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ABSTRACT

This paper examines the wave of investment in agriculture in 16th and 17th century France, a movement with parallels throughout western Europe. After dismissing the explanations advanced by most historians, I argue that the investment in agriculture resulted from royal tax policy. I then consider the predilection investors showed for sharecropping and suggest that this predilection can be explained in light of modern economic theories of share contracts.

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From the mid-sixteenth century to the early 1700's, the money of wealthy Frenchman flowed into land. Merchants, lawyers, royal officials, and nobles lent money to impoverished peasants, who frequently defaulted on their loans and then were forced to sell their property. The creditors or other privileged investors thus gained title to the peasants' vineyards or fields, and they subsequently leased these holdings to tenants or sharecroppers, who often turned out to be the very peasants who had originally owned the land. Thus in 1576 a beleaguered laboureur named Jehan Crespeau, in debt to his seigneur, sold his farm, land and buildings to the lord. The same day the lord leased the property back to Crespeau for a rent in kind.¹

The records of this great wave of investment in land fill page after page of notarial registers, and the process was common enough to have attracted the attention of contemporaries. In Lyon, for example, the local historian Guillaume Paradin described in 1573 how the city's wealthy merchants and bankers had been buying land from destitute peasants at bargain prices:

The poor laboueurs, lacking enough to eat, were constrained to put their lands up for sale at rock bottom prices to rich people, who thereby acquired good lands and vineyards for a morsel of bread. In this way, many have built beautiful farms and villas, constructing their country houses upon the misery of paupers.²

Nor is this the only example of contemporary comment.³

Modern historians have not neglected the phenomenon either. From the classic studies by Gaston Roupnel in the 1920's and Louis Merle in the 1950's to the more recent works of the social historians Emmanuel Le Roy Ladurie and Jean Jacquart, scholars have noted the upsurge of investment in land in Burgundy in the east, in the Gâtine Poitevine in the west, in Languedoc in the south, and in the hinterland of Paris in the north. In fact, the pattern of investment in land seems to have occurred throughout France, and it has parallels elsewhere in Mediterranean Europe, most notably in northern Italy.⁴

Almost without exception, historians have depicted this flight of money into land in early modern France in somber tones. It has indeed become a commonplace of French social history to describe how debt and the loss of their lands destroyed the independence and prosperity of French peasants. At the same time, historians have condemned the merchants, officers and nobles who purchased the peasant land for their supposed indifference to profits and their failure to provide their farms with capital. Presumably, these purchasers and investors were content to live off the misery of their tenants. Perhaps the only dissenting voice to this argument comes from Robert Brenner, who argues that the sales of land in the early modern period did nothing to destroy the independent French peasantry. But even

Brenner maintains that the investors who bought land did not in any way encourage efficiency and ``progress`` in the agricultural sector.⁵

It is not my intention to rewrite the history of investment in agriculture in early modern France, for as yet I have precious little evidence to add to the balance. What I shall do is to raise several questions that historians, despite all the work in the field, have never answered satisfactorily. I have as yet no firm responses to these questions, but I will advance a number of rather tentative hypotheses, hypotheses that will help guide the research I plan to undertake in this area.

The first question I want to deal with is chronological: why was it during the late sixteenth and seventeenth centuries in particular that urban money flowed into land? Despite all that has been written on the subject, historians have not devised a satisfactory answer to this question. Often scholars cite the peasants' ``misery``, at that time, but real though it may have been, misery is merely a symptom, not a cause. We need to know precisely what it was that reduced the peasants to grinding poverty and forced them to sell their land in the late sixteenth and seventeenth centuries. Why did they not sell before 1550 or after 1700? Similarly, it is not enough to invoke the security and status that property ownership conferred in order to explain why French elites increased their purchases of land. Owning property undoubtedly fulfilled a variety of non-economic desires, but there is no reason to believe that these became more pronounced after 1550 and then less

important after 1700.

Another factor that is often cited — mauvaise conjoncture or unfavorable economic conditions — seems equally vacuous as an explanation. If mauvaise conjoncture means simply reduced profits from farming, why did privileged investors continue to buy farms? And even if we ignore this question, it is not at all clear that returns from agriculture did fall. To be sure, some historians have used a drop in tithe returns to argue that agricultural profits declined, but in several areas tithe returns did not slump until well after the sales of land had begun, and in any case, the tithe is not an index of profits, but rather of gross revenues.⁶ Agricultural lease rates, which provide a better index of the expected profits to be derived from farming, actually rose in the last half of the sixteenth century and in the early seventeenth century, at a time when enormous quantities of land were changing hands.⁷

If, on the other hand, mauvaise conjoncture means simply a succession of crop failures, then we must somehow demonstrate that the fluctuations of agricultural revenues were greater between 1550 and 1700 than in other years. Although it would be possible to do this (one could imagine a world in which a higher variation in agricultural revenues favored large investors who could spread risks, and one could test for a higher variance of revenues using tithe or lease records), no one has yet formulated the necessary model. And in any case, it seems highly unlikely that revenues would vary more than normally for one hundred and fifty years.

A related explanation for the flow of money into land involves population growth and diminishing returns in agriculture. Emmanuel Le Roy Ladurie and others have argued that increases in population fragmented peasant holdings and reduced many farms to the point that they were no longer profitable.⁸ Left with a pitiful existence on a tiny scrap of land, many a peasant was forced to sell. The problem with this argument, though, is that in most areas of France population growth ceased in the early seventeenth century. With a stagnant or declining population, one would presume that the size of farms would stabilize and that peasants would no longer have any reason to sell. But as we know the sales of land continued for nearly one hundred years.⁹

Moreover, this whole line of reasoning neglects a number of strategies which peasants could and did adopt in times of population growth. In the countryside around Lyon, for example, peasants sought work in the city when the population was rising. They also married later, which limited the size of their families and brought fragmentation to a halt. Furthermore, they could -- and did -- shift to labor-intensive cultivation, such as viticulture, and thus circumvent some of the problems of diminishing returns. Since the labor intensive crops seem to have permitted a profit even on small plots of land, it is not at all clear that population growth and estate fragmentation (even when they occurred) would have forced the peasants to sell.¹⁰ Finally, even if population growth sheds light on some of the land sales, it does not explain why nobles, urban

merchants and other privileged investors predominated among the buyers. There were, after all, peasants who were in a position to purchase plots of land to round off their holdings: the village syndics, for instance, who collected the local taxes. Yet it seems to be outsiders -- the nobles, merchants and officers -- who made the overwhelming majority of investments.¹¹

Surprisingly, French historians have overlooked what would seem to be an obvious explanation for investment in agriculture in the sixteenth and seventeenth centuries: royal tax policy. To be sure, they pay lip service to taxes when they discuss the misery of the peasantry, but they ignore the effect that taxes had on investment.¹² The major taxes in France -- and here I simplify tremendously -- were the taille, a land tax, and aides, indirect taxes on a number of items including many agricultural commodities. All of these taxes fell disproportionately upon the peasantry. Nobles and most royal officers were exempt from the taille, and in much of the kingdom (in areas of taille personnelle) this exemption extended to any land they held in the countryside.¹³ Similarly, urban merchants (and especially those who enjoyed some political influence) paid a reduced taille on property outside their city. Furthermore, the nobles, officers and urban merchants were frequently exempt from the indirect taxes levied on crops from farmlands they owned. In sixteenth-century Lyon, for example, if a merchant purchased a vineyard from a peasant, the vineyard would in effect be withdrawn from the tax rolls of the peasant's village. In theory, the merchant would pay a tax on this

property as a part of Lyon's own levy on real property, but his assessment would be far less than the portion of the taille the peasant had originally paid. In addition, the merchant could bring wine from his own vineyard into the city without paying aides. Although the wine he imported was ostensibly for his personal use, he could no doubt sell it on the market. The peasant who previously owned the vineyard would of course have had to pay the aides.¹⁴

The net effect of the exemptions and the disproportionate tax burden on the peasantry was to drive a number of peasants out of business. Peasants fell into debt to pay taxes that rose precipitously in the last half of the sixteenth century and stayed high until the early eighteenth century. They then sold out to privileged investors who rented or sharecropped the land. These privileged landholders were willing to purchase the land (and willing to pay more for it than any non-privileged farmer) because it gave them an opportunity to exploit their tax exemptions.¹⁵ Worse, each sale to a noble or privileged merchant only aggravated the difficulties of the remaining peasants by removing land from the tax rolls. Since those who remained had to pay the village's assessment, their own taxes rose accordingly. The whole process came to a halt only when higher land prices and the costs of administering distant estates outweighed the profits from a tax exemption. Eventually, the royal government also took steps to limit tax exemptions in order to protect its tax revenues. Although to a certain extent this policy curbed the flow of money into land, the royal edicts and court

decisions were never enforced with any vigor.¹⁶

The hypothesis that rising taxes and inequitable exemptions were at least partially responsible for the flow of money into land certainly appears to explain the chronology of the investments. Taxes rose considerably in the middle of the sixteenth century, at just the time that the money began to flow into land, and there was no relief until the end of Louis XIV's reign, in the early eighteenth century, at about the time that investment in land tapered off. To demonstrate this rigorously, though, will require more precise tests. One possibility would be to collect figures on investment and land sales in a given region for a number of years and regress them against local tax levies. Another would be to take a cross section of different regions at a given time and see whether differences in taxes and tax laws could explain varying levels of investment.¹⁷

If taxes seem a likely explanation for the wave of investment in agriculture in early modern France, can we also explain the predilection investors showed for sharecropping? And what were the consequences of the spread of sharecropping contracts? Sharecropping was not unknown in the Middle Ages, but not until the sixteenth century and the great wave of investment in land did it spread throughout much of France.¹⁸ So far, historians have not devised a convincing explanation for its popularity.¹⁹ Here, perhaps, some recent investigations by economic theorists can cast some light upon the phenomenon. In an attempt to explain the prevalence of sharecropping today, economic theorists have devised a number of

arguments, of which one in particular seems relevant to early modern France.²⁰

This explanation involves the fact that agriculture is risky. If a landlord hires labor to work his land, he assumes all the risks of blights, crop failures, and bad weather. If he rents his property for a fixed fee, it is the tenant who bears the burden of the risk. The sharecropping contract, by contrast, allows the landlord and the person who actually farms the land to share the risks, which would seem to have advantages for both of them if they are risk-averse. The opportunity to share the risk will in fact benefit both landlord and sharecropper, but only under certain conditions. First, the landlord has to be able to enforce contracts that specify the work a sharecropper is to perform: how much plowing, how much hoeing, etc. If contracts cannot be enforced, sharecroppers have a great incentive to undersupply labor, which would make landlords shy away from sharecropping. Second, at least one of two additional conditions has to be met:

- 1) There must be risks in the market for labor, land, or one of the other factors of production. These risks could involve, for example, having to pay higher and unpredictable wages for temporary laborers at harvest time.
- 2) There must be economies of scale in agriculture. The economies of scale could derive from the lack of a rental market for work animals, wagons or other expensive pieces of farm equipment. Without a rental market for draft animals, for example, a farmer would have to buy a team of oxen, whether his farm were large or small. With a large farm, he could spread the costs of the oxen over more acres, and his average costs would be lower. The economies of scale might also stem from the fixed costs of enforcing the clauses in a labor, sharecropping or rental contract, or they could reflect untraded factors of production,

such as a farmer's skill.

If either of these two conditions obtain and landlords can enforce contracts, then sharecropping will present both landlord and the potential sharecropper with advantages as a means of splitting risks.²¹

One might of course doubt that such theories would be relevant to the Old Regime. At least one knowledgeable contemporary, however, perceived in sharecropping some of the same advantages that modern economists have claimed for it. This was Olivier de Serres, who in 1600 published the classic early modern French treatise on agriculture, Le théâtre de l'agriculture.²² In this work, the fruit of his own experience as a landlord and farmer, de Serres considered the various drawbacks and advantages of farming land with tenants, sharecroppers or hired labor. He noted that whereas a renter "takes on the responsibility at his own loss or profit," a sharecropper "does not risk everything in advance as he only contracts to cultivate the land for a share." Given the difficulties of finding tenants who could or would take on these risks, de Serres recommended sharecropping to all but the biggest landlords. He also felt that sharecropping was superior to hired labor for absentee landlords because the costs of supervising laborers were too high.²³

Olivier de Serres does not recapitulate the theory of sharecropping in its entirety, but his statement that sharecroppers bear less risk than renters suggests that he recognized the advantages of a share system. His remarks about the supervision of labor also

recall certain features of the theory. It is thus not completely anachronistic to apply the theory to early modern France.

We can therefore ask whether the conditions that explain sharecropping theoretically were actually met in the French countryside. If we consider first the enforceability of labor contracts, it is clear that landlords certainly tried to specify how much labor their sharecroppers were to contribute. In addition to stipulating traditional seasonal tasks of the agricultural year, sharecropping contracts commonly required the sharecroppers to perform a certain amount of carting. Sharecroppers also had to maintain or improve the property. They might have to carry a specified quantity of the soil that had washed to the bottom of the vineyard back to the top of the hillside, or they might have to build so many feet of hedges or enclosures each year.²⁴ Proving that landlords always managed to enforce these clauses would require further research, but at first glance it would not seem difficult for a landlord or his agent to verify that the work had been performed. If the sharecropper did not plow, for example, there would be no crop, and a landlord could actually see whether hedges or enclosures had been built. Moreover, investors who bought land tended to purchase property close to their own residence, so that it could easily be inspected, and sometimes they even summered in the midst of their agricultural possessions. Finally, the sharecropping contracts usually contained a variety of penalties directed against tenants who did not perform their duties.²⁵

If the landlords were able to enforce the labor clauses in contracts, what about the two other conditions that figure in the theory? To begin with, at least one of the factor markets, the market for labor, does seem to have been risky. In the Gâtine poitevine described by Louis Merle, for example, farmers often had to hire a large number of workers at harvest time, but they had no idea in advance of how many hands they would need. The higher wages they paid for these short term laborers reflected the risks involved.²⁶

There is also reason to believe that economies of scale existed in agriculture. First of all, important pieces of farm equipment could not be rented, at least in certain regions. To return to the Gâtine again, farmers apparently could rent cattle from livestock raisers who maintained ``banks'' of animals. It was no doubt also likely that they could hire a plowing team for a day. But despite these well developed rental markets, farmers could not lease one of the most important and most expensive pieces of farm machinery: wagons, which were by far the costliest item in farm inventories and which were absolutely essential for many of the tasks stipulated in sharecropping contracts. Unable to rent or to build the wagons he needed, a farmer would have to spend one or two hundred livres, an amount equal to four or five times the value of all his other farm equipment.²⁷ This high cost would be an obvious source of economies of scale.

Similarly, the expense of supervising hired laborers, tenant farmers or sharecroppers (including the costs of enforcing contracts

for absentee landlords) would inevitably produce additional economies of scale. Olivier de Serres, for one, discussed these expenses in great detail. In his opinion, the costs of supervision made hired labor prohibitively expensive, save for individuals who resided on their own farms. Renters, according to de Serres, were also costly, for a landlord had to find a reliable tenant and then make sure that he did not neglect the farm buildings. In de Serres' opinion, the best solution for absentee landlords (save for the biggest, who could attract large scale, solvent tenants) was sharecropping. In effect, de Serre recognized the advantages of sharecropping in the face of economies of scale.²⁸ The landlords who let their land out for shares were evidentially aware of these economies of scale, for they almost inevitably tried to consolidate and enlarge their farms.

Since the various conditions of the theory seem to hold, we have a ready explanation for the reason why a number of landlords (though not all) resorted to sharecropping instead of rental contracts or wage labor.²⁹ What then were the consequences of the spread of share farming and the wave of investment in agriculture? Traditionally, sharecropping and the privileged landlords have been held responsible for the chronic ills of French agriculture. Historians have argued that short term share contracts with rigid clauses eliminated any incentives for investment or technological change. And they have blamed the absentee landlords for exploiting such an inefficient system. The economic theory, by contrast, suggests that sharecropping was relatively efficient, and the

historical evidence tends to confirm this. The contracts often extended over a number of years (five to nine years in the Gatine, for example, six years northwest of Lyon), and it therefore seems incorrect to say that sharecropping sacrificed long term development to short term profit. If the clauses in individual contracts drawn from particular regions seem rigid, they nevertheless varied from place to place and evolved over time.³⁰ Moreover, as the theory would predict, landlords of sharecroppers did engage in investments. They generally tried to consolidate their holdings, they built hedges and enclosures, and they endowed their property with larger amounts of livestock. In Burgundy, they were responsible for the introduction and commercialization of high quality wines.³¹ And if they failed to adopt all of the techniques that revolutionized farming in England, the reason may lie in part with soils that would not accept the improvements and factor prices that made them uneconomical.³²

In saying this, I do not mean to defend the agricultural system of Old Regime France, for its inefficiency and inequality are indisputable. Elucidating these problems of French agricultural history, though, will require more thoughtful explanations than historians have devised in the past. In particular, historians will have to pay closer attention to the economic consequences of politics under the Old Regime.

FOOTNOTES

1. Louis Merle, La métairie et l'évolution agraire de la Gâtine poitevine de la fin du Moyen Âge à la Revolution (Paris, 1958), p. 53.
2. Quoted in Richard Gascon, Grand commerce et vie urbaine au XVIIe siècle: Lyon et ses marchands, 2 vols. (Paris, 1971), 2: 841.
3. Cf. the communal archives of Bourg-en-Bresse (Ain), AAll.
4. Gaston Roupnel, La ville et la campagne au XVIIe siècle: Etude sur les populations des pays dijonnais (Paris, 1922; 2nd ed., 1955); Merle, op. cit.; E. Le Roy Ladurie, Les paysans de Languedoc, 2 vols. (Paris, 1966); Jean Jacquart, La crise rurale en Île-de-France, 1550-1670 (Paris, 1974); F. Braudel, The Mediterranean and the Mediterranean World in the Age of Philip II, 2 vols. (New York, 1972-1975), 1: 525-528; N. J. G. Pounds, An Historical Geography of Europe, 1500-1840, (Cambridge, 1979), pp. 42-44, 153, 170.
5. Pierre Goubert, "Le cadre de la vie rurale," in F. Braudel and E. Labrousse, eds., Histoire économique et sociale de la France, vol. 2 (Paris, 1970), pp. 114-115; Jean Jacquart, "Immobilisme et catastrophes," in G. Duby and A. Wallon, eds., Histoire de la France rurale, vol. 2 (Paris, 1975), p. 230; Robert Brenner, "Agrarian Class Structure and Economic Development in Pre-

Industrial Europe," Past and Present 70 (1976): 73-75.

6. For an example of a region in which tithe returns, corrected for inflation, did not fall until after the wave of investment had begun, see Georges Durand, Vin, vigne et vigneron en Lyonnais et Beaujolais (Lyon, 1979), pp. 495-497.
7. Jacquart, "Immobilisme," pp. 251-258.
8. Le Roy Ladurie, 1: 187-260; see also Jacquart, Île-de-France.
9. For evidence of widespread continuing sales of land, see Jacquart, "Immobilisme," pp. 265-275.
10. Durand, pp. 225-250, 363-386, 445-462, 507-510.
11. Jacquart, "Immobilisme," pp. 267-273, to cite but one example.
12. D. C. North and R. P. Thomas The Rise of the Western World: A New Economic History (Cambridge, 1973), p. 125, is one exception.
13. Even in areas of real taille, where exemptions were limited, investors could obtain tax reductions by wielding influence in the tiny village assemblies that levied taxes. See, for example, Bernard Bonnin, "Un aspect de la société rurale: Les milieux dominants en Dauphine au XVIIe siècle," Lyon et l'Europe: Hommes et Sociétés: Mélanges d'histoire offerts à Richard Gascon, ed. J. P. Gutton, pp. 47-66.
14. Gascon, 2:862-866; Durand, pp. 481-484.

15. In some areas, sharecropped land was still subject to the taille, and the sharecropper managed to pass along some of his taxes to the landlord. See, for example, Merle, p. 183. Nevertheless, the peasant still had an incentive to sell his land and become a sharecropper, while the landlord still had an incentive to purchase the land. As a sharecropper, the peasant managed to pass along some of his taxes, whereas the landlord still enjoyed a partial tax exemption, which gave him a reason to buy.
16. See Bonnin, ``Milieux dominants,`` and Roupnel, Ville et campagne, for examples.
17. The area around Lyon has a number of documents that could serve as a basis for such a study. In addition to an excellent set of rural and urban notarial registers, there are tax documents (the nommées rurales in Lyon and occasional taille rolls in the villages), seigneurial terriers, and a series of records (the insinuations des aliénations) which recorded all major land sales for an eight year period in the middle of the sixteenth century. Lyon and the surrounding regions also merit further research because the tax laws varied radically from the west of the city (the Lyonnais) to the east (Dauphiné, Dombes and Bresse).
18. Marc Bloch, French Rural History, trans. Janet Sondheimer (Berkeley, 1966) pp. 146-148; Pound, pp. 42-44; Merle, pp. 146-148. Sharecropping did not flourish in some areas where there was investment in agriculture: Normandy, Flanders, and Lorraine.

- See Pierre Goubert, ``Le paysan et la terre,`` in Braudel and Labrousse, 2: 142-144. It was also rare in Germany.
19. Cf. Goubert, ``Le paysan et la terre,`` pp. 142-144. For most Marxists, sharecropping has appeared to be a means of perpetuating ``semi-feudal`` exploitation, but the very fact that sharecropping was first introduced into France by Italian bankers casts doubt upon this viewpoint. Other historians have seen it as a means by which landlords circumvented the royal policy of Bauernshutz: see Brenner, p. 74, and Jan de Vries, The Economy of Europe in an Age of Crisis, 1600-1750 (Cambridge, 1976), pp. 65-66. The problem here is that the royal policy of Bauernshutz was largely ineffective on the local level; moreover, sharecropping was highly popular long before the king made any effort to aid the peasants.
20. For what follows, see David Newbery, ``Risk Sharing, Sharecropping and Uncertain Labour Markets,`` Review of Economic Studies, 44 (1977): 585-594, the latest word on the subject. See also Joseph Stiglitz, ``Incentives and Risk Sharing in Sharecropping,`` Review of Economic Studies, 41 (1977): 219-255; Clive Bell and Pinhas Zusman, ``A Bargaining Theoretic Approach to Cropsharing Contracts,`` The American Economic Review 66 (1976): 578-588; and William Hallagan, ``Self Selection by Contractual Choice and the Theory of Sharecropping,`` Bell Journal of Economics, Autumn, 1978: 344-354.

21. The reason for the two additional conditions is that a landlord could mix rental contracts and direct cultivation by labor and thereby achieve all the benefits of risk sharing afforded by sharecropping. A landless farmer could do the same, renting out some land and working other land for wages. Such mixing of contracts was conceivable under the Old Regime, and it would make sharecropping unnecessary unless the other conditions held. It should also be stressed that these theories of sharecropping do not rule out the coexistence of rental and labor contracts along with sharecropping.
22. There are a number of obvious questions that can be raised about applying economic theory to traditional Europe. One could, to begin with, question the wisdom of applying models based on utility maximization to the sixteenth and seventeenth centuries. It is worth recalling, however, what was de Serre's guiding principle: "où plus se trouvera de profit et de plaisir." Similar expressions occur in notarial contracts even in small towns and villages, so utility maximization is not an unreasonable assumption. One might also worry about models which assume free entry into contracts, at a time when landlords could easily pressure peasants. Here, it is worth noting that none of the theoretical models assume that peasants are completely free. Moreover, there were limits to the pressure landlords could apply, for, as Merle shows, peasants would give up sharecropping or move to another landlord if the terms of a contract were too

- onerous. The economic theories take into account these limits to the landlord's powers. See, in particular, Bell and Zusman's article, which discusses coercion by landlords.
23. Olivier de Serres, Le théâtre d'agriculture (Paris, 1600), pp. 52-53.
24. Merle, pp. 161-185, 205-226; Serge Dontenwell, "Les baux à mi-fruits en roannais et brionnais aux XVIIe et XVIIIe siècles," in Lyon et l'Europe, pp. 179-208; Durand, p. III. Examples abound in the notarial registers.
25. Gascon, 2: 813-862; Merle, pp. 176- 186-193, 224-226. Distant possessions were usually rented to a fermier, who sublet to sharecroppers. In addition to fines and penalties, the sharecropper might have to put up a deposit or have someone vouch for him.
26. Merle, p. 127.
27. Merle, pp. 109, 117-118.
28. De Serres, pp. 45-54. For examples, see Dontenwell, pp. 179-208. As we mentioned above, the theory of sharecropping is consistent with of coexistence of rental, share and wage-labor farming: a risk neutral landlord, for example, would resort to hired labor rather than tenant farmers or sharecroppers. A better explanation, though, for the predilections individuals had for

various contracts can be found in Hallagan's ``Self Selection.'' Hallagan's landlords, tenants and agricultural workers are endowed with skills and entrepreneurial ability, and he incorporates the costs of finding the best match between landlord, tenant and worker. This, in a sense, was what de Serres was discussing: how, for instance, does a landlord with no taste or gift for farming locate a skilled, reliable tenant to take over his farm? Hallagan's simple model actually seems to explain many of the differences between tenants, sharecroppers and wage laborers, and between landlords who rented, let their property out for shares, or hired wage labor.

29. Why sharecropping did not appear in the north of France (or Germany) is a question that will require further research. Here the theory of sharecropping can at least furnish us with hypotheses.
30. Merle, pp. 161-185; Dontenville, pp. 179-208.
31. Merle, pp. 49-62, 71-79, 102-106, 124-137; Jacquart, ``Immobilisme,`` pp. 226-235.
32. Merle, pp. 137-138; cf. P. K. O'Brien and C. Keyder, Economic Growth in Britain and France, 1780-1914 (London, 1978).