

## Alternative Approaches

### 28.1 INTRODUCTION

In the post-war period a number of economists have argued that the mainstream approach to economics is fundamentally flawed, and needs replacing with an alternative. From these perspectives the controversy between Monetarists and Keynesians appears as a doctrinal dispute within a shared framework, not as a dispute about fundamental assumptions. Kuhn's notion of a change of paradigm, or a scientific revolution, has been used to emphasize the magnitude of the change required, and to lend respectability to the idea that much of what now constitutes accepted theory must be abandoned. In addition, this dissent has, especially since the 1960s, become institutionalized, scholarly societies and academic journals being established to provide a forum for economists working in alternative paradigms. Thus, to name but a few, we have the *Journal of Economic Issues* centred on an institutional approach, the *Journal of Post Keynesian Economics* and the *Cambridge Journal of Economics* representing post-Keynesian economics, and the *Review of Radical Political Economy*.

There are two reasons why it is important to consider these alternative approaches here. The first is that they raise questions concerning the basic assumptions, or "hard core" of mainstream economics. The second is that it is useful to examine the extent of the differences between these alternative approaches and mainstream economics. Are the proponents of these alternative approaches, for example, merely changing a few assumptions, or are they following a completely different methodology? Are these approaches analogous to Kuhnian paradigms?

There is not space here to discuss these alternative approaches in detail, so this chapter will concentrate on examining a few alternative approaches, the emphasis being on how they impinge on mainstream economics, and on the response of mainstream economists to the challenges posed. The first five approaches to be considered are ones which are seen by their proponents as providing comprehensive, fundamentally different, approaches to that of the mainstream, namely Institutionalism, "Austrian" economics, post-Keynesian economics, Marxian and Radical economics. Also considered is the Chicago School, which, though not an alternative to mainstream economics in the same sense as the others, is sufficiently distinctive, and sufficiently important, to merit separate treatment. Some of the issues raised in discussing Chicago economics are relevant to an understanding of other approaches to economics.

## 28.2 INSTITUTIONALISM

*Ayres*

An important link between the institutionalism of Veblen and that of post-war economics is the work of Clarence Ayres. Though Ayres' first major work specifically on economics was his *Theory of Economic Progress* (1944), it is important to note that he started his graduate training at Chicago as early as 1916, and that many of his ideas and his criticisms of orthodox economics date from the 1920s and 1930s.<sup>1</sup> In particular, some of the most important themes in Ayres' work can be found in two articles published in 1935.<sup>2</sup>

Ayres criticized orthodox, neoclassical economics on three main grounds. (1) He criticized the notion of equilibrium, claiming that they asserted more than merely cause and effect:

The laws of economics [i.e. of neoclassical economics] are "natural laws" of a distinctly theological persuasion, such as physical scientists have been struggling for a century and more to escape. In so far as they are efficacious at all, these laws take effect in a "natural" harmony or equilibrium of forces, a "balance", for instance, of supply and demand.<sup>3</sup>

He went on to argue that a "moderate acquaintance with modern science reveals it [this natural order] to be wholly without factual support. The affinity we feel for it is cultural".<sup>4</sup> He persisted in criticizing orthodox theory on these grounds, despite Knight's response that the concept of equilibrium involved no more than mechanical analogies.<sup>5</sup>

(2) Ayres criticized orthodox economic theory for attaching excessive importance to capital.<sup>6</sup> Classical economics, he argued, had erred in attributing a creative potency to capital, conceived as funds at interest:

Obviously funds, whether as interest or even as capital, create nothing. Investment brings nothing into existence. The "surplus" of which capitalists obtain (or retain) control by the institutional device of interest must have an objective existence. The real surplus is an excess of physical materials.<sup>7</sup>

Claiming that institutionalists had been wholly negative in their criticism of the orthodox theory of capital, Ayres argued that the explanation of the technical efficiency of western culture had to be sought in "the material culture itself".<sup>8</sup> The institutions of capitalism were permissive rather than creative. Ayres thus saw the evolution of technology as the dynamic force in social evolution. He saw a discrepancy between technology and institutions, for "technology grows of its own inherent character, whereas institutions do not".<sup>9</sup> This theme, of the dominance of technology, has remained throughout Ayres' work, in which he distinguished sharply between technological and ceremonial behaviour, seeing the former as fundamental.

(3) Technology was also important for Ayres in that it provided an absolute standard of value. He argued that individuals' attitudes could not

provide a basis on which the value of economic activities could be judged, for these were influenced by the customs of the society in which the individuals live. The only escape from the relativity of judgements based on individual preferences, and hence on customs, was to seek

some other basis of judgement altogether distinct from mores and therefore from the whole institutional aspect of civilization. That other basis is technology. I am therefore, in this sense, a complete materialist. It seems to me that technological process does indeed afford a basis of judgement which is absolute in the sense that it is in no wise dependent on any sort of moral inwardness nor upon any moral tradition whatever.<sup>10</sup>

Ayres thus argued the case for an instrumental theory of value: whatever contributes to the activity of a community in making a living is valuable, and whatever hinders this is economically deleterious: "The criterion of every economic judgement is 'keeping the machines running'."<sup>11</sup>

In addition, Ayres denied that "means" and "ends" were separate phenomena: every end is a means towards something else.<sup>12</sup> He thus rejected the orthodox approach of using an individualistic social welfare function: not only did he refuse to take wants as given, but also he did not see consumption as the end of economic activity.

Ayres berated classical economic theory for finding the meaning of the economy in price, arguing that "economics must be a science of value. If the economy is meaningless, no science of economics is possible. If it has meaning, the problem of economics is to elicit that meaning."<sup>13</sup> He argued that price theory was misleading, for not only did it create the illusion that value could be measured precisely, but also "price as we say 'sets a value' on goods and services which by other and less quantitative standards of value we do not hesitate to designate as 'anti-social' ".<sup>14</sup> Other ways of thinking about value were possible, provided that orthodox price theory, in which value resulted from the opposition of means and ends, were abandoned:

All that economic thinking has hitherto been obliged to exclude and reject – all that is excluded when it is assumed that "wants" and "primary" and that "scarcity" is defined by "nature" – all that we know today of social change, including the factors which actually shaped the industrial revolution: all this stands ready for assimilation into modern economics. It is only the barrier of price theory which prevents.<sup>15</sup>

### *Galbraith*

The most well-known of post-war Institutionalists is undoubtedly J. K. Galbraith, whose most important works are probably *American Capitalism* (1952), and *The New Industrial State* (1967). Galbraith views the economy as dominated not by competition, but by monopoly. He argues, however, that even monopolists are subject to constraints, these being imposed by what he calls "countervailing power".<sup>16</sup> Galbraith sees countervailing power as much more of a dynamic process than the bilateral monopoly of orthodox theory, for countervailing power is something which emerges in response to the growth of monopoly. For example, unionization emerges to

act as a check on the power of large employers, or retailing chains are developed in response to monopoly in manufacturing.<sup>17</sup>

The constraints imposed by technology are crucial to Galbraith's view of how the economy works. He has argued that with the development of technology, the scale of investment becomes larger and larger, which means that firms can no longer afford to accept the risks involved in relying on the uncertainties of the market. The risks are, because of the size of the investment required, too large. Thus corporations are, according to Galbraith, forced into planning and into attempting to control the environment in which they operate. The importance of government contracts, negotiated outside the market, increases. Firms become involved in political activity. In addition, the manipulation of consumer taste, in order to ensure the success of new products, becomes a necessity. Advertising and the manipulation of consumers in the interests of large corporations is thus, for Galbraith, more than a merely accidental feature of capitalism.

Though this manipulation of consumers and the economy by large corporations has a beneficial role in the sense that it enables otherwise excessively risky investments to be undertaken, it is something of which Galbraith is as critical as was Veblen. The pattern of economic activities is distorted in undesirable directions. Particularly important is the encouragement of private consumption at the expense of public spending ("private affluence, public squalor"). In his criticism of big business, and in his appeal to wide audiences, Galbraith is the only contemporary economist to be the equal of Veblen, his *The Affluent Society* (1958) being comparable in its influence to Veblen's *Economic Theory of the Leisure Class*.

#### Myrdal

A very different type of institutional economics from the institutional economics of either Ayres or Galbraith is that of Myrdal.<sup>16</sup> Myrdal's early work<sup>19</sup> was far from Institutionalism: on his first exposure to Commons' ideas, in 1930, he was not converted, seeing the rise of Institutional economics as a danger. His sympathies were closer to those of Fisher, Frisch and the founders of the econometric society.<sup>20</sup> The change in his attitudes took place with the studies of American race relations which formed the basis for *The American Dilemma* (1944). He found himself taken away from conventional economics by the need to adopt a much broader approach. This stress on factors other than purely economic ones, and on the need to consider societies as a whole, continued into his work, in the post-war period, on the problems of developing countries.<sup>21</sup>

The nature of Myrdal's Institutionalism is clearly shown by a quotation from the Prologue to his *Asian Drama* (1968), a study of South-east Asia.

Conditions in the rich Western countries today are such that, broadly speaking, the social matrix is permissive of economic development or, when not, becomes readily readjusted so as not to place much in the way of obstacles in its path. This is why an analysis in "economic" terms, abstracting from that social matrix, can produce valid

and useful results. But that judgement cannot accurately be applied to South Asian conditions. Not only is the social and institutional structure different from the one that has evolved in Western countries, but, more important, the problem of development in South Asia is one calling for induced changes in that social and institutional structure, as it hinders economic development and as it does not change spontaneously, or, to any very large extent, in response to policies restricted to the “economic” sphere.<sup>22</sup>

He views people as being conditioned, even in their economic choices, “by their total mental make up” and “by the community in which they live”, and as being “motivated in a variety of ways”.<sup>23</sup> Because of this he rejects not only “economic man”, but also “scientific man”, arguing that “all knowledge and all ignorance tends to be opportunistic”.<sup>24</sup> Whilst it is important to reduce such biases as far as possible through continually checking theories against empirical facts, complete objectivity is, Myrdal argues, impossible: “Valuations enter into the choice of approach, the selection of problems, the definition of concepts, and the gathering of data.”<sup>25</sup>

If objectivity cannot be achieved through scientists being disinterested, how then can it be achieved? Myrdal’s answer was the same as in his *The Political Element in the Development of Economic Theory* (1929), published nearly 40 years earlier: economics should be based on “explicit and concrete value premises”<sup>26</sup>:

The only way in which we can strive for objectivity in theoretical analysis is to lift up the valuations into the full light, make them conscious and explicit, and permit them to determine the viewpoints, the approaches and the concepts used.<sup>27</sup>

Thus in *Asian Drama*, Myrdal’s first concern, after setting out the scope of the study, is to discuss *in detail* the value premises chosen, which he labels “the modernization ideals”.<sup>28</sup>

Though Myrdal’s approach is *very* different from the approaches of the other institutionalists discussed in this chapter and in chapter 18, there are nonetheless important common features. (1) Myrdal attaches great importance to the fact that social factors affect the way economists think about the problems which confront them. (2) He denies the possibility of removing value judgements from economic analysis. (3) He sees economic inquiry as concerned, in South-east Asia at least, with much more than conventional economics.

### *Institutionalism*

In the late 1920s and early 1930s the influence of American Institutionalism was at its height, it being the advocates of quantitative, theoretical economics who were on the defensive,<sup>29</sup> but from the 1930s this influence rapidly waned.<sup>30</sup> In his *Theory of Economic Progress* (1944) Ayres described the victory of the orthodox over the Institutional approach as being, amongst professional economists, complete. Institutionalists, he argued, were credited merely with



having called attention to the importance of matters which no economist should completely overlook although they do lie outside the field of economic analysis since they are not measured by price.<sup>31</sup>

Writing in 1976, Samuelson claimed that 40 years earlier, "Institutionalism withered away as an effective counterforce in economics."<sup>32</sup>

Institutionalism, however, did survive. The Association for Evolutionary Economics, with its *Journal of Economic Issues*, provides evidence for this. In it two viewpoints can be ascertained. One is that of Veblen and Ayres, stressing the fundamental importance of technology, and the distinction between technological and ceremonial institutions. The other viewpoint owes more to Commons', attaching much less importance, if any, to the Veblen-Ayres distinction between technology and institutions.<sup>33</sup> There is thus considerable variety within contemporary Institutionalism.

#### *The new institutional economics*

Very different from the Institutionalism discussed above is the so called "new institutional economics". Unlike the Institutionalism stemming from Veblen, the new institutional economics does not reject marginalism. Its emphasis is on extending the scope of orthodox microeconomics by taking account of previously neglected features of the economic system.<sup>34</sup> Greater institutional detail is introduced into theoretical models, making them less abstract. Organizational structures are perceived to affect incentives and behaviour, and are treated as a subject for economic analysis. In such analysis, transactions costs play an important role, for they provide reasons why transactions take place in one way rather than another. Coase's (1937) theory of the firm is the pioneering example of this type of theory. More recently, however, the approach has been applied much more widely. North (1981, 1984), for example, has attempted to interpret economic history in terms of the costs of political and economic organization.

Like Veblen's theory, the new institutional economics deals with institutional change, but its conception of the forces underlying this is closer to that of the "Austrians" than to Veblen's. Institutional change is seen to be generated largely by market forces, the direction of change being accounted for by the nature of transactions costs. Individuals are assumed to be pursuing their self-interest, and competition ensures that the most efficient institutions survive. The affinity with Commons' work, however, is greater. Like Commons, the proponents of the new institutional economics focus attention on transactions,<sup>35</sup> whilst institutions are conceived as rules and regulations which constrain behaviour.<sup>36</sup>

### 28.3 AUSTRIAN ECONOMICS

#### *Modern "Austrian" economics*

The Austrian school of economics stems from the work of Menger and his disciples. To a great extent Menger's ideas were assimilated into the

mainstream of economic theory. In this process, however, Menger's ideas were combined with those of Walras and Jevons, as was done by Wicksell and Schumpeter. The result was that Austrian theory was thought to be about substantially the same basic theory as the Walrasian, the differences being those of emphasis and perspective. In Mises' words,

after some years all the essential ideas of the Austrian School were by and large accepted as an integral part of economic theory. About the time of Menger's demise (1921), one no longer distinguished between an Austrian School and other economics. The appellation "Austrian School" became the name given to an important chapter in the history of economic thought.<sup>37</sup>

Over the years, however, the mainstream of economic theory developed in a way very different from that intended by Menger. Subsequent generations of Austrian economists, notably Mises and Hayek, followed by certain of their students, in particular Rothbard, Kirzner and Lachman, claimed that when Austrian and Walrasian economics were combined, for example as in the work of Wicksell or Schumpeter, some of Menger's important insights were lost. What is now known as "Austrian" economics is thus not simply the economics stemming from Menger: it is the tradition that runs from Menger via Mises and Hayek, as opposed to that running via Böhm-Bawerk or Schumpeter.<sup>38</sup>

The first characteristic of "Austrian" economics (one shared with mainstream economics) is that it is individualistic, viewing economic activities as the outcome of the purposive activities of individuals. These individuals are assumed to operate in a changing environment in which the future is unknown, and information is limited. This has important implications for the way we view the individual. In Walrasian theory, the only relevant aspect of an individual is his or her tastes. Pareto, for example, wrote that "The individual can disappear, providing he leaves us this photograph [i.e. an indifference map] of his tastes."<sup>39</sup> In contrast, "Austrian" theory is based upon a richer view of the individual personality. Individuals' knowledge of their own tastes, their interpretations of current events, their expectations of future events, and their alertness to new opportunities are all considered important.<sup>40</sup>

It is necessary, however, to look beyond the individual, for human actions have consequences never intended by the individuals concerned. Thus "Austrians" are concerned with the evolution of social institutions, these being seen as evolving in response to the actions of individuals pursuing their own ends.<sup>41</sup> Money and markets are perhaps the most important such institutions.

Throughout "Austrian" economics there is a concern with time. Time is important not only because institutions develop over time, but also because the incompleteness of knowledge about the future, and the costs of obtaining information, mean that the economy will never actually be in equilibrium, but will continually be moving towards equilibrium. This leads to a much greater stress on entrepreneurship, on the process whereby new opportunities for profit are discovered, than is characteristic of general

equilibrium theory.<sup>42</sup> “Austrian” economics is thus about explaining change. As a result of this competition is a dynamic process whereby the sources of high profits are eliminated over time. It is not the perfect competition of orthodox theory, in which no agent can influence the prices it faces, and in which profits are zero.

There is, within “Austrian” economics, a tendency to stress the gap between the methods appropriate to economic inquiry, and those used in the natural sciences. Kirzner has written of “Austrians” as being “deeply suspicious of attempts to apply measurement procedures to economics”, and “sceptical of empirical ‘proofs’ of economic theorems”.<sup>43</sup> There are two strands underlying this attitude. One is that of Mises’ “praxeology”,<sup>44</sup> whereby conclusions are derived from the logic of human action. Rothbard, for example, writes, “Apart from the fact that these conclusions cannot be ‘tested’ by empirical or statistical means, there is no *need* to test them since their truth has already been established.”<sup>45</sup> Not altogether compatible with this is the second strand in “Austrian” methodology, according to which uncertainty and limitations of knowledge create fundamental problems for prediction in economics. On the one hand there are reasons why it is impossible to test economic theories conclusively: there are numerous unobservable variables, and aspects of economic theories, which cannot be tested. In addition, it has been argued that the act of choice is a spontaneous, creative, act, and as such is substantially unpredictable. According to Kirzner, “there is an indeterminacy and unpredictability inherent in human preferences, human expectations, and human knowledge”.<sup>46</sup>

### Hayek

This emphasis on uncertainty, and on the importance of knowledge, owes much to Hayek’s “Economics and Knowledge” (1937).<sup>47</sup> He opened this article with the contention

that the tautologies, of which formal equilibrium analysis in economics essentially consists, can be turned into propositions which tell us anything about causation in the real world only in so far as we are able to fill those formal propositions with definite statements about how knowledge is acquired and communicated. In short, I shall contend that *the empirical element in economic theory* – the only part which is concerned not merely with implications but with causes and effects and which leads therefore to conclusions which, at any rate in principle, are capable of verification – *consists of propositions about the acquisition of knowledge.*<sup>48</sup>

In its simplest terms Hayek’s argument here is that equilibrium denotes a situation in which, by definition, all agents’ plans are synchronized with each other, and in which expectations are correct:

the concept of equilibrium merely means that the foresight of the different members of the society is in a special sense correct. It is correct in the sense that every person’s plan is based on the expectation of just those actions of other people which those other people intend to perform[,] and that all these plans are based on the same set of



external facts, so that under certain conditions nobody will have any reason to change his plans.<sup>49</sup>

Equilibrium relationships, according to Hayek, cannot be deduced from objective facts, for people's behaviour depends on what they know.<sup>50</sup> If equilibrium is then not an empirically based concept, how then can its use be defended? The only justification for its use, Hayek argues, "is the supposed tendency towards equilibrium. It is only by this assertion that such a tendency exists that economics ceases to be an exercise in pure logic and becomes an empirical science".<sup>51</sup> It might be thought that this was a question answered by conventional economics, for example by Walras's *tâtonnement*.<sup>52</sup> Hayek, however, argues that because such theories are based on the assumption of perfect markets, such theories assume what they purport to prove: they say nothing about the process whereby individuals' knowledge is changed in such a way as to make their behaviour consistent with equilibrium.<sup>53</sup> It is the usually "disguised and incomplete" assumptions "that people do learn from experience, and about how they acquire knowledge", which constitute the empirical content of propositions about the real world.<sup>54</sup>

Many of the ideas contained in Hayek's later work, and that of other "Austrians" can be traced back to this article. The centrality of individual behaviour in an uncertain world is paramount, with economic activity being seen in a dynamic context in which new information is continually being acquired and used. It is important to notice, however, that although he shares Mises' attitude towards equilibrium as indicating the direction of change, Hayek bases this on a methodology very different from Mises' praxeology. He is concerned throughout with empirical content in the sense of falsifiable propositions, a concern which has grown stronger in some of his post-war writings.<sup>55</sup> It is his concern with empirical content which leads him to stress the acquisition of knowledge, using the argument outlined above. Though we may, in constructing an economic theory, choose assumptions such that our theories of "perfect markets", or the logic of choice, are "a priori true", such a procedure would not provide us with what Hayek describes as "the justification which consists in the assumption that the situation in the real world is similar to what we assume it to be".<sup>56</sup>

### *Shackle*

Another economist who has laid great stress on the importance of uncertainty, and on the spontaneity of individual decision-making, is G. L. S. Shackle.<sup>56</sup> Shackle shares with both Keynes and Hayek a stress on the uncertainty and the ignorance involved in human affairs.

Fundamental to all Shackle's work is his stress on the prevalence of true uncertainty. It is inappropriate, Shackle argues, to analyse uncertainty in terms of probabilities, for the distinguishing feature of uncertainty, as opposed to risk, is that we have no information on which to base a calculation of probabilities.<sup>57</sup> Probabilities, and hence decision rules such as

the maximization of expected utility, are appropriate only where the same "experiment" is repeated, to provide relative frequencies on which probabilities can be based. Where genuinely new events are involved, that is events which have never occurred before, there can be no basis on which to calculate expected probabilities, even subjective ones.

Shackle postulates an alternative treatment of uncertainty, based on two new concepts: possibility and potential surprise. Even though we may not be able to attach a probability to an event, because nothing like it has ever happened before, we may be able to say whether we think its occurrence to be possible, and how surprised we would be if it were to occur.<sup>58</sup>

Having suggested this alternative to the orthodox theory of probability, however, Shackle does not simply go on to replace maximization of expected utility with a maximizing model based on a different treatment of uncertainty. This is because he stresses, in a way no other economist has done, the creativity and spontaneity of human actions.<sup>59</sup> Conventional economic theory is based on the assumption of rational behaviour, but, according to Shackle,

Reason is not sufficient for the guidance of conduct. ... Economic choice does not consist in comparing the items in a list, known to be complete, of fully specified rival and certainly attainable results. It consists in first creating, by conjecture and reasoned imagination on the basis of mere suggestions offered by visible or recorded circumstance, the things on which hope can be fixed. These things, at the time when they are available for choice, are thoughts and even figments ... if we wish to claim that reason by itself is a sufficient guide for conduct, we need to claim, not that reason can find novelty, but that it can find *all* novelty and thus *exhaust* novelty.<sup>60</sup>

Shackle is thus critical of what he calls the "rational ideal", the explanation of economic phenomena in terms of rational behaviour, for he sees the scope for rational action as being of necessity severely limited.

Shackle, like Hayek and modern "Austrians", sees time as central to economics, arguing that orthodox theory has failed to recognize important aspects of time. Time is irreversible, and future events are uncertain, not least because human actions are creative, and hence not completely explicable in terms of past events. Economic phenomena, therefore, must be explained in terms of a dynamic process in which the past is irrevocable, and the future inherently unpredictable. Using the analogy of a kaleidoscope, Shackle has christened such a process "kaleidics". Consider Shackle's discussion of the expectations which underlie decisions to invest:

Expectations are *kaleidic*. Like the symmetric pattern of colours in the kaleidoscope, they can be changed comprehensively and radically by a slight shock or twist given to the instrument, or to the evidence in the mind of the expectation former. "Stretch of time" is a figment, it is memory or else imagination engendered by the evidence existing in the *actual present*. But the value to be assigned to a so-called "durable" tool or plant can be based only on the supposed content of this fundamental stretch of future time. Expectational value is a structure of thought resting at only one point on the ground of visibly recorded evidence. A small irregularity as the wheel rolls forward can lift it bodily or even deform and destroy it. The consequences of the kaleidicity of investment-values can be formidable and far-reaching.<sup>61</sup>

Shackle has argued that it was with such a process that Keynes was concerned.<sup>62</sup>

#### 28.4 POST-KEYNESIAN ECONOMICS

##### *Interpreting the General Theory*

After the *General Theory* Keynes' ideas were interpreted and developed by Hicks, Hansen, Samuelson and others in terms of the framework provided by general equilibrium theory.<sup>63</sup> There also emerged, however, a tradition critical of this development.<sup>64</sup> Proponents of this alternative interpretation of Keynes could turn for support to several passages in Keynes' work. Firstly, there were the passages in the *General Theory* in which Keynes explicitly attacked the propositions of "classical economics".<sup>65</sup> More important than this, however, were passages where Keynes stressed the fundamental importance of uncertainty as to the future course of events.

In chapter 12 of the *General Theory*, for example, Keynes, in discussing the determinants of the marginal efficiency of capital, drew attention to "the extreme precariousness of the basis of knowledge on which our estimates of prospective yields have to be made".<sup>66</sup> Keynes, therefore, did not regard the marginal efficiency of investment schedule as stable. More importantly, however, the presence of uncertainty was fundamental to Keynes' theory of money. Differences of opinion as to the future course of interest rates, for which uncertainty was a prerequisite, underlay Keynes' speculative motive for holding money. It was the speculative demand for money which led Keynes to reject the notion of "the demand for money as a whole being proportional, or having some determinate relation, to income".<sup>67</sup> It was only a *portion* of the public's cash holdings that was related to income. In arguing this, Keynes was thus doing much more than merely introducing the rate of interest into the demand for money function: (1) his speculative demand meant that his demand for money function was not homogeneous (a change in income would not change demand for money in the same proportion);<sup>68</sup> and (2) demand for money changed with expectations, monetary policy, which would affect expectations as well as the quantity of money, affecting the interest rate via both supply and demand for money.<sup>69</sup> In addition, the presence of uncertainty was important to Keynes' argument that money was an asset with very special properties, not merely one asset amongst many.<sup>70</sup>

Thus when Keynes, in response to his critics, expounded the main themes of the *General Theory* in an article in the *Quarterly Journal of Economics* (1937), he stressed uncertainty as the factor distinguishing his theory from that of the classical economists.<sup>71</sup> He argued that classical economics allowed only for the possibility of risk, not for genuine uncertainty. In reality, Keynes argued, probabilities are not calculable, for "we have only the vaguest idea of any but the most direct consequences of

our actions".<sup>72</sup> He drew the conclusion, "I accuse the classical economic theory of being itself one of those pretty, polite techniques which tries to deal with the present by abstracting from the fact that we know very little about the future."<sup>73</sup>

It is these two themes, the inappropriateness of supply and demand theories based on maximizing behaviour, and the importance of uncertainty about the future, which are taken by its proponents to justify the designation of their work as "Post-Keynesian". Post-Keynesian economics is claimed to be post-Keynesian, not merely chronologically, or in the sense of accepting certain aspects of the Keynesian system, but in the more profound sense of recognizing, in a way not true of mainstream economics, the fundamental criticisms of classical theories made by Keynes. Post-Keynesians, for example, seek to take seriously Keynes' claim that the importance of money lies in its being a link between the present and an uncertain future. It follows from this, for example, that it is an important characteristic of a monetary economy, for example, that wage bargains are in terms of money: that the wage bargain determines the nominal wage rate, not the real wage rate.<sup>74</sup> Such an assertion would not make sense in many general equilibrium models.

Although taking the lead from Keynes' *General Theory*, Post-Keynesian economics has also leaned heavily both on more recent developments in the theory of capital, and on certain other parts of Keynes' work. The criticisms of the neoclassical aggregate production function stemming from Robinson's work<sup>75</sup> have been used to reinforce the argument that neoclassical price theory is fundamentally, and irreparably, flawed. Not only is there, for reasons exposed in the *General Theory*, no tendency to a full employment equilibrium, but even if there were, the assumption of diminishing marginal productivity, on which neoclassical factor demand curves are based, is unjustifiable.<sup>76</sup> Thus the neoclassical theory cannot explain the distribution of income between factors, even should these be fully employed, and an alternative has to be found.

In seeking an alternative to the marginal productivity theory of income distribution, Post-Keynesian economists turned to the ideas put forward by Keynes in his *Treatise on Money* (1930) and by Kalecki (1933), later developed by Robinson, Kaldor and Pasinetti.<sup>77</sup> Though this theory of distribution, sometimes called the "Cambridge" theory, is quite compatible with factor prices being equal to marginal productivities obtained from a neoclassical aggregate production function,<sup>78</sup> it is used by Post-Keynesians as an alternative to this theory.

These criticisms of neoclassical economics are brought together by Robinson, one of its most persistent Post-Keynesian critics, in her discussion of "historical time". She distinguishes between two types of argument:

One kind of argument proceeds by specifying a sufficient number of equations to determine the unknowns, and so finding values for them which are compatible with each other... . The other type of argument specifies a particular set of values obtaining at a point of time, which are not, in general, in equilibrium with each other, and shows how their interactions may be expected to play themselves out.<sup>79</sup>

She argues that there is a fundamental difference between the two types of model, for

in a model depicting equilibrium positions there is no causation. It consists of a closed circle of simultaneous equations. The value of each element is entailed by the values of the rest. [In contrast,] in an historical model, causal relations have to be specified.<sup>80</sup>

In an historical model the past is irrevocable, and the future uncertain. It is inappropriate, therefore, either to treat capital as malleable, or to neglect the importance of money.

#### *Neo-Ricardian economics*

An important aspect of post-Keynesian economics has been the revival of interest in the Ricardian–Marxian theory of value.<sup>81</sup> The main contribution to this revival was Sraffa's *Production of Commodities by Means of Commodities* (1960), subtitled "Prelude to a critique of economic theory." Central to Sraffa's system is a set of equations each linking the price of a commodity to its cost of production. Production costs include the costs of produced commodities used up in production, and also the cost of labour, a non-produced input. Anything left over after paying these necessary costs of production is a surplus. Making the assumption that competition will result in a uniform rate of profit and a uniform wage rate, Sraffa thus has  $n$  equations, where  $n$  is the number of produced commodities:

$$\begin{aligned}(1+r)\{p_1a_{11} + p_2a_{12} \dots + p_na_{1n} + wl_1\} &= p_1 \\(1+r)\{p_1a_{21} + p_2a_{22} \dots + p_na_{2n} + wl_2\} &= p_2 \\&\vdots \\(1+r)\{p_1a_{n1} + p_2a_{n2} \dots + p_na_{nn} + wl_n\} &= p_n\end{aligned}$$

In these equations  $p_i$  is the price of the  $i$ th commodity,  $w$  the wage rate,  $r$  the rate of profit,  $a_{ij}$  the amount of commodity  $j$  used in producing a unit of commodity  $i$ , and  $l_i$  is the labour used in producing commodity  $i$ .<sup>82</sup>

In these equations there are  $n+2$  prices:  $n$  commodity prices, the wage rate and the rate of profit. We can take one of these as *numéraire*, which means that there are  $n+1$  prices to be determined. As there are only  $n$  equations this means that something else has to be brought in before prices are fully determined. The obvious possibility is to introduce an explanation of the distribution of income, such as a subsistence wage rate, Marx's rate of exploitation, or a Keynesian theory of the rate of profit. Any of these would supply the necessary extra equation.

It is this need to bring in an extra equation which forms the basis for Dobb's claim that there is a dichotomy, "in which prices are derived from (or in part dependent on) conditions of distribution rather than distribution being derived from the structure of prices treated as being in turn a resultant of demand".<sup>83</sup>



Distribution is thus, for Dobb, not a part of the general process of price-determination: "there was a crucial sense in which distribution was *prior* to exchange: namely, that price-relations or exchange values could only be arrived at *after* the principle affecting distribution of the total product had been postulated."<sup>84</sup>

*A neoclassical interpretation of neo-Ricardian theory*

Before considering the case in favour of Sraffa's approach it is useful to see how Sraffa's system looks from the point of view provided by general equilibrium theory. Sraffa's equations are in themselves quite compatible with neoclassical general equilibrium theory, for competitive equilibrium requires that pure profits are zero (that normal profits are earned in all industries). Indeed, it is *because* Sraffa's equations can be used to describe one aspect of a general equilibrium model that they could be used to criticize the neoclassical production function. Sraffa's system thus appears related to the linear models of Cassel, Leontief or von Neumann. Thus Hahn has written that "there is no correct neo-Ricardian proposition which is not contained in the set of propositions which can be generated by orthodoxy".<sup>85</sup>

From this perspective, the neo-Ricardian approach seems to depend on certain important simplifications. One of the clearest statements of such a view is that of Bliss (1975), who has argued that in what he calls the "Cambridge model",

the irritations arising from the interdependent network of influences are circumvented by some special assumptions that have the effect of allowing the state of the economy to be solved out and discussed in three distinct stages:

- (1) The rate of interest (here equal to the rate of profit) is determined by a relation ... between the need for investment funds implied by the growth of the economy and the supply of these funds which is related to the level of profits. From this step is derived the rate of interest [profit<sup>86</sup>].
- (2) Given the rate of interest it is possible to determine, independently of demand conditions and the growth rate, the costs of production of all goods ... and the techniques of production that the economy will use. From this step come relative prices.
- (3) Finally, demand conditions may be brought in to determine the rates of output, given the techniques of production. ...

Here is an undeniably attractive scheme and it is not surprising that economists have found it absorbing. As a decomposable structure it has the advantage of simplicity; given a change in specification one ascertains which steps in the solution procedure are affected and it is then not difficult to work out the consequences ... and to obtain definite conclusions.<sup>87</sup>

He goes on to argue, however, that "the assumptions necessary to support this edifice are so restrictive that it is difficult to attach a great deal of weight to it".<sup>85</sup> These assumptions include: (1) saving is a constant proportion of profits, there being no other sources of saving; (2) there is only *one*

non-produced input (labour); (3) there are constant returns to scale.<sup>89</sup> Bliss is thus very critical of this approach:

We have here an example of a general analytical method which proceeds by embedding the variable whose magnitude is desired in an equation in which all other terms are deemed by assumption to be constants. The method has been called “Ricardian” by Schumpeter [<sup>90</sup>] and “implicit theorizing” by Leontief [<sup>91</sup>]. The trouble with this method of treating problems is not merely that things are assumed to be constant which are certainly not constant, though that is indeed a tendency; but also that *factors which ought to be analysed and made the subject of economic theories remain unanalysed, or are analysed only crudely.*<sup>92</sup>

#### *A defence of Neo-Ricardian theory*

If Sraffa’s equations can be seen as describing merely certain aspects of a simplified general equilibrium system, how can it provide the basis for an *alternative* to the neoclassical theory of value? To answer this question it is useful to note that Sraffa started work on what became *Production of Commodities by Means of Commodities* in the late 1920s. Thus although it was not published until 1960, the book arose *not* out of the 1950s’ controversy over capital theory, but out of the discussions of Marshall’s theory of the firm which took place in the 1920s.<sup>93</sup> Sraffa’s main contribution to this discussion had been to argue that Marshallian partial equilibrium analysis was compatible only with constant returns to scale. Because he saw increasing returns to scale as being incompatible with the assumption of perfect competition, Sraffa advocated, in his *Economic Journal* article of 1926, moving towards a theory of monopoly.

In *Production of Commodities*, however, Sraffa moved even further from Marshallian theory, dropping *all* assumptions about returns to scale. He was concerned to develop only those propositions which did not depend on assumptions about returns to scale. To do this he abandoned the concepts of supply and demand curves, together with the idea that prices and quantities were determined simultaneously. Sraffa used his system of equations not to determine equilibrium prices, but to determine the prices of production which corresponded to a *given* level of output. This meant that if the level of production were to change, so too would the input–output coefficients, and hence the prices of production. It was because he interpreted his equations in this way that he did not have to make any assumption about returns to scale.

This method has been explained by Roncaglia (1977) in the following way:

Analytically, the situation of a certain economic system is considered as it might appear from a “photograph” taken at a given moment. All economic magnitudes which are not the object of analysis may be considered as data. ... In the case of *Production of Commodities by Means of Commodities* Sraffa has chosen the relationship between production prices and distributive variables (rate of profits and wage rate) as the objects of the analysis. All other variables (technology, levels of output, firm structure of all industries, etc) are taken as the data of the problem.

It must be stressed, however, that this choice does not imply an *a priori* refusal of the possibility of analyzing the problems of technological development, levels of output, strategy of firms, etc. This choice stems from the necessity of analyzing the different problems one by one, and each in isolation. The necessary assumptions and methods of analysis are not necessarily identical for all problems; for each of them only what is relevant should be included, leaving aside those elements which, as Ricardo said, simply "modify" the analysis but do not change it substantially.<sup>94</sup>

A similar defence of the Ricardian method has been provided by Bharadwaj (1978):

social output and methods of production were provisionally taken as data for the value problem in classical political economy in recognition of the fact that the determinants of these were diverse and not explained on the basis of relative prices alone or within the scheme of abstraction adopted to work out the value question.<sup>95</sup>

The crucial aspect of this is Bharadwaj's claim that different levels of abstraction are required for dealing with different problems. She argues that the classical framework is less restrictive than the supply and demand framework, for

it does not commit itself through its theoretical structure to any form and direction of change; in other words, the classical theory is not constrained to permit only some specific changes of the many possible ones as alone consistent with theory. Thus it does not have to presume more than is necessary for the limited objective of determining relative values at one "observed" position of the economic system.<sup>96</sup>

The value of the classical theory of value is seen to be twofold: (1) it emphasizes the primacy of costs of production in determining values; and (2) it does not lead us astray when we study in greater detail the conditions under which exchange takes place in particular cases, for it does not conceal from us the fact that to analyse exchange in particular circumstances it is necessary to go beyond the theory's assumptions.<sup>97</sup>

Roncaglia and Bharadwaj thus see an important methodological difference between neoclassical and neo-Ricardian economics. The neo-Ricardian argument, as represented by Roncaglia and Bharadwaj, is that it is pointless to seek a completely general theory. Roncaglia argues, for example, that marginalist theory is based on the premise that there is "a method which can be used to analyse *all* the relevant aspects of reality".<sup>98</sup> He supports this with a quotation from Samuelson's *Foundations*:

The existence of analogies between central features of various theories implies the existence of a general theory which underlies the particular theories and unifies them with respect to these central features... It is the purpose of the pages that follow to work out [the] implications for theoretical and applied economics [of this fundamental principle of generalization by abstraction].<sup>99</sup>

In marginalist analysis, Roncaglia argues, the givens are consumers' tastes, technology and resource endowments. These, he argues, are "the result of complex social phenomena, which cannot be considered to be independent of the economic phenomena that the marginalists consider to be the object of the analysis".<sup>100</sup> He thus concludes that marginalist theory is not nearly as general as it might appear to be.

Similarly, Bharadwaj criticizes the nature of the interdependence allowed for in supply and demand theories:

the *classical* value problem was worked out in a framework of economic interdependence between production, consumption, distribution and exchanges altogether different from the equilibrium framework where these are interlinked through the market forces of supply and demand.<sup>101</sup>

The issue, Bharadwaj argues, is thus not one of partial versus general equilibrium analysis, but is rather one of whether the interdependence between various aspects of the economic problem can be analysed in terms of a single model. Bharadwaj chooses, for example, to follow Marx's analysis of the relation of production and consumption, seeing "historically evolved production relations" as determining the social norms of consumption.<sup>102</sup> This is interdependence, but not of the type allowed for in marginalist theory.

## 28.5 MARXIAN AND RADICAL ECONOMICS

### *Marxian economics*

During the period covered by this chapter a number of attempts were made to interpret Marxian economics in the light of modern non-Marxist economics, and it is these on which this section will concentrate. Most of the Marxist literature of the period will be neglected, for it is of little relevance to an understanding of developments within the mainstream of economics. Since 1939, however, non-Marxist economists have paid a significant amount of attention to Marx, many of them reaching the conclusion that Marx raised interesting technical issues, and that his attempts at solving these problems, though not always satisfactory, are worth taking seriously. The attention paid to Marx's work was probably at its height in the early 1970s, following the ferment of radical ideas associated with opposition to the Vietnam war. Marxian economics came to be re-evaluated, not merely by young economists who embraced Marxian ideas, but also by economists who remained firmly within the non-Marxian mainstream of economic thought. Symbolic of the change which took place was the change in Samuelson's attitude. In 1962 he described Marx as, "from the viewpoint of pure economic theory, a minor post-Ricardian ... a not uninteresting precursor of Leontief's input-output".<sup>103</sup> In contrast, the view he expressed in 1974 was that, on the basis of his schemes of reproduction, "one can claim immortal fame for Marx".<sup>104</sup> Since the mid 1970s, however, interest in Marxist economics has lessened.<sup>105</sup>

The starting point in modern attempts to evaluate Marx in the light of modern economic theory is Lange's "Marx and modern economic theory" (1935). In this article Lange claimed that Marxian and bourgeois economics were each fitted to answer a different type of question:

let us imagine two persons: one who has learned his economics from the Austrian School, Pareto and Marshall, without ever having seen or even heard a sentence of Marx or his disciples; the other one who, on the contrary, knows his economics exclusively from Marx and the Marxists and does not even suspect that there may have been economists outside the Marxist school. Which of the two will be able to account better for the fundamental tendencies of the evolution of Capitalism? To put the question is to answer it.

But this superiority of Marxian economics is only a partial one. There are some problems before which Marxian economics is quite powerless, while "bourgeois" economics solves them easily. What can Marxian economics say about monopoly prices? What has it to say on the fundamental problems of monetary and credit theory? What apparatus has it to offer for analysing the incidence of a tax, or the effect of a certain technical innovation on wages? And (irony of Fate!) what can Marxian economics contribute to the problem of the optimum distribution of productive resources in a socialist economy?

Clearly the relative merits of Marxian economics and of modern "bourgeois" economic theory belong to different "ranges".<sup>106</sup>

Lange went on to conclude that any superiority of Marxian economics was not due to the economic concepts Marx used, but to "the exact specification of the institutional datum distinguishing Capitalism from the concept of an exchange economy in general".<sup>107</sup> Marxian economics could thus explain and predict the evolution of capitalism. This was true even though the labour theory of value was inadequate for Marx's purposes, being unable to explain prices when the economy was out of equilibrium.<sup>108</sup>

A defence of the classical and Marxian approach to value theory was provided two years later by Dobb (1937), who argued that the choice between a cost theory of value (of which the labour theory is an example) and a subjective theory, was related to the issue of whether or not it was meaningful to talk of a surplus in the economy. According to Dobb, the concept of the surplus was crucial to classical and Marxian political economy, for it provided the basis on which to distinguish between one type of income and another. In classical and Marxian economics it is possible to say that some incomes correspond to a necessary cost of production, and that others correspond to a surplus over this cost. However, in contrast,

in the modern theory of subjective value the very concept of surplus, contrasted with cost, loses any essential meaning, and a criterion for any fundamental distinction between different classes is lacking.<sup>109</sup>

Dobb interpreted the transition from classical to subjective value theory in Marxian terms. According to Marx's theory of ideology,

the abstract ideas which were fashioned from a given society tended to assume a phantom or fetishistic character, in the sense that, being taken as representatives of reality, they came to depict actual society in an inverted or a distorted form. Thereby they served not merely to hide the real nature of society from men's eyes, but to misrepresent it.<sup>110</sup>



Following Marx in dating the significant change from 1830, an interpretation of the historical evidence for which he has, justifiably, been very strongly criticized,<sup>111</sup> Dobb viewed the movement to a subjective value theory in these terms. Through rendering meaningless the concept of the surplus, subjective value theory served, according to Dobb, to disguise the true nature of capitalism.<sup>112</sup>

In 1942 two book-length appraisals of Marxian economics were published: Robinson's *Essay on Marxian Economics* and Sweezy's *The Theory of Capitalist Development*.<sup>113</sup> Sweezy's book was important because it revived interest in the transformation problem, drawing attention to von Bortkeiwicz's solution. Both books viewed Marxian economics sympathetically but critically, appraising it, as had Lange, in the light of modern economic theory. Both Sweezy and Robinson, for example, were critical of Marx's doctrine of the falling rate of profit. In addition, both of them brought Keynesian ideas about under-consumption into their discussions of Marx.

Subsequent attempts to reinterpret Marxian economics have been on rather different lines, a major reason for this being developments in non-Marxian economic theory. The first of these is the development of linear production models of the type used by Leontief. The other was post-war growth theory. It was only after the developments in these two fields that non-Marxian economists possessed a framework within which Marxian economics could be evaluated. Linear models were needed to make sense of Marx's numerical examples relating both to value and to growth. Growth theory was needed in order to understand what Marx was doing in his schemes of reproduction. It was only in the light of modern theories that it became evident that the problems Marx was tackling were worth considering.<sup>114</sup>

It was seen, for example, that Marx's schemes of reproduction had much in common with the approach to growth found in von Neumann's work.<sup>115</sup> This approach to Marx is perhaps most clearly presented in Morishima's *Marx's Economics* (1973), where Morishima argues that Marx started with a multi-commodity model which he wished to aggregate in order to obtain a macroeconomic growth model with only two sectors, namely the model used in volume II of *Capital*. This is an interpretation of Marxian economics that would have been hard to conceive in the absence of post-war discussions of growth and of aggregation in macroeconomic models. To illustrate the way in which such a new interpretation can open up possibilities previously unimaginable, it is worth noting Morishima's conclusion. This is that the labour theory of value has to be abandoned, not for any ideological reason, but because, for various technical reasons, it is unsuitable for the purpose for which it is used. Morishima argued that Marx's model could be repaired by using prices taken from von Neumann instead of labour values. This specific conclusion is far less important than the fact that interpreting Marx, or anyone else for that matter, in a new framework, can make possible radically different attitudes.

Another widely discussed aspect of Marxian economics was the transformation problem, together with the related issues of the labour theory of

value, exploitation and profits. Underlying all these discussions was von Bortkiewicz's solution of the transformation problem, to which Sweezy had drawn attention. Von Bortkiewicz's solution, however, worked only where there were three sectors. For economists familiar with Leontief and von Neumann models it was a simple step to analysing Marx's problem. Thus in 1957 Seton generalized von Bortkiewicz's solution to cover the general,  $n$  sector, case.

A separate influence on the discussion was that of Sraffa, for not only did Sraffa use a Leontief-type technology, but he was also, despite his un-Marxian stress on commodities as being produced by commodities rather than by labour, concerned with issues similar to those with which Marx was concerned. Sraffa was concerned with the relationship between distribution and prices in a way in which Leontief was not. The reason for this was simple: Marx and Sraffa were, in an important sense, Ricardians. Thus where Marx, in his discussions of the labour theory of value, was led to use the concept of an industry in which the organic composition of capital equalled the economy-wide average, Sraffa could use his "standard commodity".<sup>116</sup>

Like those who started from von Neumann, economists whose starting point was Sraffa were also led to reappraise the Marxian system. Steedman (1977), for example, reached the conclusion that

the proximate determinants of the rate of profit, the rate of accumulation, the prices of production, the social allocation of labour etc. are the physical conditions of production, the real wage and the capitalist desire to accumulate.<sup>117</sup>

He went on to argue that, in order to provide a materialist account of capitalist societies it was necessary to investigate the social, economic, political and technical determinants of these proximate determinants. This programme, despite its being thoroughly Marxian rather than neoclassical in its approach, would "involve no reference to Marx's value magnitudes".<sup>118</sup> Steedman claimed that the relationship between exploitation and profits could be understood without recourse to the labour theory of value.

Despite important differences in their attitudes to Marx, both Morishima and Steedman were attempting to keep what they considered the important aspects of Marxian theory by abandoning aspects of his theory, however important they had previously been considered, that would not stand up to criticism.

#### *Radical economics*

The issues discussed above all relate to technical aspects of the Marxian system, its Ricardian component. This should not, however, be taken as implying that the other strand in Marx's thought, the denunciations of the injustices of the capitalist system, stemming from his early writings,<sup>119</sup> have been neglected in recent decades. Important here is what is often known, both by critics and supporters, as "Radical economics".<sup>120</sup> Though Radical

Economics is not the same as Marxian economics, Radical economists comprising some Marxists, some Post-Keynesians, plus others who fit into neither category, its concerns have strong affinities with those of Marxism, especially those of the early Marx.<sup>121</sup> Radical economics is the product of the 1960s, and in particular of the protest movements which centred on opposition to the American role in the Vietnam war.<sup>122</sup> It is to some extent the fact that many Radical economists are held together by a similar political position that accounts for the diversity of views on the technical aspects of economic theory. Though Radical economics extends far beyond this, it is represented by the Union of Radical Political Economy, founded in 1968.

Radical economics has been more than a narrowly academic movement, stressing the importance of political activism, decrying excessive technical specialization, and seeking to widen participation in economic discussion.<sup>123</sup> Its importance here, however, lies in the fact that Radical economists have produced a series of criticisms of conventional economic theory. Lindbeck (1971), an outsider investigating American Radical economics, listed five main criticisms of orthodox economic theory. (1) It avoids discussing the distribution of incomes, wealth and economic power. (2) Taking tastes and resources as given, it is much too restricted in its outlook. (3) It analyses small, marginal changes, rather than large changes which might fundamentally alter the nature of the economic system. (4) It pays too little attention to the "quality" of life. (5) It neglects the interaction of economic with social and political factors.<sup>124</sup> The role of markets and optimizing behaviour is thus played down in favour of a greater stress on the development and role of institutions. Static theorizing in terms of equilibrium models is disparaged.

There is, within Radical economics, an emphasis on inequalities and other undesirable features of the capitalist system, this determining the direction of research. Racial and sexual inequality, and the role of developing countries in exploiting the third world, are thus examples of topics Radical economists consider important. However, whilst Radical economists have made important points concerning the research agenda of mainstream economics, and whilst they have raised important questions concerning some of the assumptions often made in economic theorizing, it is far less clear that they have undermined the mainstream approach. In many areas it is the orthodox approach, of analysing the implications of maximizing behaviour under alternative assumptions, that throws light on the problems raised by Radical economists. Thus the mechanisms linking the incompleteness of labour contracts to unemployment and inflation have been analysed by economists very much within the mainstream; segmented labour markets have been the basis for much Institutionalist labour economics; discrimination has been analysed by Chicago economists, and so on.<sup>125</sup> A strong case can be made out to the effect that some of the most fruitful research has arisen when orthodox, neoclassical methods have been applied to the issues raised by Radical economists, not when orthodox methods have been abandoned.

## 28.6 THE CHICAGO SCHOOL

Even more than any of the "alternative approaches" considered above, the Chicago School is in many ways placed firmly within the mainstream of economic thought. It is however, appropriate to consider it here, for two reasons. The first is to emphasize the differences between Chicago economics and other branches of mainstream economics. The second reason is to point out the difference between Chicago economics and that of the "Austrians", something which is necessary because the two approaches are easily grouped together on the basis of their strongly libertarian positions, and their advocacy of free markets.

The Chicago School is the name usually given to the school, based at Chicago, though not encompassing all economists there, dominated above all by Friedman and Stigler, and before them by Knight, Viner and Simons. A succinct statement of the Chicago view has been provided by Friedman:

In discussions of economic policy "Chicago" stands for belief in the efficiency of the free market as a means of organizing resources, for scepticism about government affairs, and for emphasis on the quantity of money as a key factor in producing inflation.

In discussions of economic science, "Chicago" stands for an approach that takes seriously the use of economic theory as a tool for analyzing a startlingly wide range of concrete problems, rather than as an abstract mathematical structure of great beauty but little power; for an approach that insists on the empirical testing of theoretical generalizations and that rejects alike facts without theory and theory without facts.<sup>126</sup>

To understand the differences between the Chicago view and the alternatives we need to look more closely at the nature of the theory involved. Reder (1982) has argued that Chicago economics is based on what he describes as

the hypothesis that decision makers so allocate resources under their control that there is no alternative allocation such that any one decision maker could have his expected utility increased without a reduction occurring in the expected utility of at least one other decision maker.<sup>127</sup>

In other words, the Chicago view is characterized by the strong presumption that the allocation of resources is Pareto-efficient. To obtain testable empirical hypotheses from this starting point, four supplementary hypotheses are required: (1) most, though not all, agents take prices as being independent of the quantities they wish to buy or sell; (2) the prices at which agents agree to trade are market clearing prices; (3) information is bought and sold in the quantity that makes its price equal its marginal cost; (4) neither government intervention nor monopoly alters prices sufficiently to prevent the prices and marginal products of identical resources from being equalized.<sup>128</sup>

These are viewed as sufficiently good approximations to reality that the predictions of an exact model (i.e. a model containing no random variables)

based on these assumptions can be taken as adequate to explain the behaviour of expected prices and quantities in the real world.<sup>129</sup> Chicago economists have analysed phenomena such as imperfect competition and market failure, but where the existence of such phenomena is established, they are not seen as requiring a shift of emphasis away from the basic competitive model.<sup>130</sup> This approach has proved extraordinarily versatile, proving capable of being applied to an enormous range of issues. Friedman has used it to analyse inflation and unemployment.<sup>131</sup> Stigler has applied it to models of search (such as workers searching for jobs) where information is imperfect.<sup>132</sup> Becker has used it to investigate the allocation of time,<sup>133</sup> and to investigate phenomena seemingly far from economics such as marriage and divorce.<sup>134</sup> Lucas has applied it to the formation of expectations.<sup>135</sup>

Chicago economics has been described, by a critic of both, as being “the extreme vanguard of neoclassicism”.<sup>136</sup> There are, however, very substantial differences between Chicago methodology and that of many mainstream economists. One difference is that much of recent theoretical work on general equilibrium theory has no place within the Chicago framework. Abstract theoretical issues, such as those faced by Arrow, Debreu and their successors, concerning the existence, uniqueness and stability of equilibrium, conflicts with the Chicago criterion of empirical relevance. It is probably such theorizing that Friedman dismisses when he refers to abstract mathematical structures “of great beauty but little power”.<sup>137</sup>

More important, however, is the extreme reluctance of Chicago economists to alter their theory to accommodate observed behaviour which appears inconsistent with the assumption that individuals are optimizing subject to constraints. If the empirical data appear sound, and if the theory cannot be extended to accommodate observed behaviour within an optimizing framework, then the problem is likely to be placed on the research agenda as a researchable anomaly.<sup>138</sup> Thus Chicago economists

are far less willing than others to accept reports of irrational or inefficient behaviour at face value ... and typically seek to discredit or reinterpret such reports so as to protect the basic theory.<sup>139</sup>

In contrast, many non-Chicago economists would not reject an argument simply because it implies a failure to optimize: for them, markets may or may not clear, individuals may or may not be completely rational, and so on.<sup>140</sup>

Because of their shared emphasis on competitive markets, and a common scepticism as to the possibility of using state intervention to improve on the market's allocation of resources, Chicago policy recommendations can sound very similar to “Austrian” ones. The two approaches are, however, very different. Most important, “Austrians” emphasize that the economy will never actually be in equilibrium, merely moving towards it. “Austrians” would thus not share the concern to model behaviour in terms of continuous equilibrium. Attitudes towards the empirical testing of theories are also sharply different, Chicago economists sharing none of the “Aus-



trian" scepticism as to the value of empirical testing.<sup>141</sup> Even Hayek, though accepting a Popperian methodology, remains sceptical as to the extent to which the propositions of economic theory can, in practice, be tested. This contrasts with the Chicago belief that, though there is a strong presumption against accepting empirical evidence which appears to conflict with the "hard core" outlined above, the predictions of economic theory must continually be confronted with empirical evidence. With Mises' methodology there is an even sharper disagreement. A further point is that Chicago shares none of the "Austrian" reluctance to use aggregates. Friedman's stress on the virtues of simple models, for example, leads naturally into a highly aggregated approach such as is characteristic of his investigations into monetary economics.