded.

In Western Europe, historically, as the nature of fundamental

[12] Fundamental institutional arrangements may be considered general statements of the rules of society, and secondary institutions specific statements dealing with one particular phenomenon. See Davis and North, "Institutional Change and American Economic Growth. . . ."

institutions has changed, the relative transactions costs of contractual forms have also changed. This is to say, the *a priori* cost ranking of various contractual arrangements must depend upon the fundamental institutional arrangements. When the parameters to the contract shift in such a way that according to current theory the instituting of another form of contract would be expected, this may not occur if the potential contractual arrangement runs afoul of the fundamental institutional arrangement. We may observe, in fact, what in current theory would be considered a second-best arrangement or even no change at all, if the cost of altering the fundamental institutions exceeds the gains from implementing the new contractual form. The history of the manor, as we shall see, affords examples of this influence on the choice of contractual forms.

We now add three propositions to the analysis developed in earlier literature.

(1) The forces for change which we shall describe later will first induce pressure to change contractual forms—that is, to alter secondary institutional arrangements. The cumulative forces of such changes which violate, modify, or otherwise bypass existing fundamental institutional arrangements will induce growing pressure for more basic—and more costly—modification in primary institutional arrangements.

(2) These changes may reflect changes in relative bargaining strength or reductions in transaction costs which permitted both sides in the bargain to increase their income, or may result from political-military conflicts, with indeterminate consequences as far as prediction is concerned. We have no theory of political change that allows us to explain, for example, the contrasting patterns of political organization that evolved, as between England and Eastern Europe, discussed in the first section of this article.

(3) We observe that when conflict has arisen over fundamental institutional arrangements, that group which achieves power has tended to impound its new rules in a written "constitutional" document which will be very costly to alter.[13] The incentive has proved greatest when a group has foreseen that its decision-making ability with respect to the fundamental rules of the game may not be

[13] Every revolution seems to produce a constitution which often requires another revolution for its alteration.

permanent. From the Magna Charta to the United States Constitution, the purpose was to specify a set of new fundamental rules removed as far as possible from capricious or individual alteration.

We shall observe in the last section of this article that cumulative changes in secondary institutional arrangements ultimately led to the enactment of a long series of fundamental statutes which were landmarks in English constitutional history. Thus, in addition to the sweeping overhauls of the English system, such as the Magna Charta or the upheavals of the seventeenth century and the gradual ascendancy of parliamentary government, which captured the attention of historians, basic statutes also became embedded as landmarks along the route to a more efficient system of property rights.

III

We now turn to an analysis of the manorial system—the dominant form of economic organization of the Middle Ages. We have already posited that Western Europe at the beginning of the tenth century was mainly a vast wilderness, sparsely inhabited. The few inhabitants, in village clusters organized mainly in manors, lived according to traditional laws or customs. Between manors, little or no social, political, or economic interaction occurred; the fundamental institutional arrangements established during the Roman Empire had long since disappeared and none had developed to replace them. The high risk of traveling outside the manor made it far more efficient to move people occasionally to adjust to economic conditions than to move goods regularly; hence the individual settlements were not linked by any systematic trade.[14]

This is not to imply that exchanges were not made in the tenth-century manorial economy—they clearly were—but the volume of trade was severely circumscribed by the resources required to effect exchanges. The high risk incurred when transporting goods between manors made for high transaction costs. Simultaneously, similar resource endowments between neighboring manors limited the potential gains from trade. The combination of the two militated against any organized market economy: the exchanges that did take place were in the nature of individual face-to-face bargains. The high costs of obtaining information in such a transaction require

[14] Marc Bloch, *Feudal Society,* I (Chicago: University of Chicago Press, 1964), p. 63.

nothing less than the mutual determination of the reservation demands of the parties involved. "Haggling," a term that describes this process, conjures up the expenditure of much time and effort. Thus the possibilities for exchange were severely limited.

The absence of an effective central political authority made the provision of protection purely a local matter. The constant threat of piracy and brigandage, and the less frequent but always possible incursions of Vikings, Huns, or Moslems, made local defense a matter of prime importance. The general lack of order compelled dependence on specialized individuals possessing superior military skills and equipment, and their presence was welcomed by peasants unskilled in warfare and therefore otherwise helpless. This affords the classic case of a public good, since protection of one peasant family involved protection of his neighbors as well. Each peasant therefore would have been inclined to let his neighbor pay the costs; in such a case, some form of coercion was required to raise the resources necessary for defense.

The military power of the lord provided him with the force to insure the collection of these resources. It also made him the logical person to settle disputes and, in the last resort, to enforce local law or customs. Thus, the dispensing of justice was early added to the lord's role of protector.

The lord's power to exploit his serfs, however, was not unlimited; in the extreme, the serf could illegally steal away to seek asylum on another manor or, somewhat later, in one of the growing number of medieval towns. Nor were such fugitives likely to be returned by the lord's neighboring rival. The abundance of land during the high Middle Ages made labor a very scarce and therefore valuable factor of production. Since the provision of public goods (in this case, protection and justice) is subject over some range to decreasing costs, some medieval lords were always in active competition with their peers to enlarge their estates.[15]

It still remains to be explained why the classic manor maintained a contractual relationship which mainly took the form of labor obligations—a sharing arrangement—rather than any more currently familiar form. The classic organization of the manor appears

[15] Collusion between lords could and sometimes did limit competition and, as a result, make exploitation possible. But by its nature such collusion tended to be unstable, since there were obvious advantages to attracting more peasants. A central coercive authority was necessary for sustained exploitation.

archaic if not irrational by today's standard due perhaps to its almost total absence in the modern world. Therein lies the clue: the selection of labor obligations was determined by conditions unknown in the modern world: namely, a restricted market for produced goods. Let us see how this condition would affect the selection of a contractual arrangement within the context of the theory of contracts discussed earlier.

During and prior to the tenth century, the category of possible arrangements included: fixed wage payments in kind, fixed rents in kind, or an arrangement to share either crop inputs or crop outputs. The choice of a fixed wage payment in kind on an *a priori* basis would have involved the following transactions costs. The negotiation costs between lord and serf would presumably have been very high, since they would have to negotiate not only the level of payment and the nature of the consumption bundle the peasant wished to consume but also the rate of exchange for substitute payments. The absence of a market for goods outside the manor and uncertainty with respect to output within the manor would make the determination of relative product prices a costly bilateral bargaining situation. There is also the problem of negotiating the quality of goods specified and the fact that the lord would bear all the risk. The costs of contract enforcements would also have been high, at least for the peasant, who must check the outputs offered in payment for both quality and quantity and to obtain redress for any contract violations would have to sue in the manor's court, often dominated by the lord.

Fixed rents in kind, from the point of view of the participants, would have been almost the reverse of fixed wage payments. The negotiation costs would have been equally high, since the peasant would have to pay the lord in rent the consumption bundle the lord stipulated. This would impose upon the manorial economy the same high transactions costs inherent in the contractual form previously discussed. The major difference would be that the peasant exchanged contractual positions with the lord, including the bearing of risk.

A sharecropping arrangement, whether of inputs or outputs, offers the possible advantage of spreading the risk between parties according to their relative shares. The negotiation costs for sharing outputs, since the arrangement also requires the specification of the consumption bundle, are probably no different quantitatively or qualitatively in the absence of an organized product market from those for either a fixed wage or a fixed rent agreement.

On the other hand, the negotiation costs for the sharing of inputs (that is, labor dues) since it avoids the necessity to negotiate a consumption bundle would clearly have been lower than for any other type of arrangement, given the general absence of an organized product market in Europe in the tenth century. This was especially true since competition between lords for labor had created a rudimentary labor market placing limits on the price serfs must pay for public goods. The enforcement costs for sharing inputs, on the other hand, are probably the highest of any of the contractual forms considered. Since the obligation of the laborer is discharged merely by being present, and since a serf could not be dismissed, he had a considerable incentive to shirk. The lord was therefore forced to devote resources to supervision, and labor gangs came into being. The customs of the manor also came to define a specified amount of achievement for a day's obligations, and manorial courts were empowered to levy fines for failure to meet the quota.

Against such a background the contractual arrangements of the classic manor can be seen as fully rational. The main obligation of the serf to provide labor services to his lord and protector is an input-sharing arrangement.[16] The general absence of any market for goods, when combined with the existence of even a rudimentary market for labor, justified the sharing of inputs as the contractual arrangement having the lowest transaction costs.[17] Competition for labor between lords restrained their natural bargaining power, allowing the determination of a customary value for labor outside a costly bilateral bargaining situation. The antique organization of

[16] The obligation on the part of a serf to perform certain labor services for his lord was not, as we have mentioned, his only liability. Besides labor dues, the serf of the classic manor was typically required to provide certain minor amounts of goods in kind, firewood being an example. These obligations were clearly in the nature of fixed rent contracts and existed on the manor because, for the goods involved, this contractual arrangement involved the lowest transaction costs. In the case of firewood, the consumption by the lord varied little from year to year. It was cheaper to negotiate once for a fixed amount and then to check the amount on delivery, than to fix a certain number of hours in a day for gathering firewood and then having to supervise each hour of labor.

[17] We do not mean to suggest that some exchanges did not take place within the classic manor; clearly, some must have. But the nature of the manor limited specialization and burdened each exchange with high transaction costs, especially for search.

the manor is therefore understandable as an appropriate response to the economic conditions of that day.

The contractual arrangement characteristic of the traditional manor lasted as long as the conditions that made it efficient. These conditions generally survived through much of the Middle Ages; in the process, the master-servant relationship became sanctified as the "customs" of the manor, and these "customs" served as the fundamental institutional arrangements of the time. In those days of literary innocence, such unwritten rules peculiar to local areas but understood by all formed the basis for the economic and social life of the manorial society.

IV

Throughout the high and later Middle Ages a groundswell was rising which eventually would surge through the manorial system, undercutting those basic contractual arrangements which had been its economic foundation. The cause of the upheaval was in two developments: additions to the labor force were now encountering diminishing returns, which changed relative factor prices; and an exchange economy was in the process of developing—first within the local areas between manors, then within regions, and finally interregionally. Following closely the growth of the market came the increasing use of money as a medium of exchange. The use of money further lowered the cost of transactions and widened the market, but introduced problems of its own in the form of a variable general-price level.

The origin of each of these influences which in combination and in the course of time were radically to alter the manorial economy can be traced directly to changes in the level of the population of medieval Europe. From the tenth century onward the boundaries of local manors were constantly in the process of being extended as a growing population took up more land. As the marginal cost of protection exceeded the value of the lord's share of the marginal product of labor, new manors were formed. When the extended boundaries of one manor met the expanding limits of its neighbor, room from expansion disappeared. Thereafter, diminishing returns to further population growth set in. Additional laborers provided by the growing population were thereafter employed on land previously considered submarginal or were used for more intensive cultivation of previously cleared arable land.

Diminishing returns to labor put increasing stress upon the manorial economy to adjust the master-servant contract to the changed factor prices. The full force of this influence however had to await the general disappearance of free land. So long as the wilderness contained an unutilized supply, migration from older settled areas to the frontier acted as a safety valve keeping factor prices from changing significantly.

As migrants settled in geographic areas where different climate and resources were encountered, conditions were created that raised the gains from specialization and trade. Differential factor endowments were created between geographic areas, particularly between the densely settled older areas and the more sparsely populated frontiers. Different natural resource endowments and climatic conditions provided further basis for specialization, and trade was created.

A powerful incentive in the form of increased gains was thus created to break down the previously iron barriers to trade. Besides the obvious social advantages to be gained, lords as a group could enjoy new consumption possibilities and new sources of revenue—taxes and tolls levied against goods—as trade expanded. The nobilty were thus encouraged to found burroughs with protected rights to serve as market places and to join voluntarily with other lords to police these and surrounding areas. However, the protection of entire trade routes and the enforcement of trading contracts were beyond the realm of the local manor or a coalition of neighboring manors. If potential gains from trade were to be enjoyed, it now became essential to create or to strengthen larger political units. These regional or national states eventually came to hold jurisdiction over extensive areas and were empowered to regulate trade, to provide naval protection, and to reduce or eliminate brigandage on land.

Stemming initially from population growth and the resulting frontier movement, the increased potential for trade created the conditions for the establishment of local, then regional, and ultimately interregional markets for produced goods. These changes were accompanied by the rise of towns to serve as central places, and later by the establishment of larger political jurisdictions capable of regulating and protecting commerce.

The extension of law and order to the areas between manors, and the increase in the potential gains from trade by the settlement of areas with different resource endowments, resulted in a further reduction in transaction costs that coincided with the extension of the market. Transaction costs vary inversely with the extent of trade: as the volume of trade expands, a reduction occurs in the average costs of exchanging goods (based largely on the cost of gathering information). The market becomes more efficient with the result that more goods both in quantity and variety are traded.

The development and extension of a market for goods altered the basic economic conditions to which the classic institution of the manor had been the efficient response. Continued reductions in the costs of using the market to exchange goods eventually eliminated the need to specify the consumption bundle if a contract were based on a fixed wage, a fixed rent, or a sharing of the output. Wages, rents, or a portion of the output, whether received in money or in kind, could now be exchanged via the market for the consumption bundle the individual desired. When this point was reached, the traditional labor-sharing arrangement no longer enjoyed a relative advantage in terms of transaction costs.

As the market economy spread, an incentive was therefore created to change the basic rules of the manor away from labor dues toward some other more efficient contractual form. The exact nature of the alteration of the traditional manorial relationship depended not only on the variables that in modern economic theory compose transactions costs—the negotiation and enforcement costs—but also upon the fundamental institutional arrangements which in the feudal world were definitely not based on private ownership. Local arrangements, the "custom" of the manor, made certain contractual innovations less costly to establish than others and thus imposed constraints at any point in time upon the selection of an alternative contractual arrangement. Historical inquiry shows the custom of the manor to have changed only very slowly by gradual modifications of those specific conventions which, sanctified by traditions, were valued highly as the only impersonal law of the local area. Such practices could be radically altered only at high social cost. However, the sum of many minor alterations amounted, after several generations, to a fundamental change in the basic institutional environment governing the manor.

Although seemingly fallen into disrepute, the traditional explanation for the decline of the manor—namely, the rise of a market economy—when considered in the context of the preceding analysis is sufficient to explain the eventual disappearance of the essential element of the manorial system: the sharing of inputs in the form of labor dues. This contractual arrangement, as we have seen, was efficient only because of the high cost of negotiating and specifying the consumption bundle which at that time was a necessary clause in any alternative form of contract. In the absence of an organized commodity market this saving had been sufficient to overcome the high enforcement costs inherent in the classic system of sharing inputs. The establishment and continued expansion of a market economy negated that advantage and created a powerful incentive to change the traditional system. Precisely how the contractual form would change depended, among other things, upon current local customs. This accounts in part for the diversity of arrangements between manors found by historians.

The rise of a market economy was the result of population growth. Increased reliance upon the market brought with it another agent which affected the nature of contractual relations within the manor—a changing price level. Throughout the later Middle Ages, inflation and deflation were to create additional pressures to change existing contractual arrangements.

Besides accounting for the rise of the market, an expanding population within the manorial economy also impelled the alteration of existing contractual arrangements to adapt to the changing value of labor relative to land. A growing population within fixed boundaries resulted in diminishing returns. Land rose in value as it became scarce relative to labor and the rights to its use became important and valuable. Pressures within the manor to adjust to different factor proportions inevitably ran afoul of current customs, and actual contractual arrangements that developed depended upon the costs of altering customary arrangements.

The most common contractual form that emerged during the twelfth century was of the following type. The lords began to commute labor dues owed them annually in return for a fixed money payment—the value to the tenant of the public goods he received at the time of commutation. This came to be accepted as the customary price, as the lords leased increasing portions of their demesne for a fixed rent payment. It came also to be accepted as the custom and served the lord's advantage by placing the entire natural risk upon the peasant. The lord's income thus came from two sources: the payment for his provision of public goods and the payment (in rents) for the use of his lands.[18]

In the absence of inflation, the lord at this time had an additional incentive to elect money payments at the customary level: as the growing manorial population continued, if slowly during the twelfth century, to reduce the value of labor, the money payment (fixed by custom) soon ceased to reflect the diminishing true value of labor. Thus the lord gained as the real value of the peasants' labor services declined, in effect collecting part of the rise in value of the peasants' land. At the same time, however, the customary fixed rent on land ceased to reflect the rising real value of the lord's land and acted in effect as rent controls do today. Since periodic renegotiation of the rent would have been expensive under existing institutions, the device of an entry fine, similar to modern "key money" arrangements, came into existence. The entry payment, reflecting the increased value of land above that covered by the customary rent, was paid by a new tenant upon taking possession of the lord's land. Such devices allowed adjustments to the rise in land value without running directly afoul of the customs of the manor.

The substantial cost of radically altering prior institutional arrangements thus set limits upon the development of new contractual arrangements to meet the changing economic situation. Alterations once made themselves in time became the "custom" and in turn proved difficult to modify. The twelfth-century shift to fixed rents and fixed money payments in lieu of traditional labor services was, in general, the most efficient method by which the manor's customs could adjust on a once-and-for-all basis to the new external conditions created by locally diminishing returns and the rise of the commodity market.

The frontier movement that existed in the tenth century and continued through the twelfth created varied conditions within the regions that composed the feudal economy. The market for commodities was obviously more efficient in densely settled areas than on the frontier. Thus, it is not surprising to observe labor dues being implemented in newly settled areas poorly serviced by the

18 The lord at this time sometimes leased or farmed his possessions to another person in exchange for a fixed annual rent. This person probably then operated the manor as if he were the lord. We have been able to find out little in the way of specific information about this arrangement.

market, even while they were being modified or dying out in older settled areas. Within the context of our explanation, there is more reason to expect diversity than uniformity of economic organizations in the feudal world.

The general trend on manors toward fixed rents and the annual commutation of labor dues for a fixed payment was interrupted and reversed during the thirteenth century. Labor obligations were revived as before the twelfth century, and the demesne returned at least partly to the active management of the lord. This seeming enigma is often interpreted in Marxian terms as an unexplained retreat in the constant march of history toward the inevitable complete freedom of the peasant. It is readily explainable, however, within our interpretation of the rise and fall of the manorial economy. The thirteenth century witnessed a striking inflation; the price level in England for example approximately tripled early in the century and, although at a reduced rate, climbed consistently thereafter.[19] Meanwhile, the virgin land previously available to absorb the continuously growing population had disappeared; the result was the general onset of diminishing returns throughout Western Europe. These two forces created severe adjustment problems for the manorial economy whose flexibility was restricted by rigid customs.

The main sources of the lord's income, fixed money payments for land rents and for commuted labor obligations, were both declining in real value, due to the inflation. Diminishing returns to an increasing population at the same time reduced the real value of labor dues paid in kind while increasing the real value of land. Entry fines, collected only when a new tenant took possession, generally on the death of the prior tenant, proved an inadequate hedge against the rapid inflation of the early thirteenth century.

The cost was very high for frequent renegotiations of the terms of the traditional relationship requiring little less than a complete break with local custom. Although establishment of a fixed crop rent or a sharecrop arrangement would have dealt adequately with the problem of inflation, it would not only have proved costly or impossible to adopt within the traditional environment but would also have required costly periodic renegotiations to adapt to the changing land-labor ratio.

[19] D. L. Farmers, "Some Grain Price Movements in Thirteenth Century England," *Economic History Review,* 2nd ser., X, 2 (Dec. 1957), pp. 207-20.

The response of the manorial economy to the altered conditions of the thirteenth century was to select within existing practices those arrangements that best met the new situation. Goaded by inflation, the lords increasingly chose to exercise their acknowledged right to reclaim their leased demesne lands as they became available and to refuse to commute the labor dues needed to work them. By actively farming their own lands, the lords could avoid the redistributional effects of inflation and capture the increased land rents due them as owners. Since both actions were clearly within the lord's prerogatives, they did not run afoul of the customs of the manor and could be instituted with relatively low transaction costs.

The continuing decline in the real value of labor due to the ever-increasing population was partially dealt with by reimposing, in specified detail, the labor obligations which formerly were unspecified. In the process the extent of these burdens was generally increased to correspond to the reduced real value of labor.[20] The thirteenth-century adjustment of contractual arrangements between lord and tenant was, therefore, an efficient adaptation to the new economic situation subject to the constraints of the existing customs or institutional arrangements. Yet, these adjustments could not be made in violation of existing lease agreements. The lords were forced to await the expiration of their leases before they could take back their lands. Since such leases were apt not to expire simultaneously we would expect to see the gradual expansion of a manor's demesne over the course of the century. Meanwhile, the records of such manors would show the partial commutation of labor dues continuing as the lord demanded labor services sufficient only to farm the lands which they had reclaimed and accepted money payments from the residual owed them.[21]

[20] A. H. Hilton, *A Medieval Society* (London: Weidenfeld and Nicolson, 1966), pp. 135-37.

[21] The lord of course during the thirteenth century had the alternative of continuing to commute for a fixed money payment the labor dues owed him and farm his land with wage labor supplied from among the growing number of cottars. He would have done so if the fixed commutation payment was greater than the wage rate. The fact that he chose not to use wage labor suggests that:

$$P_c < W = MPP_L \cdot P_p$$

Where P_c is the fixed commutation payment; W equals the wage of hired labor, MPP_L is the marginal physical product of labor and P_p is the price of agricultural products. Labor obligations would be chosen in preference to wage labor by the lords if, over time, the decline in the marginal physical product of labor was less than the rise in agricultural prices. The inflation of the thirteenth century was therefore a contributing factor in the reintroduction of labor dues during that era.

Early in the fourteenth century the ultimate consequences of centuries of population growth caught up with Western Europe. Widespread famines in the early decades were followed by plagues in 1347-1351 which recurred irregularly throughout the rest of the century. The combined result of famine and pestilence was to drastically reduce the population, thus raising the land-labor ratio. Trade and commerce, while substantially reduced in volume, nevertheless continued. The price level rose rapidly immediately after the Black Death but fell slowly thereafter throughout the fifteenth century.

These changed economic conditions again required adjustments in the manorial contractual arrangements. The decline in population left the holdings of many peasants and landlords at least partially vacant. The lords initially attempted to force their surviving tenants to take up vacancies on the old customary terms and resisted with such laws as the Statute of Labourers the increase in real wages consistent with the new economic conditions; such attempts quickly came to nought. The flight of peasants, the competition between lords anxious to attract tenants, and the stubborn refusal of villeins to obey orders defeated these attempts. Only an effective central coercive authority, as developed in Eastern Europe, could have prevented competition for the now very scare labor.

In Western Europe the most effective way to retain tenants was to lower rents and to relax servile obligations. The latter objective led to the innovation of lengthy leases, which soon came to be life leases, under which labor obligations were combined with customary rents in one fixed rent contract. Inflations of the previous centuries had reduced substantially the real value of the nominal customary fixed rents, so they provided a close approximation to the current real value of rents and made mutual agreement easy. A life lease was renegotiable only on the death of the tenant—such was the price lords were now willing to pay to obtain tenants. The tenants in effect received the use of the land for life in return for agreed fixed payments to the lord, who still provided the public goods required on the manor.

Life leases turned out to be a last-ditch effort by lords to retain their customary rights by signing them away for only one generation of tenants. But since recurrent plague did not allow the population to expand for several generations, these agreements themselves took on the force of custom and eventually the tenants obtained by customary practice the right of inheritance. In the late fifteenth and sixteenth centuries such arrangements came to be considered as equal in law to copyholds and as subject only to the now-customary encumbrance of a fixed money payment or quit rent. A secularly rising price level during the sixteenth century reduced this to a purely nominal payment by the year 1600. The manorial economy thus met its death: labor services were now irrevocably replaced by money rent payments; land was now tilled by free tenants and/or by workers receiving money wages, who were free to seek their best employment.

It has been our contention that there are two levels of institutional arrangement. The fundamental institutional arrangements at any given time constitute the basic rules of the economy with respect to market and non-market decision making. The secondary institutional arrangements (as identified in this article) are specific forms of agreement consistent with the fundamental arrangements and which are changed to realize the gains from economies of scale, reduction of transactions costs, or redistribution of income. Whether the former are merely cloaked in custom, are embodied in common law, or are written in a constitution, they are intentionally sanctified by tradition and thereby provide a degree of built-in stability (and, hence, a reduction of uncertainty) in man's competitive and cooperative relationships.[22] This sanctity, in fact, simply raises the costs of altering the fundamental arrangements. When a change of parameters offers potential gains from establishing new secondary institutional arrangements, these may not be directly realizable simply because they run counter to the basic rules of society. When the fundamental institutional arrangements are not those of private property rights, the possible new contractual responses to changing parameters may not be "ideal": that is, a more efficient contractual arrangement could be envisioned by an economist, given the existence of private property. The response of the manorial economy to the inflation of the thirteenth century is an example. However, a cumulative number of such prospective "non-ideal" secondary institutional arrangements can encourage (that is, raise the aggregate benefits relative to the cost of) attempts to reorganize the fundamental institutional environment, in an effort to realize the gains from more "ideal" contracts. In this section we

[22] Sir Frederick Pollock and Frederick William Maitland, *The History of English Law*, 2d ed., I (Cambridge: Cambridge University Press, 1968), p. 172.

saw how changes in the size of the market, in relative prices, and in the price level led to alteration of contractual arrangements. In the next section we shall show that in the case of England these changes led to a body of common law that redefined property rights in land and separated land law from "master-servant" law.

V

The history of land law in England is a well-researched area, in which a substantial literature describes in detail the process of change.[23] While there is disagreement over many details of this process, the broad outlines needed to support our argument do not appear controversial. One initial condition must be added to those in the previous section which clearly differentiates the evolving structure of English common law from Continental feudal society: the Norman conquest led to a degree of centralized control in England and to authority within the King's court which has no exact parallel on the Continent.

Feudal law did not recognize ownership in land. Rather, its basic characteristic was that several persons could have jurisdiction over a given piece of land. King, lord, and peasant (in somewhat different senses) each held a right to the same piece of land.[24] Distinctions between public and private law were, therefore, blurred; and the key to property was jurisdiction. While a piece of land was held "of the king," neither the tenant nor the king owned the land. Moreover, the "incidents," that is to say, the taxes, went with the piece of land so that if subinfeudation occurred, the ultimate responsibility for the incidents was taken over by the new tenants.

While we must wait until the 1920's for a set of property acts which annuls both the language and some of the lingering elements of feudal land law, the effective transformation occurred in the

[23] In addition to Pollock and Maitland, see I. M. W. Bean, *The Decline of English Feudalism* (New York: Manchester University Press, 1968); Charles Montgomery Gray, *Copyhold, Equity, and the Common Law* (Cambridge, Mass.: Harvard University Press, 1963); A. D. Hargreaves, *An Introduction to the Principles of Land Law* (Oxford: Clarendon Press, 1927); Edward Jenks, *Modern Land Law* (Oxford: Clarendon Press, 1899); Gail Gates Lawler and J. John, *A Short Historical Introduction to the Law of Real Property* (New York: Longmans, Green and Co., 1936), pp. 221-81; A. W. B. Simpson, *An Introduction to the History of the Land Law* (London: Oxford University Press, 1961).

[24] Pollock and Maitland, *History of English Law*, p. 237.

centuries we have just examined.[25] Common law grew up around real actions which brought litigation before the King's Court. This court had jurisdiction over all freeholders in contrast to the Court of the Lord—the seignorial court—which had jurisdiction merely over villeins, unfree tenants. A royal writ was necessary to instigate certain litigation. The various forms of actions which evolved over time gradually gave protection to the freeholder (and tenant-in-chief) in the possession of land and its hereditary transfer.[26] It appears that the heritability of a fee (holding) was established in Glanvil's time (1180), but the alienability of land took somewhat longer. The rising value of land led to growing pressure to permit its transfer; but countering this pressure was the threat to the lord of loss of services (incidents) which accompanied the land. The Great Charter (in a restatement of 1217) stipulated: "No free man shall henceforth give or sell so much of his land that the residue shall be insufficient to support the service due in respect of the free."

However, it appears that by the middle of the thirteenth century a lord could in fact do nothing to prevent alienation by a tenant,[27] and the statute of *Quai Emptores* in 1290 specified what had already become settled practice by permitting alienability through substitution of one tenant for another (thereby, at least nominally, continuing undiminished the services that accompanied the holding) rather than through subinfeudation (which threatened the continuation of these services and which the statute prohibited). It is interesting to note that tenants-in-chief did not receive this right from the Crown until more than thirty years later (1327).

This is not the end of the story, but merely the first phase of a long struggle on the part of mesne lords and the Crown to avoid the loss of revenue from the incidents associated with land. Not until the Statute of Wills in 1540 and the Statute of Tenures in 1660 was the transformation completed.[28] However, the foregoing illustrates the whole process. In the early period, the succession of writs

[25] We must go to the Statute of Tenures of 1660 to eliminate many of the feudal incidents that included elements of both feudal land law and feudal master-servant relationships; but these hangovers of the past did not prevent "effective" land ownership in fee-simple absolute with the ability to alienate.

[26] For an excellent brief account, see Simpson, *An Introduction to the History of Land Law*—ch. ii, "The Real Actions," and ch. iii, "The Tenants Interest in the Land."

[27] *Ibid.*, p. 51.

[28] The detailed history is covered in I. M. W. Bean, *The Decline of English Feudalism.*

stemming from real actions provided the secondary institutional arrangements which evolved as a result of the economic pressures described in previous sections of this paper. The statutes of 1290 and 1327 specified these changes and inserted them into the fundamental institutional structure.[29]

While the contest of Crown and lords was in progress, the villein had no recourse to the King's Court and was subject to the lord's will in the manor court. The custom of the manor did, however, tend to limit the arbitrary power of the lord in dealing with unfree tenants. The long history of the gradual transformation of villein to copyholder, through intervention by the chancellor and ultimately to protection of common law, followed a similar pattern of gradual evolutionary changes in the rights of villeins to heritability and alienability. Again, it was the economic forces described in the previous section of this article which induced the changes: in particular, the scarcity of labor in the fourteenth and fifteenth centuries forced the lord to commute labor services, thus abrogating many of the master-servant aspects of villein status and setting a course toward later effective ownership. The Action of Ejectment in Elizabethan times was the final stage in common law remedies which imbedded the tenants' rights in the fundamental institutional structure.[30] Thus, the pattern of changes in English common law was a rational response to economic pressures. The final result was fee-simple absolute ownership of land and a free market for labor —two essential preconditions for efficient resource allocation and, ultimately, for economic growth.

We have seen that the fundamental institutional arrangements of feudalism and manorialism were sufficient to the needs of a day characterized by anarchy, local autarchy, and differential military capacity. The growth of population radically altered this world by creating a market economy, diminishing returns to labor, and the pressures of a changing price level. The institution of the manor no longer constituted an efficient solution to these problems. Required were new fundamental institutional arrangements that would equate the private rate of return with the social rate of return. Such institu-

29 A similar evolutionary change took place in the fourteenth and fifteenth centuries through the employment of uses which was temporarily thwarted in 1536 by the Statute of Uses, but then recognized in 1540 with the Statute of Wills.

30 For a detailed account of this transformation, see C. M. Gray, *Copyhold, Equity, and the Common Law.*

tions, of course, do not exist completely, even today. Yet private property in the land (the right of the owner to enjoy, exclude, and alienate his possessions) and a free labor market where each man is able to seek his best alternative were important moves in this direction.[31]

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[31] Lest these developments be considered inevitable consequences of population growth, let us remember the fate of modern Asia. There was nothing inevitable about the results analyzed in this paper. The fundamental institutions created in Europe significantly redistributed power, wealth, and income among the groups in society. There were winners and losers. Had the losers been able, they would have forestalled the change. This happened in Spain at a later date, when for centuries the Mesta retained their rights to take herds of sheep across any land without the payment of compensation, thus thwarting the creation of effective private property rights despite a growing population.