

## Chapter Outline

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## Learning Objectives

- Understand that macroeconomics analyses the behaviour of aggregates, such as employment, unemployment, GDP and inflation, whereas microeconomics studies the behaviour of individual economic agents, notably households and firms.
- Recognise that macroeconomics is a contested discipline with two broad schools of thought that differ in terms of their perspectives on the effectiveness of markets and the role of government.
- Acknowledge that social science disciplines and physical science disciplines each have their own language in the form of concepts and theories, and these provide the basis for understanding, and not merely describing, relevant phenomena.

### 1.1 What is Economics? Two Views

US President Harry Truman is said to have sought a one-armed economist because he was so frustrated by his economic advisors always telling him, “Well, on the one hand, we could do X, but on the other hand, we could instead do Y” – with ‘Y’ typically being the precise opposite policy to ‘X’.

The story is of course funny, but it does highlight a problem that is ubiquitous to all social sciences. Unfortunately, economics is sometimes relegated to something like the ‘study of business decision making’, or even just a branch of mathematics, a view enabled in part by the heavy use of mathematics and models in much of the discipline. This view of economics as a ‘decision science’ assumes a highly artificial hypothesised world of hyper-rational automatons that consistently act to maximise pleasure and avoid pain. If this were true, of course it would have been easy for Truman’s advisors to have come up with the one ‘right’ policy to follow.

This textbook will instead take a broader perspective of the discipline of economics, by including it within the social sciences. As Truman’s experience illustrates, economics is as difficult as the other social sciences, such as psychology and political science, because it too concerns human behaviour, taking place in a sphere that we designate as ‘the economy’, which itself is hard to define and to delineate from other arenas of human interaction. Since the main topic of the social sciences – human behaviour – is complex, we often do not understand its causes, or even its nature, and much less do we know how to influence it in a desired manner. Even if we know the result we would like to achieve (say, smarter and happier kids), we do not know with certainty which policy choices would produce the desired outcome.

While we may think it is useful to separate ‘the economy’ from the rest of social life, and to apply ‘economics’ to the study of that area of life, we recognise that the division is necessarily arbitrary. In truth, there is no completely separate sphere of ‘economic life’, meaning that economics is linked to, and incorporates findings from, the other social science disciplines.

Further, we want to stress that there is no single ‘right’ way to do economics. In this textbook we will use a variety of methods and approaches to build our understanding of ‘the economy’. We will occasionally bring in research and methods from other disciplines. We will use some mathematics and modelling. Because we believe that economic history, as well as the history of economic thought, helps us to understand today’s economy, we will look back in time, both in terms of economic events and to examine the insights of the great thinkers of the past.

In the rest of this section we will briefly outline the two main approaches to economics taken by those thinkers, as well as by today’s economists. It is always risky to pigeonhole individuals and their theories into categories. Just as a politician in any political party (say, the Labor Party in Australia, or the Republican Party in America) will hold many views that are shared by most members of that party, they will likely also hold some views that are more consistent with those of a rival party. This is true of economists too. Still, it is useful to identify the two broad approaches to economics that have dominated much of the debate over the past two centuries.

Recalling the story about President Truman’s frustration, we can think of the ‘two hands’ of economics as the orthodox, or neoclassical approach, of which a number of related strands have emerged, and the heterodox or Keynesian/Institutionalist/Marxist approach, which also is a ‘broad church’. Let us examine each in turn, while recognising that we must generalise.

#### Orthodox, neoclassical approach

In the neoclassical approach, an important assumption about human nature is made: individuals seek to maximise pleasure and avoid pain. Pleasure is defined as ‘utility’, so individuals pursue utility-maximising behaviour and avoid the ‘disutility’ of pain. Further, rational individuals are self-interested, seeking to maximise their own utility, and they do not receive either utility or disutility from the experiences of others. Neoclassical economics presumes individuals are ‘rational’, meaning that they maximise utility, given constraints. If there were no constraints, neoclassical thinking indicates that individuals would maximise utility to infinity. However, individuals are constrained by the resources that they have at their disposal, which are referred to in neoclassical economics as ‘individual resource endowments’. Mutually beneficial exchange redistributes resources according to preferences, increasing the utility of both parties to the trade.

In the hypothesised free market, exchanges take place at competitively determined relative prices. (Relative prices are ratios; for example: one deer = three beavers = six rabbits = two bushels of wheat = ten hours of labour services.) Participants in markets take relative prices as signals. Relative scarcity will cause the price of a traded commodity to rise, inducing suppliers to produce more of it, and buyers to demand less. For example, if the supply of students trained in economics is insufficient to meet the demand for economists, the relative wage of economists to that of historians, say, rises. This signals to students that they ought to switch from the study of history to the study of economics. At the same time, employers try to find acceptably close – but cheaper – substitutes; say, political science students. As the supply of economists increases, the relative wage advantage for students trained in economics falls. Of course, other factors enter into decisions, but the important point is that relative prices function as signals to both suppliers (economics students) and demanders (employers of economists).



Equilibrium is defined as the set of relative prices that 'clear' markets; a 'general equilibrium' is a complete set of prices to clear all markets. Adam Smith's famous metaphor of an **invisible hand** is invoked to explain how markets are guided toward equilibrium prices. One interpretation of the 'invisible hand' analogy is that by producing market clearing prices, the market provides the signals that guide individuals to maximise their utility while also providing the social or public good of ensuring that demand and supply are equilibrated. To understand the invisible hand idea, we could envision a farmers' market held in the public square on a weekend. The farmers bring their fruits and vegetables early on Saturday morning, advertising the prices at which they are willing to make sales. Over the course of the day, some discover they've set them too low (facing a brisk pace of sales that would deplete their inventory too soon) while others have set them too high. At the same time, consumers adjust their reservation prices (the maximum they will pay for a given quantity/quality) as well as their desired quantities in light of offer prices. Prices are adjusted over the weekend to try to maximise revenue while ensuring the farmers do not have to cart home unsold produce. In this narrative, rational behaviour by producers and consumers will adjust prices so that 'supply equals demand'; that is, all fruits and vegetables have been sold.

The hand is 'invisible', guiding individuals and the economy as a whole toward equilibrium, with no need of an authority. For that reason, there is little need for the government to manage the economy. While it is a bit of an analytical leap, the next step in this 'free market' narrative is to stretch the market analogy to the economy as a whole. Surely if all prices and wages were flexible, every market, including the markets for labour of every kind of skill, would clear, with demand equalling supply in each of the markets? Would it be rational for any individual supplier or demander to stubbornly refuse the guidance provided by the invisible hand? It seems that the overall economy might reach a grand **general equilibrium** with a set of prices and wages (one for each type of product or input to production) that clears every market.

Certainly government has some role to play in setting and enforcing rules, in providing national security, and (perhaps) for providing a social safety net. But according to this interpretation of Smith, there is no need for the government to direct individuals to serve the public interest because by reacting to price signals and pursuing their own interests, individuals actually act in the public interest.

There is one more important conclusion to be reached by neoclassical economics: "you deserve what you get". If we all come to the free market to make mutually beneficial exchanges, we are all seeking to maximise our own individual utility subject to our resource constraints. The equilibrium allocation can be construed as being 'fair'. That does not mean that the allocation is equal. Some will have more (and achieve greater utility) and others will have less but that is because some start with greater endowments (of resources, ability, and drive).

Technically, the idea is that one receives an allocation of resources based on one's own contribution to the market. If your final allocation is low, it is because you did not bring enough to market: perhaps you were born with few resources, you made a constrained choice to obtain little education, and you prefer leisure over work. In other words, you have no one to blame for your meagre allocation but yourself.

To be sure, neoclassical economics also allows for bad luck, congenital disabilities, and so on. Hence, there is a role for social policy to get involved in altering the allocation in order to protect the poorest and least advantaged. However, generally speaking, allocations ought to be left to the market because it will reward each participant according to their productive contributions to the market; a dimension of fairness.

In recent years, the neoclassical approach to economics has been invoked in support of the conservative backlash against post-Second World War economic and social reforms in Western nations. (This movement is generally called 'neoliberal' outside the USA or 'neoconservative' within the USA.) This 'anti-government' stance is closely associated with the terms in office of President Ronald Reagan in the USA and Prime Minister Margaret Thatcher in the UK. When running for President in 1980, Reagan promised to "get the government off the backs of the people", while Thatcher was famous for arguing that there is no such thing as society, reflecting the individualistic framework shared by neoclassical economics.

Downsizing government, and especially reducing the social safety net, is consistent with the view that government only needs to 'get the incentives right', and then the 'free market' will maximise individual welfare while the invisible hand will ensure that signals coming from markets guide individuals to do what is best for the economy as a whole.

While neoliberal/neoconservative policies are most closely associated with conservative political parties, even the moderate and social democratic parties adopted these policies throughout the 1990s and 2000s. For example, US President Clinton (a Democrat) echoed President Reagan's distaste for social welfare programmes when he promised to "end welfare as we know it" in his 1992 election campaign. He eliminated the biggest anti-poverty programme (Aid to Families with Dependent Children) and replaced it with a term-limited programme that tried to force aid recipients to work for their benefits ('workfare' rather than 'welfare').

Outside the USA other left-wing parties such as the Labour Party in the UK pursued similar strategies (such as 'work for the dole'). Many European social democratic parties have overseen the fiscal austerity, privatisation and deregulation that have occurred in the Economic and Monetary Union (the 'Eurozone'). Neoclassical economic theory provided strong justification for these economic and social policy changes as politicians invoked the so-called benefits of a greater reliance on 'market outcomes' while reducing 'government interference' in the workings of the 'invisible hand'.

Since the 1980s, the neoclassical domination of the public debate has been so powerful that most political parties, at least in terms of economic policy, have fallen into step with these ideas. We shall see that many of the policy decisions that were based on an adherence to this school of thought have led to poor outcomes.

Finally, let us turn to the neoclassical definition of economics, as it provides a very nice summary of the approach taken.

**Neoclassical Definition of Economics:** the study of the allocation of scarce resources among unlimited wants.

This definition is often framed as 'the economic problem' – that is, while resources are scarce, our wants are unlimited. The 'problem' is that we cannot ever satisfy our wants. While we all try to 'maximise utility', resource constraints prevent us from ever achieving maximal bliss. For this reason, many call economics 'the dismal science' in recognition of the unsolvable nature of 'the problem'.

Another statement commonly attributed to economists is that "there's no such thing as a free lunch", which also derives from the neoclassical definition of economics. In other words, since resources are scarce, there is always a trade-off. If we move resources from one use to another, we necessarily reduce enjoyment of the first use in favour of enjoyment of the second. For example, if we want to have more 'guns', we must have less 'butter', and if we want to improve the standard of living enjoyed by 'Bob', we must reduce the living standard of 'Jill'.

Strictly speaking, this would be true only at full employment of all resources. However, with the invisible hand guiding the allocation of resources, flexible relative prices ensure that all scarce resources are fully employed. The idea is that prices will always fall until supply equals demand so that no resource is left idle.

Note also that the trade-off might only be temporary. For example, if we move resources out of the production of consumption goods and into the production of investment goods that raise productive capacity, then in the future we can have (produce) more consumer goods. Through economic growth we can increase the level of production so that both 'Bob' and 'Jill' can have more. This does not contradict the admonition that there is no free lunch, however. If we are to have more production in the future, we need to be willing to sacrifice some consumption today.

We will have much more to say about the neoclassical approach later in the text. However, it is time to move on to the alternative approach.

### Heterodox approach – Keynesian/Institutionalist/Marxist

There is a second, important tradition in economics that adopts a quite different framework. Unfortunately, there is no strong consensus about what to call it. Sometimes it is called 'non-orthodox', which appears to define it in opposition to 'orthodox' or neoclassical economics. In recent years, many of those working in this tradition have settled on the term 'heterodox', but that adjective too is usually defined as 'not in agreement with accepted



beliefs'. Yet from the end of the Second World War until the early 1970s, those views now labelled 'heterodox' economics were actually dominant, and it was the 'orthodox' views that could be considered 'unorthodox' in the sense that they were not the majority opinion!

Further, while all orthodox theorists substantially accept the tenets of neoclassical theory, 'heterodoxy' is made up of a number of well-established and coherent economic schools of thought.<sup>1</sup> While these share a common approach, they also deviate from one another in important ways. The three most important of these schools of thought are the Marxist (following the work of Karl Marx), the Institutionalist (following the work of Thorstein Veblen), and the Keynesian (followers of John Maynard Keynes).<sup>2</sup>

What are we to do? In spite of the semantic objections we have raised, we will conform to the convention and call this second approach the heterodox or Keynesian/Institutionalist/Marxist approach. Let us examine their shared framework.

First, according to this approach there is no such thing as 'natural' human behaviour; rather, it is shaped and changed by institutions, culture and society. There is nothing inherently 'natural' about self-interested (or better, 'selfish') behaviour, nor would such behaviour be 'rational' in the neoclassical sense. Humans are social animals and in many cultures, selfish behaviour is punished and selfish individuals are ostracised. Since human survival requires cooperation, selfishness would actually be irrational because losing the support and resources of the group would reduce one's chances of survival. In all known societies, elaborate rituals and traditions have evolved to promote cooperation and even sacrifice for the common good.

Human behaviour varies significantly across societies, and the economic system is one factor that helps to determine appropriate behaviour within any particular society. Self-interested behaviour is more acceptable in some societies than in others. It is not a coincidence that neoclassical economic theory was developed largely in Western capitalist societies, and particularly in the UK. The 'rational' behaviour attributed by neoclassical economists to all humans actually forms a reasonably accurate description of the behaviour of early British capitalists. In the social environment in which they operated, pursuit of their own self-interest without regard to the welfare of others (especially that of their employees) may have increased their probability of success as capitalists. Further, they operated in a hostile political climate in which the Crown and the land-owning aristocracy wanted to protect the dominance of an agrarian economy that favoured them, and to maintain or even increase their own share of the nation's rather feeble output. Government 'intervention' was almost always a bad thing from the perspective of the first capitalists because government operated substantially in the interest of the Crown and the aristocracy.

We will not go into economic history now. What we wish to emphasise is that human behaviour is surprisingly malleable and influenced in a complex manner by custom and tradition.

Furthermore, we cannot know for certain that any action we take is truly 'utility maximising'. Should I buy the Renault or the Mazda motor car? After the decision has been made I might have a better idea of the better choice with the passage of time, but it is more probable that, even a decade down the road, I will not know which would have been best. Obviously, that choice is relatively unimportant and simple compared to most economic choices one must make. In truth, we almost never know whether we made the right decision for 'maximising' utility, even with hindsight.

According to the heterodox approach, decisions and behaviour depend on a range of other factors, including uncertainty, power, discrimination, prejudice and segregation. The range of options that are realistically available to individuals depends on their status, social class, race, religion and gender, for example. These 'noneconomic' factors heavily influence and even constrain our choices.

Heterodox economists of all persuasions reject the notion that economic outcomes are arbitrated by an impersonal market that only seeks to equilibrate 'demand and supply'. In the real world, market prices are largely administered by firms with market power. Wages are set not to 'clear' the labour market, but rather to reflect the outcome of contested bargaining processes between workers and the representatives of capital. Capitalism is a system defined by class conflict. In general, workers want to earn as much as they can for the effort they expend, while bosses want workers to produce as much as they can while paying them as little as possible. And, as will be discussed later, unemployment cannot be eliminated through wage reductions that eliminate excess labour supply; indeed, wage reductions can reduce the demand for labour and thus increase unemployment. More

generally, wages and other prices are not simply signals of the invisible hand, but rather determine incomes and thus influence business sales and decisions going forward. For that reason, price and wage determination are not usually left to the invisible hand of the market.

Heterodoxy holds a different view of the so-called 'economic problem' of scarce resources and unlimited wants. Wants are largely socially created, and there is nothing natural about humans having 'unlimited' wants. While it is true that modern advertising operates to continually expand our desires, this can be countered through education. Further, resources are also largely socially created. While it is true that some natural resources have a limited supply, innovations continually produce substitutes. For example, Western societies faced their first major energy crisis in the 19th century when whalers had significantly reduced the number of whales, the source of whale oil used for lighting and other purposes. However, the production of petroleum and then electricity quickly replaced the need for whale oil.

Moreover, the most important resource in any economy is labour. Ironically, in capitalist economies labour is virtually always in excess supply, that is, many workers are left unemployed. It is ironic that neoclassical economics starts from the presumption that resources are scarce, when the obvious empirical fact is that labour is underutilised. Any theory that begins with the presumption that labour is always fully employed, and hence scarce, is ignoring a glaring inconsistency.

Let us look at the heterodox definition of economics.

**Heterodox Definition of Economics:** the study of social creation and social distribution of society's resources.

Note that unlike the orthodox definition, heterodoxy focuses on the creation of resources. Further, most of that creation is a collective undertaking rather than an individual one: people work together to produce society's resources. Distribution too is socially determined, rather than being determined by a technical relation (one's contribution to the production process). For example, labour unions engage in collective bargaining with their employers, who themselves band together to keep wages low.

The political process is also important in determining distribution; not only does government directly provide income to (employ or support) large segments of society, but it also puts in place minimum wages, benefits, and working conditions that must be met by employers. Government is also a creator of resources; it is not just a user of them. It organises and funds innovative research and development (often in its own labs) that is then used to create resources (frequently by private firms). It also purchases directly from firms, encouraging them to increase hiring and output. Not only do these government activities increase production, but they also affect distribution. This is well understood by voters and their representatives in government because policy creates winners and losers, and not usually in a zero-sum manner. Thus some policies can create more winners while others might create more losers.

Power, discrimination, collusion and cooperation all play a role in determining who gets what. The point is that society does not have to let 'the market' decide that women should be paid less than men for example, or that those with less education should remain jobless and thus poor.

Economics, like all social sciences, is concerned with a society that is complex and continually undergoing change. Since economists study human behaviour in the economic sphere, their task is very difficult. Whatever humans do, they could have done something different. Humans have some degree of free will, and their behaviour is largely based on what they think they ought to do. That in turn depends on their expectations of an unknowable future. They do not know precisely what the outcome of their actions will be, and they do not know what others will do.

Indeed, humans do not know exactly what happened in the past, nor do they fully understand what is happening today. They must interpret the environment in which they live, and realise that they cannot fully understand it. They can never know if they have truly 'maximised' their pleasure. They make plans in conditions of existential uncertainty, and do the best they can, given their circumstances. Their actions are almost always



taken with consideration given to the impacts on others. Humans are above all social animals and that is why economics must be a branch of the social sciences.

### What do economists do?

Like sociologists and political scientists, economists are trying to understand particular aspects of human behaviour; for example decisions about levels and patterns of spending, choices about enrolment in post-school education and types of employment to pursue. We have argued above that all these are influenced by institutions, culture and society, at least as much as they are by 'purely economic' variables such as income, the prices of goods and prospective wage rates for different occupations. In microeconomics our focus is the behaviour of individual consumers and firms, whereas in macroeconomics the focus is the aggregate impacts of these decisions on outcomes at a national level, including total output and employment and the rate of inflation. We elaborate on these definitions of microeconomics and macroeconomics below.

In trying to understand particular forms of economic behaviour, we need to develop theories that require us to decide on those factors that we think influence particular economic decisions. In other words, we need to make simplifying assumptions, which means we necessarily ignore those factors that we consider to be irrelevant. Otherwise we would be trying to replicate the complex reality as we see it; engaging in description rather than theorising.

In the development of theory, we formulate concepts that can be viewed as the building blocks of theory. A model can be seen as the formalisation of a theory (see below). To understand any theory (model), it is important that students comprehend its underlying concepts.

Social scientists seek to test their abstract theoretical models, expressed in the form of conjectures about real world behaviour, using the empirical data that the real world provides. For example, we might form the conjecture that if disposable income (that is, income remaining after the payment of taxes) rises, household consumption will rise. We would then collect the relevant data for disposable income and household consumption and any other information we thought might bear on the relationship and use various statistical tools (for example, regression analysis) to enumerate the relationship between disposable income and household consumption to see whether our conjecture was data consistent.

In engaging in this sort of exercise, the responsible social scientist is not seeking to establish whether the theoretical model is true, because that is an impossible task given there is no way of knowing what the truth is anyway. Instead, we seek to develop theories or conjectures that provide the best correspondence with the empirical world in which we live. This means that our current, accepted body of knowledge comprises theories and conjectures that explain the real world data in the most comprehensive way possible compared to the competing theories.

Further, we can rarely completely refute a theory. As President Truman complained, there are two or more sides to the most important economic questions, so there are competing theoretical approaches yielding different conclusions. Even when a researcher utilises the analysis of relevant data (which often entails the use of econometrics), they can never refute a theory with 100 per cent confidence. Often the acceptance of a theory is driven by ideology and politics, rather than a balanced assessment of the competing theories and associated evidence.

### Implications for research and policy

Many students, like President Truman, find the inability of economists to come up with definitive answers to economic questions to be rather frustrating. Here it is important to emphasise that, like physical sciences and other social sciences, economics is a contested discipline, as illustrated by our brief discussion of the two schools of thought above. Students will be exposed to some other major contemporary debates in macroeconomics in Chapter 31.

If there are long-standing debates in economics (and other disciplines) which appear to be unresolved, how can there be progress in our understanding of economic phenomena? This is an important question because decisions made by macroeconomic policymakers have profound effects on the welfare of the population in terms of, for example, employment opportunities and wages.

## 1.2 Economics and the Public Purpose

The households and business firms in a modern capitalist economy make many of the important economic decisions that contribute to determination of the level of employment and output, the prices and composition of that output and the distribution of income. Claims are sometimes made that a 'free market' economy comprised of individuals seeking only their own self-interest can operate 'harmoniously' as if guided by an 'invisible hand' (see Section 1.1). In fact, economists had rigorously demonstrated by the 1950s that the conditions under which such a stylised economy could reach such a result could not exist in the real world. In other words, there is no scientific basis for the claim that 'free markets' are best.

In any case, these claims – even if true for some hypothesised economy – are irrelevant for the modern capitalist economies that actually exist. This is because all modern capitalist economies are 'mixed', comprising huge corporations (including multinational firms), labour organisations and a significant government relative to the size of the economy. Individuals and firms operate within socio-political and cultural economic structures that are constraining but also enabling.

Sometimes the goals of individuals and firms coincide with what might be called 'the public purpose', while often they do not. In this section we will discuss the public purpose and the role played by government in trying to align private interests with socially progressive goals.

What is the public purpose? It is not easy to define or to identify. One of the basic functions of any social organisation is to provide the necessary food, clothing, shelter, education, health care, legal framework and socialisation for the survival of members of the society.

While the subject of this course is economics, there is no sharp distinction between the sphere of economics and the spheres of other social sciences that study social processes. We usually think of the economy as that part of the social organisation that is responsible for the provision of the material means of survival: food, clothing, shelter and so on. However, the economy is always embedded in the social organisation as a whole, affecting and affected by culture, politics and social institutions.

Even if we can agree that any successful economic organisation should be able to produce adequate food for its population, that still leaves open many questions: What kind of food?; How should it be produced?; How should it be distributed?; and even What does 'adequate' mean?

Further, no society comprises harmonious individuals and groups. There are always conflicting claims and goals that must be moderated. There is no single, obvious public purpose to which all members of a society wish to strive. Even if we can identify a set of goals that the majority of society would like to work toward, that set will surely change over time as hopes and dreams evolve. The public purpose is an evolving concept.

The position taken in this book is that there is no 'invisible hand' that ensures that private interests are consistent with the public purpose. Indeed, the economy is just one component of the social organisation that is necessary to establish the always evolving public purpose and to work towards its achievement.

The 'market' is just one institution among a wide variety of social organisations working to delineate social goals that comprise its social and private purposes. Other institutions include political organisations, labour unions, manufacturers and NGOs (non-governmental organisations).

As we noted at the beginning of this chapter, the national government plays an important role in society because it can help to identify the social purpose and to establish a social structure in which individuals and groups will work toward achieving the public purpose.

While it is admittedly difficult to outline what defines the public purpose, it is possible to identify widely accepted goals. For example, the United Nations Universal Declaration of Human Rights (1948) commits signatory nations to a common set of relatively well-defined goals.

The declaration is outlined on the United Nations Home Page (United Nations, 1948):

*Now, Therefore THE GENERAL ASSEMBLY proclaims THIS UNIVERSAL DECLARATION OF HUMAN RIGHTS as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to*



*secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.*

The Articles that define the Declaration include:

- Everyone has the right to life, liberty and security of person.
- No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.
- Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted them by the constitution or by law.
- Everyone has the right to freedom of movement and residence within the borders of each state.
- Everyone has the right to a nationality.
- Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.
- Everyone has the right to own property alone as well as in association with others.
- Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change their religion or belief, and freedom, either alone or in community with others and in public or private, to manifest their religion or belief in teaching, practice, worship and observance.
- Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.
- Everyone has the right to freedom of peaceful assembly and association.
- Everyone has the right to take part in the government of their country, directly or through freely chosen representatives.
- Everyone has the right of equal access to public service in their country.
- Everyone, as a member of society, has the right to social security and is entitled to realisation, through national effort and international co-operation and in accordance with the organisation and resources of each state, of the economic, social and cultural rights indispensable for their dignity and the free development of their personality.
- Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.
- Everyone, without any discrimination, has the right to equal pay for equal work.
- Everyone who works has the right to just and favourable remuneration ensuring for themselves and their family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.
- Everyone has the right to form and to join trade unions for the protection of their interests.
- Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.
- Everyone has the right to a standard of living adequate for the health and well-being of themselves and of their family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond their control.
- Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
- Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

It is obvious that many of these human rights, especially near to the end of this list, are connected to the operation of the economy. For example, we argued above that any successful economy should provide adequate food, clothing and shelter, and many of the human rights listed in the UN Charter address the material well-being of a nation's population.

Further, other human rights that superficially appear to be unrelated to economic performance actually presuppose fulfilment of other human rights that are themselves directly related to material well-being.

For example, in a modern capitalist economy access to employment (one of the recognised rights) is necessary for full participation in society. Not only does a job provide income that allows one to purchase food, clothing, and shelter, but it also provides access to social networks, generates feelings of self-worth (since one contributes to social production), enhances social prestige and helps to provide for retirement in old age.

Indeed, employment has been shown to have a wide range of other benefits to individuals and to society including better physical and psychological health, reduced crime and drug abuse, lower child and spouse abuse, and greater participation in other social and political activities.

To be sure, the above list (which is itself only a partial listing of the agreed universal rights) includes many rights that have not been fully achieved even in the wealthiest and most democratic nations. In that sense, these rights are 'aspirational', with the signatory nations committing to striving toward achieving them. Again, if we look at the example of the right to work and to an adequate standard of living, those are rights that are routinely violated even in the best of times in the wealthiest of nations. Still, these universally recognised rights provide a measure against which nations can assess their progress.

We conclude with three important points.

First, the public purpose is broad and evolving over time, and for these reasons it varies across time and place. It should include rising living standards, particularly for those on low incomes. Environmental sustainability must be included. The reduction of racial, ethnic, and gender inequalities is an important component of public purpose. This must go beyond simple economic measures such as family income to include full participation in the life of the community. The public purpose also should include reductions of crime, corruption, cronyism, invidious distinction, conspicuous consumption and other social pathologies.

Second, the UN Charter lays out what it sees as 'universal' human rights. This is a useful, but not wholly satisfactory list to be included in a statement of the public purpose. What is considered to be a human right today would have appeared to be radically utopian a century ago; and the above list will no doubt appear far too cautiously conservative at some date in the future.

The public purpose is inherently a progressive agenda that strives to continually improve the material, social, physical, cultural, and psychological well-being of all members of society. It is inherently 'aspirational' in the sense that there is no end because its frontiers will continually expand.

Third, national governments as well as international organisations (such as the United Nations) must play an important role in shaping our vision regarding the types of societies to which we aspire. And beyond setting these goals, governments at all levels must take the lead in developing sets of institutions, rules of behaviour and sanctions for undesirable behaviour in order to move societies toward the achievement of these goals.

As an example, in the 1950s national governments and international organisations started to eliminate the devastating disease known as smallpox. While markets and for-profit production played a role in helping to develop vaccines, in distributing the vaccines, and in formulating information campaigns, private initiative alone would never have eliminated the disease.

The task was too big, it was not completely consistent with self-interested profit-seeking behaviour, and it required international cooperation beyond the reach of even the largest firms.

Hence, governmental organisations had to play a role.

With respect to the aspirational nature of the public purpose, successful elimination of smallpox would not be the end, but rather would serve as the beginning of a new campaign, to eliminate another disease, and then another and yet another.

Perhaps in a long-distant future, a human right to a disease-free life will be recognised, adding to an ever-increasing list of established rights that all nations would be expected to protect.

While we cannot, of course, imagine such a future, it was not so long ago that the US Congress did not recognise the voting rights of women and African Americans. Today, any nation that denies the vote to members of society on the basis of gender, religion, race or ethnicity, or national origin is considered to be in violation of human rights, and thus, to be an international pariah, even though such restrictions were considered acceptable just a few generations ago. For example, white US women over the age of 21 did not secure the vote until the 1920



Presidential election, while in the UK suffrage was extended to all women over the age of 21 in 1928. In Australia Aborigines were granted the right to enrol and vote in federal elections in 1962. Many developed countries that are seen as liberal democracies today did not give women or minorities the vote until well into the 20th century (1971 in the case of Switzerland for instance).

The public purpose is inherently progressive; it can never be finished.

### 1.3 What is Macroeconomics?

In macroeconomics we study the aggregate outcomes of economic behaviour. The word 'macro' is derived from the Greek word 'makro', which means large, as we take an economy-wide perspective.

Thus, macroeconomics is not concerned with analysing how each individual person, household or business firm behaves; that is the domain of the other major branch of economic analysis, *microeconomics*. Macroeconomics focuses on a few outcomes at the aggregate level and is considered to be the study of employment, output and inflation in an international context. A coherent macroeconomic theory will provide consistent insights into how each of these aggregates is determined and why it changes.

In this regard, there are some key macroeconomic questions that we seek to explore:

1. What factors determine the flow of total output produced in the economy over a given period and its growth over time?
2. What factors determine total employment and why does mass unemployment occur?
3. What factors determine the evolution of prices in the economy (inflation)?
4. How does the domestic economy interact with the rest of the world and what are the implications of that interaction?

A central idea in both macroeconomics and microeconomics is efficiency: getting the best out of what is available. The concept is extremely loaded and is the focus of many disputes, some more arcane than others. However, there is a consensus among economists that at the macroeconomic level, the 'efficiency frontier' (which defines the best outcome achievable from an array of possible outcomes) is normally summarised in terms of full employment. The hot debate that has occupied economists for years is the exact meaning of the term 'full employment'. We will consider that issue in full in Chapters 17 and 18.

But definitional disputes aside, it is a fact that the concept of full employment is a central focus of macroeconomic theory. Using the available macroeconomic resources, including labour, to their limits is a key goal of macroeconomics. The debate is over what the actual limit is. The related macroeconomic challenge is how to maintain full employment but at the same time achieve price stability, that is, the growth of prices at a low and stable rate.

The clear point is that if you achieve full employment and price stability then you will be contributing to the prosperity and welfare of the population by ensuring real output levels are high within an environment of stable prices.

This book develops a framework for understanding the key determinants of these aggregate outcomes – the level and growth in output, the rate of unemployment, and the rate of inflation – within the context of what we call a monetary system. All economies use currencies as a way to facilitate transactions. The arrangements by which the currency enters the economy and the role that the currency issuer, the national government, has in influencing the outcomes at the aggregate level are crucial parts of macroeconomics. Modern Monetary Theory (MMT), which is briefly outlined below, develops a macroeconomic framework that incorporates the unique features of the monetary system.

#### The macro model

To organise our thinking about macroeconomic relationships, we use a conceptual structure sometimes referred to in the economics literature as a model; in this case a **macroeconomic model**. A model is just an organising framework and represents a simplification of the system that is being investigated. In this textbook, we will develop a macroeconomic model that combines narrative and some algebra to advance your understanding of

how the real world economy operates. We will necessarily simplify where complexity hinders clarity, but we will always focus on the real world rather than an assumed abstraction that has no relevance to the actual economy.

All disciplines develop their own language as a way of communicating. One might think that this just makes it harder to understand the ideas and we have sympathy for that view. But we also understand how useful it will be for students of a specific discipline, in this case macroeconomics, to be somewhat conversant with the language of the discipline they are studying.

In Chapter 7 – *Methods, Tools and Techniques* – we present the essential analytical techniques and terminology that are used to specify and solve macroeconomic models throughout this book. These tools and techniques are also deployed in the practical exercises that accompany this text and are to be found on the internet home page for the book ([www.macmillanihe.com/mitchell-macro](http://www.macmillanihe.com/mitchell-macro)). Chapter 7 should be consulted regularly.

A macroeconomic model draws on concepts and algebraic techniques to advance our understanding of the main economic aggregates (such as output, employment and price level). This textbook design is unique because it specifically develops the Modern Monetary Theory (MMT) macroeconomic model, which will inform economic policy debates. We introduce that approach in the next subsection.

#### The MMT approach to macroeconomics

Modern Monetary Theory (MMT) is distinguished from other approaches to macroeconomics because it places the monetary arrangements at the centre of the analysis. As we will see, MMT builds on the insights of many economists who have worked in the heterodox tradition. It therefore rejects the main precepts of the orthodox neoclassical approach to macroeconomics. However, because it places an emphasis on monetary arrangements within the capitalist economy, it adds new insights that were not previously available within the heterodox tradition. Learning macroeconomics from an MMT perspective requires you to understand how money 'works' in the modern economy and to develop a conceptual structure for analysing the economy as it actually exists.

By placing government, as the currency issuer, at the centre of the monetary system, the MMT approach immediately focuses on how a government spends, and how that spending influences those aforementioned macroeconomic aggregates that we seek to explain. The framework will first provide a general analysis of government spending that applies to all currency exchange rate systems, before explaining the constraints (policy options) that apply to governments as we move from a flexible exchange rate to a fixed exchange rate system. We will consider how the design of the monetary system impacts on the domestic policy choices open to government and the outcomes of specific policy choices in terms of output, employment and inflation.

The most important conclusion reached by MMT is that the issuer of a currency faces no financial constraints. Put simply, a country that issues its own currency can never run out and can never become insolvent in its own currency. It can make all payments as they come due. For this reason, it makes no sense to compare a sovereign government's finances with those of a household or a firm.

Households and firms are users of the currency; they must obtain the currency in order to make payments as they come due. They must either earn income, or borrow, or sell assets to obtain the currency. They can be forced to default. But the sovereign currency issuer can never run out of its own currency. In later chapters, we will explain how sovereign currency issuers spend and why they can always afford anything that is for sale if it is priced in their own currency.

There is a caveat, however. Even a sovereign currency issuer can tie its own hands. This occurs if the government promises to deliver precious metal (such as gold) or a foreign currency in payment. It is not uncommon for governments to issue debt denominated in foreign currency. This is especially true of developing nations. In this case, they must obtain the foreign currency to service their debts. In the past, many governments promised to exchange their own currencies for gold or silver so, again, they had to obtain the gold or silver to meet these promises. Thus while these governments cannot run out of their *own* currencies, they can certainly run out of precious metal or foreign currencies and then be forced to default *on their promise to make payments in precious metal or foreign currency*.

Many people are unaware that a major historical event occurred in 1971, when US President Nixon abandoned gold convertibility and ended the system of fixed exchange rates that had existed in the Bretton Woods international monetary system since the Second World War. Under that system (as well as under the gold standard



system that had existed since the late 19th century, with breaks for both world wars), currencies were convertible into gold, and exchange rates were fixed to the US dollar. As such, they had to operate their economies in such a manner as to accumulate gold or dollars. This usually meant adopting contractionary fiscal policy as well as maintaining high interest rates to ensure trade surpluses and strong currencies. However, after 1971, most governments floated their currencies and traded them freely on foreign currency markets. Occasionally, central banks would conduct what became known as a 'managed' float where they tried to limit the amplitude of movements that the free float would generate.

It is thus essential to understand the notion of a currency regime, which can range through a continuum from a fixed exchange rate system to a floating exchange rate system with varying degrees of exchange rate management in between. Understanding the way the exchange rate is set is important because it allows us to appreciate the various policy options that a currency-issuing government has in relation to influencing the main objects of our study; employment, output and inflation. It also allows us to deepen our understanding of the policy options available to a government which chooses to use a foreign currency, such as the Member States of the Economic and Monetary Union (the 'Eurozone').

A flexible exchange rate releases monetary policy from defending a fixed parity (exchange rate) against a foreign currency. Fiscal and monetary policy can then concentrate on ensuring domestic spending is sufficient to maintain high levels of employment. A consequence of this is that governments that issue their own currencies need no longer accumulate large reserves of foreign currencies to defend their exchange rates. The reality is that currency-issuing governments such as those of Australia, Britain, Japan and the USA can never run out of money. These governments always have the capacity to spend in their own currencies.

However, most of the analysis appearing in macroeconomics textbooks, which filters into the public debate and underpins the cult of austerity, is derived from 'gold standard' logic and does not apply to modern fiat monetary systems. The economic policy ideas that dominate the current debate are artefacts from the old system, which was abandoned in 1971.

One of the most basic propositions in macroeconomics that MMT emphasises is the notion that at the aggregate level, total spending equals total income and total output. In turn, total employment is related to the total output in the economy. So to understand employment and output determination we need to understand what drives total spending and how that generates income, output and the demand for labour.

In this context, we will consider the behaviour and interactions of the two economic sectors: government and non-government. Then we will unpack the non-government sector into its component sectors: the private domestic sector (consumption and investment) and the external sector (trade and capital flows). In Chapter 4 we analyse in detail the so-called National Accounts, drawing on these broad macroeconomic sectors. This approach is called the *sectoral balance approach*, and builds on the accounting rule that a government deficit (or surplus) must be exactly offset by a surplus (or deficit) in the non-government sector. The non-government sector comprises the private domestic and external sectors. So a more general observation is that the sum of the sectoral balances nets to zero when we consider the government, private domestic and external sectors.

If one sector spends more than its income, at least one of the others must spend less than its income because for the economy as a whole, total spending must equal total receipts or income. While there is no reason why any one sector has to run a balance between its spending and income, the National Accounts framework shows that the system as a whole must. Often though, but not always, the private domestic sector runs a surplus (spending less than its income). This is how it accumulates net financial wealth. Overall private domestic sector saving (or surplus) is a leakage from the overall expenditure cycle that must be matched by an injection of spending from another sector. The current account deficit (the external sector account) is another leakage that drains domestic demand. A current account deficit occurs when the domestic economy is spending more overseas than foreigners are spending in the domestic economy. These concepts are developed in full in Chapter 6.

Here it is useful to differentiate between a stock and a flow. The latter is a magnitude per period of time. For example, spending is always a flow of currency per period (for example, households might have spent \$100 billion dollars in the first three months of 2018). On the other hand, a stock is measured at a point in time. For example, a student's financial wealth could have consisted of a deposit account at a local bank, with a balance of \$1,000 on 1 January 2018. We explain stocks and flows in more detail in Chapters 4 and 6.

The sectoral balances framework shows that a sectoral deficit (a flow per year, say) accumulates as a matter of accounting to a financial debt (a stock). On the other hand, a sequence of sectoral surpluses accumulates to a financial asset, which is also a stock. MMT is thus based on what is known as a stock-flow consistent approach to macroeconomics by which all flows and resulting stocks are accounted for in an exhaustive fashion. The failure to adhere to a stock-flow consistent approach can lead to erroneous analytical conclusions and poor policy design.

From the perspective of fiscal policy choices, an important aspect of the stock-flow consistent approach that will be explained in greater detail in Chapter 6 is that one sector's spending flow equals its income flow plus changes to its financial balance (stock of assets).

This textbook will show that a country can only run a current account deficit if the rest of the world wishes to accumulate financial claims on the nation (financial debt). The MMT framework also shows that for most governments, there is no default risk on government debt, and therefore such a situation is 'sustainable' and should not necessarily be interpreted to be undesirable. Any assessment of the fiscal position of a nation must be taken in the light of the usefulness of the government's spending programme in achieving its national socio-economic goals. This is what Abba Lerner (1943) called the **functional finance** approach. Rather than adopting some desired fiscal outcome (relationship between spending and taxation revenue), a government ought to spend and tax with a view to achieving 'functionally' defined outcomes, such as full employment.

On matters of terminology, we avoid using the term 'budget' to describe the spending and taxation outcomes for the currency-issuing government. Instead, we use the term **fiscal balance**. A government fiscal deficit occurs when its spending exceeds its taxation revenue, whereas a fiscal surplus occurs when government spending is less than its taxation revenue.

The use of the term 'budget' to describe the fiscal balance invokes the idea that the currency-issuing government faces the same financial constraints as a household when it is forming its budget. A careful understanding of the monetary system will make it obvious that the government is not a 'big household'. The government can consistently spend more than its revenue because it creates the currency. Households use the currency issued by the government and must finance their spending. Their access is constrained by the sources of available funds, including income from all sources, asset sales, and borrowings from external parties. Whereas households have to save (spend less than they earn) to spend more in the future, governments can purchase whatever they like, as long as there are goods and services for sale in the currency they issue.

A sovereign government must spend before it can subsequently tax or borrow. A household cannot spend more than its revenue indefinitely because continuously increasing private debt is unsustainable. The budget choices facing a household are thus limited and prevent permanent deficits. A currency-issuing government can never be revenue constrained in a technical sense and can sustain deficits indefinitely without solvency risk. In other words, our own personal budget experience generates no knowledge that is relevant to the consideration of government matters. This alternative narrative, which we present in this book, highlights the special characteristics of the government's currency monopoly.

Fiscal surpluses, which arise when a government's spending is less than the amount it takes out of the economy by way of taxation, do not provide governments with a greater capacity to meet future needs, nor do fiscal deficits erode that capacity. Governments always have the capacity to spend in their own currencies.

In summary, budget surpluses force the non-government sector into deficit and the domestic private sector is forced to accumulate ever-increasing levels of indebtedness to maintain its expenditure. We will explain why this is an unsustainable growth strategy and how eventually the private domestic sector is forced to reduce its risky debt levels by saving more. The resulting drop in non-government spending will reinforce the negative impact of the government fiscal surplus on total spending.

### Fiscal and monetary policy

The two main policy tools that influence what is termed the demand, or spending, side of the economy are monetary and fiscal policy.

Fiscal policy is represented by the spending and taxation choices made by the government (the 'treasury'). The net financial accounting outcomes of these decisions are summarised periodically by announcements of the



government's fiscal position. Fiscal policy is one of the major means by which the government seeks to influence overall spending in the economy and achieve its economic and social objectives.

This textbook will show that a nation will have maximum fiscal space (that is, capacity for government to use its fiscal policy tools of spending and taxation):

- If it operates with a sovereign currency; that is, a currency that is issued by the sovereign government and whose value is not pegged to foreign currencies; and
- If it avoids incurring debt in foreign currencies, or guaranteeing the foreign currency debt of domestic entities (firms, households, and state, province, or city debts).

Under these conditions, the national government can always afford to purchase anything that is available for sale in its own currency. This means that if there are unemployed resources, the government can always put them to productive use through the use of fiscal policy. To put it as simply as possible, this means that if there are unemployed workers who are willing to work, a sovereign government can afford to hire them to perform useful work in the public interest. As we have noted, from a macroeconomic efficiency perspective, a primary aim of public policy is to fully utilise available resources. Under these optimal conditions, the government is not revenue constrained, which means it does not face the financing constraints that a private household or firm faces in framing its expenditure decision.

The central bank in the economy is responsible for the conduct of monetary policy, which typically involves the setting of a short-term policy target interest rate. Since the 2008 global economic crisis the ambit of monetary policy has broadened considerably and these developments will be considered in Chapter 23.

The typical roles of a central bank include not only the conduct of monetary policy via the overnight interbank lending rate, but also operating the interbank clearing mechanism (so that bank cheques clear among banks), acting as lender of last resort (to stop bank runs), and regulating and supervising the banks.

MMT considers the treasury and central bank functions to be part of what is termed the **consolidated government sector**. In many textbooks, students are told that the central bank is independent from government. The MMT macroeconomic model will demonstrate how it is impossible for the central bank to work independently of the treasury if the monetary system is to operate smoothly.

### Policy implications of MMT for sovereign nations

MMT provides a broad theoretical framework based on the recognition that sovereign currency systems are in fact public monopolies *per se*, and that the imposition of taxes coupled with insufficient government spending generates unemployment.

An understanding of this point will be developed to allow the student to appreciate the role that government can play in maintaining its near-universal dual mandates of price stability and full employment. The student will learn that two broad approaches to controlling inflation are available to government in designing its fiscal policy.

Both approaches draw on the concept of a **buffer stock** to control prices. We will examine the differences between the use of:

- Unemployment buffer stocks:** The neoclassical approach, which describes the current policy orthodoxy, seeks to control inflation through the use of high interest rates (tight monetary policy) and restrictive fiscal policy (austerity), and leads to a buffer stock of unemployment. In Chapters 17 and 18, students will learn that this approach is very costly and provides an unreliable target for policy makers to pursue as a means for inflation control; and
- Employment buffer stocks:** Under this approach the government exploits its fiscal capacity, which is inherent in its currency-issuing status, to create an employment buffer stock. In MMT, this is called the **Job Guarantee (JG)** approach to full employment and price stability. This model, which is considered by MMT to be the superior buffer stock option, is explained in detail in Chapter 19.

The MMT macroeconomic framework shows that a superior use of the labour slack necessary to achieve price stability is to implement an employment programme for those who are otherwise unemployed, which both anchors the general price level to the price of employed labour of this (currently unemployed) buffer and can produce useful output with positive supply side effects.

## Conclusion

This chapter has emphasized that economics is a social science that studies “economic life”. We defined the economy as that part of the social organization that is responsible for the provision of the material means of survival: food, clothing, shelter, and so on. However, the economy is always embedded in the social organization as a whole, affecting and affected by its culture.

There is no single ‘right’ way to do economics. Economic theories, as well as economists themselves, can be grouped into two main approaches: the orthodox, Neoclassical approach and the heterodox, Keynesian/Institutionalist/Marxist approach. We will see that public policy recommendations that follow from each of these two approaches are quite different because they are based on very different views as to how the economy works.

The heterodox approach, for example, envisions a more important role for the government to play in ensuring that the economy furthers the public purpose. This chapter discussed widely shared goals of public policy as enumerated in the United Nations Universal Declaration of Human Rights, many of which are related to economic issues such as the right to work.

Finally, the chapter defined the scope of macroeconomics as the study of the aggregate outcomes of economic behaviour. The Modern Money Theory (MMT) approach was introduced and distinguished from other approaches to macroeconomics because it places the monetary arrangements at the centre of the analysis. In particular, **MMT puts emphasis on the sovereign nature of currency and the policy implications that derive from the ability of a national government to issue its own currency**. This is a theme that will be examined throughout this text.

## References

- Lerner, A. (1943) “Functional Finance and the Federal Debt”, *Social Research*, 10 (1), 38–51.
- Samuelson, P. (1947) *Foundations of Economic Analysis*, Cambridge, MA: Harvard University Press.
- United Nations (1948) United Nations Declaration of Human Rights, United Nations General Assembly, 10 December 1948, available at: <http://www.un.org/en/universal-declaration-human-rights/> accessed 15 January 2016.

## Endnotes

1. Note that the approach taken in this text, Modern Money Theory, falls within the heterodox camp. Indeed, it rests upon the foundations of many of the heterodox traditions.
2. A caveat is necessary here. Many of those who call themselves ‘Keynesian’, as well as the approach that is often presented in economics textbooks as ‘Keynesian theory’, are not heterodox. They are much closer to the neoclassical approach. Indeed, one of the founders of orthodox macroeconomic theory, Paul Samuelson (1947), called it the ‘Neoclassical Synthesis’ to indicate that while its foundations are neoclassical, some of Keynes’ ideas are ‘synthesised’ or grafted onto that base. Heterodox followers of Keynes argue that such integration is not possible. We will revisit these issues in more detail in Chapter 27.



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