Henry George and an Alternative Islamic Land Tenure System

Author(s): Shahrukh Rafi Khan

Source: *Economic Development and Cultural Change*, Jul., 1988, Vol. 36, No. 4 (Jul., 1988), pp. 721-739

Published by: The University of Chicago Press

Stable URL: https://www.jstor.org/stable/1153791

Henry George and an Alternative Islamic Land Tenure System*

Shahrukh Rafi Khan
State University of New York, College at Oneonta

Islamic banking, a result of the much discussed "Islamic resurgence," is probably the most significant part of an attempt to instill an Islamic ethos into a socioeconomic system. Although much can be said about the sincerity and the success of such social engineering, here I intend to examine only the wider economic application of profit-and-loss sharing, a novel feature in the theory of Islamic banking.

Essentially, Islamic banking is based on equity participation because Islamic law prohibits an agent from earning a return without incurring a risk attached to a productive activity or engaging in some form of socially productive effort.[1] Such a return is referred to as *ribā,* and transactions that entail such exchange are referred to as *ribāwi.* Since interest is interpreted by most Muslim scholars as constituting a predetermined and hence risk-free return, it is considered *ribāwi.*

The two main financial instruments in Islamic banking, borrowed from the writings of medieval Islamic jurists, are essentially forms of equity participation. In *mudarāba,* entrepreneurs use borrowed funds in a productive enterprise and share profits, if any, according to a prespecified ratio with the lenders. Any loss that is not caused by negligence is borne by the lenders. *Musharika* differs only in that the entrepreneur's capital investment is drawn partly from his own funds rather than entirely from borrowed funds.[2]

This form of equity participation, generally referred to as profit-and-loss sharing (PLS), has been suggested as a land tenure arrangement by various classical and recent Islamic scholars.[3] This recommendation has been made because the conventional contracts, sharecropping and renting, have been the subject of continual controversy.[4]

Although this article may appear to be addressing an impractical issue, the Council of Islamic Ideology in Pakistan has endorsed the use

0013-0079/88/3604-0044$01.00

of PLS for various medium-term and long-term financial needs in the agricultural sector.[5] These include land improvement and development and the purchase of equipment such as tractors and tubewells. Thus, what follows has practical relevance for the program of Islamization in Pakistan. Furthermore, since landownership rights in Islam (and hence in PLS) are similar to those advocated by Henry George, PLS may be of more general interest, particularly in view of recent interest in the relevance of Henry George's ideas related to economic development.[6]

Two qualifications to this study are necessary: first, agricultural conditions in Pakistan are used as a point of departure, and consequently the examples underlying the analysis are specific to that country and to South Asia. Second, while the logic of the competitive model in neoclassical analysis is viewed to be a sound starting point, an extension of this model is necessary to address imperfect competition where land is highly concentrated.

The existence of land concentration has to be accepted as a reality, notwithstanding the consensus among Islamic scholars that any form of monopoly power, including land concentration, is unacceptable. Monopoly power leads to the appropriation of value without returning socially acceptable countervalue and hence to *ribā*.[7] Thus, ideally to enforce PLS, any economic power that could hinder the free operation of contract formation in the market would have to be eliminated.[8] Realistically, the power large landlords have to impose contracts in their own favor needs to be addressed.[9]

In this article I compare an Islamic view of justice with Western theory. Secondary sources are used to define the institutional premises on which a PLS contract is to be operationalized and to elaborate on *ribā* in an agricultural setting. In the review of the secondary literature, particular importance is attached to identifying a consensus among scholars, since such a consensus (*ijmā*^{c}) has played an important role in the evolution and development of Islamic law.[10] No attempt is made to identify the originators of the various ideas or to document all their adherents. Finally, the mechanics of applying the PLS contract to the agricultural sector are analyzed with standard tools of economic analysis. The complex problem addressed is that of determining the shares of the owner, the operator, and the community.

PLS, Social Justice, and Equality

To assess whether an activity is socially just, the Islamist must first accept two premises: that Qur'ānic legislation is just, and that the other sources of Islamic law based on it are grounded in justice in general and social justice in particular. Thus, Qur'ānic and other legislation is used to determine whether an activity is socially just.

This procedure is controversial. Modernist scholars have qualified the first premise by suggesting that certain specific Qur'ānic legislation

was meant by the Qur'ān itself to be relevant only to the particular context in which it was revealed.[11] In fact, the principal identifying feature of modernists may well be their emphasis on the eternal principles of Islamic law as opposed to any specific legislation.[12] Modernist and orthodox scholars also differ on the sources of Islamic law in general and on the interpretation of specific legislation in particular.[13]

In light of this controversy, the way to proceed is to specify in each case whether the modernist or the orthodox view is used. There is consensus that the elimination of *ribā* contributes to social justice. Thus one can conclude that PLS contributes to social justice by framing *ribā*-free contracts.

It is instructive to view PLS from the perspective of the recent and influential theory of justice of J. Rawls.[14] He believed that justice results when individuals who are in an "original position"—that is, ignorant of the social role they would ultimately assume—establish social institutions. The unanimity in the original position follows by assumption.[15] If a consensus were to be arrived at by such individuals on some form of tenure arrangement, PLS may be viewed as preferable insofar as it entails drawing a return for productive risk taking rather than simply for ownership.

R. J. Herring concludes that the Rawlsian formulation requires a defense of the existence of inequality, given that equality is logically just.[16] Inequality results from differences in natural endowments and/or inherited social positions, neither of which, according to Rawls, results in deserved inequalities.[17]

Inequalities resulting from natural ability are often viewed as more justifiable than those resulting from inherited social positions. However, Rawls believes that wealth determined by a natural lottery is undeserved from a moral perspective[18] and suggests that greater abilities should be viewed, in accordance with a "difference principle," as a social asset to be used for common advantage.[19] Both forms of inequalities, he maintains, need to be redressed by compensation.[20]

It is difficult to compare this view of justice to that prevailing in a society conforming to the dictates of a revealed divine law. For example, Islamic scholars concerned with justice and equality have often quoted a verse from the Qur'ān that reveals humans as unequal in their talents and abilities and states that some are blessed with more than others in order that they may be tested.[21]

A distinction is often made in Islamic literature between economic and social inequality; while the former is considered acceptable, the latter is not.[22] The measure of social justice is said to be the provision of equality of opportunity and not equality of outcome.[23] The problem, of course, is that inequality of opportunity tends to result from inequality of outcome, even if in theory access to all career-building institutions is based on merit and financing is provided by the state.[24]

To sum up, Islamic social justice could be viewed as more restrictive than that of Rawls on at least two counts. First, Islam seems to accept differences in shares resulting from differences in natural endowments based on the principle of divine purpose. Second, to attain social justice, certain prescriptions have to be taken as givens, such as the elimination of *ribā*, the imposition of prescribed welfare taxes (*zakāt* and *ushr*) and inheritance laws. In addition, there is a preference by Prophetic tradition for the unhindered operation of the market mechanism for both allocational and distributive outcomes.[25]

The elimination of *ribā* includes the elimination of rents. Absolute rents, which are caused by power differentials, are quite clearly *ribāwi*. However, even differential (Ricardian) rents are *ribāwi* since by definition they arise not because of effort on the part of the landowner but because nature or the development process endows different portions of finite and hence scarce land with different properties. This issue will be taken up again in the analytical section.

Institutional Framework for the Application of PLS as a Land Tenure Arrangement and an Elaboration on *Ribā*

The institutional framework I have adopted is only one of those possible in Islamic economic philosophy. It is not as restrictive as it may seem because the analysis is easily transferrable when the premises underlying the institutional framework are changed. For example, the recommendation and analysis of PLS as a tenure arrangement are reinforced by a view in Islam that qualifies private ownership of land. However, the analysis is possible even when there are no qualifications on private ownership of land, which is the more common view.

The institutional premises adopted here are as follows: first, land, a natural resource, is essentially a trust that bestows on the owner a right to utilization; in addition, Islamic law sets a 3-year limit on the time that an owner can leave land uncultivated before dispossession.[26] Second, the return from the soil is a gift to the whole community and is not meant to be appropriated by the landowner exclusively. Third, to avoid *ribā*, the owners are entitled to a return from land only if they invest in it and only to the extent of that investment.[27] Some readers will immediately recognize the commonality between the above premises and Henry George's viewpoint, on which I will elaborate later.[28]

Using PLS as an alternative tenure arrangement—in conjunction with the qualifications about ownership mentioned above—would significantly change the rights of the individual landowner and the nature of land contracts. The landowner would have the privilege of either investing in the land or being an owner operator. If both of these options were forsaken, the owner would not be entitled to any return from the land and would lose—with compensation—ownership privileges, if the land were not utilized within a specified time period. In

PLS, the owner would be entitled to a fixed share of the operating surplus. The remainder would accrue partly to the operator and partly to the community by means of a land value tax.

The advocacy of PLS as an alternative tenure arrangement can be understood better by examining the category of contracts that lead to *ribā*. These are as follows: (1) contracts that lead to the specification of a predetermined return to one party irrespective of the outcome of the contracted venture; (2) contracts that specify a flow of income to one party solely on the basis of either ownership or economic power; and (3) contracts that entail uncertainty or ambiguity in their framing. In addition, evidence indicates that jurists also forbade contracts based on output sharing where the livelihood of the operator and hence that of the family could be threatened.[29]

Sharecropping can lead to *ribā* because ownership, and not landowner effort, guarantees a return. One might counter that the land was acquired by income that was itself a return for effort. Even if this were the case, a return due merely to ownership is still unjustifiable. Income from past effort used to buy land procures the privilege for the owner of further investing in the land or of cultivating it himself. This is the reward for past effort. Thus, the owner is provided with an income-earning opportunity, but not a guaranteed future income, in return for his past effort.

The nature of uncertainty implicit in the sharecropping contract can again lead to *ribā*. For example, while shares are specified, the absolute return to the two parties remains indeterminate. This indeterminacy can result in *ribā* because in sharecropping the gross returns are shared. Thus, even if the sale of gross output is inadequate to meet costs, the cultivator still has to share the product with the owner. It is *ribāwi* because the owner may gain even when there is actually a loss.

As in sharecropping, when profit shares are agreed on in a PLS contract, the absolute returns to the two parties are once again indeterminate. However, in PLS the net returns, if any, rather than gross returns, are shared. Thus, the landowner shares only in the profit. If there is a loss that is not due to operator negligence, the owner receives no return on his funds, while the operator receives no return for his time and effort.

Analysis of PLS as an Alternative Tenure Arrangement

The presence of land, as an additional factor, considerably complicates the already complex issue of determining the shares of various agents contributing to production. In order to do so, the causes of differential operating surpluses per acre of agricultural land will first be identified and then sequentially analyzed.

Various phenomena can contribute to a differential in operating surpluses. These include variable soil fertility and location. For ex-

ample, transport may be significantly cheaper when there is access to roads and market towns. A differential in the operating surplus can also result from differences in the quality and the quantity of human skill employed on the land. In addition, a differential can be caused by differences in the extent of structural and nonstructural capital investment on the land. Nonstructural investment would include working and fixed capital, such as seeds, fertilizers, tractors, and tubewells, whereas structural investment alters the future value of the land itself, for example, reclaiming, clearing, and leveling the soil or building irrigation or drainage channels.

To distinguish the contribution of these various elements, I use many simplifying assumptions, which are then sequentially relaxed. First, the PLS model is introduced based on assumptions of homogeneous soil with no locational differences, homogeneous labor, equal sized farms, and the complete absence of long-term structural investment. Second, differences in farm sizes are allowed for. Third, the assumption about the homogeneity of the soil and the locational factors is relaxed to bring the issue of differential rent and land taxation into focus. Fourth, differences in the quality of human skill employed on the land will be allowed for to see if the analysis is significantly affected. Fifth, the analysis is extended to include differences in structural investment on the soil. Finally, upon completion of this sequential analysis, the vital issues of enforcement and market structure are addressed.

The PLS Model

The basic PLS model is introduced briefly without rigorous derivations of the supply and demand curves for loanable funds. The principal actors are the farmers and landowners. The farmers in this case are viewed to be entrepreneurs and will be referred to as "operators." They will in all likelihood work on the farm themselves, although they will also be overseers and make the entrepreneurial decisions. In the existing institutional setting, the pool from which they may be drawn includes tenants, owner cultivators, and landless laborers.

Landowners are viewed as investors. According to the qualifications of ownership, they are required to invest something to retain their ownership. The extent of their investment is likely to be based on alternative investment opportunities and their taste for investment as opposed to consumption. The implications of the various qualifications on ownership need clarification here.

Ownership rights include the "first right" of investing in one's land. To allow for nonowner investment on the land, the broader term "investor" will be utilized. Owners also have the right to choose among competing operators and may choose to become owner-operators themselves.

In principle, the modeling of profit shares between investors and operators would be the same as that presented in S. R. Khan.[30] Let π = operating surplus or profit per acre; $\rho_A\pi$ = profit-share of investors per acre in return for the investment of their capital; and $(1 - \rho_A)\pi$ = profit-share of operators per acre. (A is a reference to the agricultural sector, and this is later to be distinguished from m, which is a reference in this paper to the manufacturing sector, assuming for simplicity a two-sector model.)

The calculation of a profit rate is implicit; it is not needed for the working of the model here, which is based on the distribution of absolute sums. For example, if κ represents total invested funds, then the profit rate in the agricultural sector is

$$r_A = \frac{\rho_A\pi}{\kappa}. \tag{1}$$

If there are losses not caused by negligence, in a given time period the investor loses all or part of his capital (i.e., κ is eroded), whereas the operator loses his time and effort.

The model presupposes various assumptions. First, since κ is viewed as the monetary value of the investment from all sources in an accounting period, the average and marginal investment on the land is assumed to be equally risky. The model therefore does not distinguish between the qualitatively different kinds of investment. This lack of distinction can be a problem where there is more than one investor (or the operator contributes to the investment himself) and the investment process is lumpy. However, if the investment priorities are jointly arrived at and if there is joint contribution of funds in any investment, this assumption is acceptable.

Second, there is the more conventional set of assumptions underlying the analysis, which includes perfectly functioning markets, homogeneous factors of production, and multifactor production functions, including land, fixed and variable capital, operators, and hired labor as inputs.

Identical production functions are assumed for farms of the same size. All of the symbols above, defined on a per acre basis, are applicable to farms of a particular size. Differences in farm size are allowed for at the onset of the analysis because production functions do vary across farm size.[31] One point related to farm size needs clarification here. The quantity of any factor used per acre across farms of the same size is expected to be equalized. For example, a difference in operating surplus due to a difference in capital per acre may take the form of quasi-rents, which by definition would not persist in the long run; that is, the capital per acre across farms of the same size would be brought into equality because of a diminishing marginal product. From each

farm, the rate of return to the ith investor on the farm (given that there is more than one investor) will be $\rho_A \pi(Ki/\kappa)$, where Ki/κ represents the capital advanced by the ith investor as a proportion of total investment.

With the groundwork completed, the PLS market for loanable funds in agriculture can be described. The demand and supply curves for loanable funds would have the usual slopes even with ρ instead of r on the vertical axis.

$$D_A = f(\rho_A, \pi_E), \tag{2}$$

where π_E is the expected operating surplus. The latter will be based on expectations about, for example, flood conditions, government policy, resource availability, market demand, and farm technology. Thus, the operators' attitude toward risk is important for decision making. Specifically, there is evidence that operators of small farms in Pakistan are risk averse, probably more so than those on medium- or large-size farms.[32] No explicit modeling of behavior under risk is attempted here since differences in attitude toward risk will be prevented from influencing the contracting process by competition.

As the share of profit to the owners drops, more people may opt to become operators. In the limit, rural migrants to the urban sector may be drawn back to operate farms. The slope of the curve is hence explained by differences in talent and in local information and, therefore, in opportunity costs.

The supply curve can be represented by

$$S_A = (\rho_A, r_{A-1}, r_{M-1}). \tag{3}$$

The supply of funds will respond to some lagged function of profit in agriculture as compared to industry. It will vary negatively with past profits from investment in the manufacturing sector. As a simplification, -1 is used to represent the lag. As ρ_A becomes lower, more landowners could be expected to become owner-cultivators. A higher ρ_A can be expected to induce more flow of funds into agriculture.

The position of the supply curve is likely to be affected by the qualification about property rights. Thus, there may be a positive horizontal intercept, indicating that, in order to retain possession for the purpose of future investment, it is possible that even if ρ_A were zero, some people may still invest in the land.

The intersection of the demand and supply curves will determine the level of investment in agriculture and the relative shares of profit. The variation in profit shares and the level of investment can be illustrated by some comparative static examples. Several factors could result in a shift of the demand curve. Emigration of people who possess

farming skills, from rural to urban areas or abroad, would cause the demand curve to shift in, causing ρ_A to be lower. The lower level of investment in the agricultural sector reflected in the move down along the supply curve would indicate a smaller number of farms operating on the basis of PLS contracts. A shift in the opposite direction could result from technological innovations, for example. The premium on funds this shift implies would result in an increased ρ_A. The movement up along the supply curve would show the increased capital intensity of cultivation.

Similarly, several shifts in the supply curve can be hypothesized. For example, tax breaks to induce investment in agriculture would cause the supply curve to shift out. On the other hand, a change in taste, such that it becomes socially more acceptable to become an owner-operator, would cause the supply curve to shift in.[33]

At this point it is appropriate to discuss some important issues in agriculture that would have a bearing on the functioning of PLS contracts. These issues are urban bias, technical change, and the economic efficiency of a PLS contract. Consider first the consequence of a differential in profit rates arising between agriculture and industry. Clearly, the logic of the competitive market model being used here would suggest that such a differential would be self-correcting. However, suppose that, in an economic environment marked by duality, subsidized capital is provided to industry. The result of the adjustment process would be a lower level of investment in agriculture, the adverse consequences of which would be felt by operators and farm workers.

The adverse effect on agriculture of economic policy designed to stimulate industry is one example of what Lipton has referred to as the urban bias. Other such policy measures that lower the aggregate profit rate in agriculture include price twists, investment allocations, and the distribution of administrative and technical skills.[34] The urban bias exists irrespective of the kind of agricultural tenure arrangement, and PLS cannot be viewed as a means of rectifying this situation.

Whether PLS would increase aggregate investment in the agricultural sector is something that would need to be empirically tested. It is possible to a priori identify some of the forces operating on the supply and demand side. On the supply side, there would be a constraint on ownership that entails a positive investment on the land in order to retain ownership. This may encourage investment in agriculture. Offsetting this beneficial effect of PLS on investment in agriculture would be the difficulty of enforcing the PLS contract (see section below "On Enforcement"). On the demand side, operators would assume less risk than in a fixed rent contract, where most of the risk is borne by the operators, or in sharecropping, where the risk is shared between the operator and owner. This lower operator risk can be expected to raise demand for investment.

While predicting the effect PLS would have on the level of investment may be difficult, PLS is likely to change the composition of investment toward the undertaking of more risk. More risk taking may come about from the operator's ability to pass on the risk to the investors. In this regard, PLS appears to be a more suitable contract in an environment of technical change. It is this potential strength that the Council of Islamic Ideology in Pakistan seems to have counted on in proposing the use of the PLS contract in agriculture. As earlier stated, they have suggested that government loans be given on a PLS basis, particularly to owners of small farms, to promote the adoption of new technologies.

The PLS contract would satisfy the marginal efficiency conditions. One way of viewing the efficiency of the PLS contract is to interpret the share of investors as a profit tax. Alternatively, the basic calculus can be worked out in the framework originally developed by S. Cheung for a comparative economic analysis of renting and sharecropping.[35] Cheung sets up a constrained optimization problem where the landowner's total rental is maximized. He solves this to show that since the constraint is the same in sharecropping and land renting—that is, the opportunity forgone by the tenant—the allocation of resources will satisfy the same marginal conditions in either tenure arrangement. With slight modifications, to accommodate the notation of the PLS contract, one can once again show that the same marginal conditions are satisfied for PLS as long as the constraint is the same.

Allowing for Different Farm Sizes

Suppose large farms consistently show a greater operating surplus relative to medium or small farms.[36] Operators would then prefer to work on them and hence bid ρ_A up and $(1 - \rho_A)$ down. However, the total operating surplus on large farms will be greater, leaving remunerations to operators on large farms higher than on medium or small farms in compensation for the greater effort.

In equilibrium, the profit rates for farms of all sizes will be equalized, and thus the return on funds will tend to equality, so that, for example,

$$r_L = \frac{\rho_L \pi_L}{\kappa_L} = \frac{\rho_S \pi_S}{\kappa_S} = r_S, \tag{4}$$

where L stands for large and S for small.

Allowing for Nonhomogeneous Land

One of the Islamic principles identified earlier was that returns to the land are to be shared by the whole community. Given nonhomogeneity of land, then, the operating surplus on inframarginal land (that which is

more fertile or better located) will be higher even across farms of the same size. This surplus on inframarginal lands is akin to Ricardian rents.[37]

The existence and size of Ricardian rents depend on different qualities and locations of land. Scarcity is implicit in their existence since infinite amounts of different qualities of land would not result in Ricardian rents. Theoretically, if farms of the same size and with the same inputs show different operating surpluses, then this difference is what would be captured by Ricardian rents in tenure arrangements that allow for the renting of lands.

The concern here, however, is not with scarcity rents in general or Ricardian rents in particular but, rather, with identifying that value which is a contribution of the land due to either fertility or location. How accurately does the difference in operating surplus across farms of the same size reflect the difference in the contribution of the land itself? If that is a completely accurate gauge, then the following land value tax per acre for farms of a given size (and using the same inputs) would follow:

$$T = \pi_h - \pi_l, \tag{5}$$

where h and l indicate categories of land with high and low fertility.

Administratively, such a tax would require the grading of land into different categories based on local knowledge and past profits. Then the differential in average operating surplus between marginal and inframarginal categories of land on farms of the same size (and using the same input) would constitute the land value tax and also the Ricardian rent where a zero tax is assessed on marginal land.

Of course, there is still the possibility that factors other than land contribute to differences in operating surplus across farms of the same size. These could include differences in skill among operators, for example.

Allowing for Nonhomogeneous Operators

Differences in operating surplus between different categories of land for farms of the same size could, for individual farms, be due to varying operator efficiency. However, when computing the land value tax across different categories of the same size, such differentials will average out, assuming that operators are randomly distributed across farms of differing fertility. The remaining difference will be due to the fertility of the soil.

The average profit shares that will be determined for operators on the market will result from average performance. These shares will probably apply in a first-time contract between investors and operators. Operators with greater than average ability will therefore initially

benefit their investors, while those with less ability will be subsidized by them. There is no reason why the efficiency of individual operators should not eventually show up in a lower ρ_A in individual contracts. Similarly, operators with consistently inferior performances would have a problem renewing contracts. A frequent change in *munshees* (local overseers) is not uncommon among urban-based absentee owners, the number of whom is continually increasing due to state land grants to army officers and other high government officials.

Allowing for Structural Investment on the Land

Taxing the rental value of land has been proposed before for both ethical and economic reasons, in particular as it has been popularized by Henry George, who inspired the "single tax" movement.[38] The ethical justification for taxing the return to land was that, given scarcity, land value exists either because of the fertility of the soil, which is a gift of nature, or because of the location, which results from the existence and progress of the community. In neither case is the landowner justified in appropriating the rent since it is not the creation of his effort. One Islamic view of this issue, as explained earlier, has been similarly interpreted.

It has been observed that appropriating the whole rental value of land will result in the capitalized value of land falling to zero.[39] This can be easily seen from the following formulation:

$$C_o = \frac{R_1 - T_1}{(1 + i)} + \frac{R_2 - T_2}{(1 + i)^n} + \ldots + \frac{R_n - T_n}{(1 + i)^n}, \qquad (6)$$

where C_o = current capitalized value of land, R_t = expected rental value at time t, T_t = the tax at time t adjusted to the rental value, and i = interest rate. Henry George believed this outcome to be part of the strength of such a tax, since it would discourage land speculation, which he considered one of the prime causes of society's economic ills.[40] However, this tax may be unfair to those who recently purchased land since they in effect paid for the rental values, which they would be denied with the tax. Henry George anticipated this claim and devoted a whole chapter to an emotional refutation of it on the grounds of justice.[41]

Henry George conceded that tailoring a tax to appropriate only and all of the rental value would not be possible.[42] In particular, it would be very difficult to distinguish the contribution of land from past structural improvements on the land due to past investment. For example, the land itself could have been reclaimed from the swamp. To avoid discouraging investment of a structural kind (digging canals or wells, building embankments against floods, or reclaiming land that is waterlogged or suffers from salinity), he asserted that the returns

should accrue to the individuals responsible for the improvement.[43] Such compensation would imply that the contribution to value by structural improvements be separately assessed and subtracted from the taxable operating surplus by looking at the differences in returns to structural investments.

$$\rho_A^I \pi^I > \rho_A^u \pi^u, \tag{7}$$

where I represents a farm embodying the structural improvements and u an otherwise comparable farm without the improvements.

The return to structural improvements would show up in the share of owners/investors in the PLS model. Given competition, the return to operators on farms with and without improvements—but otherwise the same—would be equalized. Operators competing to work on the improved land would bid up the share of investors, with the result that

$$\rho_A^I > \rho_A^u, \tag{8}$$

and hence

$$(1 - \rho_A^I) < (1 - \rho_A^u), \tag{9}$$

but

$$\pi^I > \pi^u, \tag{10}$$

so that one may expect a tendency toward equalization of $(1-\rho_A^I)\pi^I$ and $(1-\rho_A^u)\pi^u$. Given that the return to operators is the same on farms with and without improvements, the return to the improvements that comes in the form of a tax break will accrue to the investors, those responsible for the structural improvements.

On Enforcement

A distinction needs to be made at the onset of differences in investors when enforcement is considered. First, there may be government PLS loans, particularly to small farmers, to encourage the adoption of new technology. Second, owners may make PLS investments. In Pakistan, two categories of owners are prominent. There are, first, in-service or retired army or other government officials who have been given land grants by the state. These are typically absentee owners. There are also the more numerous traditional landlords, who reside in the same village as the operator or in a neighboring village. Often a large part of a landed family moves away, but the usual practice is to have some member of the family stay behind to oversee the farm.

Enforcement of the PLS contract is least likely to be a problem for

the landlords situated on or near their lands. The government sector does have leverage in its ability to threaten legal action or to deny future loans to those with a poor track record of repayment.

It is for the absentee owners situated far away from the land, especially when they have little prior knowledge of agriculture, that enforcement is the greatest problem. Investors are likely to become more knowledgeable about agriculture from their involvement with the land, particularly when the interaction with the operator is frequent. Nevertheless, distance from the land and less direct experience on it than the operator will certainly limit the investor's knowledge. For example, he might be ignorant of a planting strategy to maximize profits by marketing produce at the beginning or end of the regular season. Also, investors can be exploited by an operator to the operator's own advantage.

The PLS contract as an alternative tenure arrangement is likely to be even more difficult to enforce than sharecropping. Sharecropping has a higher enforcement cost than the fixed rent tenure because the gross output has to be monitored. In the PLS contract, both output and costs have to be watched. There is thus enormous scope for cheating. Each cost can be overstated, while output can be understated. This problem is likely to be further compounded in situations where basic literacy is not widespread.

To some extent, the market can be relied on to enforce honesty in transactions. It is in the interest of operators to be honest to safeguard their jobs. Operators consistently showing an operating surplus below the average for their farm size and fertility are likely to lose their contracts.

In many cases, investors who are located too far from their farms to exercise effective control either will have to find trusted employees or sell their land. It is possible that a wholesale conversion to a PLS tenure arrangement would indirectly promote a movement toward "land to the tiller." Since many Islamic scholars believe that owner cultivation is preferable to tenancy, PLS has probably the additional advantage of gradually leading to such a form of cultivation.[44]

On Land Concentration

Enforcement would not be the problem where land is concentrated. Rather, the problem would be one of operators getting a competitively determined share of profits. My own view is that in any country where a rural elite is politically entrenched, the big battle would be to institute PLS as the tenure arrangement. Of course, doing so would be easier politically than imposing land taxes or a land reform. However, almost by definition, the existence of PLS would in some ways make the economic position of the tenant stronger than in land renting or sharecropping.

This economic betterment of the tenant can be illustrated in the conventional framework of a monopsonistic labor market confronted by operators. So far, the PLS terminology has described the market for loanable funds. In this special case, the terminology can also be used to describe the supply curve of the labor market for operators. The important point is that the supply curve of labor under monopsonistic conditions would vary positively with ρ_A but that the marginal cost of hiring additional operators would exceed the average cost. Thus landlords would be able to pay operators on average less than under competitive conditions. However, depending on the degree of imperfection in the labor market, ρ_A would vary between one and the competitively determined profit share.

As long as remuneration is determined by PLS, operators are assured a positive profit if it occurs, and they are insulated from a loss. By contrast, under both renting and sharecropping, tenants frequently are confronted with the burden of loss. If profit shares determined under existing market conditions made operators consistently worse off than they were with the traditional tenure arrangements, the decision makers would very quickly realize this fact.

Concluding Comments

This article proposes that the Islamic financial arrangement of profit-and-loss sharing can be used as an alternative land tenure arrangement. Profit-and-loss sharing is argued to be more consistent with the Islamic ethicoeconomic philosophy. An attempt has been made to show how PLS can be operationalized as a land tenure arrangement. The main claimants in the contract would be the operators, the landowners, and the state. The latter would claim the rental value of the land that is due either to location or to the fertility of the soil and hence is the right of the whole community. This arrangement has also been advocated by Henry George.

When there is no structural investment on the land across farms of any given size, the difference in operating surplus is part of the inherent value of the land, as in the Ricardian concept of rent. A tax could be designed to appropriate this difference in operating surplus. The problem is that structural investment on the land also contributes to the operating surplus. This problem can be dealt with by separately assessing and subtracting the value of improvements from the tax on the operating surplus.

The difficulty in enforcing the PLS contract because of the possibility of overstating costs and understating output may result in an increase in owner cultivation. The latter outcome may also occur because PLS forces the owner to bear more risk than in sharecropping. The owner/investor in PLS is guaranteed some return only if there is a profit, unlike sharecropping, where the gross output is subdivided.

The most significant benefits of PLS may be the following. (1) The traditional form of absentee ownership may be eliminated. (2) There may be a gradual elimination of unused holdings because use becomes a requirement for possession. (3) Borrowing from local moneylenders at usurious interest rates by operators strapped for cash may be abolished. Both laws against *ribā* and alternative sources and arrangements for the supply of funds would reduce this usury. (4) If the tax scheme is implemented along with PLS, additional tax revenue would be generated. (5) Researchers have recommended the need for overcoming the risk aversion of operators of small farms.[45] The PLS contract provides a possible method of accomplishing this. (6) Even where the labor market is highly concentrated, instituting PLS would probably be preferable to sharecropping and renting for operators since they would be insulated from natural or market determined losses at worst and get a positive profit otherwise. This tenure arrangement could promote the development of an indigenous (rural) entrepreneurial class in agriculture.

The proponents of the PLS contracts in the agricultural sector, as in the financial sector, must look for advantages primarily on the ethical and social plane. It is, of course, important to establish the economic feasibility of a mechanism to avoid *ribā*. However, the ethical and social gains from adhering to an Islamic value system, a result both of the immediate application of PLS and the possible long-run effects of its implementation, may be viewed as outweighing the difficulties of administration and enforcement.

Notes

* This article draws in part on chap. 7 of *Profit-and-Loss Sharing: An Islamic Experiment in Finance and Banking* (Karachi: Oxford University Press, 1987). My dissertation supervisor, T. E. Weisskopf, contributed generously to the analysis of this article. I remain indebted to him. I would also like to thank anonymous referees for useful recommendations and for raising important issues. Finally, I gratefully acknowledge Stephanie Bunker's careful editing.

1. For a definition of *ribā*, see J. Schact, "Riba," in *Encyclopedia of Islam,* 1939 ed. Also see Zia-ul-Haque, "Riba, Interest, and Profit," *Pakistan Economist* (May 24, 1980), pp. 14–35; and A. H. A. Abu-Sulayman, "The Economics of Tawheed and Brotherhood," in *Contemporary Aspects of Economic Thinking in Islam* (n.p.: American Trust Publications, 1976), pp. 9–54.

2. For details, see A. L. Udovitch, *Partnership and Profit in Medieval Islam* (Princeton, N.J.: Princeton University Press, 1970).

3. See Zia-ul-Haque, *Landlord and Peasant in Early Islam* (Islamabad: Islamic Research Institute, 1977), pp. 316–17, 332; F. Hussan, *The Concept of State and Law in Islam* (Washington, D.C.: University Press of America, 1981), pp. 186–88; S. A. H. Al-Khatib, "Landed Property and Ownership in Islam," in *Some Economic Aspects of Islam,* ed. M. N. Huda (Karachi: Motamar al-Alam al-Islami, 1964), p. 118; H. A. Masood, "Land Tenure System in an Islamic Framework," Discussion Paper Series no. 2 (Islamabad: International Institute of Islamic Economics, May 1985), pp. 29–30.

4. For a review of this controversy, see S. R. Khan, *Profit-and-Loss Sharing: An Islamic Experiment in Finance and Banking* (Karachi: Oxford University Press, 1987), pp. 109–17.

5. Council of Islamic Ideology, "Report on the Elimination of Interest from the Economy," in *Money and Banking in Islam,* ed. Z. Ahmed et al. (Islamabad: Institute of Policy Studies, 1983), pp. 140–43.

6. S. R. Lewis, *Henry George and Contemporary Economic Development* (Williamstown, Mass.: Williams College, 1985).

7. A. I. Qureshi, *Islam and the Theory of Interest,* 2d ed. (Lahore: Ashraf Publications, 1974), p. 191.

8. For the view that Islamic economic philosophy endorses the free and fair operation of the market system, see M. Rodinson, *Islam and Capitalism,* trans. Brian Pearce (Austin: University of Texas Press, 1978), p. 34; M. J. Kister, "The Market of the Prophet," *Journal of Economic and Social History of the Orient* 8 (1965): 273; S. M. Yusuf, *Economic Justice in Islam* (Lahore: Ashraf, 1971), p. 40.

9. K. Griffen has written about the impact of feudal power on agricultural contracts in *The Political Economy of Agrarian Change* (London: Macmillan, 1974), pp. 24–25; Akmal Hussain, "Technical Change and Social Polarisation in Rural Punjab," in *Pakistan the Political Economy of Rural Development,* ed. Karamat Ali (Lahore: Vanguard, 1982), pp. 344–55. Hussain also discusses the determinants of extra-market power in terms of the social origins of the landowners and the location of the land.

10. Fazlur Rahman, *Islam,* 2d ed. (Chicago: University of Chicago Press, 1979), pp. 68–84.

11. Ibid., p. 190.

12. This point is made by Fazlur Rahman in "Islam: Challenges and Opportunities," in *Islam: Past Influence and Present Challenge,* ed. Alfred T. Welch and Pierre Cachia (Edinburgh: Edinburgh University Press, 1979), p. 326.

13. Shahrukh R. Khan, "Political Economy of an Islamic System," *Hamdard Islamicus* 8 (Winter 1985): pp. 9–11.

14. John Rawls, *A Theory of Justice* (Oxford: Oxford University Press, 1972). The two principles of justice that would emerge from the original situation according to the author are first presented on p. 14.

15. Ibid., p. 263.

16. Ronald J. Herring, *Land to the Tiller* (New Haven, Conn.: Yale University Press, 1983), p. 273.

17. Rawls, p. 100.

18. Ibid., p. 72.

19. Ibid., p. 101, 107.

20. Ibid., p. 100.

21. Anas Zarqa, "Islamic Economics: An Approach to Human Welfare," in *Studies in Islamic Economics,* ed. Khurshid Ahmed (Leicester: Islamic Foundation, 1980), pp. 11–12; Muhammed Hameedullah, review of *Homo Oeconomicus Islamicus,* by J. Hans, *Islamic Quarterly* 2 (1955): 142–46. The citations from the Qur'ān include 6:165 and 16:71.

22. Afzal-ur-Rehman, *Economic Doctrines in Islam* (Lahore: Islamic Publications, 1974), 1:83; Ayatolluh Y. Noori, "The Islamic Concept of State," *Hamdard Islamicus* 3 (1980): 78–80.

23. C. N. Ahmed, *Principles and Objectives of an Islamic Economy* (Calicut: Ansari, 1964), p. 52; Amir H. Siddiqui, *Studies in Islamic History* (Karachi: Jamiyal-ul-Falah, 1967), p. 98.

24. Also see Rawls, pp. 60–65.

25. See n. 8 above.

26. Yusuf (n. 8 above), p. 19; Abu-Sulayman (n. 1 above), p. 22; S. Alam, "Islamic Economy: Some Thoughts about Sharecropping," *Islamic Review* 53 (1968): 24–26.

27. C. N. Ahmed, p. 57; H. Ahmed, "Social Justice in Islam," *Islamic Studies* 10 (1971): 397.

28. Henry George, *Progress and Poverty* (n.p.: National Single Tax League, 1879).

29. Zia-ul-Haque, *Riba, Interest and Profit* (Lahore: Vanguard, 1984), pp. 264–66.

30. Shahrukh R. Khan, "An Economic Analysis of a PLS Model for the Financial Sector," *Pakistan Journal of Applied Economics* 3 (1984): 89–105.

31. Moazam Mahmood and Nadeem-ul-Haque, "Farm Size and Productivity Revisited," *Pakistan Development Review* 20 (1981): 186–87; M. H. Khan, *Underdevelopment and Agrarian Structure in Pakistan* (Boulder: Westview, 1981), p. 195.

32. Muhammad Sharif and Muhammed J. Khan, "Risk and Resource Allocation: A Study of Small Farmers in Faisalabad District, Pakistan," Occasional Paper no. 6 (Lahore: Punjab Economic Research Institute, October 1985).

33. As an example of this kind of phenomenon, see Jerry B. Eckert, "Farmer Response to High-yielding Wheat in Pakistan's Punjab," in *Tradition and Dynamics in Small Farm Agriculture,* ed. D. Stevens (Ames: Iowa State University Press, 1977), p. 173. Eckert points out how the new technology of the Green Revolution made it a mark of status for the innovative landowners to be the leaders in introducing new inputs and techniques, and therefore much displacement of tenants occurred.

34. Michael Lipton, *Why Poor People Stay Poor: Urban Bias in World Development* (Cambridge, Mass.: Harvard University Press, 1977), pp. 67, 271.

35. Steven S. Cheung, *The Theory of Share Tenancy* (Chicago: University of Chicago Press, 1969), pp. 10–21.

36. For evidence that this is likely to be the case because of the disproportionately distributed benefits of the Green Revolution, see Hussain (n. 9 above), p. 353. This is of course a very controversial topic. For a literature review of South Asia, see Herring (n. 16 above), pp. 240–52. Herring does point out that it may be more meaningful to compare farm returns by scale of operations rather than farm size (p. 246). Those wishing to follow this controversy in recent years for Pakistan may see M. Ghaffar Chaudhry, "Green Revolution and Redistribution of Rural Incomes: Pakistan's Experience," *Pakistan Development Review* 21 (Autumn 1982): 173–205. For a comment on this by Mahmood H. Khan, see "Green Revolution and Redistribution of Rural Incomes: Pakistan's Experience—A Comment," *Pakistan Development Review* 22 (Spring 1983): 47–56; for a reply by Chaudhry, see "Green Revolution and Redistribution of Rural Incomes: Pakistan's Experience—a Reply," *Pakistan Development Review* 22 (Summer 1983): 117–23.

37. D. Ricardo, *Principles of Political Economy* (Cambridge: Cambridge University Press, 1951), pp. 67–83.

38. George (n. 28 above), pp. 326–31.

39. Arthur S. Otis, *Added Revenue without Burden* (Boston: Christopher Publishing, 1958), pp. 26–27.

40. George, p. 262.

41. Ibid., pp. 356–65.

42. Ibid., p. 424.
43. Ibid., p. 396.
44. Mahmud Abu-Saud, "The Economic Order within the General Conception of the Islamic Way of Life," *Islamic Review* 55 (1967): 13. The author cites (29:59) from the Qur'ān to support this view. For other arguments on which a strong case for the preferability of owner cultivation rests, see S. R. Khan, *Profit-and-Loss Sharing* (n. 4 above), pp. 114–15.
45. Sharif and Khan (n. 32 above), p. 43.