competition: Austrian conceptions

The essence of Austrian economics is its emphasis on the ongoing economic process as opposed to the equilibrium analysis of neoclassical theory. Austrian concepts of competition reflect this emphasis. Indeed, one of the central challenges by Austrians to the neoclassical model, and a common denominator of virtually all Austrian economics, is the rejection of the concept of perfect competition. In this respect, a number of economists who cannot be considered Austrian in all aspects of their work, share, nonetheless, the Austrian emphasis on actual market activities and processes—e.g., Joseph Schumpeter (1942), J.M. Clark (1961), Fritz Machlup (1942) and others.

When the concept of competition entered economics at the hands of Adam Smith and his predecessors, it was not clearly defined, but it generally meant entry by firms into profitable industries (or exit from unprofitable ones) and the raising or lowering of price by existing firms according to market conditions. There was little recognition, and virtually no analysis, of entrepreneurship as it might be reflected in these and other forms of competition, but there was a recognition that business firms do in most situations have some control over market prices, with the degree of control varying inversely with the number of firms in the industry. These basic ideas, expanded and supplemented, are generally compatible with most modern Austrian analysis.

What is objectionable to Austrian economists is the neoclassical concept of perfect competition, developed during the 19th and early 20th centuries. The development began with Cournot (1838), whose concern it was to specify as rigorously as possible the effects of competition, after the process of competition had reached its limits. His conceptualization of this situation was a market structure in which the output of any one firm could be subtracted from total industry output with no discernible effect on price. Later contributions by Jevons, Edgeworth, J.B. Clark and Frank Knight led to the model of perfect competition as we know it today (Stigler, 1957, McNulty, 1967).

The trouble with the concept from the Austrian point of view, as Hayek has emphasized, is that it describes an equilibrium situation but says nothing about the competitive process which led to that equilibrium. Indeed, it robs the firm of all business activities which might reasonably be associated with the verb 'to compete' (Hayek, 1948). Thus, firms in the perfectly competitive model do not raise or lower prices, differentiate their products, advertise, try to change their cost structures relative to their competitors, or do any of the other things done by business firms in a dynamic economic system. This was precisely the reason why Schumpeter insisted on the irrelevance of the concept of perfect competition to an understanding of the capitalist process.

For Schumpeter, any realistic analysis of competition would require a shift in analytical focus from the question of how the economy allocates resources efficiently to that of how it creates and destroys them. The entrepreneur, a neglected figure in classical and neoclassical economics, is the central figure in the Schumpeterian analytical framework. The entrepreneur plays a disquieting role in the market process by interrupting the 'circular flow' of economic life, that is, the ongoing production of existing goods and services under existing technologies and methods of production and organization. He does this by innovating—i.e. by introducing the new product, the new market, the new technology, the new source of raw materials and other factor inputs, the new type of industrial organization, etc. The result is a concept of competition grounded in cost and quality advantages which Schumpeter felt is much more important than the price competition of traditional theory and is the basis of the 'creative destruction' of the capitalist economic process. It produces an internal, efficiency within the business firm, the importance of which for economic welfare is far greater, Schumpeter argued, than the allocative efficiency of traditional economic theory (Schumpeter, 1942).

His emphasis on the advantages of the firm's internal efficiency led Schumpeter to a greater tolerance for large-scale business organizations, even for those enjoying some degree of monopoly power, than was typical of many more traditional theorists of his time. This is a not uncommon characteristic of Austrian economics. Hayek, for example, makes the distinction between entrenched monopoly, with its probable higher-than-necessary costs, and a monopoly based on superior efficiency which does relatively little harm since in all probability it will disappear, or be forced to adjust to market conditions, as soon as another firm becomes more efficient in providing the same or a similar good or service (Hayek, 1948). And that is precisely Schumpeter's point. The ground under even large-scale enterprise is constantly shaking as a result of the competitive threat from the new firm, the new management, or the new idea. Schumpeter's competitive analysis was less a defense of monopoly power than an attack on certain business activities which were judged to be monopolistic only from the comparative standpoint of the model of perfect
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Only through the principle of competition has political economy any pretension to the character of a science. So far as rents, profits, wages, prices, are determined by competition, laws may be assigned for them. Assume competition to be their exclusive regulator, and principles of broad generality and scientific precision may be laid down, according to which they will be regulated (John Stuart Mill, Principles of Political Economy, p. 242).

In all versions of economic theory 'competition', variously defined, is a central organizing concept. Yet the relationship between different definitions of competition and differences in the theory of value has not been fully appreciated. In particular, the characteristics of 'perfect' competition (notably the conditions which ensure price-taking) are often read back, illegitimately, into classical discussions of competition.

The mechanisms which determine the economic behaviour of industrial capitalism are not self-evident. As a form of economy in which production and distribution proceed by means of a generalized process of exchange (in particular by the sale and purchase of labour) it possesses no obvious direct mechanisms of economic and social coordination. Yet, in so far as these operations constitute a system, they must be endowed with some degree of regularity, the causal foundations of which may be revealed by analysis. The first steps in economic investigation which accompanied the beginnings of industrial capitalism consisted of a variety of attempts to identify such regularities, often by means of detailed description and enumeration, as in the works of Sir William Petty, and hence to establish the dominant causes underlying the behaviour of markets. But what was required was not simply the description and classification which precedes analysis, but abstraction, the transcendence of political arithmetic (Smith, 1776, p. 501).

The culmination of the search for a coherent abstract characterization of markets, and hence the foundation of modern economic analysis, is to be found in chapter 7 of Bock I of Adam Smith's Wealth of Nations — 'Of the natural and market price of commodities'. In this chapter Smith presented the first satisfactory formulation of the regularity inherent in price formation. The idea, partially developed earlier by Cantillon, and by Turgot in his discussion of the circulation of money, was that

There is in every society ... an ordinary or average rate of both wages and profits ... When the price of any commodity is neither more nor less than what is sufficient to pay the rent of land, the wages of labour, and the profits of stock employed ... according to their natural rates, the commodity is then sold for what may be called its natural price.

and that

The natural price ... is, as it were, the central price, to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep them suspended a good deal above it, and sometimes force them down somewhat below it. But whatever may be the

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obstacles which hinder them from settling in this center of repose and continuance, they are continually tending towards it (Smith, 1776, p. 65).

Thus the natural price encapsulates the persistent element in economic behaviour. And that persistence derives from the ubiquitous force of competition: or, as Smith put it, the condition of 'perfect liberty' in which 'the whole of the advantages and disadvantages of the different employments of labour and stock must ... be either perfectly equal or continually tending to equality' (p. 111), for the natural price is 'the price of free competition' (p. 68).

The relationship between competition and the establishment of what Petty called 'intrinsic value' had been discussed in the works of Petty, Boisguillebert, Cantillon and Harris as the outcome of rival bargaining in price formation, competition being the greater when the number of bargainers was such that none has a direct influence on price. Quesnay expressed the formation of competitive prices as being 'independent of men's will ... far from being an arbitrary value or a value which is established by agreement between the contracting parties' (in Meek, 1962, p. 90), but he did not relate the organization of production to the formation of prices in competitive markets. Consideration of that relationship required the development of a general conception of the role of capital, and with it the notion of a general rate of profit formed by the competitive disposition of capital between alternative investments (Vigg, 1987).

A significant step in this direction was made by Turgot, who both conceived of the process of production as part of the circulation of money:

We see ... how the cultivation of land, manufactures of all kinds, and all branches of commerce depend upon a mass of capitals, or movable accumulated wealth, which, having been first advanced by the Entrepreneurs in each of these different classes of work, must return to them every year with a regular profit ... It is this continual advance and return of capitals which constitutes what ought to be called the circulation of money (Turgot, 1767, p. 148)

and saw that the structure of investments would tend to be that which yielded a uniform rate of profit:

It is obvious that the annual products which can be derived from capitals invested in these different employments are mutually limited by one another, and that all are relative to the existing rate of interest on money (Turgot, 1973, p. 70).

However, Turgot neither related the determination of the rate of profit to production in general -- he accepted the Physiocratic idea that the incomes of the industrial and commercial classes were 'paid' by agriculture -- nor developed the conceptual framework which linked the formation of prices and of the rate of profit to the overall organization of the economy. These were to be Smith's achievements:

If ... the quantity brought to market should at any time fall short of the effectual demand, some of the component parts of its price must rise above their natural rate. If it is rent, the interest of all other landlords will naturally prompt them to prepare more land for the raising of this commodity, if it is wages or profit, the interest of all other labourers and dealers will soon prompt them to employ more labour and stock in preparing and bringing it to market. The quantity brought thither will soon be sufficient to supply the effectual demand. All the different parts of its price will soon sink to their natural rate, and the whole price to its natural price (Smith, 1776, p. 65).

So in a competitive market there will be a tendency for actual prices (or 'market prices' as Smith called them) to be relatively high when the quantity brought to market is less than the effectual demand (the quantity that would be bought at the natural price) and relatively low when the quantity brought to market exceeds the effectual demand. This working of competition was known as the 'Law of Supply and Demand'. The working of competition which constitutes the 'Law' do not identify the phenomena which determine natural prices. The 'Law' of supply and demand should not be confused with supply and demand theory, i.e. the neoclassical theory of price determination which was to be developed one hundred years later. Nor should Smith's discussions of the tendencies of concrete market prices be confused with supply and demand functions, which are loci of equilibrium prices.

Adam Smith's conception of 'perfect liberty' consists of the mobility of labour and stock between different uses -- the mobility that is necessary for the establishment of an 'ordinary or average rate both of wages and profits' and hence for the gravitation of market prices toward natural prices. Smith identifies four reasons why market prices may deviate for a long time together' above natural price, creating differentials in the rate of profit, all of which involve restriction of mobility:

(a) extra demand can be 'concealed', though 'secrets of this kind ... can seldom be long kept';
(b) secret technical advantages;
(c) a monopoly granted either to an individual or a trading company;
(d) 'exclusive privileges of corporations, statutes of apprenticeship, and all those laws which restrain, in particular employments, the competition to a smaller number than might otherwise go into them.'

For Smith there is some similarity in the forces acting on wages and profits which derive from his conceiving of the capitalist as personally involved in the prosecution of a particular trade or business. So the rate of profit, like the rate of wages, may be differentiated between sectors by 'the agreeableness or disagreeableness of the business', even though 'the average and ordinary rates of profit in the different employments of stock should be more nearly upon a level than the pecuniary wages of the different sorts of labour' (1776, p. 124). Landlords, capitalists and workers are all active agents of mobility. In Ricardo's discussion the emphasis shifted towards the distinctive role of capital:

It is, then, the desire, which every capitalist has, of diverting his funds from a less to a more profitable employment, that prevents the market price of commodities from continuing for any length of time either much above, or much below their natural price (Ricardo, 1817, p. 91).

Ricardo used the term 'monopoly price' to refer to commodities 'the value of which is determined by their scarcity alone', such as paintings, rare books and rare wines (pp. 249–51) which have 'acquired a farcical value', and he argued that for 'Commodities which are monopolised, either by an individual, or by a company ... their price has no necessary connexion with their natural value' (p. 385). His analysis of value and distribution is accordingly confined to 'By far the greatest part of those goods which are the object of desire ... such commodities only as can be increased in quantity by the exertion of human labour, and on the production of which competition operates without restraint' (p. 12).

For Marx competition is synonymous with the generalisation-
The development of capitalism as a mode of production is a process of transformation from a mode of production based on individual labor to one that involves collective labor. This transformation is marked by the concentration of capital, the growth of the capitalist class, and the exploitation of workers. The development of capitalism is a result of the competition between capitalists for profits and the drive for accumulation of capital.

The process of accumulation in capitalism is driven by the need for capitalists to seek higher profits. This is achieved through the exploitation of workers, the concentration of capital, and the expansion of the market. The accumulation of capital leads to the growth of the capitalist class and the concentration of wealth in the hands of a few.

The development of capitalism is characterized by the growth of the state and the role it plays in the economy. The state acts as a mediator between the interests of capital and labor, and it plays a role in the regulation of the economy. This regulation is necessary to ensure the smooth operation of the capitalist system and to prevent the collapse of individual enterprises.

The development of capitalism is also characterized by the growth of the working class and the struggle for the rights of workers. The working class is a key player in the development of capitalism, and it has played a role in the formation of societies based on the principles of democracy and socialism.

In conclusion, the development of capitalism is a complex process that involves the transformation of the mode of production and the development of new economic relations. This process has been characterized by the growth of the capitalist class, the concentration of capital, the exploitation of workers, and the role of the state in regulating the economy.
associations with radicalism and Marxism. But despite the dramatic change in theory that was to be heralded by the works of Jevons, Menger and Walras, the method of analysis which characterized the object the theory was to explain stayed fundamentally the same; the new theory was an alternative explanation of the same phenomena. Marshall labelled natural prices 'long-run normal prices', and declared that, as far as his discussion of value was concerned 'the present volume is closely connected with the normal relations of wages, profits, prices etc., for rather long periods' (1920, p. 315). The same continuity of method may be found in the work of Walras (1874–7, pp. 224, 380), Jevons (1871, pp. 86, 133–6), Böhm-Bawerk (1899, p. 380) and Wickelström (1934, p. 97).

Nonetheless, the structure of neoclassical theory is such that a different notion of competition is required. The classical emphasis on mobility must be supplemented by a precise definition of the relationships presumed to exist between individual agents. The fundamental concept of 'perfect' competition, for example, encompasses the idea that the influence of each individual participant in the economy is 'negligible', which in turn leads to the idea of an economy with infinitely many participants (Aumann, 1964). Such formulations are entirely absent from the classical conception of competition, since the classical theory is not constructed around individual constrained utility maximization.

John Eatwell

See also Centre of gravitation; Natural and normal conditions; Surplus approach to value and distribution.

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conceived in which capital funds flow into industries with high rates of return away from industries with low rates of return. Thus the relative output proportions in industries will change, creating imbalances of supply and demand. These, in turn, cause relative market prices and profit rates to change, tending to establish for the economic system long-run prices of production as centres of gravity for market prices. Yet the stability properties of such a dynamic process were not demonstrated rigorously. The arguments were put forward intuitively by analogy with Newton's theory of the planetary system that profit rates fluctuate or oscillate within a bounded interval and actual prices gravitate around their long-run production prices. Differentials of profit rates between industries and firms were expected to exist for a shorter or longer period due to disequilibrium dynamics and due to speed and ease of adjustment varying from one industry to another (Marx, 1894, p. 208). Though Marx anticipated possible institutional and structural changes, due to "concentration and centralization of capital", he did not, however, assume that inter-firm and inter-industry competition would become less severe with the evolution of capitalism.

POST-MARXIAN THEORY. In the post-marxian theory since Hilferding (1910) the elimination of competition and the delay and disruption of the formation of a general profit rate through monopolization became the main theoretical concern. Three causes are posited as reasons for monopolization: industrial concentration, increasing constraints for the mobility of capital (in particular due to high proportion of fixed capital in total capital outlay), and collusion (cooperative behaviour and cartels). In this view these three causes result in monopoly prices and the persistence of differential profit rates between industries and size classes of firms (Sweezy, 1942). For these theories, the large firms are conceived as economic units endowed with discretionary price setting power determining their own environment (Kalecki, 1938, 1943; Sweezy, 1939, 1942; Baran and Sweezy, 1966; and Eichner, 1976). Here the idea of mark-up pricing, target rate of return pricing and entry-preventing pricing have replaced the classical and marxian theory of production prices (natural prices, prices of production).

Given this general trend in post-marxian theory there are, however, many differences among theorists regarding (i) the cause of the monopolization; (ii) the determination of the mark-ups and the rates of return; (iii) the different roles of inverse demand function and quantity reactions in their theory of price setting firms; (iv) the impact of the rise of oligopolies and firms size on technical change; and (v) the impact of large oligopoly firms on the stability of the economic system (increasing stability or instability with stagnation tendencies).

Yet in spite of these differences, post-marxian theory is influenced by the theory of imperfect competition arising in the 1930s, and competition is thus identified more with market structure than with rival behaviour. Moreover, the theory of mark-up pricing was built more on a partial equilibrium view and thus not well-suited in an interdependent economic system. Though in the analyses of some of the post-Marxian writers the existence of large oligopoly firms does not prevent rivalry and competition (in particular concerning technical change, see Baran and Sweezy, 1966, ch. 3), imperfect competition is more adequate framework for their analysis of advanced capitalism.

NEW DISCUSSIONS. In recent discussions there is a certain revival of the concepts of competition of the classics and Marx, in particular concerning the role of competition for (1) industrial and corporate price and profit determination; (2) technical change and innovation; and (3) the formation of a general rate of profit.

(1) In new contributions attempts have been made to elaborate a theory of mark-up pricing for large corporations in the context of a dynamic theory of competition and long-run prices of production. In this context the economic behaviour of large corporations is explained more in terms of change of the production processes and the organization of the firm and less in terms of a change of market structures (Clifton, 1977; Semmler, 1984a) as was attempted by post-Marxian theory. According to this new view, mark-up and target rate of return pricing have their origin not in new market structures but in the rise of a new type of firm: the multi-plant and multi-product corporations and their new financial management techniques. Though there is, as the theory of mark-up pricing predicts, sufficient empirical evidence of differential profit rates among industries and size classes of firms - see spending, however, also on the time-period and the measure chosen for the rate of profit - it has not been sufficiently demonstrated that these differentials stem from imperfect market structures or from a disequilibrium dynamics. In addition, the empirically observed mark-up, target rate of return, and entry-preventing pricing, originally developed by large corporations in the 1920s, can be made consistent with a concept of long period prices of production. Since, however, large corporations are no longer single product firms, it is more appropriate to apply the theory of joint production to the economic behaviour of large corporations (Semmler, 1984a). On this basis fruitful attempts have been made to analyse the dynamics of competition, mark-ups, and rates of return on the basis of an interdependent system of prices and outputs.

(2) The theory of technical change in marxian economics has recently been given a firm foundation in the theory of competition (Okishio, 1961; Shiloh, 1978; Roemer, 1979). In this discussion, the marxian statement (Marx, 1867, ch. 12, 1894, ch. 15) that under competitive pressure individual firms will implement technical change and innovations and capture a transient surplus profit, but that the diffusion of techniques will entail a falling general profit rate, was debated anew with the tools of mathematical economics. The Okishio theorem seemed to invalidate this statement, since it implies that the capitalist firm in competition will always choose a cost minimizing technique that raises the individual as well as the general profit rate (Okishio, 1961). This Okishio result was disputed by Shiloh (1978) and extended by Roemer (1979).

Yet in spite of these differences, post-marxian theory is influenced by the theory of imperfect competition arising in the 1930s, and competition is thus identified more with market structure than with rival behaviour. Moreover, the theory of mark-up pricing was built more on a partial equilibrium view and thus not well-suited in an interdependent economic system. Though in the analyses of some of the post-Marxian writers the existence of large oligopoly firms does not prevent rivalry and competition (in particular concerning technical change, see Baran and Sweezy, 1966, ch. 3), imperfect competition is more adequate framework for their analysis of advanced capitalism.

3 In post-marxian theories the competitive formation of a
general profit rate was either taken for granted or completely disputed (as in the tradition since Hirsch). Recently, however, it became clear that if it cannot be established theoretically how profit rate differentials are dynamically equalized through the forces of competition then the concept of prices of production would become empirically irrelevant. In order to solve this problem, many scholars have begun to formalize Marx’s conceptualization of competition by means of dynamical systems with price and quantity changes over time. Nikaido (1983) presented results on the dynamic equalization of profit rates and the stability properties of prices of production showing that in general they are not even locally stable. In subsequent discussion, however, it was shown by Dumenil and Lévy (1984), Steedman (1984), and Flaschel and Semmler (1987) that better results may be obtained if the dynamics of competition are formalized as indicated above. For an n-sector model, a dynamics which includes changes not only in prices but also in production levels can be formulated as follows:

\[ \dot{x}_i = d_i[r(p, x), \tilde{r}(p, x)] \]  

and

\[ \dot{\rho}_i = k_i[D(p(x), \rho - S(p, x))] \]  

where \(D(p, x)\) is the average or expected demand for an industry \(i\) for a growing economic system, \(S(p, x)\) the industry’s supply, \(r(p, x)\) the industry’s profit rate, \(\tilde{r}(p, x)\) the average profit rate and \(\dot{x}, \dot{\rho}\) the time rate of change of prices and outputs. This dynamical process of competition refers to capital flows across industries according to differential profit rates (and changes in respective production levels) as well as to changes in prices due to imbalances in supply and demand. The results obtained in recently published articles on this process range from the demonstration of complete instability of the dynamic equalization of profit rates (Nikaido, 1983) to the demonstration that prices of production are at least locally stable (Dumenil and Lévy, 1984). It can also be demonstrated (by utilizing a proper Lyapunov function) that prices, outputs, and profit rates are fluctuating or oscillating within boundaries (Flaschel and Semmler, 1987). Most of these attempts, however, refer only to a circulating capital model while the inter-industry competitive process is analyzed, and the demonstrated results depend on the type of formalization, the reaction coefficients as well as on additional stabilizing forces (such as substitution in capitalist consumption, rate of change of inventories or rate of change of profit rate differentials). Models of inter-industry competition including fixed capital, returns to scale, or multiple techniques are still rare.

**WILLI SEMMLER**

See also MONOPOLY CAPITALISM, SURPLUS APPROACH TO VALUE AND DISTRIBUTION.

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