CHAPTER TWELVE

*Competition as a Discovery Procedure**

I

It is difficult to defend economists against the charge that for some 40 to 50 years they have been discussing competition on assumptions that, *if* they were true of the real world, would make it wholly uninteresting and useless. If anyone really knew all about what economic theory calls the *data*, competition would indeed be a very wasteful method of securing adjustment to these facts. It is thus not surprising that some people have been led to the conclusion that we can either wholly dispense with the market, or that its results should be used only as a first step towards securing an output of goods and services which we can then manipulate, correct, or redistribute in any manner we wish. Others, who seem to derive their conception of competition solely from modern textbooks, have not unnaturally concluded that competition does not exist.

Against this, it is salutary to remember that, *wherever* the use of competition can be rationally justified, it is on the ground that we do *not* know in advance the facts that determine the actions of competitors. In sports or in examinations, no less than in the award of government contracts or of prizes for poetry, it would clearly be pointless to arrange for competition, if we were certain beforehand who would do best. As indicated in the title of this lecture, I propose to consider competition as a procedure for the discovery of such facts as, without resort to it, would not be known to anyone, or at least would not be utilised.[1]

* This lecture was originally delivered, without the present section 2, to a meeting of the Philadelphia Society at Chicago on 29 March 1968 and later, on 5 July 1968, in German, without the present final section, to the Institut für Weltwirtschaft of the University of Kiel. Only the German version has been published before, first in the series of 'Kieler Vorträge', N.S. 56, Kiel, 1968, and then reprinted in my collected essays entitled *Freiburger Studien*, Tübingen, 1969.

1 Since I wrote this my attention has been drawn to a paper by Leopold von Wiese on 'Die Konkurrenz, vorwiegend in soziologisch-systematischer Betrachtung', *Verhandlungen des 6. Deutschen Soziologentages*, 1929, where, on p. 27, he discusses the 'experimental' nature of competition.

This may at first appear so obvious and incontestable as hardly to deserve attention. Yet, some interesting consequences that are not so obvious immediately follow from the explicit formulation of the above apparent truism. One is that competition is valuable *only* because, and so far as, its results are unpredictable and on the whole different from those which anyone has, or could have, deliberately aimed at. Further, that the generally beneficial effects of competition must include disappointing or defeating some particular expectations or intentions.

Closely connected with this is an interesting methodological consequence. It goes far to account for the discredit into which the micro-economic approach to theory has fallen. Although this theory seems to me to be the only one capable of explaining the role of competition, it is no longer understood, even by some professed economists. It is therefore worthwhile to say at the outset a few words about the methodological peculiarity of any theory of competition, because it has made its conclusions suspect to many of those who habitually apply an over-simplified test to decide what they are willing to accept as scientific. The necessary consequence of the reason why we use competition is that, *in those cases in which it is interesting*, the validity of the theory can never be tested empirically. We can test it on conceptual models, and we might conceivably test it in artificially created real situations, where the facts which competition is intended to discover are already known to the observer. But in such cases it is of no practical value, so that to carry out the experiment would hardly be worth the expense. If we do not know the facts we hope to discover by means of competition, we can never ascertain how effective it has been in discovering those facts that might be discovered. All we can hope to find out is that, on the whole, societies which rely for this purpose on competition have achieved their aims more successfully than others. This is a conclusion which the history of civilisation seems eminently to have confirmed.

The peculiarity of competition – which it has in common with scientific method – is that its performance cannot be tested in particular instances where it is significant, but is shown only by the fact that the market will prevail in comparison with any alternative arrangements. The advantages of accepted scientific procedures can never be proved scientifically, but only demonstrated by the common experience that, on the whole, they are better

adapted to delivering the goods than alternative approaches.[2]

The difference between economic competition and the successful procedures of science consists in the fact that the former is a method of discovering particular facts relevant to the achievement of specific, temporary purposes, while science aims at the discovery of what are sometimes called 'general facts', which are regularities of events. Science concerns itself with unique, particular facts only to the extent that they help to confirm or refute theories. Because these refer to general, permanent features of the world, the discoveries of science have ample time to prove their value. In contrast, the benefits of particular facts, whose usefulness competition in the market discovers, are in a great measure transitory. So far as the theory of scientific method is concerned, it would be as easy to discredit it on the ground that it does not lead to testable predictions about what science will discover, as it is to discredit the theory of the market on the ground that it fails to predict particular results the market will achieve. This, in the nature of the case, the theory of competition cannot do in any situation in which it is sensible to employ it. As we shall see, its capacity to predict is necessarily limited to predicting the kind of pattern, or the abstract character of the order that will form itself, but does not extend to the prediction of particular facts.[3]

2

Having relieved myself of this pet concern, I shall return to the central subject of this lecture, by pointing out that economic theory sometimes appears at the outset to bar its way to a true appreciation of the character of the process of competition, because it starts from the assumption of a 'given' supply of scarce goods. But which goods are scarce goods, or which things are goods, and how scarce or valuable they are – these are precisely the things which competition has to discover. Provisional results from the market process at each stage alone tell individuals what to look for. Utilisation of knowledge widely dispersed in a society with extensive division

2 Cf. the interesting studies of the late Michael Polanyi in *The Logic of Liberty*, London, 1951, which show how he has been led from the study of scientific method to the study of competition in economic affairs; and see also K. R. Popper, *The Logic of Scientific Discovery*, London, 1959.

3 On the nature of 'pattern prediction' see my essay on 'The theory of complex phenomena' in *Studies in Philosophy, Politics and Economics*, London and Chicago, 1967.

of labour cannot rest on individuals knowing all the particular uses to which well-known things in their individual environment might be put. Prices direct their attention to what is worth finding out about market offers for various things and services. This means that the, in some respects always unique, combinations of individual knowledge and skills, which the market enables them to use, will not merely, or even in the first instance, be such knowledge of facts as they could list and communicate if some authority asked them to do so. The knowledge of which I speak consists rather of a capacity to find out particular circumstances, which becomes effective only if possessors of this knowledge are informed by the market which kinds of things or services are wanted, and how urgently they are wanted.[4]

This must suffice to indicate what kind of knowledge I am referring to when I call competition a discovery procedure. Much would have to be added to clothe the bare bones of this abstract statement with concrete flesh, so as to show its full practical importance. But I must be content with thus briefly indicating the absurdity of the usual procedure of starting the analysis with a situation in which all the facts are supposed to be known. This is a *state* of affairs which economic theory curiously calls 'perfect competition'. It leaves no room whatever for the *activity* called competition, which is presumed to have already done its task. However, I must hurry on to examine a question, on which there exists even more confusion – namely, the meaning of the contention that the market adjusts activities spontaneously to the facts it discovers – or the question of the purpose for which it uses this information.

The prevailing confusion here is largely due to mistakenly treating the order which the market produces as an 'economy' in the strict sense of the word, and judging results of the market process by criteria which are appropriate only to such a single organised community serving a given hierarchy of ends. But such a hierarchy of ends is not relevant to the complex structure composed of countless individual economic arrangements. The latter, unfortunately, we also describe by the same word 'economy', although it is something fundamentally different, and must be judged by different standards.

4 Cf. Samuel Johnson in J. Boswell, *Life of Samuel Johnson*, L. F. Powell's revision of G. B. Hill's edition, Oxford, 1934, vol. II, p. 365 (18 April 1775): 'Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information about it.'

An economy, in the strict sense of the word, is an organisation or arrangement in which someone deliberately allocates resources to a unitary order of ends. Spontaneous order produced by the market is nothing of the kind; and in important respects it does not behave like an economy proper. In particular, such spontaneous order differs because it does *not* ensure that what general opinion regards as more important needs are always satisfied before the less important ones. This is the chief reason why people object to it. Indeed, the whole of socialism is nothing but a demand that the market order (or catallaxy, as I like to call it, to prevent confusion with an economy proper)[5] should be turned into an economy in the strict sense, in which a common scale of importance determines which of the various needs are to be satisfied, and which are not to be satisfied.

The trouble with this socialist aim is a double one. As is true of every deliberate organisation, only the knowledge of the organiser can enter into the design of the economy proper, and all the members of such an economy, conceived as a deliberate organisation, must be guided in their actions by the unitary hierarchy of ends which it serves. On the other hand, advantages of the spontaneous order of the market, or the catallaxy, are correspondingly two. Knowledge that is used in it is that of all its members. Ends that it serves are the separate ends of those individuals, in all their variety and contrariness.

Out of this fact arise certain intellectual difficulties which worry not only socialists, but all economists who want to assess the accomplishments of the market order; because, if the market order does not serve a definite order of ends, indeed if, like any spontaneously formed order, it cannot legitimately be said to *have* particular ends, it is also not possible to express the value of the results as a sum of its particular individual products. What, then, do we mean when we claim that the market order produces in some sense a maximum or optimum?

The fact is, that, though the existence of a spontaneous order not made for a particular purpose cannot be properly said to have a purpose, it may yet be highly conducive to the achievement of many different individual purposes not known as a whole to any single person, or relatively small group of persons. Indeed, rational action is

[5] For a fuller discussion see now my *Law, Legislation and Liberty*, vol. II, *The Mirage of Social Justice*, London and Chicago, 1976, pp. 107–20.

possible only in a fairly orderly world. Therefore it clearly makes sense to try to produce conditions under which the chances for any individual taken at random to achieve his ends as effectively as possible will be very high – even if it cannot be predicted which particular aims will be favoured, and which not.

As we have seen, the results of a discovery procedure are in their nature unpredictable; and all we can expect from the adoption of an effective discovery procedure is to improve the chances for unknown people. The only common aim which we can pursue by the choice of this technique of ordering social affairs is the general kind of pattern, or the abstract character, of the order that will form itself.

3

Economists usually ascribe the order which competition produces as an equilibrium – a somewhat unfortunate term, because such an equilibrium presupposes that the facts have already all been discovered and competition therefore has ceased. The concept of an 'order' which, at least for the discussion of problems of economic policy, I prefer to that of equilibrium, has the advantage that we can meaningfully speak about an order being approached to various degrees, and that order can be preserved throughout a process of change. While an economic equilibrium never really exists, there is some justification for asserting that the kind of order of which our theory describes an ideal type, is approached in a high degree.

This order manifests itself in the first instance in the circumstance that the expectations of transactions to be effected with other members of society, on which the plans of all the several economic subjects are based, can be mostly realised. This mutual adjustment of individual plans is brought about by what, since the physical sciences have also begun to concern themselves with spontaneous orders, or 'self-organising systems', we have learnt to call 'negative feedback'. Indeed, as intelligent biologists acknowledge, 'long before Claude Bernard, Clerk Maxwell, Walter B. Cannon, or Norbert Wiener developed cybernetics, Adam Smith has just as clearly used the idea in *The Wealth of Nations*. The "invisible hand" that regulated prices to a nicety is clearly this idea. In a free market, says Smith in effect, prices are regulated by negative feedback.'[6]

6 G. Hardin, *Nature and Man's Fate* (1951), Mentor ed. 1961, p. 54.

We shall see that the fact that a high degree of coincidence of expectations is brought about by the systematic disappointment of some kind of expectations is of crucial importance for an understanding of the functioning of the market order. But to bring about a mutual adjustment of individual plans is not all that the market achieves. It also secures that whatever is being produced will be produced by people who can do so more cheaply than (or at least as cheaply as) anybody who does not produce it (and cannot devote his energies to produce something else comparatively even more cheaply), and that each product is sold at a price lower than that at which anybody who in fact does not produce it could supply it. This, of course, does not exclude that some may make considerable profits over their costs if these costs are much lower than those of the next efficient potential producer. But it does mean that of the combination of commodities that is in fact produced, as much will be produced as we know to bring about by any known method. It will of course not be as much as we might produce if all the knowledge anybody possessed or can acquire were commanded by some one agency, and fed into a computer (the cost of finding out would, however, be considerable). Yet we do injustice to the achievement of the market if we judge it, as it were, from above, by comparing it with an ideal standard which we have no known way of achieving. If we judge it, as we ought to, from below, that is, if the comparison in this case is made against what we could achieve by any other method – especially against what would be produced if competition were prevented, so that only those to whom some authority had conferred the right to produce or sell particular things were allowed to do so. All we need to consider is how difficult it is in a competitive system to discover ways of supplying to consumers better or cheaper goods than they already get. Where such unused opportunities seem to exist we usually find that they remain undeveloped because their use is either prevented by the power of authority (including the enforcement of patent privileges), or by some private misuse of power which the law ought to prohibit.

It must not be forgotten that in this respect the market only brings about an approach towards some point on that n-dimensional surface, by which pure economic theory represents the horizon of all possibilities to which the production of any one proportional combination of commodities and services could conceivably be carried. The market leaves the particular combination of goods, and

its distribution among individuals, largely to unforeseeable circumstances – and, in this sense, to accident. It is, as Adam Smith already understood,[7] as if we had agreed to play a game, partly of skill and partly of chance. This competitive game, at the price of leaving the share of each individual in some measure to accident, ensures that the real equivalent of whatever his share turns out to be, is as large as we know how to make it. The game is, to use up-to-date language, not a zero-sum game, but one through which, by playing it according to the rules, the pool to be shared is enlarged, leaving individual shares in the pool in a great measure to chance. A mind knowing all the facts could select any point he liked on the surface and distribute this product in the manner he thought right. But the only point on, or tolerably near, the horizon of possibilities which we know how to reach is the one at which we shall arrive if we leave its determination to the market. The so-called 'maximum' which we thus reach naturally cannot be defined as a sum of particular things, but only in terms of the chances it offers to unknown people to get as large a real equivalent as possible for their relative shares, which will be determined partly by accident. Simply because its results cannot be assessed in terms of a single scale of values, as is the case in an economy proper, it is very misleading to assess the results of a catallaxy as if it were an economy.

4

Misinterpretation of the market order as an economy that can and ought to satisfy different needs in a certain order of priority, shows itself particularly in the efforts of policy to correct prices and incomes in the interest of what is called 'social justice'. Whatever meaning social philosophers have attached to this concept, in the practice of economic policy it has almost always meant one thing, and one thing only: the protection of certain groups against the necessity to descend from the absolute or relative material position which they have for some time enjoyed. Yet this is not a principle on which it is possible to act generally without destroying the foundations of the market order. Not only continuous increase, but in certain circumstances even mere maintenance of the existing level of incomes, depends on adaptation to unforeseen changes. This necessarily

7 Adam Smith, *The Theory of Moral Sentiments*, London, 1759, part VI, chapter 2, penultimate paragraph, and part VII, section II, chapter 1.

involves the relative, and perhaps even the absolute, share of some having to be reduced, although they are in no way responsible for the reduction.

The point to keep constantly in mind is that *all* economic adjustment is made necessary by unforeseen changes; and the whole reason for employing the price mechanism is to tell individuals that what they are doing, or can do, has for some reason for which they are not responsible become less or more demanded. Adaptation of the whole order of activities to changed circumstances rests on the remuneration derived from different activities being changed, without regard to the merits or faults of those affected.

The term 'incentives' is often used in this connection with somewhat misleading connotations, as if the main problem were to induce people to exert themselves sufficiently. However, the chief guidance which prices offer is not so much how to act, but *what to do.* In a continuously changing world even mere maintenance of a given level of wealth requires incessant changes in the direction of the efforts of some, which will be brought about only if the remuneration of some activities is increased and that of others decreased. With these adjustments, which under relatively stable conditions are needed merely to maintain the income stream, no 'surplus' is available which can be used to compensate those against whom prices turn. Only in a rapidly growing system can we hope to avoid absolute declines in the position of some groups.

Modern economists seem in this connection often to overlook that even the relative stability shown by many of those aggregates which macro-economics treats as data, is itself the result of a micro-economic process, of which changes in relative prices are an essential part. It is only thanks to the market mechanism that someone else is induced to step in and fill the gap caused by the failure of anyone to fulfil the expectations of his partners. Indeed, all those aggregate demand and supply curves with which we like to operate are not really objectively given facts, but results of the process of competition going on all the time. Nor can we hope to learn from statistical information what changes in prices or incomes are necessary in order to bring about adjustments to the inevitable changes.

The chief point, however, is that in a democratic society it would be wholly impossible by commands to bring about changes which are not felt to be just, and the necessity of which could never be clearly demonstrated. Deliberate regulation in such a political system must

always aim at securing prices which appear to be just. This means in practice preservation of the traditional structure of incomes and prices. An economic system in which each gets what others think he deserves would necessarily be a highly inefficient system – quite apart from its being also an intolerably oppressive system. Every 'incomes policy' is therefore more likely to prevent than to facilitate those changes in the price and income structures that are required to adapt the system to new circumstances.

It is one of the paradoxes of the present world that the communist countries are probably freer from the incubus of 'social justice', and more willing to let those bear the burden against whom developments turn, than are the 'capitalist' countries. For some Western countries at least the position seems hopeless, precisely because the ideology dominating their politics makes changes impossible that are necessary for the position of the working class to rise sufficiently fast to lead to the disappearance of this ideology.

5

If even in highly developed economic systems competition is important as a process of exploration in which prospectors search for unused opportunities that, when discovered, can also be used by others, this is to an even greater extent true of underdeveloped societies. My first attention has been deliberately given to problems of preserving an efficient order for conditions in which most resources and techniques are generally known, and constant adaptations of activities are made necessary only by inevitably minor changes, in order to maintain a given level of incomes. I will not consider here the undoubted role competition plays in the advance of technological knowledge. But I do want to point out how much more important it must be in countries where the chief task is to discover yet unknown opportunities of a society in which in the past competition has not been active. It may not be altogether absurd, although largely erroneous, to believe that we can foresee and control the structure of society which further technological advance will produce in already highly developed countries. But it is simply fantastic to believe that we can determine in advance the social structure in a country where the chief problem still is to discover what material and human resources are available, or that for such a country we can predict the particular consequences of any measures we may take.

Apart from the fact that there is in such countries so much more to be discovered, there is still another reason why the greatest freedom of competition seems to be even more important there than in more advanced countries. This is that required changes in habits and customs will be brought about only if the few willing and able to experiment with new methods can make it necessary for the many to follow them, and at the same time to show them the way. The required discovery process will be impeded or prevented, if the many are able to keep the few to the traditional ways. Of course, it is one of the chief reasons for the dislike of competition that it not only shows how things can be done more effectively, but also confronts those who depend for their incomes on the market with the alternative of imitating the more successful or losing some or all of their income. Competition produces in this way a kind of impersonal compulsion which makes it necessary for numerous individuals to adjust their way of life in a manner that no deliberate instructions or commands could bring about. Central direction in the service of so-called 'social justice' may be a luxury rich nations can afford, perhaps for a long time, without too great an impairment of their incomes. But it is certainly not a method by which poor countries can accelerate their adaptation to rapidly changing circumstances, on which their growth depends.

Perhaps it deserves mention in this connection that possibilities of growth are likely to be greater the more extensive are a country's yet unused opportunities. Strange though this may seem at first sight, a high rate of growth is more often than not evidence that opportunities have been neglected in the past. Thus, a high rate of growth can sometimes testify to bad policies of the past rather than good policies of the present. Consequently it is unreasonable to expect in already highly developed countries as high a rate of growth as can for some time be achieved in countries where effective utilisation of resources was previously long prevented by legal and institutional obstacles.

From all I have seen of the world the proportion of private persons who are prepared to try new possibilities, if they appear to them to promise better conditions, and if they are not prevented by the pressure of their fellows, is much the same everywhere. The much lamented absence of a spirit of enterprise in many of the new countries is not an unalterable characteristic of the individual inhabitants, but the consequence of restraints which existing customs

and institutions place upon them. This is why it would be fatal in such societies for the collective will to be allowed to direct the efforts of individuals, instead of governmental power being confined to protecting individuals against the pressures of society. Such protection for private initiatives and enterprise can only ever be achieved through the institution of private property and the whole aggregate of libertarian institutions of law.