Keynes
The Return of
the Master
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The Keynesian Revolution: Success or Failure?

THE KEYNESIAN WORLD

For roughly a quarter of a century after the Second World War, Keynesian economics ruled triumphantly. No one wanted to go back to the 1930s. Nationally, governments accepted responsibility for maintaining high and stable levels of employment. Internationally, institutions, collectively known as the Bretton Woods system, were set up to prevent depressive forces from being transmitted through the international payments and trading system. It was also a period of remarkable growth, not confined to the war-damaged economies of Europe and Japan. Many economies that had largely avoided physical destruction – like the American, the Australian and the Swedish – recorded stunning performance. Latin America and the Soviet Union experienced high economic growth.

From the late 1960s this dispensation started to unravel; by the 1980s both theory and policy had swung back to pre-Keynesian ideas. Government was seen once more as part of the problem, not the solution. Expansionary government policies were accused of fuelling inflation and crowding out better-informed private investment without reducing unemployment in the long run. With the coming to power of Margaret Thatcher and Ronald Reagan in 1979 and 1980 respectively, markets were deregulated, taxes were lowered, trade unions were bashed, and the international institutions were emasculated. The Bretton Woods philosophy of managed global capitalism was replaced by the Washington Consensus – a term coined by John Williamson in 1989 to denote the neoliberal policies advocated for developing countries by the US administration: free trade, privatization, deregulation, balanced budgets,

inflation targeting, floating exchange rates. What defined the new world view was the classical belief in efficient and self-regulating markets. Free markets would deliver *better* results than fettered ones.

The unravelling of the Keynesian revolution can be explored along two dimensions: intellectual and practical. There was a counter-revolution in economic theory, and a counter-revolution in economic policy. The relationship between the two is neither simple nor direct. The ideas of economists and philosophers may be ultimately determinative of policy, for good or ill, as Keynes thought, but they always enter the public arena mixed up with politics, ideology, vested interests and national circumstances. This was true of the Keynesian revolution itself. The Keynesianism attacked by the intellectual counter-revolutionaries was not the Keynesianism left by Keynes. So in some ways they were punching a straw man. Nor were the policies pursued by governments in the Keynesian era pure distillations of Keynesian theory or advice. Some doubt whether the Keynesian golden age owed much to Keynes at all. Nor were the ideas of the New Classical economists completely embodied in the policies of the Reagan–Thatcher era. Nevertheless, I believe we are justified in treating the policies pursued in both the Keynesian and the post-Keynesian eras as in some sense the practical expression of the dominant ideas of the two periods. The first part of this chapter will trace the counter-revolution in ideas; the second section will compare the economic records of the Keynesian and the post-Keynesian ages.

THE THEORETICAL UNRAVELLING

Uncertainty dominates Keynes's economics. The future is a twilight zone; it is full of unexpected, unpredictable events. It resembles the past in the way that children resemble their parents and forebears: the genetic ingredients are the same, but the possible combinations are unlimited. Tiny differences in initial arrangement can make for huge differences in outcome. To cope with uncertainty, human beings fall back on conventions. These allay anxiety, give them confidence. The conventions allow for considerable diversity of opinion, as in bulls and bears in a stock market, or competition between parties in politics.

When some shock causes the conventions to break down, herd behaviour takes over: everyone rushes for the entrance or exit. In finance, everyone becomes either a bull or a bear. In politics, the masses flock to a leader offering salvation.

There was something about this picture which stuck in the gullet of the power-holders in economics and in politics. This was particularly so in the United States, the cradle of economic individualism, which had always prided itself on being exempt from the conventional expectations of the Old World. Keynesianism was accepted largely on sufferance: by economists as a pragmatic accommodation to reality; by businessmen as a barrier to socialist agitation; by politicians of the right as providing additional arguments for tax cuts or large defence expenditures, and by those of the left as justifying more social spending. Intellectual conviction was always less important than practical usefulness. The Keynesian revolution as it took root in the United States was to a large extent a policy revolution without a theory. This theoretical void was waiting to be filled by old theory in new mathematical clothes; the New Classical macroeconomics was ready to succeed to the old classical economics as soon as receding memories of the Great Depression, policy mistakes of the Keynesian managers, and changing technological and social structures had created fertile political soil.

Joan Robinson described American Keynesianism as 'bastard Keynesianism'. The flavour of what became known as the 'neoclassical synthesis' is given by the remark of its main author, Nobel laureate Paul Samuelson: 'Had Keynes begun his first few chapters with the simple statement that he found it realistic to assume that modern capitalistic societies had money wage rates that were sticky and resistant to downward movements, most of his insights would have remained just as valid.'[1] So, despite his faulty theory, Keynes's conclusions were valid: the use of Keynesian policy tools was justified on practical, not theoretical, grounds. This interpretation fitted American pragmatism, and the urgent political imperative to counter the appeal of Communism. The first-generation Keynesian economists were fervent Keynesians. They passionately believed in anti-depression policies. But the way they interpreted Keynes implied that he was a theoretical charlatan.[2] For classical economists of Keynes's generation like Arthur Pigou had also explained lapses from full employment by the 'stickiness' of prices, and

had advocated 'Keynesian' anti-depression policies for exactly this reason. Yet Keynes relied on uncertainty, not sticky wages or prices, to explain how slumps occur and why they were likely to last a long time.

It has to be admitted that Keynes himself sanctioned most of this 'bastardization'. Having written the *General Theory*, he was much more concerned to get activist policy going than to insist on precise adherence to his theory. And there was sufficient technical satisfaction to be had out of macroeconomic theory itself to satisfy most economists and statisticians, especially as it gave them a much greater role in making policy. The needs of Keynesian macroeconomic policy spawned vast quantities of national-income statistics which were fed into huge computer-forecasting models set up to capture the significant short-term trends of the macroeconomy. The Keynesian age was the golden age of macroeconomics: the famous economists of the time were all macroeconomists; most of them worked for or advised government at least some of the time. The study of markets and how they worked, or even failed to, was distinctly unfashionable: certainly it was not the royal road to promotion and influence. Chicago bided its time.

For the fact was that the neoclassical synthesis was intellectually unstable. It left the relationship between macroeconomics and microeconomics in a mess. There seemed no logical way of getting from the optimizing behaviour which microeconomics attributed to the individual to the perverse outcomes in the macro sphere which justified the theory of counter-cyclical policy. If workers were rational, why were they so inefficient in adjusting wages to the appropriate levels? Keynes would have answered that the assumption of individual optimization is not a realistic way of modelling states of the world with uncertain expectations. But this was precisely what was rejected.

There were two possible escape routes for the profession: either macroeconomic theory could be adjusted to fit classical micro methodology or microeconomic theory could be adapted to fit Keynesian macroeconomic policy. The first was the dominant strategy. It was pursued by monetarists, New Classical economists, and real business cycle theorists (broadly the Chicago boys, or freshwater economists, of Chapter 2). The second, minority, strategy was adopted by the 'New Keynesians' (the saltwater economists of Chapter 2).

Enter Milton Friedman

Keynes explicitly introduced expectations into economics. But he had little to say about how expectations were formed. What he did have to say seemed to leave out learning from experience or making efficient use of available information. If agents were truly 'rational' they wouldn't go on making the same mistakes. The conventions or 'rules of thumb' he equipped them with seemed invariant to changes in conditions or policy. It seemed more reasonable to assume that recurrent events would cause them to regard the structure of the future as probabilistic rather than uncertain. The reduction of uncertainty to certainty or calculable risk, the attribution of economic fluctuations to efficient responses to 'real' shocks, the denial that governments could ever improve on the performance of unimpeded markets – these were the weapons used by the New Classical economics to reinstate the classical theory of the self-regulating economy, destroy the Keynesian revolution, and limit the economic functions of government to maintaining sound money and open markets.*

The leader of the classical counter-attack was Milton Friedman, the gnome of Chicago. Coming out of the monetary-disequilibrium tradition (see p. 80), Friedman argued that, whereas in the long run changes in the money stock affect the level of prices rather than the level of output, in the short run 'changes in the rate of growth of the money stock are capable of exerting a sizeable influence on the rate of growth of output as well.'[3] Since discretionary monetary and fiscal policy is itself a potent source of instability – being subject to 'long and variable lags' – governments should follow a monetary rule which aims to keep the money supply growing steadily at a rate equal to the long-run increase in national output. This would simultaneously achieve price stability (or more precisely an equilibrium path of the price level) and keep the economy fully employed. A predictable policy regime, rather

* There were important neo-Keynesian attempts, like those of James Tobin and Franco Modigiliani, to work out optimizing principles for the Keynesian portfolio, consumption and investment functions. Similarly, Robert Clower and Axel Leijonhufvud analysed effective demand failures in terms of the failure of the price system to coordinate the plans of individuals, households and firms in face of demand shocks. For a succinct account of these efforts to ground Keynesian aggregates in micro-rationality, see Klamer, *The New Classical Macroeconomics*, pp. 4, 10–11.

than policy changes to match changing conditions, was what was needed for stability.

Friedman's most influential contribution was his analysis of rising post-war inflation in terms of the growth of inflationary expectations. Keynes had admitted that the quantity theory of money was valid at full employment: an increase in effective demand beyond full employment would only raise prices, not output. Friedman agreed, but with a crucial modification. By full employment he meant not the absence of any spare capacity in the economy, but an equilibrium level of unemployment which he called the 'natural' rate. This was that rate which established itself under conditions of stable inflation or 'neutral' money.

The post-war Keynesians refused to accept price behaviour as a measure of full employment. Short of an absolute limit on labour supply, the expansion of aggregate demand could always produce output gains, even if these were a declining fraction of price increases. This amounted to the view that labour was nearly always off its supply curve.* The Keynesians of the 1960s believed in a stable trade-off between inflation and unemployment, giving policymakers a 'menu of choice' between different mixes of the two. Friedman claimed that the trade-off was temporary, and existed only because workers were fooled into accepting lower real wages than they wanted by not taking into account the rise in prices. But if governments repeatedly resorted to monetary expansion in an attempt to reduce unemployment below its 'natural' or 'wanted' rate, money illusion would disappear and workers would put in increased wage demands to match the expected rise in prices. This would render the unemployment-reducing policies ineffective. In Friedman's interpretation, the phenomenon of cost push – trade unions pushing up wages ahead of productivity – was not an autonomous source of inflationary pressure, but an induced response to excessive money creation.

* In the *General Theory* (CW, vii, pp. 6–8) Keynes did distinguish between 'voluntary' and 'involuntary' unemployment, but he never formalized the former as the 'equilibrium' rate, and post-war Keynesians ignored the distinction. They never doubted, that is, that more labour would be willing to work at the existing money wage if it were demanded. There is no theory of inflationary expectations in 'The Theory of Prices', Chapter 21 of the *General Theory*, especially on pp. 301–3. However, during the Second World War, Keynes became convinced that workers had become 'index conscious', so that a policy of raising the price

Milton Friedman predicted the coming of simultaneous increases in inflation and unemployment – so-called stagflation – as early as 1962. His prediction seemed borne out by the 'stagflationary' data of the late 1960s and early 1970s. The natural rate of unemployment, it could be said, was rising owing to growing structural rigidities in the labour market; inflation, temporarily controlled by socially disruptive pay policies which soon broke down, was also rising owing to repeated injections of demand into the economy to reduce unemployment to a socially acceptable level. British prime minister James Callaghan was expounding pure Friedmanite doctrine when he said in 1976 that the option of 'spending our way out of recession' no longer existed, and had worked in the past only by 'injecting bigger and bigger doses of inflation into the economy'. This statement is widely seen as marking the end of the Keynesian age.

Friedman held a fundamentally different interpretation of history from the Keynesians. 'The Great Depression,' he argued, 'like most other periods of severe unemployment, was produced by government mismanagement rather than by any inherent instability of the private economy.' Thus history as well as theory called for the unfettering of private enterprise from government: lighter taxes, less regulation. Friedman declared himself to be in favour of 'cutting taxes under any circumstances and for any excuse, for any reason, whenever it's possible'. As the Keynesian age slipped into crisis, Friedman became the new prophet of the free market.

Friedman's theories marked a return to the classical method of deducing macroeconomic outcomes from the logic of individual choice. Rational self-interested agents were forward-looking. They learned by experience to change their strategies when governments attempted to force unwanted outcomes on them. Like Keynes's own 'general theory', Friedman's monetarism was a decisive challenge to orthodox policymaking – now Keynesian – at a time of crisis. Just as Keynes succeeded politically because unemployment was the problem of the 1930s, Friedman succeeded politically because inflation was the problem of the 1970s. Friedman's defence

level to reduce civilian consumption would not work (Skidelsky, *Keynes* vol. 3, p. 53). But this was forgotten when Keynesian economics reverted to depression thinking after the Second World War.

of free markets also came at the moment when big business, alarmed by the growing social expenditures needed to finance President Johnson's Great Society programme, started to swing against 'big government'. From the late 1960s to the early 1980s there was a halting but eventually decisive swing back of the political pendulum towards conservative economic and social policy. Thus the intellectual and political logics started to coincide, with each feeding the other.

The New Classical Economics

However, Friedman's theory of 'adaptive expectations' did not go far enough for a new generation of mathematically trained economists like his former student Robert Lucas. Friedman has agents learning from, and adapting their behaviour to, changing market signals, but with an inevitable lag since market processes take place in time. But rational agents should be able to do better than that. They should already have learned from past experience (their own and everyone else's) that certain types of event will bring about certain results. In that case, Friedman's distinction between the short period in which agents can be fooled and the long period in which they know what to expect becomes superfluous. Adaptive behaviour is a description of *irrational* behaviour if agents know what to expect already.

So, in the 1980s, the theory of adaptive expectations was followed by the theory of rational expectations. Rational expectations theorists have carried Friedman's scepticism about managing the business cycle to its logical conclusion. If monetary policy is systematically operated according to Keynesian principles, it will be anticipated, and have no real effects even in the short run! Stabilization policy would then be possible only if governments had better information than private agents. By abolishing the 'short period', the New Classical macroeconomics abolished the narrow interval of time that Friedman's monetarism had left for Keynesian policy to work in. In Robert Solow's words, the rational expectations revolution swept away 'all of the loopholes that provided some fuzziness in the vertical long-run Phillips Curve'.[4]

Real business cycle theory was invented to close any remaining loophole for government intervention. The economy is constantly at full employment, since the observed fluctuations in output are fluctuations

in Friedman's 'natural rate' of unemployment and not deviations from it. Thus, government interference to reduce instability will *always* result in a reduction in welfare.

It is hard to know whether real business cycle theorists actually believed in their models, or whether they just found it more mathematically elegant to do their economics in this way. The political comfort their theory gave to those clamouring to reduce taxes and 'get Washington off our backs' was clear enough. Nothing a government could do to stimulate the economy would work; in fact it was bound to make things worse. So government might as well cut taxes, deregulate economic life, and let businessmen get on with the job of producing wealth, not least for themselves.

The New Keynesians

New Keynesianism arose in the 1980s to challenge the newly dominant Chicago school of Robert Lucas and his followers. It started with the fact that the Reagan – Thatcher revolutions had left a heavy and persisting legacy of unemployment in their wake, contrary to real business cycle teaching. As has been pointed out, belief in rational expectations does not entail belief in instantaneous market clearing, as it takes time to change contracts, and not all prices convey new information. Moreover, not all firms are price takers; they can therefore resist price adjustmetns up to a point. Thus New Keynesians were able to explain sticky prices in a rational expectations framework. Yes, agents can be assumed to have rational expectations, but not instantaneous adjustment capacities, since it might be costly for them to update their information. New Keynesian models allowed for both supply and demand and with imperfect information firms and job-seekers may reach inferior outcomes when bargaining on the labour market shocks which cause involuntary unemployment. Incorporating the rational expectations hypothesis and Friedman's natural rate hypothesis – two distinctly classical assumptions – along with the Keynesian assumption that markets do not always clear, New Keynesian theories justified limited government intervention since they implied that economies fail rapidly to self-equilibrate and the actual rate of unemployment can remain above the natural rate for a long time.

This attempt to refloat Keynesian theory on a sea of market imperfections did not please post-Keynesians like Paul Davidson, who accused New Keynesians like Joe Stiglitz of being traitors to the cause, since they had abandoned Keynes's central postulate of uncertainty. However, the post-Keynesians were even more isolated than the New Keynesians, and mostly failed to obtain tenured positions in prestigious universities.

The New Neoclassical Synthesis

By the end of the twentieth century, commentators were talking about the emergence of the 'New Neoclassical Synthesis', which uses the focus of New Classical economics to explain the empiries highlighted by New Keynesians.

Analysing structural relationships, so-called Dynamic Stochastic General Equilibrium (DSGE) models, became the new workhorses of macroeconomics. They retained rational expectations, but allowed that changes in institutions and policies could affect outcomes. They thus mitigate one of Keynes's criticisms of econometrics: that it treated parameters as constant (see above p. 85). By specifying institutions DSGE models made more concrete the nature of 'surprises' which could upset economies. The dispute between New Classicals and New Keynesians on the speed of adjustment to 'surprises' continued, with the former assuming flexible, and the latter 'sticky', wages and prices. As Krugman recognizes, the New Keynesians have not yet mined the 'deep foundations' of real-world disorders.

Public Choice Theory

Running parallel with developments in macroeconomics proper, a branch of economics known as public choice theory has grown up which analyses the interactions between politics and economics. Whereas the conventional (normative) approach simply regards the policymaker as a 'benevolent social planner', public choice theory views the government as an inside actor in economic life. The former is concerned with how policymakers should act; the latter looks at how they actually do act.

Public choice theory claims that public policies are motivated not by a concern for the public interest, but by the private interests of politicians,

bureaucrats and 'rent-seeking' lobbies. This theory of 'government failure' constituted another powerful argument for the limited state, and one in which politicians were constrained by rules. What the rational expectations and public choice theories share is the methodology of modelling public policies as the solution to individual maximization problems.[5] In doing so, they revive the original eighteenth-century inspiration of economics, which juxtaposed the efficiency of markets with the failures of government.

To Bring the Story Up to Date

Mainstream economics today, by improving on the maths, and abandoning common sense, is further away from Keynes's economics than ever before. Eight differences stand out:

(1) Keynes's distinction between uncertainty and risk has been abolished. All uncertainty about future events can be reduced to a probability calculus – that is, to the presumption that the probability distributions of the past and present are also valid in the future. This amounts to saying that economic agents have perfect information about future events or, in weaker versions, that perfect information is available, though costly to obtain. Keynes's marvellous insights into the psychology of financial markets, the variability of investment, and the role of money as a store of value are irrelevant.

(2) New Classical economics has abolished time. Events do not have to happen in a sequence: they happen simultaneously. Equipped with continuously updated information, economic agents adjust instantly and efficiently to all external 'shocks'. The New Keynesian economists inhabit the same mental universe, but, by 'relaxing the assumptions', they allow for situations in which markets may misbehave in the short run. Although real GDP fluctuates around a rising long-term trend, there may be short-run fluctuations primarily caused by 'stickiness' of prices in face of demand shocks, and they have investigated the microeconomic sources of this stickiness. Even so, their models cannot explain the sources of aggregate demand failure, which require a recognition of uncertainty. Keynes said that people *cannot* possess the information required to validate the theory that markets are self-equilibrating at full employment either in the long run or in the short run.

(3) While the simple aggregate equations of Keynes's macroeconomic model are still taught, there has been a return to neoclassical standards of method. No longer is it acceptable to posit *ad hoc* supply and demand functions. Macroeconomics is best seen as an application of microeconomics, in the sense that macroeconomic models *should* be based on optimization by firms and consumers. This is contrary to Keynes, who believed that individual behaviour is structured by aggregate psychological data ('propensity to consume', 'state of confidence', 'liquidity preference') arising from inescapable uncertainty about the future.

(4) Mainstream macroeconomics today is based on supply, not demand. It has reasserted some version of Say's Law – that supply creates its own demand – which Keynes repudiated. Thus, both New Classicals and New Keynesians believe that the growth of real GDP in the long run depends on an increase in the supply of factor inputs and technological progress. Further, many economists only accept sticky contracts as contingent, not inescapable. The 'supply-side' school of economists has been busily advocating their dissolution by weakening trade unions and fixed-wage contracts and stiffening conditions for receipt of unemployment and welfare benefits. They look forward to a world in which all contracts are instantly renegotiable.

(5) Contemporary mainstream economists have reasserted the quantity theory of money – the view that the rate of growth of the money supply determines the rate of inflation – completely in line with Friedman's argument, but contrary to Keynes, who asserted that this is true only at full employment.

(6) In modelling economies, contemporary macroeconomists are not fazed by the unrealism of their assumptions; indeed, they regard this as a strength of their models. Fortified by maths, they have reverted more completely than their ancestor classical economists to 'ideal-type', or Platonic, theorizing, sacrificing truth for mathematical elegance. This is in direct contrast to Keynes, who insisted on 'realism of assumptions'.

(7) In contrast to the Keynesian consensus during the 'golden age', though not to the views of Keynes, it is now widely thought that governments should not attempt to fine-tune the economy. Instead, stabilization policy should merely aim to assist the market's self-correcting capabilities, chiefly by keeping prices stable.

(8) Whereas in the 1950s and 1960s stabilization was seen as a control-theory

problem, it is now modelled as a strategic game between the authorities and private agents, whose expectations the authorities need to 'manage' by means of clear rules. This follows the normative prescription that governments should aim to provide agents with a consistent model of the economy. This is expected to make real variables more stable.

The cumulative effect of these theoretical developments has been to narrow the scope of macro policy and change its explicit aim. With acceptance of the 'natural rate' doctrine, much of macro policy's earlier unemployment-reducing function is now assigned to supply-side reforms, leaving macroeconomic policy with the single aim of maintaining price stability. This is turn tends to re-establish the so-called classical dichotomy between money and the 'real' economy, leaving the quantity theory of money as the only relevant macroeconomic theory. That amounts to the theoretical abolition of the Keynesian revolution.

Having said this, most politicians, being deficient in mathematics, and more keenly alive to political needs, remain understandably sceptical of the New Classical and even the New Keynesian claims. There is little acceptance by policymakers that 'shocked' economies rapidly recover to full-employment equilibrium, even if this is defined as the 'natural rate'. They certainly do not act on this assumption. This is only sensible in view of the prolonged periods of unemployment, underemployment and stagnation which have characterized most economies since the collapse of the golden age.

What we have described in the last two chapters is a long passage from classical to New Classical economics, with the Keynesian revolution as an intermission of common sense. The question is how far the New Keynesian strategy of 'relaxing the assumptions' of New Classical macroeconomics can proceed without inducing a 'paradigm shift'. In his influential *Structure of Scientific Revolutions* (1962), the historian of science Thomas Kuhn argued that the dominant scientific theories of the day are overthrown by the accumulation of 'anomalies' – the occurrence of events unpredicted by the theory, which have to be given *ad hoc* explanations. Thus Ptolemaic astronomy was overthrown by the Copernican revolution, Newton's physics by Einstein's revolution, and so on. A similar accumulation of anomalies has occurred within the New Classical macroeconomic paradigm, of which the present crisis is

the latest, and most egregious, example. The time is ripe for a new 'paradigm shift', which needs to build on Keynes's original insight into the nature of behaviour under conditions of uncertainty.

Ideas Versus Vested Interests

So far, I have treated the 'rise and fall' of Keynesian economics as a contest of ideas, but the political context in which ideas are generated, gain acceptance, and fall into disuse should certainly not be ignored. The Keynesian full-employment policy was adopted by the leading capitalist powers after the Second World War as a consensus-building strategy and to put capitalism in a stronger position to withstand revolutionary assaults, both domestic and international. But the political work it did in the different countries varied. In the US it was the tax-cutting aspect of Keynesianism which was most in evidence; in Britain, spending on the social services; on the European continent, public investment programmes. All had their particular justifications, but all could invoke the general rationale of maintaining high levels of demand.

The United States is a particularly interesting example of how the 'new economics', as it was known to avoid calling it Keynesian, had to be mixed up with domestic ingredients before it could become acceptable. Initially, it offered a way of carrying on FDR's New Deal in a way acceptable to the business community.[6] Having enjoyed, in war, the benefits of high profits, businessmen were determined not to fall back into recession. In the tax cut, they now had the ideal instrument for avoiding it. The 'new economics' could, after all, be married to one of the constants of business thinking – reducing taxes – while simultaneously winning the support of labour. Budget deficits – sometimes relying on the automatic stabilizers, sometimes promoted by vigorous tax cutting – remained the basis of 'pragmatic' macro policy American style from Kennedy and Johnson in the 1960s to Reagan in the 1980s to Bush in the 2000s. (The Clinton surplus of the late 1990s represents an intermission of virtue.) It is hard to avoid the conclusion that the quasi-permanent deficit has been, for a long time, the mainstay of the American consensus. It enabled high employment to be maintained by methods which did not alarm the business community. In fact it was associated with two big tax-cutting bouts (under Reagan and George

W. Bush), a gradual whittling down of social programmes, and a huge increase in inequality. Keynesians could argue in favour of the tax cuts on employment-boosting grounds, anti-Keynesians on incentive-improving grounds. None of this had any connection with Keynes's own fiscal policy, which required current spending to be balanced by tax revenues.

There is also a political context for the fall of Keynesianism – one that has recently been emphasized by Paul Krugman.[7] Krugman's main argument is that, from the 1980s, Keynesian economics and, more generally, social-democratic reform were derailed by 'a vast right-wing conspiracy', which duped the poor-white voter into neglecting his material interests by playing on his fear of racial swamping. Race is Krugman's main explanation for America's lack of universal health care: whites did not want integrated hospitals. This is the 'vested-interest' argument, which Keynes himself minimized. Marxists have long argued that Keynes's ideas were taken up because they served the interests of the bourgeoisie in the 1930s, and were dropped when they started to endanger capitalist profits in the 1970s. Friedman and Hayek, Marxists say, became popular in the 1980s because they legitimized the re-creation of the 'reserve army of the unemployed'. Freeing up markets also provided ideological cover for the use of state power to promote financial interests. But the heavy unemployment in the 1980s also provided the political setting for the birth of New Keynesianism, just as it is bringing Keynes back into fashion again today.

All this raises the old question of whether ideas are part of the base or the superstructure of social life – society's building blocks or weapons in the struggle for power. I know of no way of answering this question except in terms that Keynes himself would have given: that, whatever the short-run fate of ideas, the ideas that survive are those that answer to what is universal in human nature or experience, and not just to the interests of particular groups.

THE KEYNESIAN AND POST-KEYNESIAN ERAS COMPARED

The persistent criticism of Keynes's economics has been that, if applied, it would reduce the natural dynamism of the capitalist system, which thrives on 'irrational exuberance'. Keynes believed that capitalism

suffered not from a surfiet of dynamism, but from a surfeit of fear, which allowed dynamism to break out only sporadically. So, as he saw it, a reducation in uncertainty would make the economy more dynamic over time, though more steadily. Events since his death have provided some test of both theories.

All policies are bound to be imperfect refletions of their intellectual aspirations. However, it is still interesting to consider which of the two imperfect global regimes – the 'Keynesian' Bretton Woods system and the 'New Classical' Washington Consensus system which succeeded it – delivered the better performance.

The structures of the two systems can be depicted in the following tables.

Bretton Wood ('Golden Age') System

Objective	*Instrument(s)*	*Responsible authority*
Full employment	Demand management (mainly fiscal)	National governments
Balance-of payments adjustment	Pegged but adjustable exchange rates (capital controls)	IMF
Promotion of international trade	Tariff reductions etc.	GATT
Economic development	Official assistance	World Bank

This is a rough outline of the system which was set up for remedying the deficiencies of the interwar years. It was consciously intended to codify and improve the rules and practices of a liberal world economy which had grown up fitfully, and in an *ad hoc* way, in the nineteenth century, and which had failed so conspicuously between the wars. It lasted till the 1970s. First to go was the fixed-exchange-rate system, which collapsed between 1971 and 1973. The full-employment commitment was abandoned from the late 1970s onward. Capital controls were dismantled in the 1980s and early 1990s. The system which replaced it can be represented as follows:

Washington Consensus System

Objective	*Instrument(s)*	*Responsible authority*
Price stability	Interest-rate policy	National central bank, ECB for Eurozone
Balance-of-payments adjustment	Floating exchange rates	
Promotion of international trade	Tariff reductions etc.	ITO, WTO (since 1995)
Economic development	Loans	Private lending, World Bank

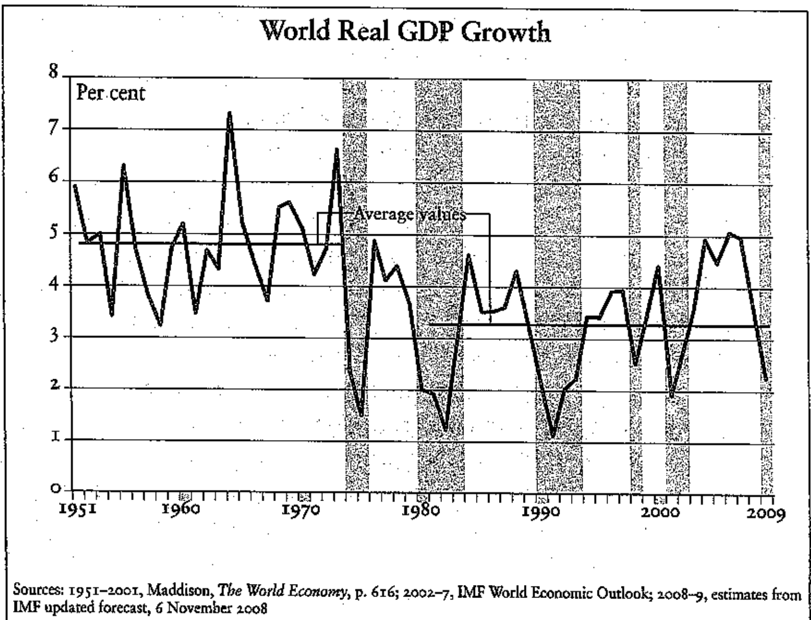
The two regimes were shaped by two different philosophies. The Bretton Woods system broadly reflected the Keynesian view that an international economy needed strong political and institutional supports if it was to be acceptably stable. The Washington Consensus regime was shaped by the theory of the self-regulating market. Of course, neither system embodied its underlying philosophy in pure form. The Bretton Woods institutions fell far short of Keynes's plan for an 'economic government of the world'. And the Washington Consensus system only to a limited extent realized the New Classical insistence on floating exchange rates. Nevertheless, the spirits of the two systems are sufficiently different for some test of the 'fruits' of the two philosophies to be possible.

The Bretton Woods period is defined as the twenty-two years from 1951 to 1973. The starting point was chosen to allow the economies involved to have put a few years behind them after the end of the war. The end date corresponds to the first OPEC shock of 1973 – a convention adhered to by economic historians such as Alec Cairncross in *The Legacy of the Golden Age*.[8] The Washington Consensus era ranges from the start of the 1980s until today. Many comparisons simply compare pre-1973 with post-1973. However, to allow Reagan and Thatcher to come into power, and to create two roughly equally long periods, 1980 has been chosen as the starting date. The future will determine whether the crash in September-October 2008 marked the end of the Washington Consensus period.

It is easy enough to compare outcomes in different periods, much harder to explain the causes of those outcomes. Did a football team's performance over successive periods improve because it had a better coach or because of other factors? We lack a counter-factual comparison – a comparison between what happened and what would have happened under different conditions. Our comparison between the Bretton Woods and Washington Consensus eras is a comparison of outcomes. And the outcomes differed significantly. Later we shall ask how much difference the old coach (Keynes) made to the performance of the Bretton Woods era.

The graph below shows the growth of global real GDP from 1951 to 2009 (estimated). The growth rate during the Bretton Woods years was on average higher than during the Washington Consensus period – at 4.8% as compared to the 3.2% growth rate after 1980. These averages are indicated by the horizontal lines in the graph. A 1.6 percentage point difference might not seem very big. However, had the world economy grown at 4.8% rather than at 3.2% from 1980 until today, it would have been more than 50% larger, something we shall achieve only in 2022 with the 1980–2009 average rate. (This calculation excludes the impact of the present economic downturn.)

The lightly shaded areas represent global economic recessions. The IMF defines a global economic recession as a year with less than 3% growth. This might seem like an odd definition. Surely 3% still signifies positive growth, and should therefore hardly count as a recession. However, while this is true of rich countries, the IMF argues that many developing countries – particularly the emerging-market economies – have much higher 'normal' growth rates. China has been growing by at least 9% over the last decade. If growth were to fall to say 6% even, the impact would be similar to a recession in advanced countries. By this definition, then, there were no global recessions in the Bretton Woods age, whereas there were five recessions in the Washington Consensus period. This contrast is made even more remarkable by the fact that the Western dominance of the global economy was much stronger in the 1950s and 1960s than in the last few decades of the century. In other words, the global economy could rely less on strong emerging-market growth rates to maintain a high average in the Bretton Woods age than in the Washington Consensus age. Even so, the



Sources: 1951–2001, Maddison, *The World Economy*, p. 616; 2002–7, IMF World Economic Outlook; 2008–9, estimates from IMF updated forecast, 6 November 2008

world did not record a single year with less than 3% growth between 1951 and 1973.

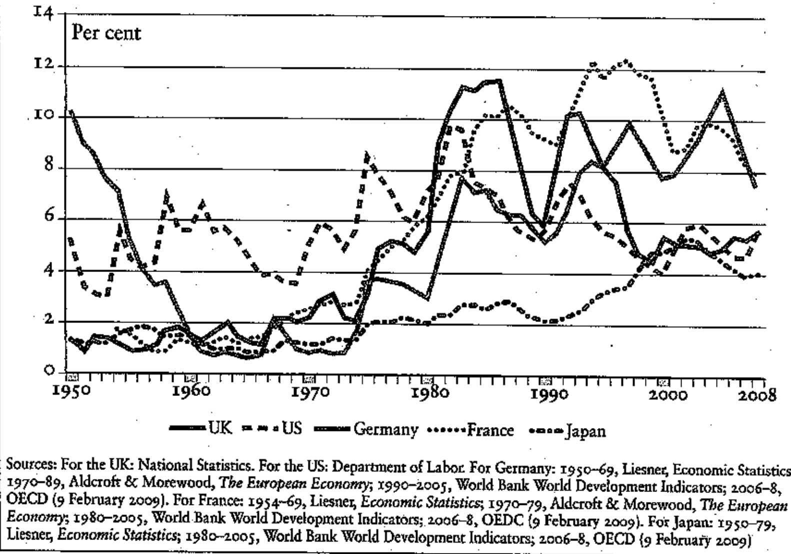
The growth in per-capita GDP slowed down, too, in all major economies. During the Bretton Woods age, France and Germany saw their GDP per capita grow by on average 4.0% and 4.9% respectively. In Japan the rate was a full 8% annually. The UK and the US also experienced high growth rates in GDP per capita, but the large influx of immigrants to these economies limited the growth to 2.5% and 2.2% respectively.[9] In the Washington Consensus era these numbers had shrunk to 1.6% for France, 1.8% for Germany, 2.0% for Japan, 2.1% for the UK and 1.9% for the US – decreases across the board.[10] Even in the US, where the difference is merely 0.3 percentage points, this slowing-down of growth has had a significant impact. The average American would have been 10% richer had the US GDP per capita grown as quickly between 1980 and 2007 as it did between 1950 and 1973.

In terms of unemployment, the contrast between the Keynesian and post-Keynesian periods is also large. Disregarding the American

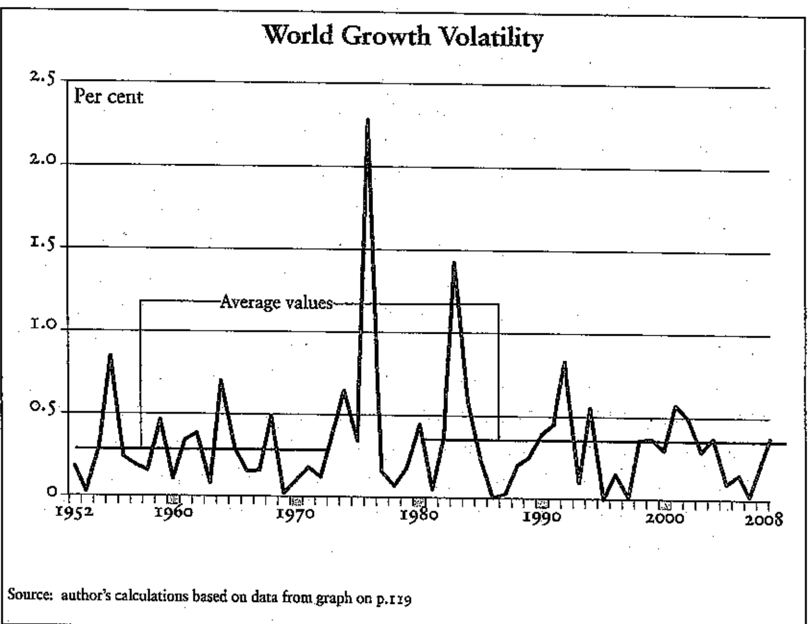
experience, the Bretton Woods decades were a period of record low unemployment rates. In the UK, for instance, merely 1.6% of the workforce was unemployed on average. In France, the percentage was even lower, at 1.2%, whereas in Germany – partly owing to the immigration of 12 million Germans from eastern Europe after the war – average unemployment was slightly higher, but still only 3.1%. This was called the European Miracle by observers at the time, and was contrasted with the persistently high unemployment figures in the US (1950–73 average of 4.8%). This might seem odd to us today, considering how often the 'flexible' American labour market has been praised for its ability to keep unemployment down over the last few decades.

After 1980, however, the labour market looks very different. In the UK, average unemployment went up from 1.6% to 7.4%; in Germany it rose from 3.1% to 7.5%. In the US the rate went up from 4.8% to 6.1%.

Another important measure is volatility. Volatility describes the relative rate of change of a variable of interest. In other words, it answers the question of how much – in this case – the growth rate of real GDP



Sources: For the UK: National Statistics. For the US: Department of Labor. For Germany: 1950–69, Liesner, Economic Statistics; 1970–89, Aldcroft & Morewood, *The European Economy*; 1990–2005, World Bank World Development Indicators; 2006–8, OECD (9 February 2009). For France: 1954–69, Liesner, *Economic Statistics*; 1970–79, Aldcroft & Morewood, *The European Economy*; 1980–2005, World Bank World Development Indicators; 2006–8, OEDC (9 February 2009). For Japan: 1950–79, Liesner, *Economic Statistics*; 1980–2005, World Bank World Development Indicators; 2006–8, OECD (9 February 2009)



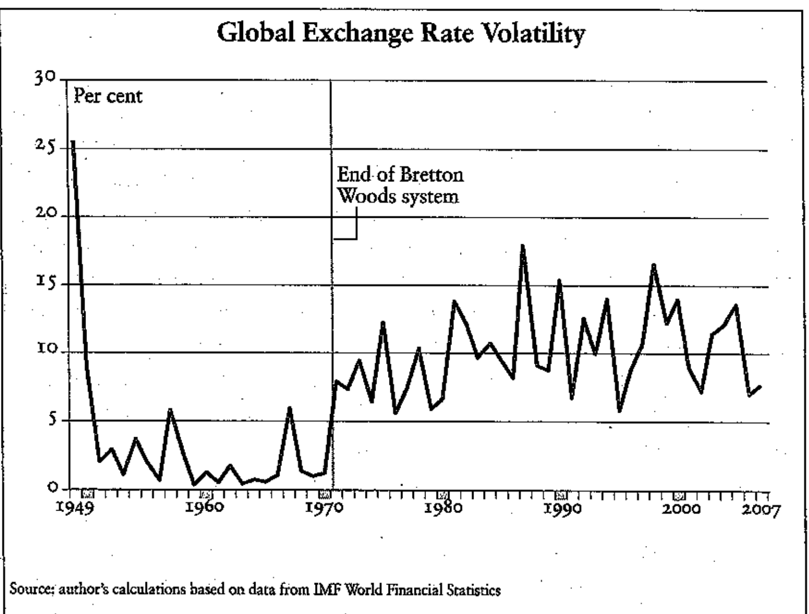
Source: author's calculations based on data from graph on p.119

varies over time. There are two main reasons why volatility is important. First, high volatility normally implies great uncertainty. If real GDP growth is prone to sudden and significant changes, you are less likely to know what growth in the next period will be. This in turn means that it is harder to plan ahead. So, if you are the government and you are uncertain about the growth of the economy next year, it will be harder to present a forward-looking budget which responds appropriately to levels of output and tax revenue. The second reason for looking at economic volatility is that there is evidence suggesting that higher volatility leads to lower growth. Viktoria Hnatkovska at Georgetown University and Norman Loayza at the World Bank analysed the relationship between volatility and growth between 1960 and 2000 and found not only that 'macroeconomic volatility and long-run economic growth are negatively related', but, more importantly, that 'the negative global relationship between macroeconomic volatility and long-run growth actually reflects an even stronger, harmful effect *from volatility to growth*.'[11] This link, they claim, is particularly strong for low and

middle-income countries, but holds true across the board. Thus, keeping volatility low can have important benefits for the economy.

Using a definition for volatility employed by Michael Bordo, the graph above shows growth volatility as the absolute rate of change of the natural logarithm of the growth rate.[12] The average values for the two periods are represented by the horizontal lines.

Contrary to a widely held view, there has been hardly any change in the level of volatility between the Bretton Woods and the Washington Consensus periods. The perception that economic growth has been more volatile in recent decades is largely a misinterpretation of the fact that there have been so many recessions. But a larger number of recessions does not necessarily mean more growth volatility: lower average growth rates imply that volatility more easily brings economies into the red. Hnatkovska and Loayza conclude, 'The world is not more volatile now than 30 years ago, but volatility is taking a larger toll on growth.'[13] And this toll frequently results in recession at current average growth rates.



Source: author's calculations based on data from IMF World Financial Statistics

Another type of volatility of interest is exchange-rate volatility. Under the Bretton Woods system, currencies were pegged to the dollar; in the Washington Consensus era they were allowed to float freely.

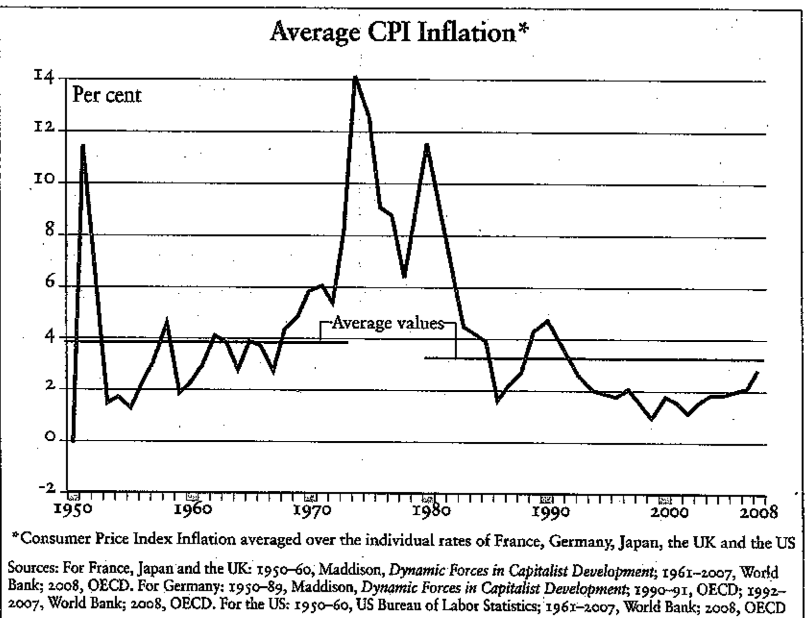
The graph above shows the increase in volatility ensuing from the collapse of Bretton Woods. The vertical line marks the end of the Bretton Woods system. Since then, liberalization of international capital flows and an enormous increase in the scale of cross-border financial transactions have contributed even further to large exchange-rate movements – and this at a time when a host of countries, predominantly in eastern and central Europe, joined the global capitalist system.

Intuitively, one expects exchange-rate volatility to disrupt trade flows. However, according to an IMF report from 2004,[14] the effect of exchange-rate volatility on trade was, at most, marginal. On the other hand, the report concedes that major fluctuations in times of currency crises could have serious repercussions. These occurred in the late 1980s and late 1990s.

One of the myths of post-war economic history is that the Keynesian age was one of high inflation brought to an end only by a salutary dose of monetarism. In fact there was no significant difference in the inflation rates of the two periods – the 1950–73 average being 3.9%, the 1980–2008 average 3.2%.

Moreover, a comparison of long-term corporate bond rates reveals an interesting observation: the average rate of US BAA bonds in the Golden Age was 4% as opposed to 6.4% after 1980.[15] The rates in the Golden Age suggest that inflationary expectations were *lower* in the supposedly high-inflation years of the 1950s and 60s than in recent decades – despite economists' claim finally to have found the formula for price stability in the creation of independent central banks. In short, there was no inflation 'price' paid for the higher employment and faster growth of the Keynesian age. Its policy success was if anything more impressive because global competition was weaker. In the first period it was fixed exchange rates which provided the anti-inflationary anchor; in the second period, inflation targeting by central banks. There was a large upsurge in inflation in the intervening 1970s, brought about largely by the collapse of the fixed-exchange-rate system in 1971.

What about inequality? Has the gap between the richest and the poorest widened? The mixed economies of the earlier period, unlike the



*Consumer Price Index Inflation averaged over the individual rates of France, Germany, Japan, the UK and the US

Sources: For France, Japan and the UK: 1950–60, Maddison, *Dynamic Forces in Capitalist Development*; 1961–2007, World Bank; 2008, OECD. For Germany: 1950–89, Maddison, *Dynamic Forces in Capitalist Development*; 1990–91, OECD; 1992–2007, World Bank; 2008, OECD. For the US: 1950–60, US Bureau of Labor Statistics; 1961–2007, World Bank; 2008, OECD

free-market economies of the Washington Consensus years, emphasized moderate redistribution and the creation of the welfare state. This would suggest that inequality should have increased in the Washington Consensus years. And this turns out to be the case.

James Galbraith is leading the University of Texas Inequality Project (UTIP), which is pioneering inequality measurement. It replaces the Gini coefficient, which is used to measure income inequality between individuals, with the Theil index, which measures inequality between groups and regions. Galbraith finds that, among the OECD countries, all but Denmark saw an increase in inequality from the beginning of the 1960s.[16] Among the non-OECD countries the trend was similar. In the US, inequality of *pay* has fallen, whereas inequality of *income* has risen. The best-off have been getting relatively richer on the back of 'extra income' like stock options and bonuses rather than their base salary. Globally, inequality was stable in the Bretton Woods age, but it rose sharply in the Washington Consensus years from 1982 and all the way into the new millennium. A rather surprising exception to this trend

is South America. UTIP has recorded decreases in inequality in the southern part of the continent since the financial crises in the late 1990s and the early 2000s. This, Galbraith argues, is the result of 'that region's retreat from neoliberal orthodoxy'.[17] The financial collapse in Argentina led to a downsizing of the previously disproportionately dominant financial sector and an increase in public-sector employment.

The increase in inequality matters for two reasons. First, many regard equality as an intrinsic good. The welfare state is widely regarded as a constitutive aspect of the identity of an advanced economy. The second reason is political. Throughout history, large discrepancies in wealth have produced political instability. And today it is not simply a coincidence that three of the countries with the largest income inequalities – Brazil, Mexico and South Africa – also suffer from some of the highest crime rates on earth. We have also seen a massive increase in inequality *between* countries. Paul Collier talks about the 'Bottom Billion' – the sixth of the global population, pre-dominantly in Africa, which is becoming poorer in both absolute and relative terms while the rest of the world is either developed or developing. Although moral considerations matter, Collier argues that the key reason why the West should do everything it can to reduce this inequality is because of the effects on our own economies in terms of mass migration and transnational violence.

To sum up, then, the comparison between the Bretton Woods and Washington Consensus years shows that the former had less unemployment, higher growth, lower exchange-rate volatility and lower inequality. The Washington Consensus era was not, as often assumed, more volatile in terms of GDP growth, although it has now suffered from five global recessions – the latest being the largest and deepest since the Great Depression. Before we can answer the question of whether the absence of the old coach made a difference, we must at least try to answer the question whether the Bretton Woods golden age was really a Keynesian golden age. How far was it due to Keynesian ideas and policies, and how far due to other factors? This is a good test of the importance of ideas.

THE INFLUENCE OF IDEAS ON PERFORMANCE

As we saw above, unemployment in the Bretton Woods age was much lower than in the Washington Consensus years. Full employment had become a 'realistic' objective for macro-economic policy. Keynesian activism took root in Canada, the UK and Scandinavia. It was written into law in the US (the Full Employment Act of 1946, not fully implemented until the 1960s) and in Germany (the Stabilization Law of 1967). And even in countries which were more supply-side focused, like France, full resource utilization became the normative standard to which to aspire. Some governments had unemployment targets, but the targets were revised downward as actual unemployment fell below targeted unemployment. Low unemployment, it could be argued, was not caused by setting low unemployment targets: the targets were set because unemployment was low. The argument that golden-age full-employment performance was not the result of full-employment policy was most famously made by R. C. O. Matthews in 1968. His case was based on British evidence, but applies more generally. Matthews pointed out that 'throughout the post-war period the Government, so far from injecting demand into the system, has persistently had a large current account surplus . . . Fiscal policy as such therefore appears on the face of it to have been . . . quite strongly deflationary.'[18] Why, then, did Britain have such a prolonged period of full employment? Matthews suggested a combination of 'Keynesian' and 'non-Keynesian' factors. The 'Keynesian' factor was a 'gigantic cyclical' private-investment boom based on the huge backlog of investment opportunities left over from the interwar and war years; the non-Keynesian factor was an increase in the scarcity of labour relative to capital, which 'provided a measure of protection to labour from the effects of fluctuation in the demand for the final product'. However, the 'Keynesian' factor – increased investment demand – was not due to Keynesian policy. It was due to a conjuncture of favourable factors, of which the big increase in export demand compared to the inter-war years was important.

The weakness in Matthews's argument is that he uses deficit spending as the test of Keynesian policy. This is a mistake: budget surpluses were as much a part of the Keynesian technique for restraining demand

as were budget deficits for stimulating demand. The use of Keynesian policy to *restrain* demand started in the Second World War, and continued for many years afterwards. It was an important factor in allowing the boom to continue.

What, then, caused the long 'quasi-boom' of the 1950s and the 1960s? A Keynesian growth theory is one that makes economic growth a function of investment demand. Evidently, if Matthews is right, Keynesian growth policy cannot have had much responsibility for the high growth rates of OECD countries in the golden age, since the investment ratio was largely determined by private-sector decisions. As the story is currently told, the fast post-war growth of the European countries was generated on the supply side of the economy by technological 'catch-up'. According to Moses Abramovitz, 'the countries of the industrialized "West" were able to bring into production a large backlog of unexploited technology . . . The principal part of this backlog . . . consisted of methods of production and of commercial and industrial organization already in use in the United States.'[19] The opportunities for technological catch-up gave capital a high marginal productivity, leading to high private-investment demand. This explanation begs the question of why the opportunities for technological catch-up – which had existed since the start of the last century – were seized only in the post-war years.

One answer is that full employment itself was a cause of productivity growth. As one economist puts it 'Before 1980, economic policy was designed to achieve full employment, and the economy was characterized by a system in which wages grew with productivity. This configuration created a virtuous circle of growth. Rising wages meant robust aggregate demand, which contributed to full employment. Full employment in turn provided an incentive to invest, which raised productivity, thereby supporting higher wages'.[20]

Another answer must lie in the greater *confidence* generated by the post-war institutions, notably the IMF, the World Bank and the GATT (General Agreement on Tariffs and Trade). These certainly represented a great improvement on the institutional disorder of the interwar years. A leading historian of the Bretton Woods system wrote in 1978 that 'during a quarter of a century' it had stood as the 'foundation upon which world trade, production, employment and investment were gradually built'.[21]

The role of the United States in maintaining global demand was crucial, but it was not played out as a result of the obligations it had assumed under the Bretton Woods system. Because Keynes's own specific doctrine of 'creditor adjustment' was not accepted at Bretton Woods, the agreement provided no mechanism for dealing with the post-war 'dollar gap': lack of dollars to buy US exports. This gap was filled by the United States providing the world with dollars. The dollar outflows *led to a rundown in US and a build-up of European and Japanese reserves, which in turn enabled the leading exchange rates to be stabilized and currency convertibility to be established.* This promoted trade liberalization between the three partners – carried out partly to cement political cohesion – and trade liberalization sustained the post-war investment boom. In effect, the US Treasury substituted for the absent Keynesian central bank as global macro-manager, injecting a steady stream of demand into the world economy.

It is not denied that the outflow of dollars had Keynesian effects, but it is often claimed that it was done for Cold War, rather than Keynesian, reasons. However, the intellectual background to American policy was not just anti-Communism, but recognition that the flourishing of the free-enterprise system could not just be left to the market. This was the work of Keynes.

As we have seen, the monetarists attributed the collapse of the long boom to the build-up of inflationary expectations under Keynesian demand-management policies. Naturally, Keynesian demand-managers of this epoch don't accept this. Some emphasize the inflationary financing by the United States of the Vietnam War, contrary to the advice of the Keynesian policy advisers. This spilled out into global inflation through the mechanism of the gold-exchange standard. Others stress an inflationary bias in the wage and price-setting institutions. All agree that the OPEC oil-price shock of 1973–4 converted an already sizeable inflationary problem into a full-blown inflationary recession. Some admit that Keynesian economics, with its focus on preventing demand shocks, was slow to develop a convincing analysis of, and response to, a major supply shock. This was the conceptual and policy gap into which monetarism stepped.

Keynesian policy advice cannot be held responsible for the inflationary financing of the Vietnam War. But it cannot be absolved from the

charge of letting inflation build up without taking effective corrective action on the supply side of the economy. The result was that, except in Japan, the quadrupling of oil prices in 1973–4 hit inflexible labour markets. This made both the inflation and the recession worse than they need have been. Some Keynesians believe that nothing could have been done about supply: wage-push short of full employment was made inevitable by the institutions of the mixed economy. The truth is that tackling supply-side rigidities and inefficiencies was never a priority for the Keynesian establishment, which believed that unemployment could always be reduced if there was enough demand. This was to apply an attitude of mind built on mass unemployment in the 1930s – when supply did not matter – to a situation of full or even over-full employment. So Keynesianism was at least partly responsible for the institutions which led to inflation.

Keynesianism was more to blame for the eventual mishandling of fiscal policy. I have suggested that an important contribution of Keynesian fiscal policy to the golden age was to keep inflation under control by methods which did not bring about the collapse of the boom, exactly as Keynes himself would have advocated.

However, US fiscal restraint was overwhelmed in the 1960s by a wave of Keynesian hubris. This was not the moment when Keynesianism 'came of age' in the United States: it was the prelude to its downfall. The mindset of the new generation of Keynesian economists was that there were virtually no supply constraints, and that macro policy could be timed, and its effects predicted, with scientific precision. A large package of tax cuts and increased military and social spending was enacted between 1964 and 1966 – to get the economy moving, to counter an alleged Soviet arms build-up, and to alleviate poverty and black alienation. Keynesian and non-Keynesian motives were jumbled up together in this fiscal stimulus. But it resulted in a widening budget deficit and rising inflation before the much greater spending on the Vietnam War came on stream. This was the high period of government activism, in Britain and Europe as much as in the United States. The breakdown of most of these activist policies marked the start of the conservative counter-attack in both politics and economics, whose fruit was the triumph of Reagan and Thatcher in the 1980s.

The question remains: to what extent were the successes and failures

of the golden age the result of Keynesian theory, however bastardized? The quick answer is: to a much greater extent in the former than in the latter. Keynesianism provided an analytical framework for organizing policy choices. It also provided *ad hoc* rationalizations for what governments wanted to do for other reasons. At the rhetorical level, these were important. They created the expectation that full employment would be maintained by policy. This reinforced the favourable background for business investment. To a more limited extent, Keynesian policy as practised in the 1960s brought the golden age into crisis: but there were more profound reasons relating to the drift of social policy (sometimes called the 'revolution in entitlements'), the role of the United States in the world, and the weakness of the Bretton Woods system of international institutions. So the old coach did make a difference.