Chapter 2

Are we all rational, optimising agents?

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Introduction

This chapter focuses on a particular methodological aspect in the history of economic thought, namely how the actions and behaviour of individual economic agents are conceptualised. As discussed in more detail in this chapter, Neoclassical economics is founded on a particular type of methodological individualism (see Box 2.1), which includes the assumption that individuals are rational in their decision-making (see Box 2.2). The behaviour of decision-makers in society, whether they are consumers, firms, or other, are modelled as optimising particular objective functions allegedly leading to socially optimal outcomes. Whilst this Neoclassical conception of individual agents' behaviour is challenged also by some of today's mainstream economists, it nevertheless constitutes the foundation for what has been described as an 'increasingly pluralistic mainstream economics' (Santos, 2011, p. 705), and continues to be one of the central organising principles in most, if not all, microeconomics textbooks.

This chapter commences with a discussion of the notion of rationality embedded in Neoclassical economics. The chapter then contrasts the Neoclassical economics approach to the Classical political economy of Smith and Marx, as well as Veblen and Keynes. Each offers alternative understandings of motives and behaviour of economic agents but in very different ways. This has implications for how one conceives the role of human agency in economic and social change. The chapter closes with a guide to further reading and suggestions for discussion topics.

The method of Neoclassical economics

For the purpose of the discussion in this chapter about how economics conceives of human behaviour and its role in the economy and society, two central methodological features of Neoclassical economics can be highlighted. The first is Neoclassical economics' framing of economic models as choice problems by individual decision makers. This is most explicit in microeconomics, where the behaviour of individual economic actors (or agents) is characterised in the form of constrained optimisation.[2] But the requirement to be consistent within the Neoclassical economic framework has also made macroeconomics conform to its 'microfoundation' so that consumption, savings, demand, unemployment, prices and wages for the economy as whole is also explained on the basis of atomised individual agents' behaviour. This method in Neoclassical economics whereby the whole is explained in terms of its individual parts (members) is called 'methodological individualism' (Milonakis and Fine, 2008, p. 98; see Box 2.1).

In standard microeconomic textbooks, economic agents typically refer to the consumer and the firm. Consumers are modelled to maximise their 'utility' subject to budget constraints, while firms are conceived as maximising profits subject to technological capabilities. The same logical principle, however, has also been extended to model the behaviour of institutions such as trade unions, as well as non-economic actors, such as policy makers, nations and others, giving rise to what Fine terms 'economics imperialism' (see Chapter 5 and Chapter 16). The agents are also often assumed to be independent from one another in 'Robinson Crusoe' fashion, as often referred to in standard microeconomic textbooks. This contrasts with Marx, Veblen and Keynes who, in their different ways, conceived the workings of the economic system not to be reducible to atomised individual decision-making and highlight how the relations between agents are core determinants of economic outcomes (see below).

The second methodological feature of Neoclassical economics is the assumption that economic agents are 'instrumentally rational'. As with individualist methodology (see Box 2.1), rationality is conceptualised in a variety of different ways in social sciences and political economy. The choice theoretic framework in Neoclassical economics is associated with 'instrumental rationality', defined 'as the choice of actions which best satisfy a person's objective' (Hargreaves Heap et al., 1992, p. 4). This implies that individuals can compare the satisfaction or 'utility' gained from different set or 'bundles' of objectives, e.g. baskets of goods purchased by a consumer (see Chapter 5); portfolio of assets and securities invested by an investor; or even political parties and candidates voted in an election.

The rational choice models have also come under scrutiny from within mainstream economics, including by Behavioural economists for whom human decision-making is context-dependent and often shaped by intuitive judgements rather than expected utility based on computation of probabilities. Another extension of the choice theoretical framework in Neoclassical economics has focused on interactions between individuals. Game theory provides a method to model how instrumentally rational individuals act in a situation in which the actions of one affect the welfare of another. Sometimes the agents' interests are in conflict with each other. In other scenarios, agents collude as they enhance their payoffs through cooperation. Typically most games will contain a combination of both. As agents try to predict the reaction of other 'players' in response to their own actions, game theory models scenarios in which individuals' choices may seem contrary to their immediate self-interest (see Box 2.3). While game theory provides a framework for economists to describe choices and decision-making when a number of agents interact, it nevertheless 'impose[s] a remarkably sophisticated (unrealistic?) degree of calculating rationality on the analysis of problems involving social interaction' (Hargreaves Heap et al., 1992, p. 124), and is firmly rooted in the choice theoretic framework of Neoclassical economics.

Finally, the rational choice framework in Neoclassical economics takes for granted that its fundamental logic applies universally across different historical periods and social settings. This is in contrast to Smith, Marx and Veblen discussed below, who, albeit in different ways, postulated that the motives and actions of individuals are socially and historically constructed, and hence endogenous to socio-economic processes and structures.

Box 2.1 Methodological individualism

Many social science and political economic theories adopt individualist methods of various types, placing emphasis on the interests and motives of individuals in understanding economic and social order, including some of the authors discussed in this chapter, as well as others such as David Hume (Infantino, 2014). Indeed, the term 'methodological individualism' is defined and used in various ways (Hodgson, 2007). However, methodological individualism adopted in Neoclassical economics is a specific type in which the explanations of economic and social phenomena are *reduced* to behavioural models of individuals. In its narrow definition, methodological individualism is a method in which 'the *ultimate* unit of analysis is always the individual' (Brennan and Tullock, 1982, p. 225; see also Chapter 6).

In practice, many mainstream economists recognise the role of interactions between individuals which give rise to social order, institutions and structure. Branches of theoretical approaches within the mainstream, including game theory and New

Institutional economics, have emerged in an attempt to legitimise social interactions and institutions, but are still grounded in behaviours of individuals. Also, methodological individualism has penetrated social sciences beyond Neoclassical economics.

Box 2.2 Rationality

As Hodgson (2012, p. 94) notes, rationality is a ‘slippery’ concept as it has multiple and overlapping meanings. Rationality can in everyday parlance simply mean that individuals make reasoned decisions. Developing this thinking, rationality can also be seen as individuals doing ‘the best they can’ in a given situation or set of circumstances (Hodgson, 2012, p. 95). However, whilst these forms of rationality may describe behaviour and even elements of Neoclassical theory, they fail to unpack the decision-making processes in more depth and fail to address a number of questions such as how ‘the best’ is identified, or the way in which decisions are made. In Neoclassical economics, the notion of rationality has a specific and technical element, with ‘strictly’ rational decisions needing to conform to a set of mathematical conditions and assumptions (see Chapters 4, 5 and 6).

Box 2.3 Game theory

The modern approach to game theory is attributed to von Neumann and Morgenstern (1944) and was closely associated with the Rand Corporation in the US with its application to the prospects of intercontinental nuclear warfare (Hargreaves-Heap and Varoufakis, 2004, pp. 49–50). More generally, game theory has been applied to various social interactions in which agents understand that the outcome of their actions will be affected by the actions of others (Hargreaves-Heap and Varoufakis, 2004, pp. 1–2). A famous example is the prisoners’ dilemma, which depicts a hypothetical situation in which two accomplices are held in separate cells (Kreps, 1991, pp. 37–8). The prisoners are told that they will be held for a maximum amount of time permitted without charges being made if the two prisoners do not denounce their colleague. If one of them denounces the other without being denounced, the prisoner who denounced will be released while the other prisoner will receive the maximum sentence permitted by law. If both prisoners denounce each other, both will receive leniency in sentencing. These four possible outcomes are depicted in Table 2.1. The first figure represents the 'payoff' to Prisoner A and the second represents that of Prisoner B.

Table 2.1 The prisoners' dilemma

		Prisoner B: Don't denounce	Prisoner B: Denounce prisoner A
Prisoner A	Don't denounce	5, 5	- 1, 6
	Denounce prisoner B	6, - 1	0, 0

The game depicted in Table 2.1 is set out to show that for a prisoner the best outcome is to denounce their partner but not be denounced him/herself, thus gaining the payoff of 6, while the other has – 1. The second best outcome is for neither prisoner to denounce each other, with the payoff of 5 each. The third best is for both to denounce each other, resulting in the payoff of 0 each. And the worst outcome is to be denounced without denouncing the colleague. In the absence of other considerations or any mechanism for cooperation, the predicted outcome will be for each prisoners to denounce the other, resulting in the 0,0 payoff – this is called the 'dominant strategy' for each.

While there are many variations of games and more complex processes of interaction can be considered, the above illustration demonstrates that game theory is ultimately based on the fundamental assumptions of Neoclassical economics outlined in the text above. Reductionist methodological individualism and instrumental rationality underpin the way in which individual behaviour is understood. In this sense, like the case for Behavioural economics (see below), the question remains as to whether game theory constitutes a fundamental challenge to Neoclassical economics or whether it, instead, constitutes a technical approach that can be accommodated by it.

Behavioural economics

Traditional Neoclassical economics modelling of human behaviour is based on the assumption that self-interested individuals choose to maximise utility with no cognitive limitations in calculating benefits and costs of alternative choices. Over recent decades, Behavioural economics has challenged these assumptions by applying insights from experimental psychology to highlight behavioural deviations from rational choice models.[3] Most notably, Simon (1979) proposed the notion of 'bounded rationality' to emphasise how decision making may not always be optimal due to restriction in the ability to process information. This does not necessarily mean that people are irrational or make decision based on poor reasoning. Rather, Behavioural economics asserts that people tend to act intuitively rather than on the basis of careful computation of expected utility.

Psychologists distinguish between two distinct systems of cognitive processes, in addition to the automatic process of 'perception' (Kahneman, 2012, pp. 20–21)

:

- *System 1* operates automatically and quickly, with little or no effort and no sense of voluntary control.

- *System 2* allocates attention to the effortful mental activities that demand it, including complex computations. The operations of System 2 are often associated with the subjective experience of agency, choice, and concentration.

As outlined in Figure 2.1, Kahneman locates System 1, which is based on intuition, 'between the automatic operations of perception and the deliberate operations of reasoning' (Kahneman, 2003, p. 1452). Like perception, intuitive judgements made through System 1 are fast, automatic and effortless, in contrast to judgements of System 2, which are slow, deliberately controlled and effortful. But System 1 goes beyond response to current stimulation and, like System 2, deals with stored conceptual representations. Due to the limited capacity for mental effort, intuition or requiring relatively less effort, System 1 tends to play a large role in people's decision making. Further, it is argued that Neoclassical economics conflates the two systems of thinking, ascribing individuals the ability to make decisions with the speed of System 1 and the computation power of System 2.

Figure 2.1 Three Cognitive Systems

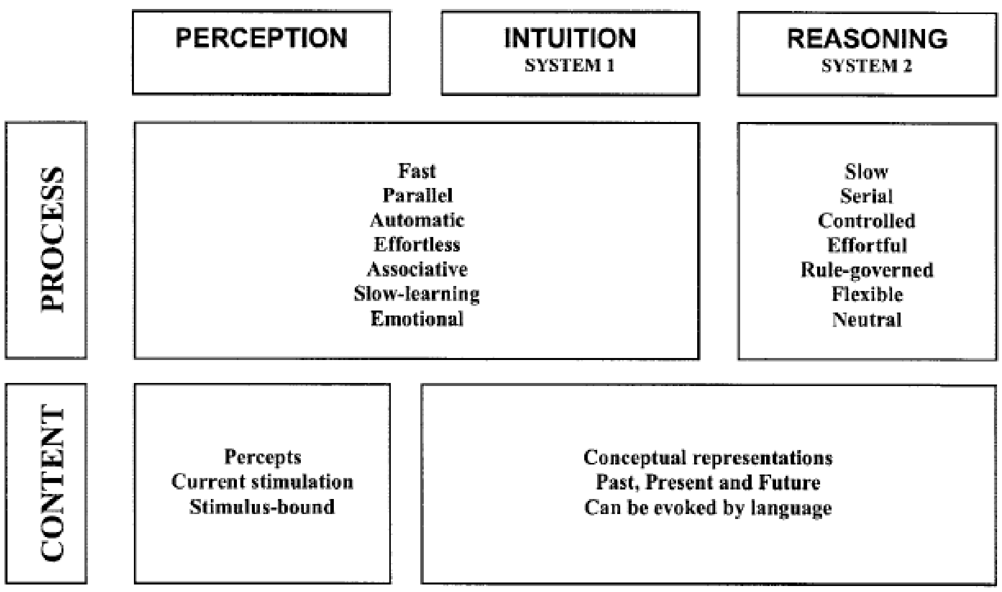

FIGURE 1. THREE COGNITIVE SYSTEMS

Source: (Kahneman, 2003, p. 1451)

Kahneman and Tversky have presented a series of experimental results that undermined the behavioural assumption of instrumental rationality (Kahneman, 2003, 2012; Kahneman and Tversky, 1979; Tversky and Kahneman, 1981). For example, the following two problems were posed to respondents in experimental settings (Kahneman, 2003, pp. 1455–6):

Problem 1:Would you accept this gamble?
    50 percent chance to win $150
    50 percent chance to win $100

Problem 2:
Which would you choose?
    lose $100 with certainty
or
    50 percent chance to win $50
    50 percent chance to lose $200

Despite the expected reward from gambling in the two problems being identical, Kahneman and Tversky found that while most people rejected the gamble in Problem 1, the majority of respondents found the gamble in Problem 2 attractive. Such sudden switch from risk aversion to risk-seeking behaviour cannot be explained by the traditional Neoclassical framework of expected utility function. This observation prompted the authors to propose an alternative theory of risk known as the prospect theory, in which people's *loss*-aversion leads to different preferences for risk aversion/seeking behaviour depending on the perceived potential gains or losses. Their work more broadly asserts that people often act intuitively rather than seek 'optimal' decisions by computing probabilities of all possible outcomes.

Although Simon, Kahneman and Tversky's contributions were seen as a challenge to the fundamental assumptions of Neoclassical economics, the application of Behavioural economics to policy can be seen to ultimately 'retain two fundamental principles of Neoclassical economics—rationality and efficiency' (Santos, 2011, p.

707). The Behavioural economics approach to policy is often described as a 'nudge' – a subtle and 'minor changes to context' that induce individuals to make better choices without addressing underlying structural problems (Fine et al., 2016, p. 642). However, even proponents of Behavioural economics recognise that as opposed to the 'nudge' approach to policy making that derives from Behavioural economics, 'occasionally a good shove advances individual and social welfare considerably' (Loewenstein et al., 2012, p. 24), suggesting that the limitations of this theoretical approach are acknowledged. This raises a question as to whether Behavioural Economics can potentially serve as a radical point of departure from Neoclassical economics and the development of alternative frameworks to replace Neoclassical economics, or merely serves to identify instances in which individuals are not behaving in a strictly rational way in order for these deviations to be 'corrected' through interventions designed to nudge them towards optimal decisions.

Smith, morality and self-interest

Smith is often considered the intellectual founder of today's Neoclassical economics. In particular, Smith is frequently associated with the idea of the invisible hand, which ensures that self-interested private individuals' optimising decisions lead to socially optimal outcomes in spite of their intentions. In a frequently quoted passage from the *Wealth of Nations*, Smith (1776, p. 9) wrote:

> As every individual … endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only

his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. It is an affectation, indeed, not very common among merchants, and very few words need be employed in dissuading them from it.

On the face of it, the above quote appears to imply that individuals following their own self-interest are not only optimising at the individual-level, but also for the society as a whole. Similarly, in another famous passage from the same work, Smith (1776, p. 119) argued that:

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love.

Despite being frequently cited as a rationale for the market mechanism (although Smith never specified that the 'invisible hand' was the market) and individual self-interest as the sole guiding force for the economy, the above two quotes only reflect part of Smith's thinking, and in particular his discussion of 'the motivation underlying exchange (rather than what makes normal exchanges sustainable, such as trust and confidence in each other)' (Sen, 2010, p. 55). Indeed, Smith's writings deal extensively with various motivations beyond self-interest that shape human behaviour, and in this sense differ significantly from today's mainstream economics.

It is worth noting that Smith (like many other political economists at the time) came from the background of moral philosophy, and as such, viewed human behaviour in a more nuanced way than today's mainstream economists. For example, in his earlier work, the *Theory of Moral Sentiments*, Smith (1759, p. 83) recognised that there are broader institutional rules and practices that govern individuals' norms and actions:

> The regard to those general rules of conduct, is what is properly called a sense of duty, a principle of the greatest consequence in human life, and the only principle by which the bulk of mankind re capable of directing their actions. Many men behave very decently, and through the whole of their lives avoid any considerable degree of blame, who yet, perhaps, never felt the sentiment upon the propriety of which we found our approbation of their conduct, but acted merely from a regard to what they saw were the established rules of behaviour .

Underlying these 'established rules of behaviour' is the role of 'sympathy' to other members of society, which restrains individuals' 'self-love' (Smith, 1759, p. 44):

> he must … humble the arrogance of his self-love, and bring it down to something which other men can go along with … In the race for wealth, and honours, and preferments, he may run as hard as he can, and strain every nerve and every muscle, in order to outstrip all his competitors. But if he should justle, or throw down any of them, the indulgence of the spectators is entirely at an end. It is a violation of fair play, which they cannot admit of. This man is to them, in every respect, as good as he: they do not enter into that self-love by which he prefers himself so much to this other, and cannot go along with the motive from which he hurt him. They readily, therefore, sympathize with the natural resentment of the injured, and the offender becomes the object of their hatred and indignation.

He is sensible that he becomes so, and feels that those sentiments are ready to burst out from all sides against him.

The emphasis of sympathy in the *Moral Sentiments* and the focus on self-interest in the *Wealth of Nations* have been highlighted as inconsistent by those in the German Historical School. This gave rise to a debate called the ‘Das Adam Smith’ problem. However, many today regard these two aspects in Smith’s thinking as internally consistent and a coherent part of his theory of human behaviour (Tribe, 2008). Indeed, Smith emphasised that sympathy ‘cannot, in any sense, be regarded as a selfish principle’, and went on to stress the importance of ‘imaginary change of situation’ for individuals to share the perspective of others. Smith (1759, p. 164) outlined this by suggesting that:

When I condole with you for the loss of your only son, in order to enter into your grief I do not consider what I, a person of such a character and profession, should suffer, if I had a son, and if that son was unfortunately to die: but I consider what I should suffer if I was really you, and I not only change circumstances with you, but I change persons and characters. My grief, therefore, is entirely upon your account, and not in the least upon my own.

Smith’s writing has significantly influenced today’s Neoclassical economics, but also shaped some of the contemporary critiques against it. By seeking the behavioural logic in human nature, Smith naturalises the motivations and actions of economic agents, as opposed to Marx and Veblen who have historicised it, albeit in very different ways (see below). Smith may not have reduced all economic and social phenomena to the behaviour of individuals, but many of his writings at least in part reflect a variant of ‘methodological individualism’ (see Box 2.1 and also Milonakis and Fine 2008, p. 109). Nevertheless, authors such as Sen have taken up Smith’s conceptions of human motives and behaviour, as well as of their roles in society, as ways to critique Neoclassical economics. For example, Sen has pointed out that the Neoclassical logic of rational choice outlined above conflates choice with welfare, and ignores motives for individual choice other than self-interest, including sympathy and commitment, an argument closely related to Smith. Sen (1977, pp. 335–336) further pointed out that:

> A person is given *one* preference ordering, and as and when the need arises this is supposed to reflect his interests, represent his welfare, summarize his idea of what should be done, and describe his actual choices and behavior. Can one preference ordering do all these things? A person thus described may be 'rational' in the limited sense of revealing no inconsistencies in his choice behavior, but if he has no use for these distinctions between quite different concepts, he must be a bit of a fool. The purely economic man is indeed close to being a social moron.

Marx, agency and class

Marx's methodology is different from the positivist methodology based on deductive reasoning that characterises Neoclassical economics. For Marx, humans are social animals in the sense that the way individuals act and relate to each other can only be understood in a specific social context, which changes over time. Moreover, Marx identified production and how it develops as the basis of his materialist conception of history. Note that far from economic or technological determinism, production is understood to be at the centre of the system, which simultaneously encompasses social, political and historical processes. From this perspective, individuals are defined by class relations, a collective expression of the whole system of social production, and how a group of persons are identified within it. In the Preface to *Capital Vol. I,* Marx stated that he is dealing with individuals (Marx, 1976, p. 92):

in so far as they are personifications of economic categories, the bearers of particular class-relations and interests. My standpoint, from which the development of the economic formation of society is viewed as a process of natural history, can less than any other make the individual responsible for relations whose creature he remains, socially speaking, however much he may subjectively raise himself above them.

Also, in the Preface to *A Contribution to the Critique of Political Economy*, Marx (1971, p. 5) stated that:

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness.

These passages are often misinterpreted as a technologically deterministic and teleological reading of history in which human agency is reduced to purely reflecting the personifications of economic categories and the laws of motion of economic systems. However, Marx's materialist conception of history need not mean that individuals do not have choices or 'freedom' to act, and indeed individual agencies actively shape material conditions as much as they are shaped by them. Indeed, Marx emphasises how material conditions, which are the result of human activities past and present, constrain agency. This dialectical conception of class is reflected in following quote from the *Eighteenth Brumaire of Louis Bonaparte* (Marx, 1973, p. 146):

> Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past.

In a commodity producing society, there is a class of direct producers and a class of those who appropriate part of the product of the labour of others: what Marx called the ‘surplus value’ (see Chapters 4 and 7). In a capitalist society, this relation takes place, in *essence*, between classes of capital and wage-labour, whereby the former controls the means and conditions of production as well as the product. This *essential* class relation, founded in the production of surplus value, is mediated by a wide range of formal and informal social relations, institutions and practices, and therefore take specific social, political, ideological and cultural expressions, including subjective perceptions about status and positions.

Marx criticised his contemporary political economists for their representation of the economy as consisting merely of voluntary exchange between equal parties, which he labelled the ‘fetishism of the commodity’ (Marx, 1976, p. 163). This criticism of course applies to today’s mainstream economics as well (see Chapter 5). Instead, Marx exposes the structural forces hidden behind the commodity form, which underpin the social relations and compels individuals within their class positions. For Marx, how production or consumption are organised, and hence how people behave, must be explained by examining the structure and historical specificity of the social system, rather than merely understand these outcomes as a result of individual choices and optimisation exercises (however constrained or modified). Patterns of consumption or the nature of the production process are not driven by transhistorical ‘rational human nature’, but are underpinned by how people relate to each other in a particular society at a particular historical moment. Marx’s approach to the role of individuals in society is therefore in sharp contrast to the methodological individualistic and ahistorical rational choice framework of Neoclassical economics.

Veblen and institutions

Veblen is associated with the development of Institutional economics and Evolutionary economics. Unlike today’s New Institutional economics (see Chapters 13 and 15), which has incorporated the methodological individualist rational choice framework, the (Old) Institutional economists of the early twentieth century were critical of Neoclassical economics. Veblen (1898, p. 389) considered prevailing approaches to economics in the late nineteenth and early twentieth centuries to be unsatisfactory in the way they conceived of human actions and their role in social change (see also Chapter 5):

> In all the received formulations of economic theory, whether at the hands of English economists or those of the Continent, the human material with which the inquiry is concerned is conceived in hedonistic terms; that is to say, in terms of a passive and substantially inert and immutably given human nature … The hedonistic conception of man is that of a lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift him about the area, but leave him intact. He has neither antecedent nor consequent. He is an isolated, definitive human datum, in stable equilibrium except for the buffets of the impinging forces that displace him in one direction or another.

Instead, Veblen proposed a conception of human action shaped by habits, traditions, conventions etc.:

> [I]t is the characteristic of man to do something, not simply to suffer pleasures and pains through the impact of suitable forces. He is not simply a bundle of desires that are to be saturated by being placed in the path of the forces of the environment, but rather a coherent structure of propensities and habits which seeks realization and expression in an unfolding activity.

This is not to deny that individuals have desires, but for Veblen (1898, pp. 390–391), these are:

> the products of his hereditary traits and his past experience, cumulatively wrought out under a given body of traditions, conventionalities, and material circumstances; and they afford the point of departure for the next step in the process. The economic life history of the individual is a cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the past process. His methods of life to-day are enforced upon him by his habits of life carried over from yesterday and by the circumstances left as the mechanical residue of the life of yesterday.

The idea that human agency is shaped, not by preferences or rational choice, but rather by aspirations, institutions and culture and so on, is in contrast to the rational choice perspective embedded in Neoclassical economics. Furthermore, Veblen provided a distinctive evolutionary interpretation of social and economic changes, which is in contrast to Marx's material conception of history discussed in the previous section. For Veblen, what explains economic processes are not primarily material changes (say, relations of production or capital accumulation) but rather what he called 'the human material of the industrial community'. The latter was the basis for his evolutionary analysis of society in that (Veblen, 1898, p. 387):

when taken as items in a process of cumulative change or as items in the scheme of life, these productive goods are facts of human knowledge, skill, and predilection; that is to say, they are, substantially, prevalent habits of thought, and it is as such that they enter into the process of industrial development.

Veblen’s objection to human agency ‘rationally’ maximising ‘utility’ is most famously demonstrated in his notion of ‘conspicuous consumption’ (see Chapter 5). In his *Theory of the Leisure Class: An Economic Study in the Evolution of Institutions*, Veblen (1997, p. 24) described the emergence of an upper class in the nineteenth century whose consumption patterns are driven more by the demonstration of their social esteem and power rather than by accumulation of wealth based on individual ‘rational’ behaviour:

the end sought by accumulation is to rank high in comparison with the rest of the community in point of pecuniary strength. So long as the comparison is distinctly unfavourable to himself, the normal, average individual will live in chronic dissatisfaction with his present lot; and when he has reached what may be called the normal pecuniary standard of the community, or of his class in the community, this chronic dissatisfaction will give place to a restless straining to place a wider and ever-widening pecuniary interval between himself and this average standard. The invidious comparison can never become so favourable to the individual making it that he would not gladly rate himself still higher relatively to his competitors in the struggle for pecuniary reputability.

Veblen recognises that material needs for reproduction remain important motives for consumption, although even these are shaped by ‘emulation’ (Veblen, 1997, pp. 24–25):

> The desire for added comfort and security from want is present as a motive at every stage of the process of accumulation in a modern industrial community; although the standard of sufficiency in these respects is in turn greatly affected by the habit of pecuniary emulation. To a great extent this emulation shapes the methods and selects the objects of expenditure for personal comfort and decent livelihood.

Keynes, uncertainty and the macroeconomy

Keynes is considered the founder of modern macroeconomics. Yet Keynes' conception of the macroeconomy was very different from today's Neoclassical macroeconomics seeking 'microfoundations' and also significantly different from some of the subsequent 'reinterpretations' of Keynes (see Chapter 6). In contrast to Neoclassical macroeconomics which interprets society as no more than a sum of its individual members, Keynes insisted that individuals do not act in isolation and that economic agents interact with one another in such way that generates its own dynamics that cannot be reduced to models of atomised agents. This Keynes' critique of Neoclassical economics forms part of the viewpoint known as the 'fallacies of composition', which arises when reasoning and concepts valid at the micro-level is falsely applied to the macro-level. In the move from micro to macroeconomics, reasoning and concepts are transformed due to interdependencies between economic agents. In the Preface to the French Edition of the *General Theory of Employment, Interest and Money*, Keynes (1936, p. xxxii) specified that:

> I am chiefly concerned with the behaviour of the economic system as a whole, — with aggregate incomes, aggregate profits, aggregate output, aggregate employment, aggregate investment, aggregate saving rather than with the incomes, profits, output, employment, investment and saving of particular

industries, firms or individuals. And I argue that important mistakes have been made through extending to the system as a whole conclusions which have been correctly arrived at in respect of a part of it taken in isolation.

A particularly famous demonstration of the fallacy of composition is what was later termed the 'paradox of thrift'. Keynes challenged the so-called 'Say's law' which postulates that each act of supply involves the creation of an equivalent demand for output. The widely received argument during Keynes' time (which remains influential today) was that the mere act of individuals saving 'always involves investment'. In the *General Theory*, Keynes (1936, p. 84) wrote that:

although the amount of his own saving is unlikely to have any significant influence on his own income, the reactions of the amount of his consumption on the incomes of others makes it impossible for all individuals simultaneously to save any given sums. Every such attempt to save more by reducing consumption will so affect incomes that the attempt necessarily defeats itself.

Similarly, in his *Treatise on Money*, Keynes dismissed the 'abstinence' theory in classical economics. He argued that the mere existence of savings from individual 'abstinence is not enough by itself to build cities or drain fens', but instead that '[i]t is enterprise which builds and improves the world's possessions'. He went on to argue that Keynes (1930, pp. 148–149):

For enterprise to be active … there must be an expectation of profit … but their power to put their projects into execution on terms which they deem attractive almost entirely depends on the behaviour of the banking and monetary system.

In general, the 'fallacies of composition' argument calls for the need to understand different levels of economic dynamics and the interdependencies between them. The paradox of thrift outlined above shows that an increase in savings which may be 'optimal' for individual agents can lead to a fall in aggregate expenditure and demand, and further to a decline in output and employment. A similar argument can be made for a fall in wages, which again might mean less cost and expansion of production for an individual firm. But for Keynes, wages do not only represent costs of production, but also income for workers. Since workers with less wages will spend less on consumption, aggregate demand and hence production is likely to contract.

Keynes also rendered probability theory inadequate as a guide to model economic decision-making under uncertainty, in contrast to the Neoclassical approach to risk. He argued that for future changes in the economy 'there is no scientific basis on which to form any calculable probability whatever. We simply do not know'. Having proposed 'a variety of techniques' to 'behave in a manner which saves our faces as rational, economic men', Keynes (1937, p. 214) went on to suggest that they are:

> based on so flimsy a foundation, it is subject to sudden and violent changes. The practice of calmness and immobility, of certainty and security, suddenly breaks down. New fears and hopes will, without warning, take charge of human conduct. The forces of disillusion may suddenly impose a new conventional basis of valuation. All these pretty, polite techniques, made for a well-panelled Board Room and a nicely regulated market, are liable to collapse. At all times the vague panic fears and equally vague and unreasoned hopes are not really lulled, and lie but a little way below the surface.

For Keynes, 'rational, economic men' are not those who maximise expected returns by attaching probability to unknown future events in the Neoclassical sense. Individuals resorting to 'herd behaviour' or aligning their interests with collective behaviour are equally 'rational' in the face of risk and uncertainty. This once again reinforces Keynes' privileging of systemic dynamics in the macroeconomy over the isolated optimising behaviour of atomised individuals.

Conclusion

This chapter has outlined a range of different approaches to understanding human behaviour, contrasting the Neoclassical model, in which individual economic agents make rational, optimising decisions which conform to a strict set of mathematical assumptions, with other approaches originating from Smith, Marx, Veblen and Keynes. The latter emphasise the contextual, moral, cultural, institutional and historical influences over behaviour. Whilst some approaches, such as Behavioural economics, continue to employ some of the concepts and tools of Neoclasscial economics, other approaches take a more radical point of departure to shed light on multiple aspects of behaviour that Neoclassical economics does not address. This can serve to highlight some of the limitations of Neoclassical conceptions of the rational individual as the key building block of economics, as well as alternative ways of thinking about economic decision making and behaviour that may be more relevant in the real world.

Discussion questions and seminar activities

For further engagement, the following topics might be discussed:

Where do preferences come from?

When you go shopping, is your choice based on your self-interest? How about when you vote in an election?

Did you buy a lottery ticket last week? Was your decision based on calculating the odds for the winning prize?

What does it mean to say that 'humans are social animals'? How do different schools of economic thought understand human agency?

Further reading

An excellent summary and critique of the Neoclassical rational choice framework can be found in Hargreaves Heap et al. (1992). Hodgson (2007) is a useful overview of different notions of individualist methodology in the mainstream.

Alternative strands of economic thought are best approached by reading the original text. Concise extracts of key sources are collected in a reader edited by Medema and Samuels (2013). Many of the texts discussed in this chapter are also available online:

- Smith, *The Wealth of Nations*: http://www.econlib.org/library/Smith/smWN.html
- Smith, *The Theory of Moral Sentiments*: http://www.econlib.org/library/Smith/smMS.html
- Marx, *Capital Vol. I*: https://www.marxists.org/archive/marx/works/1867-c1/index.htm
- Marx, *A Contribution to the Critique of Political Economy*: https://www.marxists.org/archive/marx/works/1859/critique-pol-economy/index.htm
- Veblen, *The Theory of the Leisure Class*: http://www.gutenberg.org/ebooks/833
- Keynes, *The General Theory*: http://www.hetwebsite.net/het/texts/keynes/gt/gtcont.htm

Sen (2010, 1977) engages sympathetically with Smith and discusses his legacies in modern debates on rationality in mainstream economics and beyond. Fine and Saad-Filho (2010) provide a concise overview of Marx's methods and political economic analysis. For a discussion on approaches to class analysis with focus on development, see: Campling et al. (2016).

Snowden et. al. (1994) provide an excellent overview of schools of thought in macroeconomics. For a more detailed exposition of Keynes' approach to macroeconomics, see: Trevithick (1992). Heilbroner (2000) offers an engaging account of Keynes' life and thoughts in chapter 9 "The Heresies of John Maynard Keynes".

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[2] Kreps defines microeconomic theory as concerning 'the behaviour of individual economic actors and the aggregation of their action in different institutional frameworks'. He further explains that '[i]n the standard approach, behaviour always takes the form of constrained maximization. The actor chooses from some specified set of options, selecting the option that maximizes some objective function' (Kreps, 1990, pp. 3–5).

[3] It is worth noting that the use of psychology to explain economic behaviours is not new – see e.g. Smith's moral philosophy, as well as Keynes' appeal to the psychology of herd behaviour, both in this chapter.