

Austrian Economics

A Primer

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1 The Austrian School's history and approach

- The Austrian School is an approach to economics that originated in Vienna in the 1870s. It is highly critical of modern mainstream economics.
- Austrians (as they are called – though today they are found everywhere) hold that all economic events stem from the values and choices of the particular individuals involved and their circumstances at the time.
- Austrians argue that mainstream economists are therefore wrong to look for statistical linkages between economic phenomena.
- Austrians say that their individual- and values-based approach provides a better explanation of economic events such as boom and bust.

The Austrian School of Economics is not some teaching institution in Vienna, nor is it even about the economy of Austria. Rather, the term refers to a particular approach to economics, and to the economists around the world who subscribe to it.

How economists should work

Nevertheless, the Austrian School did have its origins at the University of Vienna, with the publication of the book *Principles of Economics* by Carl Menger. The book criticized the economic ideas that then prevailed in the German-speaking world – the so-called Historical School, led by Wilhelm Roscher. They took the view that economics was like history, dealing with unique events that would never be repeated in exactly the same way. It was therefore impossible to establish general laws of economics – linkages that would apply regardless of place or time, like the laws of physics – as England’s Classical School economists supposed.

Menger thought that economists could indeed come up with principles that would hold true in every place and time; but that the English economists were wrong in looking for linkages among the statistics of trade and commerce. Statistics, he believed, simply smother what is actually going on. And what is going on in economics is that millions of individuals are constantly making choices. Those choices are the basis of economic phenomena such as demand, supply, price, and markets. They must be the basis of economic science too. Economics must start at the level of individuals – an approach known as *methodological individualism* – and seek to understand how they choose.

Menger also argued that the actual choices that individuals make depend on the particular values and preferences they have for different things. But these are matters of personal feeling and emotion, something to which the economist cannot get direct access. A physical scientist can measure weight or volume, but economists cannot measure people’s values, any more than

they can measure someone's grief, or joy, or love. Inevitably, economics is not about *objective*, natural phenomena, but *subjective*, human ones.

As if this was not enough, Menger also developed (alongside William Stanley Jevons and Leon Walras, though they worked independently) a revolution in economic thought called *marginal utility analysis*. It remains a key building block of mainstream economics today. The idea is that when people make choices and trades, they strive to acquire whatever that will satisfy their most urgent needs first. After that, they attend to their less and less urgent (or more and more 'marginal') needs. Likewise, if they must give something up, they first surrender whatever gives them least satisfaction, before giving up things they value more. People choose, in other words, on the basis of the *marginal utility* which different things provide them. This principle enables us to understand a great deal about how people make economic bargains, and about how markets work.

The first waves

Menger's approach sparked a huge dispute on what social sciences like economics were actually all about, known as the *Methodenstreit* or debate on method. In the course of it, Menger and his followers at the University of Vienna, Eugen von Böhm-Bawerk and Friedrich von Wieser, were dubbed the "Austrian School".

Böhm-Bawerk developed Menger's *subjectivist* approach by applying it to the area of interest and capital. He showed that interest rates reflect a particular preference of human beings, namely *time preference*. We prefer to have things now than in the future, and we are prepared to borrow at interest to get them. When

we lend something for a while, we demand to be paid interest. And from this Böhm-Bawerk derived much of the theory of investment, production, and how capital is used.

Wieser, for his part, took the same approach into the analysis of costs. He showed that costs are not an *objective* measure but, once again, stem from the *subjective* values and preferences of those involved. Production involves giving up some things now to produce others later, and it is a matter of individual judgement, not hard measurement, whether those choices are considered worthwhile. Wieser stressed the role of entrepreneurs in testing out such judgements, based on their expert understanding of markets.

Menger, Böhm-Bawerk and Wieser constitute the ‘first wave’ of the Austrian School. The ‘second wave’ was led by Ludwig von Mises and Friedrich Hayek, who collaborated in the 1930s to explain business cycles – the periodic booms and busts that seem a permanent fixture of the commercial world. They argued that the cycles originate from an injection of bank credit. Cheaper borrowing prompts entrepreneurs to invest more in production, and consumers to buy more in the shops. But once the credit stimulus has worn off, reality reasserts itself. Entrepreneurs find they are producing too much of the wrong things, business slumps, and over-ambitious investments have to be written off.

With the threat of Nazism growing, Hayek and Mises left Austria in the 1930s. Mises went to America, and focused on the pure science of choice and action, sharpening Menger’s original principles and working out their implications. Hayek went first to Britain, then also to America, and concentrated on the crucial role of information in how people make choices and how markets actually work.

Contemporary Austrians

The ‘third wave’ Austrian School economists have come mostly from America, in Universities such as New York, Auburn, and George Mason. But they reflect a wider range of intellectual traditions, and while many would not hesitate to call themselves ‘Austrians’, others would admit only to having been influenced, to a greater or lesser degree, by the Austrian School approach.

Among the prominent Austrians must be listed Murray Rothbard, who pinned the blame for business cycles squarely on central banks, and developed a rigorous libertarian critique of the state; Israel Kirzner, who traced the critical importance of entrepreneurship in driving economic progress; and Lawrence White, who showed how banking works better without government controls and regulations. But many other prominent economists, including several winners of the Nobel Prize in Economic Science, accept some of the Austrian School’s ideas and acknowledge their debt to it.

Hayek himself won a Nobel Prize, in 1975, for his 1930s work on the business cycle, and this raised some worldwide interest in Austrian ideas. Nevertheless, Austrian economists remain very much the minority, outside and opposing the mainstream, textbook view. Partly this is because their approach is subtle and complex and not easy to explain to students. Or because they reject much of what passes for economic ‘science’ and so are seen as ‘unscientific’ by the mainstream. Or because they are regarded as a sect, unwilling to engage with criticism.

Whatever the reason, the fact remains that the Austrian School approach has much to teach us about how people make choices

– or ‘economize’ as the experts would say. And that is plainly the very heart of economics. Hence the need for Austrian ideas to be presented simply, in ways that are more widely accessible – even at the risk of some oversimplification and distortion.

2 Key principles of Austrian Economics

- The economic decisions from which all economic phenomena derive are inherently personal and unpredictable.
- Value does not exist in things, but in the minds of the individuals who value them. Trade occurs and prices emerge precisely because people value things differently. Markets steer goods to their most valued uses. Private ownership is essential to achieving the best results.
- Government intervention, and policy mistakes such as inflation, disrupt this highly complex market process and invariably produce perverse results.

A number of key principles, or points of emphasis, distinguish the views of Austrians from those of mainstream economists. Let us start with ten. They cover all parts of the subject, from the very nature of what economists ought to be studying, through how individual prices come about (and their importance in directing production and consumption), through the workings of the overall economy, to policy prescriptions.

The first, methodological, points can be difficult for many people to grasp. But a clear view of what science can and cannot tell us about our economic life is essential if we are to explain everything else correctly, and so it is right that we should start from here.

The foundations of economics

First, economics is all about individuals. That is because economics is all about choice. We can't have everything, so we have to choose which things are most important to us: would we prefer a new car, for example, or a summer holiday? To go out with friends, or to relax at home? Invariably, we have to give up one thing (an amount of money or time and effort, say) to get another (such as a new pair of shoes or a tidy garden). These are *economic* decisions – even when no money is involved. They are questions of how we juggle scarce resources (cars, holidays, company, leisure, money, time, effort) to best satisfy our many wants. They are what economics is all about.

And they are decisions that can be made only by the *individuals* concerned. A society does not choose; a collective has no life or mind of its own; a state may decide things by elections, but it is the individuals who choose which way to vote. The role of economics is to understand choice and its effects, and we can only understand that if we focus on how individuals make decisions.

Second, economics is quite unlike natural science. That is because the things it studies are entirely different. The physical sciences deal with natural objects, which can be observed and measured. The facts of their nature and behaviour can be known, and scientists can make predictions on that basis. Economics is

about how people choose, which means that it is about what they prefer, and value, and intend, and believe about the world. These are personal, individual feelings, which we cannot observe and measure – nor therefore *predict*.

What we can do, though, is to *explain* human choices. We can do this because we too are human individuals and we know how we think. We can understand preferences, and values, and intents, and beliefs about the world because we experience all of those. And we can advance that understanding by working out the logic of where those things take us – how markets and exchange actually work, for example. But a natural scientist who looks at us as mere objects, pushed around by outside forces, misses everything *inside* us that gives us motivation and explains how we live.

Values, prices, and markets

Third, everything in economics rests on human values. Value is not a quality that resides in objects, and which can be measured, like their size or weight. The same good has different value to different people, depending on how much use they have for it. Someone in a rainy country may have very little use for a cup of water, but someone in a desert may value it greatly. And people's wants and values change: a thirsty person may greatly value a drink, but have no use for more once they have had their fill. Goods, then, do not contain some fixed quantity of usefulness, or 'utility'. Usefulness is in the mind of the user: utility, and value, are *subjective*.

But goods are limited, as are our own time and resources. We have to make choices and weigh up the implications of those choices.

To take one course of action, we have to give up something else. And what we give up we call the cost. It does not have to be a financial cost – it might just be the time and effort we expend to achieve some goal, or the various alternative possibilities we forgo (what economists call *opportunity costs*). But these *costs* are subjective too. What we weigh up is the value to us of what we achieve against the value to us of what we surrender for it. That is a personal decision: other people might make a completely opposite choice. So economists must remember (say the Austrians) that every economic decision – from investment to production to trade and final consumption – is inherently *subjective* and depends on the values of the individuals involved.

Fourth, prices help us maximize value and minimize cost. It is because people value the same goods differently that they are prepared to exchange them in market transactions. Each values more what the other has than the thing they have to give up to get it. We should not fall into the trap of supposing that because a pair of shoes (say) sells for a particular sum of money, that this *price* equals the value of the shoes. Value is personal. The person selling shoes values the cash more than the shoes; the buyer values the shoes more than the cash.

What prices do summarize, though, is the quantity of one thing (shoes) that people in the market are in fact prepared to sacrifice for another (cash). Prices are the going rates of exchange between different goods. And they send out important signals to market participants. If the price of something rises – for whatever reason – it prompts buyers to use less, and switch their spending to things they value more; and it prompts sellers to produce more, and enjoy the extra money. Thanks to the crucial information sent out by the price system, buyers and sellers

automatically adjust their choices to the new reality, and the activities of millions of people are coordinated.

Fifth, competition is a discovery process. Markets are not perfect. Indeed, it is the imperfections that drive them. They work because people in the market spot new opportunities to trade for mutual gain. Perhaps they see a cheaper way of making a particular good, or a niche for services that nobody else is providing. Filling these gaps enables them to make a profit by taking resources to where they are most needed, and diverting them out of less valued roles. And the lure of profit encourages people to be alert to such opportunities and to innovate so as to capture them – that is, to act as *entrepreneurs*.

The bigger the need that entrepreneurs fill, the bigger the profit they can hope for – until their competitors follow suit. So the pressure to develop new and better products and processes is constant. Competition is a constant process of entrepreneurial exploration, from which we all gain as better and cheaper ways of satisfying our wants are discovered.

Sixth, private ownership is essential. Socialists believe that we can do without the lure of profit by taking property into collective ownership. Obviously this cannot work for consumer goods, like shoes or spectacles, which cannot practicably be shared, so socialists focus on the collective ownership of the means of production. But if factories and machines are never sold, they have no price. And where there is no price, there is no market to help us to discover which things are scarce and to steer resources into the gaps. The result is that socialist planners can never know whether the means of production are producing value, or being wasted.

The wider economy

Seventh, production is a difficult balancing act. Production decisions may be impossible for socialists with no prices to go on, but they are not easy for private owners either. The sole purpose of production is to make the goods we consume. But all production takes time, and may require complex intermediate steps that are brought together in just the right way. At any time and point in this intricate process, changes in prices (say, rising energy or labour bills) or demand (say, a competitor produces a better product) can knock things off course.

If the capital goods used in production could be re-used for any purpose, then entrepreneurs might be able to recover from such disappointments. But many capital goods (such as steel mills or newspaper presses) have only one specific purpose. Production, then, is a risky business, and carries a real risk of loss.

Eighth, inflation is deeply damaging. The risk of loss is widespread when governments make mistakes with money. To Austrians, money is a good like any other: it has a *supply* (usually determined by government authorities) and a *demand* (people value it as a convenient medium for making exchanges). If government increases its supply, then that value slips. Sellers demand more of it for the goods they sell – so money prices rise. This is the process of *inflation*.

Inflation is good for debtors, who find themselves repaying loans in money that is not worth so much, and bad for savers, which unbalances the loan markets and the production processes that depend on them. But worse, prices in an inflation do not rise instantly and uniformly. They rise first where the extra money goes in (government enterprises, for example), and then spread

gradually to other sectors, like treacle pouring onto a table. So resources are drawn first to one sector, then another, creating temporary booms. But as the money spreads out, the booms subside, businesses find their investments wasted, and the result is an inevitable and widespread bust.

Society and government

Ninth, actions have unintended consequences – good and bad. On the good side, it does not always take conscious planning or design for human beings to create something that works well. Often they do it unintentionally, as a by-product of their action. People walking between one village and another think only of finding the easiest route, but gradually wear down a path that helps everyone. Buyers and sellers think only of getting value for themselves, but millions of such exchanges create a price system that draws effort and resources to their most valuable uses. Money emerged simply because people wanted some generally accepted medium of exchange. Language grew from the need to communicate. And a body of common law grew up as people resolved their differences case by case.

The moral is that we should not presume institutions to be unstructured and inefficient just because they have not been deliberately designed and planned. On the bad side, our attempts to ‘improve’ on social institutions – such as the free market economy – often unbalance the intricate mechanisms that make them work, and lead to catastrophic consequences that we did not intend.

Tenth, government intervention is almost always malign. Individuals have limited ability to disturb the balance of our

intricate social institutions, but the huge and concentrated power of government makes it easy. Central banks, for example, like to keep interest rates low, encouraging entrepreneurs to borrow and boost production. But as the boom ripples from sector to sector and then fades away, productive resources are wasted and the population are made poorer.

Governments may advocate minimum wage laws to help poor workers; but then some workers are not worth that amount to employers, so unemployment rises. Rent controls, similarly, may be adopted to help poor tenants; but that just prompts owners to stop renting out their property and do something more profitable. Regulators may impose tough new standards to protect the public; but the extra costs make it harder for new operators to come in, competition declines, and the public end up with a worse deal.

And government action is usually misplaced in another important way. There is no way that officials can know what individuals do in fact value. They cannot look into our minds and know whether we would gladly pay more taxes to have better schools or hospitals, for example. Market prices could tell them what the public is prepared to give up for such things, but by ignoring prices and trying to 'improve on' the market, they inevitably fail to maximise our values. In a vibrant market, where people constantly adjust their plans against changing conditions, officials could not even collect the necessary information before it became out of date, and could certainly never know what people would choose. Perhaps the government has a role in making sure markets work smoothly; but as far as Austrian economists are concerned, it has no business intervening in them.

3 Why economists don't know what they're doing

- Scientists look for statistical linkages between causes and effects. But economic events depend on individuals' choices, which are unpredictable.
- Likewise, people's values are diverse and personal, so cannot be treated statistically.
- Economists should not look for non-existent linkages, therefore, but should instead focus on trying to understand how people make choices.

Austrian School economists believe that social sciences – such as economics – are indeed sciences, but sciences that are quite different from the natural sciences. Indeed, economics is unlike any science you have come across.

Natural scientists – chemists or physicists, say – look for repeated linkages between natural phenomena. They may observe that when you raise the temperature of a gas, it expands. Every time you heat it, the same thing happens. So

they consider this as a universal *scientific law* – that when (and wherever) you raise the temperature of a gas, it will expand. They make *predictions* that this same thing will happen at any time in the future too. And by measuring the size of the effect, they may come up with some *constant* – say, that the volume of a particular gas expands by two per cent for every degree that its temperature is raised.

This *scientific method* has been enormously fruitful in helping us predict the natural world, so most social scientists think that they should do much the same. They believe they should look for linkages and constants between *social* phenomena, as the physicist or chemist does between natural ones. For example, sociologists might search for a relationship between how densely a city is populated and the amount of violent crime on its streets. Similarly, economists might look for relationships between social phenomena in the economic sphere – say, between the level of a country's income and the amount it saves.

In this manner, economists end up looking for linkages between the big, society-level measures of economic life, such as national income, saving, investment, consumption, imports, exports, taxation, government expenditure, employment and many more – the so-called *economic aggregates*. And they look to identify 'constants' – say, that when a country's income rises by four per cent, the total amount saved will rise by one per cent – the so-called *marginal propensity to save*.

The importance of focusing on individuals

Austrian economists think this approach is completely wrong. They argue that there can never be any universal laws or constants

between these statistics, which are no more than summary totals of the many, varied, and even conflicting things that are really going on. Take a statistic like the consumer price index, which governments publish each month. It purports to show the level of prices, and how it changes. But Mises and other Austrians point out that there is no such thing as the 'price level'. There are millions of specific prices, all fluctuating one against the other. (For an example, just look at the erratic daily movements of stock market prices.) Different people react to those prices in different ways – a rising price might convince some people it is time to buy, while others may think it is a good time to sell and cash in.

So what is really going on is that millions of *individuals* are making choices – whether to buy or sell, whether to spend or save a pay rise, whether to invest in a new machine, whether to hire an extra employee, and all the rest. Their choices will depend on their views and their circumstances, and other people might decide quite differently. The economic aggregates simply conceal all that great variety under a single statistical number. They tell us little, and mislead us a lot – and that is the shaky foundation of mainstream economic 'science'.

What economic science should be about is understanding human choices. It is, as Menger puts it, the science of choice. An 'economic' action involves looking at different options, working out what we have to give up to achieve each possibility, and then deciding on the basis of what balance of pain for gain best suits our purposes. And this is something that only happens at the level of the individual. A *collective* – a society, or nation, or race, say – does not have a mind of its own: it does not have purposes. Only the *individuals* that comprise it have minds and purposes. A collective does not act: it does not save, or consume, or hire people. Only

the individuals that it consists of do that. Economic events are not created by some or other impersonal social ‘forces’. They are simply the outcome of the economic decisions and actions of individuals.

So economic events cannot be understood except by analysing what creates them, namely the choices of individuals. Joseph Schumpeter coined a useful (if ungainly) name for this approach: *methodological individualism*.

This approach is not an argument about the nature of society. It is not saying ‘there is no such thing as society’ or ‘the whole is no more than the sum of its parts’. Nor is it about preferring political individualism to socialism. It is about the method of economic science – the best way to *explain* economic events.

Why economists get it wrong

Austrians therefore regard macroeconomics as fundamentally misguided and misleading. First, it tries to add up chalk-and-cheese individual actions and make predictions on the results, which is simply impossible. It is pseudo-science. And the attempt to apply mathematics to identify supposed ‘constants’ between the economic aggregates is pseudo-science on stilts. It is to apply numbers to things that cannot properly be added together and to supposed effects that do not exist. For this reason, Austrians are generally suspicious of the use of mathematical and statistical techniques that is such a feature of mainstream economics.

Second, economics should be about trying to *understand* the nature of choice, not about trying to *predict* what choices will actually come out of the process. Individuals are diverse and

complex, and most often do not know exactly what they would choose until they are actually faced with the choice – as anyone who has gone in a shop for one item and come out with something quite different will appreciate. But if we can understand *how* human beings choose, that is genuine economic science.

Mainstream economists argue that they do in fact have an individualist method of their own. They assume that ‘economic agents’ (that is, individuals) are ‘rational’ and ‘utility-maximising’ (that is, they make choices on the basis of the net benefit to them that results). And that model of humankind actually explains much about the structure and workings of our economic institutions.

Austrians would retort that, precisely because individuals *are* diverse, we can never get into the mind of each person and observe their private thought processes. So talk about ‘rational’ and ‘maximising’ individuals is misplaced. And even then, we can never *predict* with certainty what people will in fact choose.

We do, however, have some insight that helps us *explain* economic decision-making, because we are human beings ourselves and we also make choices, have purposes, and embark on courses of action accordingly. And just as important as this personal, *subjective* understanding, we can investigate how the *objective* world affects choices – how, for example, individuals acquire the information that shapes their decisions, such as what events make them believe that a particular mineral is in short supply or that a particular product is likely to sell well. This, again, is much more the proper study of economic science than the pseudo-science of the macroeconomics textbooks.

4 The importance of values

- Value is not a property of things, like their size or weight. Different people value different goods differently at different times and places. Value exists only in the minds of the individuals concerned.
- We cannot know what is in people's minds, but we can get some inkling of their scale of values by looking at what they actually choose.
- Choices and values are not mathematical: someone with a headache does not value a hundred aspirin fifty times more than two.

The Austrian School approach to economics is quite unlike that of the natural sciences – though Austrians believe it is perfectly scientific. It can be used to make predictions, but predictions of quite a different kind to those made – or claimed – by natural scientists.

The science of economics is necessarily different, say the Austrians, because economics deals with human individuals; and

– unlike the inanimate objects that natural scientists deal with – individuals have their own *motivations* and *purposes* that animate them. It would be hard for a physicist to predict the expansion of a gas if the molecules in the gas had a life of their own and some started complaining about the experiment while others welcomed it. Likewise, it is hard to predict economic statistics when the motives and actions of individuals are as diverse, changing, and conflicting as they are.

The ‘facts’ of economic science, then, are not statistical aggregates like prices, or investment, or saving. Nor even are they individual prices, or investments, or savings plans. These things have no importance except in terms of what they *mean* to individuals, and the choices those individuals make as a result. The ‘facts’ of economics are not things, but what people think and believe about the world, what they expect to happen, and what things are most important to them and spur them into action. This approach is called *subjectivism*, because it stresses the importance of personal, subjective opinions over measurable, *objective* things. On this view, economics is about what people *value*, and what they do as a result.

Value is in minds, not things

People get very confused about value, and have done for thousands of years. There is a common assumption that value is something that different goods have different amounts of – a measurable quality like their volume or weight. But value is not an objective quality that resides in things. Value is in the mind of the beholder. Different people value the same thing differently – like the stock market traders, one who thinks it is a good time to buy,

and the other who thinks it is a good time to sell. The value we attach to something is a matter of personal judgement, something emotional. It reflects the benefit we believe something will bring us. That depends on our physical and psychological state – we might greatly value a warm coat in a snowstorm, but not in the desert. And it depends on how well informed our beliefs are – often we value something highly, only to find that it disappoints us once we have it.

Our values also change because new products and processes spring up, and technology changes, shifting our desires onto better or cheaper things. The results are not always predictable: as Mises puts it, the mass production of a fashion item might make it affordably attractive to poorer customers, yet cause the style-conscious rich to abandon it and seek out something more exclusive.

Although economics is rooted in human values, then, it is not a branch of psychology. It does not worry about *why* people value different things – why they drink alcohol, for example – only the results of those values on what they choose in the marketplace – such as how much alcohol they demand at different prices. Economics has to take individuals' values and purposes as a 'given', because it can never get into their minds. Instead, it focuses on their actions – what they do as a result of their values and purposes. As Mises describes it, economics is part of the more general science of human action (which he calls *praxeology*).

However, it is not like the natural sciences, which proceed through observing things, coming up with predictive theories, and testing them. For one thing, we cannot observe people's values precisely because we cannot get into their minds. Second, we cannot test theories about what they do because the exact circumstances may

never be replicated. The world is constantly changing, and people's values and motives change too.

Mises calls the actual outcome of all this buzzing action and interaction a *catallaxy*, fearing that the usual term 'the economy' suggests something too mechanical, deliberate and planned. And the economic study of these outcomes he calls *catallactics*.

The nature of economic science

Yet economics *is* a science that can discover things, and even make predictions, say Austrians – not on the basis of observation, theorising and testing, but through a process of deduction. Just as geometry or mathematics are derived from a few simple axioms about line or number, so economics can be deduced from a few simple axioms about human action. We know something of how people choose to do things because we too are human. And from that we can actually deduce quite a large body of economic understanding. We can analyse the principles of demand or of how prices are determined, for example, even if we can never know *why* different people demand different things.

Equally, though we cannot know a person's values directly, we can build up a picture of them from the choices that they actually make. When people choose one course of action over another, we can reasonably assume that is the one they prefer, the one they value more. It is more important to them than the thing they decide not to do. When we watch them over a series of choices, we can build up a picture of their *scale of values* through the preferences that they reveal by their actions – what Mises calls *demonstrated preference*. We cannot access people's values, but we can *infer* them from

what they actually choose. And this is how we eke out the principles of economics, the principles of choice.

This kind of thinking allowed Carl Menger to devise a new science of value and action that was so revolutionary and so useful that it is still used (and abused) in mainstream economics textbooks today – *marginal utility analysis*.

The choice calculation

One thing that always puzzled economists was why water – so essential to life – was so cheap, while diamonds – so inessential – were so expensive. Menger provided the answer. Individuals never have the options of owning all the world's water, or all the world's diamonds. They face only the options of having some small amount of each – say, a cupful of water, or a single diamond. Most people already have enough water to slake their thirst, and so do not value an extra cupful of it very much. But few people ever believe they have enough diamonds, so are prepared to pay handsomely for another. They do not think they will get much benefit from an extra cup of water, but they imagine great benefit from owning an additional diamond. It is a question of what is called *marginal utility* – how much *benefit* people expect to get from a *small addition* to their existing stocks of things.

Of course, people's choice will depend on their exact circumstances. A person dying of thirst in the desert may value a cup of water very highly indeed, and be prepared to exchange it for a large quantity of diamonds. A person living in a wet country would never consider such a thing. *Utility* is the benefit that someone expects to get from a good, and as such is a matter of

personal judgement at that place and time. Someone with a headache might welcome a couple of aspirins, but have no use for a hundred more. A person who needs ten logs to complete a shelter might (in Mises's example) exchange a raincoat for ten or more, but not for nine, which would not keep out the weather. Utility is not a quality of objects that can be stacked up and compared like piles of bricks – as mainstream economics textbooks often suggest.

This is why textbook *indifference curves* are also very misleading. They purport to show the amount of one good that people would willingly sacrifice to get another. But all such exchanges depend on the emotions of those concerned and not on straightforward mathematical formulae that produce smooth graphs – as the logs and raincoat example demonstrates.

To see how people really do decide, take the example of a farming family with five sacks of grain – one to feed themselves, one to feed their animals, one to plant for crops, one to sell for the essentials they need, and one they use to feed their pet parrots. Unfortunately they have to give up one sack of grain to pay an old debt. Do they then cut back all their uses of grain by a fifth, as mathematics would suggest? No, they eat, feed, plant and sell as much as before, but let the parrots starve, because that is the most *marginal* use to them.

It is on this basis of *marginal utility* that people choose between different courses of action. When people face an economic choice – giving up something to acquire something else they value, what do they offer to give up? Plainly, they start with whatever they regard as least important to them, the thing which gives them least benefit, the thing with the lowest *marginal utility*. They will make

the exchange only if the marginal utility to them of the thing they gain is greater than the marginal utility to them of the thing they give up. And recognising this is the key to understanding how markets work.

5 Prices, costs and profit

- Making a choice involves giving up one thing in pursuit of something you value more highly.
- *Costs* (what you give up when you choose) and *benefits* (what you gain) are therefore inherently personal too – as is *profit*, the difference between them.
- People exchange things because they value them differently. Prices are simply the rate at which people are willing to exchange.
- The textbook idea of ‘perfect competition’ is fundamentally misleading: it is diversity and differences that makes markets work, not uniformity.

When people think about economics, they think about people buying and selling things in shops and markets. But economics is actually about human choices and actions in the broadest sense, not just those that involve money.

Should I lie in bed or mow the lawn? It is a choice between taking things easy and the pleasure I get from having a tidy garden. Should I go out with friends, or finish my book at home? It is a choice of how I split my time between two things I would like to do. Shall I use my break to have a nice lunch, or to donate blood? It is a choice between pleasant conviviality and the warm feeling that I will be helping other people. Should I walk or take a bus? Take a coat or not? Go to the doctor or just endure my sore throat? They all involve choosing between things.

Most of our everyday choices are like these. None of them involve money. But they are ‘economic’ choices in the sense that to achieve one thing, we have to give up something else. That makes them just like market transactions, where we give up money to buy something we want. The science of economics applies equally well to both.

Choice and satisfaction

What we are doing when we choose, say the Austrians, is to pursue a *preferred* situation over a less preferred one. When we decide to mow the lawn, go out with friends, or give blood, it is because we believe those courses of action will give us more satisfaction than the alternatives. We may turn out to be wrong about that – maybe we end up having an argument with our friends, for example, and wish that we had stayed home – but nevertheless we act *in pursuit* the preferred results, or *ends*, that we expect.

It follows that we will give priority to pursuing the ends that will bring us the most satisfaction. Quite simply, we *prefer* something that will bring us more satisfaction to something that will bring us

rather less. So we choose the most satisfying course of action over others. We take action, in other words, to do what will maximise our satisfaction. And by the same token, we prioritise avoiding the outcomes that we expect to cause us the most dissatisfaction; and so we act in order to minimise our dissatisfaction. Economists do not have to know exactly what it is that people find satisfying or dissatisfying. It is just a logical deduction. Once we accept that people act to achieve their preferred ends, it follows that they act to maximise their satisfaction and minimise their dissatisfaction.

The personal nature of cost

But our pursuit of satisfaction is not straightforward. We usually have to give up something to achieve it. There is a *cost*. It need not be a financial cost, and in most cases it will not be. To mow the lawn costs us some physical effort. To finish our book, the cost is losing a convivial evening with friends. To donate blood, the cost is our time and perhaps some discomfort. When we consider whether to pursue some satisfying end, we must also consider the cost of achieving it, the dissatisfying time, or effort, or loss of enjoyment.

And the interesting thing is that all these are in the mind of the individual. A tidy lawn does not contain some objective, measurable amount of satisfaction, which is there to be plucked by anyone with a mower. The satisfaction of a neat lawn exists only in the mind of those who see it, and some may value it highly, others hardly at all. Likewise, the time and effort of mowing cannot be measured in units of dissatisfaction. Some people may value their time more than others, and weaker people may resent the effort more than stronger ones. It depends on them and their particular values. So

as Wieser pointed out, just as *benefit* exists only in the minds of individuals, so to do *costs*. Costs and benefits are not objectively measurable, but are *subjective*.

In fact, our choices are even less straightforward because when we choose to pursue one preferred end, we actually give up a whole range of other possibilities. Yes, we could lie in bed instead of mowing the lawn. But we could also tidy the house, bake a cake, write some emails, walk the dog, do the crossword, and many other things, each of which would bring us some satisfaction. When we choose not to do them and mow the lawn instead, we have to give up those options and the opportunities for satisfaction that they would bring us. In other words, we face what economists call *opportunity costs*. When we decide on a course of action, it is not just the time and effort of achieving it that we must consider, but the value of the other opportunities we forgo.

Profit is personal too

Another interesting conclusion is the nature of profit. When people think of *profit* they usually think of the difference between the amount of money that it costs a businessperson to bring something to market, and the cash price they get from the sale. But once again, profit is not really about money. It too exists only in the mind of those involved.

When we achieve some preferred end – a neat and tidy lawn, for example – we derive satisfaction or benefit from it. That satisfaction is of course entirely personal – or subjective. Similarly, the value of what we use to produce some end, and the value of the other opportunities we give up, those costs are entirely subjective too.

When costs and benefits are both subjective, it means that the difference between them – profit (or, if you are unfortunate, loss) is subjective too. Profit, again, is in the mind of individuals.

Why we exchange things

It is because values, preferences, benefit, satisfaction, cost, profit, and loss are all matters of personal judgement that we exchange things. If everything had some particular objective value, measurable like its size or weight, then nobody would ever exchange 'valuable' items for 'less valuable' ones. But we do exchange things. Children swap toys they are bored with for others they want. Adults do favours for one another. We buy magazines in exchange for cash, and the newsagent in turn exchanges that money for groceries. No toys, newspapers or groceries are created in the process, but everyone involved regards themselves as better off, because they have exchanged something they have for something they value more, be it toys, newspapers, groceries or cash.

There is nothing mechanical or mathematical about such exchanges. People are not swapping things of 'equal value', as some pre-Austrian economists supposed. Why should they bother? No: people are motivated to exchange things precisely because they value them *differently*. Each child prefers the other's toy to their own. The customer prefers the magazine to the small amount of cash that it costs. The newsagent prefers the groceries to the money. Markets work – and work only – because people do not value things the same. Indeed, the more that people disagree on value, and the wider apart their valuations are, the greater is the benefit that they each derive from the exchange. They each get something they want in return for something they do not regard at all highly.

The origin of prices

We can never know how much *profit* each party derives from such exchanges, because we cannot get into their minds and measure their values. But in the modern economy, we can at least see and measure the amount of one thing that they are prepared to give up to get another – namely the amount of money that, for example, the newsagent demands for a magazine, or that the grocer demands for some provisions. We can see the going *rate* at which they are prepared to exchange one for the other. And this *rate of exchange* between money and other things we call their *price*. In a barter economy, the price of something would be the rate of exchange it commands in terms of cattle, or shells, or pelts. In the modern economy, the price is expressed as the rate at which it exchanges for pounds, or dollars, or whatever the local currency is.

Yet we must remember that prices, though plainly observable, are not the measure of the *value* of things. Values are personal and emotional, and diverse. The price is just the rate of exchange that emerges as a result of many individuals all trading things in the marketplace – trade that happens only because their values are *different*. Each transaction occurs at only one price, but implies two, conflicting, valuations.

Textbook perfect markets

This all makes the Austrian view of markets quite different from the textbook explanations. Of course, the textbook ‘perfect competition’ model is just that – a simplification of the real world. But a model in which buyers and sellers are supposed to be identical is not a simplification of the real world, but a complete renunciation of it.

Markets work only because people are different, and have different views on the value of things.

The textbook models also assume prices as 'given'. But prices are not 'given' – they *emerge* as the result of countless transactions between diverse human beings, each revising their priorities as time and circumstances change. And they fluctuate accordingly. Nor can there be some 'equilibrium price' at which markets balance perfectly, since perfection implies there is never any cause for change. These models are wildly misleading because they assume away everything that actually makes markets work.

6 Co-ordination through markets

- Prices co-ordinate the activities of countless individuals throughout the world. High prices show where something is scarce, but also induce people to supply it and fill the scarcity.
 - There are usually many different ways of producing the same product. Prices encourage people to use the cheapest mix of inputs. Their decisions in turn affect the input prices in other markets, initiating an avalanche of smooth adjustment.
 - Information on supply, demand and prices is essential in economic choices. By using information that is fragmentary, changing, local and personal, markets can make much faster and better choices than centrally planned economies.
 - Markets reward the value to others of what each individual produces – whatever the personal merits of the producer and whether the increased value is the result of hard work, good judgement or sheer luck.
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The textbook model of ‘perfect competition’ is responsible for a lot of bad policy. It makes people imagine that markets in the real world are somehow ‘imperfect’ and that steps must be taken to remove imperfections. It imagines that suppliers are identical, that there are no barriers to entry for new suppliers, and that profits will be whittled down by competition to some just-profitable level. So when people see that in the real world there are barriers to entry, that suppliers are not identical, and that some entrepreneurs enjoy large profits, they regard these as ‘market failures’ that have to be corrected.

Many people go further and say that the market system, being unplanned and lacking any central direction, can never deliver economic benefits rationally or efficiently. So they call for economic planning of production and distribution.

How markets reconcile our differences

Austrians counter that the market system is in fact a hugely effective system that successfully steers resources, including time and skill as well as material goods, to their most valued uses. But it manages this only because it is so different from the standard textbook description. It does not work because people are the same but because they are different. And it co-ordinates their differences and enables them to use their various talents for mutual benefit.

In fact, it is the market that connects the huge and diverse populations of the world, and enables them to co-operate in peaceful collaboration. Given the political differences between countries, that is no mean achievement, and it is unlikely that any other institution could do the same. And yet, I am linked to people all over the planet. My shoes are from Italy, my shirt from China.

The wine I drink is from Chile and the movies I watch are from America. All these people are producing things that I buy, and in return I send them money. We both think we are getting a good deal. We both benefit from the exchange.

Of course, I have no idea what motivates people in Italy, China, Chile or America. They all have their own different beliefs and values and ambitions. What the market does is to allow their purposes to be reconciled with mine, because we both benefit from the economic transactions between us. They get the benefit of money to spend on themselves and their families, I get the benefit of being clothed or entertained. It does not matter exactly what our various ambitions are. Indeed, the wider our values diverge, the more we gain from exchange. The market helps all of us to achieve our ends, *whatever* they happen to be. If there is a proper role for public policy, it should be to let the market get on with promoting that free collaboration between us, not trying to force us into some preconceived notion of what our values should be.

Prices as telecommunications

But how is it that the market can co-ordinate the activities of millions of people across the globe, and enable them to co-operate for mutual advantage, even though they have never met and have very different values? According to Hayek, the answer is the price system, which acts as a vast communications system.

Prices may be just the rate of exchange at which people are prepared to trade one good for another. But they also summarise the values of everyone involved in the market. If a good goes up in people's estimation, they will be prepared to exchange more of other things – such as money – to obtain it. The rising price signals to suppliers

that there is financial profit to be made from bringing more of the good to market, which they do. But while their only motive was to make a profit, their action shifts resources to where they will bring greater satisfaction to their fellow human beings. The price system has co-ordinated the changing preferences of customers and suppliers.

Hayek uses the example of a rise in the price of tin. Perhaps some new use has been discovered for tin, or perhaps some existing source has run out. In fact, it does not matter which. Customers now know that if they want to save money they must use tin more sparingly, using it only where it is essential and finding cheaper substitutes for other purposes. In turn the new demand for substitutes will *raise* their prices, prompting users to act in just the same way. People who use those substitutes will in turn be prompted to economise, and so it goes. As Mises put it, every change in the market sets off an *avalanche* of other changes as people adjust their behaviour to the new situation – and to other people's responses to that situation as well.

In this way, the entire market adjusts to the new scarcity of tin. People in the market do not need to know and evaluate all the various uses of tin and determine which are the most important – not that they ever could. Rather, the price system gives them all the information they need to *co-ordinate* their own actions with everyone else's. And their response to that information automatically steers resources towards their highest valued uses and away from less valued uses.

Prices ensure the cheapest input mix

There are usually several or many different ways of making the same product. The buyers of tarpaulins (to use another example

from Hayek) probably care little whether they are made on a base of hemp, flax, jute, cotton or nylon. The producer therefore chooses the least-cost material – that is, the material that requires the least sacrifice of other desirable products. By seeking the lowest cost, the producer releases resources that can be used in more valued uses.

Likewise, when a product has several components, producers will be looking for the lowest-cost mix of inputs. If some input, like tin, becomes more expensive, it indicates that other producers value it more, and producers who can reduce their reliance on tin will look to place cheaper substitutes in their input mix. In this way the price system indicates the highest-value use of all materials, and encourages us to use them as sparingly as possible as we pursue our various ends.

People's adjustment to changes in the market, like the avalanche of price movements brought about by a rise in the price of tin, are not instant or mechanical, as the textbook models suggest. In a market with millions of products being traded, there will be price avalanches coming from various directions, through which producers and consumers each have to navigate. It is rather like trying to navigate across a busy station concourse, when thousands of other people are all rushing in different directions. It is a very complex process, a *social* process in which people's changing value judgements will be decisive – not a process that can be described and predicted mathematically.

The remarkable thing is that this system, which steers resources to where they are most valued, is completely automatic. It is not something that had been deliberately designed by governments and officials to do this job. The price system arose quite naturally, and persisted because it works – rather like the way that language

arose and persisted, because of its usefulness in communication. Indeed, the price system itself is an extremely effective way of collecting, using, processing and imparting information about the scarcity of resources and the valuation that people put on them.

How markets use local information

In the economic textbook model, information is ‘perfect’, and that makes the market run efficiently. But in real life, information is very far from perfect. Nobody has perfect information. Much information is partial, fragmentary, inaccurate, conflicting, diffused, personal, costly to obtain and difficult to pass on. And it is *because* information is imperfect that markets work better than any other form of economic organisation.

People tend to think of information as straightforward and accessible, like the books in a library. In fact, much ‘information’ is actually the competing theories of different experts. And most of it is dispersed, known only to specific people, and cannot easily be written down and transmitted. Real estate agents, for example, know about temporary opportunities in a rapidly shifting market, in which the needs of many and diverse buyers have to be matched with the property that becomes available each day. Much of this knowledge is simply their expert ‘feel’ for the local market, built up through experience. They might not even be able to describe it, much less communicate it.

Their feel may not always be accurate. Their information may not be complete. They may overestimate what buyers will pay, and lose a sale to a competitor who takes a different view and prices properties more cheaply. Or they may overlook a new road or

school development and how it will impact demand. One thing is for sure, though: they will have better information about local conditions than some distant central planner could ever have. By the time local officials had collected what information they could and sent it up to the centre, it would be both lacking and out of date. By the time the centre had evaluated the conflicting views of different agents, local events would have moved on, and it would be beyond useless. The great thing about the market, with its telecommunications system of prices, is that it allows local, dispersed, and personal information to be used and acted on quickly and efficiently. That means it is much more likely to succeed in co-ordinating the plans of everyone involved, and thereby raising value, than any centralised planning system, which could not possibly collect and process so much information so fast.

Capitalism does not lead to monopoly

Another criticism made of market competition is that it actually promotes monopoly capitalism. Marx, for example, suggested that, as competition steadily whittled out the less successful enterprises, the remaining firms would get larger and larger, until there was just one monopoly producer left in each sector.

This is nonsense, say Austrians: the reality is quite different. While it is easy to see the growth of large, successful firms, we invariably overlook the decline of the – equally large – firms that are supplanted by up-and-coming ones. The market is not a process of inevitable concentration, but of constant jostling and change.

What worries people about monopoly is that dominant firms could charge any price they like. But even this is not so. There will

always be the threat of competition, perhaps from smaller, more innovative firms. And likewise there will always be substitutes that customers can turn to: the market dominance of America's railroad companies, for example, was broken by the rise of the airlines.

Unlike commercial enterprises, which survive only if they continue to serve their consumers, governments can simply vote themselves monopolies – as they have done in the past for salt, telephones, broadcasting and much else. Or they create monopolies by restricting entry to certain professions through licensing. Their justification may be public safety – so that people are not exposed to unqualified doctors or taxi drivers, for example. But all too often, Austrians believe, the real motive is political. Licences generate revenue for the authorities. And licensing will help those already in the market – who have more wealth and probably more political influence – to keep out potential competition. Few cartels and monopolies would ever have come into being, had it not been for government and the efforts of those with political power to stifle competition. Capitalism has no natural tendency to monopoly or monopoly prices; on the contrary, it has a powerful tendency towards diversity and differentiation, which bids quality up and prices down. The textbook models conceal it, but that is the whole point, and the enduring benefit, of the process of competition.

Justice and the market

The market system does not depend on people 'working hard', but on their making the things that other people desire – and in ways that conflict least with the desires of others. Its rewards are not a 'just' reward for effort or personal merit, and do not even reflect the size of the investment that is made – people sometimes hit

on highly successful products that cost them very little time and money to develop. The market rewards only the *value to others* of what each individual produces, whether it came about by luck, good judgement, or hard work.

Some thinkers, such as Karl Marx, adopted a 'labour theory of value' that suggested that the value of a product was determined by the labour invested in it. (He used this to justify the expropriation of capitalists, who do not seem to put much physical labour into the goods they produce.) In reply, Böhm-Bawerk and other Austrians argue that this is completely confused. Value is not a quality that exists in a good, or a quality that producers can put into it. Producers can work hard, and invest a large amount of time and effort, and yet create a product that nobody wants. Value is what customers or *consumers* think of the product. Prices are not a measure of how much time and effort has gone into a product. Quite the contrary: prices inform producers how much time and effort is *worth putting into a product*. Production does not determine prices: prices motivate producers.

The market system is not something that has been planned in order to achieve a particular outcome. So we can never predict what share of its rewards will go to any particular individual or group. Some people who work hard may be poorly rewarded, others who strike it lucky may make fortunes. But in a market system, there is an important sense in which each individual's share will be as large as it can be. Since the market system efficiently directs resources to where they will produce most value for society, each individual's share of the total will be delivered at the lowest possible cost.

7 Competition and entrepreneurship

- Competition is not wasteful duplication. In competition, producers jostle to provide goods with *different* prices and qualities in the hope of discovering what buyers value most. This drives innovation and progress.
- Competition therefore works only because it is *not* perfect – because different producers, products and consumers are all different, not identical.
- The discovery process of *competition* is driven by entrepreneurs, alert and expert individuals who – motivated by the possibility of profit – take risks to innovate products that they hope will appeal to consumers.
- Profit therefore has an important social role, inducing entrepreneurs to strive to produce what the public most want.

The possibility of making a profit by supplying some consumer want is what motivates producers, but the threat of competition sharpens the process by which resources are steered to their most valuable use.

Competition encourages producers to move swiftly to close the gaps between consumers' values and what the market is supplying. And it prompts producers to try to outdo each other in making sure that consumers' wants are satisfied. The greater the competition, the faster and more accurate producers have to be in serving the public, and indeed in anticipating their future demands; and the more innovative and imaginative they have to be in that endeavour.

The consumer referendum

Competition is a process of selection. And in the market, it is consumers who do the selecting. They are always seeking out the best and the cheapest products to satisfy their needs. And they are hard to please: if someone can produce a better or cheaper product, they will drop their existing suppliers and spend their money on that new product instead.

Mises described the market as a daily referendum on what should be produced and who should produce it. Every penny spent by consumers, in countless daily transactions, acts like a vote in a continual ballot, determining how much of each and every thing should be produced, and drawing production to where it is most highly valued. It is much more efficient than taking decisions through political elections, where people get to vote only every few years, and even then are voting for a package of disparate measures. In the market, every penny really does count, and it counts every day.

Competition and diversity

Many people think competition means the duplication of similar work and is therefore 'wasteful'. It is a view that comes naturally from

the textbook model of ‘perfect competition’ in which all producers are identical. But in fact, competition is precisely what spurs producers to be different. They want to outdo other producers, to provide consumers with something better or cheaper than others, something that stands out from the crowd, grabs their attention, and makes them switch their purchasing towards the new product.

In the textbook model, consumers are indifferent between suppliers because all suppliers are identical. But the role of competition is precisely to differentiate producers. No two dentists, or grocers, or travel agents are exactly alike, and never could be: yet there is still plenty of competition between them. Different firms produce products at different prices, with different qualities, different features, different packaging, and different advertising slants. Even seemingly standard products like soap or orange juice are different, and sold in different ways at different places. Would we really like all our houses, cars, or clothes to be identical in order to create a ‘perfect’ market? Or anything like it? Producers are not trying to give us all some identikit product and the lowest prices, but trying to find out which products consumers *prefer*.

Competition as a discovery process

In the textbook ‘perfect competition’ model, consumers’ tastes and preferences are identical, known and static. They are a ‘given’. But in real markets, consumers’ values are not identical and are never known and ‘given’. They are known only to the individual consumers concerned – and even then, consumers may not fully know their scale of values until they are actually faced with some choice. The task of producers is to discover what their customers actually want, and provide it to them. They do not have ‘perfect information’ about

consumers' preferences. They cannot know exactly how customers will react to a new product or a change in a product's quality or price.

For Austrians, then, competition is not a state of affairs but an activity. Competition is a *discovery procedure*. It is a *process* by which producers try to discover (on the output side) the various preferences and tastes of consumers, and (on the input side) the best and cheapest mix of resources that will enable consumers' demands to be met at the lowest possible cost.

Competition prompts producers to innovate and experiment with new products, and to try to satisfy consumer wants that have not been recognised by other producers who are in competition with them. Likewise, competition spurs producers to experiment with various mixes of inputs and processes in order to discover which mix produces the most valuable output at the lowest cost.

Entrepreneurship and profit

Production, then, is not just a matter of investing capital in any way you choose and sitting back to enjoy the 'normal return' it generates. Investment does not always produce things that customers want to buy, as some critics of capitalism often suggest. It involves complex choices, calculations, and guesswork. Complementary resources such as land, labour and equipment have to be brought together. Products have to be designed, made, packaged and sold. Consumer demands have to be anticipated with some accuracy. And all this in a world of changing events and imperfect information, where nobody can be completely sure what is the best mix of inputs, or what consumers will actually go for, or what new products their competitors may come out with.

Successful production therefore involves guessing the future state of the market. All production takes time, as inputs are assembled, products are made, and marketing gets underway. To make a financial gain, the promoter of a production project – the *entrepreneur* – must be able to sell the final product at a price higher than the price of the various inputs that have been used to bring it to market. But since production takes time, and things can change in the interval, this outcome is by no means certain. The cost of inputs may rise along the way, other competitors may bring better or cheaper products to market, fashions might change, and consumers may not be willing to pay the price that the entrepreneur had hoped for.

Profit, then, does not come from simply investing money in some production process and waiting for the returns to come in. All production is a *speculation*. It is possible to make huge mistakes, spending time, money, and effort on creating products that do not in fact find favour with the public. The longer and more complicated are the production processes, as in the modern economy, the larger is the possibility of making such a mistake. Entrepreneurial success hinges on a mixture of knowledge, skill, and luck. Profit comes only from making correct guesses about what gives value to other people. Incorrect guesses lead to loss. The pursuit of profit entails taking a risk.

The social role of profit

Profit has an important role, therefore, in stimulating individuals to discover new and unsatisfied demands, and to try to anticipate the market as accurately as they can, and to satisfy it as cheaply and efficiently as they can. Far from being a mere windfall benefit for

producers, the lure of profit has an important *social purpose* in helping to drive resources to where they create the highest value. In a world without profit – say, where state monopolies manage all production – there is no incentive for anyone to take a risk, and therefore no incentive to seek out new ways in which the public’s wants can be satisfied. State planners are far less likely to invest in new ideas.

Profit is not just a personal gain. It reflects the value that the producer has delivered into the lives of other people. It comes solely through the willing custom of satisfied consumers – since, where there is competition, they are not forced to trade with anyone they do not wish to trade with voluntarily. Indeed, the greater the profit that entrepreneurs make, the more value that we can be sure they are adding, and the greater the increase in general prosperity.

Kirzner argues that even good luck should be rewarded. Because the market is a discovery process in which people do find opportunities and possibilities that others have not, the profits of doing so should rightly belong to the discoverer. That will, after all, encourage other people to act entrepreneurially, take risks, and discover more opportunities and possibilities that will benefit others.

Entrepreneurial alertness

When Austrian economists talk of *entrepreneurs* or *speculators*, they do not have a picture of sharp-suited wheeler-dealer capitalists in mind. Because of the inevitable uncertainties about the future, they regard *all* action as a speculation. Everyone is to some extent an entrepreneur, seeking to use their skills and their resources to capture future gains. That is as true of workers who sign up for a training course in the hope of improving their job prospects, as it

is for business executives who build factories or stockbrokers who trade securities.

Nevertheless, in our specialised modern economy, some people do carve out a profession as full-time entrepreneurs, just as others become full-time doctors or engineers. According to Kirzner, entrepreneurs bring to the market process not only their innovation and organisational skills, but their *alertness*. They are on the lookout for opportunities to make profits – opportunities where consumer wants remain unsatisfied, or where better and cheaper goods can be brought to them. They keep alert to detect changes in market conditions, and indeed try to anticipate them, and move to profit from them before others less watchful. Their information may be better than other people's, because they have better insight into the particular markets that they make their specialist concern – enabling them to make faster and more accurate guesses about the future state of demand. Or they may just be able to think innovatively and find new ways to produce more cheaply, improve products, or find completely new ways of bringing satisfaction to the public. When they do succeed and make profits, it encourages other people, who were less alert or less well informed, to follow their example. In this way they contribute to a continual improvement in the general standard of living.

Once again, the whole market adjusts, steering resources into the value gap that the most alert entrepreneurs detected. With more competitors now fighting for the same gap in the market, profits become more difficult to capture; and in an endless process of alertness, speculation and discovery, entrepreneurs use their particular knowledge and skill to seek out new places where they can profit by providing value to consumers and so boosting the prosperity of the public.

Because the entrepreneurial function is so important to maintaining and indeed improving our standard of living, Kirzner argues that it is important not to stifle it. Government regulation, for example, may close off some of the possibilities that entrepreneurs may come up with that would benefit others. Taxation may make some innovations no longer worthwhile, and it also reduces the incentive to innovate by eating into future profits – profits which, we must remember, are themselves no more than a risky and uncertain prospect.

8 Time, production, capital and interest

- All production takes time. How much time it is worth spending to produce a particular product – the length of the production process – depends not just upon how people value the end product, but on how they value time too.
- This time preference – how much people are willing to give up now for the prospect of a greater reward in the future – is the origin of interest.
- Because production takes time, changes in events or human preferences can lead to resources being wasted. The important thing about capital assets is not how much of them we have, but how they are structured.

Entrepreneurs may be motivated by their own profit, but in reality they are the servants of consumers. It is consumers' demand that ultimately decides what will be produced – and indeed, *how* it is produced.

What economists call *producer goods* or *capital goods* – things like factories, machinery, tools, equipment, and commercial

vehicles, plus all the components that are used in any manufacturing process – have only one purpose. And that purpose is to create the final goods that we use, or consume – so-called *consumer goods* like chocolate, hairdryers, pens, beer, newspapers, toys, and socks. Nobody wants producer goods for themselves, but only for the consumer goods they create. Their value to us stems solely from the value of the consumer goods they produce – or at least, what value we expect them to produce.

Investing to raise our productivity

Why do we go to the trouble and expense of building producer goods? Because we hope that they will save us something we value – time and effort. To take an example from Mises, someone might be able to catch enough fish to live on simply by wading into a stream and catching them by hand. But that person could catch fish far more easily with a net. It would make their efforts far more *productive*.

To make a net also takes time and labour, of course, and the materials to make it have to be found and perhaps processed into the right form to be of use. But the individual might calculate that it is worth this investment of time and effort, because it will reduce the time and effort that they have to spend later on. Indeed, it might enable them to catch more fish in less time, fish that they could sell on to other people in exchange for cash or for something else that they value. Or they might be able to catch more interesting varieties – sea fish, say – that they could not catch by hand, again adding to the value generated by their fishing activities.

The calculation about whether or not to make a net is not entirely simple. To be able to spend the time necessary to make the net, the person has to go hungry for a while, or must have stored up enough fish to live on. They might need more fish to exchange with other people in return for the materials they need to make the net. And they need to be confident that the net will indeed produce the result they intended. Today we might say that they need *capital* to live off and to invest on the producer good that is the net, and that that they are *speculating* that the investment will in fact produce a profit for them.

Investment driven by consumer value

Once again, the market process will reward those who make the most accurate guesses about what consumer goods people actually want, and how much they are prepared to pay for them. An entrepreneur who has too pessimistic a view about future consumer goods prices will be priced out of the competition for productive resources like land, machinery, and labour. Meanwhile an overoptimistic entrepreneur, willing to pay much more for those assets, will suffer losses when the final product is marketed. Only those who make accurate guesses about the future prices of consumer goods will succeed.

Acquiring capital is therefore no guarantee of future riches. Capital does not 'reproduce itself' and 'hatch out profit', as Marx suggested. First, it has to be accumulated through the deliberate action of individuals who are prepared to take a risk, forgo consumption and create capital goods, like the person going hungry to make a fishing net. Second, it can be lost and wasted. It can be lost by mistakes, as when the entrepreneur misjudges the minds of consumers. And

third, it can be consumed, as when someone sells their productive equipment to pay their bills or finance consumption.

All this puts a pressure on entrepreneurs to take care in getting their guesses right, and therefore tends to keep the prices of producer goods in step with the prices of the consumer goods that they exist to produce. It systematically prompts entrepreneurs to invest in the producer goods that deliver the highest value to consumers, and to find out the best and cheapest ways of satisfying those needs.

Production encapsulates time

However, the key thing about production, according to the Austrians, is that it takes *time*. In the modern economy, producer goods are often far more complicated than a mere fishing net, and production processes may be far longer than the time spent making a net and throwing it into a stream. There may be many steps involved, and many components to be assembled. Even then, the producer goods we build and the sophisticated consumer goods we create with them may require additional investments of time and labour to keep them running and well maintained. Nor will our consumer goods last forever: they will provide us for only so long before we have entirely consumed them, or need to repair or replace them.

So whenever we engage in production, we face choices – not just about the means and materials we are going to use, but about how we value our time. Do we prefer to spend more time making high-quality goods that will last? Or do we prefer to have something quicker and cheaper to produce, even if it is less durable? There

is no 'correct' answer to such questions; it depends entirely on the values of those making the decisions.

How we value time is therefore an essential element in every action we take. We naturally prefer to have something we value now rather than have it later. Yet some people value immediate satisfaction very highly, and consume everything they earn, while others prefer to save, and sacrifice satisfaction today in the hope of greater satisfaction in the future.

Consider someone facing the choice of having \$100 now or putting it in the bank at 4% interest and getting \$104 back in a year's time. If they put no value at all on their time, they would have nothing to lose by waiting. They would choose to bank the money and get the \$104 later on. But our time is limited, and like everything that is in short supply, it *does* have a value to us. Some people might want a greater reward for giving up access to the money for a year, and some less: but everyone places at least *some* value on time.

Production choices rest on time preference

Whether or not to create a producer good – like a net, or a car plant – is therefore not just a matter of having the right technology. Since production takes *time*, the decision whether you should postpone consumption and build producer goods depends on how you value your time – your *time preference*. You might know how to make a net, but calculate that for you at least, the time involved is just not worth it.

This, as Böhm-Bawerk explained, is the origin of the idea of *interest*. At its simplest, interest reflects people's time preference.

Would they prefer \$100 now or \$104 in a year's time? Interest is not something that can be abolished or legislated away, because it is part of human nature. It reflects our natural preference to have satisfaction now rather than satisfaction in the future.

Time preference is also crucial to our choice of production processes – specifically, how much time we are prepared to commit to them. If time is precious to us – reflected in a high interest rate – then we will prefer shorter production processes. We will not want to waste time in production, since we prefer to get our satisfaction more immediately. If we do not place much value on time – reflected in a low interest rate – then longer production processes will make financial sense. If time is not important, we can engage in more sophisticated processes that perhaps have more steps in them, involving a greater use of time – what Böhm-Bawerk called more *roundabout* production processes.

The structure of capital

On the basis of Böhm-Bawerk's insights on capital and interest, Mises and Hayek recognised that the fact that production processes today are sophisticated and involve many steps also makes them somewhat fragile. Mistakes anywhere in the production chain can have disastrous results.

People talk about 'capital' as if it is some homogeneous thing, but in fact it is simply an idea. Like 'size' or 'weight', it does not exist on its own. It exists only in capital goods, that is to say, producer goods. And the exact mix of those producer goods that is employed in an economy – what Austrians call the *capital structure* – is crucial. A country can have large capital expenditures, but if they go into

building the wrong producer goods that do not in fact create value for consumers, then all that spending has been wasted.

This is all of particular importance in explaining a persistent feature of capitalist economies, the repeated booms and busts that occur in them, the phenomenon known as the business cycle, and the unemployment and financial losses that go with them.

9 The business cycle

- Austrians believe that the boom and bust pattern of business cycles is due to the structure of production being out of kilter with people's real preferences.
- The cycle starts with monetary authorities setting interest rates too low. This encourages firms to borrow and invest in new plant and equipment, boosting the business sector.
- However, the low interest rates discourage saving and eventually the banks have to curb their lending. Investments that were profitable at low rates now become unprofitable. Production processes have to be scrapped, and capital resources are wasted.

The periodic ups and downs in the economy, lurching from boom to recession, is something that puzzled economists for a long time. Böhm-Bawerk provided some useful insights, but the Austrian explanation was first set out in detail by Mises in his *Theory of Money and Credit*, and later developed by him in collaboration with Hayek at the Austrian Institute for Business Cycle Research in the 1930s – work for which Hayek won the Nobel Prize many years later.

To Austrians, the business cycle is in fact a *credit* cycle, because it usually starts with an excess of credit being created by the banks – specifically, says Rothbard (who further developed the work of Mises and Hayek), *central* banks.

The incentives on central bankers all push them to expand credit. They are judged on the success of their country's business and financial sectors, and are praised when economic growth booms. Slowdowns and recessions, by contrast, earn them nothing but criticism and abuse. So they tend to encourage booms, and try to avoid slowdowns at all costs.

The way they do this is to keep interest rates as low as possible. Central banks are such large players in the financial markets that by changing the rate at which they lend to the commercial banks, they can influence interest rates right across the banking and finance sector. Lower interest rates from the banks encourage people to borrow, because they make borrowing less expensive – there is less interest to be paid back. So householders take out more loans for new homes, adding to the demand for housing, and pushing up house prices, while entrepreneurs find it cheaper to finance the new factories and equipment that they believe will enable them to step up production and increase their profits.

On the surface, everything appears to be on the up. Unfortunately, the artificially low interest rates destabilize the delicate equivalence between investment in productive assets and people's time preferences, and create a credit-fuelled boom that causes entrepreneurs to invest in the wrong places. When the boom inevitably ends, the investment proves to be loss making, and jobs and capital are lost.

How banks create money

There are several phases to this cycle. It starts when banks increase their lending to customers. The thing most likely to set that off is when the central bank reduces interest rates, which makes borrowing cheaper and prompts customers to take out larger loans and mortgages. This is mischief enough, since it encourages people to borrow more even through their time preferences have not changed. But the mischief is multiplied through fractional reserve banking.

Most people think of *money* as just the notes and coins they keep in their pockets and purses. But perhaps thirty or forty times larger than this is another kind of money, namely the amounts that people hold as deposits at their bank.

Banks lend to their customers simply by increasing their overdrafts or adding to their deposits. If it lends \$1000 to an individual or a company, it gives itself a new asset – a \$1000 claim (plus interest) against that customer. But that is balanced off by a new liability – the extra \$1000 that the customer now has on deposit, and could withdraw at any time. So the bank's books remain in balance. Yet, at the stroke of a pen, it has created new money – because it has created a new deposit, and bank deposits, after all, are money. Even if the customer withdraws and spends the \$1000 to pay suppliers, it simply ends up as deposits in those suppliers' accounts.

But where does the bank get the \$1000 in cash for its customer to withdraw? Remarkably, this is just a case of writing an entry on its balance sheet. It does not need to have cash in its vaults in order to grant the customer the loan. Of course, when the customer comes in and actually draws some or all of the agreed \$1000 loan

facility in cash, then the bank needs cash on hand to pay it: but then savers are coming in all the time to deposit cash. Plainly, the bank has to keep enough cash on hand to meet its daily inflows and outflows. Beyond this, however, it can actually create money, as it does in this case.

How much money can banks create? Astonishingly, there is almost no limit. Many countries specify how much money their banks must keep on hand, precisely so that they do not run out of cash for their daily transactions and cause a panic. In most places, however, this is just one or two percent of their deposits. So provided it can meet its customers' day-to-day cash needs, then for every \$1000 in notes and coins that the bank takes in from savers, it can lend out – and therefore effectively create – another \$50,000 or \$100,000.

Of course, if all customers came in on the same day and demanded to withdraw everything in their savings accounts and loan facilities in cash, the bank would not have enough cash to pay them. Some Austrians, such as Rothbard, regard this *fractional reserve* banking system as a fraud: depositors put their money into the bank for safe keeping, but the banks put it at risk by lending it out and using it to create even more money. But bank runs are rare in normal times, and depositors accept this risk in return for the benefits of being paid interest.

What worries all Austrians, though, is the extent to which the system magnifies changes in the money supply. A \$1 increase in the money supply allows the banks to create \$50 or \$100 of new loans. And if they lend to other banks, they can do the same in turn. This 'money magnifier' means that small changes in the supply of money can have enormous – and therefore potentially dangerous – effects on the financial system and therefore on the real economy.

How new money boosts business

But let us suppose that the banking system has carried on like this, without incident, for some years. If the central bank then cuts interest rates, mortgages and loans become cheaper, and the banks have more people coming through their door asking for them. Let us say that the banks increase their lending, using a fraction more of their deposits to provide new loans. The increase might be too small to worry savers, but as we have seen, on the back of it, very large quantities of new money are created, and find their way into the economic system.

For people in business, this all looks too good to be true. The cost of borrowing has fallen, and at the same time there is more money around in their customers' pockets. Entrepreneurs figure that they can now afford to invest in sophisticated new machinery, take longer over the production process, and still turn a handsome profit at the end of it all. So they set about buying land, building factories, ordering machinery and hiring in new workers.

Other entrepreneurs come to the same conclusion, and join the same dash to invest. But that extra demand bids up the prices of land, buildings, and machines. And as their prices rise, more resources are drawn into them. Money that might have been spent on consumer goods is now spent investing in producer goods. Meanwhile, some entrepreneurs may even increase their borrowing to meet the new higher prices, and even more resource is drawn in to the producer goods sector.

Landowners and those who sell capital goods will all find themselves better off. So will their workers and the workers hired by the entrepreneurs they supply. Rising wages simply give more

heart to the entrepreneurs, convincing them that there is a strong market for what they will eventually produce. So they carry on, and the boom continues.

How the boom turns to bust

Now entrepreneurs are so deep into their new commitments that they cannot pull back. They have invested in new factories, and more sophisticated, longer production processes. Their costs continue to rise, but if they pull out now, they will face certain losses. Like a builder who has oversized some foundations and run out of bricks, they keep borrowing in the hope that they can yet finish and save their project.

Unfortunately, by now all the new money that has been created is starting to run out. The banks have lent as much as they possibly can. Meanwhile, people are not saving any more than they did before, since their time preferences have not changed; and low interest rates do not encourage them to keep large deposits at the bank. Short of cash, the banks start to worry about the security of the loans they have made, and begin to rein back, tightening their lending terms, and perhaps even demanding repayment from customers they see as risky. Projects that looked profitable when loans were cheap are now exposed as having been overoptimistic. Some business plans fail, and workers are laid off. Spending and investment falls, and commerce goes into a downward spiral.

The banks' return to more prudent lending does not *cause* the crisis. It simply reveals how overambitious was the original expansion, and how mistaken were the original investments. It exposes the scale of the *malinvestment* that has occurred. And

these malinvestment mistakes end in real losses for those involved. Unable to keep borrowing more and more, firms run out of cash. They have to sell assets for whatever they can get – in a falling market. Factories are closed, construction projects halted, and workers dismissed. Some firms will default on their loans, and banks will tighten their lending terms even further, dragging other firms into bankruptcy too. Even firms that have acted prudently throughout the episode will be caught up in the tidal wave of bad news spreading out from others' failures.

How the cycle wastes real resources

If capital really was homogeneous, then perhaps most of the failed investment could be rescued and reapplied for other purposes. Sadly, most factories and production machinery cannot be used for any purposes other than those they were designed for. A car plant cannot be used to make electronic equipment, at least not without being completely gutted and re-equipped; a newspaper press is a huge piece of machinery that cannot be turned to any other use once the newspaper business has collapsed. Such specialist plant and equipment will have to be written off and perhaps scrapped. Workers may, perhaps, be re-trained for other jobs, albeit at the cost of some time and money. But the fact remains that the boom has led to a bust that has produced a real loss of capital and real unemployment.

There is no way out of the crisis, say the Austrians, except to go through the dismal downswing of falling prices and wages, and of factory closures and business bankruptcies. Attempts to delay the adjustment – trade unions resisting layoffs, or governments trying to stimulate the economy further by pushing interest rates even

lower – simply prolong the malinvestment and makes the eventual reckoning even worse. The original credit-fuelled boom was not the start of a new era of prosperity; rather, it gulled business and individual borrowers into wasting precious resources on misguided investment. No subsequent policy can change that fact.

Austrians say that the way to prevent this boom and bust, with the real loss of jobs and waste of capital resources that it inevitably brings about, is not to get into it in the first place. That means central banks should not try to avoid every slowdown and reinvigorate business by pushing down interest rates so low that they no longer reflect people's real time preferences – for that is how the cycle starts. We need to explore how to make our money more solid, since it is the sudden increase of money that gives entrepreneurs the means and the encouragement to invest too much in the wrong things. That means looking at government's ability to print new money, and the banks' ability to magnify that amount and fuel a misguided boom.

10 The trouble with money

- Money is subject to the same market forces as any other good. Its 'price' – the volume of other things it will buy – depends on how much of it is supplied and how much people demand it as a means of making sales and purchases.
- Governments, as the main suppliers of money, can easily destabilise its purchasing power by creating more of it – the problem of inflation.
- When inflation avalanches through different markets, it stimulates fake booms that are inevitably followed by retrenchment, losses, and wasted resources.
- Inflation is so damaging that there must be strong restraints on governments' ability to create inflationary booms.

Money is a very powerful force in a modern economy, because all transactions are made through it. But mainstream economists often misunderstand the nature and role of money. They puzzle over it, because it does not seem to be a producer good – indeed,

entrepreneurs have to give it up, not accumulate it, to acquire the capital goods they need for manufacture. Nor does it seem to be a consumer good – only a miser wants to stock up with money just for the pleasure of owning it. And because economists do not properly understand what money is, they have allowed it to be mismanaged by the monetary and banking authorities, say Austrians – leading to major problems such as inflation and business cycles, with all the damage that they create.

Money is valued for exchange

Starting with Mises, though, Austrians have given us a clearer understanding of what money actually is and how it works.

According to Mises, money is an economic good like any other, though it is certainly an unusual one. People do not hold it to produce other things, nor to consume for its own satisfaction. They hold it to *exchange* with other goods. The whole point of money is that it makes exchange easier. Instead of people having to find others who have exactly what they want, and are prepared to accept exactly what we have in exchange – like hungry barbers searching for bakers in need of haircuts – they offer and accept some third good that is easily exchangeable later for whatever it is that they really want.

Money is desired and valued for this special purpose. Its other qualities, mentioned in the textbooks – such as whether the particular thing we use as money is durable, or easily divisible, or is portable, or is a good store of value – are secondary. Money is valued because of its usefulness as something you can easily *exchange*. It is valued for its *purchasing power*.

Money's roots in real commodities

Money's value in facilitating exchange makes Mises believe that it is something that *emerges* from the market system. The value we put on money as a medium of exchange today, he argues, reflects what amount of goods it would in fact purchase yesterday. Likewise, its value then, and the reason why people dealt in it, reflected what it would purchase the day before – and so on. Eventually we must get to a day when whatever we use as money was valued, not as a medium of exchange, but as something with a usefulness of its own, so that it could be bartered against other goods. It should be no surprise that the word *pecuniary* comes from *pecus*, meaning cattle, or fleece – easily exchangeable and portable goods that did serve as an early form of money.

From this, which he calls his *regression theorem*, Mises concludes that money always has its roots in useful, valued commodities. It is not something that governments can create and which will be trusted because they command it so.

The price of money

Like other economic goods, there is a *supply* of money and a *demand* for it, and money has its *price*. The price of money is expressed a little oddly – not in terms of the value of goods that will exchange for one unit of it (how many loaves or haircuts for a dollar), but the number of units of money that exchange for the other goods (how many dollars for a loaf or a haircut) – and we talk about its *purchasing power* rather than its *price*. Yet the purchasing power of money is a price like any other, decided by how people value it, through the pressures of supply and demand.

The *demand* for money depends upon the values and preferences of the individuals concerned. Exactly how much money people want to hold for transactions may depend not just on how greatly they value it as a medium of exchange, but on the scale of the transactions they wish to make with it, and their view of money and the world – whether they believe that the purchasing power of money is rising or falling, or whether they just feel more comfortable having plenty of it to hand.

The *supply* of money is equally complex. Among other kinds, there is *commodity money* like gold and silver – things that are readily acceptable in exchanges, but which also have a practical usefulness of their own and are therefore valued for that as well. And there is *fiat money* – the notes and base-metal tokens that are produced by national governments, which have almost no value in themselves (though in Weimar Germany’s hyperinflation of the 1920s, banknotes provided a cheap alternative to firewood), but which are widely accepted as a medium of exchange.

The course of inflation

Like other goods, the price of money – its *purchasing power* – will fall if the supply of it increases without any matching increase in the demand. That means that sellers will demand more money in exchange for their goods. Buyers will have to pay more dollars, pounds, yen or roubles to purchase the same item. This is what happened in Weimar Germany, and it is what happens in every *inflation*.

Textbook models may imply that this is as far as the problem goes. As in any other market, they suggest that a rise in supply simply

makes the price (or purchasing power) of money fall and then order is restored once again. Economists would call this a naive *monetarist* explanation. The actual effects, say the Austrians, are very different. An increase in the supply of money sets off an avalanche of price changes which tears through markets, drawing resources first to one place, then another, creating real and destructive changes. Money, they say, is not *neutral*.

The first thing to remember is that the expansion in the money supply starts at some *point of origin*. It might start with the government printing more money in order to pay its debts or its bills, or to expand public enterprises. It may come from the central bank lowering interest rates and other banks creating more money in the shape of mortgages, overdrafts and loans to their customers. So the new money has its first effect at that point. Government suppliers and workers may be the first to benefit from an expansion of fiat money, for example. They find themselves better off, and spend more. That makes their own suppliers better off; and the new money ripples out from there to the next suppliers, and so on, raising prices and drawing in investment and resources at every stage.

A surge in bank lending sets off similar avalanches. Householders find they can afford larger home loans, so they trade up to more expensive homes, and house prices rise. Investors have more money with which to buy stocks, shares, bonds and other financial assets, so the prices of those assets rise too. Entrepreneurs, meanwhile, find it easier to borrow for new production projects, setting off the wave of overoptimistic investment that marks the start of the business cycle. The effect, says Hayek, is like honey pouring onto a table. It forms a mound of high prices at the point where it is poured. The high prices attract resources to that point;

but when the banks or the authorities stop pouring out the new money, prices fall again and the investments that have been made on the back of them collapse.

Money is not neutral

Even if the new money could be spread evenly across all markets – as if it were dropped from helicopters – its effect on prices would still be far from equal. Some individuals would choose to spend the extra money, while others, perhaps more cautious, might tend to save it. And because everyone now has a little more money, it does not mean that they buy a little more of everything. They may tend to buy more luxury items, which causes a boom for the producers of luxury goods, but they may not increase their spending on food much at all. So the inflation causes a real change in the pattern of what is consumed, and therefore in what is produced.

As the price avalanche continues to spread, people may also take different views on what it means. Those who believe that the price rises are real and durable might aim to spend their money now, before prices go up further. Those who believe they are only temporary will hold off. So again there will be a real transfer of resources from one group to the other, depending on who is right. Likewise, if prices continue to rise, borrowers will be better off, because they will be repaying their loans in money that is not worth so much, and lenders will lose out. So again, there is a real shift in the allocation of resources between different people.

If the authorities and the banks do not rein in, the boom will continue and prices will rise faster and faster. More and more people will seek to spend whatever money they have before it

loses yet more of its purchasing power. That frenzied buying will again fuel further price increases. People will try to borrow more to keep pace – but eventually the authorities cannot print money fast enough to keep up with it, while the banks reach the limit of their lending capacity, and the boom cracks up, leaving markets in disarray.

Preventing the scourge of inflation

Most people think *inflation* means rising prices, but to Austrians, *inflation* is the very increase in the supply of money that has caused the price rises and all the chaos that they create. Their view is that policy should focus on how to prevent such inflationary expansions happening in the first place.

One possibility would be to prevent governments being able to print money – or the note and coin *money substitutes* that we use in trading – without limit. We could peg the quantity of notes and coins, or other things that can be used in exchange, to prices, for example: so that if prices started rising, government would have to reduce the supply of money it creates. But this is no easy task, because (as the Austrians remind us) there is no such thing as ‘the’ price level, Different prices are fluctuating up and down all the time. The movement of any *price index* depends on what ‘basket’ of different goods it tracks. The choice is inevitably controversial. And by choosing the wrong basket, it is still possible to be inflating without realizing it.

Another possibility is to prevent governments issuing any fiat money at all. Mises, for example, says that the first duty of the monetary authorities should be to affirm and support the choice of whatever

commodity currency people use out of choice. In the past, gold and silver have had people's confidence as reliable and practical forms of money; but it does not necessarily have to be one of these things, nor even be a metal at all. Whatever people are happy to accept as a medium of exchange, that is what policy should aim at supporting.

Of course, moving to a commodity currency like gold would be a controversial and difficult step. There would, of course, be a huge increase in the price of gold as people started to demand it not just for its decorative or commercial uses, but for its value as a medium of exchange. There is a surprisingly small amount of gold in the world (one-third of the volume of the Washington Monument, according to one estimate), while there are billions of transactions going on at any time. Many people would argue that reverting to the use of gold as a currency is not a practicable idea.

Hayek came up with an alternative suggestion, which is to allow competition between currencies. Many governments create a monopoly in their own fiat money: they command that it can be used to settle any debt, and that no other currency can be used, or that the law will not recognize other currencies, leaving people who trade or make loans using those currencies exposed if their customers and borrowers do not pay up. If people were able to use the currency of their choice, however – so that someone in Britain could use dollars or roubles, say, while someone in America could use yen or euros, or even some new currency issued by a private agency – then people would tend to use the currency they thought would best maintain its value, since a stable currency would make business calculations much easier, particularly as *time* comes in to every reckoning. This competition in currencies would in turn pressure governments to resist inflationary policies, and so spare themselves the embarrassment of people rejecting their currency

and moving to someone else's. Allowing people choice in currency can certainly work: many countries with high rates of inflation in their own currency have seen traders adopt the dollar or the euro for their transactions instead. Yet governments are reluctant to give up the control that their monetary monopolies give them.

Fractional reserve banking

Many Austrians would also like to take action on bank lending. At present, banks are required to keep only a small fraction (say, 10%) of their depositors' money in their vaults to provide for customers' requests for repayment. The rest they can lend. If they lend to other banks, those banks in turn can lend 90% of that amount to others. So if banks get in more deposits, or ease their lending terms, it is possible for this extra money to be magnified many times through the banking system. Thus a modest increase in the supply of a government's fiat currency, for example, can have a much larger impact on the real economy, making its malign effects that much larger too.

Some Austrians would scap the fractional reserve banking system entirely, and force banks to keep on hand 100% of the cash their customers deposit. They argue that this would neutralize the potential dangers of the money multiplier, and would end bank runs, because depositors would know that all their money was held safely. In practical terms, though, it is doubtful that many customers would be willing to pay banks to look after their money, rather than getting interest on their deposits as they do at present.

Again, competition might provide a solution. Lawrence White has written much on the history and practicality of *free banking*.

Banks, he argues, performed much better when they were not as closely regulated by governments as they are today, and were not subject to fixed reserve requirements set down by the authorities. They would keep on hand as much cash and other liquid reserves as they thought necessary to keep paying their depositors' daily withdrawals. And they would (quite literally) make money by printing more banknotes than they had money in their vaults to back them all. As long as people thought a bank's financial management was sound, they would accept its notes at face value. But if people began to get worried about the security of a bank, they would grow more cautious – perhaps accepting its notes at a discount rather than full value, to reflect the risk of the bank suffering a run and being unable to pay its depositors and note holders. However, the fact that a bank's notes were trading at a discount would send it a strong signal that it needed to strengthen its financial position and so avoid these dangers, and this was enough to keep the banks sound.

In the nineteenth century, the Suffolk Bank, in Boston, acted as a clearing house that would exchange the notes of other banks that customers might find it hard to get to, applying discounts where it was concerned about their soundness. There is no need for central banks in such a system because there is no state-issued national currency. For the system to work, however, there can be no government bailouts of failing banks: that would simply encourage banks to take bigger and bigger risks, knowing that taxpayers would bail them out. It is precisely the fact that worried customers would pull out all their money that would make free banks keep their business and their currency sound enough to retain customers' trust – which is perhaps more than one can say of the government-regulated commercial banks and government-run central banks of today.

11 The flaws of socialism

- People engage in free, voluntary exchange because both sides in the transaction regard themselves as being made better off by it. Socialism, which interferes with free exchange, therefore reduces the human benefit that it generates.
- Production is complicated. Any number of things could be produced, and in any number of ways. Without the guidance of prices to show how scarce things are, socialists have no way to calculate what inputs and outputs are worthwhile.
- Under socialism, productive assets are commonly owned and never bought or sold, so no prices are ever established for them – leading to miscalculation and waste. Without the lure of profit, there is nothing to drive improvement.

Austrian School economists see markets as a natural and efficient way of allocating resources, using all the relevant information that is available to people. They maintain that free exchange benefits both sides in the transaction – as it must do, because as Menger pointed out, nobody would voluntarily enter into a deal if they thought it

would leave them worse off. Exchange therefore benefits people just as much as production does – something that socialists, with their focus on production, often overlook.

Free markets, in which exchange is voluntary, therefore maximise human value. Anything that interferes with that – forcing people to transact their business in a certain way, or preventing them from making voluntary exchanges – reduces the value created by trade. This, of course, is what governments often try to do, with regulations that put rules on what sorts of business can be transacted, and ban some kinds of transactions entirely, on the grounds of ‘public interest’. But Austrians say that this simply replaces genuine public interest, as indicated by the fact that all those involved in the trade count themselves better off, by some preconceived political idea of public interest.

Political and governmental interference in free markets should therefore be avoided. It may be that some kinds of government rules are needed in order to ensure that markets are genuinely free, and to make certain that people are not being coerced into a transaction. And there may be a need for some authority to guarantee that people do actually deliver on their contracts and pay their bills afterwards. Beyond that, state interference is damaging – and some Austrians, such as Rothbard, think that market participants can sort out even these basic market conditions without needing the coercive force of government.

The critique of Marx

The Austrians’ run-in with socialism started right at the beginning. Menger’s idea that value was not a quality of goods, but existed only

in the minds of individuals who found a use for them, was in direct contradiction to the idea, popularised by Karl Marx, that the value of a good was the amount of labour used in producing it. According to this *labour theory of value*, the more labour it took to produce something, the greater its worth.

Yet the theory does not stand up to examination. Menger pointed out that a good does not become valuable simply because producers invested a lot of time and effort on it. It becomes valuable only if consumers actually want it and derive some satisfaction from it. Marx's producer-led economic and political theories were topsy-turvy: it is not the effort invested in a good that gives it its value, but the value that people put on it that determines how much effort is worth investing to produce it.

Böhm-Bawerk made more extensive and more subtle criticisms of Marx. In particular, he argued that Marx had completely forgotten the importance of *time* in production. On the basis of the labour theory of value, Marx believed capitalist bosses exploited their workers, getting several days' labour – and therefore value – out of them in advance, before finally paying them only at the end of the week. On the contrary, says Böhm-Bawerk: with the sophisticated, lengthy, complex and 'roundabout' processes typical of the modern economy, it can take months or even years before a product is ready to take to market – and it is only then that the entrepreneur gets paid. Entrepreneurs are actually providing workers with an income well in advance of the revenue that they hope to get from selling the goods that are produced.

It is not even a certain hope. It is a risk, which the entrepreneur has to take on, together with the burden of financing and organising the complicated, 'roundabout' production process. The wages paid to

workers can only reflect what people today expect their products to be worth in the future, when they are put in front of consumers. Plainly, entrepreneurs and workers may disagree on that, with the entrepreneur (who is carrying the risk) likely to be more cautious than workers and their representatives. That is why there are disputes about wages. But the disputes are entirely natural differences in valuation, not an indication that anyone is being exploited.

The socialist calculation debate

Mises landed some further blows on socialism in general, in what was known as the *socialist calculation debate* of the 1920s and 1930s. His point was that today's production methods are very complex, and to produce everything that is needed in a modern economy requires a huge number of inputs. Each of those could, of course, be used in a huge number of other ways, on a huge number of different possible production processes, to create a huge number of alternative products. How could a socialist planner possibly know which to choose?

For example, should the socialist economy produce more wine, or more oil? To produce either will require various types and quantities of land, storage facilities, bottles, barrels, transport, and much, much else. Each decision to produce something requires vast numbers of other decisions about what is needed to produce it and how the conflicting possible uses for these producer goods can be co-ordinated. As Hayek puts it, the array of choices is simply too large for any human mind to contemplate.

In the capitalist economy, the structure and direction of production is of course driven by the very simple mechanism

of prices. The price of a consumer good reflects the value that people put on it as they exchange different goods in the market. That price in turn tells producers how much it is worth spending in order to create that particular product. So the prices of producer goods, such as the buildings, machinery and inputs that are used, come to reflect the value of that consumer good to its ultimate buyers. In this way, producer good prices draw productive resources to where they create most value to consumers – and do so straightforwardly and effectively.

In the socialist economy, though, the *means of production* – producer or capital goods – are owned in common. (Consumer goods, when you think about it, cannot be owned in common, since a group of people cannot all wear the same coat or eat the same piece of chocolate: so socialists have wisely focused their call for common ownership on producer goods, which *can* be jointly owned.) But if producer goods are commonly owned, and never bought and sold, there is no market for them, and so no way to establish prices for them. The socialist planner has no simple way to decide which of millions of possible resources should be combined in which of millions of possible ways to produce which of millions of possible consumer goods.

The problem of co-ordination

That is a major snag, because producer goods are not all the same: they are *heterogeneous*, they have many different forms and qualities. Without some single unit of account, choosing between them is like choosing between oil and wine. Without the guide of price, the choice must come down to the personal judgement of the planners – as opposed to the judgement of

the public, which is what motivates production in the market economy.

Nor is this a mere technical problem that can be overcome by crunching enough numbers in a computer, as some socialists suggested. No socialist planner has any direct knowledge of the value that different people place on different goods. People's values are personal, and information on the scarcity of goods is incomplete, dispersed, rapidly changing, variable in quality, diverse in form and hard even to pass on to the number crunchers. Without some unit of account such as prices, different sorts and pieces of information cannot be compared. Without some such basis for comparison, it is impossible to act on the available information in any rational and synchronised way. Again, it comes down to the personal choices of those in power.

Some socialists responded with what they called *market socialism*, in which planners directed the use of producer goods as if there was a market. But, Mises retorted, if a market does not exist, it is impossible for planners to know how it would work. If there were markets around that the planners could copy, they might have a hope – though they would always be behind the curve on new developments, and so some value at least would be lost. But the whole aim of international socialism was to rid the world of private ownership and therefore of markets – which would leave planners with no guidance at all. There would be no producer goods markets to guide the structure of production, and no capital markets to evaluate the different production possibilities and allocate capital efficiently between them. Without profit, there would be no entrepreneurs alert to changes in the pattern of scarcity and doing something about it. No

attempt to 'improve on' the market will produce as much value as the market itself; and full-scale central planning simply cannot work. It may limp along, but it will produce less value than the market alternative; and the longer it limps along, the deeper the value shortfall becomes.

12 Liberalism

- Exchange works, and boosts prosperity, only because people differ in their values. Austrians believe that economic – and social – progress is best facilitated by peaceful settlements between different individuals, rather than the majority imposing their will on everyone.
- A society does not need to be centrally planned to work well. Nature is full of well-functioning, ‘spontaneous’ social arrangements. The market is one such, co-ordinating the activities of millions of people without needing central control.

Most Austrians are liberals – in the European sense, rather than the American sense. They believe that if people are free to act as they choose, subject to the same freedom of other people to do the same, then society is largely self-regulating. In such a society, coercion is minimised because disputes have to be resolved by agreement, while beneficial collaboration is maximised through the free exchange of private property and labour.

Yet many Austrians did not begin life as liberals, but came to it as they started working out their economic ideas. Mises, for example, wrote that like most students, he initially believed in the need for

government intervention in the economy, but his discovery of Menger's *Principles of Economics* converted him to the importance of free markets and individual choice. Hayek, similarly, said that he looked in on one of Mises's lectures but found them antipathetic to his moderate socialist views, and never returned – though later discussion with Mises won him round.

Political implications of the Austrian method

The *methodological* individualism of the Austrian School is not the same as political individualism, though it does give strength to it. The Austrian view is that human events are driven by the actions of individuals, that only individuals make choices, and that society and social institutions do not have a mind of their own, somehow independent of the minds of the individuals that comprise them. There is therefore no such thing as a 'collective will', and any politics rooted in that idea is fundamentally flawed. Politics must respect the fact that decisions are made by individuals, not collectives.

The Austrian view also emphasises the importance of differences and diversity in human progress. For example, it is precisely because people *differ* about the value of things that they enter into exchanges – to the benefit of both sides. Their mutually beneficial social behaviour is not the collective will of people who agree about everything, but a reciprocal arrangement between people who *disagree*. If everyone shared the same views on society, then collective politics might be feasible; but the reality is that they do not. Consequently, Austrians feel that it is better for political solutions to emerge through peaceful settlements between individuals, than by the majority imposing their will on everyone else.

Our ever-changing world throws up continual social and political problems for us to solve. Austrians believe that we get more solutions – and better, more creative solutions – if the energy, imagination, alertness and specialist knowledge of many individuals are engaged on the task. In economics, this is achieved through the process of competition, which gives diverse entrepreneurs the incentive to seek out new and better ways of enhancing value to consumers. By the same reasoning, our social and political problems may also be best solved if we give individuals the widest possible freedom to come up with a variety of creative responses, rather than hoping that a single collective approach will suffice.

The differences in method between Austrian and mainstream economists may be another factor pushing Austrians towards political individualism. Mainstream economists' macroeconomic level of analysis may prompt them to look for macro-level solutions. The individualist method, by contrast, suggests that the key issues concern individuals and the incentives and information around them, and that policy should therefore focus at this level. Likewise, textbook welfare economics makes mainstream economists imagine that the utility of different people can be added, such that sound policy can maximise social benefit. But Austrian economists regard utility as personal and subjective, like love or grief, and therefore something that cannot be manipulated by social policy.

Peace and planning

An important reason why Mises preferred liberalism as a social arrangement was that he felt that it reduced the likelihood of war and improved the prospects for peace. Where governments plan or intervene in an economy, they also have to protect it from outside

economic events. Subsidies to keep wages and profits high, for example, will be undermined if cheap labour or cheap goods can flood in from abroad. So protectionist barriers have to be raised against other countries – which promotes the hostility of the outsiders, and raises tensions. Liberal capitalism, however, gives a much smaller role to government, and its success depends on free trade, not protectionism. When goods and workers are crossing borders, and countries become economically interdependent, war becomes unthinkable.

Mises also rejected socialism, arguing that it made rational economic planning impossible. Because the means of production were owned in common, they were never bought and sold, and prices for them were never established. So there was no measure by which to calculate whether very different capital resources were being used effectively. Without private property and the freedom to exchange it, in other words, rational economic planning becomes impossible.

Having rejected both socialism and interventionism, Austrians like Mises are then left with liberalism, or something like it, as the only durable form of social organisation. More positively, liberalism captures the benefits of voluntary exchange between individuals, encourages entrepreneurial alertness, and allows dispersed, personal, and partial knowledge to be used effectively in making production decisions.

The spontaneous society

Many people find it hard to believe that a society or an economy could survive – much less create and distribute wealth in any organised and rational way – without central planning and authority.

Hayek has provided the explanation, however: the liberal human society and economy is, he says, an example of a *spontaneous order*. Just because something is not planned from the centre does not mean that it is wild, unkempt, random and disorderly, he points out. Societies of bees and termites are very orderly, but they are hardly *planned*. Human language, similarly, was never ‘invented’, but evolved, and grew and survived because it is useful. The common law, too, was not laid down in detail from the centre, but simply emerged as one case, and then another, was settled, such that a body of precedent grew up. The market and the price system, similarly, was never planned, but evolved as people exchanged different goods. Nor do they need any central command structure to maintain them: they have survived and expanded because they deliver such enormous benefit to us.

Some spontaneous orders are so sophisticated that it would be hard or even impossible for any planner to invent or manage them. Indeed, it is often quite hard even for people to explain how they work. The grammatical rules that give structure to our language, for example, are so complicated that most people would have enormous difficulty setting them down. And yet people follow the rules of grammar quite naturally every time they speak. Similarly, the body of common law is vast, having grown up and been added to over the centuries; and yet most people have a good sense of what is ‘just’ or ‘unjust’ under it.

In other words, there is a great deal of wisdom in these institutions, despite the fact that they have never been consciously designed and planned. The price system, for example, quickly and efficiently steers resources to their highest value uses, without anyone ever having deliberately invented it. The fact that there is no central planning does not mean that it is ‘unplanned’ and irrational. We are

all planners, says Hayek, in that we consciously act in order to satisfy our ambitions with the materials and information that are available to us. In the market order there is in fact far more planning taking place, and far more information being used and acted upon, than could ever be achieved by the single mind of any central authority.

Hayek believes that useful orders emerge naturally when people follow certain regularities of action – just as an exciting or interesting entertainment emerges through people following the rules of a game. In the case of the liberal market order, the rules are principles like the respect for private property and the right to hold or dispose of it, the rejection of violence and coercion, the freedom of people to enter into voluntary contracts, and the honouring of such contractual promises. Astonishingly, a few simple liberal rules such as these are sufficient to create what Rothbard calls an ‘awe-inspiring’ harmony and co-ordination between individuals, and a precise, swift arrangement to guide resources to the greatest possible satisfaction of consumers’ desires.

No specified outcome

Liberals believe that adhering to such liberal principles of behaviour produces a self-regulating social order that tackles social and economic challenges with huge creativity and effectiveness – much more so than a centrally planned order – and should be endorsed for that reason. However, the exact outcome of the resultant social order cannot be known in advance, any more than the result of a game can be known in advance if everyone sticks to the rules. We cannot know, for example, what distribution of income it will produce, nor who will be where on that distribution at any particular moment.

Some people – those who believe in income equality, for example – see this as a shortcoming. But Austrian School liberals are unapologetic. Free markets, they maintain, deliver what people actually *want* and *choose* – not what various idealists would like to impose upon them. Imposing a specific social outcome is like determining in advance who will win a game: it makes the whole activity pointless and not worthwhile. Set people free, however, and you focus their energy and creativity on improving life for everyone.

The continuous improvement that free markets deliver is another reason why Austrian economists endorse them. Because competition is not ‘perfect’ but a discovery process, free markets incentivise people to increase human satisfaction by producing things better and cheaper. In market societies, the gap between rich and poor – as Mises puts it, being able to enjoy caviar rather than cod roe – is insignificant compared to the huge increase in living standards that the spread of the market culture has unleashed. Even the poorest people in, say, the United States today live at a standard undreamed of by mediaeval nobility – with hot running water, sanitation, transport, light and warmth, a stable supply of foods from around the world, labour-saving machines, and many other modern luxuries.

Indeed, many Austrians argue that in practice, liberal societies produce greater equality than planned or socialist ones. As Hayek says, the rich might be able to afford the latest fashions or technology, but pretty soon, these luxuries spread to everyone. And in a liberal society, people have a greater chance of improving their own lives than they do in a socialist society, where some central planning agency decides their station in life. In many, there is a huge gap between the ruling elite and other members of society –

especially if they happen to belong to the wrong race, or religion, or clan. In a liberal society, though, anyone can aspire to make money, whatever their background: and if they do improve the satisfaction of others, they will.

The limits to liberalism

Most Austrians up to Mises and Hayek would consider themselves 'classical' liberals. They believed that freedom should be maximised, and that coercion should be minimised, and that this would create a dynamic, harmonious, self-regulating society. Yet for markets to operate, they needed rules (such as the respect for property and contracts), just as a fire needs a fire-baked to burn properly. So there was a role for the state in enforcing these rules.

Some modern Austrians are more sceptical about the need for state authorities. Starting from Mises's argument that government intervention always unbalances markets and therefore draws resources to the wrong places, they go on to argue that *any* government intervention has damaging results. Rothbard, for example, insists that the supply of money, and even policing and defence, are best left to the market to provide, rather than any central authority. Since capitalism works effectively and spontaneously without the need for central planning, control, or direction, it should be left to get on with it, says Rothbard: an approach that he calls *anarcho-capitalism*.

Rothbard also takes a *libertarian* view of social life, since what is true in our economic lives must be true of our social lives too. The public interest is best served when free people co-operate through

voluntary agreement, rather than when particular ways of living are imposed on them by distant governmental authorities – authorities with their own values, and with incomplete information about the values of others and how best to serve them.

13 Criticism of the Austrian approach

- Some critics argue that the Austrians' strict individualist method is too narrow, and that social patterns can be used to explain and predict human groups.
- Critics also argue that Austrians caricature their models, which are after all only abstractions. They also insist that Austrians are too quick to blame government intervention for every failing, and that free markets produce monopolies and other problems.
- Most criticism focuses round the deductive method of Mises, which mainstream economists regard as unscientific.

Austrian individualism

Austrians trace all economic phenomena back to individual purposes and actions, and reject the idea that human groups have any existence, or mind, or purposes, beyond the individuals that comprise them. But critics argue that things can indeed be more than the sum of their parts. The human body, for example, is not

just a collection of living cells – except in a very trivial sense. The complex arrangement of those cells gives rise to a quite different life form.

Different explanations are needed to understand these larger forms. When we see the doctor about a runny nose, we do not want a long micro-explanation about how nasal cells work. We want a short macro-explanation of whether it is an infection or an allergy, and whether antibiotics or antihistamine will cure it. We do not need to *know* how cells work to treat a runny nose, any more than a scientist needs to know how individual molecules behave in order to predict the expansion of a gas.

It may be technically true that only *individuals* choose. But that ignores useful macro-explanations, like culture, history, ethics, and tradition – all of which can give us useful insights into social and economic events. We can see *patterns* in a carpet without knowing the colour of each individual fibre. Likewise, we may well be able to detect – and *predict* – regularities in the macroeconomic figures, while knowing nothing of the individuals concerned.

Scientific method

Most Austrians would counter that we would never get such predictions right. A Martian might see packed trains disgorging passengers at the station each weekday – and confidently predict the same pattern for the future. But soon, a day dawns when the trains are empty. The Martian has not understood that all this activity is not clockwork. It exists to suit human purposes, and this particular day is a public holiday, when people choose to stay at home.

In reply, though, scientists would say that any prediction is only a guess, and that with more observations, the Martian will learn to predict public holidays with useful accuracy, even without knowing their purpose. This is how science and understanding progress.

To Mises, economic science involved reasoning things out from the nature of conscious action, which he thought undeniable (since to deny it would be a conscious action). This view prevails among American members of the Austrian School in particular, though other Austrians think it over-blown. Hayek, for example, accepted that while much of economics is about tracing the implications of known facts, we still need the standard scientific method of observation and theorisation if we are to explain the *unexpected*. Austrians in the Hayek tradition believe that little or nothing is self-evident, and human reasoning is fallible: after all, even followers of Mises disagree on things.

Austrian and mainstream thinking

Mainstream economists maintain that the Austrian School caricatures their methods, and exaggerate the real differences between them. They *do* realise that utility is subjective cannot be measured, and that markets are never *perfect*: their models are just useful ways of simplifying and understanding difficult concepts. And the Austrians themselves have a vision of markets in which there is no force, or theft, or taxation – just as unreal as those they caricature.

In reply, Austrians say that mainstream economists still seem to make absurd mistakes. Though utility is as inherently personal as joy or shame, their textbooks suggest that ‘units of utility’ can be measured and added. And their students *do* end up believing

that markets can be made perfect – which prompts a lot of bad government policy – even though markets *could never work* if they were perfect, since there would be nothing to motivate them. By contrast, a market without coercion would work well: it is an ideal worth aiming for.

The nature of action

Some critics, particularly from the Left, believe that Austrians are wrong to regard conscious action as the basis of economic science. People can have preferences, without being able to express them, because what they actually want is not available. Or they may be pressurised to choose in a certain way. Or their action may be involuntary or unconscious. A great deal of economic life is shaped by accidental misfortunes or lucky discoveries. And most production is led by small groups of bosses: the general public do not *act*, but merely *respond* to this reality.

Austrians reply that this confuses economics with psychology, history and politics. Economists are interested in how people actually choose between things – and choice implies *conscious* action. *Unconscious* action is a matter for psychologists, not economists. People may indeed desire things that are beyond reach, but that again is about psychology; it becomes economics only when people make practical choices. Misfortunes may close off some choices, and discoveries open up new ones, but economists are interested only in *how* people choose: *what* they choose is more a matter for historians and political scientists. True, entrepreneurs lead and steer production; but the decision, say, to leave the fields and take work in a factory remains one that individuals make, and make consciously.

Markets and monopolies

Critics argue that Austrians are too quick to blame government intervention for almost every economic failing. The failure of Soviet socialism, for example, was not necessarily due to the alleged impossibility of socialist planning: other causes may have been its corruption, poor incentives, and authoritarian political system. Austrians counter that these problems themselves are the result of a system in which resources are allocated by the power game of politics.

Even if one does reject central planning, many people still believe that a mixed economy works best: for example, having free exchange and competition (which incentivises innovation and customer service), within a framework of central co-ordination (which avoids duplication and ensures all options are covered). But Austrians say that any government intervention necessarily places the values of a small political class over the values of the whole population, freely collaborating in trade, and so diminishes human welfare.

Austrians blame governments for creating and maintaining monopolies. Critics accept that large and corrupt governments can indeed create monopolies; but so can large and corrupt businesses. And in reality, they say, unregulated markets are rife with monopolies: the great nineteenth-century *laissez-faire* era saw huge monopolies springing up.

In reply, Austrians insist that where markets are open, monopolies cannot exist, or not for long. Even 'natural' monopolies are vulnerable: a mining company might have a monopoly in the production of a particular mineral, for example, but then people

would search for alternatives rather than pay monopoly prices. And where monopolies are based on scale, large companies are always open to the attacks of other large companies, and indeed of smaller companies eating away at particular parts of their market. Only if there is government regulation protecting them can they insulate themselves from such competition.

Business and credit cycles

Austrians maintain that the source of boom and bust is government expansion of credit, leading to investment mistakes, and that the only solution is to let the effects of these mistakes work themselves out. But many economists believe that when business is faltering, governments *should* be encouraging greater investment. This, they think, may risk some rise in prices, but that is better than a major economic upheaval.

Austrians see the problem more like a drug addiction. The stimulus of new credit produces a boom, but the boom lasts only as long as credit continues to grow. Without larger and larger doses, the stimulus is lost, and the investment mistakes made on the back of cheap credit are exposed as unviable. Putting off the evil day just makes the eventual upheaval all the greater.

Money and inflation

Mainstream economists also have problems with the Austrians' affinity to a gold standard. Commodity currencies like gold do indeed take the supply of money out of governments' control, and perhaps moderate the dangers of inflation. But they do not *prevent* damaging

booms and busts. The United States, for example, suffered eight depressions while on a commodity money standard. And fiat currency, properly managed, can be used to smooth out the booms and busts, and so promote economic growth.

Austrians remain fearful that governments will try to use fiat money to create vote-winning booms, ignoring the inherent dangers, and that fractional reserve banking will simply magnify this effect. Though fractional reserve banking has worked well in terms of putting savings to work and creating economic growth, it has also allowed huge debasement of the currency and rising prices, which confuse investment decisions, creating economic inefficiency and waste. Worse, as events in 2008-9 showed, it magnifies disastrously the boom-bust cycle.

Conclusion

Criticism of the Austrian School focuses mostly around the deductive method and thoroughgoing individualism of Mises, Rothbard and their (mostly American) followers. However, there remains a wide range of views within the Austrian tradition. Other Austrians accept that all human action is ultimately down to individuals, but that explanations based on broad cultural, economic, or historic trends *do* help our understanding. Hayek, for example, took the view that we could detect *patterns* in social and economic life, from which we can make reasonably reliable scientific predictions, even if we do not understand precisely how these patterns come about.

Many Austrians also believe that the deductive method needs to be checked against the hard evidence of real life; and that if we start

from the idea of action that is untainted by theft, fraud, coercion and government, we will end up with equally unreal conclusions. Completely free, unregulated markets never arise: indeed, as Hayek put it, markets actually *require* a framework of social rules in order to function – rules of property and contract, for example – just as a domestic fire requires a fire-basket to contain it.

To Austrians like Hayek, it seems pointless to reject any method other than deduction and any deviation from a purely conceptual ideal. Better to show that, despite all their inevitable taints, the advantages of markets outweigh their disadvantages. Fractional reserve banking and fiat money may not be ideal: but do their benefits exceed their costs? For most people, including many Austrians, the answer to such questions should be a matter of evidence and debate, rather than fallible human logic.

14 Contemporary Austrian thinking

The Austrian School received a boost from the award of a Nobel Prize to F A Hayek in 1974. The solid work of scholars such as Ludwig Lachmann on capital theory and Israel Kirzner on entrepreneurship bolstered this effect.

There are now several universities where Austrian economics flourishes and is taught, such as George Mason University in Virginia, Loyola University in New Orleans and Auburn University in Alabama. Austrian ideas are promoted by think-tanks and other institutions, such as the Cato Institute in Washington DC, the Foundation for Economic Education in Irvington, New York, and the Ludwig von Mises Institute in Auburn, Alabama. Several Nobel Laureates in Economics, including James Buchanan, Douglass North, Elinor Ostrom and Gary Becker, admit to Austrian leanings, as do government figures such as the former Federal Reserve chairman Alan Greenspan and US Congressman Ron Paul. Austrian economist Peter Klein served as Senior Economist on the US President's Council of Economic Advisers.

But Austrianism thrives outside the United States too. There are large centres at the Universidad Francisco Marroquin in Guatemala

and Rey Juan Carlos University in Madrid, for example. Austrians can be found in research groups, government institutions and university departments all over the world – even in China. And in 2010, the UK elected its first avowedly Austrian Member of Parliament, Steve Baker.

Today, Austrians are developing original theories and innovative approaches on a wide range of subjects, including entrepreneurship, the market process, business and government institutions, capital, business cycles, banking, monetary theory and macroeconomic policy, and the evolution of free and spontaneous social orders. Indeed, it is precisely because the Austrian approach has proved so fertile that there is so much diversity in Austrian thinking today.

The two traditions

Yet within this great diversity there is one main difference of emphasis. One is the Mises/Rothbard tradition, long associated with the Ludwig von Mises Institute. Its emphasis is on the role of deductive and subjectivist foundations of economics, and on the legal and ethical frameworks of a liberal economy. The other is the Hayek tradition, upheld at George Mason University, focusing more on spontaneous social orders, market processes, and the institutions of business and government. Scholars in this tradition have also been more willing to accept that the standard scientific methods of measurement and experiment can expand economists' knowledge – even while accepting that their use on independent-minded human beings has none of the certainty that it brings to the study of solid natural objects. British Austrians also tend to subscribe to this approach.

Austrians remain unsure of how close to the economic mainstream they are and should be. The Mises/Rothbard tradition is more content to remain outside the mainstream, considering it fundamentally flawed. The feeling is mutual, with mainstream economists regarding these Austrians' methods as unscientific, and rejecting their prescriptions as doctrinaire and unworldly.

Nevertheless, mainstream economics has always been happy to absorb Austrian ideas that it regards as useful, as happened with marginal utility analysis and opportunity cost, and is now happening in other areas. Austrians of the George Mason University tradition, being more content to debate with the mainstream, have sought to continue this absorption, forcing mainstream economists to confront the over-simplicity of their aggregates, models and formulae, and start taking account of the role of entrepreneurship, time, dispersed information and other Austrian precepts.

The breadth of Austrian thinking

The fertility of the Austrian approach shows itself in the diversity of the ideas that contemporary Austrian thinkers are working on, ranging from the method of economic enquiry, through the process and institutions of a liberal economy, to macroeconomic policy.

A process, not a snapshot. Much of the current thinking focuses on the economic system as a continuing process, confronting the snapshot view that is common in the mainstream. In this context, Peter Boettke has explored the evolution of economic systems, while Tyler Cowen (a sympathetic critic of the Austrian

School) has explained how markets change culture and evolve so as to provide what people actually want. Peter Leeson has shown how spontaneous social orders and private social structures develop and thrive as a result of the practical benefit they deliver to communities, even where governments are absent or (as in the case of pirate groups) are deliberately avoided.

Dispersed knowledge. Mario Rizzo, along with Gerald O’Driscoll, has written on the importance of the fact that economic knowledge is dispersed and incomplete. George Shackle too has explored how economic actors’ knowledge – and ‘unknowledge’ – affects their choices. This thinking has taken Austrians into direct criticism of the mainstream ‘rational expectations’ hypothesis (that economic agents act rationally and that their errors balance out); the fact is that human beings are led by their values and emotions, and make systematic errors because their information can never be complete. Gary Becker has written widely on irrationality in economics. Rizzo and Glen Whitman have responded to the rise of behavioural economics, rejecting the philosophical basis of libertarian paternalism.

Time and coordination. Time, say Austrians, is just as important as ignorance in terms of economic choices and outcomes. The fact that different choices take different amounts of time to make and execute means that people’s actions do not always mesh well together, the ‘coordination problem’ that O’Driscoll has written much on. Rizzo too has written about how different time preferences may explain some people’s tendency to crime (instant gratification, distant consequences).

Entrepreneurship and innovation. In the real world, where knowledge is dispersed and incomplete – unlike that of the

more simplistic mainstream economic models – the role of entrepreneurship in spotting gaps and coordinating resources to fill them becomes crucial. Israel Kirzner, Stephen Littlechild and Don Lavoie have focused on this and on how entrepreneurs actually deal with profit opportunities. Peter Klein and Nicolai Foss emphasise the role of entrepreneurial judgment, while Jesus Huerta de Soto has explored the creativity that entrepreneurs bring to the market process.

Macroeconomics. Though Austrian economics is rooted in the values and actions of individuals, many contemporary Austrians have been perfectly willing to debate macroeconomic theory and policy. Much of their contribution has been to point out how mainstream ‘aggregates’ throw together diverse things. Lachmann, for example, wrote extensively on the heterogeneity of capital and how important was the structure of capital, and not just its quantity.

Business cycles. Following the financial crisis there has been much attention given to the Austrian theory of the business cycle. Both Lachmann and Sudha Shenoy, much against the mood of their time, pointed out the dangers of inflationary booms and the malinvestment and consequent unemployment that they created. De Soto, Roger Garrison and others have described the progress of credit-induced business cycles in detail. (But many mainstream economists remain unconvinced: Scott Sumner and Brad DeLong have argued, as Milton Friedman did before them, that credit expansions and malinvestments have actually been too small to support the Austrian view of subsequent events.)

On this front, Steve Horwitz has worked on the costs of inflation, monetary disequilibrium, and macroeconomic coordination from

an Austrian perspective, while George Selgin has suggested a monetary rule (the ‘productivity norm’) that is focused on a stable growth rate rather than an inflation target. But many Austrians favour a return to a commodity-backed currency, such as gold.

Free banking. Others, however, have suggested that national governments should lose their monopoly on money completely. This influential ‘free banking’ school, led by Lawrence White, George Selgin, Kevin Dowd and others, argues that private banks should issue their own currencies, between which people could choose – a powerful incentive for banks to keep their business innovative, but sound. The benefits of free banking, they say, are akin to the benefits of free trade, and in each case it is government interference that causes the problems.

Companies and governments. Another fertile strand of Austrian thinking is on the institutions of the free economy. Klein, Peter Lewin and George Shackle, for example, have all pointed out the nature and importance of the design, diversification, and inventiveness of private companies, with Lewin focusing particularly on the (usually damaging) role of regulation on corporate life and innovation. Buchanan, with his Public Choice School of economics, has explained how the political decision-making process often produces results that serve private, rather than public interests, hampering the market process. Boettke showed how special interests and rent-seeking stifled the Soviet economy, and how the transition process required a foundation of private property rights.

Economic development. Though not counting themselves as Austrians, William Easterly and the Nobel laureate Elinor Ostrom have applied Austrian ideas (such as the importance of property rights, the dispersed and partial nature of information and the

failure of central planning) to outline policies that would more effectively promote economic development in poorer countries.

Impact on mainstream thinking

Even this is only a partial list of the areas into which the current wave of the Austrian School is bringing fresh thought. However much the mainstream might wish to dismiss the Austrians, it is plain that the diversity, originality and fecundity of Austrian ideas are giving them a good deal to think about.

Today, things seem less like a clash between two different orthodoxies that purport to explain things – like Newton’s mechanics replacing Aristotle’s and in turn being supplanted by Einstein’s – than it did in Mises’s time. Rather, Austrian critiques seem instead to be making mainstream economists re-think every part of their existing structure, right down to its foundations, and to absorb more and more Austrian ideas into their own approaches.

15 Relevance of the Austrian School today

- Austrian economists provide telling criticism of mainstream theories, helping to explain phenomena like stagflation and exposing the weaknesses of policy based on artificial and misleading economic models.
- The Austrian School explains why we can have faith in the unplanned order produced by markets. Simultaneously, it exposes the malign consequences of government intervention.
- Austrian School approaches can provide explanations and solutions to important current issues, like environmental protection and recessions.

The Austrian School has made several significant contributions to what is now mainstream economic thought – marginal utility analysis, for example, and the concept of opportunity cost. Some of their other contributions have certainly had an influence – the Austrian theory of value, for instance, or their focus on the heterogeneity of capital, the importance of time in

production, and their explanation of the origin of interest – though mainstream economists often dismiss these as mere differences in emphasis. Now, after the financial crash of 2007 in particular, interest has increased in the Austrian explanation of the business cycle, with its roots in time preferences, its elucidation of the destructive dislocation brought about by inflation, and its conclusion that fiat currency and fractional reserve banking are a dangerous cocktail.

Mainstream economists find it harder to warm to Austrian views on the critical importance of private property as the foundation for exchange and prices, or the Austrian emphasis on the centrality of individualism – and the fact that individuals’ values, preferences, wants, needs and circumstances are so diverse and unpredictable – in economic analysis. The Austrians’ conclusion, that the mainstream economists’ aggregates and mathematical formulae are misleading nonsense, is of course not accepted by them at all.

An alternative view of economics

Yet the Austrian approach does provide ways of explaining what mainstream economics cannot explain at all. The stagflation – rising inflation *and* falling output – of the 1970s, for example, could not be explained by the prevailing Keynesian orthodoxy, which predicted that inflation and government spending should stimulate employment and growth. Austrians, by contrast, could explain it easily: inflation confuses economic calculation and leads to malinvestment, while government intervention undermines enterprise and growth.

The mainstream economists readily accept the Austrian criticism that their macroeconomic models and notions of 'perfect' markets are merely theoretical abstractions; but then, say Austrians, they try to build *practical* policies on these imaginary foundations. They suggest that 'market failure' can be 'corrected' through regulation and intervention. But how are politicians supposed to know when a market is 'failing'? And how can they be sure that they can do any better?

Anti-monopoly legislation is a case in point. Governments commonly intervene when they feel that particular firms are starting to 'dominate' the market. But how can the state know what the 'right' market structure is? In some sectors, like plumbing, firms tend to be small; in others, like car making, large; and even these change with time and technology. Only markets can decide what works. And in any case, say Austrians, firms cannot grow so large as to extract monopoly profits, because high profits simply invite others to come in to the market. It is, after all, precisely such 'imperfections' that motivate entrepreneurs. In trying to control markets, governments bring them to a screeching halt.

It is also useful to remind mainstream economists that the 'aggregates' on which they expend so much mathematical analysis are inherently flawed. In a world of scarcity, people have to make choices; and the outcome rests entirely on the specific human values of the particular individuals at that unique time and place. Such things can no more be added, or graphed, or manipulated in equations than can grief or joy. And is it obvious nonsense to say, for example, that a country needs more 'investment' when the crucial issue is not how much we spend on capital goods, but on what and where they are – the capital *structure*.

A renewed faith in markets

The Austrians also provide a solid intellectual foundation for those who believe that markets are better than at serving our economic needs than government control and planning. They see economic life as a problem of co-ordinating the actions of diverse individuals across the planet, in response to each other and to rapidly changing local circumstances. Markets, they argue, constantly use, process and act on dispersed, partial, personal, and even conflicting information – a task that would overwhelm any central planner.

How many chickens are needed each day, for example, in the restaurants of New York, and how does one get them there? A government chicken-supply board would have to survey restaurateurs and their customers, factor in public holidays and seasonal variations, contract with farmers, processors and truckers, and no doubt much more. Yet the market, driven by the price changes that expose surpluses and scarcities, does it automatically, day after day. Nobody is in control of it all; yet it is a vast, unplanned, but co-ordinated effort. That is the remarkable power of markets.

Competition, say the Austrians, is a process of discovery – discovering what diverse customers actually want, and the most cost-effective way of supplying it at that particular place and time. It reminds us of the need to keep markets competitive and keep barriers to entry low – two things that are thwarted by regulation. It reminds us too of the dynamic role of entrepreneurs in obtaining and evaluating dispersed market information, and taking a risk and acting on their predictions of customers' future wants – something that can only happen within a framework of secure property rights, the rule of law, and low taxation.

The critique of government action

Too often it is assumed that governments can do anything – even manipulate markets to their own wishes – and do it well. Austrians remind us that this is not so. Before governments intervene, they need to show why and how they can actually improve things. That is no easy task, however, since most interventions into free markets have unintended, and usually malign, consequences. And governments themselves are by no means perfectly wise and rational: they are subject to the lobbying of interest groups, and to the empire-building of their own politicians and officials.

Minimum wage laws, for example, may seem to make life better for the poorest workers; but in fact they cause employers to stop hiring less-skilled workers, and so worsen the lot of poor and young, untrained people in particular. The only gainers are workers above the minimum wage, who no longer face cheaper competition, and who were probably the lead campaigners for the law. Likewise, governments are easily persuaded by established firms that their markets should be protected from ‘cowboys’ by regulation, when in fact it is their own market position that is being protected from the threat of new entrants.

Austrians also remind us to be sceptical of any policy that is based on supposed aggregates and index numbers. Government monetary policy, for example, aims at a stable Consumer Price Index; but the result depends very much on what prices are contained in that index, because the reality is that individual prices are fluctuating up and down all the time. Nor should we presume that governments can stimulate growth by managing ‘demand’, since that aggregate too contains many diverse and

conflicting things. In any case, ‘government investment’ is to Austrians an oxymoron, since to fund its own ‘investment’, government imposes taxes on creative entrepreneurs who could have invested that same money more productively somewhere else. Similarly, when people urge governments to raise their spending in order to boost demand, they forget the wider economic costs imposed by taxation, regulation and the erosion of private property rights.

The Austrian view of contemporary problems

The financial crisis of 2007 and beyond led to a resurgence of interest in Austrian School ideas, as being the only compelling explanation of the boom and bust cycle – a credit-led boom and bust, in their opinion. There has been rising interest in their solutions too: stricter control of fiat currency (or its replacement by forms of money that governments cannot debauch: the pound and the dollar have lost 98% of their value since they were detached from gold), and higher (perhaps even 100%) reserve requirements on the banks. As for governments’ efforts to moderate the crisis through higher borrowing – that, say Austrians, is no solution. Rather, it is what caused the crisis in the first place.

Austrians claim no expertise on environmental science, but again, they argue that markets, rather than governments, are more likely to solve our problems. Are we running out of vital resources like oil, as many people fear? No, say Austrians: we have more known oil reserves than we have ever had in our history. But as demand grows, and more sophisticated technology is needed to extract oil, its price must rise, which has

the precise effect of limiting demand and prompting people to look for cheaper alternatives. The Stone Age did not end because we ran out of stone, but because more cost-effective alternatives were developed. Austrians believe that markets can protect and husband valuable resources – like energy sources, fishing grounds, watercourses, rare animals, clean air, parks and forests – while communal ownership invariably leads to them being over-used, squandered and destroyed. They would *extend* the role of markets, not try to control them.

The future of the Austrian School

For all their telling criticism, and despite the recent rise of interest in them, Austrian School ideas are still regarded as merely a sidelight on mainstream ones. Perhaps that is because most people still have a touching faith in the power of governments to identify and cure our problems. Or perhaps people find it hard to imagine that markets can solve extremely large and difficult problems without the need for central direction and control.

Then again, in some cases it might be that many people remain uncomfortable with some Austrians' reliance on deductive techniques, rather than on the theorising, observation and testing that characterises standard scientific method. Or it may be that the policy solutions offered up by some leading Austrians seem hard-edged and obdurate.

Yet there is a wide range of views among economists who call themselves Austrians, or who at least accept many parts of the Austrian approach. Mises, Rothbard and their followers (particularly in America) insist on a rigorous deductive method

and on an uncompromising anti-interventionism. But others (particularly in Britain and Europe) who are more influenced by Hayek, are willing to admit that measurement, observation and experiment have their uses in expanding economists' knowledge – even while accepting that their use on fickle human beings has none of the certainty that they bring to the study of solid natural objects. This group in particular, being more open and seeming less sectarian to outsiders, are already making mainstream economists re-consider their simplistic aggregates, models and formulae, and start accommodating the role of entrepreneurship, time, place, values, dispersed information and other Austrian precepts in their analysis. As the global economy – or perhaps one should say *catallaxy* – itself becomes wider, more diverse, lighter, faster, more complex and more difficult to model, it seems likely that the influence of Austrian ideas will continue to grow.

Carl Menger (1840-1921)

Carl Menger was one of three academically gifted brothers born in Neu-Sandec in Galicia, part of Austro-Hungarian Empire (now Nowy Sacz, in Poland), where his father was a lawyer and his mother was the daughter of a wealthy merchant.

Menger studied law in Prague and Vienna, getting his doctorate from Kraków in 1867. While writing journalistic reports on markets in Lviv (now in Ukraine) and Vienna, he came to conclude that real-world price determination did not match the economic theory. So he started studying economics, and in 1871 published *Principles of Economics*, which launched the Austrian School. Attacking Marx's labour theory, it showed that value was a subjective concept, developing the idea of marginal utility as an explanation of economic choices.

Menger spent some years as tutor to the Austrian crown prince, Archduke Rudolf von Hapsburg, accompanying him on European travels. Back in Vienna, where he served as professor until his 1903 retirement, he sparked a fierce debate, the *Methodenstreit*, by insisting that social sciences could not produce 'laws' and predictions because they dealt with people, not things; but that useful findings could be deduced from the principles of human action.

Serving on a commission on the Austrian monetary system, he came up with new insights on the nature of money, arguing that its value came as an exchange good, that it grew up naturally because it facilitated trade and exchange, and that it did not, and does not, need governments to develop and maintain it.

Friedrich von Wieser (1851-1926)

Friedrich von Wieser was one of the early principals of the Austrian School. He developed Austrian cost theory, showing the subjectivity of costs and developing the idea of *opportunity cost*.

One of the few Austrian School economists born in Vienna, where his father was a senior official, Wieser studied law and social science at the University, before entering government service.

Like Böhm-Bawerk (who became his brother-in-law), Wieser studied under senior Historical School thinkers, including Wilhelm Roscher at Leipzig; but Menger's alternative won him over.

In 1884 he began teaching at the University of Prague, where he wrote his first major work, *Natural Value* (1889). This built on Menger's subjectivism and marginal utility analysis, showing that costs too were not objective, but a matter of individual values. He observed that people facing choices between desirable but mutually exclusive alternatives consider not just the cost of their choice, but the value of whatever they must forgo to get it – what today we call *opportunity cost*.

Wieser also developed the Austrian theory of *imputation* – the prices of capital goods are determined, he explained, not by the cost of building them, but by the expected value of the products they create. In his 1914 *Social Economics*, he attempted to apply this theory to the real world.

In 1903, Wieser returned to Vienna to succeed Carl Menger after Menger's retirement. In that role, he helped shape the ideas of 'second wave' Austrian economists such as Ludwig von Mises.

Eugen von Böhm-Bawerk (1851-1914)

Eugen von Böhm-Bawerk was a leading early figure in the Austrian School, developing the Austrian theory of interest, investment and capital, and identifying the importance of *time* in production processes. He also made important criticisms of Karl Marx's views on these questions.

Böhm-Bawerk was born in Brünn in Moravia, part of the Austro-Hungarian Empire (now Brno in the Czech Republic). He studied law at Vienna, where he read Carl Menger's *Principles of Economics* and became a firm adherent of Menger's ideas. At Vienna he also met Friedrich von Wieser, who became the third leading figure in the early Austrian School.

After university he joined the finance ministry in Vienna, but in 1881 went to teach at Innsbruck. During this time he published two major volumes of his great work, *Capital and Interest*. He explained that interest rates reflect people's *time preferences* – the fact that they prefer to have things now than in the future, and demand payment to postpone their consumption. This, he thought, was crucial to investment decisions, since all production takes *time*. Longer processes made sense only if the resulting product was more valued.

In 1889 he returned to the finance ministry to draft plans for tax reform, and became Austria's Minister of Finance in 1895, and again in 1897 and 1900-04. He eliminated subsidies, and strictly maintained the gold standard and a balanced budget. His image was placed on the Austrian 100-Schilling note in 1984, until the introduction of the Euro in 2002.

Ludwig von Mises (1881-1973)

Ludwig von Mises was a prominent 'second wave' Austrian economist, who used Menger's marginal utility analysis to sharpen the theory of money, worked on business cycles, and explained economics as a deductive, not predictive, science.

Mises was born in Lemberg, in Austro-Hungarian Galicia (now Lviv in Ukraine), where his father managed railroad projects. Initially a leftist, he discovered the importance of individual values and free markets from Menger's *Principles of Economics*. Attending Böhm-Bawerk's seminars in Vienna, he became interested in monetary theory. In 1912, aged just 31, he published *The Theory of Money and Credit*, which applied marginal utility analysis to show how money was valued as a medium of exchange. This enabled him to explain how damaging business cycles emerge when credit surges upset the delicate balance between the supply and demand for money. In 1926 he founded an institute to research this with F A Hayek.

Mises was chief economist at the Chamber of Commerce in Vienna, and from 1913 to 1934 he gave private seminars at the University. His 1922 *Socialism* showed that without prices, socialist societies could never make rational economic choices.

After Hitler's rise, Mises moved to Switzerland, then the United States. There, he wrote *Human Action* (1949), explaining economics as a deductive, not predictive, science. Since economists deal with individual values, he noted, they can never make predictions like physical scientists. Economic insights came from working out the logical consequences of self-evident truths about choices and action.

F A Hayek (1889-1992)

Friedrich Hayek was a polymath who worked on business cycles, explained the importance of information in markets, and showed how liberal societies could thrive without central planning.

The son of a doctor in Vienna, Hayek's grandfathers were both prominent academics, and Wieser and Böhm-Bawerk were family friends. After wartime service in the Austro-Hungarian Army, he earned doctorates in law and political science from Vienna. Wieser recommended him to Mises, with whom he studied business cycles, earning Hayek the Nobel Prize years later.

In 1931 he began teaching at the London School of Economics, taking British citizenship in 1938. During the wartime evacuation of the LSE, Keynes found rooms for him in Cambridge, where he wrote his searing critique of totalitarianism, *The Road to Serfdom*.

Hayek began to conclude that central planning was impractical. The economic information that planners needed was dispersed, partial, vast and fleeting. It was beyond the grasp of a single mind; yet it informed the personal plans of millions of individuals, whose actions the market co-ordinated.

In 1950, Hayek moved to the University of Chicago, where he traced the limits of scientific method in understanding society, and further developed his view that human institutions evolved naturally, without requiring central commands.

Hayek's idea that a liberal government should maintain the rules of justice but not direct society was encapsulated in *The Constitution of Liberty* (1960). In 1992 he moved to the University of Freiburg, where he refined these ideas in *Law, Legislation and Liberty*.

Murray Rothbard (1926-1995)

Murray Rothbard was a leading 'third wave' Austrian School thinker who built on Mises to create a thoroughgoing individualism and anti-interventionism, which he called *anarcho-capitalism*.

Born in New York, Rothbard graduated in mathematics and economics at Columbia University in 1945, before going on to complete a PhD in economics in 1956. Meanwhile, inspired by the free-market ideas of his teacher George Stigler, he discovered the Foundation for Economic Education, where he met Ludwig von Mises. *Human Action* (1949) influenced him greatly as a logical defence of free markets, and he became a regular participant in Mises's seminars at New York University.

A project to explain *Human Action* in simpler terms led to Rothbard's publication of *Man, Economy, and State* (1962). It carried Mises's deductive method and laissez-faire conclusions into new areas, arguing the superiority of free markets over government intervention, even in defence, policing, and the creation of money. Its development of Mises's theory of action anticipated much of the *rational expectations* idea that would later win Robert Lucas a Nobel Prize.

Working through the implications of the Austrian business-cycle theory, Rothbard argued for a gold standard and 100% reserve banking so as to prevent future damaging credit surges, and went on to explain the Great Depression in Austrian credit-cycle terms.

Rothbard believed that, like economics, ethics too stemmed from human nature and could be rationally deduced. He maintained a thoroughgoing libertarianism, based on the primacy and self-ownership of the individual.

Israel Kirzner (1930-)

Israel Kirzner developed the Austrian School's ideas on entrepreneurship, showing how and why it was crucial to the market system. The son of a rabbi and Talmud scholar, Kirzner was born in London and studied in Cape Town before moving to New York. A rabbi and Talmudist himself, he also explained the ethical nature of markets.

To him, the essence of entrepreneurship is alertness: being alert not only to innovations and adjustments that could create better and cheaper processes and products, but also in correctly anticipating what will appeal to consumers. In ever-changing global markets, this is a difficult and risky task, but entrepreneurs are motivated in the challenge by the possibility (for it is no certainty) of making a profit if they correctly anticipate and supply what the public wants.

Profit, therefore, has an important social function. It rewards and encourages people – and we are all entrepreneurs to some degree – to be alert to the gaps and opportunities that open up amid the constant churning of markets. This helps to keep supply and demand in balance and to co-ordinate human endeavours. Entrepreneurs *discover* opportunities and have a right to their profits under the simple precept of 'finders, keepers'. Nevertheless, we all gain from their discoveries.

The likelihood of such discoveries and social gains is enhanced if markets are open and competitive, says Kirzner. Regulation, by contrast, closes off opportunities and incentives for entrepreneurial alertness and discovery, and government intervention diverts it into less effective activities.

