

CHAPTER 1

Life, the Universe and Everything

WHAT IS ECONOMICS?

What is economics?

A reader who is not familiar with the subject might reckon that it is the study of the economy. After all, chemistry is the study of chemicals, biology is the study of living things, and sociology is the study of society, so economics must be the study of the economy.

But according to some of the most popular economics books of our time, economics is much more than that. According to them, economics is about the Ultimate Question – of ‘Life, the Universe and Everything’ – as in *The Hitchhiker’s Guide to the Galaxy*, the cult comedy science fiction by Douglas Adams, which was made into a movie in 2005, with Martin ‘The Hobbit’ Freeman in the leading role.

According to Tim Harford, the *Financial Times* journalist and the author of the successful book *The Undercover Economist*, economics is about Life – he has named his second book *The Logic of Life*.

No economist has yet claimed that economics can explain the Universe. The Universe remains, for now, the turf of physicists, whom most economists have for centuries been looking up to as their role models, in their desire to make their subject a true science.* But some economists have come close – they have claimed that economics is about ‘the world’. For example, the subtitle of the second volume in Robert Frank’s popular *Economic Naturalist* series is *How Economics Helps You Make Sense of Your World*.

Then there is the Everything bit. The subtitle of *Logic of Life* is *Uncovering the New Economics of Everything*. According to its subtitle, *Freakonomics* by Steven Levitt and Stephen Dubner – probably the best-known economics book of our time – is an exploration of the *Hidden Side of Everything*. Robert Frank agrees, even though he is far more modest in his claim. In the subtitle of his first *Economic Naturalist* book, he only said *Why Economics Explains Almost Everything* (emphasis added).

So, there we go. Economics is (almost) about Life, the Universe and Everything.†

When you think about it, this is some claim coming from a subject that has spectacularly failed in what most non-economists think is its main job – that is, explaining the economy.

In the run-up to the 2008 financial crisis, the majority of the economics profession was preaching to the world that markets are rarely wrong and that modern economics has found ways to iron out those few wrinkles that markets may have; Robert Lucas, the 1995 winner of the Nobel Prize in Economics,* had declared in 2003 that the ‘problem of depression prevention has been solved’.¹ So most economists were caught completely by surprise by the 2008 global financial crisis.† Not only that, they have not been able to come up with decent solutions to the ongoing aftermaths of that crisis.

Given all this, economics seems to suffer from a serious case of megalomania – how can a subject that cannot even manage to explain its own area very well claim to explain (almost) everything?

Economics Is the Study of Rational Human Choice ...

You may think I am being unfair. Aren’t all these books aimed at the mass market, where competition for readership is fierce, and therefore publishers and authors are tempted to hype things up? Surely, you

would think, serious academic discourses would not make such a grand claim that the subject is about ‘everything’.

These titles *are* hyped up. But the point is that they are hyped up in a particular way. The hypes could have been something along the line of ‘how economics explains everything about the economy’, but they are instead along the lines of ‘how economics can explain not just the economy but everything else as well’.

The hypes are of this particular variety because of the way in which the currently dominant school of economics, that is, the so-called Neoclassical school, defines economics. The standard Neoclassical definition of economics, the variants of which are still used, is given in the 1932 book by Lionel Robbins, *An Essay on the Nature and Significance of Economic Science*. In the book, Robbins defined economics as ‘the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses’.

In this view, economics is defined by its theoretical approach, rather than its subject matter. Economics is a study of **rational choice**, that is, choice made on the basis of deliberate, systematic calculation of the maximum extent to which the ends can be met by using the inevitably scarce means. The subject matter of the calculation can be anything – marriage, having children, crime or drug addiction, as Gary Becker, the famous Chicago economist and the winner of 1992 Nobel Prize in Economics, has written about – and not just ‘economic’ issues, as non-economists would define them, such as jobs, money or international trade. When Becker titled his 1976 book *The Economic Approach to Human Behaviour*, he was really declaring without the hype that economics *is* about everything.

This trend of applying the so-called economic approach to everything, called by its critics ‘economics imperialism’, has reached its apex recently in books like *Freakonomics*. Little of *Freakonomics* is actually about economic issues as most people would define them. It talks about Japanese sumo wrestlers, American schoolteachers, Chicago drug gangs, participants in the TV quiz show *The Weakest Link*, real estate agents and the Ku Klux Klan.

Most people would think (and the authors also admit) that none of these people, except real estate agents and drug gangs, have anything to do with economics. But, from the point of view of most economists today, how Japanese sumo wrestlers collude to help each other out or how American schoolteachers fabricate their pupils’ marks to get better job assessments are as legitimate subjects of economics as whether Greece should stay in the Eurozone, how Samsung and Apple fight it out in the smartphone market or how we can reduce youth unemployment in Spain (which is over 55 per cent at the time of writing). To those economists, those ‘economic’ issues do not have privileged status in economics, they are just some of many things (oh, I forgot, some of everything) that economics can explain, because they define their subject in terms of its theoretical approach, rather than its subject matter.

... or Is It the Study of the Economy?

An obvious alternative definition of economics, which I have been implying, is that it is the study of the economy. But what *is* the economy?

The economy is about money – or is it?

The most intuitive answer to most readers may be that the economy is anything to do with money – not having it, earning it, spending it, running out of it, saving it, borrowing it and repaying it. This is not quite right, but it is a good starting point for thinking about the economy – and economics.

Now, when we talk of the economy being about money, we are not really talking about physical money. Physical money – be it a banknote, a gold coin or the huge, virtually immovable stones that were used as money in some Pacific islands – is only a symbol. **Money** is a symbol of what others in your society owe you, or your claim on particular amounts of the society's resources.²

How money and other financial claims – such as company shares, derivatives and many complex financial products, which I will explain in later chapters – are created, sold and bought is one huge area of economics, called financial economics. These days, given the dominance of the financial industry in many countries, a lot of people equate economics with financial economics, but it is actually only a small part of economics.

Your money – or the claims you have over resources – may be generated in a number of different ways. And a lot of economics is (or should be) about those.

The most common way to get money is to have a job

The most common way to get money – unless you have been born into it – is to have a job (including being your own boss) and earn money from it. So, a lot of economics is about **jobs**. We can reflect on jobs from different perspectives.

Jobs can be understood from the point of view of the individual worker. Whether you get a job and how much you are paid for it depends on the skills you have and how many demands there are for them. You may get very high wages because you have very rare skills, like Cristiano Ronaldo, the football player. You may lose your job (or become unemployed) because someone invents a machine that can do what you do 100 times faster – as happened to Mr Bucket, Charlie's father, a toothpaste cap-screw, in the 2005 movie version of Roald Dahl's *Charlie and the Chocolate Factory*.^{*} Or you have to accept lower wages or worse working conditions because your company is losing money thanks to cheaper imports from, say, China. And so on. So, in order to understand jobs even at the individual level, we need to know about skills, technological innovation and international trade.

Wages and working conditions are also deeply affected by 'political' decisions to change the very scope and the characteristics of the labour market (I have put 'political' in quotation marks, as in the end the boundary between economics and politics is blurry, but that is a topic for later – see [Chapter 11](#)). The accession of the Eastern European countries to the European Union has had huge impacts on the wages and behaviours of Western European workers, by suddenly expanding the supply of workers in their labour markets. The restriction on child labour in the late nineteenth century and early twentieth centuries had the opposite effect of shrinking the boundary of the labour market – suddenly a large proportion of the potential employees were shut out of the labour market. Regulations on working hours, working conditions and minimum wages are examples of less dramatic 'political' decisions that affect our jobs.

There are also a lot of transfers of money going on in the economy

In addition to holding down a job, you can get money through **transfers** – that is, by simply being given it. This can be either in the form of cash or 'in kind', that is, direct provision of particular goods (e.g., food) or services (e.g., primary education). Whether in cash or in kind, these transfers can be made in a number of different ways.

There are transfers made by ‘people you know’. Examples include parental support for children, people taking care of elderly family members, gifts from local community members, say, for your daughter’s wedding.

Then there is charitable giving, that is, transfer voluntarily made to strangers. People – sometimes individually sometimes collectively (e.g., through corporations or voluntary associations) – give to charities that help others.

In terms of its quantity, charitable giving is overshadowed in many multiples by transfers made through governments, which tax some people to subsidize others. So a lot of economics is naturally about these things – or the areas of economics known as public economics.

Even in very poor countries, there are some government schemes to give cash or goods in kind (e.g., free grains) to those who are in the worst positions (e.g., the aged, the disabled, the starving). But the richer societies, especially those in Europe, have transfer schemes that are much more comprehensive in scope and generous in amounts. This is known as the **welfare state** and is based on **progressive taxation** (those who earn more paying proportionally larger shares of their incomes in taxes) and **universal benefits** (where everyone, not just the poorest or the disabled, is entitled to a minimum income and to basic services, such as health care and education).

Resources earned or transferred get consumed in goods or services

Once you gain access to resources, whether through jobs or transfers, you consume them. As physical beings, we need to consume some minimum amount of food, clothes, energy, housing, and other **goods** to fulfil our basic needs. And then we consume other goods for ‘higher’ mental wants – books, musical instruments, exercise equipment, TV, computers and so on. We also buy and consume **services** – a bus ride, a haircut, a dinner at a restaurant or even a holiday abroad.³

So a lot of economics is devoted to the study of **consumption** – how people allocate money between different types of goods and services, how they make choices between competing varieties of the same product, how they are manipulated and/or informed by advertisements, how companies spend money to build their ‘brand images’ and so on.

Ultimately goods and services have to be produced

In order to be consumed, these goods and services have to be produced in the first place – goods in farms and factories and services in offices and shops. This is the realm of **production** – an area of economics that has been rather neglected since the Neoclassical school, which puts emphasis on exchange and consumption, became dominant in the 1960s.

In standard economics textbooks, production appears as a ‘black box’, in which somehow quantities of **labour** (work by humans) and **capital** (machines and tools) are combined to produce the goods and services. There is little recognition that production is a lot more than combining some abstract quanta called labour and capital and involves getting many ‘nitty-gritty’ things right. And these are things that most readers may not normally have associated with economics, despite their crucial importance for the economy: how the factory is physically organized, how to control the workers or deal with trade unions, how to systematically improve the technologies used through research.

Most economists are very happy to leave the study of these things to ‘other people’ – engineers and business managers. But, when you think about it, production is the ultimate foundation of any economy. Indeed, the changes in the sphere of production usually have been the most powerful sources of social

change. Our modern world has been made by the series of changes in technologies and institutions relating to the sphere of production that have been made since the Industrial Revolution. The economics profession, and the rest of us whose views of the economy are informed by it, need to pay far more attention to production than currently.

Concluding Remarks: Economics as the Study of the Economy

My belief is that economics should be defined not in terms of its methodology, or theoretical approach, but in terms of its subject matter, as is the case with all other disciplines. The subject matter of economics should be the economy – which involves money, work, technology, international trade, taxes and other things that have to do with the ways in which we produce goods and services, distribute the incomes generated in the process and consume the things thus produced – rather than ‘Life, the Universe and Everything’ (or ‘almost everything’), as many economists think.

Defining economics in this way makes this book unlike most other economics books in one fundamental way.

As they define economics in terms of its methodology, most economics books assume that there is only one right way of ‘doing economics’ – that is, the Neoclassical approach. The worst examples won’t even tell you that there are other schools of economics than the Neoclassical one.

By defining economics in terms of the subject matter, this book highlights the fact that there are many different ways of doing economics, each with its emphases, blind spots, strengths and weaknesses. After all, what we want from economics is the best possible explanation of various economic phenomena rather than a constant ‘proof’ that a particular economic theory can explain not just the economy but everything.

Further Reading

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CHAPTER 2

From Pin to PIN

CAPITALISM 1776 AND 2014

From Pin to PIN

What is the first ever thing written about in economics? Gold? Land? Banking? Or international trade?

The answer is the pin.

Not the one that you use for your credit cards. But that little metal thing that most of you do *not* use – that is, unless you have long hair and like to keep it tidy or make your own clothes.

The making of the pin is the subject of the very first chapter of what is commonly (albeit mistakenly)¹ considered to be the first economics book, namely, *An Inquiry into the Nature and Causes of the Wealth of Nations*, by Adam Smith (1723–90).

Smith starts his book by arguing that the ultimate source of increase in wealth lies in the increase in productivity through greater **division of labour**, which refers to the division of production processes into smaller, specialized parts. He argued that this increases productivity in three ways. First, by repeating the same one or two tasks, workers become good at what they do more quickly (‘practice makes perfect’). Second, by specializing, workers do not have to spend time moving – physically and mentally – between different tasks (reduction in ‘transition costs’). Last, but not least, a finer breakdown of the process makes each step easier to be automated and thus be performed at superhuman speed (mechanization).

And to illustrate this point, Smith discusses how ten people dividing up the production process of making a pin and specializing in one or two of the sub-processes can produce 48,000 pins (or 4,800 pins per person) a day. Compare this to the at most 20 pins each of them can produce a day, Smith pointed out, if each individual worker performed the whole process alone.

Smith called the pin manufacture a ‘trifling’ example and later went on to note how more complicated the divisions of labour for other products are, but there is no denying that he lived in a time when ten people working together to make a pin was still considered cool – well, at least cool enough to front someone’s would-be *magnum opus* in what then was a cutting-edge subject.

The next two and a half centuries have seen dramatic developments in technology, driven by mechanization and the use of chemical processes, not least in the pin industry. Two generations after Smith, the output per worker had nearly doubled. Following Smith’s example, Charles Babbage, the nineteenth-century mathematician who is known as the conceptual father of the computer, studied pin factories in 1832.*² He found that they were producing about 8,000 pins per worker a day. 150 more years of technological progress increased productivity by yet another 100 times, to 800,000 pins per worker per day, according to the 1980 study by the late Clifford Pratten, a Cambridge economist.²

The increase in the productivity of making the same thing, such as the pin, is only one part of the story. Today, we produce so many things that people living in Smith’s time could only dream about, such as the flying machine, or could not even imagine, such as the microchip, the computer, the fibre-optic cable and numerous other technologies that we need in order to use our pin – sorry, PIN.

All Change: How the Actors and the Institutions of Capitalism Have Changed

It is not only production technologies – or how things are made – that have changed between Adam Smith's time and ours. **Economic actors** – or those who engage in economic activities – and **economic institutions** – or the rules regarding how production and other economic activities are organized – have also gone through fundamental transformations.

The British economy in Smith's time, which he called the 'commercial society', shared some fundamental similarities with those that we find in most of today's economies. Otherwise his work would be irrelevant. Unlike most other economies of the time (the other exceptions being the Netherlands, Belgium and parts of Italy), it was already 'capitalist'.

So what is the capitalist economy, or **capitalism**? It is an economy in which production is organized in pursuit of profit, rather than for own consumption (as in **subsistence farming**, where you grow your own food) or for political obligations (as in feudal societies or in socialist economies, where political authorities, respectively aristocrats and the central planning authority, tell you what to produce).

Profit is the difference between what you earn by selling something in the market (this is known as the sales revenue, or simply **revenue**) and the **costs** of all the inputs that have gone into the production of it. In the case of the pin factory, its profit would be the difference between the revenue from selling the pins and the costs that it has incurred in making them – the steel wire that has been turned into pins, the wages for its workers, the rent for the factory building and so on.

Capitalism is organized by capitalists, or those who own **capital goods**. Capital goods are also known as the **means of production** and refer to durable inputs into the production process (for example, machines, but not, say, raw materials). In everyday usage, we also use the term 'capital' for the money invested in a business venture.*

Capitalists own the means of production either directly or, more commonly these days, indirectly by owning **shares** (or **stocks**) in a company – that is, proportional claims on the total value of the company – that own those means of production. Capitalists hire other people on a commercial basis to operate these means of production. These people are known as **wage labourers**, or simply workers. Capitalists make profits by producing things and selling them to other people through the **market**, which is where goods and services are bought and sold. Smith believed that **competition** among sellers in the market will ensure that profit-seeking producers will produce at the lowest possible costs, thereby benefiting everyone.

However, the similarities between Smith's capitalism and today's capitalism do not stretch much beyond those basic aspects. There are huge differences between the two eras in terms of how these essential characteristics – private ownership of means of production, profit-seeking, wage employment and market exchange – are actually translated into realities.

Capitalists are different

In Adam Smith's day, most factories (and farms) were owned and run by single individual capitalists or by partnerships made up of a small number of individuals who knew and understood each other. These capitalists were usually personally involved in production – often physically on the factory floor, ordering their workers about, swearing at them and even beating them up.

Today, most factories are owned and operated by 'unnatural' persons, namely, corporations. These corporations are 'persons' only in the legal sense. They are in turn owned by a multitude of individuals, who buy shares in them and part-own them. But being a shareholder does not make you a capitalist in the

classical sense. Owning 300 of Volkswagen's 300 million shares does not entitle you to fly to its factory in, say, Wolfsburg, Germany and order 'your' workers about in 'your' factory for one-millionth of their working time. Ownership of the enterprise and control of its operations are largely separated in the largest enterprises.

Today's owners in most large corporations have only **limited liabilities**. In a limited liability company (LLC) or a public limited company (PLC), if something goes wrong with the company, shareholders only lose the money invested in their shares and that is that. In Smith's time, most company owners had unlimited liabilities, which meant that when the business failed, they had to sell their own personal assets to pay back the debts, failing which they ended up in a debtors' prison.* Smith was against the principle of limited liability. He argued that those who manage limited liability companies without owning them are playing with 'other people's money' (his phrase, and the title of a famous play and then 1991 movie, starring Danny DeVito) and thus won't be as vigilant in their management as those who have to risk everything they have.

Companies are organized very differently from in Smith's days too, whatever the ownership form. In Smith's day, most companies were small with one production site under a simple command structure made up of a few foremen and ordinary workers, and perhaps a 'caretaker' (which is what the hired manager was called then). Today, many companies are huge, often employing tens of thousands of workers or even millions of them all over the world. Walmart employs 2.1 million people, while McDonald's, including franchises,[†] employs around 1.8 million people. They have complicated internal structures, variously made up of divisions, profit centres, semi-autonomous units and what not, hiring people with complicated job specifications and pay grades within a complex, bureaucratic command structure.

Workers are different too

In Smith's time, most people did *not* work for capitalists as wage labourers. The majority of people still worked in agriculture even in Western Europe, where capitalism was then most advanced.³ A small minority of them worked as wage labourers for agricultural capitalists, but most of them were either small subsistence farmers or **tenants** (those who rent land and pay a proportion of their output in return) of aristocratic **landlords**.

During this era, even many of those who worked for capitalists were not wage labourers. There were still slaves around. Like tractors or traction animals, slaves were means of production owned by capitalists, especially the plantation owners in the American South, the Caribbean, Brazil and elsewhere. It was two generations after the publication of *The Wealth of Nations* (henceforth *TWON*) that slavery was abolished in Britain (1833). It was nearly a century after *TWON* and after a bloody civil war that slavery was abolished in the US (1862). Brazil abolished it only in 1888.

While a large proportion of people who worked for capitalists were not wage labourers, many wage labourers were people who wouldn't be allowed to become wage labourers today. They were children. Few thought that there was anything wrong with hiring children. In his 1724 book *A Tour Through the Whole Island of Great Britain*, Daniel Defoe, the author of *Robinson Crusoe*, expressed his delight at the fact that in Norwich, then a centre for cotton textiles, 'the very children after 4 or 5 years of age could everyone earn their own bread', thanks to the 1700 ban on the import of calicoes, the then prized Indian cotton textile.⁴ Child labour subsequently became restricted and then banned, but that was generations after Adam Smith's death in 1790.

Today, in Britain and other rich countries, the picture is completely different.* Children are not allowed to work, except for limited hours for a limited range of things, such as paper rounds. There are no legal slaves. Of the adult workers, around 10 per cent are **self-employed** – that is, they work for themselves – 15–25 per cent work for the government, and the rest are wage labourers working for capitalists.⁵

Markets have changed

In Smith's time, markets were largely local or at most national in scope, except in key commodities that were traded internationally (e.g., sugar, slaves or spices) or a limited range of manufactured goods (e.g., silk, cotton and woollen clothes). These markets were served by numerous small-scale firms, resulting in the state that economists these days call **perfect competition**, in which no single seller can influence the price. For people from Smith's time, it would have been impossible even to imagine companies hiring over twice the then size of London's population (0.8 million in 1800) operating in territories that outnumber the then British colonial territories (around twenty) by a factor of six (McDonald's operates in over 120 countries).⁶

Today, most markets are populated, and often manipulated, by large companies. Some of them are the only supplier (**monopoly**) or, more typically, one of the few suppliers (**oligopoly**) – not just at the national level but increasingly at the global level. For example, Boeing and Airbus supply close to 90 per cent of world civilian aircrafts. Companies may also be the sole buyer (**monopsony**) or one of the few buyers (**oligopsony**).

Unlike the small companies in Adam Smith's world, monopolistic or oligopolistic firms can influence market outcomes – they have what economists call **market power**. A monopolistic firm may deliberately restrict its output to raise its prices to the point that its profit is maximized (I explain the technical points in [Chapter 11](#) – feel free to ignore them now). Oligopolistic firms cannot manipulate their markets as much as a monopolistic firm can, but they may deliberately collude to maximize their profits by not undercutting each other's prices – this is known as a **cartel**. As a result, most countries now have a **competition law** (sometimes called an **anti-trust law**) in order to counter such **anti-competitive behaviours** – breaking up monopolies (for example, the US government broke up AT&T, the telephone company, in 1984) and banning collusion among oligopolistic firms.

Monopsonistic and oligopsonistic firms were considered to be theoretical curiosities even a few decades ago. Today, some of them are even more important than monopolistic and oligopolistic firms in shaping our economy. Exercising their powers as one of the few buyers of certain products, sometimes on a global scale, companies like Walmart, Amazon, Tesco and Carrefour exercise great – sometimes even defining – influence on what gets produced where, who gets how big a slice of profit and what consumers buy.

Money – the financial system – has also changed⁷

We now take it for granted that countries have only one bank that issues its notes (and coins) – that is, the **central bank**, such as the US Federal Reserve Board or the Bank of Japan. In Europe in Adam Smith's day, most banks (and even some big merchants) issued their own notes.

These notes (or bills, if you are in the US) were not notes in the modern sense. Each note was issued to a particular person, had a unique value and was signed by the cashier issuing it.⁸ It was only in 1759 that

the Bank of England started issuing fixed-denomination notes (the £10 note in this case – the £5 note came only in 1793, three years after Adam Smith died). And it wasn't until two generations after Smith (in 1853) that fully printed notes, with no name of the payee and no signature by issuing cashiers, were issued. But even these fixed-denomination notes were not notes in the modern sense, as their values were explicitly linked to precious metals like gold or silver that the issuing bank possessed. This is known as the **Gold** (or Silver or other) **Standard**.

The Gold (Silver) Standard is a monetary system in which the paper money issued by the central bank is freely exchangeable with a specified weight of gold (or silver). This did not mean that the central bank had to have in reserve an amount of gold equal to the value of the currency that it had issued; however, the **convertibility** of paper money into gold made it necessary for it to hold a very large gold reserve – for example, the US Federal Reserve Board kept gold equivalent to 40 per cent of the value of currency it issued. The result was that the central bank had little discretion in deciding how much paper money it could issue. The Gold Standard was first adopted by Britain in 1717 – by Isaac Newton,* the then head of the Royal Mint – and adopted by the other European countries in the 1870s. This system played a very important role in the evolution of capitalism in the next two generations, but that is a subject for later: see [Chapter 3](#).

Use of banknotes is one thing, but saving with and borrowing from banks – namely, **banking** – is another. This was even less developed. Only a small minority had access to banking. Three-quarters of the French population did not have access to banks until the 1860s – nearly a century after *TWON*. Even in Britain, whose banking industry was far more developed than that of France, banking was highly fragmented, with the interest rates being different in different parts of the country well into the twentieth century.

Stock markets, where company shares (stocks) are bought and sold, had been in existence for a couple of centuries or so by Smith's time. But, given that few companies issued shares (as mentioned above, there was only a small number of limited liability companies), the stock market remained a sideshow to the unfolding capitalist drama. Worse, many people considered stock markets to be little more than gambling dens (some would say they still are). Stock market regulation was minimal and hardly enforced; stockbrokers were not obliged to reveal much information about the companies whose shares they were selling.

Other financial markets were even more primitive. The market for **government bonds**, that is, IOUs that can be transferred to anyone, issued by a government borrowing money (the very market that is at the centre of the Euro crisis that has shaken the world since 2009), existed only in a few countries, such as Britain, France and the Netherlands. The market for **corporate bonds** (IOUs issued by companies) was not very developed even in Britain.

Today, we have a highly developed – some would say over-developed – financial industry. This is made up of not just the banking sector, the stock market and bond markets, but increasingly the markets for financial derivatives (futures, options, swaps) and the alphabet soup of composite financial products like MBS, CDO and CDS (don't worry, I will explain what all these are in [Chapter 8](#)). The system is ultimately backed by the central bank, which acts as the **lender of last resort** and lends without limits during financial crises, when no one else wants to lend. Indeed, the absence of a central bank made the management of financial panic very difficult back in Smith's time.

Unlike in Smith's time, today there are a lot of rules on what actors in the financial market can do – how many multiples of their equity capital they can lend, what kind of information about themselves companies selling shares need to reveal, what kinds of assets different financial institutions are allowed to hold (e.g., pension funds are not allowed to hold risky assets). Despite this, the multiplicity and complexity of financial markets have made their regulation difficult – as we have learned since the 2008 global financial crisis.

Concluding Remarks: Real-world Changes and Economic Theories

As these contrasts show, capitalism has undergone enormous changes in the last two and a half centuries. While some of Smith's basic principles remain valid, they do so only at very general levels.

For example, competition among profit-seeking firms may still be the key driving force of capitalism, as in Smith's scheme. But it is not between small, anonymous firms which, accepting consumer tastes, fight it out by increasing the efficiency in the use of given technology. Today, competition is among huge multinational companies, with the ability not only to influence prices but to redefine technologies in a short span of time (think about the battle between Apple and Samsung) and to manipulate consumer tastes through brand-image building and advertising.

However great an economic theory may be, it is specific to its time and space. To apply it fruitfully, therefore, we require a good knowledge of the technological and institutional forces that characterize the particular markets, industries and countries that we are trying to analyse with the help of the theory. This is why, if we are to understand different economic theories in their right contexts, we need to know how capitalism has evolved. This is the task we turn to in the next chapter.

Further Reading

H.-J. CHANG

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R. HEILBRONER AND W. MILBERG

The Making of Economic Society, 13th edition (Boston: Pearson, 2012).

G. THERBORN

The World: A Beginner's Guide (Cambridge: Polity, 2011).

CHAPTER 4

Let a Hundred Flowers Bloom

HOW TO 'DO' ECONOMICS

‘Any customer can have a car painted any colour that he wants so long as it is black.’

HENRY FORD

‘Let a hundred flowers bloom, let a hundred schools of thought contend.’

MAO ZEDONG

The One Ring to Rule Them All?: The Diversity of Approaches to Economics

Contrary to what most economists would have you believe, there isn’t just one kind of economics – Neoclassical economics. In this chapter, I introduce no less than nine different kinds, or schools, as they are often known.*

These schools are not irreconcilable enemies, however; the boundaries between schools are actually fuzzy.¹ But it is important to recognize that there are distinctive ways of conceptualizing and explaining the economy, or ‘doing’ economics, if you like. And none of these schools can claim superiority over others and still less a monopoly over truth.

One reason is the nature of theory itself. All theories, including natural sciences like physics, necessarily involve abstraction and thus cannot capture every aspect of the complexity of the real world.² This means that no theory is good at explaining everything. Each theory possesses particular strengths and weaknesses, depending on what it highlights and ignores, how it conceptualizes things and how it analyses relationships between them. There is no such thing as one theory that can explain everything better than others – or ‘the one ring to rule them all’,³ if you are a fan of *The Lord of the Rings*.

Added to this is the fact that, unlike things that are studied by natural scientists, human beings have their own free will and imagination. They do not simply respond to external conditions. They try – and often succeed – to change those very conditions by imagining a utopia, persuading others and organizing society differently; as Karl Marx once eloquently put it, ‘[m]en make their own history’.* Any subject studying human beings, including economics, has to be humble about its predictive power.

Moreover, unlike the natural sciences, economics involves value judgements, even though many Neoclassical economists would tell you that what they do is *value-free* science. As I will show in the following chapters, behind technical concepts and dry numbers lie all sorts of value judgements: what is the good life; how minority views should be treated; how social improvements should be defined; and what are morally acceptable ways of achieving the ‘greater good’, however it is defined.⁴ Even if one theory is more ‘correct’ from some political or ethical points of view, it may not be so from another.

Cocktails or the Whole Drinks Cabinet?: How to Read This Chapter

While there is a good reason for the reader to learn about different schools of economics, I accept that being suddenly asked to taste nine different flavours of ice cream when you had thought that there is only plain vanilla can be quite overwhelming.

Even though I simplify things a lot, readers may still find the discussion too complicated. In order to help them, I preface my presentation of each school with a one-sentence summary. These summaries are, of course, far too simplistic, but at least they will help you overcome the initial fear that you are about to walk into a new city without a map, or, rather, a smart phone.

Now, even those who are willing to learn about more than one school may feel that nine schools is six or seven too many. I agree. For them, I offer in the box below a number of ‘cocktails’ made up of two to four different schools, each of which covers particular issues well. Some of these cocktails, such as CMSI or CK, will be like Bloody Mary with a lot of Tabasco sauce, given the disagreements present. Some others, such as MDKI or CMDS, may taste like a Planter’s Punch, with different flavours complementing each other.

My hope is that tasting one or two of those cocktails may even make you want to taste the whole drinks cabinet. Even if you don’t want to go the whole length, tasting one or two of them will still have shown you that there is more than one way to ‘do’ economics.

ECONOMICS COCKTAILS	
<i>Ingredients: A, B, C, D, I, K, M, N and S</i> <i>or</i> Austrian, Behaviouralist, Classical, Developmentalist, Institutional, Keynesian, Marxist, Neoclassical and Schumpeterian.	
On diverging views of the vitality and the viability of capitalism, take CMSI.	If you want to know why we sometimes need government intervention, take NDK.
To discover different ways of conceptualizing the individual, take NAB.	In order to learn that there is a lot more to the economy than markets, take MIB.
If you want to see how groups, especially classes, are theorized, take CMKI.	To study how technologies develop and productivities rise, take CMDS.
To understand economic systems, rather than just their components, take MDKI.	If you want to find out why corporations exist and how they work, take SIB.
If exploring how individuals and society interact is your thing, take ANIB.	For debates surrounding unemployment and recession, take CK.
For various ways of defending the free market, take CAN.	
<i>Health warning: On no account drink only one ingredient – liable to lead to tunnel vision, arrogance and possibly brain death.</i>	

One-sentence summary: *The market keeps all producers alert through competition, so leave it alone.*

Today, the Neoclassical school dominates. As you will have guessed, there was Classical economics before Neoclassical economics, of which the latter is the supposed heir (although the Marxist school has an equally good claim to be its heir, as I shall explain).

The Classical school of economics – or, rather the Classical school of **political economy**, as the subject was then called – emerged in the late eighteenth century and dominated the subject until the late nineteenth century. Its founder is Adam Smith (1723–90), who we have discussed already. Smith's ideas were further developed in the early nineteenth century by three near-contemporaries – David Ricardo (1772–1823), Jean-Baptiste Say (1767–1832), and Robert Malthus (1766–1834).

The invisible hand, Say's Law and free trade: the key arguments of the Classical school

According to the Classical school, the pursuit of self-interests by individual economic actors produces a socially beneficial outcome, in the form of maximum national wealth. This paradoxical outcome is made possible by the power of competition in the market. In their attempts to make profits, producers strive to supply cheaper and better things, ultimately producing their products at the minimum possible costs, thus maximizing national output. This idea is known as the **invisible hand** and has become arguably the most influential metaphor in economics, although Smith himself used it only once in *The Wealth of Nations* (*TWON*) and did not accord it a prominent role in his theory.*

Most Classical economists believed in the so-called Say's Law, which states that supply creates its own demand. The reasoning was that every economic activity generates incomes (wages, profits, etc.) equivalent to the value of its output. Therefore, it was argued, there can be no such thing as a recession due to a shortfall in demand. Any recession had to be due to exogenous factors, such as a war or the failure of a major bank. Since the market was incapable of naturally generating a recession, any government attempt to counter it, say, through deliberate deficit spending, was condemned as disturbing the natural order. This meant that recessions that could have been cut short or made milder became prolonged in the days of Classical economics.

The Classical school rejected any attempt by the government to restrict the free market, say, through protectionism or regulation. Ricardo developed a new theory of international trade, known as the theory of **comparative advantage**, further strengthening the argument for free trade. His theory showed that, under certain assumptions, even when a country cannot produce any product more cheaply than another country can, free trade between them will allow both to maximize their outputs. They can achieve this by specializing in, and exporting, products in which they have *comparative* advantage – those with the largest relative cost advantages in the case of the more efficient country and those with the smallest relative cost disadvantages in the case of the less efficient country.*

The Classical school viewed the capitalist economy as being made up of 'three classes of the community', in Ricardo's words – that is, capitalists, workers and landlords. The school, especially Ricardo, emphasized that it is in the long-term interest of everyone that the greatest share of national income go to the capitalist class (that is, profits), because it is the only class that invests and generates economic growth; the working class was too poor to save and invest, while the landlord class was using its income (rents) on 'unproductive' luxury consumption, such as the employment of servants. According to Ricardo and his followers, the growing population in Britain was forcing the cultivation of increasingly

lower-quality land, constantly raising the rents for existing (higher-quality) land. This meant that the share of profit was gradually falling, threatening investment and growth. His recommendation was to abolish the protection for grain producers (called the Corn Laws in Britain at the time) and import cheaper food from countries where good-quality land was still available, so that the share going to profits, and thus the ability of the economy to invest and grow, could be raised.

Class analysis and comparative advantage: the Classical school's relevance for today

Despite being an old school with few current practitioners, the Classical school is still relevant for our time.

The notion of the economy as being made up of classes, rather than individuals, allows us to see how an individual's behaviour is strongly affected by her place in the system of production. The fact that marketing companies still use class categories in devising their strategies suggests that class is still a very relevant category, even though most academic economists may not use the concept or even actively deny its existence.

Ricardo's theory of comparative advantage, while having clear limitations as a static theory that takes a country's technologies as given, is still one of the best theories of international trade. It is more realistic than the Neoclassical version, known as the Heckscher-Ohlin-Samuelson theory (henceforth HOS), which is today the dominant version.* In HOS, it is assumed that all countries are technologically and organizationally capable of producing everything. They choose to specialize in different products only because different products use different combinations of capital and labour, whose relative endowments differ across countries. This assumption leads to unrealistic conclusions: if Guatemala isn't producing things like BMWs, it is not because it cannot but because it is not economical to do so, given that their production uses a lot of capital and little labour, when Guatemala has a lot of labour and little capital.

Sometimes wrong, sometimes outdated: limitations of the Classical school

Some of the theories of the Classical school were simply wrong. The school's adherence to Say's Law made it incapable of dealing with **macroeconomic** problems (namely, problems that are to do with the overall state of the economy, such as recession or unemployment). Its theory of the market at the **microeconomic** level (namely, the level of individual economic actors) was also severely limited. It did not have the theoretical tools to explain why unrestrained competition in the market might not produce socially desirable outcomes.

Some Classical theories, even if not wrong in the logical sense, have limited applicability today because they were designed for a world very different from ours. A lot of 'iron laws' of Classical economics turned out to be no such things. For example, the Classical economists thought that population pressure would raise agricultural rents and squeeze industrial profits to such an extent that investment might cease, because they did not – and could not – know how much the technologies for food production and birth control would develop.

The Neoclassical School

One-sentence summary: *Individuals know what they are doing, so leave them alone – except when markets malfunction.*

The Neoclassical school arose in the 1870s, from the works of William Jevons (1835–82) and Leon Walras (1834–1910). It was firmly established with the publication of Alfred Marshall's *Principles of Economics* in 1890.

Around Marshall's time, Neoclassical economists also succeeded in changing the name of the discipline from the traditional 'political economy' to 'economics'. The change signalled that the Neoclassical school wanted its analysis to become a pure science, shorn of political (and thus ethical) dimensions that involve subjective value judgements.

Demand factors, individuals and exchanges: differences with the Classical school

The Neoclassical school claimed to be the intellectual heir of the Classical school but felt itself to be sufficiently different to attach the prefix 'Neo'. The key differences are as follows.

It emphasized the role of demand conditions (derived from the subjective valuation of products by consumers) in the determination of the value of a good. Classical economists believed that the value of a product is determined by supply conditions, that is, the costs of its production. They measured the costs by the labour time expended in producing it – this is known as the **labour theory of value**. Neoclassical economists emphasized that the value (which they called the price) of a product also depends on how much the product is valued by potential consumers; the fact that something is difficult to produce does not mean that it is more valuable. Marshall refined this idea by arguing that demand conditions matter more in determining prices in the short run, when supply cannot be changed, while supply conditions matter more in the long run, when more investments (disinvestments) can be made in facilities to produce more (less) of what is demanded more (less).

The school conceptualized the economy as a collection of rational and selfish individuals, rather than as a collection of distinct classes, as the Classical school did. The individual as envisaged in Neoclassical economics is a rather one-dimensional being – a 'pleasure machine', as he was called, devoted to the maximization of pleasure (**utility**) and the minimization of pain (**disutility**), usually in narrowly defined material terms. As I shall discuss in [Chapter 5](#), this severely limits the explanatory power of Neoclassical economics.⁵

The Neoclassical school shifted the focus of economics from production to consumption and exchange. For the Classical school, especially Adam Smith, production was at the heart of the economic system. As we saw in [Chapter 2](#), Smith was deeply interested in how the changes in the organization of production were transforming the economy. He had a view of history in which societies develop in stages according to the dominant form of production – hunting, pastoralism, agriculture and commerce (this idea was further developed by Karl Marx, as I shall discuss below). In contrast, in Neoclassical economics, the economic system is essentially envisaged as a web of exchanges, ultimately driven by choices made by 'sovereign' consumers. There is little discussion of how actual processes of production are organized and changed.

Self-interested individuals and self-equilibrating markets: similarities with the Classical school

Despite these differences, the Neoclassical school inherited and developed two central ideas of the Classical school. The first is the idea that economic actors are driven by self-interest but that the competition in the market ensures that their actions collectively produce a socially benign outcome. The other is the idea that markets are self-equilibrating. The conclusion is, as in Classical economics, that

capitalism – or, rather, the market economy, as the school prefers to call it – is a system that is best left alone, as it has a tendency to revert to the equilibrium.

This laissez-faire conclusion of the Neoclassical school was further intensified by a critical theoretical development in the early twentieth century, intended to allow us to judge social improvements in an objective way. Vilfredo Pareto (1848–1923) argued that, if we respect the rights of every sovereign individual, we should consider a social change an improvement only when it makes some people better off without making anyone worse off. There should be no more individual sacrifices in the name of the ‘greater good’. This is known as the **Pareto criterion** and forms the basis for all judgements on social improvements in Neoclassical economics today.⁶ In real life, unfortunately, there are few changes that hurt no one; thus the Pareto criterion effectively becomes a recipe to stick to the status quo and let things be – laissez faire. Its adoption thus imparted a huge conservative bias to the Neoclassical school.

The anti-free-market revolution: the market failure approach

Two theoretical developments in the 1920s and the 1930s severed the apparently unbreakable link between Neoclassical economics and the advocacy of free-market policies. After these developments, it has become impossible to equate Neoclassical economics with free-market economics, as some people still mistakenly do.

The more fundamental of these was the birth of welfare economics, or the **market failure approach**, developed by Cambridge professor Arthur Pigou in the 1920s. Pigou argued that there are occasions when market prices fail to reflect the true social costs and benefits. For example, a factory may pollute air and water because air and water have no market prices and thus it can treat them as free goods. But as a result of such ‘over-production’ of pollution, the environment is destroyed, and the society suffers.

The problem is that the effects of some economic activities are not priced in the market and thus not reflected in economic decisions – this is known as an **externality**. In this case, it would be justified for the government to make the factory, which is said to create a **negative externality**, pollute less through pollution taxes or regulations (e.g., a fine on excessive release of effluents). Conversely, there may be activities that have a **positive externality**. An example may be research and development (or R&D) activities by a company. By generating new knowledge that can be used by others, R&D creates more value than what accrues to the company conducting it. On this occasion, the government would be justified to pay subsidies to anyone who does R&D so that there would be more of it. Subsequently, other types of market failure were added to Pigou’s externality, as I will discuss in [Chapter 11](#).

A more minor yet important modification came in the 1930s, in the form of the **compensation principle**. The principle proposes that a change may be deemed a social improvement even when it violates the Pareto criterion (in the sense of there being some losers), if the total gains for the gainers are large enough to compensate all the losers and still leave something behind. By allowing them to endorse a change that may hurt some people (but can fully compensate for their damages), the compensation principle has allowed Neoclassical economists to avoid the ultra-conservative bias of the Pareto criterion. Of course, the trouble is that the compensation is rarely made in reality.*

The counter-revolution: the renaissance of the free-market view

With these modifications, there was no reason for the Neoclassical school to remain committed to free-market policies any more. Indeed, between the 1930s and the 1970s, many Neoclassical economists were *not* free-market economists. The current state of affairs in which the predominant majority of

Neoclassical economists are of free-market leaning is actually due more to the shift in political ideology since the 1980s than to the absence or the poor quality of theories within Neoclassical economics identifying the limits of the free market. If anything, the arsenal for Neoclassical economists who reject free-market policies has been expanded since the 1980s by the development of **information economics**, led by Joseph Stiglitz, George Akerlof and Michael Spence. Information economics explains why **asymmetric information** – the situation in which one party to a market exchange knows something that the other does not – makes markets malfunction or even cease to exist.⁷

However, since the 1980s, many Neoclassical economists have also developed theories that go so far as to deny the possibility of market failures, such as the ‘rational expectation’ theory in macroeconomics or the ‘efficient market hypothesis’ in financial economics, basically arguing that people know what they are doing and therefore the government should leave them alone – or, in technical terms, economic agents are rational and therefore market outcomes efficient. At the same time, the **government failure** argument was advanced, to argue that market failure in itself cannot justify government intervention because governments may fail even more than markets do (more on this in [Chapter 11](#)).

Precision and versatility: the strengths of the Neoclassical school

The Neoclassical school has some unique strengths. Its insistence on breaking phenomena down to the individual level gives it a high degree of precision and logical clarity. It is also versatile. It may be very difficult for someone to be a ‘right-wing’ Marxist or a ‘left-wing’ Austrian, but there are many ‘left-wing’ Neoclassical economists, such as Joseph Stiglitz and Paul Krugman, as well as very ‘right-wing’ ones, like James Buchanan and Gary Becker. To exaggerate only slightly, if you are clever enough, you can justify any government policy, any corporate strategy, or any individual action with the help of Neoclassical economics.

Unrealistic individuals, over-acceptance of the status quo and neglect of production: limitations of the Neoclassical school

The Neoclassical school has been criticized for assuming too strongly that people are selfish and rational. From soldiers selflessly taking bullets for their comrades to highly educated bankers and economists believing in the fairy tale of never-ending financial boom (until 2008), there is simply too much evidence against this assumption (see [Chapter 5](#) for details).

Neoclassical economics is too accepting of the status quo. In analysing individual choices, it accepts as given the underlying social structure – the distribution of money and power, if you will. This makes it look at only choices that are possible without fundamental social changes. For example, many Neoclassical economists, even the ‘liberal’ Paul Krugman, argue that we should not criticize low-wage factory jobs in poor countries because the alternative may be no job at all. This is true, *if* we take the underlying socio-economic structure as given. However, once we are willing to change the structure itself, there are a lot of alternatives to those low-wage jobs. With new labour laws that strengthen worker rights, land reform that reduces the supply of cheap labour to factories (as more people stay in the countryside) or industrial policies that create high-skilled jobs, the choice for workers can be between low-wage jobs and higher-wage ones, rather than between low-wage jobs and no jobs.

The Neoclassical school’s focus on exchange and consumption makes it neglect the sphere of production, which is a large – and the most important, according to many other schools of economics – part of our economy. Commenting on this deficiency, Ronald Coase, the Institutionalist economist, in his

1992 Nobel Economics Prize lecture, disparagingly described Neoclassical economics as a theory fit only for the analysis of ‘lone individuals exchanging nuts and berries on the edge of the forest’.

The Marxist School

One-sentence summary: *Capitalism is a powerful vehicle for economic progress, but it will collapse, as private property ownership becomes an obstacle to further progress.*

The Marxist school of economics emerged from the works of Karl Marx, produced between the 1840s and the 1860s, starting with the publication of *The Communist Manifesto* in 1848 (co-authored with Friedrich Engels (1820–95), his intellectual partner and financial patron) and culminating in the publication of the first volume of *Capital* in 1867.⁸ It was further developed in Germany and Austria and then in the Soviet Union in the late nineteenth and the early twentieth centuries.* More recently, it was elaborated in the US and Europe during the 1960s and the 1970s.

Labour theory of value, classes, and production: The Marxist school as the truer heir of the Classical school

As I mentioned earlier, the Marxist school inherited many elements from the Classical school. In many ways, it is *truer* to the Classical doctrine than the latter’s self-proclaimed successor, the Neoclassical school. It adopted the labour theory of value, which was explicitly rejected by the Neoclassical school. It also focused on production, whereas consumption and exchange were the keys for the Neoclassical school. It envisioned an economy comprised of classes rather than individuals – another key idea of the Classical school rejected by the Neoclassical school.

Developing the Classical school, Marx and his followers came up with a type of economics very different from that offered by its half-brother, the Neoclassical school.

Production at the centre of economics

Taking the Classical school’s production-based view of the economy further, the Marxist school argued that ‘production is ... the basis of social order’, in the words of Engels. Every society is seen as being built on an economic **base**, or the **mode of production**. This base is made up of the **forces of production** (technologies, machines, human skills) and the **relations of production** (property rights, employment relationship, division of labour). Upon this base is the **superstructure**, which comprises culture, politics and other aspects of human life, which in turn affect the way the economy is run. In this sense, Marx was probably the first economist to systematically explore the role of institutions in the economy, presaging the Institutionalist school.

Further developing Adam Smith’s ‘stages of development’ theory, the Marxist school saw societies as evolving through a series of historical stages, defined in terms of their mode of production: primitive communism (‘tribal’ societies); antiquarian mode of production (based on slavery, as in Greece and Rome); feudalism (based on landlords commanding semi-slaves, or serfs, tied to their lands); capitalism; communism.* Capitalism is seen as but one stage of human development before we reach the ultimate stage of communism. This recognition of the historical nature of economic problems is a great contrast to the Neoclassical school, which considers the ‘economic’ problem of utility maximization universal – for Robinson Crusoe in a desert island, for participants in a weekly market of medieval Europe, for

subsistence farmers in Tanzania and for an affluent German consumer in the twenty-first century, you name it.

Class struggle and the systemic collapse of capitalism

The Marxist school took the class-based view of society of the Classical school to another level. It viewed **class conflicts** as the central force of history – summarized in the declaration in *The Communist Manifesto*: ‘The history of hitherto existing society is the history of class struggles.’ Moreover, the school refused to see the working class as a passive entity, as did the Classical school, and accorded it an active role in history.

Classical economists viewed workers as simple souls unable to even control their biological urges. As soon as the economy expands and the demand for labour grows and higher wages are paid, workers have more children. This means more workers, bringing the wages again down to subsistence level. Only a life of misery lay ahead of them, those economists believed, unless they learned to exercise restraint and stop producing so many children – a highly unlikely prospect, those economists surmised, given their base nature.

Marx had a totally different view. For him, workers were not the powerless ‘huddled mass’ in Classical economics but active agents of social change – the ‘grave digger of capitalism’ in his words – whose organizational skills and discipline were being forged in the harsh hierarchy within factories of ever-growing size and complexity.

Marx did not believe that workers could start a revolution and topple capitalism at will. The time had to be ripe. This would come only when capitalism has developed sufficiently, leading to a heightened contradiction between the technological requirements of the system (forces of production) and its institutional set-up (relations of production).

With the continuous development of technologies, spurred by the need on the part of capitalists to invest and innovate in order to survive the unrelenting competition, the division of labour becomes increasingly more ‘social’, making capitalist firms become more dependent on each other as suppliers and buyers. This makes coordination of activities among those related firms increasingly more necessary, but the persistence of private ownership of the means of production makes such coordination very difficult, if not totally impossible. The result is increasing contradiction in the system, finally leading to its collapse. Capitalism would be replaced by socialism, in which the central planning authority fully coordinates the activities of all the related enterprises, now collectively owned by all workers.

Fatally flawed, but still useful: theories of the firm, work, and technological progress

The Marxist school has many fatal flaws. Above all, its prediction that capitalism will collapse under its own weight has not come true. Capitalism has proved far more capable of reforming itself than the school had predicted. Insofar as socialism emerged, it did so in countries like Russia and China, where capitalism was hardly developed, rather than in the most advanced capitalist economies, as Marx had predicted. Because it was so intertwined with a political project, along the way, many of its followers developed blind faith in whatever Marx said or, even worse, what the Soviet Union said was the right interpretation of his ideas. The collapse of the socialist bloc has revealed that the Marxist theory of how the alternative to capitalism should be organized was highly inadequate. The list goes on.

Despite these limitations, the Marxist school still offers some very useful insights into the workings of capitalism.

Marx was the first economist to pay attention to the differences between the two key institutions of capitalism – the hierarchical, planned order of the firm and the (formally) free, spontaneous order of the market. He described capitalist firms as islands of rational planning in an anarchic sea of the market. Moreover, he foresaw that large-scale enterprises owned by multitudes of shareholders with limited liability – which were called ‘joint stock companies’ in his time – would become the leading actors of capitalism, at a time when most free-market economists were still against the very idea of limited liability.

Unlike most other economists, Marx and some of his followers have paid attention to work for its own sake, rather than as a disutility that people have to put up with in order to earn money to pay for their consumption. He believed that work can allow human beings to express their inherent creativity. He criticized the hierarchical capitalist firm for blocking such possibility. He emphasized the dehumanizing and mind-numbing effects of the repetitive work that emanates from increasingly fine divisions of labour. It is interesting to note that, while praising the positive productivity effects of finer divisions of labour, Adam Smith had also worried about the negative impact of fragmented work on individual workers.

Last but not least, Marx was also the first major economist who truly understood the importance of technological innovation in the process of capitalist development, making it the central element in his theory.

The Developmentalist Tradition

One-sentence summary: *Backward economies can't develop if they leave things entirely to the market.*

A neglected tradition

Unbeknownst to most people and rarely mentioned even in books on the history of economic thought, there is a tradition in economics that is even older than the Classical school. It is what I call the Developmentalist tradition, which started in the late sixteenth and the early seventeenth centuries – two centuries or so before the Classical school.

I don't call the Developmentalist tradition a *school*, because the latter term implies that there are identifiable founders and followers, with clear core theories. This tradition is very dispersed, with multiple sources of inspiration and with a complicated intellectual lineage.

This is because policy-makers, who are interested in solving real-world problems, rather than intellectual purity, started the tradition.* They pulled together elements from different sources in a pragmatic, eclectic manner, even though some of them have made important original contributions of their own.

But the tradition is no less important for that. It is arguably the most important intellectual tradition in economics in terms of its impact on the real world. It is this tradition, rather than the narrow rationalism of Neoclassical economics or the Marxist vision of classless society, that has been behind almost all of the successful economic development experiences in human history, from eighteenth-century Britain, through nineteenth-century America and Germany, down to today's China.⁹

Raising productive capabilities to overcome economic backwardness

The Developmentalist tradition is focused on helping economically backward countries develop their economies and catch up with the more advanced ones. For economists belonging to the tradition,

economic development is not simply a matter of increasing income, which could happen due to a resource bonanza, such as striking oil or diamonds. It is a matter of acquiring more sophisticated **productive capabilities**, that is, the abilities to produce by using (and developing new) technologies and organizations.

The tradition argues that some economic activities, such as hi-tech manufacturing industries, are better than others at enabling countries to develop their productive capabilities. However, it argues, these activities do not naturally develop in a backward economy, as they are already conducted by firms in the more advanced economies. In such an economy, unless the government intervenes – with tariffs, subsidies and regulations – to promote such activities, free markets will constantly pull it back to what it is already good at – namely, low-productivity activities, based on natural resources or cheap labour.¹⁰ The tradition emphasizes that desirable activities and appropriate policies depend on time and context. Yesterday's hi-tech industry (e.g., textiles in the eighteenth century) may be today's dead-end industry, while a policy that is good for an advanced economy (e.g., free trade) may be bad for a less developed country.

Early strands in the Developmentalist tradition: Mercantilism, the infant industry argument and the German historical school

Although the policy practice started earlier (for example, under Henry VII, who reigned between 1485 and 1509), theoretical writings in the Developmentalist tradition started in the late sixteenth and the early seventeenth centuries, with Renaissance Italian economists like Giovanni Botero and Antonio Serra, who emphasized the need for promotion of manufacturing activities by the government.

The Developmentalist economists of the seventeenth and eighteenth centuries – known as **Mercantilists** – are these days typically portrayed as having been solely focused on generating trade surplus, that is, the difference between your exports and imports when the former is larger. But many of them were actually more interested in promoting higher-productivity economic activities through policy interventions. At least the more sophisticated of them valued trade surplus as a symptom of economic success (that is, the development of high-productivity activities), rather than as a goal in itself.

From the late eighteenth century, shedding the Mercantilist garb and its interest in trade surplus, the Developmentalist tradition became more clearly focused on production. The critical development came from Alexander Hamilton's invention of the infant industry argument, which we encountered in the last chapter. Hamilton's theory was further developed by the German economist Friedrich List, who is these days often mistakenly known as the father of the infant industry argument.¹¹ Alongside List, in the mid-nineteenth century, the German Historical school emerged and dominated German economics until the mid-twentieth century. It also heavily influenced American economics.* The school emphasized the importance of understanding the history of how the material production system has changed, both influencing and influenced by law and other social institutions.¹²

The Developmentalist tradition in the modern world: Development Economics

The Developmentalist tradition was advanced in its modern form in the 1950s and the 1960s by economists such as, in alphabetical order, Albert Hirschman (1915–2012), Simon Kuznets (1901–85), Arthur Lewis (1915–91) and Gunnar Myrdal (1899–87) – this time, under the rubric of Development Economics. Writing mostly about the countries on the periphery of capitalism in Asia, Africa and Latin America, they and their followers not only refined the earlier Developmentalist theories but also added quite a lot of new theoretical innovations.

The most important innovation came from Hirschman, who pointed out that some industries have particularly dense **linkages** (or connections) with other industries; in other words, they buy from – and sell to – a particularly large number of industries. If the government identified and deliberately promoted these industries (the automobile and the steel industries are common examples), the economy would grow more vigorously than when left to the market.

More recently, some development economists have emphasized the need to complement infant industry protection with investments in building an economy's productive capabilities.¹³ Trade protection only creates the space within which a country's firms can raise productivity, they argued. The actual raising of productivity requires deliberate investments in education, training and R&D.

A lot more than meets the eye: assessing the Developmentalist tradition

As I have pointed out earlier, the lack of a coherent, overarching theory is a crucial weakness of the Developmentalist tradition. Given the human tendency to be seduced by a theory that supposedly explains everything, this has put the tradition in seriously lower esteem in most people's eyes than more coherent and self-confident schools, such as the Neoclassical school or the Marxist one.

The tradition is more vulnerable to the government failure argument than other economic schools that advocate an active role for the government. It recommends a particularly wide-ranging set of policies, which is more likely to stretch the administrative capabilities of the government.

Despite these weaknesses, the Developmentalist tradition deserves more attention. Its crucial weakness, namely its eclecticism, can actually be a strength. Given the complexity of the world, a more eclectic theory may be better at explaining it. The success of Singapore's unique combination of free-market policies and socialist policies, which we encountered in [Chapter 3](#), is a case in point. Moreover, its impressive track record in generating real world changes suggests that there is a lot more to it than meets the eye.

The Austrian School

One-sentence summary: *No one knows enough, so leave everyone alone.*

Oranges are not the only fruit: different types of free-market economics

Not all Neoclassical economists are free-market economists. Nor are all free-market economists Neoclassical. The adherents of the Austrian school are even more ardent supporters of the free market than most followers of the Neoclassical school.

The Austrian school was started by Carl Menger (1840–1921) in the late nineteenth century. Ludwig von Mises (1881–1973) and Friedrich von Hayek (1899–1992) extended the school's influence beyond its homeland. It gained international attention during the so-called Calculation Debate in the 1920s and the 1930s, in which it battled the Marxists on the feasibility of central planning.¹⁴ In 1944, Hayek published an extremely influential popular book, *The Road to Serfdom*, which passionately warned against the danger of government intervention leading to the loss of fundamental individual liberty.

The Austrian school is these days in the same laissez-faire camp with the free-market wing (today the majority) of the Neoclassical school, producing similar, if somewhat more extreme, policy conclusions. However, methodologically it is very different from the Neoclassical school. The alliance between the two groups is due more to their politics than economics.

While emphasizing the importance of individuals, the Austrian school does *not* believe that individuals are atomistic rational beings, as assumed in Neoclassical economics. It sees human rationality as severely limited. It argues that rational behaviour is only possible because we humans voluntarily, if subconsciously, limit our choices by unquestioningly accepting social norms – ‘custom and tradition stand *between* instinct and reason’, Hayek intoned. For example, by assuming that most people will respect moral codes, we can devote our mental energy to calculating the costs and the benefits of a potential market transaction, rather than to calculating the odds of being cheated.

The Austrian school also argues that the world is highly complex and uncertain. As its members pointed out in the Calculation Debate, it is impossible for anyone – even the all-powerful central planning authority of a socialist country that can demand any information it wants from anyone – to acquire all the information needed to run a complex economy. It is only through the **spontaneous order** of the competitive market that the diverse and ever-changing plans of numerous economic actors, responding to unpredictable and complex shifts of the world, can be reconciled with each other.

Thus, the Austrians say that the free market is the best economic system not because we are perfectly rational and know everything (or at least can know everything that we need to know), as in Neoclassical theories, but exactly because we are not very rational and because there are so many things in the world that are inherently ‘unknowable’. This defence of the free market is a lot more realistic than the Neoclassical one, based on the assumption of absurd degrees of human rationality and on the unrealistic belief in the ‘knowability’ of the world.

Spontaneous vs. constructed order: limits to the Austrian argument

The Austrian school is absolutely right in saying that we may be better off relying on the spontaneous order of the market because our ability to deliberately create order is limited. But capitalism is full of deliberately ‘constructed orders’, such as the limited liability company, the central bank or intellectual property laws, which did not exist until the late nineteenth century. The diversity of institutional arrangements – and the resulting differences in economic performances – between different capitalist economies is also in large part the result of deliberate construction, rather than spontaneous emergence, of order.¹⁵

Moreover, the market itself is a constructed (rather than spontaneous) order. It is based on deliberately designed rules and regulations that prohibit certain things, discourage others and encourage still others. This point can be more clearly seen when we recall that the boundaries of the market have been repeatedly drawn and redrawn through deliberate political decisions – a fact that the Austrian school fails to, or even refuses to, accept. Many once-legal objects of market exchange – slaves, child labour, certain narcotics – have been withdrawn from the market. At the same time, many formerly unmarketable things have become marketable due to political decisions. ‘Commons’, the grazing lands that were collectively owned by communities and therefore could not be bought and sold, became private land through the Enclosure in Britain between the sixteenth and eighteenth centuries. The market for carbon emission permits was created only in the 1990s.¹⁶ By calling the market a spontaneous order, the Austrians are seriously misrepresenting the nature of the capitalist economy.

The Austrian position against government intervention is too extreme. Their view is that any government intervention other than the provision of law and order, especially protection of private

property, will launch the society on to a slippery slope down to socialism – a view most explicitly advanced in Hayek’s *The Road to Serfdom*. This is not theoretically convincing; nor has it been borne out by history. There is a huge gradation in the ways market and the state combine across countries and within countries. Chocolate bars in the US are provided in a much more market-oriented way than is primary school education. South Korea may rely more on market solutions than Britain does in the provision of health care, but the case is the reverse in water or railways. If the ‘slippery slope’ existed, we wouldn’t have these kinds of diversity.

The (Neo-)Schumpeterian School

One-sentence summary: *Capitalism is a powerful vehicle of economic progress, but it will atrophy, as firms become larger and more bureaucratic.*

Joseph Schumpeter (1883–1950) is not one of the biggest names in the history of economics. But his thoughts were original enough to have a whole school named after him – the Schumpeterian, or neo-Schumpeterian, school.* (Not even Adam Smith has a school named after him.)

Like the Austrians, Schumpeter worked under the shadow of the Marxist school – so much so that the first four chapters of his magnum opus, *Capitalism, Socialism, and Democracy* (henceforth *CSD*), published in 1942, are devoted to Marx.¹⁷ Joan Robinson, the famous Keynesian economist, once famously quipped that Schumpeter was just ‘Marx with the adjectives changed’.

Gales of creative destruction: Schumpeter’s theory of capitalist development

Schumpeter developed Marx’s emphasis on the role of technological development as the driving force of capitalism. He argued that capitalism develops through **innovations** by entrepreneurs, namely, the creation of new production technologies, new products and new markets. Innovations give the successful entrepreneurs temporary monopolies in their respective markets, allowing them to earn exceptional profit, which he called the **entrepreneurial profit**. Over time, their competitors imitate the innovations, forcing everyone’s profit down to the ‘normal’ level; just think about the way in which there are now so many products in the tablet computer market, once an almost exclusive domain of the Apple iPad.

This competition driven by technological innovations, in Schumpeter’s view, is much more powerful and important than Neoclassical price competition – producers trying to undercut each other with lower prices, by increasing the efficiency with which they use *given* technologies. He argued that competition through innovation is ‘as much more effective than [price competition] as a bombardment is in comparison with forcing a door’.

On this, Schumpeter has proven prescient. He argued that no firm, however entrenched it may look, is safe from these ‘gales of creative destruction’ in the long run. The decline of companies like IBM and General Motors, or the disappearance of Kodak, which at their peaks dominated the world in their respective industries, demonstrates the power of competition through innovation.

Why did Schumpeter predict the atrophy of capitalism and why was he wrong?

Despite being such a believer in the dynamism of capitalism, Schumpeter was not optimistic about its future. In *CSD*, he observed that, with the growing scale of capitalist firms and the application of scientific principles in technological innovation (the emergence of ‘corporate labs’), entrepreneurs were

making way for professional managers, whom he disparagingly called the ‘executive types’. With the bureaucratization of the management of its firms, capitalism would lose its dynamism, which ultimately rests on the vision and the drive of charismatic heroes called entrepreneurs. Capitalism would slowly wither away and morph into socialism, rather than meeting the violent death predicted by Marx.

Schumpeter’s prediction has not come true. Capitalism has become actually *more* dynamic since his gloomy foretelling of its death. He made such an incorrect prediction because he had failed to see how entrepreneurship was fast becoming a collective endeavour, involving not just the visionary entrepreneur but also many other actors inside and outside the firm.

Much of technological progress in complex modern industries happens through **incremental innovations** originating from pragmatic attempts to solve problems arising in the production process. This means that even production-line workers are involved in innovation. Indeed, Japanese automobile firms, especially Toyota, have benefited from a production method that maximizes worker inputs into the innovation process. Gone are the days when a genius like James Watt or Thomas Edison could (almost) single-handedly perfect new technologies. That is not all. When they innovate, firms draw on research output and research funding provided by various non-commercial actors – the government, universities and charitable foundations. The whole society is now involved in innovation.

Having failed to appreciate the role of all these ‘other guys’ in the innovation process, Schumpeter came to the mistaken conclusion that the diminishing room for individual entrepreneurs will make capitalism less dynamic and atrophy.

Fortunately, Schumpeter’s intellectual heirs (sometimes called the neo-Schumpeterian school) have overcome this limitation in his theory, especially through the **national system of innovation** approach, which looks at interactions between different actors in the innovation process – firms, universities, governments, and others.* Having said that, the (neo-)Schumpeterian school may be criticized for focusing overly on technology and innovation and relatively neglecting other economic issues, such as labour, finance and macroeconomics. To be fair, other schools too focus on particular issues, but the Schumpeterian school exhibits a narrower focus than most.

The Keynesian School

One-sentence summary: *What is good for individuals may not be good for the whole economy.*

Born in the same year as Schumpeter and sharing the honour of having a whole school named after him is John Maynard Keynes (1883–1946). In terms of intellectual influence, there is no comparison between the two. Keynes was arguably the most important economist of the twentieth century. He redefined the subject by inventing the field of macroeconomics – the branch of economics that analyses the whole economy as an entity that is different from the sum total of its parts.

Before Keynes, most people agreed with Adam Smith when he said, ‘What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom.’ And some people still do. David Cameron, the British prime minister, said in October 2011 that all Britons should try to pay off their credit card debts, without realizing that demand in the British economy would collapse if a sufficient number of people actually heeded his advice and reduced spending to pay off their debts. He simply did not understand that one person’s spending is another’s income – until he was forced by his advisors to withdraw the embarrassing remark.

Rejecting this view, Keynes sought to explain how there could be unemployed workers, idle factories and unsold products for prolonged periods when markets are supposed to equate supply and demand.

Why is there unemployment?: the Keynesian explanation

Keynes started from the obvious observation that an economy doesn't consume all that it produces. The difference – that is, savings – needs to be invested, if everything that has been produced is to be sold and if all productive inputs, including the labour service of workers, are to be employed (this is known as **full employment**).

Unfortunately, there is no guarantee that savings will equal investment, especially when those who invest and those who save are not one and the same, unlike in the early days of capitalism, when capitalists mostly invested out of their own savings and workers could not save, given their low wages. This is because investment, whose returns are not immediate, is dependent on investors' expectations about the future. In turn, these expectations are driven by psychological factors rather than rational calculation because the future is full of **uncertainty**.

Uncertainty is not simply about not knowing exactly what is going to happen in the future. For some things, we can rather accurately calculate the probability of each possible contingency – economists call this **risk**. Indeed, our ability to calculate the risk involved in many aspects of human life – death, fire, car accident and so on – is the very foundation of the insurance industry. However, for many other things, we do not even know all the possible contingencies, not to speak of their respective likelihoods. The best explanation of the concept of uncertainty was given by, perhaps surprisingly, Donald Rumsfeld, the defence secretary in the first government of George W. Bush. In a press briefing regarding the situation in Afghanistan in 2002, Rumsfeld opined: 'There are known knowns. There are things we know that we know. There are known unknowns. That is to say, there are things that we now know we don't know. But there are also unknown unknowns. There are things we do not know we don't know.' The idea of 'unknown unknowns' nicely sums up Keynes' concept of uncertainty.

Active fiscal policy for full employment: the Keynesian solution

In an uncertain world, investors may suddenly become pessimistic about the future and reduce their investments. In such a situation, there will be more savings than are needed – there will be, in technical terms, a 'savings glut'. The Classical economists thought this glut would be sooner or later eliminated, as the lower demand for savings would drive the interest rate (that is, the price of borrowing, if you like) down, making investments more attractive.

Keynes argued that this does not happen. As investment falls, overall spending falls, which then reduces income, as one person's spending is another's income. A reduction in income in turn reduces savings, as savings are essentially what are left after consumption (which tends not to change much in response to a fall in income, being determined by our survival necessities and habit). In the end, savings will contract to match the now lower investment demand. If excess savings are reduced in this way, there will be no downward pressure on interest rates and thus no extra stimulus for investment.

Keynes thought that investment will be high enough for full employment only when **animal spirits** – 'a spontaneous urge to action rather than inaction', as he defines it – of the potential investors are stimulated by new technologies, financial euphoria and other unusual events. The normal state of affairs, in his view, would be that investment is equated to savings at a level of **effective demand** (the demand that is actually backed up by purchasing power) that is insufficient to support full employment. In order to achieve full

employment, Keynes argued, the government therefore has to use its spending actively to prop up the level of demand.¹⁸

Money gets a real job in economics: the Keynesian theory of finance

The prevalence of uncertainty in Keynesian economics means that money is not simply an accounting unit or merely a convenient medium of exchange, as the Classical (and the Neoclassical) school thought. It is a means to provide **liquidity** (or the means to quickly change one's financial position) in an uncertain world.

Given this, the financial market is not just a means to provide money to invest but also a place to make money by taking advantage of the differences among people's views about returns on the same investment projects – in other words, a place for **speculation**. In this market, the buying and selling of an asset is driven not mainly by the ultimate return that it will deliver but by expectations about the future – and, more importantly, the expectations about what other people expect, or, as Keynes put it, the 'average opinion about the average opinion'. This, according to Keynes, provides the basis for the herd behaviour that is often witnessed in financial markets, making it inherently prone to bouts of financial speculation, boom and ultimately bust.¹⁹

It is upon this analysis that Keynes famously warned against the danger that the speculation-driven financial system can pose: 'Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.' He should know – he was a very successful financial speculator himself, amassing a fortune of over £10 million (or \$15 million) in today's money, even after very generous donations to charitable causes.²⁰

An economic theory fit for the twentieth century – and beyond?

The Keynesian school built an economic theory that was more fit for the advanced capitalist economy in the twentieth century than that of the Classical or Neoclassical schools.

Keynesian macroeconomic theory is built on the recognition that the structural separation of savers and investors that emerged from the late nineteenth century has made the equalization of savings and investment, and thus the achievement of full employment, more difficult.

Moreover, the Keynesian school rightly highlights the key role that finance plays in modern capitalism. The Classical school did not pay too much attention to finance, as it was developed at a time when the financial market was primitive. The Neoclassical theory was developed in a world which was already quite similar to the one Keynes was living in, but, given its failure to acknowledge uncertainty, money is not essential in it. In contrast, finance plays a key role in Keynesian theories, which is why it has been so useful in helping us understand episodes like the Great Depression of 1929 and the 2008 global financial crisis.

'In the long run we are all dead': shortcomings of the Keynesian school

The Keynesian school can be criticized for paying too much attention to short-term issues – as summarized in the famous quip by Keynes that 'in the long run we are all dead'.

Keynes was absolutely right in emphasizing that we cannot run economic policies on the hope that in the long run the 'fundamental' forces, such as technology and demography, will somehow sort everything

out, as the Classical economists used to argue. Nevertheless, its focus on short-run macroeconomic variables has made the Keynesian school rather weak on long-term issues, such as technological progress and institutional changes.²¹

The Institutionalist School – Old and New?

One-sentence summary: *Individuals are products of their society, even though they may change its rules.*

From the late nineteenth century, a group of American economists challenged the then dominant Classical and Neoclassical schools for underplaying, or even ignoring, the social nature of individuals – that is, the fact that they are products of their societies. They argued that we need to analyse the **institutions**, or social rules, that affect, and even shape, individuals. This group of economists are known as the Institutionalist school – or the Old Institutional Economics (OIE), in recognition of the emergence of the so-called New Institutional Economics (NIE) since the 1980s.

Individuals are shaped by society: the rise of the Institutionalist school

The emergence of the Institutionalist school can be traced back to Thorstein Veblen (1857–1929), who made his name for questioning the notion of the rational, self-seeking individual. He argued that humans have layers of motivations behind their behaviours – instinct, habit, belief and, only finally, reason. Veblen also emphasized that human rationality cannot be defined as a timeless thing but is shaped by the social environment, made up of institutions – formal rules (e.g., laws, internal rules of companies) and informal rules (e.g., social customs, conventions in business dealings) – that surround the particular individuals that we are observing. Institutions, Veblen believed, did not just affect the way in which people behaved but actually changed them, and they in turn changed those institutions.²²

Taking inspiration from Veblen’s emphasis on institutions, but also drawing, overtly and covertly, from Marxism and the German Historical school, a new generation of American economists emerged in the early twentieth century to establish a distinctive economic school. The school was officially proclaimed as the Institutionalist school in 1918 with Veblen’s blessing, under the leadership of Wesley Mitchell (1874–1948), Veblen’s student and the then leader of the group.*

The school’s shining moment was the New Deal, in whose design and administration many of its members participated. These days the New Deal is commonly thought of as a Keynesian policy programme. But, when you think about it, *The General Theory of Employment, Interest, and Money*, Keynes’s *magnum opus*, did not come out until 1936, which is one year after the second New Deal of 1935 (the first was in 1933). The New Deal was much more about institutions – financial regulation, social security, trade unions and utilities regulation – rather than about macroeconomic policy, as I discussed in [Chapter 3](#). Institutional economists, such as Arthur Burns (chairman of the Council of Economic Advisors to the US President, 1953–6; then chairman of the Federal Reserve Board, 1970–78), played important parts in the making of US economic policy even after the Second World War.

Individuals are not fully determined by society: the decline of the Institutionalist school

After the 1960s, the Institutionalist school went into decline. Part of this was due to the rise of Neoclassical economics in the US in the 1950s. The Neoclassical school’s rather narrow view of what

economics should be – with its emphasis on individual-based theory, ‘universal’ assumptions and abstract modelling – made it regard the Institutional school as not just different but intellectually inferior.

But the decline was also because of the weaknesses of the Institutional school itself. The school failed to fully theorize the diverse mechanisms through which institutions themselves emerge, persist and change. They only saw institutions as outcomes of formal collective decisions (e.g., legislation) or as products of history (e.g., cultural norms). However, institutions may come into being in other ways: as a spontaneous order emerging out of interactions of rational individuals (the Austrian school and the New Institutional Economics); through attempts by individuals and organizations to develop cognitive devices that will allow them to cope with complexity (the Behaviouralist school); or as a result of an attempt to maintain existing power relationships (the Marxist school).

Another big problem was that some members of the school went overboard in emphasizing the social nature of individuals and effectively adopted a structural determinism. Social institutions and the structure they create were everything; individuals were seen as being totally determined by the society they live in – ‘there is no such thing as an individual’, famously declared Clarence Ayres, who dominated the (declining) Institutional school in the US in the early post-Second World War period.

Transaction costs and institutions: the rise of the New Institutional Economics

From the 1980s, a group of economists with Neoclassical and Austrian leanings – led by Douglass North, Ronald Coase and Oliver Williamson – started a new school of institutional economics, known as the New Institutional Economics (NIE).²³

By calling themselves *institutional* economists, the New Institutional economists made it clear that they were not typical Neoclassical economists, who looked at only individuals but not the institutions that affect their behaviour. However, by emphasizing the adjective *new*, this group clearly dissociated itself from the original Institutional school – now called the Old Institutional Economics (OIE). The main point of departure from the OIE was that the NIE analysed how institutions emerge out of deliberate choices by individuals.²⁴

The key concept in the NIE is that of **transaction cost**. In Neoclassical economics, the only cost is the cost of production (costs of material, wages, etc.). However, the NIE emphasizes that there are also costs of organizing our economic activities. Some define transaction cost rather narrowly as the cost involved in market exchange itself – finding out about alternative products (‘shopping around’), spending time and money actually doing the shopping and sometimes bargaining for better prices. Others define it more broadly as the ‘cost of running the economic system’, which includes the cost of conducting market exchange but also the cost involved in enforcing the contract after the exchange is over. So, in this broader definition, transaction cost includes the cost of policing against thefts, running the court system and even monitoring workers in factories so that they put in the maximum possible amount of labour service specified in their contract.

Institutions are not just constraints: contributions and limitations of the New Institutional Economics

Deploying the concept of transaction cost, the NIE has developed a wide range of interesting theories and case studies. One prominent example is the question as to why, in a supposedly ‘market’ economy, so many economic activities are conducted within firms. The (simplified) answer is that market transactions are often very costly due to the high cost of information and contract enforcement. In such cases, it would be much more efficient if things were done through hierarchical commands within the firm. Another

example is the analysis of the impacts of the exact nature of **property rights** (the rules on what owners can do with which kinds of property) on patterns of investments, choice of production technologies, and other economic decisions.

Despite these very important contributions, the NIE has a critical limit as an ‘institutionalist’ theory. It sees institutions basically as constraints – on unfettered self-seeking behaviour. But institutions are not just ‘constraining’ but can also be ‘enabling’. Often institutions limit our individual freedom exactly in order to enable us to do more collectively – traffic rules, for example. Most members of the NIE would not deny the enabling role of institutions, but by not talking about it explicitly and continually referring to institutions as constraints, they convey a negative impression of institutions. More importantly, the NIE fails to see the ‘constitutive’ role of institutions. Institutions shape the motives of individuals and do not merely constrain their behaviour. Missing out on this critical dimension of what institutions do, the NIE falls short of being a full-blown institutional economics.

The Behaviouralist School

One-sentence summary: *We are not smart enough, so we need to deliberately constrain our own freedom of choice through rules.*

The Behaviouralist school is so called because it tries to model human behaviours as they actually are, rejecting the dominant Neoclassical assumption that human beings always behave in a rational and selfish way. The school extends this approach to the study of economic institutions and organizations – for example, how best to organize a firm or how to design financial regulation. The school thus has a fundamental affinity, and some overlap in membership, with the Institutional school.

The Behaviouralist school is the youngest of the schools of economics that we have so far examined, but it is older than most people think. The school has recently come to prominence through the fields of behavioural finance and experimental economics. But it has its origins in the 1940s and the 1950s, especially in the works of Herbert Simon (1916–2001), the 1978 Nobel economics laureate.*

Limits to human rationality and the need for individual and social rules

Simon’s central concept is **bounded rationality**. He criticizes the Neoclassical school for assuming that people possess unlimited capabilities to process information, or God-like rationality (he calls it ‘Olympian rationality’).

Simon did *not* argue that human beings are irrational. His view was that we try to be rational but that our ability to be so is very limited, especially given the complexity of the world – or given the prevalence of uncertainty, if you want to formulate it in the Keynesian way. This means that often the main constraint on our decision-making is not the lack of information but our limited capability to process the information we have.

Given our bounded rationality, Simon argued, we develop mental ‘shortcuts’ that allow us to economize on our mental capabilities. These are known as **heuristics** (or intuitive thinking) and can take different forms: rule of thumb, common sense or expert judgement. Underlying all these mental devices is the ability to recognize patterns, which allows us to abandon a large range of alternatives and focus on a small, manageable but most promising range of possibilities. Simon often used the chess masters as an example of someone using such a mental approach – their secret lay in their abilities to rapidly eliminate

less promising search paths and converge on a sequence of moves that are likely to yield the best outcomes.

Focusing on a subset of possibilities means that the resulting choice may *not* be optimal, but this approach enables us to handle the complexity and the uncertainty of the world with our bounded rationality. Therefore, Simon argues, when they make their choices, human beings **satisfice**, that is, we look for ‘good enough’ solutions rather than the best ones, as in the Neoclassical theory.²⁵

Market economy vs. organization economy

Even though it starts with the study of individual decision-making, the interest of the Behaviouralist school stretches much further. According to the school, it isn’t just at the individual level that we build simplifying decision rules that help us operate in a complex world with our bounded rationality.

We build **organization routines** as well as social institutions so that we can compensate for our bounded rationality. Like heuristics at the individual level, these organizational and social rules restrict our freedom of choice but help us make better choices because they also reduce the complexity of the problem. Particularly emphasized is the fact that these rules make it easier for us to predict the behaviour of other related actors, who would follow those rules and behave in particular ways. This is a point that the Austrian school also emphasizes using slightly different language, when they talk about the importance of ‘tradition’ as the basis for reason.

Adopting the Behaviouralist perspective, we begin to see our economy in a way that is very different from the dominant Neoclassical one. The Neoclassical economists usually describe the modern capitalist economy as the ‘market economy’. The Behaviouralists emphasize that the market actually accounts for only a rather small part of it. Herbert Simon, writing in the mid-1990s, reckoned that something like 80 per cent of economic activities in the US happen inside organizations, such as the firm and the government, rather than through the market.²⁶ He argued that it would be more appropriate to call it the **organization economy**.

Why emotion, loyalty and fairness matter

The Behaviouralist school also provides persuasive reasons as to why human qualities like emotion, loyalty and fairness matter – things that most economists, especially the Neoclassicals and the Marxists, would dismiss as at best irrelevant and at worst as distracting people from rational decisions.

The theory of bounded rationality explains why our emotion is not necessarily the stumbling block to rational decision-making but may be often a useful part of our (bounded) rational decision-making process. According to Simon, given our bounded rationality, we need to focus our limited mental resources on solving the most important problem at hand. Emotion provides such focus. The Behaviouralists argue that organizational loyalty of their members is essential for organizations to operate well, as an organization full of disloyal members would be overwhelmed by the costs of monitoring and punishing their selfish behaviours. The issue of fairness is very important in this regard, as the members of an organization or a society will not develop loyalty to it, if they think they are being treated unfairly.

Too focused on individuals?: assessing the Behaviouralist school

The Behaviouralist school, despite being the youngest school of economics, has helped us radically rethink our theories about human rationality and motivations. Thanks to it, we have a much more sophisticated understanding of how people think and behave.

The Behaviouralist school's attempt to understand human society from individuals up – actually from a place 'lower' than that, that is, from our thinking process up – is both its strength and its weakness. Focusing too much at this 'micro' level, the school often loses sight of the bigger economic system. This does not have to be; after all, Simon wrote a lot about the economic system. But most members of the school have focused too much on individuals – especially those economists who are engaged in experimental economics (trying to establish whether people are rational and selfish through controlled experiments) or neuroeconomics (trying to establish links between brain activities and particular types of behaviour). It also needs to be added that, given its focus on human cognition and psychology, the Behaviouralist school has few things to say about issues of technology and macroeconomics.

Concluding Remarks: How to Make Economics Better

Preserving intellectual diversity and encouraging cross-fertilization of ideas

Recognizing that there are different approaches to economics is not enough. This diversity needs to be preserved, or even promoted. Given that different approaches emphasize different aspects and offer different perspectives, knowing a range of schools, and not just one or two of them, allows us to have a fuller, more balanced understanding of the complex entity called the economy. Especially in the longer run, in the same way in which a biological group with a more diverse gene pool is more resilient to shocks, a discipline that contains a variety of theoretical approaches can cope with a changing world better than one characterized by intellectual mono-cropping can. We are actually living through a proof of this – the world economy would have experienced a collapse similar to the 1929 Great Depression, had the key governments not decided to ditch their free-market economics and adopt Keynesian policies in the early days of the 2008 global financial crisis.

I would go one step further and argue that preserving diversity is not enough. We shouldn't just let a hundred flowers bloom. We need to have them cross-fertilized. Different approaches to economics can actually benefit a lot from learning from each other, making our understanding of the economic world richer.

Some schools with obvious intellectual affinities have already been cross-fertilizing. The Developmentalist tradition and the Schumpeterian school have interacted to the benefit of both, the former providing theories to understand the bigger context in which technological development occurs and the latter providing more detailed theories of how technological innovation happens. The Marxist, the Institutionalist and the Behaviouralist schools have long interacted with each other, often in hostile manners, in relation to the understanding of the internal workings of the firm and especially the capitalist-worker relationship in it. The common emphasis on psychological factors by the Keynesian and the Behaviouralist schools has always existed but has recently produced particularly notable cross-fertilization of ideas in the new field of 'behavioural finance'.

However, cross-fertilization can happen between schools that most people think are incompatible with each other. Even if they are spread across the political spectrum, the Classics (right), the Keynesians (centre) and the Marxists (left) all share a class-based vision of the society. The Austrians and the Keynesians may have locked horns since the 1930s, but they share with each other (as well as with the Behaviouralists and the Institutionalists) the view that the world is a very complex and uncertain place and that our rationality to deal with it is severely limited. The Austrians, the Institutionalists and the

Behaviouralists all share a view of human beings as layered entities, made up of – if we use the Institutional formulation – instinct, habit, belief and reason, even though some Austrians may think that the others are objectionable left-wingers.

How all of us, not just professional economists, can play a role in making economics better

Even those readers who have been persuaded by my argument for intellectual diversity and cross-fertilization in economics may still ask, ‘What does that have to do with me?’ After all, only a very small number of readers will ever have a chance to preserve or increase the diversity of economics as professional economists.

The fact is, we all need to know something about diverse approaches to economics if we are not to become passive victims of someone else’s decision. Behind every economic policy and corporate action that affects our lives – the minimum wage, outsourcing, social security, food safety, pensions and what not – lies some economic theory that either has inspired those actions or, more frequently, is providing justification of what those in power want to do anyway.

Only when we know that there are different economic theories will we be able to tell those in power that they are wrong to tell us that ‘there is no alternative’ (TINA), as Margaret Thatcher once infamously put it in defence of her controversial policies. When we learn how much intellectual common ground there is between supposed ‘enemy factions’ in economics, we can more effectively resist those who try to polarize the debate by portraying everything in black and white. Once we learn that different economic theories say different things partly because they are based on different ethical and political values, we will have the confidence to discuss economics for what it really is – a political argument – and not a ‘science’ in which there is clear right and wrong. And only when the general public displays awareness of these issues will professional economists find it impossible to browbeat them by declaring themselves to be custodians of scientific truths.

Knowing different types of economics and knowing their respective strengths and weaknesses, thus seen, is not an esoteric exercise reserved only for professional economists. It is a vital part of learning about economics and also a contribution to our collective effort to make the subject better serve humanity.

Further Reading

G. ARGYROUS AND F. STILLWELL

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Appendix: Comparing Different Schools of Economics

	CLASSICAL	NEOCLASSICAL	MARXIST	DEVELOP- MENTALIST	AUSTRIAN
The economy is made up of...	classes	individuals	classes	no strong view, but more focused on classes	individuals
Individuals are...	selfish and rational (but rationality is defined in class terms)	selfish and rational	selfish and rational, except for workers fighting for socialism	no strong view	selfish but layered (rational only because of an unquestioning acceptance of tradition)
The world is...	certain ('iron laws')	certain with calculable risk	certain ('laws of motion')	uncertain, but no strong view	complex and uncertain
The most important domain of the economy is...	production	exchange and consumption	production	production	exchange
Economies	capital accumula-	individual choices	class struggle, capital accumula-	developments in productive	individual choices, but

change through...	tion (investment)	man-made changes	tion and technological progress	improvement in productive capabilities	rooted in tradition
Policy recommendations	free market	free market or interventionism, depending on the economist's view on market failures and government failures	socialist revolution and central planning	temporary government protection and intervention	free market

	SCHUMPETERIAN	KEYNESIAN	INSTITUTIONALIST	BEHAVIOURALIST
The economy is made up of...	no particular view	classes	individuals and institutions	individuals, organizations and institutions
Individuals are...	no strong view, but emphasis on non-rational entrepreneurship	not very rational (driven by habits and animal spirits); ambiguous on selfishness	layered (instinct – habit – belief – reason)	only boundedly rational and layered
The world is...	no strong view but complex	uncertain	complex and uncertain	complex and uncertain
The most important domain of the economy is...	production	ambiguous, with a minority paying attention to production	no strong view, but puts more emphasis on production than do the Neoclassicals	no strong view, but some bias towards production
		ambiguous	interaction	

Economies change through...	technological innovation	ambiguous, depends on the economist	interaction between individuals and institutions	no strong view
Policy recommendations	ambiguous – capitalism is doomed to atrophy anyway	active fiscal policy, income redistribution towards the poor	ambiguous, depends on the economist	no strong view, but can be quite accepting of government intervention