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Tax Farming--A Radical Solution for Developing Country Tax Problems?

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Abstract

Systemic tax administration problems in many developing countries have led to a search for radical solutions. One such proposed solution is tax farming. Tax farming is a system wherein the right to collect taxes is auctioned off to the highest bidder. An analysis of the historical experience with tax farming shows that its purported administrative efficiency is largely illusory. While certain aspects of tax administration may be suitable for privatization, the classic form of tax farming would appear to have little attraction for a modern state concerned with justice and equity.

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Summary

Despite serious problems with tax administration in developing countries, the search for and examination of alternative institutions for tax assessment and collection have been stunted, argue Tanzi and Casanegra de Jantscher (1987), by the assumption made in most theoretical tax models that administration is costless. Far from being costless, administration may be considered a primary concern for many developing countries. What is necessary is a theory of the second best in tax administration to complement that of the theory of the second best in tax policy.

This paper examines tax farming as an alternative tax collection mechanism. Tax farming is a practice whereby the right to collect certain taxes is auctioned off to private sector collectors. If, as conventional wisdom suggests, this technique minimizes government administrative costs and results in more efficient tax collection, it would have great appeal for developing countries where lack of administrative capability and resources makes tax administration difficult.

Some authors have suggested that tax farming might significantly improve tax collection. However, an examination of the historical record reveals that the administrative savings of tax farming are largely illusory and that the popularity of the system--in use for over three thousand years--can be explained by its ability to generate more gross revenue than the alternative, direct government collection. However, this very characteristic is the major drawback of tax farming. Because the system leads to over-zealous tax collection, a government concerned with justice and equity in tax collection would be forced to expend considerable resources on monitoring private tax collectors. If taxpayer abuse is to be avoided, only those activities where there is little ambiguity and room for interpretation could be privatized. The scope for privatizing the core functions of tax administration appears limited.

I. Introduction

Systemic problems encountered in many developing country tax administrations have hindered efforts to increase public saving and have proven to be the weak link in a number of economic stabilization programs. For these reasons, consideration of radical reforms of tax administrations is warranted. Such a position has been ably argued by Mansfield (1987) and Bird (1989). Unfortunately, there has been relatively little written on this topic in the formal economic literature. As Tanzi and Casanegra de Jantscher (1987) have pointed out, the assumption of costless administration made in most theoretical tax models has steered analysts away from examining alternative institutions and structures. This is an important oversight, particularly in the developing country context, where the gap between tax law and tax practice is often substantial. What is needed is an examination of correct tax administration practice while recognizing that developing countries are virtually always in the situation of the second best, that is, given limited resources and technical ability, the optimal tax administration and tax structure may be different than in a situation where the government has abundant resources and skills.

This paper analyzes the characteristics of an alternative tax collection mechanism--tax farming--that was commonly employed in the past by governments facing problems similar in nature to those facing contemporary developing countries. Tax farming is a system wherein the right to collect certain taxes owed the state is auctioned off to the highest bidder. The farmer then keeps whatever revenue is collected. A winning private sector bidder wishing to maximize profit will operate at the point where private marginal revenue equals private marginal cost. Tax farming, representing a pure private sector solution to the tax collection problem, is a natural alternative to government collection. Having been employed over a span of 3,000 years, it has traditionally been praised for its purported ability to remedy certain tax administration shortcomings.

Historians of tax farming have argued that its virtues have been effectively employed to alleviate a number of problems many of which are chronic in modern developing countries such as ineffective administrative and organizational structures; underdeveloped and imperfect capital markets where the sovereign has a poor credit rating; weak political will to enforce tax law; heavy reliance on inefficient tax collection methods--often the inflation tax--owing to an inability to collect conventional taxes. The effectiveness and desirability of tax farming is thus of more than historical interest. Indeed, Azabou and Nugent (1988) go so far as to argue "...where taxes are likely to be difficult to collect (i.e., the transaction costs of their collection are relatively high), the advantages of tax farming or fixed rent methods of collecting the taxes may be rather substantial" and later, "Indeed, the experience seems to have been sufficiently positive to suggest that serious consideration by governments should be given to the possible use of tax farming contracts in collecting their taxes in other high transaction cost situations. Since a little imagination can lead one to identify many such situations, it could be that tax farming techniques could have a relatively bright future."

The method of this paper is to explore through the historical evidence the validity of the claims made in support of tax farming, to propose a major alternative explanation for its popularity and to examine the relevance of the historical experience for modern developing countries.

The following section enumerates the more common justifications for the past use of tax farming and then offers the author's own reasoning. The third section analyzes each argument from a historical and theoretical perspective. The penultimate section offers an explicit consideration of tax farming as a second best solution. The last section offers conclusions and policy advice. The conclusion argues that tax farming was popular primarily as a result of its ability to generate the maximum gross revenue in a way that obfuscated the government's role in setting policy. This objective is unlikely to be congruent with that of an enlightened modern tax administration. While it is certainly true that direct government administrative costs are lower under tax farming, these costs will be borne by the private sector and will be deducted from net government revenue. Moreover, if the government seeks to ensure a fair and proper administration of tax law, considerable effort would be necessary to monitor the process of tax collection by tax farmers. Consequently, tax farming would appear to have significantly less to offer developing countries today than its proponents believe.

II. Arguments Justifying the Rationality of Tax Farming

Three logically distinct justifications of tax farming will be considered in this section:

1. Conventional wisdom suggests that tax farming was a method whereby administratively weak governments could minimize the cost of collecting tax revenue. Those who accept the efficient collection hypothesis typically emphasize the benefits of decentralized versus centralized efforts to collect taxes--primarily on organizational or technological grounds--and the saving accruing to government from avoiding the burden of a large bureaucracy. Thus, by economizing on scarce administrative resources, tax farming would offer a potential Pareto improvement compared with government collection. Moreover, there would exist real gains to split between the government, acting on behalf of the representative taxpayer, and private tax farmers.

2. A second rationale is that tax farming served to facilitate sovereign borrowing from the farmers. Problems arising from shallow or imperfect credit markets and/or market failure owing to moral hazard problems were mitigated to the extent that tax farms, representing the right to collect certain established taxes, served as collateral for risky loans by the farmer to sovereign governments. It is important to note that this

hypothesis differs in an important respect from 1. above, in that it does not require private collectors to be more efficient than public collectors. Indeed, the private sector might be less efficient yet the requirement by private lenders that governments offer collateral for loans resulted in collection being placed in private hands.

3. The third line of reasoning flows from the theoretical argument developed in Stella (1990) which shows that tax farming will, in general, result in "overcollection," where this is defined in reference to the wishes of the representative taxpayer. If, what would be in modern terms considered "excessive" collection is the Government's objective, then tax farming will have considerable appeal.

This argument is fundamentally different from 1. and 2. in that it depicts tax farming as a socially inefficient institution leading to overexpenditure on tax collection. Such an institution may be preserved either because it represents the best option among available technologies, that is, it is a second best solution, or because the government has an objective function that differs in a very significant way from one that would value citizens' preferences. The latter is possible if, as appears to have been the case in a number of historical episodes, taxation is nothing more than a forced transfer from the taxpaying class to the governing class. Readers interested in more background on this topic may wish to see Grossman (1991) who, with reference to Mills (1986), justifies the assumption that the "...ruler's objective is to maximize the expected income of his clientele, who include property owners and other politically favored groups." Tax farming provides an additional benefit to government by delegating to the private sector the odious job of tax collection and thereby obfuscates the fact that the government is not interested in overall social welfare but in maximizing its revenue. This benefit is positively related to the difference between the level of taxation imposed and the public goods provided. The more excessive the tax effort in relation to the level that would be chosen by a benevolent government, the greater the wrath of the taxpayer and consequently the greater the incentive for the government to be disassociated from tax enforcement. An independent tax collection agency, just as an independent central bank, may be criticized by political leaders even when they are actually carrying out the politicians' mandate.

The correct interpretation of the historical record on tax farming would have a direct bearing on modern policy proposals. Which of the three arguments outlined above provides the firmest explanation for the popularity of tax farming is therefore more than just an important historical question. In the following section the validity of these arguments is examined and the issue of whether these justifications are sufficient cause to contemplate the use of tax farming in modern developing countries is addressed.

III. The Historical Evidence and Theoretical Argument

1. The administrative efficiency hypothesis

The first known application of tax farming was in Mesopotamia (c. 1750 B.C.). "Although citizens of all cities had to pay taxes to the central government, the civil bureaucracy itself did not collect the taxes. The task was delegated to each city's assembly of elders, who in turn handed the job to local merchants and bankers, who were, if not the world's first tax farmers, at least the first whose traces historians have found" (Webber and Wildavsky (1986)). In exchange for a fixed fee negotiated in advance and paid to the assembly of elders, merchants acting as tax farmers collected taxes. Two important features should be noted here that were common in most examples of tax farming. Payment from the farmer was required in advance and the form of payment was a fixed fee. This task was rotated among wealthy citizens, according to Webber and Wildavsky, to assure equitable distribution of the burden and risk (although one might just as easily have said the "spoils").

Later in their outstanding work on the history of taxation and expenditure in the Western World, Webber and Wildavsky argue that savings in administration were an important inducement to adopt tax farming: "In Egypt and India, the attempt to control receipts and audit expenditures involved the Government in a costly enterprise that yielded variable returns for the amount of effort required. The Mesopotamian alternative, collection by tax farmers, made much smaller demands on the ruler's ability to administer and control. With tax farming, the Government needed only a relatively modest administrative capacity to negotiate contracts and enforce payment of the contract fee. Tax farming proved to be such a workable alternative to a large centralized bureaucracy that it was adopted in Egypt late in the New Kingdom and was used in many different governments until the late eighteenth century of the modern era...The Roman Senate...simplified its administrative responsibilities and avoided a large uncontrollable financial bureaucracy by contracting with Publicans, wealthy members of the commercial Equestrian order, to collect provincial revenue...The Senate awarded short-term, one-year contracts for each tax to several small tax farmers in each municipality."

In determining whether this system was better than direct government collection, it is important to recognize that <u>some</u> organization had to undertake the expense of collection. The amount generated by a government at auction represented a private sector estimate of the net revenue that could be collected. It is necessary to show <u>how</u> the private sector would have been more efficient in collecting revenue. Furthermore, even were it the case that private collectors were more efficient, it would still be necessary to explain why the Government did not simply pay a fee to a private individual to collect revenue, that is, the form of contract must still be explained.

There is ample evidence that private tax collectors had to bear the expense of extensive collection networks. In ancient Rome, for example, the government had difficulty in collecting taxes from the distant Provinces. The Senate negotiated a single contract for all direct and indirect revenues from each distant Province. This was a large scale undertaking: "The syndicate holding contracts in Bynthia during the first century B.C., for example, had tens of thousands of employees....The syndicates sometimes operated as holding companies which in turn delegated their authority to small local contractors in exchange for a flat fee. Local contractors' ambitions guaranteed only slightly reduced profits, yet eliminated the need for an elaborate system of internal control" (Webber and Wildavsky (1986)). Similarly, in 17th century France, "The tax system was the largest employer...giving work to at least 75,000 people for the collection of the indirect taxes alone...The peasant collectors themselves should also be counted among the employees of the system; this would add another 80 to 100,000 people to our total. If we count these collectors, something like 2 percent or 3 percent of the adult male French population worked for the tax system each year" (Collins (1988)).

Consequently, although one might rightly state that governments avoided employing bureaucracies directly, it does not follow that the bureaucracies did not exist. In discussing the French "General Farms," Matthews (1958) points out: "All taxes required skilled agents for their collection: excise men, customs officials, guards, bookkeepers, accountable receivers, and directors. It was necessary to train this personnel, to coordinate and discipline their activities, to draw up effective rules and regulations. Once the tax-farm was in operation, it became, in consequence, more than a mere body of tax rights, more than the simple act of leasing those rights. The tax-farm became also an establishment of physical, human, and procedural parts and skills. It became a bureaucracy."

The fact is that administrative costs must be borne by some entity. In cases where the private sector simply replicates the bureaucracy of the government, there is little to be gained from private collection. To explain why private costs might have been lower requires further analysis.

One possibility is that the correct organizational structure is a decentralized one where intermediation by the market is thought to be beneficial. The historical evidence seems to indicate that geographical distance and/or a weakening of political control over distant territories had an influence in determining the use of tax farming. Modern developing states where these issues are problematic include, inter alia, Argentina, Brazil, China, India, and the former U.S.S.R. Within a more general context, the issue of the appropriate boundary between the market and the firm has been extensively addressed by Coase (1937), Alchian and Demsetz (1972), Williamson (1971), and Chandler (1977). Williamson (1971), for example, argues that "mainly on account of bounded rationality and greater confidence in the objectivity of market exchange in comparison with bureaucratic processes, market intermediation is generally to be preferred over internal supply in circumstances in which markets may be said to 'work well'."

Is the tax farmer/government relationship one where it would be facile to assume the market would work "well"? Here, at a bare minimum, "well" would have to imply that the market for tax farming services be sufficiently competitive so that the government could be certain to receive a reasonable offer at auction. There is, however, good reason to believe that tax collection does not satisfy this criterion in developing countries. First, the available pool of talent is likely to be so small that it would not permit the formation of competing tax farming firms. For this reason it would be improbable that a large number of potential bidders could be found to compete at auction. Furthermore, tax farming is likely to be a natural monopoly for reasons that are even more salient in developing than developed countries. Modern tax collection methods depend to a great extent on the efficient use of information. Information, having the character of a public good, should be shared by tax collectors, but at the same time the public should have their right to privacy maintained. A monopoly would have the advantage of free transfer of information within its boundaries and, from the standpoint of public accountability, misuse of private information could be traced to a single collecting agent. Training also plays an important role in efficient tax collection. The general skills important in tax collection such as accounting, auditing, computer analysis and programming, legal training, etc. are useful in other occupations and professions. One justification that has been put forward for state involvement in the provision of education is that private employers do not have enough incentive to train employees who may leave for other jobs outside the firm. While tax administrators, even in countries such as the United States and the United Kingdom bemoan the difficulty they have in keeping talented staff, to a certain extent the economy benefits from the training they take with them to the private sector or other government agencies. However, from the standpoint of the private sector, there will be less of an incentive to train employees if it is easy for them to use the acquired skills in other firms.

In addition to the training and informational reasons put forth to argue for a tax collection monopoly at any point in time, there is also an intertemporal argument for monopoly. In order to prevent overzealous collection of taxes by a monopolist with only a short-term lease, the optimal monopoly lease would likely be a lengthy one. For these reasons it is difficult to envision a high degree of competition in the tax collection field, even if one takes into account potential competition from firms not currently in the market.

All this is not to deny the seriousness of the monitoring problem and, indeed, an important motivation for adopting tax farming, in particular the explicit form of contract usually adopted--a lump sum payment rather than, for example, a sharecropping arrangement--is ease of monitoring. Whether or not the fixed fee had been paid was a comparatively easy question to verify and could have made this system attractive to unsophisticated aristocratic rulers and their finance ministers. As argued in Tanzi and Casanegra (1987), one cannot ignore the difficulties in accounting and measurement that were encountered in the pre-modern world and in many developing countries today. The contrast between modern systems and their predecessors is apparent in statements such as: "France in the eighteenth century was without a budget. The very word first officially appears in a law of 1806. Living from hand to mouth, its accounts little better than statements of balances in the Exchequer, or of cash receipts and payments actually effected, it may almost be said that the financial system of the ancient regime was to have no system" (Cambridge (1928)). "The notion of budget forecasting was virtually non-existent." Braudel (1979).

Verification that the contract had been fulfilled was a matter of checking the amount paid by the farmer against the contractual commitment. Had the state endeavored to collect the revenue by itself, revenue shortfalls that occur, for a variety of good reasons, would have to be explained to the sovereign. It can easily be imagined that in the 17th century there was little understanding beyond the "bottom line." The feudal notions of service, duty, and obligation were paramount in the minds of the aristocracy who might easily understand a servant's failure to deliver on a promise, that is, the farmer's failure to meet the contract, and devise a suitable response. As Hicks (1969) points out "For the revenue system, it will be remembered, goes back to the pre-market economy; it is based on the rights, the customary rights, of the ruler in that economy...."

The argument that savings in monitoring cost were an important justification for the adoption of tax farming pales when cast in the light of closer scrutiny. A salient issue that must not be neglected in the discussion of the choice between private and public collection is that the state, if it is committed to the rule of law rather than discretion, must in either case both set the rules and monitor play, that is, must also monitor the <u>process</u> of collection. As the administration of justice is surely one of the goals of any state, it would seem a dereliction of duty for the state to cede the right to the private sector to set the rules. There would also be obvious conflict of interest problems. Furthermore if the state must bear part of the expense of the judicial system, justice being a public good, then private agents may overuse it. Were the state to enforce tax laws there might be a more efficient decision to prosecute cases and a greater incentive to design simple and clear laws and regulations in the first instance. It would be difficult to imagine, for instance, that a tax farming system would be able to match recent performance in the United Kingdom where, in the year ending March 31, 1990 over 70,000 investigations resulting in additional tax and/or interest and penalties were settled in Tax Offices or referred to Enquiry Branch in comparison with only 335 criminal proceedings resolved in the courts over the same period (Board of Inland Revenue, Report for the year ending 31st March 1990). The need to foster acceptable settlements of contentious issues may be even more important in developing countries where recourse to the formal legal system is very costly and the outcomes are frequently somewhat arbitrary.

The aim of modern developing country tax administrations should be to observe not only the outcome, but the process of tax collection, safeguarding taxpayer rights and determining that the legally obligated revenue is collected in a proper and least cost manner. While tax farming facilitates monitoring the outcome it compounds the problem of monitoring the process. The greater the decentralization, the more difficult it is to monitor the process and achieve accountability.

Another way to approach the issue of the supposed administrative advantages of tax farming is to ask would private collectors have been more efficient than government collectors if both were attempting to achieve the same goal? To answer that question directly is beyond the scope of this work, but the burden of proof would seem to be on those who would claim that the private sector is more efficient. False analogies from the study of public versus private enterprise performance should be avoided. One reason is that the comparison should be made between government and private enterprises attempting to maximize the same objective function. However, one of the key factors explaining the variance in enterprise behavior is clearly the different objectives each tends to pursue (Stella (1989)). But fundamentally, were they to have the same objective function and set of constraints, it would be difficult to argue for an essential difference between public and private. There are important reasons why, however, public and private collector objective functions should differ, not the least of which is that government should value the taxpayer's loss of welfare associated with tax payments and the cost of tax compliance.

The view that real cost savings were achieved simply by avoiding the government bureaucracy is clearly naive. Some agent of the state had to bear the administrative cost. The idea that private sector agents could perform this service better than the state must rely on their superior ability to avail themselves of market intermediation. This in turn requires that markets work well in the collection of taxes. There are, however, reasons to believe markets will not work well in such situations. There exist elements of natural monopoly with respect to the importance of information in the tax collection process and with respect to the optimal length of a tax collector's lease. In developing countries there is likely to be a paucity of available competitors who would be competent to bid at auction. Furthermore, there would be problems retaining skilled staff.

Perhaps most importantly, there would exist no market for enforcing market rules and administering justice. The primary ethical justification for permitting free operation of markets is that transactions are voluntary. Each side to a transaction is free not to participate if the terms of the offer are not acceptable. This creates prima facie evidence that the transactions are mutually beneficial. This is not the case for tax payments, however, as tax payments, by their very definition are "...compulsory, unrequited, nonrepayable contributions exacted by a government for policy purposes" (IMF Government Finance Statistics, p. 102). The process of tax collection does not involve two willing participants and consequently is not an area where the market may be expected to lead to an appropriate outcome. This problem will not be solved in the absence of a market for justice. Such a market would be a virtual contradiction in terms if justice means a decision is determined according to certain moral principles that imply more than simply a rule whereby the highest bidder wins.

Other problems with the efficient working of markets are likely to affect the tax collection process. One is that tax farmers with short-term leases would have an incentive to press collection harder than would a firm with a long-term lease. A tax collector with a longer time horizon might choose not to force a debtor into bankruptcy, for example, if the long-term prospects of the firm are favorable. Granting long-term leases, however, clearly limits the amount of potential competition in the market.

A last problem concerns the access to confidential proprietary information that would seemingly be required to carry out auditing and investigatory functions of tax collection. Obvious conflicts of interest could arise from private tax farmers harassing firms in competition with the tax farmers' other business interests and utilizing proprietary information to obtain an unfair advantage. While this power would certainly enhance the monetary bids received at auction, the consequences of such abuse for the operation of the economy as a whole could be quite deleterious. Admittedly, governments do on occasion use tax collecting agencies to attack political enemies. Tax farming would, however, appear to institutionalize this problem.

2. <u>The tax farming as collateral hypothesis</u>

This second hypothesis does not rely on tax farming being efficient. Rather it stresses the role of the tax farm as a substitute for loan collateral in situations where the government has credit needs. The risks in sovereign lending are quite apparent today in the current developing country debt crisis. Throughout history, these problems were widespread. In the case of the French monarchy, for example, "Bankruptcies or repudiations on the part of the national obligations, occurred in 1715, 1721, 1726, 1759, and 1770" (Cambridge (1928)). Lenders, who were aware of this problem were wary to lend without collateral. One solution was to cede the right to collect taxes to the lender. In the Italian states, "...the Casa di San Giorgio, was established in Genoa in 1405 and soon became something like the financial agency of the Genovese state...To secure the payment of interest charges on the public debt it had, by the mid-fifteenth century, assumed responsibility for the collection of direct and indirect taxes and the proceeds of the mints and the salt-monopoly...Venice and Florence funded debts needed the backing of direct taxation, charges on trade or profits of state monopolies" (Collins (1988)).

Much of the evidence suggests that payment in advance played an important role in tax farming. In the Athenian republic the state demanded a deposit of 50 percent in advance and the remainder in 6 months from the tax farmer and insisted on stringent requirements for the soundness of the farmer's financial situation (Webber and Wildavsky (1986)). Sovereign borrowing from the tax farmer was common in France (Miller (1972)). In the 20th century, both the Dominican Republic and Nicaragua had the collection of customs and government debt repayment taken over by private interests in the United States. In Nicaragua the relation between loans to the government and tax revenue as collateral was quite evident: in exchange for loans from two New York banking firms, Nicaragua agreed, in 1911, that "During the continuance of the debt the customs were to be in charge of a collector-general. This official was to be appointed by the Nicaraguan executive on the nomination of the bankers making the loan and his selection was subject to the approval of the (U.S.) State Department....The Government of Nicaragua also pledged itself not to alter its customs laws and internal taxes without the consent of American creditors" (Cox (1927)). A retired U.S. army officer was put in charge of customs, the revenue from which guaranteed repayment of the loan. This system was extended soon thereafter: "The Government was unable to meet current expenses and called on bankers for further aid. The latter as security assumed the collection of all the revenues with the National Bank as its agent. The difficulties experienced by American subordinates in enforcing local fiscal laws, led them, after a year's trial, to abandon the collection of internal revenue" (Cox (1927)). This incident is particularly interesting for several reasons. It clearly illustrates the use of tax farming in serving as loan collateral. It also shows that tax farming was not necessarily technically efficient as the foreigners were compelled to give up collection of internal revenue. As noted above, the use of tax farms as a form of loan collateral is not dependent on tax farming being more efficient than government direct collection. Third, it points to an area of conflict discussed above, namely the tax collector must be able to control, to a certain extent, the nation's tax laws and the regulatory interpretations thereof. In effect, the tax farmers forced the Nicaraguan government to freeze its tax legislation. Lastly, it is an example where an attempt was made to change the objective function of an existing tax administration.

While serving as loan collateral may be an important factor in the adoption of tax farming, it did not play a role in all cases. In Imperial Rome, where tax farming was utilized, the state actively <u>lent</u> funds to the private sector. In the second century, A.D., the program for public subsistence payments for support of children, known as the **alimenta**, was extended throughout the Italian peninsula. "The Italian **alimenta** were financed by government grants placed with landowners in the districts in which children were to be supported. Generally speaking, each landowner who accepted a loan received a sum worth about 8 percent of the stated value of his land, on which he had to pay the city interest of 5 percent per year, which formed the income from which the children were supported" (Duncan-Jones (1974)). This sort of program financing, which clearly required a large capital expenditure "up front," is rather inconsistent with the view of a state seeking to borrow and forced to cede tax collection to the borrowers. Indeed, Finley (1981) argues that republican Rome "exploited" its dominions by "...the lending of money at high rates of interest, usually in order to provide the latter with the cash required by them for their tax (or tribute) payments to the imperial state." Webber and Wildavsky(1986) note that in the Roman case, "The syndicates paid their contract fee to the Senate at the end of the year after taxes had been collected..." (Emphasis added).

Thus, tax farming may be viewed in some, though clearly not all cases, as a method whereby a Government's credit problems are alleviated. A requirement for this view is that it must be more difficult for the state to repudiate the tax farming agreement than a straight loan. This assumption has some validity because the sovereign typically did not have the specialized ability to take over the collection apparatus on short notice. Naturally, there was the option to give the concession to another collector, but this individual, in turn, might be reluctant to make the necessary substantial investments in "start up" costs in light of the possibility that he, too, would lose the franchise. In this way, tax farming may have served as a form of precommitment on the part of the government. Governments with little other recourse would be unlikely to revoke a farmer's lease.

This view of the credit constrained state is consistent with the historical practice of selling tax exemptions and public offices. In exchange for a lump sum payment the individual received, in the former, an exemption from future taxation, or in the latter, a secure amount of income to be derived from the office purchased. Both of these transactions are similar to the purchase of an annuity from the state.

It would be efficient for the Government to borrow through tax farm auctions and sale of government offices only if the private sector could borrow at a lower rate (or the opportunity cost of borrowing for the private sector is lower) than the Government. It is safe to assume that financial markets were neither sufficiently deep nor well established during this historical period--nor in the modern developing countries where tax farming is most likely to appeal--to ensure that private and government discount rates were equal to the "market" rate of interest. Therefore, it is possible for the Government to have had a higher rate of time preference than the private sector. This, in turn, would imply that the present discounted value of future tax liabilities viewed from the Government's perspective would have been less than that obtained using the private sector's rate of discount. This would open the opportunity for a Pareto improving trade, the government selling tax exemptions or the right to collect future tax revenue for a price that would be below the private sector's assessment of the present discounted value of those taxes.

The notion that the government has a higher rate of discount than the private sector appears to be at the odds, however, with the modern phenomenon of government financed development lending institutions. Indeed, if the government could borrow on its own at a lower rate than the tax farmer, then it should do so and although tax farming might be efficient, the payment could be made by the tax farmer at the end of the tax year rather than at the beginning of the season. In this situation it would be beneficial for the Government to borrow rather than tax (effectively performing the financial intermediation service of lending the taxpayers their tax obligations) because it can borrow at a lower rate than the public.

If the sovereign risk was very high, however, as was the case during most of history and is surely the case in developing countries today--even in domestic currency (witness, for example, the recent forced rollover of Argentine treasury debt in 1989), then there would be a potential Pareto gain from having the private sector advance tax payments. This benefit is independent of the relative efficiency of tax farming nor does it depend on the system of tax farming at all. Modern states have required forced loans from taxpayers, albeit not necessarily resulting in a Pareto improvement, such as in the forced saving, or ahorro forzoso scheme in Argentina in 1986 where certain taxpayers were forced to buy bonds in amounts that were related to their prior years' tax liabilities. That this technique is not at all new is evidenced by the fact that in 13th century Venice, the state forced the rich to subscribe to a loan. This Venetian loan was explicitly backed by future revenue and in this "...she had invented, as early as the thirteenth century, a method of raising money which would be practiced successfully by England in the eighteenth century: Venetian loans, like the later English loans, always corresponded to the releasing of a set of revenues from which interest and repayment of the principal would come..." (Braudel (1979)). This sort of collateralized borrowing is common in states and localities in the United States which demonstrates that although it may be necessary to assign revenues to facilitate borrowing, it is not necessary to cede taxation authority to the lenders.

An additional feature of the fixed payment in advance aspect of tax farming is that while it puts the risk on the farmer and ensures the state a certain amount of revenue, it leads to procyclical tax rates. In years when the tax base is lower than expected, private sector tax payments would be a higher percentage of the tax base. Consequently, the burden of the taxation is greater in such years than in years when the tax base is higher than anticipated or normal. Naturally, pre-modern finance ministers can hardly be blamed for not recognizing this undesirable feature of tax farming (although they must have realized that the tax farmer gave little relief from the tax burden during bad years) but for modern administrations this is another drawback.

From a more general perspective, it is clear that improvements in tax compliance are an effective way in which to improve a nation's creditworthiness. The issue here is whether tax farming is the right way to achieve this goal. Using tax farming to secure foreign debt would certainly set up a disincentive to comply with taxes. As illustrated in the case of Nicaragua, even with government cooperation in the area of tax law, it is difficult for outside agents to enforce tax compliance. Indeed, if foreign commercial banks cannot enforce loan contracts it is difficult to see how they could enforce tax obligations. Local tax agents might have more success but the same problem with the lack of technical and financial resources in most developing countries that was mentioned in section 1 would imply a lack of competition in the market and probably unfavorable terms for the government. Consequently the argument for tax farming as simply a substitute for collateral would appear to have little relevance for modern developing countries.

3. Generating the maximum amount of gross revenue hypothesis

Commentators are virtually unanimous in reciting a litany of complaints against the overzealous collection practices of tax farmers. "In Mesopotamia, near the end of the second millennium, B.C., the traditional tax on land was 10 percent of the crop, payable in kind. In practice, tax farmers collected much more. Seeking to guarantee the good years against possible losses from poor ones, the average tax farmer demanded one-fifth to half the crop from reluctant peasants" (Webber and Wildavsky (1986)). "The practice of farming the indirect taxes to the highest bidder (in France) encouraged revolting harshness in collection" (Cambridge (1928)). "In the times of Louis XIII and Louis XIV, riots in France almost always originated from over-heavy taxation" (Braudel (1979)). Azabou and Nugent (1988), in discussing the experience of tax farming in North Africa state: "Over the course of time, overzealous large, monopolistic tax farmers, driven by the incentive to collect as much in the way of taxes as possible, tended to abuse their power by mistreating the taxpayers, thereby giving tax farming a bad reputation. This led to demands for more monitoring on the part of the state of tax farmer practices." De Vries (1976) comments on the Dutch Republic's experience with tax farming during the 17th and early 18th centuries: "Here, too, tax farmers controlled the excise tax collections; each year the tax collection privileges on forty three separate excises were sold to the highest bidders. This system produced social discord that generated the most significant riots in the Republic's history" (p. 202). Perhaps tax farming's most famous critic was Adam Smith (1776): "The farmers of the public revenue never find the laws too severe which punish any attempt to evade the payment of a tax. They have no bowels for the contributors, who are not their subjects, and whose universal bankruptcy, if it should happen the day after their farm is expired, would not much affect their interest. In the greatest exigencies of the state, when the anxiety of the sovereign for the exact payment of his revenue is necessarily the greatest, they seldom fail to complain that, without laws more rigorous than those which actually take place, it will be impossible for them to pay even the usual rent ... Even a bad sovereign feels more compassion for his people than can ever be expected from the farmers of his revenue. He knows that the permanent grandeur of his family depends upon the prosperity of his people and he will never knowingly ruin that prosperity for the sake of any momentary interest of his own. It is otherwise with the farmers of his revenue, whose grandeur may frequently be the effect of the ruin, and not of the prosperity of his people."

The opinion that tax farming resulted in overly zealous collection is virtually unanimous. That the state wished to maximize revenue rather than economic welfare would seem to provide sufficient motivation for the popularity of tax farming among sovereigns. Tax farming generates the maximum amount of net revenue because it gives the farmer profit maximizing incentives--to maximize net revenue collected is to maximize profit. This notion is explored more fully in Stella (1990). This explanation of the popularity of farming among sovereigns also explains why it was so unpopular among taxpayers. Numerous contemporaries and many historians have commented on the overzealous activities of tax farmers, but they have generally attributed this behavior to the personal characteristics or traits of those pre disposed to enter into farming rather than to the institution itself. On the contrary, the very "rules of the game" dictated an overzealous response on the part of rational profit maximizing tax collectors. The fact that this institution generated the maximum level of tax payments was precisely why it was popular for governments. Had it really been socially efficient rational taxpayers would not have violently protested its use.

Evidence on bid rigging and a general lack of competition might be thought to be evidence against the thesis of this paper which is that tax farming was popular, not for administrative reasons, but rather because it generated the most revenue for the sovereign. Take the following example: in France, "In 1697, the indirect taxes were leased collectively to a body of financiers, sixty in number, henceforward known as the Farmers-general. They were appointed by the King for six years and paid an agreed sum in advance year by year. The leases were awarded by Court favor and led to much intrigue and corruption, always at the ultimate expense of the public. The farmer made large profits...it was on the charge of this fraud that the Farmers-general were guillotined during the Revolution" (Cambridge (1928)). The key point is that this system is inefficient only from the standpoint of the public. Indeed, the public paid the maximum amount of tax in this institutional set-up but this merely made the attractiveness of the contract structure to the ruling class that much greater and the resultant bids that much higher. The adoption of this system was consistent with the general indifference the state showed for the welfare of the taxpayer. Bribery represented nothing more than transfers of income within the ruling class. Furthermore, tax farming was a system wherein the corruption could be centralized and closely controlled from above.

IV. Tax Farming as a Second Best Solution

While tax farming clearly has flaws, this paper would not have been written if the practical alternatives were perfect. Even though tax farming will lead to excessive revenue effort from the standpoint of the first best solution it may be superior to the alternative. Indeed, there are those who argue, such as Tanzi (1989) in the Latin American context, that revenue generation is the most important objective of the tax system. Of course, this does not imply that the best system is the one that generates the most revenue. It must be recognized, however, that whatever system is adopted will likely have flaws and tax farming cannot therefore be rejected a priori in all circumstances.

As in any situation where reform is being considered, it is important to diagnose the existing problems before examining the appropriateness of alternative solutions. In some cases it is clear that the government salary schedule has been compressed and reduced to the point where it is not possible to recruit or retain qualified personnel in the specialized talents required for tax administration. The obvious solution to this problem, raising wages, may be politically or administratively difficult without creating pressure from the rest of the civil service to be treated similarly. A second problem with the civil service in some countries is that it is very difficult to dismiss anyone from their post. While this may be perceived to be an important safeguard against political manipulation of the civil service, in the sphere of tax administration it makes it costly to deal with poor performers or even outright corruption. In some cases it may be possible to couple an increase in salaries with the elimination of job tenure. Another approach that has been tried in, inter alia, Argentina and Bolivia, is to reward the tax administration based on its revenue performance. Chand and Lorie(1992) push this argument even further in the context of economies in the process of being transformed from centrally planned to market oriented. In response to the likely reduction in real salaries of tax administrators they state: "...to motivate tax officers in particular and to reduce any incentive to engage in corrupt practices, special facilities will need to be given to them such as revenue-related bonuses." These sort of incentive systems are in the direction of tax farming, albeit with the important difference that government officials will presumably be subject to a set of political, ethical and administrative constraints that a private farmer would not necessarily adopt.

It is worth noting in passing that in the Argentine and Bolivian cases, the amount retained by the tax authority for its use is based on a percentage of the <u>total</u> tax collection. This, in turn, implies that the percentage rate is quite low and consequently the marginal incentive is low. Alternatively, the administration could be rewarded on the basis of a percentage of the collections above a predetermined target. In this latter case a higher marginal reward could be offered with the same overall cost. The system based on a percentage of the total collection basically has the effect of increasing the tax officials' basic remuneration and does not change incentives very much--particularly as any one individual's contribution to overall collections is likely to be small. This system is therefore a close alternative to outright wage increases in situations where such wage increases would cause political or administrative difficulties. In order to fundamentally change incentives, however, a higher marginal reward would have to be offered. In the limit, receiving 100 percent of collections above a certain threshold would present the government tax official with the same incentives as a tax farmer.

In other cases it may be that the tax administration is rife with corruption and that drastic measures are warranted. Before tax farming should be considered one must ascertain that at some higher level there is a genuine political commitment to reform. In the absence of such a commitment, tax farming may merely substitute a centralized form of corruption for a decentralized one. The existence of a genuine political desire for reform makes the chances of success for any type of reform much higher. A second consideration when evaluating the potential gain from tax farming is that one may overestimate the net revenue gain to be had from abolishing corruption. If the venial tax collector has merely accepted an average level of bribes that brings his or her wage to the alternative he or she could obtain elsewhere, then the wages the private sector farmer would have to pay his employees would be that much higher. In such a case the tax farmer could not offer the government higher net revenue than is currently being obtained. However, in circumstances such as those mentioned above where the public collector cannot be fired and entry into the tax collection profession is restricted, the public employee could generate a level of bribes that would bring his or her compensation above the private sector equivalent. Such cases would indicate a need for civil service reform.

The notion that higher wages would eliminate at least some of the potential gains from a reduction in corruption is in addition to the point brought out in the previous section, that in many developing countries the accounting and administrative structures are currently at a less than advanced stage of sophistication and it is questionable whether sufficient competition would exist for the tax farms--a necessary prerequisite for the Government to generate its fair share of revenue through auction.

In other circumstances, public revenue collection is weak for reasons that would not be addressed by private collection. Ambiguous or overly complex laws, an ineffective legal enforcement mechanism, or a large underground economy, are all situations wherein tax farming is unlikely to improve the situation. Indeed, in surroundings such as those described by Gray (1989) in Indonesia, where the salary structure was such that skilled lawyers, accountants, tax specialists, prosecutors, and judges cannot be retained in the public sector, the judicial system cannot be relied upon to effectively monitor the behavior of tax farmers and the adverse consequences of private sector collection could be severe.

Up until this stage, this paper has discussed tax collection and administration as though it were a monolithic activity. This degree of simplification is evident, as well, in many theoretical works on tax evasion where the tax collector is usually confined to setting an audit strategy and a penalty structure. In reality tax administration involves many different identifiable stages beginning with the issuance of interpretations of tax law, regulations and guidelines, to the collection of court awarded tax arrears and penalties. Given the wide range of activities that are the responsibility of the tax administration it is appropriate to consider which might be suitable for privatization and which would not.

Based on the preceding discussion, it would seem that only activities that involve very little ambiguity, judgement, interpretation and discretion would be amenable to privatization. The collection of known tax arrears, for example, is a case where the judicial system has already ruled on any issues in dispute and where what is required is simply collection. Data processing services and employer mandated tax withholding are other cases where the private sector can be usefully involved. In the latter case the employer plays no role in the determination of the ultimate tax liability and merely serves as an agent in the retention process. The core activities of the tax administration--interpretation of the law and issuing guidelines, assessment, and auditing--are areas where, if the government is committed to fairness and the rule of law, a significant degree of monitoring of the government's agents is required. Under these circumstances, privatization might lead to higher overall costs than an effective internal reform of tax administration. By analogy, one could argue that the privatization of prisons results in efficiency gains, but a society committed to justice and equality before the law could not privatize the process by which an individual is sentenced to prison.

In contrast with those who argue that tax farming has a bright future in areas where tax administration costs are highest, it would seem that efficient and fair privatization of tax administration/collection activities is most likely to occur in situations where monitoring costs are lowest. Such partial reforms have taken place or are being considered in a number of countries. In Argentina, it has been proposed that the collection of tax arrears be contracted out to private firms who would retain a share of collections. In this case since private collection efforts would be aimed only at those with identified tax arrears, there would be little scope for overcollection. Other countries have engaged private companies to administer part of the customs functions. Most commonly, a private foreign firm is contracted to verify that the value of goods declared by importers at customs corresponds to international price data. Thus part of the verification task is privatized without ceding the actual right to collect taxes.

V. Conclusion

This paper has examined the historical record of tax farming, a system that gave the tax collector profit maximizing incentives. Three different hypotheses concerning the justification of the employment of tax farming were analyzed.

It was argued that the notion that tax farming was popular because it was technically a more efficient way to administer taxes is seriously flawed. While it may be true that a certain degree of decentralization in tax administration was necessary from an organizational standpoint, it is not obvious why the Government, operating with the same objective function as private collectors, would not have been equally successful. Fundamentally, some executive must employ a bureaucracy to enforce tax laws. At the microeconomic level private farmers would have to be just as concerned as public officials with issues of monitoring and control of individual tax collectors. Furthermore, in order to restrict abuse, the government would have to monitor the behavior of private collecting agents. This latter consideration would seem to obviate the main benefit advanced of tax farming--that the government is relieved of monitoring the process of tax collection and need only observe the end result. Unlike virtually every private market transaction, tax collection is not a situation of voluntary exchange. Consequently, if the state has an interest in justice, it cannot cede its monitoring role.

The second motivation considered for tax farming was that the tax farms served as collateral for sovereign lending. While this may have played an important role in some cases in the past, it is unlikely to be a particularly relevant feature for modern developing countries. In the absence of a real efficiency gain, the loan aspect of tax farming would do little to solve the structural problems of poor revenue generation in those countries where it may be considered for adoption.

The most convincing rationale for the use of tax farming is that it generated the maximum amount of revenue for governments that failed to accurately consider the welfare of the representative taxpayer, that is, tax collection was a forced transfer of revenue from one class of society to another. This explains, without any imputation of superior efficiency to the tax farmer, why governments chose to delegate their responsibility--it was to distance themselves from the wrath of the taxpaying public.

While the bulk of this paper focused on the flaws of tax farming the penultimate section considered its potential as a second best solution. In drawing distinctions between the various aspects of tax administration, it was pointed out that certain activities, such as the collection of court adjudicated tax arrears, might be suitable for privatization. Functions involving an important degree of discretion, interpretation, and the opportunity to transgress taxpayers' rights, however, are more appropriately left in public hands.

In sum, the classic form of tax farming would appear to have little to offer modern governments wishing to accurately represent the welfare of the taxpayer. While certain functions of the tax authority may usefully be carried out by the private sector, the scope for privatizing the core functions of tax administration appears limited. A lasting improvement in tax compliance is likely to take place only when changes in tax administration are undertaken within the context of increased transparency, simplicity, and equity in the tax system.

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