

8 SUSTAINABLE CONSUMPTION, DEFICITS AND DEBT

How much can we sustainably spend? How much can we borrow and for what? What does living within our means actually mean? How far are we adrift, over-spending at the expense of the next generation?

The balance sheet approach to national accounts shapes the answers. The rules are that debt should be incurred only where it enhances the assets, and that otherwise the sustainable economy should be on a pay-as-you-go basis after the application of the polluter-pays principle. We can spend the surplus from taxation after paying for the capital maintenance of the core system assets. That way we can look the next generation in the eye and ensure that their capabilities will not be impaired by our excessive consumption.

To some, these may seem like very old-fashioned Victorian ideas and they are anathema to conventional modern economics, and to Keynesian macroeconomics in particular. The concept of sustainable consumption faces a formidable mainstream challenge. Keynesians do not follow a capital maintenance rule because there is no account for capital maintenance. To Keynesians it is all just spending, and part of aggregate demand. Far from curtailing spending to the sustainable path, Keynesians' aim is to maximise aggregate demand up to the full capacity of the economy, and indeed Keynesians expect higher demand to cause more capacity to come on stream. Spending is generally a 'good thing', and the worry for Keynesian economists comes when the news headlines are all about falling retail sales. When

this happens, the policy response is to find new ways of boosting back that spending, for example by increasing government spending. Cut taxes, increase spending, cut interest rates, all to get growth going again. This should give all those environmentalists who see this as the way to lots of environmental spending and borrowing, resulting in extra 'green growth', pause for thought. Many Keynesians now exacerbate our problems: they encourage debt to fund current consumption, encouraging consumption beyond our sustainable means. Environmental concern and Keynesian economic policies don't generally mix.

There are deep philosophical undercurrents to what is presented as the technical economic argument, as science rather than political economy. Keynes's focus on consumption was always more than a piece of economic theory. It had much deeper roots, and it has become entrenched in the paradigm of a consumer-led economy. The idea that consumption has to be limited, that it can sometimes even be bad, and that in particular it can exceed the capacity of the environment to cope, were not concerns for Keynes. He was a prisoner of his times, as we all are. His economics was part of the rebellion against all things Victorian. Keynes, Lytton Strachey and the Cambridge Apostles rejected the moral strictures, and especially the moral constraints, of their parents' generation.¹ Keynesian economics is best viewed through the lens of the Bloomsbury Group and the rejection of the broader Victorian outlook.² Its validity ultimately depends upon the assumption that the Victorians were generally wrong about the virtues of thrift and savings, the fear of debt and the constraints they tried to live within.

We live in a Keynesian world, one that is incompatible with the sustainable economy. Keynesians have achieved this mainstream status for two reasons: first, they have a theory, taught in all the main universities, dressed up as science, which dominates economics; and second, it gives the politicians we elect a free pass to pander to our preference for more spending and less taxes, even if this means borrowing from

¹ See R. Skidelsky (2010), *Keynes: The Return of the Master*, vol. 1, chapters 1–3, London: Penguin Books.

² For a general review, see L. Edel (1979), *Bloomsbury: A House of Lions*, London: The Hogarth Press. The classic anti-Victorian statement is L. Strachey (1918), *Eminent Victorians*, London: Chatto & Windus. See also P. Levy (1975), 'The Bloomsbury Group', chapter 8 in M. Keynes (ed.), *Essays on John Maynard Keynes*, Cambridge: Cambridge University Press.

the next generation. Boris Johnson expressed it succinctly: ‘My policy on cake is pro having it and pro eating it.’³

The consequences have been far from happy. The last twenty-five years of this Keynesianism have produced asset bubbles, including housing and land price bubbles, a global financial crisis and a Covid-induced expansion of debt, an increase of another 40ppm in the carbon concentration in the atmosphere, and an acceleration in the destruction of major ecosystems and the biodiversity they had been home to. The environment cannot stand more of the same.

Like most paradigms that become conventional wisdoms, the origins of today’s Keynesians lay with very different problems, and it has morphed from being a solution to unemployment in the 1930s to being the answer to boosting economic growth. The context was that wages failed to adjust to the weakened economic circumstances in the post-First World War period that the British economy found itself in, and there was a slump followed by the Great Depression.

In order to puncture the current enthusiasms for Keynesian policies, let me take you back to what may seem a very academic debate about sticky wages and inflexible labour markets. Bear with me, as it turns out to have a major consequence for the sustainable economy and creates a very special difficulty about the transition to the sustainable economy and how to avoid a deep economic recession and unemployment if consumption is reduced back onto the sustainable path. We need to work out how consumption can fall back to the sustainable level without triggering a major recession.

Bear in mind too that sticky wages are just another way of saying that we resist any attempts to make us live within our means if it makes us worse off. We always want more income and resist the pressure to make us pay for the costs of great shocks like the Covid pandemic and the costs of addressing climate change and biodiversity loss. This includes not just workers, but pensioners too. At issue are the very different theories about how the labour market works, with profound consequences for designing social justice into the sustainable economy, and the role of investment and savings, and how much the current generation should set aside spending for savings to repair and enhance the primary assets.

³ L. Barber, ‘No More Mr Nice Guy’, interview with Boris Johnson in *The Guardian*, 19 October 2008, www.theguardian.com/culture/2008/oct/19/boris-london.

The Victorians and the 'Classical' Theory

Analogous to how the sustainable economy is developed as a reaction to the Keynesian models that it challenges, and as the major environmental problems of our age replace those that Keynes focused on, Keynesian theory was developed in reaction to and rejection of what went before, the so-called classical theory and conventional wisdoms of the Victorians underlying it.

Classical economics had very much a supply-side approach to the economy and it built upon the central idea of Adam Smith, that a decentralised economy, left to its own devices, with each of us self-interestedly pursuing our own utility, could be the best way to organise an economy. This fitted with Smith's deep scepticism about the corruption of government and the drag of its spending on the economy. It was at the time, and still is, a very radical idea – that the best way to organise an economy and a society is for each to pursue their own interests, rather than cooperate. Self-interest becomes a virtue, not a vice, as long as it is tempered by competition. Given this, the policies the Victorians subsequently trumpeted – the nightwatchman minimalist state, and free trade – would be amongst the best ways to organise an economy.

There is no role for proactive macroeconomics. Money has no real function over and above its role as a means of exchange and a store of value, and could be treated as one of many goods, with a supply, a demand and a price (the interest rate). It has no significant general effects on the economy, as all markets clear all the time. Money, credit and banking are bit-part players, facilitating not shaping the real economy. They are useful servants, but nothing more.

In this perfect theoretical world, refined and developed by economists in the nineteenth and early twentieth centuries around utility and marginal analysis, involuntary unemployment does not exist; wages equal the marginal product of labour, so that the labour market clears. If wages are too high, or just sticky, the unemployment that results is voluntary; if workers want a job, they have the option of accepting lower wages. Unemployment is a supply-side problem, caused by market failure, and in particular by attempts by trades unions to raise wages above their marginal products. Striking railway staff destroy railway jobs. Zero-hours contracts create employment. Minimum and living wages are the way to destroy jobs.

The rules of the game of this older classical economics tradition were: savings equal investment, and Say's Law, which states that supply creates its own demand.⁴ The classical economists like Smith, Marx and Mill viewed the economy as a supply-side exercise in combining the fixed factor of production – land – with the variable factor – labour (treating capital as embodied labour). This is how they got to the labour theory of value. More labour meant more economic output. More land, for example the discovery of North America and the gradual development of colonies, temporarily relieved the constraint of the fixed factor. But ultimately no one is making more land and, following Thomas Malthus, more labour would be checked by limits on food supplies. For Malthus, population increased geometrically, whilst food production increased arithmetically. It would all end up in a stationary state, whether Marx's communist utopia or Malthus's hell on earth as reflected in the Irish potato famine in the mid-nineteenth century.⁵ The bit missed by the classical economists, and surprisingly by Adam Smith, whose *Wealth of Nations* was published in 1776 just as the Industrial Revolution was getting going, was the impact of technical progress, opening up the prospects for growth in both food supplies and industrial output rather than a stationary state of affairs.⁶

What could possibly go wrong? The answer for many Victorians of Adam Smith's persuasion came when the state interfered too much with the normal operation of markets, straying beyond its nightwatchman's role. Worse, organised labour, with socialism as its motivating political theory, would, by driving up wages and reducing hours, drive a wedge between the costs of labour and its productivity.

The macroeconomic theory challenge, to the extent that there was one, was to explain the trade cycles that bedevilled the nineteenth-century economy, and how investment could first run ahead and then be too little to maintain a steady growth path. There might be irrational exuberance, later highlighted by Joseph Schumpeter and the

⁴ J.B. Say (1803), *A Treatise on Political Economy*. See also T. Sowell (1972), *Say's Law: An Historical Analysis*, Princeton: Princeton University Press; and D.P. O'Brien (1975), *The Classical Economists*, Oxford: Clarendon Press, especially pp. 159–62.

⁵ K. Marx and F. Engels (1848), 'The Communist Manifesto', in K. Marx (1969), *Karl Marx and Fredrick Engels: Selected Works*, vol. 1, Moscow: Progress Publishers, pp. 98–137; T.R. Malthus (1798), *An Essay on the Principle of Population as It Affects the Future Improvement of Society, With Remarks on the Speculations of Mr. Godwin, M. Condorcet and Other Writers*, London: J. Johnson.

⁶ Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*.

Austrian economists, and there might be an excessive expansion in credit-fuelled booms. Both irrational exuberance and credit needed to be carefully constrained, and the stability of the currency and the Gold Standard disciplined the market players and especially speculators. Get credit right, if necessary by manipulating the bank rate (the interest rate), and that was about as far as the state should interfere. (For most of the nineteenth century, there was no inflation, arguably because of the Gold Standard.) A good dose of the Victorian values might insulate those exposed to the cycle since they would have saved for such rainy days.

Growth itself was explained by increases in population and fluctuations in agricultural output at the mercy of weather, itself some thought was partly explained by sunspots, which were believed to influence agriculture output, and later, by changes in technology.⁷ Classical economists opposed trade restrictions, and were vehemently opposed to mercantile protection, particularly from Smith onwards, persuaded by David Ricardo's theory of comparative advantage. Abolishing the Corn Laws had centre stage in their ambitions.

As the realities of the unemployment in the 1920s and 1930s sunk in, it would be a mistake to think this classical theory was dead and buried. Keynes moved on from his concerns in the 1920s about the Gold Standard (which he had supported, albeit at a lower exchange rate) and manipulating the bank rate, and looked for further levers to tackle mass unemployment. In doing so, he naturally focused on the labour market (unemployment was the problem) and considered how to tackle the stickiness of wages. He defined himself in opposition to those who thought the solution lay in cutting wages, which, his opponents claimed, would have recognised that the costs of the First World War had made the country worse off (a bit like Covid now) and improved its competitiveness in the context of a fixed exchange rate.

⁷ William Jevons investigated the link between sunspots and agricultural output, and hence the business cycle. See S. Peart (1991), 'Sunspots and Expectations: W. S. Jevons's Theory of Economic Fluctuations', *Journal of the History of Economic Thought*, 13(2), 243–65. Robert Solow famously said: 'You can see the computer age everywhere but in the productivity statistics.' This became known as 'the Solow Paradox'. R.M. Solow (1987), 'We'd Better Watch Out', book review, *New York Times*, 12 July, p. 36. For a sceptical view about the prospects for technology-led growth, see R.J. Gordon (2016), *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War*, Princeton: Princeton University Press.

Keynesian Policies

Keynes's general theory was less general and less revolutionary than he and his followers claimed. It was more an evolution on fast-moving theoretical and practical grounds.⁸ But it was a revolution in economic *policy*. What Keynes eventually did was to shift the lens through which the economy was viewed. He switched from the supply side of the classics and the Victorians to the demand side. He made aggregate demand the key variable and the central focus of policy. Demand created its own supply, not Say's supply creating its own demand. This was new, radical and different.

Keynes took the world as he found it as largely given and that included much of the supply side. He had limited interest in industry (despite the various commissions he sat on). On the cotton industry and his involvement with the famous Liberal 'Yellow Book', and with Lloyd George's various policy initiatives, Keynes saw large industries as essentially corporatist and more like extensions of the state. He viewed management as needing to move towards a wider public interest perspective. With an academic's disdain for commerce, he thought that most of the captains of industry were at best average, if not often stupid. Keynes saw no prospect of lowering wages: they were sticky and they would remain sticky, whether they were sustainable or not. Workers were not willing to reduce their consumption, as they are unwilling to do so now, and if wages were cut, he saw a vicious circle of falling demand and hence even higher unemployment. Consumption had a floor, regardless of whether it was sustainable. Breaking through that floor risked causing a depression.

There were two main interpretations of Keynes's 'general' theory that emerged following its publication, both focused on sticky wages. The first was the attempt, pursued ever since, to give Keynes's theory conventional, mainstream legs, less a revolution in economic theory as Keynes had claimed. Don Patinkin's famous restatement in

⁸ The classical theory Keynes had in mind was all about money, interest, credit, savings and investment, and he had the banking system and the setting of interest rates very much to the fore. Many 'classics' like Knut Wicksell did too. See K. Wicksell (1907), 'The Influence of the Rate of Interest on Prices', *Economic Journal*, 17(66), 213–20. Keynes's theory turned out to be much more of an evolution from theirs, not the theoretical revolution he and his followers claimed. His *Treatise on Money* preceded the *General Theory*, and carried on a long tradition. J.M. Keynes (1930), *A Treatise on Money*, London: Macmillan. Keynes was as much a prisoner of defunct economists of the past as his interlocutors.

Money, Interest, and Prices,⁹ as well as Paul Samuelson's exposition in his *Foundations*,¹⁰ took the guts out of Keynes's theory, rendering it a special case of the general equilibrium construction. That special case was to add wage rigidity into the labour market model, and show how this could lead to unemployment. Essentially, the special case was the market failure of wage adjustment, caused by either money illusion (confusing real and nominal wages) or union monopoly power. This approach of trying to provide microeconomic foundations carries on today. The 'consensus' new Keynesian models are of this variety, as was the new classical synthesis of the 1980s.¹¹

A less-noticed interpretation, and one very relevant to our concern with the sustainable economy, was provided by Hicks (which went beyond the IS–LM model for which he is famous). With hindsight in 1955, he wrote that 'it is hardly an exaggeration to say that instead of being on a Gold Standard, we are on a Labour Standard'.¹² In effect, the economy, and money and credit in particular, had to adjust to the *given* wages. We might today rewrite this as the claim that environmental policy needs to adjust to given consumption, with the environment a luxury good, affordable in good times, but not for example when the cost of living and energy prices are rising, as in 2021 and 2022.

This idea can be generalised. If workers decide what their wages are going to be, and hence demand a particular standard of living, this can be accommodated in two ways. There could be redistribution from the rich to the workers and from capital to labour. Labour could get more of the national income at the expense of profits.¹³ The alternative is that this *ex ante nominal* Labour Standard is adjusted in real terms by inflation and devaluation, so that real wages are not given. In other words, something else has to give to deliver full employment, and the answer is indirect, but really a version of the old theory that wages are

⁹ D. Patinkin (1965), *Money, Interest, and Prices: An Integration of Monetary and Value Theory*, New York: Harper & Row.

¹⁰ Samuelson, *Foundations of Economic Analysis*.

¹¹ See T.J. Sargent and N. Wallace (1975), "'Rational" Expectations, the Optimal Monetary Instrument, and the Optimal Money Supply Rule', *Journal of Political Economy*, 83(2), 241–54.

¹² J.R. Hicks (1955), 'Economic Foundations of Wage Policy', *Economic Journal*, 65(259), 389–404; and in (1982), *Money, Interest and Wages: Collective Essays on Economic Theory*, vol. 111, Oxford: Blackwell, pp. 193–209.

¹³ D. Bergholt, F. Furlanetto and N. Maffei-Faccioli (2022), 'The Decline of the Labor Share: New Empirical Evidence', *American Economic Journal: Macroeconomics*, 14(3), 163–98.

driven to their marginal products by competitive forces. On this view, the Labour Standard is an illusion, a money illusion.

It is not hard to see both of these factors at play since the 1920s and 1930s: the UK has been devaluing for 100 years since then, to continually recalibrate the current account of the balance of payments given a declining relative competitiveness, and there have been periods of inflation, notably in the 1970s, the early 1990s and from 2020 onwards. Both force consumers and workers to live within their means. The breakdown of the Bretton Woods architecture in the early 1970s was in response to inflation, and that inflation had the labour troubles of the 1960s behind it, before the Organization of the Petroleum Exporting Countries (OPEC) oil shocks.

In the period after 1990, and particularly after 2000, the coming of zero-hours contracts, cheaper migrant labour and cheaper Chinese goods has been a notable example of enforcing competitive (low) wages, and employment has been high. Having gained wage bargaining power in the 1960s and 1970s, workers lost that power from 1980 onwards, and thereafter capital gained at the expense of labour in national income, with technology encouraging further substitution away from traditional types of work. As minimum wages and living wages are imposed, the inflation option opened up again in the post-coronavirus world and in the face of high private and public debts. QE is just one example of monetising the debts. The inability, post-BREXIT, to hire British butchers, lorry drivers and seasonal agricultural labour reflects an *ex ante* desire to live beyond the UK's means.

From the Labour Standard to the Consumption Standard

The Labour Standard has a broader context. It could be argued that a democratic voting system will always seek to protect standards of living, and politicians will find it necessary to promise ever-higher consumption. The generalisation of the Labour Standard is what I call the *Consumption Standard*. In the aftermath of the 2000 stock market crash, the subprime crash in 2007/8 and the lockdown crash in 2020, governments strove to underpin consumption by increasing debt and lowering the cost of public, corporate and private borrowing. This was true even in the context of 'austerity'. The government strived to protect voters from the consequences of the shocks that would (and should) otherwise have made them worse off. Voters insisted upon

this. It morphed into its modern version, ‘cake-ism’,¹⁴ with debt underpinning the Consumption Standard.

Of course, the consumers and workers were, and are, in reality worse off, as they will be because of climate change and biodiversity loss, and the consequences of the financial excesses and asset price adjustments that follow. The political trick is to treat consumption as the target, and then to use the macroeconomic instruments to meet it in money (rather than in real) terms. This eventually involves devaluation, inflation and monetarising the debt. The real value of consumption cannot be shielded permanently, unless the debt burden falls on the next generation, breaking the first principle of the sustainable economy. It is not sustainable and hence will not be sustained. Eventually, living beyond our means has to stop, unless the next generation pays for it, and it is limited by environmental damage and inflation. There is no free lunch as the cake-ists claim.

Investment

Concentration on aggregate demand does not automatically lead to higher consumption. Demand equals consumption plus investment for the domestic economy. Keynes (though not modern Keynesians) was at pains to put investment rather than consumption at the heart of his *General Theory* (but not so much his policies), even though (extraordinarily) he had no credible theory of what actually determined investment, and thought that this was about ‘animal spirits’ and the mindsets of those generally rather stupid businessmen. This is the controversial, some say notorious, chapter 12 of the *General Theory*.¹⁵ It offended mainstream economists because animal spirits did not have a microeconomic utility-maximising underpinning, pointed to a very different (and Austrian) theory of human nature, as discussed in chapter 3, and

¹⁴ ‘But this strategy shows how we can build back greener, without so much as a hair shirt in sight.’ See HM Government (2021), ‘Net Zero Strategy: Build Back Greener’, October, p. 9.

¹⁵ Keynes wrote: ‘Even apart from the instability due to speculation, there is the instability due to the characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than on a mathematical expectation, whether moral or hedonistic or economic. Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of animal spirits – of a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities.’

sat separately and out of place with the rest of his book. Keynes's continuous engagement with Hayek (his principal theoretical adversary in the great debates of the 1930s) will have informed his views on entrepreneurs and he expressed a lot of sympathy with Hayek on matters of wider political economy.¹⁶ If animal spirits were the ultimate driver of investment, it is hard to see how his theory could drive them forward, or what economic policies could make people more animal-spirited.

Whatever the causes of investment, it is the problem of investment that helps Keynes theoretically explain why the economy once in recession can get stuck in an unemployment equilibrium. This is where his liquidity trap comes in. For Keynes, investment drives (or should drive) savings, not the other way around, as he ascribed to the views of the 'classicals'. The Victorians, in Keynes's caricature, thought savings accumulated to facilitate investment. Whereas the Victorians had triumphed thrift as a moral virtue, Keynes thought that thrift could be the problem. What mattered was how savings translated into investment, and here the issue was the prospect of profits from enterprise and all those animal spirits that profits were supposed to excite. Investment was the pull factor; there was no supply-side push. The interest rate was secondary, but the economy would get stuck in unemployment because businesses lost confidence, and held cash balances rather than investing in new enterprises. Once stuck in this liquidity trap, the interest rate would not help much. And wages would not adjust.

The Victorians start with thrift and ethics and then show how virtuous this personal set of values is for the economy. Indeed they went further, with a deep fear of debt, a form of guilt (in German *Schuld* means both debt and guilt – the two are conflated). The prudent Victorians save, and then invest their savings in the family business, government bonds, the new utility bonds and in the emerging joint stock companies. For the Victorians, retained earnings played a key financial role. This money underpinned the great industrial boom, built the railways and facilitated the emerging municipal utilities. It is what built the sewers.

¹⁶ Keynes wrote after reading Hayek's *Road to Serfdom*: 'The voyage has given me the chance to read your book properly', 'In my opinion it is a grand book. We all have the greatest reason to be grateful to you for saying so well what needs so much to be said. You will not expect me to accept quite all the economic dicta in it. But morally and philosophically I find myself in agreement with virtually the whole of it; and not only in agreement with it, but in a deeply moved agreement.' See further N. Wapshott (2011), *Keynes Hayek: The Clash that Defined Modern Economics*, New York: W.W. Norton.

This thrift is forgone consumption. At the heart of this nineteenth-century model is a focus on the long term, as it is for the sustainable economy. It is a model close to that pursued by China since 1980 until the global financial crisis in 2007/8, and Japan until the late 1980s. In these and other great economic transformations (including Germany after the Second World War), the core feature was very high savings. In both China and Japan, this exceeded 30 per cent of GDP for significantly long periods. Consumption was suppressed both by a risk-averse population and the deliberate hand of the governments. The Germans, Japanese and Chinese had good historical reasons for being very personally risk-averse. They were all very thrifty.

In all these cases, the important success factors were first the savings themselves, and then how these savings were channelled into investment. In the case of Germany and Japan, the notionally private banking system played this role; in China, it was the state and state-run financial institutions that did this job. In all three cases, like Victorian Britain, it worked. When it began to fail, Japan and China tried to boost consumption and used Keynesian deficit spending to do so. In Japan's case, this has been a thirty-year failure; in China, the results of trying to boost domestic consumption are just beginning to play out, as its great property bubble collapses. In both cases, declining fertility and eventually declining populations might further undermine the Keynesian policy measures. Fewer workers relative to pensioners is not consistent with maintaining living standards.

Keynes might claim that Victorian success was because there were lots of very profitable investments to make in the Victorian economy, and the savings were the consequence, not the cause of, a virtuous circle encouraging enterprise. Investment begat profits which begat more savings. Yet, if it is enterprise that is the driving force, then the question Keynes might have asked is why the profitable opportunities were so absent in the 1920s and 1930s in Britain. This would have driven him to take seriously the supply side and productivity growth. The opportunities that the new technologies provided were considerable. It was a great age of technical progress. It was not low wages that suppressed demand, but rather the want of enterprise itself and a lack of competitiveness that sticky wages reinforced.¹⁷

¹⁷ This plays into Martin Wiener's theory of decline, and its deep cultural roots. See Wiener, *English Culture and the Decline of the Industrial Spirit, 1850–1980*.

In the late 2010s, increasing the minimum wage and generally rising wages were argued to be a positive contribution to raising productivity, though there was scant evidence to suggest they did much to shift the poor performance. The Uber economy, whilst it lasted, pointed to a more mainstream pre-Keynesian response, as did the flow of migrant labour from Eastern Europe. Both provided cheaper labour. The remarkable fact is that, following the financial crisis in 2007/8, productivity growth stopped, and has remained close to zero ever since, despite the opportunities provided by the current great burst of technical progress.

If Keynes had delved further into the primacy of enterprise,¹⁸ he might have engaged more with the fact that the Victorian model was remarkably successful, helping a very small island and a very small population dominate the global economy and make sterling the global currency. Quite why it was so successful is not a question that Keynes spent much time on, sharing the Bloomsbury general prejudices against all things Victorian.

The UK economy only exceeded the Victorian economic growth performance in the period 1945–70, and arguably for non-Keynesian reasons. In retrospect, the period looks more like a weaker, catch-up version of the German, Japanese, Korean and now Chinese models, not a period when demand management was the key determinant, indeed if at all.

The turn to boosting consumption is a counsel of despair, a dose of short-termism and a belief that it is better that people do something in employment rather than waste their potential on the dole. There is after all so much to be done, and with idle people on tap, there is an essential common-sense argument that the tasks and the people ought to be applied to each other.

An obvious question to ask is: if wages do not fall to clear the labour market and utilise those idle hands, why should government borrowing funding and financing increased government spending work

¹⁸ He would probably have fallen back on Sigmund Freud, who was fashionable at the time among Keynes's circle. This is also part of what lies behind the psychological chapter 12 and its 'animal spirits' in the *General Theory*. But if it is an exogenous psychology, or perhaps national culture emerging out of history, and, in Britain's case, the searing experience of the First World War, then it is not clear how society might snap out of doom-and-gloom, other than to go for a bit of hedonism and stop being Victorian. It fits with the general revolt against the perceived strong big stick of Victorian morality.

any better? Keynes's answer (or rather Richard Kahn's answer¹⁹) was the famous multiplier, a bit of magic that made borrowing and spending now pay for themselves and more. It looked too good to be true. The government could borrow, increase public works, and the resulting spin-offs in increased demand in terms of the spending of wages would lead to secondary and tertiary, and indeed effectively infinite, rounds of demand increases through the economy. Kahn much later remarked there is no obvious reason 'why the multiplier is not infinite'.²⁰ The resulting higher tax yields would make the stimulus self-financing or better, the purest form of cake-ism.

It was a nirvana that Keynesians returned to after the 2007/8 financial crisis, and again after the Covid-19 lockdowns, and it lurks behind the 'green deals' in the UK, EU and US. Deficits do not matter because debt does not matter, because spending funded by debt would more than pay for itself. It is a magic debt tree. It would all work up to the point where full employment was achieved. But since many Keynesians believed that there is a general underconsumption tendency in modern economies, this mattered less.

Keynes had private investment as the vehicle, but he and the Keynesians slipped to advocating increasing investment in public works, the sort that the Victorian municipalities went for with sewers, water supplies, railways and so on, and in principle compatible with the asset enhancement of the sustainable economy. But as this also took time (not much is genuinely shovel-ready), Keynesians slipped back further to just increasing spending to increase aggregate demand.²¹ More consumption had the political merit of improving standards of living now, whereas investment was more long term and hence likely to reap its benefits to voters later. In contrast, Franklin D. Roosevelt's New Deal in the US did have more investment, notably in dams and infrastructures. Later China's great expansion gave preference to investment over consumption, at least initially. After the Second World War, Britain

¹⁹ R. Kahn (1931), 'The Relation of Home Investment to Unemployment', *Economic Journal*, 41(162), 173–98.

²⁰ R. Kahn (1984), *The Making of the Keynes' General Theory*, Cambridge: Cambridge University Press, pp. 101–2, quoted in R. Skidelsky (1992), *John Maynard Keynes: The Economist as Saviour, 1920–1937*, vol. 11, London: Macmillan.

²¹ Keynes was a member of the Executive Committee of the Liberal Industrial Inquiry, and its report has become known as the 'Yellow Book'. Keynes was largely responsible for 'Book II: The Organisation of Business'. Liberal Industrial Inquiry (1928), *Britain's Industrial Future, Being the Report of the Liberal Industrial Inquiry of 1928* (the 'Yellow Book'), London: Ernest Benn; second impression, with a foreword by David Steel, 1977.

and Europe suppressed consumption with high taxes to boost the great post-war reconstruction. Keynes himself promoted just such a policy of suppressed, or at least delayed, consumption in his 1940 proposals in *How to Pay for the War* – high tax to fund high war investments, funded by a capital levy after the war ended.²² All very Chinese.

A further line that Keynes took was on the problem of where the savings went, and in particular into investment outside Britain, as a counterbalance to the then current-account trade surpluses.²³ He wanted these savings to be spent at home, not abroad. Despite his earlier support for free trade, he came to favour home over abroad, another break with the classical economists who were united in their opposition to protectionism. This pool of funds should, he argued, be added to the potential fire power for tackling home unemployment. To the extent that he thought through this dimension of dealing with unemployment, he also favoured population control to limit the workforce,²⁴ but presumably exporting surplus labour might have done the trick, as it had during the eighteenth and nineteenth centuries, with the Scottish and Irish rural poor, and, in Scotland's case, the Clearances.

It did not take long for the magic of the multiplier to come under attack. One line of attack was expectations, where Keynes escaped one of the biggest holes in his multiplier by focusing only on the short term. He greatly neglected what would much later be called the neo-Ricardian effect and the neo-Ricardian equivalent theory, developed by Robert Barro.²⁵ If the government borrowed now, might not people expect taxes to be higher tomorrow to pay it back? And if so, might they not reduce their spending now, expecting to be poorer tomorrow to pay the interest and the debt back? Fiscal policy could thereby be rendered impotent. Indeed, it could be worse. Not only would there be unintended consequences of government spending, but the incentives facing government, and its vulnerability to capture by vested interests, would mean that its spending would be inherently less

²² J.M. Keynes (1940), *How to Pay for the War: A Radical Plan for the Chancellor of the Exchequer*, London: Macmillan.

²³ A current-account deficit reflects a desire to buy more imports than can be paid for by exports, and hence requires foreigners to lend us the money to pay for the excess of imports.

²⁴ He also thought that the quality of the labour force was a matter of concern, hence his flirtation with and support for euthanasia.

²⁵ R.J. Barro (1974), 'Are Government Bonds Net Wealth?', *Journal of Political Economy*, 82(6), 1095–1117.

efficient than that of the private sector. The public sector would ‘crowd out’ the private sector, an idea that Smith had made one of the themes of his *Wealth of Nations*.

The public choice literature, and the theory of institutional sclerosis caused by vested interests and the *bête noire* of the sustainable economy, the lobbyists, set out by Mancur Olson,²⁶ showed how a less-than-zero-sum game could be created. Just as the multiplier painted a picture of the ripples of more spending increasing output and employment and producing the money to pay for the initial outlay, so expectations contracted the benefits, including expectations of the inefficiency of government spending. There would be even more to pay back in due course. People are rational and they cannot be fooled all the time. They learn and react in a dynamic way. Economic growth would not be cumulatively built on the initial fiscal expansion, and hence the future would not pay for the current spending stimulus. On the contrary, such fiscal deficit funding could make matters worse. ‘Going for growth’ based on fiscal deficits would actually have the opposite effect and might add to inflation too.

Although there is little evidence that people measure up to the stringent rationality of Barro’s theory, especially when it is the next generation who will have to pay back the debt, there developed an empirical analysis of the impacts of fiscal policy which encouraged a deep scepticism. While it became fashionable to argue that the great golden age of economic growth and its associated full employment in the period 1945–70 was the result of applying Keynes’s *General Theory*, the facts hardly bear this out. It is not hard to see a general post-war tide lifting all boats, built on sustained investment, underpinned by the profitable opportunities of reconstruction and new technologies. Furthermore, that investment had very important supply-side dimensions: it was centred on rebuilding and expanding the energy industries, roads and housing – all key systems infrastructure assets and all key parts of the sustainable economy. Only later would the UK great white elephants, like Concorde and the AGRs (advanced gas-cooled reactors), start to deliver negative-value public investments. (Most countries have their terrible examples too.)

As noted, and contrary to the Keynesian reinterpretations of history, the post-war path in the UK (and in major European countries

²⁶ M. Olson (1982), *The Rise and Decline of Nations*, New Haven: Yale University Press.

and the US) was characterised by very high taxation, and the state directing the surplus from consumers garnered by these taxes through to physical infrastructure investment. As electricity demand increased at around 7 per cent for each year of 3 per cent economic growth, the power stations were built on a pay-as-you-go basis going beyond capital maintenance to include enhancements for future benefits, paid for out of current consumption and current tax revenue. There was not much on the consumer side until well into the 1950s and 1960s; people were forced to be savers. Rationing carried on well after the war into the mid-1950s. To claim that this post-war economic growth was achieved by manipulating aggregate demand through government surpluses and deficits has little foundation. It is true that there was a stop-go cycle, and an electoral cycle, but for the UK the ever-present threat to sterling after the devaluation of 1948 repeatedly put the brakes on.

What drove the final nail into the coffin of simple post-Second World War Keynesian remedies was the experience of the 1970s. The UK suffered two years of near 25 per cent inflation, followed by three years of near 10 per cent inflation. It was in effect a massive default on the debt. The very Keynesian fiscal medicine administered by the Edward Heath government in 1972, aiming at 10 per cent GDP growth over three years onwards, fuelled the inflation that followed, as did Arthur Burns's policy of not raising US interest rates as US inflation took off, further exacerbated by the OPEC oil price shocks. By 1976, even the UK's Labour leadership recognised that 'you can't spend your way out of a recession'.²⁷ It is echoed in the great post-2007/8 financial crisis and pandemic spending of 2020–2.

When the economic crises struck in 2000, 2007/8 and 2020–3, the UK (and eventually the EU) gradually gave up on any semblance of fiscal rectitude. With inflation suppressed in part by Chinese export competition, the shift of emphasis came back to managing the business cycle, just as American economist, Robert Lucas, famously declared that economists had solved the problem of managing cycles (and Gordon Brown famously stated that there would be no more 'boom-and-bust'). By the time that the coronavirus pandemic hit in 2020, it was clear that trying to head off recession with ever-greater fiscal and monetary policy would not usher in higher economic growth or raise the productivity growth much above zero, even if it bought time, and

²⁷ J. Callaghan (1976), Prime Minister, speech to Labour Party Conference.

up until 2020 it looked like the labour market reforms of the 1980s and 1990s had indeed made the labour market flexible, creating what became known as ‘The Great Moderation’. As mentioned, zero-hours contracts were a reflection of labour being priced into employment, and in the UK case large numbers of European immigrants were both absorbed into the labour market and thereby a lid was kept on wages. This was the opposite of Keynes’s population control: the UK population started to rise sharply. Labour supply went up, and so did employment. It looked surprisingly as if a greater supply of labour was leading to higher demand for it.

The post-2000 period has also been a period of unprecedented monetary laxity. Negative real interest rates for two decades had never been witnessed in economic history. By mid-2022, the real interest rate in both the UK and the US was around *minus* 6–8 per cent. Negative real interest rates encouraged both a spending boom and a series of asset bubbles, little investment but lots of financial engineering. Had Keynes been around, this would no doubt have attracted his criticism. It was a case of animal spirits in financial markets, rather than the sort of investment he had in mind. That the financial engineering was caused by the monetary policy would not have been wasted on him, and the coming of QE would have reinforced the criticism.

Modern Monetary Theory and the Magic Money Tree

The extreme point of Keynesian (but not Keynes’s) policies is reflected in the ‘Modern Monetary Theory’ (MMT),²⁸ an approach designed to bolster the case for QE and unlimited fiscal expansion, up to a point of inflation. It is perhaps the greatest general economic policy threat to the sustainable economy, despite its advocates advancing this as a way to pay for decarbonisation. The advocates of MMT share with many Keynesians the assumption that the economy is almost always prone to under-utilisation of capacity, and hence they argued that this inflation point is far off, and more of theoretical than practical concern. It did not take long for this complacency on inflation to prove dangerously wrong.²⁹

²⁸ N.G. Maniw (2020), ‘A Skeptic’s Guide to Modern Monetary Theory’, *AEA Papers and Proceedings*, 110, 141–4.

²⁹ For a popular version of MMT, see S. Kelton (2021), *The Deficit Myth: How to Build a Better Economy*, London: John Murray.

The idea is simple and one that has beguiled many cash-strapped rulers in the past. It is that it is possible to print an unlimited amount of money in a country's own currency. This is indeed strictly true: there is no limit to QE, whereby the Bank of England and the Federal Reserve and the European Central Bank (ECB) print money to 'buy up' debt issued by the Treasuries (and once the Treasuries stop issuing, buy up private debt as well). The Treasuries keep issuing, and the central banks keeps buying, and the Treasuries then spend the proceeds. By early 2021, the Bank of England had, for example, bought around half of all UK government debt.

MMT goes further: there should be no interest paid on this debt, because it is riskless. This is only true in the sense that central banks 'buy' the debt at a price they choose. Were they to subsequently sell the debt to the market, unless the private financial institutions are compelled to buy it (which MMT advocates might force them to do – exchange controls might do the job), the market will price the risk, and almost certainty at more than zero interest. Indeed it already has.

In earlier times, this would have been called monetarising the debt, or even debasing the currency. It was attractive to the medieval King John and a number of successors, and it has been tried in many countries, including Zimbabwe. The 2020 episode of QE by the Bank of England, the US Federal Reserve and the ECB arguably follows MMT fairly closely. MMT advocates would quarrel only about the amount, and argue that it should be an order of magnitude greater. It is seductive politics too: it breaks free from the usual question about who will pay it back and when, and therefore the consequential eventual tax rises and expenditure cuts. A recent example is the argument for paying for net zero policies with debt, itself financed by QE. It is another example of pure cake-ism.

MMT comes as close as it is possible to get to the idea that debt does not matter, notably when it is held within a country and hence directly challenges our approach to debt in the sustainable economy, as only appropriate to finance asset enhancements. In the MMT world, the debt is owed to the citizens who are themselves the recipients of the spending and the taxpayers who avoid higher taxes. Only overseas lenders need to be repaid. If the real interest rate is zero then there is no net cost. At one leap, governments can spend as much as they like on social care, healthcare, infrastructure projects and indeed widespread industrial subsidies. They can spend an unlimited amount of money on 'green'

stuff too. Taxes can be reduced since they are not needed to continue to pay for services because new debt can be issued to pay for them instead at zero cost. At the limit, taxes are not needed.³⁰ Capital maintenance and capital enhancements to meet our obligations to the next generation can all be easily and costlessly met by printing money. It is the antithesis of our balance sheet rules and the requirements of the sustainable economy. Worse, it helps dig an even deeper environmental hole.

This is a nirvana for those in favour of big government and many environmentalists on the political left, and on the right those like Donald Trump and Liz Truss who want unfunded tax cuts. But, like miracles, it is too good to be true: an economy has to live within its means and the resources it can command. There is a good reason why monetarising debt tends to result in inflation, and using QE to finance government spending and then even to finance the interest on the debt ends in implicit or explicit default. For a relatively small open economy like the UK, if the money markets expect the government to monetarise the debt, the incentive is to switch out of sterling. Where there is also a current-account deficit that needs to be financed, a crisis can quickly develop, with capital inflows falling sharply, as they did in the 1960s and 1970s. The balance of payments can then balance only at a sharply reduced exchange rate, and that in turn means a lower standard of living and imported inflation. Whereas the UK has been gradually devaluing for a century, MMT could induce a full currency crisis. Inflation and devaluation are the likely results. What staved this off in 2020 and 2021 was that all other major countries were doing the same thing. But none of these countries has staved off inflation. The US, EU and UK all experienced rising inflation rates by the end of 2021, and by the second half of 2022 inflation rose to 10 per cent. As with the 1970s, the inflation started and then (in the 1970s) oil prices pushed it up sharply and (in 2022) Russia's invasion of Ukraine kicked up inflation further as oil and gas prices rose.

The External Position

For both conventional Keynesians and MMT theorists, the focus is the nation state considered largely in isolation from the world economy. Keynes accepted that UK industry was sclerotic, in need

³⁰ See Kelton, *The Deficit Myth*, pp. 31–7.

of rationalisation and fundamentally uncompetitive. He just thought there was not much that could be done about this, an attitude some take to the zero productivity growth now. The MMT theorists start (and end) with sovereign currencies. As already noted, by 1930 Keynes was beginning to favour protectionism. The MMT theorists largely neglect the link between the currency and domestic prices and policies.³¹ The calls for protectionism are again growing, including amongst environmentalists.

This is just not credible for a small open economy like the UK, which relies on services and on imported manufactured goods, and increasingly on imports of non-renewable natural capital. The trade position matters. With 8 billion people, the world economy is to all intents and purposes a source of unlimited effective demand for goods and services. There is no lack of potential demand, and if there are Keynesian aggregate demand problems, these can be solved by increasing exports and outcompeting imports, as Germany, Japan, Korea and China had done. The central problem for the UK is that home production is not competitive: wages are relatively high, capital equipment dated, the infrastructure is often poor and productivity is stagnant. UK workers want to live beyond their competitive means, as well as beyond their environmental means. UK pensioners want to carry on spending, forcing the young to pay for them. Whereas the US, as a very large economy that trades much less of its GDP, can take a more relaxed view about its trade deficits, and is protected by the global dominance of the dollar, the UK has no such luxury.

It would be better for Keynesians to argue that a *world* slump is a special world situation warranting special short-term world demand-side measures, and admit that the medium-term problem is sorting out productivity, competitiveness and the environment. For the MMT theorists, unlimited monetary easing through the sovereign printing press is a backdoor route to devaluation, unless everyone else is doing it too (again a special circumstance as in the 1930s' protectionism). A falling currency means a lower standard of living and rising prices. It is an enforced return towards a more sustainable consumption path. MMT is not a free lunch. It is a dangerous delusion.

The retreat to protectionism in its various forms is an admission of domestic failure, a temporary bail-out which continues to

³¹ See again Maniw, 'A Skeptic's Guide to Modern Monetary Theory'.

reinforce that failure. The difference between the Thatcherite position in the 1980s and that of the Keynesians now is in essence that the former attempted to improve productivity as a route to improving competitiveness through supply-side measures. That the Thatcherites failed, despite relaxing exchange controls and positively opening up the UK economy to the shock of foreign competition, reducing the trades union power they inherited and lowering tax rates, is a measure of the scale of the challenge, and it may be that the UK is more content to allow the gradual decline since the British empire in the nineteenth century to continue through a series of punctuated devaluations and bouts of inflation. Not even the temporary boost of North Sea oil and gas could bridge the gap. The seductive argument that BREXIT frees the UK up to engage in proactive industrial policies (meaning subsidies) is itself an admission of competitive failure. In any case, matching the US subsidies in the Inflation Reduction Act (2022), the CHIPS and Science Act (2022) and the Infrastructure Investment and Jobs Act (2021) is not a sensible option for the UK.

Moving on from the Keynesians

The Consumption Standard reflects a desire to maintain living standards whatever the external circumstances, and especially in the context of recessions, external shocks like Covid and inflation. Keynesian economic policies aim to do just this, because maintaining consumption is either thought to be a good thing per se, or because it holds up demand and leads via the multiplier to GDP economic growth.

The Consumption Standard stands in contradiction to the sustainable consumption path, the level of consumption which is consistent with passing on the assets to the next generation in at least as good a state as we inherited them, the first principle. The sustainable consumption path is the path of spending, which is consistent with living within our means, and especially our environmental means.

In criticising the Keynes theory and the Keynesian policies, two glaring problems remain for the sustainable economy: how to ensure full employment; and how to do this in a context that requires an adjustment down from the current Consumption Standard to the sustainable consumption path. This requires social justice, and in the next chapter the key steps are set out: the provision of a USO for the core primary assets to participate in the economy; a return to

the flexible labour market, but protected by an element of universal basic income; and a stake in the national dividend. These measures turn out to be even more important as the economy moves towards digitalisation and more zero marginal costs, and capital increasingly replaces labour. The Keynesians have been broadly wrong in their policy recommendations for the twentieth and early twenty-first centuries, except in very short-term responses to very sudden shocks. They have brought us the legacies of debt and inflation, and much environmental damage too. This is true not only in the UK, from which the examples discussed in this chapter are largely drawn, but for most developed and fast-developing countries too. These policies will be even more inappropriate in the twenty-first-century world of digitalisation and the advances in ideas and technologies that will marginalise manual labour even more.