LAND REFORMS: PROSPECTS AND STRATEGIES

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Abstract

The paper is in two parts. The first part tries to understand the case for redistributive land reforms. We argue that there is relatively persuasive evidence showing that redistributing land may promote equity as well as efficiency. We then suggest that it is, nevertheless, unclear, given that all forms of redistribution cost money as well as bureaucratic and political capital, that redistributing land is the best way to redistribute. The second part of the paper takes as given that we want to redistribute land, and discusses strategies for achieving such redistribution. We argue that, for the most part, redistribution should be based on a uniform land ceiling and not discriminate between different types of landlords but violations of the land ceiling may be permitted if the buyer is willing to pay a high enough price. We also argue that land reform programs should be accompanied by agricultural extension programs and emergency income support programs. We argue in favor of allowing renting out redistributed land but restricting sales of such land. Finally we argue that market-assisted land reforms and tenancy reforms are possible alternative strategies where more traditional (coercive) land reform is not an option, but have significant disadvantages that should be taken seriously.

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Writing about a topic that has as much emotional resonance as land reforms does among many people is always difficult. To make matters worse, people seem to use the term to mean different things – redistributing land is certainly a land reform but so potentially is land reclamation, reforestation and many other forms of policy action that affect land. Being forced to make a choice we have opted to make our task somewhat less impossible by confining ourselves to the narrow (and we believe, colloquial) sense of land reforms – namely a policy of actively redistributing land towards the rural poor.

Even in this circumscribed version, the case for land reforms is highly multifaceted and as we see later, how we make the case does influence what we think should be appropriate policy. We will therefore need to spell out the arguments carefully – this is subject of the next section. In the following section, we discuss various alternative designs for a land reform program. In the following, penultimate, section we discuss alternatives to land reform as we have defined it here that may achieve similar goals.

2. The Case for Land Reform

To make a case for land reform one has to make two distinct arguments. First, that a more equitable land distribution is desirable in itself. And second, that after careful consideration of the costs implied in the process and possible alternative uses of the same resources, it is still worth of our while to try to move to a more equitable distribution. We take these up one by one.

2.1 The Case for a More Equitable Land Distribution

At the heart of this argument is a factual observation: small farms in developing countries tend to be more productive than larger farms. For India, this has been found by a series of farm management studies going back to the 1950’s and even earlier. Berry and Cline (1979) summarize more recent evidence from a range of countries, both in Asia and Latin America, showing much the same pattern (see also the many studies cited in Binswanger,
Deininger and Squire (1995)). Moreover, the magnitude of the productivity difference is substantial: in Punjab, Pakistan, the productivity on the largest farms as measured by value added by unit of land was less than 2/5 of that in the second smallest size group. The corresponding number in Muda, Malaysia is 2/3.\(^3\) Using data from the semi-arid ICRISAT region of India, Rosenzweig andBinswanger (1993) report that profit/wealth ratios are always at least twice as high for the farmers in the smallest category as they are for those in the largest.

2.11 The Scale Effect in Agriculture I: Sources of Increasing Returns

From a purely technological point of view the bias in agriculture is, if anything, towards increasing returns. It takes a certain minimum amount of land to make full use of a tractor or a harvester combine, and even a draught team can be underused if there is too little land. Indeed, if the plot is small enough, there can be problems with turning the draught team.

Some of the increasing returns may enter at the processing or marketing stage. Sugarcane, for example, needs to be crushed immediately after harvesting and the crushers tend to be large (one would need thousands of acres to keep one of them fully employed). This gives an obvious advantage to plantations that have thousands of acres of land. Tea requires careful marketing, but once a firm has the marketing skills it does not matter how much tea it markets.

Some of these disadvantages of being small may be mitigated in part by clever contracting or better institutional design. There is a rental market for farm machinery and bullock-teams which allows small farmers to take advantage of better technologies without having to buy them. Cooperatives of sugar farmers allow them to collectively own a crusher, thereby spreading the cost across many farmers. Contracting farming, where a single marketing organization contracts to buy the products from a large number of farmers and then markets them, has been used in the fruit industry to take advantage of

\(^3\) One reason this differential varies across regions is that the smallest and largest size categories in different regions are very different indeed.
increasing returns in marketing. On balance, however, being very small probably remains something of a handicap, especially because the effectiveness of these alternative arrangements (renting, cooperatives) tends to be limited by agency problems and other transaction costs. It is, therefore, rather reassuring that the evidence of decreasing returns cited above does not come from areas where plantation crops dominate.

Compounding the advantages of big farms from purely technological increasing returns is the fact that bigger farms tend to have better access to credit and other inputs. This is, in part, a result of the fact that there appears to be increasing returns in the lending technology that gives the bigger farmers better access to credit. In part, it is also because access to land and many inputs are politically regulated, and bigger farmers are often able to capture more than a proportionate share of them.\(^5\)

Another potential source of apparent increasing returns comes from the process of occupational choice. It seems reasonable to assume that the more technologically savvy and/or talented farmers will want to work with more land\(^6\) and therefore, ceteris paribus, bigger plots ought to be more productive. The extent of increasing returns from this source should however be much more limited than the corresponding effect in most other industries: first, because the pace of technological change in agriculture tends to be slow and a substantial fraction of the new technologies are both developed and promoted through a public extension system; and second, because talent is probably less important for success in agriculture (at least in areas where cultivation has a long history) than in most other industries.\(^7\)

### 2.12 The Scale Effect in Agriculture II: Incentive Effects and Decreasing Returns

Incentive problems loom large in agriculture: the work, by its very nature, resists

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\(^4\) On the limitations of sugar cooperatives, see Banerjee et al (1998).

\(^5\) Few historical phenomena share the remarkable uniformity that one finds in the history of agrarian relations. The state, it appears, has intervened always and everywhere in the markets for land, agricultural labor and other inputs into and outputs from agriculture to make life easier for larger farmers. See the appendix to Binswanger et al (1995) for a very erudite account of this history.

\(^6\) See Lucas (1978) for a formalization of this point.

\(^7\) Some tangential evidence for this claim is to be found in the fact that the measured rate of return to human capital in agriculture tends to be lower than in the rest of the economy (see Rosenzweig (1993)).
supervision. People work alone and at some distance from everybody else. The work, while usually straightforward, often demands care and attention.

This is the one obvious argument for decreasing returns. Large farms need to hire labor. Small farms do not. Hired labor will be less productive than family labor unless it is effectively supervised (which may be very costly) or is given the right incentives.

Agency theory helps us to identify the conditions under which hired labor will face weaker incentives than those (implicitly) faced by family labor. A simple example is a situation where there is a limit to how little someone can be left with. This could be a physical limit – one cannot take away what someone does not have. It could be a social limit – for example most societies do not allow bonded labor. Or it could simply be the limit of what is enforceable. Forcing someone to give up more than this may be counterproductive – he may just rebel or run away and make it very costly to collect.

Such a limit obviously sets a lower bound on how effectively a farm laborer can be punished for failure. Of course, he could still be given the right incentives by offering him a prize for success, but prizes cost money. A rational landowner may choose to offer a prize that is too small in order to avoid having to pay for it, and settle for lower productivity.

This argument can be usefully rephrased as follows: Ideally, the landowner would like to sell the hired laborer the right to be a residual (in other words, he would want to get a fixed-rent tenant). The problem is that at the beginning of the season he is simply too poor to be able to pay what the landowner would like to charge as rent. The alternative for the landlord would be to wait until after production when the tenant will have more money (at least on average). But production is uncertain – crops may fail – and when this happens, the landlord will still face the limit on how much he can collect from the tenant. This will set the bound on the fixed rent he can charge (since for a fixed rent to be meaningful, the tenant has to be able to pay it even when his crop fails). If this bound is low enough, the landowner may not want a fixed rent – it may be better for him to charge
the tenant more when the crop does well (and he can pay more) than when it fails. What then emerges is a version of sharecropping which is a contract where the landowner imposes what is, in effect, a tax on the tenant’s output. The tenant will react by putting in less into production. Productivity will be lower than on smaller farms that are only family labor. 

Thinking about the problem of incentives in this way makes it clear that the problem is not a missing market for credit or land. The landowner in our example has the option of offering his tenant a loan that the tenant could use to pay the rent. The problem is that this simply shifts the problem from one of collecting the rent, to one of collecting on the loan. The same limit on how much can be extracted from the tenant that made the rent contract unprofitable will now make the loan unprofitable.

Land markets do not help for much the same reason. In this model, the landowner would want to sell his land to his tenants. The problem is that the price that the tenants can afford is too low. Once again, there is the possibility of lending them the money to buy the land, but the problem will come back when he has to collect on the loan.

Agency problems can also arise in the absence of any constraints on how much people can be made to pay. As we said before, the ideal situation from the point of view of risk-sharing is when the tenant/laborer becomes the residual claimant. Unfortunately, this also means that the tenant bears all the risk. If he is risk averse, he may not want to do this – he could prefer that he share some of the risk with the landowner. As a result, it will be in both of their interests to move away from a fixed rent contract towards risk-sharing and lower incentives.

Do these theories support land reform? These two views of the agency problem seem superficially similar but are in fact quite different. In the first model, the size

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8 For a theory of sharecropping along these lines, see Banerjee, Gertler & Ghatak (1998).
9 Unless there is something that is permissible when one is collecting on a loan that is not when one is collecting rents.
10 For a model of share-tenancy based on these ideas, see Stiglitz (1974).
productivity relationship is a direct consequence of the fact that owner-farmers (who are the ones who crop the small farms) have very different incentives from the tenant-farmers or hired laborers who crop the big farms. The landowner in this model is not doing anything useful and therefore doing away with him has no costs and clear benefits.

In the second, risk-aversion based, model, the landowner is indeed useful – he is in effect acting as an insurer to his tenant. To generate a size-productivity relation in this model we will need to assume that the demand for insurance (generated by the extent of risk aversion) varies among farmers. The owner-farmers are clearly tolerating much more risk than the tenant-farmers and we need to explain why they are prepared to do so. One explanation is that they are different kinds of people. The owner-farmers are those who are willing to trade off higher returns for more risk. The rest settle for the relative safety of waiting for somebody else. A second explanation recognizes the endogeneity of risk aversion – the owner-farmers in this view are those who happen to own some land and are less risk averse for this reason.

These two versions of the risk-aversion-based model have quite different implications for the effect of land reforms on productivity. Under the first, purely selection-based, view, land reforms should not have an effect on the erstwhile tenant’s incentives. He will simply find someone, like his previous landowner, with whom he will contract to share risk and returns. Productivity will be unchanged. Under the second view, the tenant will be richer after land reforms and therefore will be willing to take more risk. Productivity will therefore go up.

It is important to emphasize that in all of these agency models, up to a first approximation, redistribution has an incentive effect (when it does), because it increases the tenant’s net worth. Incentives improve because the tenant is richer and it is easier to give incentives to richer tenants. In other words, any other way of making the tenant

11 See Kihlstrom and Laffont (1979) or Kanbur (1979) for theories of entrepreneurship based on these considerations.
richer could work just as well as redistributing land. The fact that he actually owns the land after a land reform is, in some sense, beside the point.

2.13 The Scale Effect in Agriculture III: Ownership Effects. The fact that ownership, per se, has no incentive effect is not accidental. The world we have been describing is one in which contracts are complete. As it is now well understood, some contractual incompleteness is necessary if there is to be a pure *ownership effect*. To see how that might work, consider the following rather commonsensical variant on the agency story: imagine that the input the agent chooses is not immediately useful, as we have been assuming, but rather, pays off after some time. Tenants who expect to be on the land for a year or two would want to not put in such an investment unless it is something that is contractible (like buying a pump set) and he can get paid by the landlord for doing it.\(^\text{12}\) But if it is something that is difficult to contract on – caring for the pump set, keeping the well clean, not over-watering the land – the fact that the tenant lacks security of tenure will clearly affect his incentive to invest. The landlord could, of course, try to rectify this by promising the tenant long-term tenure on the land. There are, however, obvious problems with such commitments: the legal system needs to be effective enough to enforce long-term contracts which specify both the length of tenure and the rents to be charged in the future. Making the tenant the owner of the land clearly avoids many of these problems and therefore may be expected to promote investment.

It is possible that the effect of ownership goes beyond this: the arguments above implicitly assume that landlord’s make the best possible use of the land (given the various incentive constraints). In fact people often own land for reasons other than making money from the land: in India land is a potential tax shelter since agricultural incomes are not taxed. In Brazil it is an important form of collateral. It is also an important source of political power and/or social prestige in some rural societies – it has, for example, been claimed that the person who controls the agricultural work teams that one finds in some areas of India, also controls their vote (see Elkins (1975)). Such landlords may not try

\(^{12}\) Though the fact that the tenant’s incentives are distorted (for the reasons discussed above, for example) will mean that the landlord may not want to pay for it, even if, in a first-best world, it would be worth doing (see for example, Braverman and Stiglitz (1986)).
very hard to get the most they can get from the land. Moreover there may be legal restrictions that prevent landlords from making optimal use of their land. One important institutional reason why the largest estates may go for wage labor even when it is suboptimal, is the overhang of past and potential land reforms. Land reform laws often exempt land that is self-cultivated and, as a result, a landowner who goes for sharecropping on his large estate may either face immediate legal problems or fear that he may lose his land in the future if and when such a law gets instituted (because such laws tend to be applied retroactively). In addition, on the tenant’s side, there may be a psychological dimension to owning the land that may make the tenant react more strongly to the transition to ownership than standard incentive theory would predict. In all of these cases efficiency of land use may be substantially enhanced by transferring the ownership to someone who is more directly involved with making the most productive use of the land.

2.14 Other Explanations of the Size-Productivity Relationship. Even in a world where inputs into agriculture could be monitored perfectly and incentives for the tenant were irrelevant, one would expect to observe a variety of different contracts between landowners and their tenants. After all, tenants can be very different – some may have their own farm implements and draught teams. Others may want to use the ones belonging to the landlord. Some may need credit from the landlord or benefit from the landowner’s technical expertise. In all these cases where the landlord is providing an input, he would have to be compensated and as a result the contract with the tenant may be different. In particular, it seems plausible that the tenant will be more likely to be a fixed-rent farmer when he does not need anything from the landowner and to be a hired laborer or sharecropper when he needs the landowner’s help.

What will be the relation between size and productivity in such a setting? One plausible case is one in which the ones who are more independent are also more productive. This will give us the observed size productivity relationship.
Land redistribution in such a setting will have no effect on the tenant's incentive. It may, however, have an effect on his ability to get all the inputs he needs. The erstwhile landowner who also used to lend him money or machines, may now refuse to do so. If there are fixed costs of enforcing contracts, the landowner may stop having any dealings with the tenant once the main land-based nexus is broken. Or the landlord may simply feel more vulnerable in his dealings with the tenant because he can no longer use the threat of expulsion from the land against him. Consequently, he may not want to lend to him.

If the land redistribution actually makes the tenant less able to get inputs, productivity might actually fall as a result of the reform (even though the observed size productivity relationship in this economy is negative). Of course, the new owner could try to sell his land back to the previous owner and restore the old equilibrium, but this may not always be possible. If the original land redistribution was based on a land ceiling, the previous owner may now be at the ceiling. Or he may simply be too afraid to buy land in the new regime. He may fear that he will lose it again.

An alternative theory of why small farms may be more productive is premised on the idea that small farms have better land. They might have better land if, for example, better land is safer in the sense that a crop failure is less likely on such land and small farmers put a higher value on such safety. If this is the case, productivity comparisons need to control for exogenously given differences in land quality (as against differences in land quality which result from investments by the farmer, which are endogenous and presumably related to the incentives faced by the farmer).

To summarize at this point: even if we accept that small farms are more productive than larger farms, the case for land redistribution is by no means open and shut. One can imagine settings where it will have no effect or even a negative effect on productivity. We therefore need data that is more able to distinguish between these alternative theories.
2.15 More Evidence on Size and Productivity. One of the more careful studies of the size productivity relation is in Rosenzweig and Binswanger (1993). They estimate a relation between a farmer’s wealth and his profits based on the ICRISAT data set from Central India. Since they have panel data at the level of the farmer, they can estimate a specification that includes farmer fixed effects. They find that the profit-to-wealth ratio for the smallest category of farmers is always at least twice that for the largest farmers.

The advantage of this study over previous studies is the fixed effect specification. As the discussion in the previous section makes clear, one reason we may get a spurious size-productivity relation is because of selection at the level of the farmer – more productive farmers may choose to be independent while the less productive may opt to work for a large land owner. The farmer fixed effect allows us to look at the size-productivity relationship after controlling for such innate differences in productivity.

This specification does not directly control for differences in land quality across size categories. However, they do use land values in calculating the profit-wealth ratio and as long as the land values correctly reflect differences in land quality, the fact that smaller farmers have better land should not bias the estimate. This, however, remains something of an issue: since the land market is at best imperfect, it is possible that the best quality land may be undervalued, which would then make the small farmers look excessively profitable.

Two papers that do try to look at the size-productivity relationship after controlling properly for land quality are Bhalla and Roy (1988) and Benjamin (1995). Benjamin shows that once he instruments for farm size using variables uncorrelated with land quality, the inverse relationship is entirely eliminated. However, average farm size is in any case very small, substantially limits the scope of his results. Bhalla and Roy's results are from India: by using direct measures of farm quality and estimating the relationship district by district, they eliminate the inverse relationship in 71% of the 176 districts for which they have data. It is not clear how damaging this is for the inverse-relationship view: given that they have on average only about 150 observations per district, not
finding a significant relationship may not be too surprising.\textsuperscript{13}

\subsection*{2.16 Direct Evidence on the Effect of Tenancy}
Shaban (1987) makes a more direct attempt measure the effect of tenancy. Using the same ICRISAT data that Rosenzweig and Binswanger use, he compares the amounts of inputs (including their own labor) that farmers put into land that they own with the amounts the same farmers put into land that they sharecrop. Like Rosenzweig and Binswanger, he is therefore able to control for any fixed farmer characteristics that affect their productivity. Moreover, Shaban has detailed measures of plot quality variables from ICRISAT, which he can use to control for differences in land quality between owned and sharecropped land.

Shaban finds that farmers do use significantly less inputs on the land that they sharecrop (the difference varies between 10\% and 47\% for different inputs). His point estimate for the resulting loss in productivity is 16\% when he controls for differences in land quality and 32\% when he does not control for them. Land quality differences are in part exogenous, but in part they are also the result of investments made on the land, which will be affected by who owns the land. Therefore these two numbers give lower and upper bounds for the true productivity loss.

It is important to note that this only gives an estimate of the productivity loss among those sharecroppers who also own some land. This may be an overestimate of the effect among pure sharecroppers if we believe that the mixed sharecroppers are richer (at least they own some land) and therefore it is possible to give them stronger incentives. On the other hand, the fact that they own some land and have still opted for sharecropping may tell us that they are more risk-averse than the average sharecropper and perhaps less productive.

\textsuperscript{13}They do not report the point estimate for these cases and nor do they mention whether they ever find a positive significant relationship.
A very different approach to this question is to look at the effect of an exogenous change in the tenant’s incentives on his productivity on the same plot. An example of this approach is the study by Lin (1992) of the productivity effects of the de-collectivization process in China. In the period between 1978 and 1984, Chinese agriculture went from collective farming to the individual responsibility system, i.e., from essentially no individual incentives to a system almost entirely based on individual incentives. Lin studies the productivity consequences of this reform, taking advantage of the fact that the reform spread at different speeds in different districts. Based on a production function analysis of a district-level panel, he finds that productivity increased by 14%. This seems to be a rather small effect, especially given the vaunted inefficiency of collective farming: one reason may be that the areas that were first allowed to switch to the individual responsibility system were the poorest areas. It is also possible that the long-run effect of the reform will turn out to be larger simply because its effect on investment takes time before it shows up in the data.

Banerjee, Gertler and Ghatak (1998) apply a rather similar methodology to Operation Barga, a large-scale tenancy reform carried out in the state of West Bengal (in India) in the late 1970’s and early 1980’s. The actual changes brought about by the reform were quite limited compared to what happened in China – the share of sharecroppers paying 50% or more to the landlord went down from 90% to 58%\(^{14}\) and the tenant was given a more secure tenure on the land.\(^{15}\) Nevertheless the effect on productivity that they find is substantially larger than the one found by Lin – their point estimate is that the productivity of the average sharecropper must have gone up by almost 60%. However, like most studies based on aggregate data, there is some question about whether there may have been other things going on at the same time which also contributed to the productivity increase. In particular, while they can and do control for improvement in public infrastructure during this period, they cannot, for example, control for changes in

\(^{14}\) This is based on a survey of sharecroppers described in Banerjee, Gertler and Ghatak (1998).

\(^{15}\) In fact, the tenant was now more or less sure that he would never be evicted from the land – but the effect of this in itself is ambiguous – while it makes him more willing to make long-term investments, it also restricts the landowners ability to use eviction threats as an incentive device.
the agricultural extension services available to the farmers, which may have contributed to the productivity increase.

2.17 Incentive Effects and Investment Effects

The various attempts to measure the efficiency loss due to tenancy do not tell us whether the loss is a result of foregone investment or insufficient current incentives. This is to be expected since both the investments and the current inputs are difficult to measure for the much the same reasons as the ones that make them non-contractible. Moreover there is not much that one can say about this question on purely a priori grounds. On the one hand, many of the more obvious forms of investment (such as irrigation) ought to be contractible, which limits the scope of the investment effect. On the other hand, as we noted above, there could be institutional and psychological reasons for why the effect of a transfer of ownership to the tenant may be much greater than what the basic theory predicts. Since we have no measure of the size of these effects, there is nothing definitive that can be said about this question. This is however unfortunate, since policy makers cannot avoid dealing with the question of whether the right response is to enrich the tenant (to improve his incentives) or to make him the owner of the land (to encourage investment). We await further empirical work on this point.

2.18 An Assessment

On balance, the evidence seems to support the view that there is a positive relation between efficiency and equity in the distribution of land. However the evidence is inconclusive about the size of the potential efficiency gain. The direct evidence on the effects of tenancy suggests much smaller gains than those implied by the evidence on farm size and productivity. One view of this discrepancy is that the estimates of the size-productivity relation in the literature are simply unreliable because they do not correct properly for variations in land quality and the ability of the farmer. However there are a number of reasons to suspect that the evidence on tenancy underestimates the extent of potential gains, at least in some cases. First, the premise of using the evidence on tenancy is that sharecropping is the principle reason why large estates are inefficient. We have already suggested (in section 2.13) why this may not be the case. Second, we cannot rule
out the possibility that while the estimates of the productivity loss that we report above all come from areas (such as the ICRISAT region of India, China, and West Bengal) where the true loss is indeed smallish, if it were possible to apply the same methodology to the areas where Berry and Cline report large productivity differentials (such as North-East Brazil), we would have found much larger estimates.\(^\text{16}\)

The lack of a precise estimate of the potential gains from land redistribution is a major handicap. As we will see, redistributing land is costly, and it is vital that we know how the benefits compare with the costs.

### 2.2 The Case for Redistributing Land

Redistribution is of course a goal in itself, quite apart from any efficiency gains that might result from a more equitable land distribution. The rural poor are among the poorest in any country and giving them any assets must promote equity. Apart from being desirable in itself, a number of recent papers have argued that a more equitable distribution of wealth can promote efficiency: when the poor have more assets they will be able get more credit and better insurance which, in turn, will help them invest more effectively. Thus, the children of the beneficiaries of a land reform may have better health and more education, and this may make them more productive. They may also be more able to start small businesses of their own by pledging the land against the loans.\(^\text{17}\)

There is also a political economy argument that favors redistribution – it has been argued that when the poor have too little stake in the economy, they are liable to impose inefficient taxes on the rest of the economy (taxes here may be a metaphor for the crime,

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\(^{16}\) One reason why the extent of the productivity loss due to agency problems may vary considerably across regions is because the size of the largest holdings both in absolute terms and relative to the smallest, tends to vary and it is reasonable to assume that agency problems are more severe in larger holdings (for example, because on smaller holdings monitoring the tenant is easier). In the Berry and Cline size-productivity comparisons reported above, the biggest farms in North-East Brazil were taken to be those over 500 hectares while small farms were between 10 and 50 hectares. By contrast, in Muda, Malaysia, the biggest farms are simply those that were bigger than 5.7 hectares while small farms were between 0.7 and 1 hectare.

\(^{17}\) See, for example, Galor and Zeira (1993) or Banerjee and Newman (1993).
riots and, in extreme cases, civil wars).\textsuperscript{18} Certainly it is hard to avoid the impression that there is a correlation between left-wing insurgency and extreme inequity in the distribution of wealth, especially in rural areas.\textsuperscript{19}

None of this, however, says that we ought to redistribute land. Though we have suggested that there may not be any efficiency costs resulting from the redistribution, there are substantial costs of implementing the redistribution even if the landlords are not compensated. Moreover, there is the opportunity cost: the government could expropriate land, resell it and redistribute the proceeds. The rural poor may benefit more if this money is used to make public investments in education and health or was simply handed to them, than they would from getting more land.

2.21 Why Give the Poor Land?
We are, regrettably, very far from being able to compare the social benefits of investment in health or education to the benefits of land redistribution: the current state of empirical knowledge on these issues is simply too primitive. On the question of whether we should redistribute land rather than money, the instinctive answer among economists is that redistributing money must be better, ceteris paribus, since the beneficiary could always use the money to buy land. In fact, if we are right and the poor do not buy land only because they are too poor, they should all buy land and the productivity gains from land reforms will be realized.

If we accept this argument, the only case for redistributing land has to be based on the belief that the beneficiaries would all want land and therefore directly redistributing land may avoid some transactions costs.\textsuperscript{20} In all other cases, it would be better to distribute money. We, however, feel that there may be other reasons why redistributing money may not always be the best option. One potential argument is that a part of the benefit from

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\textsuperscript{18} See Alesina and Rodrik (1994) and Persson and Tabellini (1994).
\textsuperscript{19} The rise of the Shining Path in Peru and the Naxalites in Bihar, are obvious examples.
\textsuperscript{20} The equivalent reform would be for the government to tax the landowners (or expropriate their land and sell it) and to redistribute the resulting revenues. The peasant who gets the money would then have to buy
land reform may be that it helps in population retention in rural areas. There is certainly an influential body of opinion that holds that our cities are overcrowded and that the private benefit from migrating to the city substantially exceeds the benefit to society. Giving the poor assets that can only be useful in rural areas (unlike money) would be a way of penalizing them for migrating. The problem with this argument is that the debate on whether cities are too large has so far been inconclusive — until this is more satisfactorily settled, it is hard to make a case based on this premise.

Perhaps a more compelling argument emphasizes the fact that land can be a permanent source of income for a poor family. It is increasingly becoming apparent that the assumption that the head of the family acts in the collective interest is at best a poor approximation to reality. If there are conflicts of interest within the family or between the current family and future generations, the goal of redistribution may be better served by giving the family an asset rather than money: this might, for example, prevent a husband from decamping with the money, leaving his wife and children destitute. Moreover, compared to other fixed assets (factories, shops, etc.), land has the particular advantage that it is, as we have suggested already, probably less complementary to particular skills. Therefore, whoever is left with the land could earn a living from it.\footnote{For an argument along these lines see Agarwal (1996).}

Note that both of these arguments for giving away land rather than money imply that the redistributed land should not be salable. We will return to this point in the discussion of the design of land reforms.

These arguments are obviously highly speculative and, in the absence of better empirical support, make, what is at best, a very tentative case for land redistribution as a way of benefiting the rural poor. It is possible, however, to take a very different view of land reforms: in this view land reforms are simply an effective way of taxing the rural rich. The immediate goal of land reforms is not to give land to the poor but simply to raise resources. These resources could, of course, be given to the rural poor in the form of

the land which is more complicated than a direct transfer of ownership.

\footnote{For an argument along these lines see Agarwal (1996).}
land, but there does not have to be a necessary connection – they could also go to urban poor, or for that matter, to the urban rich. Conversely, resources to finance land transfers to the rural poor could be financed out of other taxes. The key here is to find the best way to raise resources.

2.22 Why “Tax” the Landlords?
One argument for using land reform as a ‘tax’ is the view, implicit in our discussion above, that taking land away from the rich, (perhaps) unlike taking factories away from the rich, has no direct efficiency cost. Moreover as a tax on sunk capital, it has no short run incentive costs, and if the government can commit not to redistribute again, its long run costs may also be quite limited.

A second argument emphasizes the price effects of redistributing land. There are at least two reasons why land redistribution on a large scale could make the landlords more willing to give up their land and could thereby reduce the effective cost of making the same transfer. First, a large-scale land reform may be an effective way to convince the landowners that there will be no more special subsidies for large farmers in the future (simply because the constituency of large farmers will be much depleted) and therefore makes them more willing to sell out. Second, the importance of land ownership as a source of status and political influence may be greater when there are a lot of large landowners than when there are a few.

Such a “tax” can also have coordination benefits: one potential benefit from land reform is that it may forestall future peasant unrest. In settings where this is important, each landowner that sells his land to a peasant may be doing every landowner that does not sell out a favor, and therefore in equilibrium it is possible that too little land will be sold. A coordinated program of land transfers may therefore be in everyone's interest.

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22 Which is, for example, what the models of dualism a la Lewis would suggest.
23 See Binswanger, Deininger and Feder (1995) for the view that such subsidies are an almost universal feature of the agricultural sector.
Against all this is the fact that the experience of land reforms suggests that physically redistributing land is far from easy. This might seem counterintuitive – land is, after all, the ultimate fixed asset – it can neither be hidden nor can it go abroad. On the other hand, land ownership is often less transparent than the ownership of capital or other assets: this is partly because land records are often incomplete and it is not always easy to figure out the amount of land that someone owns. In part the problem is also that the structure of social relationships in many rural communities are such that the formal ownership of land is irrelevant: a landowner can formally gift away his land to members of his extended family or even to farm servants, and yet retain effective ownership.

Corruption in the bureaucracy entrusted with carrying out the land reform is yet another problem. Landlords can simply pay the bureaucrats to look the other way. For all these reasons, the experience of countries attempting expropriatory land reforms is reasonably summarized by this quote from Binswanger, Deininger and Feder (1995): “... most large-scale land reforms were associated with revolts . . . or the demise of colonial rule . . . Attempts at land reform without massive political upheaval have rarely succeeded in transferring much of a country’s land”.24

The recent thrust in a number of countries (Brazil, Colombia and South Africa) towards market-assisted land reforms, where the government uses general tax money to help the poor buy land, is perhaps the clearest proof that ‘taxing’ agriculture has not proved easy in those countries. In the next section, we will return to the logic behind such market-assisted reform.

2.23 Summing Up

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24 Bell (1990) also argues for pessimism about land reform in “normal” times. We see two reasons why peacetime reforms tend to fail. First, landlords are probably more powerful in times of peace – after all, revolts are precisely the times when the masses have somehow managed to coordinate their efforts to resist. Second, peacetime reforms tend to respect de jure ownership – whereas, as we remarked above, the problem is that the landlord may own much more land than the legal records show. In revolutionary times on the other hand it is the de facto ownership rather than the de jure, that may be the basis for redistribution.
The most compelling part of the case for land reform we make here is the evidence that there are decreasing returns in agriculture. As a result, we expect at worst, no change in productivity when we redistribute land. While this does undermine the usual arguments against expropriating the assets of the rich – that the rich make better use of the asset – we argued that the direct costs of getting the land out of the hands of the rich could be dauntingly large in some situations. Finally, and perhaps most damningly, the question of whether land reforms are the best way to help the poor, remains almost entirely unsettled.

Of course, the gaps in the case for land reforms are paralleled by gaps in what we can say about other interventions – we simply know too little. We therefore do not see our tentativeness as an argument against land reforms per se: it is rather a plea for being open to alternatives. And a plea for more empirical work.

3. The Design of a Land Reform

How should a land reform program be best designed to achieve the efficiency and equity goals that are its ultimate justification? In this section, we discuss a set of design issues that pertain to what we have called “traditional land reform”. The next section discusses some alternatives to traditional land reform. We conclude the paper with some discussion of what we view, with some trepidation, as the basic message that emerges from these two sections.

3.1 Permanent or One-Shot Reform?

Reforms differ in the extent to which they constrain the long-term distribution of the land. On one extreme are rules that ban all transfers of redistributed land except through inheritance. More common and less extreme are permanent land-ceiling regulations which, if properly enforced, imply that no one will ever own more than some number of

25 Among the Indian states which passed land ceiling laws, several, including Maharastra, Gujarat and Himachal Pradesh, do not permit the sale of redistributed land.
acres. On the other extreme are one-shot efforts to redistribute land without imposing any constraints on what subsequently happens to that land – in principle it could all end up with the largest farmers.  

One advantage of a permanent reform is that it is less likely to be undone. This is important is situations (discussed in section 3.3) where it is important that there is a coordinated and irreversible effect on all large landowners. Another advantage is that there is less uncertainty – once there is one reform there can always be another one if the land distribution reverts to being too unequal. This will clearly hold back investment on the land. Moreover, as we noted in the previous section, the fear that there will be another round of reforms with possibly different rules, might quite plausibly discourage renting out the land even when that is the efficient choice. Third, if an aim of land reforms is to encourage population retention in rural areas, allowing land sales would tend to defeat the purpose of the reform. Finally, redistributions are simply very costly: the bureaucratic and political effort that goes into them is considerable. If land has a natural tendency to get concentrated (as Binswanger, Deininger and Feder (1995) have argued), the government ought to recognize that unless it takes steps to prevent certain kinds of land transfers now, there will be pressure for more redistributions in the future, when the current generation of beneficiaries are dead and gone. Indeed such demands could be entirely just, if we allow for the possibility that the previous generation of beneficiaries did not necessarily have the best interests of the current generation in mind when they sold or pledged the land. Taking the cost of such redistribution into account may make it optimal to discourage land sales in some situations. It is worth noting, however, that the government can limit the extent of land transfers in other ways. If, as Binswanger, Deininger and Feder (1995) claim, distress sales are the main reason for increasing land concentration, preventing distress sales by offering emergency income support programs (like food-for-work programs) will surely help.  

Removing the

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26 The recent market-assisted land reform in South Africa falls into this category.
27 Such demands for further redistribution would indeed be just, unless we take a very specific stance on the nature of dynastic preferences.
28 Note that just a few paragraphs ago we argued that an emergency income assistance program of this type could mitigate the cost of a restriction on land sales. In this sense, an income assistance program does not necessarily argue for moving in any specific direction but, rather, makes the choice less drastic.
distortions in the current system of taxes and transfers, which encourage the formation of large estates, would also help counteract any tendency towards land concentration.

The most obvious objection to permanent reform is that it limits the extent of redistribution. The family that gets the land may be better off selling it or at least selling a part of it. In particular, it seems unfair to not allow people to sell land for the purposes of consumption smoothing. On the other hand, as we have already argued, long-term equity may be better served by making land non-salable. A way of making this trade-off more palatable is to combine the land reform with a policy of emergency income assistance, such as a food-for-work program. Such a policy, effectively implemented, would make it less likely that the peasant would need to sell land in an emergency.

Another potential disadvantage of a permanent reform is that it can stand in the way of efficient reallocation of the land. In this respect a land ceiling is clearly less obtrusive than a ban on all sales since it allows reallocation among the group of those owning less than the ceiling. Nevertheless, a uniform ceiling on the amount of land anyone can hold still has the possibility of discouraging talented people from taking up farming (because it limits the extent to which they can possibly profit from it). It also potentially limits the extent to which the system can benefit from the talents of those who do join and in principle could stand in the way of taking advantage of any increasing returns that may become important in the future.

We have, however, already argued against a major role for increasing returns in the agriculture of the less developed world. Moreover, disallowing land sales to the large farmers does not necessarily imply that the use of the land could not be transferred. Reverse tenancy – renting or leasing land to a large farmer on a yearly or even a bi-yearly basis – is still permissible and is actually widely observed in many areas with enforced land ceilings. Given that the large farmers who want extra land tend to have good access to credit and insurance, the efficiency loss from reverse tenancy should be relatively small in most settings (and indeed most of the reverse tenancy contracts tend to be fixed.
rent contracts).\textsuperscript{29} It is however possible that at some point in the future, increasing returns will become more important in third world agriculture.\textsuperscript{30} In this case, the fact that a dynamic farmer cannot come in, buy up the necessary amount of land, and make the necessary investments may hold back productivity growth. It should be possible, however, to limit the loss from this source by making it easier for the current owners to make the necessary investments. In this sense, it can be argued that publicly funded research on agricultural technology and agro-business, better extension services, public investments in infrastructure and marketing and improvements in credit access, should all be a part of a broader program that includes land reforms.\textsuperscript{31} One can also see why it may be optimal to allow some land sales that are in violation of the land ceiling but set a high minimum price for such transactions. In this way, the basic intention of discouraging land transfers to the rich would be served and yet really talented and dynamic entrepreneurs (for whom the land would be worthwhile even at the high price) would still be able to buy land. In fact, the best way to attract talented producers (rather than those that want land for rent-seeking purposes) is to charge more than the market price but to offer some discounts based on output – in this way we can be sure that it will be the best producers who will self-select into this program.\textsuperscript{32}

Yet another problem with a permanent restriction on land transfers is that it makes it harder to use land as collateral (in the case of a total ban on land transfers, land cannot be collateral). Since land is typically the only asset that the rural poor have, this is an important restriction on their ability to get credit to finance consumption smoothing or investment. However, it is possible to limit the cost of such a restriction by providing people with alternative ways of smoothing consumption such as food for work programs. Moreover, one can make it easier to use land as collateral by imposing a land ceiling

\textsuperscript{29} Of course, one could make matters worse (at least from this point of view) by disallowing the renting out of redistributed land, and indeed some land reforms have this feature (such as the land ceiling act in Maharastra, India, (see Behuria (1997))). It is however not easy to justify such a restriction. Indeed, the best argument for restricting rentals is perhaps that rentals can be a way of making secret land sales. But this is probably not something that is of first order importance.

\textsuperscript{30} After all, if very long-term leases are possible even after the reform, they will simply provide a way of circumventing the ban on land sales.

\textsuperscript{31} These same investments would also make the redistributed land more valuable and therefore also enhance the extent of redistribution.

\textsuperscript{32} A tax rebate may be the way to offer such a discount.
rather than a ban on sales and permitting the lender to hold on to the collateralized land for some period following a default, after which he has to sell it to someone who does not violate the land ceiling. The government may even want to agree to buy all land acquired in this way at a fixed price, thereby guaranteeing the lender a reasonable return. The government could then redistribute the land.

Finally, perhaps the most important problem with a permanent reform is that a permanent reform needs permanent bureaucracy. Land ceilings have to be enforced and land sales have to be monitored, all the while resisting the temptation of easy money. Any bureaucracy would find it difficult: third world countries, with their limited bureaucratic resources, doubly so. The initial land reform is perhaps easier: it may be possible to bring together a large part of the available bureaucratic resources for a one time grand effort. But this clearly cannot be a part of a long-term plan.

On the other hand, if the alternative is having to redo land reforms every so many years, it is certainly tempting to try to control the process of land reconcentration. While getting the bureaucracy to monitor land transfers on an ongoing basis is difficult, it may be even harder to get them to carry out large scale land transfers, with the knowledge that it will soon be undone.

It may be possible to limit the demands made on the bureaucracy by a permanent reform by changing the style of enforcement. One possibility is to use the court system more. Instead of monitoring each land transfer, the government could require the courts not to enforce transfers that violate the land ceiling. In other words, someone who sells land in violation of the land ceiling law will be given the effective right to reclaim the land without surrendering the price he has been paid. This should discourage potential buyers. Another possible option is to have the government stand willing to buy back any redistributed land at an attractive price, to be paid in the form of a guaranteed income.

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33 Selling the land immediately after default may be difficult because defaults often happen as a result of shocks that are correlated across the area.
34 Operation Barga in the state of West Bengal in India is an example of such an effort (see Gazdar and Sengupta (1997)).
The government can then resell the land. If the price paid is rewarding enough, this should attract a large fraction of the true distress sales, thereby limiting the number of transactions that the bureaucracy has to monitor.

A range of factors, among them most importantly bureaucratic feasibility, will decide whether the reform should be one-shot or ongoing. The above discussion, however, makes clear that we can make the choice less drastic by a choosing suitable package of policies to supplement the land reform. Among the programs proposed here are emergency income assistance programs, agricultural extension programs, permitting some land sales in violation of the land ceiling (at a higher than market-clearing price), a public buy back program for redistributed land and possible innovations in the methods of enforcement.

3.2 What land to target?

The approach taken almost universally in traditional land reform programs has been to define a land ceiling – which is seen as the maximum amount of land that a man, woman or family can reasonably lay claim to. Land above the ceiling is then targeted for the reform.

While this approach has a natural justification in terms of equity – it is not obviously the most efficient thing to do. From the point of view of efficiency, it would be more natural to target the land of those landlords who are the least productive. Theoretically it is not entirely clear why the biggest landlords should be the least productive (which is what would immediately justify a land ceiling). The fact that agency problems may be more severe on larger estates could be counteracted by the fact that the landlord is particularly talented – which is perhaps why he has chosen to have such a large estate. A better solution would be to use a direct measure of productivity.

\[35\] Of course there are other reasons why he would have chosen a large estate, which have nothing to do with his productivity on the land – he could have political ambitions or enjoy the prestige of owning lots of land or simply have low opportunity cost of capital. The negative size-productivity relation, which seems to hold for all size categories, suggests that these other reasons probably dominate on average, but there could be people for whom this is not true.
The problem is that measuring productivity (after appropriately controlling for land quality, climate, etc.) is never easy and it is hard to imagine that the political system will ever have enough faith in the estimates of productivity to actually make use of that information. There are nevertheless possible ways of bringing productivity information into the choice of the land. One obvious possibility is to tie expropriation to the absence of the landlord — presumably his talents cannot matter very much if he is not there most of the time (or rather, what he can do from afar — such as suggesting new crops or technologies — can perhaps also be done by government extension agent). To discourage landlords from moving back to agriculture purely in order to evade expropriation, the definition of being absent could be tied to absences over the past several years. A similar case could be made for partially exempting landlords who have been involved in agriculture over several years before the reform.

Residence requirements of this type were a part of the successful post-war Japanese land reforms, which disallowed any ownership of tenanted land by absentee landlords. In India, some states (e.g., West Bengal, Maharastra) gave resident landlords extra protection from tenancy reforms but the National Guidelines on Ceilings on Agricultural Holdings in India do not suggest additional penalties for non-resident landlords (see Behuria (1997)).

Most land reform programs also attempt to discriminate among landlords on the basis of their participation in agriculture. This may be defensible if it is past participation that is being rewarded, especially if the landlord is himself just a slightly glorified peasant with no other skills or assets. However even in this case it is important to ensure that the law is implemented effectively. Writing about land reforms in India, Appu (1996) claims that during the long process of negotiation over land reforms a lot of landlords got wind of what was coming and quickly converted to self-cultivation. Numerous tenants lost their land rights in the process. Effective and rapid implementation of the reform (or making

\[ ^{36} \text{The Philippine reform laws also do not seem to make this distinction (see Riedinger (1995)).} \]
the application of the law appropriately retrospective) is essential if such exemptions are to be made.

Less defensible, in our view, is the so-called right of resumption. This is a clause in many reform laws which allows the landlord special exemptions if he resumes cultivation of the land. It therefore typically does not require any past participation by the landlord and in many cases, landlords can exercise this right without actually living in the village. Especially in such cases, the right of resumption is an open invitation to convert tenanted estates into estates for cultivation using farm labor. If this is a true conversion then it presumably increases the inefficiency of land use – since otherwise the land would not have been tenanted.\(^{37}\) If, by contrast, it is merely a nominal conversion and all that has happened is that the tenants have been bullied into saying that they are farm laborers, there will be essentially no effect on land use. In either case, the main result is that a large number of tenants lose some their land rights. Moreover, attempts to protect tenants by exempting tenanted land from the domain of this law were often frustrated because the tenants were induced (often by threat of violence) to “voluntarily” surrender their land.\(^{38}\) It is therefore not surprising that many have come to conclusion that these exemptions were a part of a deliberate strategy of creating loopholes that would emasculate the reform.

Land reform laws that discriminate on the basis of the organization of farm – different exemptions for commercial farms,\(^{39}\) for example – and crop specific exemptions will have similar distortionary effects. Large farmers will move into crops and organizational forms with generous exemptions – even where they are not the most productive options.\(^{40}\) Moreover, in the process of converting the land they may actually reduce the amount of labor used on it (by throwing out sitting tenants, for example), which is, presumably, bad for the poor.

\(^{37}\) Except in the case where it induces the landlord to give up his alternative occupation. In this case farm output may go up even though the overall social surplus declines.

\(^{38}\) See Appu (1996).

\(^{39}\) The Aquino land reforms in the Philippines made such a distinction.

\(^{40}\) In the Philippines, the Aquino reform laws had special dispensations for new crops like mangoes and coffee. In India, almost all the states made special allowances for rubber, tea, coffee, cardamom and cocoa.
The cumulative effect of such reform-induced conversions (into self-cultivation, into commercial farms, into fruit farming, etc.) can be enormous. Indeed, it has been argued that the number of those who were thrown off the land as a result of the Marcos reforms in the Philippines exceeded the number of new owners that it created.\(^{41}\)

On the positive side, the stated intention behind these special dispensations is typically to attract producers who either have special talents or who produce certain particularly valuable crops (in the case of right of resumption, the stated intention is to lure landlords back into cultivation, presumably on the grounds that they have talents which the agricultural sector needs). The issues that this raises are very similar to those that arose in the previous sub-section in the context of our discussion of whether land sales are desirable. We argued there that the costs of not allowing land sales may not be very large if we adopt a package of policies which includes allowing rentals, making it easy to have contract farming and cooperatives, emergency income assistance programs and agricultural extension programs. We also argued that it may be reasonable to allow some landlords to violate the ceiling if they are willing pay something extra as a way of discriminating in favor of the most productive landlords. With this caveat, given the obvious costs of the exemptions, we feel that exemptions other than those based on past residence and past involvement in agriculture, are probably best avoided.

### 3.3 Compensated or not?

One key dimension of any land reform is the extent to which the landlord is compensated for land that is appropriated from him. The range can be enormous – on one end are acts of pure expropriation such as the Soviet or Chinese reforms in the post-revolutionary period. At the other extreme are programs where the landlords are generously or even

\(^{41}\) See Wurfel (1988).
excessively compensated, as in Tsarist Russia or more recently in the Philippines under Aquino.\textsuperscript{42}

The trade-off here is obvious. Landlords will clearly resist less if they are more generously compensated but the extent of the redistribution will clearly be more limited. The costs of landlord resistance should not be underestimated. The landlord class tends to be well represented in the ruling elites of most countries and this gives them enormous political power that they can use to block, stall or undermine efforts to carry out land reforms. Moreover, as noted above, just the physical act of redistributing land is far from straightforward.

On the other hand, generously compensating landlords clearly limits the benefits from the program. If the beneficiary of the reform pays the bulk of the compensation, the extent of effective redistribution and therefore the equity gains from the reform will clearly be quite limited. Less obviously, the extent of efficiency gains in this case may also be quite limited: this follows from the fact that from the point of view of the basic (complete contracting) agency model, what counts is not the ownership of the land but the net asset position of the tenant. If the net position has only changed slightly because the tenant now has compensation payment liabilities that have to be deducted from the value of the extra land he has acquired, his incentives and hence his productivity will also change little. Essentially, for much the same reasons why the tenant chose a contract with weak incentives when he was not the owner, he will now want to trade away a part of his share of the profits, in order to have to reduce his borrowing costs or risk exposure.

The fact that the tenant’s net asset position has not changed very much also implies that his ability to borrow and take risks more generally (i.e., not just in his role as a farmer) will remain more or less unchanged. We should not therefore expect to see large changes in the health of his children, their education or his small business.

\textsuperscript{42} According to Riedinger (1995), the Department of Agrarian Reform adopted valuation rules for compensation which would effectively pay the landlord 133\% of the market value of the land.
This is not to say that a land reform cannot have a beneficial effect if the compensation payments that its beneficiaries have to make are relatively generous. We have already argued that the transfer in ownership, can, by itself, have positive productivity effects. Moreover we argued above that large-scale land transfers could lower the price of land and help landlords coordinate better with each other.

Our discussion so far assumes that the beneficiary pays most of the compensation. This was true, famously, of the emancipation of serfs in Russia, but a lot of the modern, more generously compensated, reforms have had a significant element of state subsidy. Often the state pays the compensation up front, which is then paid off by the beneficiary over time, usually at a subsidized rate of interest. Moreover, since the peasants often default on their amortization payments, which are then written off, the effective subsidy tends to be even larger.

While such subsidies can enhance both the efficiency and equity benefits of the program, they are clearly very costly and the extent of the reform will be limited by the government's ability to mobilize additional resources from the rest of the economy. In a country where agriculture contributes 25% to GDP, the value of the total land may be close to 25% of the national wealth. Redistributing land on any substantial scale and paying for it out of public resources will therefore require making a very large transfer from the rest of the economy to the agricultural sector. A priori, it is not clear that

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43 Indeed, the nature of these effects are such that in some cases the tenant's output may go up without his being in the least better off.
44 This was true, for example, of the Marcos reform in the Philippines.
45 Riedinger reports that at most 10% of the reform beneficiaries of the Marcos reforms were current on their amortization payments in the mid '80s.
46 In the short run, governments often finance these programs by issuing special bonds. This is a natural strategy if we expect productivity gains from the reform – the reform can in effect pay (at least in part) for itself. Some governments have also adopted the strategy of paying the landlords, at least in part, in these bonds. This has the advantage of giving the landlords a stake in the success of the reform, since a failed reform and the consequent peasant unrest may cause the bonds to be devalued. On the other hand, landlords are often reluctant to accept bonds from a government they do not trust, which makes them less cooperative. For this reason it may be better, at least in some situations, to pay the landlords cash by selling the bonds or getting an external loan.
47 The problem here is not one of financing the transfer – which, in any case, can be facilitated by a loan from abroad – but of imposing a substantial and ongoing cut in the consumption stream of the non-agricultural sector.
making these kinds of transfers on any significant scale is any easier (in terms of political and economic costs) than simply expropriating the land. Indeed, even if it was politically feasible, it is not obvious that the rural poor would be better off if the government paid for a land reform by imposing an extremely heavy tax burden on the rest of the economy or by cutting back government expenditure. Moreover, once part of the compensation is paid by the fisc, the reform can potentially turn into a bonanza for the landlord class – the government sets the compensations too high and the tax payer has to pay for them.

The trade-offs here are all rather unpleasant. Compensated reforms will tend to be politically easier but potentially less effective and (if the fisc has to pay for them), less extensive. Some element of prior coalition building, which would make it easier to implement a less generously compensated reform, may have to be an integral part of a really effective land reform.

4. Alternatives to Land Reform

We have thus far interpreted land reforms as the very specific policy of redistributing land from those who have land to those who do not. There are other policies which can achieve some of the same goals without requiring the state to be involved in physically redistributing land. This is what we turn to in this section.

4.1 Market-Assisted Land Reform

Market-assisted land reform has emerged in recent years as a non-coercive alternative to more traditional land reform. There are ongoing projects for market-assisted land reform in a number of countries, including Brazil, Colombia and South Africa.

The basic idea is very simple: the state gives qualified landless people a grant or a subsidized loan to buy land. Superficially, it is therefore very much like a fully compensated land reform, with the fisc paying for a substantial part of the compensation. Like a fully compensated reform, it has the advantage of avoiding landlord resistance.

48 We clearly need a proper comparative evaluation of land reform programs and other programs that help the poor.
There are, however, a number of key differences: first, there are neither explicit targets for the kind of land distribution that will be eventually achieved nor a fixed time-scale. This probably means that the change in the land distribution will be less coordinated—both in time and in space—than in the case of a (successful) conventional land reform. This is potentially a disadvantage of the market-assisted approach since, for this reason, it probably would not have the coordination benefits that might result from a large-scale traditional land reform (see section 2.22). Moreover the price effect, discussed above, arises from the fact that each landlord is more willing to sell, knowing that all the other landlords will sell. With a market-assisted reform, there is uncertainty about how many others will sell, and as result no landlord may want to be the first to sell out. Indeed, it is plausible that the price of land will go up when such a reform is introduced.

Another feature of this kind of reform stressed by its supporters is the fact that it is demand-driven. Instead of the government deciding who will benefit from the reform, the potential beneficiaries themselves decide whether they want to go through the various bureaucratic processes that they would need to before they get the land. This, presumably, generates better targeting, at least along some dimensions. People who want the land most and who know where to find the kind of land they are looking for, should come forward first—though the fact that most of these programs do not forbid immediate resale of the land may also attract some who have no interest in farming. From the point of view of raising productivity and placating the politically most volatile sections of the rural population, this is perhaps the way to maximize the impact of the program, at least if there is some restriction on immediate resale. It is less clear that this kind of procedure is the best way to promote equity: there is some reason to suspect that the nature of the bureaucratic process tends to discourage the weakest sections of the population. Encouraging and subsidizing NGO's to help those who would not be able to apply otherwise, as the South African program does, may make this less of an issue.

Third, since the beneficiary pays a part of the price for the land he presumably has better incentives for negotiating a low price than a bureaucrat entrusted to negotiate a
compensation that is acceptable to the landlord. In this sense, a market-assisted land reform should be substantially cheaper than a fully compensated traditional land reform.

Finally, even a fully compensated land reform has substantial political costs since given that the compensation is bureaucratically determined, there will always be those who claim (and perhaps believe) they were not adequately compensated. The market-assisted approach avoids these problems.

The most important drawback of the market-assisted approach is one that it shares with traditional land reform programs that pay generous compensation — it is expensive.\(^49\) For reasons already discussed in section 3.3, we should not expect such a program to achieve a very substantial redistribution in the near future.\(^50\) Nevertheless, it may still be a useful policy tool, especially in settings where the bureaucratic and political constraints are such that a more traditional approach to land reform is doomed to failure. In particular, market-assisted reforms can be a way of giving some extra land to the most dynamic and/or volatile elements in the agricultural sector and thereby bringing about some measure of political peace in the rural areas. It is clear, however, that unlike the more ambitious programs for traditional reform, market-assisted reform can only be one part of a much larger program for poverty alleviation in rural areas.

### 4.2 Tenancy Reform

Tenancy reforms, unlike land reforms, do not attempt to change the pattern of ownership of land: they simply give the tenant some additional rights on the land. The typical tenancy reform law looks very much like a standard urban rent control law. It has two parts: one part sets a bound on how much the landlord can demand from the tenant as rent or share of output. The other part restricts the eviction of tenants who have paid their due rents or shares.

\(^{49}\) Though, as we note above, a fully compensated traditional program may be even more expensive.

\(^{50}\) In the longer run, as the rest of the economy grows and agriculture becomes a less important part of the national product, making such transfers will be easier but perhaps less valuable.
There are obvious reasons why these two elements need to be combined: in the absence of a rent ceiling, the restriction on evictions has no bite – the landlord can always persuade the tenant to leave by setting a high enough rent. Conversely, a tenant who can be evicted at will probably cannot insist on the legal rent ceiling. The landlord could easily use the threat of eviction to force him to agree (secretly) to a higher rent.

Why should such a law have effects similar to that of land redistribution? Our reasoning so far has tied productivity gains closely to increases in the tenant’s net asset position. It is not clear why such a law would significantly alter the tenant’s net asset position. To explain the effect of a reform law within the framework of the agency model we need to invoke another ingredient – the tenant’s outside option. The tenant’s outside option matters because it determines how cheap or expensive he will be for the landlord. In the agency model, low incentive contracts are chosen because the tenant has to be paid a lot more if he has to have strong incentives. If, however, the tenant is being paid a lot in any case, relatively little is saved by dulling his incentives. In other words, the worse the tenant’s outside option, the less efficient will be the use of his labor.51

Tenancy reforms work in part by making the tenant less cheap. The first effect of a reform is to change the distribution of power between the landlord and the tenant: the tenant now has the option of holding out for the share of the output guaranteed him by the reform law. This is his new outside option: the landlord has to offer him something that is at least comparable. The tenant is therefore more expensive now and correspondingly, his incentives, and the productivity of the land ought to be better.

This is not the only effect of such a reform. The ban on evictions makes it impossible to use the threat of evictions as an incentive, which should reduce productivity. On the other hand, it gives the tenant a long-term stake in the land, which encourages investment in a world of incomplete contracts.

51 This proposition is only true under some specific, though plausible, conditions. See Banerjee, Gertler and Ghatak (1998) for a more detailed analysis.
There are other, longer run, effects of such a reform. The right it creates is typically not tradable, which means that the land is effectively tied to a single family. This may not have any costs in short run if, as we might expect, the landlord in the pre-reform period had picked the best possible tenant. In the longer run, of course the current tenant will retire and then it is not clear that his son (or daughter) will be the best person to have the land. In many cases, tenancy laws do not build in any mechanisms that would allow an efficient turnover of the land in this situation. The one provision they typically have is to allow the tenant to buy out his land at a subsidized price: it is not, however, clear that he can raise enough money to pay for the land. Moreover, to generate turnover, after he has bought it he will have to resell it (which is sometimes allowed and sometimes not) and for this he will have to find a buyer with enough money. An interesting alternative way of generating turnover was built into the Sri Lankan tenancy reform of 1958. This allowed tenants to sell their right of tenancy, but only to the local cultivation committees. This has the advantage of discouraging landlords from trying to coerce the tenants to sell their land rights, but also the disadvantage that the committee may not reallocate the right to the best possible person. Setting effective criteria for how the land should be reallocated – perhaps allowing bidding among potential tenants as long as they satisfy certain criteria – may make this system more effective.

On balance, the net effect of such a reform on productivity may be positive or negative. It can also make the tenant better off without improving his productivity. Recent empirical work by Banerjee, Gertler and Ghatak (1998) based on a tenancy reform carried out in West Bengal in the late 1970’s and early 1980’s shows that the effect on productivity was substantial and positive. Using data from India as a whole, Besley and Burgess (1998) find no positive effect of a tenancy reform on productivity, but a strong effect on poverty.

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52 It is possible though that the tenant may have been picked for his docility.
53 This is true, for example, of the tenancy law in West Bengal, India, analyzed in Banerjee, Gertler and Ghatak (1998).
54 For more negative assessment of tenancy reform, see Bell (1990).
This is clearly not enough evidence to say that tenancy reforms are an effective substitute for land reforms, but it raises an important possibility. If making the tenant's labor less cheap can get us better incentives, then a range of interventions – what elsewhere we have called empowerment strategies – including, but hardly confined to, tenancy reform, will become relevant. For example, food-for-work programs and other rural employment schemes may have some of the same effects by putting the tenant in a better bargaining position vis a vis the landlord.

5. Conclusions

What, after all these arguments and counter arguments, are we left with? The strongest evidence is probably about the efficacy of redistributing land: while the evidence is hardly definitive and there are a number of points where more evidence would be very useful, it appears that redistributive land reforms may promote equity as well as efficiency. It also appears that if implementation were not a constraint, traditional (coercive) land reform has a number of clear advantages over the alternatives. In particular, it will almost certainly be more extensive. It will probably also save on money and have a stronger effect on productivity. However it is clear that implementation is a constraint and may indeed be the binding constraint in many cases. In such cases, market-assisted reforms and/or tenancy reforms may work better.

Taking as a given that we want to carry out a traditional reform, there is still the question of how to do it. On this issue there are few things that we can say with some confidence: first, that in any plan for land reforms that land reform programs should be accompanied by an effective agricultural extension program. Second, emergency support programs and, more generally, "empowerment strategies" should go together with land reform programs – they limit the need for emergency land sales, increase the peasant's

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55 One reason for the discrepancy between the results of these two papers is that the West Bengal reforms are well-known for having been effectively implemented, a reputation not shared by many of the reforms included by Besley and Burgess (1998) in their measure of tenancy reforms.

56 The two main alternatives are a fully compensated (and therefore non-coercive) traditional reform program and market-assisted land reform.
willingness to take risks and improve his bargaining power vis a vis the landlord (if he still remains a tenant). Third, the government should create an appropriate institutional environment for farmer’s cooperatives and contract farming. Fourth, reform beneficiaries should be permitted to rent out redistributed land. Fifth, the application of the land ceiling, and any laws applicable to tenancy, should not discriminate on the basis of things that the landlord can choose (such as whether or not he returns to cultivation, what crops he grows, etc.). Discrimination on the basis of past choices (whether he lived on the land before the reform was announced) may be a good idea but only if the reform is implemented effectively and quickly. Sixth, tax distortions and distortions in the market for inputs which discriminate in favor of large farmers should be removed as a prelude to land reforms. The quick and coordinated implementation of the land transfer process may make it easier to commit to not re-instituting these or other distortions.

With substantially less confidence, we have also supported restrictions on the sale of redistributed land – such as a permanent land ceiling or even a ban on sales by individual beneficiaries. Moreover, we have argued that some violations of the land ceiling may be desirable as long as the violators pay a higher than market price for the additional land. We have also hinted that tenancy reforms may work better than it has hitherto been suspected.

Finally, we have repeatedly suggested that we need to know more. Making policies that may change the lives of large numbers of people is always daunting, but it is all the more so when it is so heavily based on speculation.


