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# The poverty of Micro-Economics

## An essay on the relationship of theory and policy

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In his memoirs, Teddy Prager kindly remembered how, as a fellow-student, I expressed scepticism as to the evidence given at the Moscow trials of 1937. Our paths diverged widely, geographically and ideologically, but I think we both share a concern for economics of socialism, and therefore also an interest in public enterprise in its many forms. Of course, activities do not become socialist merely by being public. Was it not Engels who remarked that, were it so, the first socialist institution was the regimental tailor. Some socialists are apt to dismiss the experience of nationalized industries in capitalist countries as irrelevant. However, they are wrong on two counts. Firstly, most of the problems encountered in administering and evaluating the performance of nationalized industries occur also in countries calling themselves socialist. Secondly, inadequacies in the operations of nationalized industries can help to discredit the socialist idea among the victims of these inadequacies, i. e. the general public.

It is my contention that Western "mainstream" micro-economics has not been helpful, indeed has on occasion been positively misleading, in the search for operational criteria. Furthermore, the teaching of economics has become less relevant, in these (and perhaps in some other) respects since the days when Teddy and I were at the London School of Economics. It so happened that I was out of academic life, first in the army and then in the civil service, for twenty years.

When I returned, I soon became aware how far out of touch I was with modern economics. But equally there arose a strong impression that modern economics was far out of touch with reality, indeed further out of touch than had been the case in my student days. True, there had been an interest in growth, a word which never seemed to have been mentioned in courses I had attended at LSE. True also that there had

been an emphasis on equilibrium. But it seemed to me that it was a different kind of equilibrium. If not exactly dynamic, it was none the less seen as a process, the market-place was the scene of struggle. Competition was a battle with winners and losers. Hayek and Mises were pro-market not because of the assumptions of perfect competition and perfect knowledge, which would have been equally applicable to perfect planning, but precisely because the real world was full of uncertainty and risk. An entrepreneur, it seemed evident, had an entrepreneurial function, and so had the firm. "Pareto" optimality would seem to be a concept inapplicable to a competitive market, because quite plainly the success of any competitor meant damage, loss, borne by the less successful. Can *anything* of significance be done without damaging *someone's* interest?

Instead I found myself face-to-face with some strange-looking concepts. Perfect competition, it seemed clear, was not competition at all, since its assumptions were inconsistent with any *process*; no battle, winners, losers, more or less efficient firms. Profits in equilibrium tended to zero, because in fact, on the assumptions underlying what purported to be the "theory of the firm", there was no reason why firms should exist at all, and no real function (or, logically enough, reward) for entrepreneurship . . . Comically enough, this dry-as-dust construction was described by some Marxists as "apologetics for capitalism", although, apart from its inherent unreality, it proposed no real role for capitalists, and treated everyone, capitalists and workers alike, as automats reacting to stimuli under conditions unknown in any world yet known. One example of our teaching may be worth quoting. I once was visiting in Oxford and was asked to discuss a draft thesis with a mature graduate student who was working on Yugoslavia. He had argued that, under certain circumstances, a Yugoslav firm would act in such-and-such a way. I objected that they would not do so, because, if they did, their competitors would gain at their expense. The student replied, coldly, that under the assumption of perfect competition, the firm would be quite indifferent to the actions of its competitors! (So it would, so it would . . .).

Many a reader will be saying to him or herself by now: this is too much, everyone knows that these abstract theories are not directly applicable to the real world, and their authors know this too and frequently say so. Quite right. But I will try to show that, none the less, certain theoretical simplifications do in fact influence advice that is given in real-world situations, partly because the fashionable mathematical apparatus requires these simplifications, partly because the relaxation of certain convenient assumptions stands in the way of desired quantification. In many instances, the problem is not a denial that certain real-world situations and complications exist, but rather an under-emphasis, or no mention at all of matters of evident importance which would disturb the elegance or rigor of formal models.

Much of this paper will relate to advice given about the running of nationalized industries. I shall try to demonstrate that conventional

micro-economics provided misleading guidelines to those charged with advising on economically rational behaviour by state enterprises. One reason among several is that they failed to use an adequate definition of commercial behaviour in real-world markets by real-worlds firms. Another is that they fell into the yawning gap between micro and macro economics. Still another is an unimaginatively narrow view of monopoly theory. Finally, there is the tendency to misuse marginal analysis, in situations in which externalities, indivisibilities, complementarities, *systemic* factors, are important, as they often are. Business studies are not guilty, or not so guilty, of the oversimplifications and omissions of which I speak. But economic theory has had regrettably little connection with business studies, despite Marshall's phrase about "the ordinary business of life".

There are certain concepts, certain words, of quite evident importance in "real" micro-economics, which are not to be found at all in most textbooks. Let us look at a few of these, and consider the reasons and the consequences.

Let us begin with *quality*. A check on the index to a dozen textbooks showed either no entry at all under this head, or one related to product differentiation: i. e. that one way in which firms can behave under imperfect competition is to supply the product in different qualities, and at different prices, for instance cars. This does at least suggest to the student that quality can vary, while in most books the word "product" is silently assumed to be homogeneous, clear and unambiguous, and any variation (for reasons of "product differentiation" or any other) then becomes simply a different product.

Kevin Lancaster wrote, and rightly, that any good or service possesses "a bundle of characteristics". Indeed it is so, and one must express astonishment that this needed saying at all. It may be simpler to confine the analysis to quantity and price, but there are other dimensions too: durability, packaging, punctuality, after-sales service, taste (whether relating to a dress or a restaurant meal), sharpness, (of a knife or a razor-blade), and so on and so forth. Under competitive conditions there will be pressure to take these matters into account. But to do so involves trouble and expense. Quality of a given good or service can deteriorate, indeed is very likely to deteriorate, if competitive pressure is weak or absent. This seems to be overlooked when economists advocate commercial behaviour by nationalized quasi-monopolies, with consequences which we will discuss.

Oddly, there is very little discussion either of the quality (or motivation) of labour and management. If not seen as homogeneous, labour is differentiated by specialization: even the most blinkered micro-economist would agree that there are differences between (say) miners, accountants and pilots. But persons of the same speciality can work well or less well, behaviour of management and labour can be affected by the indicators by which their performance is judged, morale and attitudes affect outcome. Obvious? But how often referred to in books on micro-economics?

To continue my list, let me take *goodwill*. Usually this is not mentioned at all. It is to be found in Samuelson, but only in the form of a note to the effect that it is a saleable asset. But this leaves out of account the underlying economic meaning of goodwill as an asset: reputation for performance. Conversely, there is badwill. If a firm provides a defective good, fails to deliver in time, cannot supply spare parts, then its reputation suffers and so does its business – if the customer can go elsewhere. There are two consequences. One is that one cannot ignore the sum total of a firm's activities; one transaction affects, for good or ill, other transactions. This explains why theorists avoid the issue: it makes marginal analysis untidy, since rigor and elegance require isolation of transactions from each other (their link is with the market). Such selling slogans as "open always", "we will take you anywhere", "You *will* be seated", "We are not knowingly undersold", are goodwill-creating means of pleasing the prospective customer. They do *not* necessarily imply that each transaction will yield the required rate of profit; indeed it is quite likely that it would not. The chosen *strategy* is expected to be profitable. A second consequence is that, if a monopoly situation exists, there is no "commercial" reason to acquire, no commercial penalty for losing, goodwill. If the customer *cannot* go elsewhere, what does it matter, in terms of the profit-and-loss account?

Let us pass on to *purpose, aim, role* of the enterprise. In a competitive market, this is simple: to make a profit. The firm chooses its role in relation to market opportunity.

It can and does modify this role, selecting the *strategy* which best suits its situation. Other firms in the same line of business may select a different role. Let us take garages. Some may be open on Sundays and/or all night, others not. Some shops open late on some evenings, others do not. Once again, it does not follow that each of these activities is at all times profitable if separately costed. Thus an all-night garage probably does not make a profit between 3 and 5 a. m., but might benefit from the fact that its customers know that it is always open. All this assumes a competitive market. If, however, market forces are weak, or there is a monopoly, then none of this would happen automatically. Why should *any* garage be open at night, unless it is considered to be someone's duty to ensure that some all-night facilities be provided? Or imagine a state-monopoly of retail trade. Apart from the question of convenience of opening hours, and the range of stocks carried, there is the not unimportant question of the saving of customers' time. Consider a monopolist retailer who is instructed to behave "commercially", i. e. to pay attention to profit, productivity per shop-worker, turnover per shop. These indicators would all look "better" if the customers stood in line all day. So would the "efficiency" of a bus service if all buses were full, with people standing on each others' toes. One really must introduce the question of "efficiency for what", the *purpose* of the exercise.

Yet the late Denys Munby, an Oxford economist who was then advising those in charge of (nationalized) transport undertakings, told the Select Committee on nationalized industries (1968) that, so long as

the head of London Transport held the (to him) odd notion that he had a species of "social contract" with Londoners, the efficient running of the business would be impossible! Surely, the exact opposite is true: unless those who are charged with providing public transport for London consider it their duty to provide the best possible service, subject of course to consideration of cost and finance, there could be no efficiency! This is so also for another reason, connected with the point made earlier about labour motivation. At lower managerial and operational levels, the staff are nor and *can* not be aware of the effect of their actions or inactions upon the profit-and-loss account. They *can*, however, take pride in doing a good job, in pleasing the customers, in running trains or buses punctually, in not having people wait for twenty minutes in the rain. Even in a competitive situation, sensible firms urge their employees to provide good service. Of course, Denys Munby did not advocate bad service! But he seemed to have a concept of commercial calculation which excluded the idea of duty and purpose ("social contract") related to user needs. He and those who think like him, tend to fragment, to disassemble a system, to concentrate on its parts, to advocate marginal cost pricing, for instance. Of the inherent ambiguity of "margins" I shall say more in a moment. Now I would like to stress the doubtful conclusions which follow from such an approach, using public transport as my example. The first is the complexity of the fares structure. In most of the world, simplicity (and so cheapness in issuing and checking) is seen as desirable, hence flat fares regardless of distance in urban areas. These, of course, neglect marginal cost, perhaps because to take it into account is itself costly. Or let us take an example from London which seems quite absurd to me. The fare from (e. g.) Oxford Circus to Notting Hill Gate was and is much dearer on the underground than by bus. Why? Did the management prefer that passengers should travel by bus? Apparently not. Some odd marginalist must have calculated that costs on the underground are higher! No other management in the *world* would so disassemble the transport system, or fail to consider its primary task, that of expeditiously moving people!

In most countries, there is some standard charge by distance for long-distance rail transport. In Britain, our economists advise discriminatory charges ("what the traffic can bear"), i. e. to exploit monopoly power if and when it exists. Yet such practices were outlawed when the railways were in private ownership!

Which brings me to my last major point, the use and abuse of marginal analysis. Let me make it quite clear that I am not attacking marginalism as such, but what Paul Streeten once called "misplaced marginalism". One point has been made already: if a firm undertakes a bundle of activities which react upon one another, decisions cannot be taken in isolation, without considering the interconnections. It is similarly evident that complementarities and indivisibilities exist, and that one must take them into account if they are significant. No one, of course, would deny this. No one, for instance, is unaware that an electricity grid is an interrelated system, that one must consider the systemic effects of

incremental decisions. But this tends to be treated as an exception to the general rule. But is this so? Is not a transport network also a network, a system?

This is relevant to the much-misunderstood issue of cross-subsidization, which many consider to be uneconomic. It is surely essential to distinguish two situations. In one, a *separate* lossmaking activity (factory, mine, service) is subsidized by another one which is profitable. It is a reasonable supposition that this is economically irrational, unless strong arguments to the contrary exist. However, where there is indivisibility, complementarity, system, the situation is much more complex. In my earlier work I have cited the following illustrative instance. Suppose an airline benefits from a feeder service (a bus link to town, or an air link to another airport), and would suffer loss if it were withdrawn. It would pay the airline to subsidize the company which provided the feeder service, so long as the subsidy was less than the loss that would be suffered if the service were withdrawn. This is a simple instance of the marketing of externalities. However, suppose that the link is owned and operated by the airline. What was an externality now becomes an internality, and the purist will qualify it as "cross-subsidization", and so as irrational!

A different example is as follows. Imagine a suburban railway line, which originates at the central station A. There are then stops at B, C, D, E, F and G. Most passengers get on at A. By the time the train reaches F three quarters have alighted. Clearly the cost per passenger-mile is now much higher. Should one, in the interests of economic rationality and marginal cost pricing, charge a higher fare per mile between F and G, or close that section of the line? It is such considerations as these which have led almost every country in the world to charge a flat-rate fare (or a standard fare by distance). Every country, that is, except Britain, where the prejudice against subsidization has also led to a situation in which public transport fares are by far the highest in the world.

What is a margin? Some textbooks do mention that the concept is unclear and ambiguous, but is this sufficiently stressed? Thus if one advocates marginal cost pricing in public transport, say in London, is one speaking of:

The No. 13 bus which leaves at 11.05 p. m. on a Sunday.

The No. 13 bus between Swiss Cottage and Golders' Green,

Buses (all routes) which leave after 11 p. m.

Buses at weekends,

etc.?

What, in this context, is the distinction between short-term and long-term? What of other "external" (internal?) effects on other public transport in London? Is it sufficiently appreciated that *margins are not, as a rule, one-dimensional?*

This last point brings together many of the arguments already advanced, about bundles, purpose, strategy, goodwill, system, complementarity, and is a criticism of *myopic* marginalism, which, I submit,

our textbooks unintentionally encourage, with unfortunate effects on advice given to government departments.

Let me illustrate the principle of multi-level margins with an example, that will serve also as the basis of a critique of conventional investment criteria. Suppose we have any large economic operation, say the Alaskan oilfield exploitation. This requires an initial decision that Alaskan oil is worth exploiting. Once this decision has been taken, a mass of consequential choices and decisions of an incremental or marginal character follow, relating to drilling equipment, means of transportation, housing, pipe, pumps, supply of food and of building materials, etc. etc. Each of these, in turn, can be sub-divided into its component parts. This represents a *hierarchy*, conceptually and administratively. Our textbooks generally imply that a marginal decision *within* this multi-level hierarchy of margins is taken by reference to the market. We sometimes remember the work of Coase and of Williamson, we are aware that *within* the firm activities are administered. What is seldom adequately stressed is that a wide variety of marginal decisions, whether on allocation of resources or on investment, are taken within contexts, that they only make sense within a network or pattern of other decisions. *Given* that Alaskan oil is being developed, there *must* be a pipeline (or tankers) to move the oil, housing *must* be built, pumps must be installed, and so on. The question is not *whether* but *what*, or *how*. The "marginal cost" of not providing an essential part of a complex is the loss of the whole output of the project. Just as a prolonged strike of twenty men at a car component plant could cause the loss of millions of pounds. (What, then, is their marginal productivity?).

Then do we distinguish sufficiently clearly between the authentically "micro" decision (e. g. whether a producer in a competitive environment should increase the output of a given product) and the rather different situation relating, say, to energy policy, or the future of the steel industry? These matters are neither macro nor micro. Yet major decisions by nationalized industries, in Britain especially, fall into this intermediate category (mezzo-economics?).

It is clear from a study of Soviet experience that these problems do not disappear if the entire economy is placed under a central planning authority. In the place of market or commercial criteria, enterprises are guided by obligatory plan targets. In theory these targets embody the needs of society, and the means to meet output targets are administratively allocated. In practice central instructions are inevitably aggregated, and, because they issue from different government offices, are inevitably inconsistent and contradictory. A large book can easily be filled with quotations from the works of Soviet economists which show how hard it is to devise efficiency criteria, and how the plan targets give rise to undesired and frequently perverse results. Thus a plan target expressed in tons penalises economy of metal; construction enterprises fulfil plans in terms of roubles of expenditure, and thus prefer expensive inputs; retail trade achieves higher "productivity" by having

customers stand in line, and avoiding handling perishable goods. Under conditions of monopoly *and* a seller's market, and with cost-based prices which reflect neither use-value nor demand, cautious attempts to give greater emphasis to profitability are ineffective, and not surprisingly so. At the same time some naive "eastern" reformers with an excessive faith in the market tend to neglect externalities and adopt the attitude described above as one-dimensional marginalism. While I am firmly of the opinion that the market mechanism and supply-and-demand balancing prices are urgently needed if Soviet micro-economics is to function with tolerable efficiency, it must be recognised that in some sectors (e. g. electricity, public transport) and in some types of decisions (especially those with important economic and social external effects) there will remain an important role for government (and planners) as custodians of the wider public interest. It is therefore not a coincidence that a paper of mine on this theme was reprinted in a Hungarian periodical (*Acta Oeconomica*, vgl. 20, 1-2, 1978). There is much here that is open to debate, in East and West alike.

If Western micro-economics is unhelpful, Marxist economics is almost wholly irrelevant. While one might not agree with Wiles' view that micro-economics is *non-Marxist*, it must be admitted that Marx had nothing useful to say on the subject, and that he tended to the view that socialist planning would be simple, that when production is for use and not for profit all will be "clear and transparent". The meaning and function of economic laws and commercial calculation under socialism remains a subject of doubt and controversy. There is much still to do for those who are working on economics of socialism, not least in the field of operational criteria for socialized enterprises.