Economic Theory in Development Economics
Methodology, Agrarian Structure and Rent Control Laws

Kaushik Basu

This paper argues that pure theory and abstract reasoning play a crucial role in the advance of development economics. Abstract theoretical arguments can throw light on many critical matters of political economy and policy-making. Two examples are taken up to illustrate this. First, it is shown that the connection between efficiency and exploitation in backward agriculture has been widely misunderstood, but this can be sorted out by resorting to some simple theory. Secondly, the subject of rental laws is a source of much confusion but, again, abstract reasoning can help us understand many of the issues involved. The popular view that the existing rental laws are ‘pro-tenant’ is examined and some suggestions are made for policy reform.

I

Theory and Vested Interests

In India, the disparaging of theory and mathematical methods in economics has harmed not only economic theory but, ironically, also the quality of empirical research. This is because we need theory to convert data and statistics into information and knowledge. In India most of our empirical findings are made to hang uncomfortably on theoretical models constructed elsewhere and meant for a different economic set-up. To rectify this we need to encourage abstract theoretical work. Such encouragement would enrich development economics and also the quality of policy-making.

When examining the poor state of theoretical research in India, three causes stand out.

First, our research bureaucracy has shown an excessive zeal for ‘directing’ research into ‘relevant’ areas. The view that to produce good economics you have to be concerned about your country is a myth. Inadequate scientific skills cannot be compensated with nationalism. Of course, we want research to be relevant. But concern and relevance are seldom the mainspring of creative work. What drives a researcher to major findings, whether it be in the natural sciences or economics, is the innate pleasure of scientific discovery, coupled with the urge to be the one who makes the discovery. So the only way to get relevant research is to encourage research and keep one’s fingers crossed.

It may be pointed out parenthetically that I am perhaps being unduly circumspect in restricting the above remarks to scientific research. They may well be applicable to all creative work. As Tom Stoppard, the playwright, when asked about the motivation behind his writings, once remarked “They must be entirely untouched by any suspicion of usefulness. I should have the courage of my lack of convictions.”

Some critics of economic theory charge that a lot of what is today produced under the label of “theory” is simply poor mathematics. I think they are right and this is the second cause of the widespread dismissive attitude towards theory. Indeed a lot of the existing theoretical work is trivial— not just from the point of view of pertinence, but in being intellectually dull. What we must however appreciate is that economic theory need not necessarily mean mathematical economics. Moreover, it is wrong to be dismissive towards all theory and mathematical economics because parts of them are misused.

Finally, abstract reasoning is both hard and austere. It teaches us scepticism and compels us to say “I do not know” very often. This is highly inconvenient in today’s consultancy-crazy age, where quick results, no matter how vacuous, command a high premium. Thus vested interests have arisen against theory.

One reason why the so-called ‘left’ in the Indian economics profession has been so ineffective in influencing policy is this vested interest. It has led the left to label ‘right’ whoever points out a logical flaw in its analyses. This, through a process of natural selection, has unfortunately resulted in a dwindling of analytical endeavour on the left. The left governments in some Indian states have shown a far greater pragmatism and understanding of the economic reality. The left in the Indian academy will be much more effective if it is open to accepting what is best in economic theory. Individual incentives and the market cannot be wished away. Our need is to understand these and channel these in desirable directions.

Harping on an old theme, let me reassert my belief that economic theory is indeed value-free. It can be good or bad but it cannot be left or right. It is wrong to brand theory—neo classical or otherwise—as belonging to a certain ideology. The mistake is the same one which Father Thomas Caccini made when, on December 21, 1614, in his wrath against Galileo, he declared from the pulpit of his church that the Copernican system, mathematics and all mathematicians were contrary to the Christian religion. It is obvious to us today that mathematical truth cannot conflict with religion or ideology. And in any case, if it does, it is clear which one has to go.

From talking about economics, let me turn to economics. In what follows I present some illustrations from development economics of how, through the use of some simple analysis, we can clear up myths and confusion. For this we do not need complicated statistics or mathematics. Of course, my examples are carefully chosen and not all problems in economics are so frugal in terms of the kinds of instruments needed to understand them.

II

Optimality and Interlinkage

A curious feature of rural credit markets is that when the moneylender is perfectly exploitative the market equilibrium resembles a competitive one in which a moneylender has no power of exploitation. Interest rates are low and Pareto optimality is ensured.

The relation between Pareto optimality and the moneylender landlord’s exploitative power is widely misunderstood. Let us begin by defining Pareto optimality. This is best done in two stages. A change is a Pareto improvement if at least one person becomes better off and no one is worse off. A society is Pareto optimal if there is no further scope left for making Pareto improvements. That is, all such opportunities have been exploited.

Note first that to describe a state as Pareto optimal is a positive observation. It is perfectly legitimate to say that a certain state is Pareto optimal but undesirable or even that all Pareto optimal states are undesirable.

What happens if a person says that a state is ‘optimal’, without using the qualifying epithet ‘Pareto’? Would that be a normative remark? The answer is: it depends. If the person in question is a lay person then his observation is a normative one since in its normal usage the word ‘optimal’ entails commending in the same way that the word ‘good’ does [see Hare, 1952]. If on the other hand the person happens to be an economist making that observation to fellow economists then it is likely that for him ‘optimality’ is merely a short form for ‘Pareto optimality’ and hence his observation would have to be treated as a purely positive one.

Moreover since an economist usually uses the term ‘optimal’ as a synonym for Pareto optimality an economist’s description of a state as efficient need not mean that he is showing appreciation for that state.

Some may protest that the definitions I
just gave of optimality and efficiency are not the only ones. Other definitions have appeared in the literature and economists of different persuasions may adhere to different uses of these same terms. But that does not change my main argument at all. As long as optimality and efficiency happen to be so well-defined that once a society is fully described we can objectively decide as to whether the society is optimal or efficient, the labelling of a society or state as optimal or efficient need not imply praise.4

Hence the remark that interlinkage in rural factor markets tends to result in an efficient outcome does not imply a recommendation in favour of interlinkage or against state intervention in rural markets.

Let us now take a closer look at the relation between the structure of rural markets and the efficiency of equilibria. I shall focus my attention on rural credit markets. If in such a market all agents behave competitively then, given some assumptions like convexity, the outcome is bound to be efficient or optimal.5

Now suppose such a market is characterised by a monopoly moneylender and several borrowers. From the standard theory of monopoly we know that the outcome will be inefficient and interest rates would be high. This has been considered the 'radical' model of rural credit markets and several papers published in the Cambridge Journal of Economics are in this mode.

A little theoretical analysis reveals that the traditional monopoly exhibits these properties because the traditional monopolist is not fully exploitative.6 Now consider a monopolist who extracts all consumer's surplus from whoever deals with him. Let us call him an extortioneer monopolist. It is easy to show that a market with an extortioneer monopolist in an efficient or Pareto optimal equilibrium.

The reason is simple. If in a group, one agent is perfectly exploitative, then it is in the agent's interest to enlarge the cake as much as feasible since he is able to give others no more than their subsistence requirements and take away the entire residual for himself. This ensures that the equilibrium will lie on the boundary of the utility possibility set of the group.

In this model to deny the efficiency of the equilibrium is to imply that the monopolist moneylender is not fully exploitative. Several economists have failed to understand this proposition [e.g., Guha, 1986]. And in their insistence that interlinkage results in inefficiency they have, therefore, partly exonerated the exploitative character of the rural moneylender.7

It can further be shown that if the monopoly-moneylender also happens to be a landlord (i.e., the rural market is characterised by interlinkage) then it is very easy for him to extract all the consumer's surplus from the borrowers. Thus, this kind of interlinkage results in an equilibrium similar to the one with an extortioneer monopolist. That is, the outcome is efficient and, in this case, it is, in addition, true that the interest rate will also be low as in the competitive model. These properties are summed up in the Table.

<table>
<thead>
<tr>
<th>Competitive money-lending (A)</th>
<th>Low</th>
<th>Efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monopolistic money-lending (B)</td>
<td>High</td>
<td>Inefficient</td>
</tr>
<tr>
<td>Monopolistic money-lending with interlinkage (C)</td>
<td>Low</td>
<td>Efficient</td>
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The superficial resemblance between the competitive model and the extreme-exploitative one has been the source of much confusion. Several writers, trying to depict the exploitative character of feudal or capitalist agriculture, have ended up taking category (B) as the apt description of exploitative relations and they have even taken models of type (C) to task in their mistaken belief that these depict a non-exploitative environment.7 That they have failed to appreciate is that in (C) the borrowers and landless labourers are worst-off. The efficient equilibrium and low interest rates are a necessary concomitant of this.

Before moving on I wish to emphasise that, with the above analysis, I do not want to argue that rural markets are efficient but simply that their inefficiency cannot be explained by interlinkage as some of the early writers in this area had felt.

III

Rent Control Laws

In the study of agrarian structure a subject that has commanded a lot of attention is technological stagnation. In Basu [1987c] I have argued that an important cause of such stagnation could be our rental laws and the structure of rights on land [for a contrasting view, see Olsen, 1987]. I shall here address a related and a more general subject—that of optimal rental laws. This is a subject in which confusion abounds. These confusions, unlike the ones in the previous example, are not restricted to academic debates between economists, but occur in lay discussions, newspaper articles and coffee table arguments. Remarks like "our tenancy laws are pro-tenant" are often heard but seldom formally analysed. Of course a full evaluation of tenancy laws would require all the artillery in economics—theory, data and econometrics. But some issues can also be cleared up by pure reason; economic theory can be brought to bear upon some of these important real-world issues.

Before going into the topic of tenancy laws, I shall make a general comment on the subject of law and economics. One area in which, I believe, economics and economists have been grossly underutilised is in the drafting and administering of the law. In many areas, like tenancy, anti-trust matters, restrictive trade practices and the division of property, economists have superior modes of analysis than are available to the lawyer. It is not surprising at all that economists in the US have entered the court room in quite a big way [see, e.g., Ashenfelter and Oaxaca, 1987].

Turning to the specific subject of tenural laws, note that these are important not just from the point of view of fairness towards tenants or landlords but because these could be instrumental in encouraging investment and innovation in land and boosting the construction industry and its ancillaries.

Let us begin by considering the widely held belief that the rent control laws in India are pro-tenant. This will be referred to, in brief, as the pro-tenant thesis. I shall argue that there is very little substance to this thesis and it may well be disastrous for the Indian economy.

The basis of this thesis is the fact that tenancy laws all over India make it very difficult for a landlord to evict tenants or to raise the rent on a sitting tenant.15 This appears pro-tenant and so we jump to the conclusion that our law is pro-tenant.

The fallacy in this argument stems from a failure to appreciate the general equilibrium character of an economy. This has led to a very poor quality of public debate on the subject. Some recently suggested recommendations are remarkable in that they try to mess up further our already messy rental laws. Even the Economic Administration Reforms Commission made suggestions for fixing a 'fair rent', as if we have not seen how effective such idealistic laws are.

The important point to realise is that a law is like an exogenous variable to the economy. Markets respond to it in various ways and what emerges in the end could be very different from what was intended. Thus in India both landlords and tenants know that the law makes the eviction of tenants difficult. Given that some positive inflation in all economic areas, a landlord knows that the real value of the rent paid by a sitting tenant will get steadily eroded over the years. Hence a tenant who will stay for a long time is less desirable than a short-duration tenant. However, there is an asymmetric information problem here, of the kind that occurs in Akerlof's [1970] model. There is no obvious way of distinguishing between short- and long-duration tenants at the time of taking on a new tenant. There will be a few clear cases, like a person doing a transferable job or a foreigner on a diplomatic assignment who will clearly be shortduration tenants. There will therefore be a great demand for such tenants and indeed, in reality, there is. A few weeks after I left my rented apartment in Delhi my ex-landlord told me with obvious glee how he had found a foreigner for a tenant. It was a couple—consisting of a foreigner husband and an Indian wife. A year later when I met my ex-landlord he was crestfallen. His tenants
had got a divorce and it was the husband who had chosen to move to another apartment.

Given the asymmetric information problem, landlords look for other characteristics of tenants in each category. Thus if the average tenant is one who stays for twenty years, then no matter what the tenant says the landlord does his calculation on the presumption that the tenant will stay for twenty years. He therefore demands a sufficiently high rent which will withstand twenty years of erosion in its real value.

So in today's India most short-duration tenants pay a higher rent than what they would have to pay in a different legal regime, in particular, one in which landlords and tenants were free to sign contracts of any duration and the courts enforced such contracts. Hence what I have shown is that our existing laws, through the working of the laws of general equilibrium, ensure that a whole class of tenants pay a higher rent than what they would be paying if we had a different legal regime. So much for the popular belief that our existing laws are pro-tenant.

The above argument that the popular pro-tenant thesis is fallacious does not mean that the existing laws are pro-landlord. They are inefficient; so they could be hurting both landlords and tenants. In reality the ones who gain from the existing legal regime cut across the ranks of landlords and tenants. The existing system favour those with muscle power and a greater facility for ruthlessnes.

One way of going into policy questions here is to compare our existing system with two other alternatives. I shall call these the no-intervention regime and the contract-enforcing regime. The no-intervention regime is one where the government enacts no tenancy laws and does not interfere in the market at all. Landlords and tenants strike contracts as they see fit and the enforcement of these contracts is also their responsibility. There are some economists (for instance some belonging to the new institutional school) who believe that such a system would work splendidly, that the right institutions will emerge and optimality will be ensured if there is no intervention.

These optimistic conclusions are reached by this school of thought with the aid of several fallacies. Its first fallacy is the belief that whatever institution is socially desirable necessarily gets implemented. In reality it is entirely possible that a certain institution is socially desirable but there is no strategy on the part of any individual which would bring about the institution. Institutions usually evolve slowly and there is no guarantee that bad ones will not appear and persist. The second problem with the no-intervention school is that of internal consistency. Suppose a group of individuals left to their own free functioning ends up creating an institution, for example, a government, which then intervenes in their free functioning. Then should this kind of intervention be stopped? After all it emerged naturally from the behaviour of individuals and according to the new institutional school what emerges in this way cannot be bad. But this entails condoning intervention which is contrary to what the new institutionalists recommend.

A more consistent and attractive legal system is the contract-enforcing regime. In its purest form this regime allows two individuals to enter into any contract. They could agree that they would pay a fixed rent forever, or sign a contract for 5 years with agreement to revalue the contract after this period or agree to a rent with an inflation indexation clause. The purpose of the judiciary in the contract-enforcing regime is to simply ascertain if a contract has been violated in the event of such a charge being brought by some agent, and to punish the violator.

The main advantage of this legal system is that it can work for sure-dated contingent contracts which are enforceable. In the language of game theory, this legal system allows individuals to commit moves in the future of extensive games. In this system, a whole range of rents for identical apartments and land will come into existence. A tenant who takes lease for a short while will pay a low rent. Also, muscle power and clout will play a smaller role in determining who wins.

The system has two disadvantages. First, it may be impossible to anticipate all contingencies in writing a contract. This need not be merely a practical hurdle; it may be a fundamental impossibility. Secondly, over time, the contracts may get so complex that some individuals may be able to cheat others by writing into contracts items which work to the others' disadvantage in a blatantly unfair manner. Thus a sufficiently camouflaged legal jargon to be not obvious to the others at the time of signing.

One way of countering this problem is to go in for what may be called a limited contract-enforcing regime. Such a system would allow a landlord and a tenant to choose any contract within a certain prespecified format. For instance it may be required that each contract entail filling out an existing form which is simple and has some blanks. There could, for instance, be blanks where it says what the monthly rent is, whether the rent is to be inflation-indexed, and the period after which the tenant promises to quit, if at all. This would allow greater flexibility of contracts than the existing system but not the full flexibility of a proper contract-enforcing system. Its advantage is that there will be little scope for slipping in unfair legal clauses without the other agent's realisation.

It is worth clarifying that to get these advantages, the new tax laws should be effective for those entering into new tenancy contracts. That is, the new law should not be applicable to existing tenants. Contracts struck by landlords and tenants in the old legal regime were done under the presumption of that regime. A new regime in which the terms of a contract in ways which could be quite unfair to some agents. Apart from the fairness issue, the contract-enforcing regime, or even its 'limited' counterpart, could have a positive impact on the maintenance of apartments and it could increase the supply of housing. This latter may happen in two ways. It could give a boost to the construction industry. But even if this was not possible because of resource shortage and inelasticity of response, the effective housing supply could increase simply by virtue of landlords leasing out apartments which in the present legal system they find more profitable to maintain vacant.

IV Conclusion

Pure theory cannot lead us to specific prescriptions. This follows from a well known law of David Hume. Theory sets the ground for policy debates. It has to be combined with hunch, statistics and values for making policy prescriptions. Hume's law, turned around, means that pure theory cannot compel us to take up particular normative positions which we find unpalatable. This is a simple point but a failure to appreciate it has been an important factor in our unfounded mistrust of economic theory.

Notes

[This is a revised version of an invited lecture delivered at the Silver Jubilee Congress of the Indian Econometric Society in Bangalore. The paper was also presented at the Theory Colloquia of NISTADS, New Delhi. I am grateful to Ramesh Ranjan and N R Ram Gopal for comments, and to ICSSR for financial support under the project 'Agricultural Structure and Economic Progress'.]

1 The usefulness of Louis Pasteur's science is beyond question. So it is interesting to find even him arguing: "Any scientist who allows himself to be lured by the prospect of industrial applications automatically ceases to be the servant of pure science; he clutters up his life and thinking with preoccupations which paralyse his faculty for discovery." (H Cuny, Louis Pasteur, Souvenir Press, London, 1963, p 18).

2 In this context I am tempted to recall, without endorsing, Ashok Mitra's [1979, p 120] colourful indictment of mathematical modelling: "Between what gets branded as mathematical model-building in economics and what finds its way onto the page of Playboy magazine, one need not make any distinction at all. Both are illustrations of indulgences...".

3 This is a position that has been taken in Chakravarty's [1987] recent book in Indian Planning: see particularly pages 41-42. I also have some methodological sympathy with

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4 What then does one make of Harcourt’s sagacious observation: ‘It is my strong impression that if one were to be told whether an economist...’? ‘...were a hawk or a dove in his views on the Vietnam War, one could predict with a considerable degree of accuracy both his general approach in economic theory and which side he would be on in the present controversies (mainly, the capital controversy).’ [Harcourt, 1972, p. 13]? This question was raised during my lecture by N R Ram Gopal. Harcourt is right and not just for Vietnam. His case can be extended to Granada and Nicaragua. And one can go further and assert that economists who believe in monetarist policies are usually right-wing. But there is no contradiction between this and what I am arguing. The cases in this footnote are of correlation and not of a logical connection. Monetarists are usually (no means invariably) right-wing. And even if they were, we ought not to describe them as right-wing because of their belief in monetarism. Similarly there would be no contradiction if an economist changed his view of Vietnam but held on to his brand of economic theory.

5 For a discussion of Pareto optimality and normative statements, see Sen [1970].

6 For some alternative definitions of efficiency, see Bhaduri [1985].

7 There are people who would not grant that even a remark like ‘This boy is 5 feet tall’ is purely positive. For my purpose it is fine if the statement ‘X is Pareto optimal’ is treated as positive as the statement ‘This boy is 5 feet tall’.

8 This is a derivative of a fundamental theorem of welfare economics. Some take this theorem as a prescription for non-intervention. But what recent advance in neoclassical research has highlighted is the stringent conditions required for its validity [see Bhaduri, 1975, p. 2].

9 See, for example, Bhaduri [1977], Basu [1984], Mukherji’s [1982] paper in the Indian Economic Review is in the same vein.

10 I elaborate on this in Basu [1987b]. In a different context the same idea occurs in Oi [1971] and even Pigou [1920].

11 Rudra [1982, Chapter 4] is right in criticising the myth that rural moneylending is competitive. But he is wrong in going from this to the conclusion that rural credit markets are inefficient. Moreover, as our analysis shows, by reaching this conclusion he inadvertently exonerates the moneylender from the charge of extreme exploitative behaviour.

12 By bringing in additional complication, usurious interest rates can be explained but this is theoretically quite difficult. In Basu [1986a] I do such exercises by utilising some well known theorems in the literature on non-linear pricing and optimal income taxation.

13 I shall in this section not distinguish between social norms supported by social sanctions [Basu, 1986b; Basu, Jones and Schlicht, 1987] and laws implemented through the nation’s judiciary.

For instance, in trying to divide property equally among two heirs, we could think of using simple principles of game theory and economics like the following. Let one person divide the property into two parts and let the other choose one of them. The remaining part goes to the person who divided the property. If both heirs have identical preferences then each does equally well whether he does the dividing or the choosing. If preferences differ, one has an advantage in being the divider but in any case this method of partition ensures that no one would complain that he prefers the part the other heir has received. In the jargon of modern economic theory, the allocation will invariably be envy-free.

15 See, for example, the Delhi Rent Control Act of 1958. Its famous Section 21, which allows, under special circumstances, for short-leases, is very much the exception.

16 This is now fairly widely accepted: see Akerlof, [1976]; Basu, Jones and Schlicht, [1987], Bardhan, [1987a].

17 To understand this consider the following problem. Can a photograph be fully described in words? That is, could there be a description so thorough that someone who has not seen the photograph can reproduce it exactly merely on the basis of the description. I feel most of us would agree that the answer to this is no. This immediately means that if I wanted to sign a contract in which I promise to do something if the sky looks like in a photograph, there may be no precise way of writing this contract since it requires a full description of the sky.

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World Population, 1988

THE estimated total world population in mid-1988 was 5.1 billion persons, according to the United Nations World Population Chart, 1988. The annual rate of increase was an estimated 1.7 per cent for 1987-1988. According to the chart, a plateau in the rate of growth of world population at around 1.7 per cent started in the mid-1970s and is expected to end around the mid-1990s, with a sharp decline thereafter. The plateau is primarily due to the relatively large number of women who have been entering the reproductive ages since the late 1970s, which in turn has kept the number of births high. Consequently, the decline in the crude birth rate, and therefore also in the rate of population growth, has slowed down globally, despite the continuous decrease in the level of fertility among women. During 1985-1995 an average of 87 million people are expected to be added to the world total annually.