MONEY AND GOVERN-MENT

A CHALLENGE TO MAINSTREAM ECONOMICS

ROBERT SKIDELSKY

'Likely to be the most valuable economics book you read this year' BRAD DELONG, AUTHOR OF *THE END OF INFLUENCE*

Contents

About the Author

Robert Skidelsky is Emeritus Professor of Political Economy at the University of Warwick. His three volume biography of John Maynard Keynes (1983, 1992, 2000) received numerous prizes, including the Lionel Gelber Prize for International Relations and the Council on Foreign Relations Prize for International Relations. He was made a life peer in 1991, and a Fellow of the British Academy in 1994.

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MONEY AND GOVERNMENT

'Since the mid-1990s we have once again been living in a world in which the most relevant economist to understanding our situation is John Maynard Keynes. Robert Skidelsky knows Keynes better than Keynes knew himself. Thus this is likely to be the most valuable economics book you read this year'
Brad DeLong, University of California, Berkeley

'A fascinating assessment by one of the world's leading experts on the history of money and government. The integration of the history with the author's unrivaled expertise on Keynes is particularly valuable. This book is essential reading for anyone who would like to understand economics – or make better and more stable policy'
Simon Johnson, MIT Sloan

'*Money and Government* is a powerful and well-written book that combines deep historical understanding with a rigorous approach to economics in an utterly persuasive way'
Harold James, Princeton University

To students of political economy, young and old

List of Figures

33. Hysteresis
34. Adjustment of labour supply in response to an external shock
35. Post-crash outcomes: UK, USA and Eurozone
36. Post-crash outcomes: Germany, Greece and Eurozone
37. UK austerity – counterfactual medicine, 2007–2013
38. The transmission mechanism of monetary policy
39. Output growth and inflation in the advanced economies during the Great Moderation
40. Cutting interest rates: central banks' base rates, 2003–2016
41. Liquidity trap
42. Four key monetary debates
43. Good and bad outcomes of QE
44. Growth in UK bank (M4) lending, 2000–2016
45. UK exchange rate and current account, and QE, 2006–2016
46. Growth in UK money supply and money lending post-crash
47. UK broad money (M4) growth, 2000–2016
48. UK output and unemployment, 2005–2016
49. UK CPI inflation and QE, 2006–2016
50. Oil prices and UK CPI inflation, 2004–2016
51. Distribution of UK household financial assets, 2011
52. Post-crash outcomes: UK, USA and Eurozone
53. Bank of England estimates of effect of QE on UK growth rates, 2006–2011
54. Share of US income going to richest 1%, 1920–2010
55. UK Gini coefficient, 1961–2016
56. Median family income as a proportion of mean family income, USA, 1953–2013
57. Labour income share in GDP, 1960–2016
58. Share of US income going to the top
59. The Bank of England's main economic model
60. VaR modelling
61. Securitization trends in the UK, 2000–2007
62. Capital mobility and banking crises, 1900–2010
63. Current account balances, pre-crash: China and USA
64. Current account balances, pre-crash: Eurozone core and periphery
65. Total cross-border capital inflows, 1990–2011
66. UK public investment as a share of total investment, 1948–2011
67. GDP growth in the OECD, 1986–2016

Preface

We are at a junction where the whole of macroeconomic policy is up for grabs. Everything we thought settled by the Great Moderation of the fifteen pre-recession years, a period of exceptional stability in Western economies, has been thrown into turmoil by the scale of the collapse of 2008–9 and the feebleness of the recovery from it. That poses a mighty challenge for the ruling economic doctrines. Policy will shift, is already changing; textbooks will have to be revised. Economics in the future will need to reflect much more on where it has come from and what it needs to do.

This book aims to build a new audience for economics while, at the same time, being of interest to the professional economist. It attempts to bridge the gap between popular books inspired by the crisis, which economists don't read, and economists' analyses of the crisis, which non-economists cannot understand.

It started off as a series of lectures to third-year economics students at the University of Warwick, and I am grateful to the Department of Economics for allowing me to put into practice my ideas of how economics should be taught. The book seeks to enfold technical issues in what, for want of a better term, may be called political economy. I am interested in the interplay between economic ideas and the circumstances in which they rise, flourish and decay. My account of what went wrong in 2008–9 is grounded in the historical debates on economic policy. The proposals in the last chapter for a new framework for economic policy are derived from the lessons I draw from both this history and the Great Recession itself.

Britain has been my chief witness for the defence and prosecution. This reflects the limitations of my own knowledge, but it is not the entire reason for my focus. For much of the period, and for many of the events covered by this book, Britain was the pacemaker and rule-setter for the global economy, an amazing achievement for a country with just 1 per cent of the world's population (it went briefly up to 2 per cent in the 1850s). David Hume, Adam Smith, David Ricardo, John Stuart Mill, Alfred Marshall and John Maynard Keynes towered over the economics of their day; Britain was the first modern gold-standard nation, the first commercial society, and the first industrial nation. The City of London bestrode the world of international finance; the Victorian fiscal constitution provided a universal model of good government;

and Britain possessed adequate hard power to enforce the rules of a liberal international trading order. It was from the 'Manchester system' that Karl Marx and Friedrich List, the great nineteenth-century continental dissidents, tried to distil their lessons; and, much later, Karl Polanyi took Britain as his case study of the wrenching effects of the market economy.

I am talking here about the mainstream – classical and neo-classical – economics tradition. Nineteenth-century economic practice was always much more pluralist than mainstream doctrine. But though there were many dissenters from the Smith–Ricardo school, there were no serious analytical challengers – that is, until Keynes in the twentieth century.

In the first half of the twentieth century, economics became much more pluralist in parallel with the convulsions of the world wars, the Great Depression, and the decay of British power. Keynes was the last economics leader from Britain. After the Second World War, the centre of gravity in Western economics shifted decisively to the United States, the new political hegemon, while the dissenting voices of Marxism and Protectionism continued to hold sway in developing countries, and the communist world built a Pharaonic system that dispensed with Western economics altogether. By the 1990s, with the fall of communism, economics had become an almost wholly American-owned subsidiary, the charter of globalization. Today, with the decay of American power and following the Great Recession of 2008–9, another geopolitical – and intellectual – shift is taking place.

I have not attempted a general history of economics, which would certainly include many great thinkers and important schools not mentioned here, but only that part of it which seemed most important for understanding the economic collapse of 2008–9; hence my focus on the 'unsettled issues' of money and government. In my approach, I have been chiefly influenced by Keynes, whose biography I have written. However, as the book progressed I became increasingly drawn to the insights of Karl Polanyi, with his insistence that, to be viable, a market order has to be 'embedded' in a framework of rules, policies and institutions. This insight has been somewhat neglected by the dominant school of Anglo-American economics.

My debts have accumulated. I would in particular like to thank Spencer Boxer, Gordon Brown, Oliver Bush, Andrea Califano, Tim Congdon, Paul Davidson, Michael Davies, Meghnad Desai, Tommaso Gabellini, Jamie Galbraith, Simone Gasperin, Andy Haldane, Geoffrey Harcourt, Michael Kennedy, David Laidler, Laurie Laybourn Langton, Toby Lewis, Felix Martin, Vladimir Masch, Marcus Miller, George Peden, Atanos Pekanov, Philip Pilkington, Edward Skidelsky, Leanne Stickland, David Sturrock, Thomas Tozer, Christopher Tugendhat, Paul

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Introduction

I. UNSETTLED ISSUES

Macroeconomics is about money and government, and their relationship. The unsettled questions in macroeconomic policy stem from disputes about the part money plays in economic life, and the part government should play. For 250 years, the dominant view of the economic profession has been that money is of no importance except when it gets 'out of order', and that government interference with the market usually makes things worse. 'You can't buck the market,' Mrs Thatcher famously declared. A competitive market economy, it was claimed, has an automatic tendency to full employment. Disturbances to employment are the result of interference, usually by or at the behest of governments, creating or promoting monopolies, impeding price adjustments or, crucially, by 'monkeying around' with the money supply, thus inducing people to trade at the wrong prices. At first it was believed that control of money should be entrusted to the gold standard; when the gold standard broke down, to independent central banks. Government should be limited to ensuring the conditions required for efficient market exchange. The only task of macro policy was to control the money supply.

This view of policy was successfully challenged by the Keynesian revolution, which, starting as a new theory in the 1930s, dominated macroeconomic policy until the 1970s. The Keynesians denied that a monetary economy – one in which contracts are made in money, not goods – had any automatic tendency to full employment. This was because people could choose to hold money, rather than spend it, and the reason they might wish to do so was the omnipresence of uncertainty; as Keynes put it, the possession of money 'lulls our disquietude'. Given the role of money as a 'store of wealth', the macroeconomy was inherently unstable, and was liable to settle down in a position of 'under-employment equilibrium'. It was therefore the task of government to maintain a full employment balance between supply and demand, which included the management of money as part of the management of the economy. But it was not money that had to be kept in order; it was the market system itself. If it was left free of management and regulation, it would be socially and politically disruptive. In the Keynesian era, stretching from the end of the Second World

War to the 1970s, the free world economy experienced a unique period of stability and growth.

In the 1970s, however, the Keynesian system succumbed to 'stagflation' – the simultaneous rise in inflation and unemployment – and the Keynesian attempt to manage the macroeconomy was abandoned. The core idea behind the new classical economic policy that succeeded it was that central banks should be mandated to control inflation, with unemployment left to settle at its 'natural' rate. This was taken to be a rate on which macroeconomic policy could not improve. The unemployed should get on their bikes and look for work.[1]

In technical terms, familiar to economists, the question about the relationship between money and government is a question about the relationship between monetary and fiscal policy. The Keynesian innovation was that the government should influence the level of total spending through fiscal policy, with monetary policy made consistent with the aims of fiscal policy. By contrast, in new classical economics, monetary policy – keeping the economy supplied with the right amount of money – is the whole of macroeconomic policy, since fiscal policy cannot influence the level of total spending, only its direction. This was the doctrine 'in power' in 2008.

The collapse of 2008 and its aftermath was a test of the two theories of macroeconomic policy, not under laboratory conditions but in as close to a real-life experiment as we are likely to get. According to the mainstream view of the time, the collapse should not have happened and, even if it had, recovery should have been swift. In the second, Keynesian, hypothesis, its happening was always a possibility, and recovery was never likely to be fast or full. However, the old Keynesian recipe for running economies at full employment through fiscal policy had succumbed to inflation, and has not been rehabilitated, so policy for the future remains unsettled.

The proximate cause of the collapse of 2008 was the accumulation of private debt, much of it the result of fraud on the part of the lenders and myopia on the part of the borrowers. A vast, global, inverted pyramid of bank, business and household debt was built on a narrow base of underlying assets – American real estate. When the base tottered, the pyramid fell. The failure of the sub-prime mortgage market in the United States triggered a collapse in the prices of financial assets. The fall in the net wealth of banks in 2007–8 produced a global financial crisis. This was transmitted to the real economy through a tightening of credit by the banks and a fall in demand by consumers and businesses, whose wealth and confidence had evaporated.

It all developed with astonishing speed. The bankruptcy of Lehman Brothers on 15 September 2008 precipitated a stock market collapse in October. Once banks started to fail and stock markets to fall, the 'real' economy started to slide

too. Banks stopped lending. Creditors foreclosed on loans to debtors. Businesses laid off workers. Total spending shrank. This brought about generalized conditions of slump throughout the world by the fourth quarter of 2008. It was eerily reminiscent of what happened in the Wall Street Crash of 1929.

The worst of the storm passed after a year. Unlike in 1929, governments intervened to prevent disaster. Governments and central banks around the world vigorously pumped money into their deflating systems. But in some European countries, governments were virtually bankrupted by the excesses of their banking systems. The collapse of state revenues brought public debts to unprecedented peacetime levels, reviving the most persistent of the economic orthodoxies: that governments are the problem, not the solution. As economies stabilized, policies of austerity were adopted to put governments back into the fiscal cage from which the severity of crisis had temporarily released them. Today, monetary expansion is being eased, in recognition that it has done as much as it can, while austerity is being eased in recognition that monetary policy is not enough. The future of the fiscal–monetary mix is unsettled.

The standard account of the origins of the crisis starts with an (unexplained) shock to the financial sector, which is then transmitted to the non-financial sector through the freezing of credit. However, it is possible that the trouble was rooted in the non-financial economy. Despite the rosy retrospect of the so-called Great Moderation years of the early 2000s, the Western economies that collapsed in 2008 were not in pristine condition. Unemployment was about double what it had been in the Keynesian era. The huge accumulation of household and corporate debt – in the advanced economies, average private-sector debt as a percentage of GDP went up from 50 per cent in 1950 to 170 per cent by 2008 – was one indication that large sections of the pre-crash economy were not 'paying their way'. This was partly a consequence of a marked growth in inequality. Real wages were stagnant or falling; investment was down from its historic levels, and with it productivity growth. The finance sector was growing faster than the economy, and financiers were getting much richer than anyone else. Signs of 'secular stagnation' were not hard to see, after the event. I have singled out the stagnation of real earnings as the deep cause of the crisis, the result of which was transmitted to the financial sector through the build-up of unsustainable debt. The Great Moderation is known chiefly for its low inflation and cyclical stability. It now seems more of a lull before a storm bound to break. It leaves the fate of advanced capitalist economies in limbo. At the time of writing, a resurgent financial system and a mediocre real recovery threaten a repeat crash at no distant date.

II. THE CULPRITS

'Why did no one see it coming?' asked Queen Elizabeth II of a group economists at the LSE in October 2008.[2] This book is an attempt to answer that question and suggest how to avoid such foul-ups in the future. This will not be easy. It will not be enough to strengthen so-called financial 'resilience' to shocks. It is economies which need to be made resilient to shocks.

It is natural to start with the financial institutions, which egregiously over-borrowed and over-lent, and which were heavily into all kinds of fraudulent practices. Gripped by a collective hubris, the institutions were oblivious to the rocks ahead. The lure of present gains drove out the fear of future losses.

But to stop with the banks would be a mistake. The banking sector was freed up to do its best and worst by national governments and regulators, who held a benevolent view of the financial system. Finance was viewed essentially as an intermediatory, bringing together willing buyers and sellers of goods and services. In the language of the day, the financial market was an 'efficient' market, which needed no more regulation than any other market. The peculiar property of finance as a vent for speculation and fraud was ignored.

This benign view of finance extended to the financial innovations of the 1990s. Securitization – the process of transforming non-marketable assets into marketable ones – led to a continuous lengthening of the chain of indebtedness. This 'financialization' of the economy – the growing share of money being made from purely financial operations – was praised (or at least justified) as 'making capital allocation more efficient' and therefore maximizing growth. Business school professors set up their own hedge funds to test their theories.

But how, the enquirer may ask, did so many governments come to hold views which were plainly absurd in retrospect? He is led inexorably to the source of these beliefs, to the 'intellectual climate', the Zeitgeist, the tide of thought and feeling that liberated our financial markets from national controls. The enquirer will discover that at the heart of today's mainstream macroeconomics is the belief that unimpeded competitive markets deliver optimal welfare, and that the financial institutions which create money, and through which money is allocated, have no independent effect on the real equilibrium of the economy, but are only acting on behalf of well-informed sovereign consumers. He will discover that the forecasting models of finance ministries and central banks lacked a financial sector. The assumption that future prices would move in line with current expectations removed any need to take precautions against financial collapse, despite a continuous history of financial manias and panics. Aiming to minimize the interference of the state, mainstream economics ignored the financial wolves on the prowl.

Surely it is here – in the world of economic ideas – that the original flaw in the regulatory design is to be found. Governments believed things about the

economic system that were not true, or at least not true enough. In the name of these ideas, finance was allowed to spin out of control; and its implosion produced a world depression.

Practical people usually pooh-pooh the influence of academic scribblers. The English famously feel themselves to be healthily exempt from intellectual influences. In fact, academic thought and policy were not so closely linked in the past. But today, economic ideas penetrate much more deeply into economic policy, because economic policymaking is largely in the hands of professional economists. Most of them work not in universities, but in treasuries and central banks, in commercial banks, businesses and newspapers, in political parties and think-tanks, or as business consultants and lobbyists. The days are long past when a Governor of the Bank of England could welcome one of its first academic economists with the words: 'you are not here to tell us what to do, but to explain to us why we have done it'.[3] Now economists do tell decisionmakers what to do.

This is supposed to make policy more expert, less partisan. However, economics is by no means the scientific citadel that many of its practitioners claim it to be. It displays a silent ideological slant while sticking to the accepted canons of scientific method. Since the 1980s, the dominance of new classical theory in economics has coincided with the neo-liberal capture of politics. The connection is not fortuitous. New classical economics has provided an economic-theoretic justification for neo-liberal policies; neo-liberal ideology has shaped the way economists 'model' the economy. Both readily sign up to Ronald Reagan's distillation of two centuries of conventional wisdom: 'The government is the problem, not the solution.'[4]

However, to say that economics is inherently ideological is not quite to get to the root of the puzzle of what went wrong in 2008. Why *this* ideology and not *that*?

Ideology is highly influenced by the structure of power, as well as helping to bring about a structure of power favourable to it. This is the important element of truth in Marx's claim that the dominant ideas of any epoch are those of its ruling class. The crash of 2008 revealed the power of financial interests.

A huge puzzle in the pre-crash situation is the weakness of democratic government in face of the structural power of finance. Orthodox political science tells us that in democracies accountability runs from government to the people. But one cannot get a grip on the history of the crisis without realizing that it is the financial community, far more than 'the people', that decides both the terms and the conditions on which government gets its money. The money–power nexus works both indirectly, through its influence on election finance and the presentations of the media, and directly through its role in financing government borrowing. What the 'efficient allocation of capital' means in

practice is the allocation which is efficient for the financial sector. In the last twenty to thirty years, the chief economic role of Western governments has been to provide the financial system with a nice environment for it to maximize its profits. This has included being prepared to bail out banks when their excesses made them insolvent, and being prepared to cut their own spending on social welfare to retain the confidence of the bond markets. Following the crash, the financial sector has turned the brave words of politicians about the need for reform into rhetoric largely without substance.

The Marxist claim that big business controls politics rests on the twin claim that the business class is a monolith and that it is effectively unchecked by countervailing forces. In fact untrammelled business power is the exception rather than the rule. On the one side business power itself is divided, notably between exporters and importers, creditors and debtors, small and big businesses, and 'finance' and 'industry'; on the other side, business power has been checked by varieties of popular power. The more equal the balance of forces, the less likely we are to get a single story about the way the economy works.

A central claim of this book is that there was a balance of power between capital and labour from the 1920s to the 1970s which enabled the emergence of a Keynesian state relatively free from the vested interests. It was in this period that the idea of the state as a benevolent guardian of the public interest gained currency. But in the last forty years the balance of power has shifted decisively from labour to capital; from the working class to the business class; and from the old business elites to new financial, partly criminal, elites. How this has come about deserves a profound study of its own, of which only hints can be given in the pages that follow. What can be claimed is that the main homage which mainstream economics pays to power is to render it invisible.

Finally, theory and policy are moulded by the conditions of the times. These produce what John Hicks called 'concentrations of attention',[5] by which he meant the problems that economists choose to study. What causes shifts in attention? In the interwar years persistent mass unemployment was *the* problem; in the 1970s it was inflation. Such changes in facts disturb the kaleidoscope; they determine what the viewer sees. (For a further discussion of the relationship between ideas, power and circumstances, see the appendix to this Introduction, here.)

What follows will attend primarily to macroeconomic doctrines as they developed until 2007, and the way these have been tested and found wanting by the crisis and its aftermath. The book is an essay in political economy, since it pays attention at all times to the context of the rise and fate of different economic doctrines. Knowing what economists thought in the past, and how and

why they came to think as they did, is, as Hicks has pointed out, an essential part of 'keeping watch' on the discipline as, unlike in the natural sciences, it can record no unambiguous progress in knowledge. It is perhaps natural for me to embrace a political economy approach, since I was originally trained as a historian, and no historian can be oblivious to the historical forces that produced the stories by which economic events are understood.

III. A BRIEF SKETCH OF THE BOOK

The book is divided into four parts. The first takes the reader through the historical debates on monetary and fiscal policy before the First World War. This history is crucial to an understanding of the pre-crash orthodoxy. The second investigates the rise and fall of the Keynesian revolution, showing how this episode ended with the partial restoration of Victorian monetary and fiscal policy. The third part shows how this restoration was itself tested by the collapse of 2008–9 and its aftermath, reopening issues formerly considered settled. Part Four concludes with reflections on the whole and a sketch of a new macroeconomics.

Part One starts with three chapters on the history of monetary theory and policy. Chapter 1 surveys the debates on the origins of money, on the nature of money, on what determines its value, and on the consequences of disturbances to its value. Chapter 2 covers the three great nineteenth-century debates about how money might be 'kept in order', which, starting in the era of the gold standard, culminated in the 'scientific' Quantity Theory of Money at the start of the last century, the subject of Chapter 3. This chapter pinpoints the rupture in monetary theory, represented by the two versions of the Quantity Theory of Money developed by Irving Fisher and Knut Wicksell, respectively.

Chapter 4 examines the nineteenth-century theory of fiscal policy. The point of special emphasis is that fiscal rules and monetary rules were considered complementary. Their joint purpose was to prevent governments from issuing too much money. With Britain setting the pace, by 1900 all 'civilized' countries had linked their domestic currencies to the gold standard and their governments balanced their budgets at the lowest level of taxes and spending possible. But the theory of the 'minimal state' was never wholly accepted outside Britain. The idea of the state as the indispensable actor in a nation's economic development survived in the 'pre-scientific' doctrine of mercantilism. Specifically, free trade, though preached by economists, was never widely accepted on the continent of Europe, or even in the United States. By the 1880s and 1890s, the doctrine of laissez-faire had started to be challenged by the rise of democracy, the depressions of the 1880s and 1890s, and the emergence of the welfare state. The appearance of the word 'unemployment' in the *Oxford English*

Dictionary in 1888 marked the arrival of a 'problem' that would dominate economic theory and policy for the next eighty years.

Part Two traces the rise, triumph and fall of the Keynesian revolution, a period stretching from the publication of Keynes's *General Theory of Employment, Interest, and Money* in 1936 to the 1970s. Chapter 5 shows how the Keynesian theory of economics and policy were a response to the Great Depression of the 1930s. It was seemingly vindicated by the achievement of full employment and stable growth in the thirty years that followed the Second World War, the subject of Chapter 6. The Keynesian regime ran into trouble in the stagflationary 1970s and was superseded by 'monetarism', which was in fact a reversion to pre-Keynesian orthodoxy about both money and governments. Chapter 7 ends with an account of the 'New Consensus' – a mixture of 'new' classical and 'new' Keynesian economics, which was in turn brought down by the collapse of 2008.

Following the theoretical twists and turns of this economic saga, no one can fail to be impressed by the persistence in economic theory of the core idea that an unimpeded market system tends to full employment equilibrium, unless obstructed by 'spanners in the works', generally thrown by governments. First suggested by Adam Smith's metaphor of the 'invisible hand', this insight was formalized in the general equilibrium theory of Leon Walras in 1874. Much later, as late as in our own day, the microeconomics of Walras begat new classical macroeconomics. The main storyline has been heavily modified and qualified in face of disconfirming events, but has always re-emerged, in more or less unchanged form. This leads to the conclusion that there has never been a real 'paradigm' shift in economics comparable to those occasionally experienced in the natural sciences (by paradigm shift I mean a fundamentally different way of looking at the material being studied). The Keynesian revolution came closest to it. Mostly, it has been a story of persistence without progress. This persistence can be explained by the fact that the rise of scientific economics coincided with the rise of capitalism, and the logic of economics as we know it is not easily separable from the arguments in support of capitalism.

Part Three of the book is about theoretical and policy responses to the downturn of 2008. It relates these responses to the historical debates covered in Parts One and Two and shows how they carried the baggage of the past with them. Chapters 8 and 9 show how fiscal and monetary policy met, or failed to meet, the challenge of the downturn. The main theme is that with fiscal policy quickly disabled by ballooning government debts, the task of stabilizing economic life fell to unconventional monetary policy. Chapter 8 examines the theory and practice of 'fiscal consolidation': the effort by governments to liquidate deficits and reduce national debts to restore 'confidence'. Chapter 9 surveys the rationale, and limited success, of 'quantitative easing', the attempt

by central banks to offset the deflationary effects of fiscal consolidation by injecting large amounts of money into the financial system. My broad conclusion is that the post-crash monetary–fiscal mix was successful in preventing the collapse of 2008–9 from turning into the rout of another Great Depression, but has not succeeded in restoring durable economic prosperity. Indeed, the methods by which it rescued damaged economies from the financial excesses of the pre-crash years have set the scene for the next financial crash. Our economies are still on life-support systems, and the withdrawal of these will be exceptionally challenging.

Chapters 10, 11 and 12 look at the structural causes of financial instability. Chapter 10 analyses the macroeconomic impact of the growth of inequality of income and wealth. The focus of Chapter 11 is on financial innovation, partly in response to the explosive increase in the demand for credit. Chapter 12 examines the contribution of current account imbalances to the instability of the pre-crash economic system.

And so to the topic of the final part: what is to be done? The central question of political economy today is as it has always been: what does a government need to do to secure the relatively smooth – and socially and morally tolerable – functioning of a decentralized, money-using, largely privately owned economy?

Technical material is presented, as far as possible, in appendices to individual chapters, so as not to break up the flow of ideas.

APPENDIX I.1: IDEAS, VESTED INTERESTS AND CYCLES

Ideas versus Vested Interests

Keynes ended *The General Theory of Employment, Interest, and Money* with the famous words: 'But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.'[6] Anyone involved in the production of ideas has to believe this, unless they are being paid by someone to produce the ideas. In today's world, the chief manufactory of ideas is the Academy. Pure research has long been recognized as an independent intellectual pursuit; its hallmark, disinterestedness; its purpose, the search for truth. The pecuniary interest of scholars is not directly involved in either the direction of their enquiry or its results.

At the same time, there is what Joseph Schumpeter called the 'sociology of success'. Put crudely, why are some ideas acceptable, and others rejected or marginalized? In the natural sciences this question is relatively easy to answer: newer ideas bring us closer to reality than the older ones. For this reason, quantum physics replaced classical physics. Reality is unchanging, only the

theory changes as it improves our understanding of reality. Predictive power is the ultimate test of the truth of a scientific hypothesis.

In social sciences this is much less true. The natural world does not interfere with one's observation of it; the social world does. It is the changeability of the object being studied which demarcates social sciences from natural sciences. Social reality is constantly shifting, problems crucial at one time become irrelevant at another. As a result, propositions in social science do not satisfy the 'universality criterion'. They are limited in time and place. As Amir Kumar Dasgupta points out, theories in economics are independent of each other, they do not supersede each other.[7] Theories in the social sciences cannot be successfully confirmed or falsified, except briefly. Progress in economics consists of greater precision in stating ideas, not the greater explanatory power of the ideas themselves; and the precision may be at the expense of the explanation. In economics, much more than in physics, the research agenda and structure of power within the profession reflect the structure of power outside it. Economic research programmes have the character of ideologies. And this, of course, was precisely Marx's contention when he wrote: 'What else does the history of ideas prove, than that intellectual production changes in proportion as material production is changed?'[8]

The relationship between ideas, circumstances and power is one of the most complicated questions in social science. Ideas are not at the mercy of circumstances in any straightforward way. The disciplines which produce theories exhibit stability through time, in their concepts, techniques and language. That is why paradigm shifts are rare. It is true that disciplines turn to new topics. But there is no need to relate all new topics to changes in the world. Theorists might simply get bored with the old topics, feeling that debate about them has reached a dead end. Change of topic is also connected with generational change within a discipline.

It is nearer to our theme to say that ideas change when large facts of the world change. Dasgupta talks of 'epochs of economic theory'. He wrote: 'A system of economic theory evolves in response to questions that are provoked by a given set of circumstances in the economy. As circumstances change, or people's attitude to them changes, questions are revised, and a new system springs up.'[9] Dasgupta is right to distinguish between changes in circumstances and changes in people's attitudes to these changes. A large shock can upset existing ideas, and policies based on them. But the nature of the adjustment of the ideas and policies is not determined. The Great Depression of the 1930s, coming on top of the First World War, benefitted rival claims to the liberal succession in the different forms of communism, fascism and Keynesian social democracy. The travails of the world economy since 2008 have led to outbreaks

of populism of both the left and right, whose ideological and political potential is as yet undetermined.

Thus there is no direct relationship between ideas and problems. Facts can be interpreted in different ways. He who controls the interpretation controls the story. This brings us to the question of power.

Adapting Steven Lukes, one may think of ideas as a form of 'soft power', which structure our debates about reality.[10] Alternatively, and more comprehensively, they may be seen as shaping our consciousness – the way we interpret our world.

Ideas are therefore an independent source of authority. Practical men – politicians, businessmen, civil servants – are consumers, not producers, of ideas. This gives the producers of ideas considerable latitude vis-à-vis their users. The vested interests are in no position – even were they capable of it – to dictate the precise form of the intellectual defence offered for their practices. Thus the economist's justification of the free market is likely to be both more general and also more circumscribed than that offered by the business class. For example, economists have almost always opposed protectionism and monopoly: business has generally been in favour. Ideas are thus capable of making self-interest seem more enlightened.

The fact that ideas are produced in non-profitmaking institutions doesn't, though, dispose of the question of the hard power behind the soft power. Who finances the business schools that produce the MBAs of contemporary business life? Who finances the dissemination of ideas in the media and think-tanks? What are the incentives facing the producers, disseminators and popularizers of ideas even in a society in which discussion is 'free'? In short, what is the agenda of business?

One must avoid over-simplifying. It is much harder – and I would say fruitless – to try to relate philosophical, artistic and literary productions to the structures of power. They are just as likely to be critiques of the status quo as homages to it, even though many subtle and not-so-subtle mechanisms, social and pecuniary, exist, for co-opting cultural elites into the business system.[11] More importantly, the cultural critique of capitalism, while persistent and often profound, has had very little influence on economics and economic policy. Nor is the state simply (or always) an agent of the bourgeoisie. Notionally, at least, it stands for the public interest. There is a bigger role for 'public intellectuals' in a mixed economy of public and private sectors than in one in which business calls the shots.

Assertion of the independence of ideas is a necessary modification of crude Marxism, and one which I dare say Marx himself would have accepted. Nevertheless, in the Marxist scheme, the intellectual class, like the state, attains

only 'relative autonomy', and ideas rarely overturn the perception or promotion of self-interest, however much they may modify its expression. Practical men like nothing better than to have their prejudices dressed up in scientific language. Ultimately, the ideas in power serve the interests of the class in power; since the 1980s this has been overwhelmingly the financial class.

Cycles

Economics, taking its cue from physics, is an equilibrium system. Disturbances are said to be brief and self-correcting. But economists, as well as historians, have been fascinated by the rhythmic character of economic life, the waves of innovation and destruction, the rise and fall of systems of political economy. The most famous economic theory of cycles is the Kondratiev cycle, a long wave of forty or fifty years, which starts with a cluster of new technologies and exhausts itself when they have been used up. Schumpeter drew on this idea in his depiction of capitalism's cycles of creation and destruction. Within the long cycles are shorter cycles of boom and bust, lasting eight to ten years. Lacking proper scientific explanation (Paul Samuelson called cycle theories 'science fiction'), cycles have nevertheless had a great influence on macroeconomic policy. Typical macroeconomic constructions, such as the 'cyclically adjusted budget deficit', refer explicitly to short cycles of definite duration, which oscillate round some 'normal' or 'long-run' situation.

Historical cycles refer to disturbances of a moral/social, rather than technological, equilibrium. That is to say, they embed technological innovation within the wider frame of political and social change. Societies are said to swing like pendulums between alternating phases of vigour and decay, progress and reaction, prodigality and puritanism. Each expansive movement produces a crisis of excess that leads to a reaction. The equilibrium position is hard to achieve and is always unstable.

In his *Cycles of American History* (1986) Arthur Schlesinger Jr defined a political economy cycle as 'a continuing shift in national involvement between public purpose and private interest'. The swing he identified was between 'liberal' (what we would call social democratic) and 'conservative' epochs. The idea of the 'crisis' is central to both. Liberal periods succumb to the corruption of power, as idealists yield to time-servers, and conservative arguments against rent-seeking win the day. But the conservative era then succumbs to a corruption of money, as financiers use the freedom of deregulation to rip off the public. A crisis of under-regulated markets presages the return to a social democratic era.

This idea fits the American historical narrative tolerably well. It also makes sense globally. The era of 'conservative' economics opened with the publication

of Adam Smith's *Wealth of Nations* in 1776. Yet despite the early intellectual ascendancy of free trade, it took a major crisis – the Irish potato famine of the early 1840s – to produce an actual shift in policy: the repeal of the Corn Laws in Britain in 1846 ushered in the free trade era.

In the 1870s, the pendulum started to swing back to what the historian A. V. Dicey called the 'age of collectivism'. The major crisis that triggered this was the first great global depression, produced by a collapse in food prices. It was a severe enough shock to produce a major shift in political economy. This came in two waves. First, all the major countries except Britain put up tariffs to protect agricultural and industrial employment. (Britain relied on mass emigration to eliminate rural unemployment.) Second, all industrial countries except the United States started schemes of social insurance to protect their citizens against life's hazards. The Great Depression of 1929–32 produced a second wave of collectivism, now associated with the 'Keynesian' use of fiscal and monetary policy to maintain full employment. Most capitalist countries nationalized key industries. Roosevelt's New Deal in the United States regulated banking and the power utilities, and belatedly embarked on the road of social security. International capital movements were severely controlled everywhere.

This pendulum movement was not all one way, or else the West would have ended up with communism, which was the fate of large parts of the globe. Even before the crisis of collectivism in the 1970s, a swing back had started, as trade, after 1945, was progressively freed from tariffs and capital movements liberalized. The rule was free trade abroad and social democracy at home.

The Bretton Woods system, set up with Keynes's help in 1944, was the international expression of liberal/social democratic political economy. It aimed to free foreign trade after the freeze of the 1930s, by providing an environment that reduced incentives for economic nationalism. At its heart was a system of fixed exchange rates, subject to agreed adjustment, to avoid competitive currency depreciation.

Liberalism, or social democracy, unravelled with stagflation and ungovernability in the 1970s. This broadly fits Schlesinger's notion of the 'corruption of power'. Keynesian/social democratic policymakers succumbed to hubris, an intellectual corruption that convinced them they possessed the knowledge and the tools to manage and control the economy and society from the top. This was the malady against which Hayek had inveighed in his classic *The Road to Serfdom* (1944). The attempt in the 1970s to control inflation by wage and price controls led directly to a 'crisis of governability', as trade unions, particularly in Britain, refused to accept them. Large state subsidies to producer groups, both public and private, fed the typical corruptions of behaviour identified by the New Right: rent-seeking, moral hazard and free-riding.

macroeconomic policy: how to stop money 'getting out of order'. The two are interlinked, in the sense that they involve the conditions under which money can be made to serve rather than disturb production. They are unsettled in the sense that people have been arguing about them ever since money started to be used. Our own attempt to make sense of these arguments takes us back to the origins of money itself. Why did people start using money? Was it inseparable from production, or was it something added on? What is its place in the scheme of social life?

1

The Mysteries of Money: A Short History

'Money's a matter of functions four,
A medium, a measure, a standard, a store.'

Nineteenth-century jingle

'[Money] only exerts a distinct and independent influence of its own when it gets out of order.'

J. S. Mill, 1848[1]

I. THE CLASSICAL DICHOTOMY

The story starts with the classical dichotomy: the division of economics into the theory of value and the theory of money. The dominant question in economics has been: why do things cost what they do? The first generation of scientific economists held that the price of things was determined by the number of hours' work it took to produce a quantity of stuff. A later generation concluded that the price of goods is determined by their value to the consumer. The cost of labour adapts itself to the preferences of buyers. Value is simply market price. This is today's theory. The point to note, for our purposes, is that neither of these explanations of value involves money. Goods cost goods: they are bartered for each other. Money, according to the classical story, plays no role in the determination of 'barter' prices, i.e. there is no desire for money as such.

The theory of money is concerned with something else: what determines the value or price of money, or its inverse, the general or average price level? The answer given by the elementary textbook is its quantity. The more money there is, the more goods as a whole will cost; the less there is, the lower the average price. The important claim of the theory of money is that the quantity of money makes no difference to the *relative prices* of goods and services. All it does is to explain the average price of all of them, and that affects nothing 'real'.

So what is the role of money in this story? The answer is it 'oils the wheels of trade'. It enables more trade to take place than otherwise would have. But it has no effect on the terms of trade. In Aristotelian terms, it is 'barren': it creates and destroys nothing. Today's textbooks on banking and finance do little more than echo Aristotle. Banks simply 'intermediate' between buyers and sellers. This

arcane phraseology serves the protective purpose of disguising the actual power of finance – and financiers – in the economy.

Philosophically, the underlying idea of the classical dichotomy goes back to Descartes' famous distinction between appearance and reality, and his rejection of induction as the method of discovering truth. In medieval times, the general view was that the way things appear is the way they are: we observe God in nature. This was what Descartes rejected. Observation can reveal only how things appear to be; behind the appearance lies the reality. The task of science is to get 'under the surface of things'. Adopting this standpoint, 'scientific' economics set itself the task of penetrating beyond the money values that we observe to the underlying world of real values. In the persistent language of economics, money is a 'veil' that hides from us the knowledge of real relationships. Economics must strip away the veil of money; or, more accurately, make the veil transparent, so we never confuse appearance and reality.[2] The Cartesian distinction runs from David Hume to Milton Friedman, and underpins the axiomatic structure of mainstream economics.

In the 1930s, the economist John Maynard Keynes challenged the classical dichotomy with what he called 'the monetary theory of production'. He wrote, in 1933:

> [In the classical view] money ... is not supposed to affect the essential nature of the transaction ... between real things, or to modify the motives and decisions of the parties to it. Money, that is to say, is employed, but is treated as being in some sense *neutral* ...
>
> The theory which I desiderate would deal, in contradiction to this, with an economy in which money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors in the situation, so that the course of events cannot be predicted ... without a knowledge of the behaviour of money between the first state and the last. And it is this which we ought to mean when we talk of a *monetary* economy.[3]

In other words, we cannot separate the theory of value from the theory of money. Money enters into the 'motives' for trade. Goods cost money, not goods. So it is the 'behaviour of money' in the time between trades that we have to attend to. Money cannot be 'neutral', in the required sense that its value has no effect on the prices at which people want to trade, because the only prices people know are money prices. By the same token there is no such thing as a barter equilibrium – what goods would exchange for in the absence of money. There is only a monetary equilibrium.

So what affects the behaviour of money? This should be a key point of enquiry into the behaviour of a monetary economy. Why did money come to exist? What purpose does it serve?

No one knows exactly where, how or why money started, so people are free to invent stories. The main aim of the storytellers has been to elucidate, by reference to a hypothetical past, the nature of money in their own time. Two such stories have dominated the literature of money. Adam Smith's eighteenth-century story tried to explain why money consisted of gold and silver. The chartalist theory, dating from the end of the nineteenth century, tried to explain why money consisted mainly of credit. We can call these the metallist theory and the credit theory.

Adam Smith's story, which goes back to Aristotle, is still the textbook favourite. It is certainly the easiest story to understand, which accounts for its popularity. Before money, it is claimed, there was barter – direct exchange of goods for goods. But barter requires a 'double-coincidence' of wants. Both partners need to want what the other has, at the same time. So money was invented to enable one of the parties to pay the other in something which the other could use to buy something else. Adam Smith conjectured that the 'something' which became the 'medium of exchange' must have been 'some one commodity ... [which] few people would be likely to refuse in exchange for the produce of their industry'.[4] Though cattle, salt, shells and the like were used, metals, and especially the precious metals gold and silver, came to be preferred, for their divisibility, but even more for their durability and scarcity. It was these qualities which fitted them to be the measure of perishable things.

At first 'rude bars' of iron, copper, gold and silver sufficed, because of their greater relative stability of value. To avoid having to weigh a lump of metal for each transaction, it became customary to affix a public stamp upon certain quantities of metals, certifying their weight and quality. 'Hence the origin of coined money, and of those public offices called mints.' The essence of this fable is that though it was convenient to make contracts in money, behind the veil of the contracts were real things being traded for each other at their real (i.e. barter) prices.

The theory of the bartering savage is heavily indebted to the classical anthropology of Adam Smith's day, at the heart of which is the figure of *homo economicus*, who pursues his self-interest in isolation from society. That this still underlies neo-classical psychology is made clear in Paul Samuelson's famous textbook, where we read: 'A great debt of gratitude is owed to the first two ape-men who suddenly perceived that each could be made better off by giving up some of one good in exchange for some of another.'[5] Most economists have favoured the bartering savage story, because it leaves out society and government.

By contrast, the *credit* story, which took root at the end of the 1800s, makes money start life as a *debt contract* – a promise to pay in the future for something bought today. The credibility of the promise depends on trust in the debtor. But trust is not bestowed on a stranger, so it is the existence of a social bond which makes money possible. The language of money is the language of promises: 'my word is my bond'. As Alfred Innes writes: 'By buying we become debtors and by selling we become creditors.'[6] The credit theory of money does not automatically upset the classical dichotomy, if it is assumed that credit is simply an advance on money, which is itself an advance on goods. But it greatly weakens it by placing expectations at the centre of its account of 'real' transactions.

This seemingly recondite dispute about the origins of money reflects a deep divergence about the purpose of money. Was money to be thought of primarily as a means of effecting two transactions barely separated in time? Or was it also, and distinctively, to be seen as a link between the present and the future? The first led to the view that the only important demand for money was as a 'means of payment'; the second that its significant economic role was as a 'store of value'. It was the motives for holding money independently of the desire for goods – the positive preference for liquidity – which interested Keynes. The 'fetish for liquidity', he reasoned, could have only one cause: uncertainty about the future. For if everyone knew for certain what the morrow would bring, there would be no rational reason for hoarding lumps of metal or pieces of paper. In fact, there would be no need for money at all. So, the dispute about the origins of money was, at its heart, an epistemological one: how predictable were future events?

III. THE VALUE OF MONEY

As one might suppose, the metallist and credit theories give different answers to the question of what gives money its value.

According to the metallist theory, the value of money inheres in the value of the thing of which it is composed, namely the metal. The 'essential' value of gold and silver is determined by properties intrinsic to them, such as their attractiveness, scarcity and durability. In the credit theory, money is simply a token of what is promised; its value is conferred by the degree of trust in the promise of its issuer.

The credit theory offers three possible issuers of money. By far the most important is the chartalist theory. This holds that the main issuer of money is the state. According to Georg Friedrich Knapp (1905) and Innes (1913), the state issues receipts (tokens of liability) for goods it commandeers. Coins (with the head of the ruler on them) are stamped tokens of state debt. These receipts circulate as currency, because the state's ability to ensure that taxes are paid in

money, they have reduced the weight and fineness of the gold and silver in their coins, or issued too much paper. By imposing an 'inflation tax' they can get hold of extra real resources without openly raising taxes. 'A government can live by this means', wrote Keynes, 'when it can live by no other. It is the form of taxation which the public find it hardest to evade and which even the weakest government can enforce, when it can enforce nothing else.'[11]

Throughout history too, reformers have directed their efforts to preventing the state from debasing the coinage: in Ricardo's words, inflation 'enriches ... the idle and profligate debtor at the expense of the industrious and frugal creditor'.[12] The main purpose of essentialist monetary thought was to stop the state from debasing the coinage. That is why it insisted that the value of money lay in the value of the metal in the coin.

A good example of this argument was the claim by the seventeenth-century mercantilist William Petty that a reduction in the silver content of the coin was bound to be self-defeating. It would diminish the amount of goods people were willing to give up for it, except among 'such Fools as take Money by its name, and not by its weight and fineness'.[13] Petty was wrong. The debased coins issued by the royal mint continued to circulate at their face value. The key to their acceptability lay in the fact that they were the only legal tender. As Aquinas had realized four centuries before Petty, money was the 'one thing by which everything should be measured ... not by its nature, but because it has been made a measure by men'.[14] The convenience of using the state's money as a means of payment for goods and obligations outweighed the losses, actual and potential, suffered by creditors through debasement, unless the debasement was carried to extremes, at which point the state's money ceased to be used for any purpose.

By the start of the nineteenth century it was realized that a stronger defence against 'over-issue' of money was needed. This could be secured by limiting the quantity of the state's money to the quantity of gold bullion in the country – the subject of Chapter 2 – and placing strict limits on the operations of the state itself. If the state could be confined to a narrow range of activities, its incentive to expand the money supply would be correspondingly circumscribed. This was the main object of the Victorian fiscal constitution, which we describe in Chapter 4. The rule that the state's spending should be annually balanced by taxation at the lowest possible level was designed precisely to limit the state's ability to 'debase the coinage'.

The other main danger to the value of money was the clamour of the debtor class to be relieved of its debts.

In *Hamlet*, Shakespeare has Polonius enjoin his son, Laertes:

> Neither a borrower nor a lender be;

For loan oft loses both itself and friend,
And borrowing dulls the edge of husbandry.

Polonius's advice, more recently echoed by Angela Merkel, has always been an old wives' tale, if applied within a single jurisdiction. The chief way of starting or carrying on a business is by borrowing money, despite its fearful moral pitfalls. Polonius's instruction makes a lot more sense if applied across country borders, because that raises much more acutely the question of the security of loans.

The age-old question for monetary policy was, whose interests should it protect? Those of lenders or borrowers, creditors or debtors? Creditors demanded of money above all that it keep its value between transactions. But debtors simply wanted to have enough money to enable them to carry on their business, and expected the state, the bank or the money-lender to produce it. These requirements were far from coinciding. Creditors are natural essentialists – they want principal and interest to be paid back in full-weight coin. Debtors are natural nominalists – they want to pay back less than they borrowed if they can.

Because of their importance in stabilizing expectations, promises need the support of both punishment and forgiveness.

Creditors assert a moral right to be repaid in money of equal value to that which they lent and a moral duty of the debtor to repay it, at whatever sacrifice. The root of credit is the Latin word *credo*, 'I believe'. A lender is someone who trusts that the borrower will pay them back in money of equivalent value.[15] Lenders assert that, without such trust, lending will cease, and trade will languish. To ensure the necessary trust, creditors have always created as many obstacles to default as government or convention allow. They have kept interest rates as high as possible against risk of default. They have imprisoned or enslaved defaulting debtors, or taken their property. They have invaded, or refused loans to, states that repudiate their debts. Economists talk of the 'moral hazard' of making life too easy for debtors. The more cynical see loans to impecunious debtors as a kind of asset-stripping, a substitute for armies to obtain land and resources.

However, the debtor position is not without moral support. All religions have supported 'debt forgiveness' and abhorred 'debt-bondage'. It was customary for new rulers to declare a debt amnesty, as in the Jubilee law of the Babylonians, recorded in the Bible. Solon (*c.*638–558 BC) was the famed lawgiver who cancelled the debts of Athenian farmers. (Throughout history farmers have been the biggest debtor class, because of the seasonal character of their business and the unreliability of harvests.) The line in the Lord's Prayer – 'Forgive us our sins as we forgive those who have sinned against us' – can be rendered: 'Forgive us our

debts, as we also forgive those in debt to us.'[16] The recent bail-outs of bankrupt banks are examples of debt forgiveness.

Shakespeare vividly dramatized the moral resistance to the creditor who claims his 'pound of flesh' for failing to repay a loan. In *The Merchant of Venice*, the money-lender Shylock suggests as a 'merry sport' that, in the event of a default, the merchant-borrower Antonio must satisfy him with a pound of his own flesh, 'to be cut off and taken in what part of your body pleaseth me'. Then the joke goes horribly wrong. Antonio's ships carrying his goods for sale are wrecked; he cannot repay the loan on the appointed day, and Shylock claims his forfeit. Shylock's downfall – he loses all his money – expresses the popular attitude towards the money-lender, who, in medieval Europe, was often a Jew. Anti-Semitism was part of a generalized debtor hostility to the rentier class – the class that lives off interest and rents.

The position of debtors was further strengthened by the Abrahamic-Christian prohibition of usury, or taking interest on the loan of money. Anti-usury laws ran from the earliest times until the nineteenth century (in Britain they were only abolished in 1835), and still exist in Islamic countries. Medieval folk believed usurers were prematurely carried off to hell, or that their money turned to withered leaves. They occupy the seventh circle of hell in Dante's *Divine Comedy*.

Two moral considerations lay behind the anti-usury legislation. The first stemmed from the idea that a debt contract is a kind of unfair trade. Since the lender is nearly always in a stronger position than the borrower, it was felt that the borrower needed protection from the lender's rapacity. Put simply, a farmer faced with a ruined harvest, or a trader with the loss of his goods, may have to borrow to stay alive, however high the interest he has to pay on the loan; a lender is under no compulsion to lend and, unchecked by law, may ask whatever interest he wants for loaning out his money. Therefore state and custom tried to keep the interest on lending money as low as possible.

But, secondly, there was also a long-standing moral hostility to 'making money out of money'. This goes back to Aristotle's view that money is, by its nature, 'sterile', so that interest on money rewarded no productive activity.

Scientific economics dropped the moral taboos and legal restrictions against taking interest. It treats interest as a justified payment for the cost of saving – denying oneself present consumption – and the risk of investment. If interest were denied or limited, there would be less incentive to save, and a disincentive to lend, therefore less investment and slower growth of wealth.

Modern developments have eased the intensity of the ancient struggle between creditors and debtors. Stock markets and limited liability have provided an alternative to bank borrowing for raising capital, and the penalties

for default have been progressively relaxed. We no longer demand labour services of defaulting debtors, or send them to prison. Debt-bondage is a shadow of its old self.

With the rise of modern tax systems, the state's need to issue debt to finance its expenditure has also declined. Its incentive to debase the coinage therefore decreased. Because governments had less recourse to their subjects for loans, people became much more willing to hold government debt. The nineteenth century was the golden age of the bondholder, with the state paying its debts in full-value money. This cosy world was horribly upset by the two world wars of the twentieth century and the triumph of democracy. The state became a huge net borrower for the first time since the Napoleonic wars, and the new voters came from the debtor, not creditor, class. Following the Second World War the debasement of money – inflation – was more or less continuous. But in the 1980s there came a reversal. Inflation was reined in, as the creditor class regained something of its old ascendancy. As unemployment rose and wages stagnated, loan sharks offering 'pay day loans' at usurious interest rates proliferated. In the Eurozone debt crisis of 2010–12, a 'troika' of creditors, in a return to nineteenth-century methods, demanded of Greece islands, gas extraction rights and museums – their 'pound of flesh' – as surety for loans they knew would never be repaid.

The truth is that any monetary policy will always produce winners and losers, depending on the terms of access to credit. The modern answer – placing monetary policy in the hands of an 'independent' central bank – does not make money 'neutral', because monetary policy is bound to have distributional effects.

V. THE ORIGINS OF THE QUANTITY THEORY OF MONEY

The Quantity Theory of Money is more accurately termed the Quantity of Money Theory of Inflation, because it was invented to explain inflation, and (much later) became the basis of policy to prevent it. Although both inflation and deflation are consequences of having the wrong quantity of money, the quantity theory was never specifically aimed at explaining deflation, deflation being considered an inevitable consequence of the previous inflation. Therefore, if you could prevent inflation, you would automatically prevent the deflation that followed the pricking of the inflationary bubble. In our own day, this argument is associated with Friedrich Hayek.

It was the sixteenth-century French philosopher Jean Bodin who turned the common understanding of inflation as 'too much money chasing too few goods' into something like a theory, in order to explain the century-long rise in prices which, starting in the middle of the 1500s, ran parallel with the importation into Europe of newly discovered and mined silver from South America. The influx of

silver from South America, which started in 1550, was the first great *monetary* disturbance of modern times, the price level in Spain doubling between 1550 and 1600.[17] This unsettled all customary relations of the medieval world, and gave birth to speculation, both intellectual and financial.

In his *Réponse aux paradoxes du M. de Malestroict* (1568), Bodin wrote that 'The principal & almost only [cause of rising prices] is the abundance of gold & silver, which is today much greater in this kingdom [France] than it was four hundred years ago.'[18] This conjecture is said to be the start of the quantity theory of money.[19] However, an early version of it may already have existed in China in the middle of the fourth century BC.[20]

Bodin's conjecture seemed reasonable enough. If there is suddenly more money to spend on a fixed supply of goods it seems obvious that competition to buy them will force up their prices; the same competition with less money will cause their prices to fall.

This condition has been the basis of the quantity theory ever since. However, though in pre-industrial societies there was little economic growth, the supply of food would vary with the harvests. Prices of foodstuffs would go up and down without any prior impulse from money. It is true that more money would be needed to pay the higher prices. But it is precisely at this point that the role of money as *credit* enters the picture, as in the phrase 'buying goods on tick'. Here money functions simply a means of account, without any physical substance. Medieval economies responded to the dearth of coin by expanding the supply of 'tick money'. This then would be paid back in cash when prices came down.[21]

The invention – in fact rediscovery – of banking in northern Italy in late medieval times was key to making the supply of money more 'elastic', especially for rulers faced with rising costs and declining revenues. Banking started up in Florence around 1300, the era of Dante. This financial innovation was soon followed by banking crises – the Bank of Bardi and that of the Peruzzi family crashed in 1345. 'Early banks', explains Hicks, 'were very *unsound*, over-anxious to accept deposits, and not yet conscious of the conditions under which alone it can be prudent to push such deposits to profitable use.'[22] What's changed?

The way modern banking grew up has been described by Nicholas Kaldor:

> Originally goldsmiths (who possessed strong rooms for holding gold and other valuables) developed the facility of accepting gold for safekeeping and issued deposit certificates to the owners. The latter found it convenient to make payments by means of these certificates, thereby saving the time and trouble of taking gold coins out of the strong room only to have them re-deposited by the recipient of the payment, who was likely to have much the same incentive of [sic] keeping valuables deposited for safekeeping. The next step in the evolution towards a credit-money system was when the goldsmiths found it convenient to lend money as well as to accept it on deposit for safekeeping. For the purpose of

was the result of 'money illusion'. As the economic historian Eli Heckscher put it: 'Everyone under natural economy (barter) recognized that exchange was the more favourable the larger the amount of goods which could be got in exchange for one's own. But then came the monetary system which drew a "veil of money" over the interconnected factors in exchange.'[30] That money was a veil that obscured accurate knowledge of barter values became a standard trope in classical economics. To remove the veil (or equivalently, to make a money economy behave like a barter economy) was at the heart of the twentieth-century monetary reform movement.

The eighteenth-century philosopher David Hume gave the first precise rendering of the phenomenon of money illusion. It is inserted into his essay on the balance of trade.[31] Here he considers the influential mercantilist argument that a country with no domestic sources of gold and silver needs to aim for a continuous trade surplus, if it is to have enough money to support a growing population. This required restricting imports, and therefore domestic consumption, and aggressively promoting exports, often through wars aimed at excluding competitors from domestic and foreign markets.[32]

Hume demonstrated that the mercantilist attention to the trade balance was fallacious. Trade between two countries, he says, automatically balances itself. This was a logical implication of the barter theory of trade: goods trade for goods. Money does not fundamentally alter the picture. A temporary imbalance between exports and imports produces countervailing gold flows, which, through their effects on price levels (up in the surplus country, down in the deficit country), restores the balance. This is his famous 'price–specie–flow' mechanism. Just as it is impossible to keep water flowing uphill, so 'it is impossible to heap up money, more than any fluid, beyond its proper level'.[33] Hume was the first clearly to identify a payments mechanism that ensured that trade would be balanced. This achievement was crucial to the free trade case developed by Smith and Ricardo.[34]

Hume, however, introduced a critical qualification: in the 'short-run', an inflow of money could, by creating money illusion, stimulate business activity by increasing the rapidity, or velocity, of circulation.[35] This insight made him the originator of the short-run Phillips Curve (see here), later taken up by Milton Friedman. Ever since Hume, economists have distinguished between the short-run and the long-run effects of economic change, including the effects of policy interventions. The distinction has served to protect the theory of equilibrium, by enabling it to be stated in a form which took some account of reality. In economics, the short-run now typically stands for the period during which a market (or an economy of markets) temporarily deviates from its long-term equilibrium position under the impact of some 'shock', like a pendulum

temporarily dislodged from a position of rest. This way of thinking suggests that governments should leave it to markets to discover their natural equilibrium positions. Government interventions to 'correct' deviations will only add extra layers of delusion to the original one. That Hume's distinction between the effects of short-run and long-run changes in the quantity of money destroys the practical utility of the theory for short-run stabilization policy was not realized until much later, and has still not been fully accepted by true believers.

Adam Smith also recognized that a growing economy required that the supply of money should increase roughly in line with demand, if 'the average money price of corn' was to stay the same. That is why he supported the issue of paper money as a supplement to gold money; paper would provide 'a sort of waggon-way through the air, [which enables] the country to convert ... a great part of its highways into good pastures and corn-fields, and thereby to increase very considerably the annual produce of its land and labour'.[36] Later monetary theorists also recognized that gold money, whose increase depended on the discovery of new gold mines, could not guarantee the desirable stability of the price level. But they went further than Smith in arguing for cutting the link between money and gold completely.

VIII. CONCLUSION

The sketch above has revealed two contrasting patterns in the theory of money, which may be called the 'hard' and 'soft' money schools. They run through the history of monetary thought and policy to our own time.

Figure 1. Beliefs of the hard and soft money schools

Beliefs of the money schools	The two money schools	
	Hard/Metallist	Soft/Nominalist
Origin of money	Barter	Credit
Nature of money	Commodities	Tokens of credit
Value	Intrinsic/Objective	Political/Social
Theory of money	Exogenous	Endogenous
Use of money	Transactions	Transactions/Store of value
Favours	The creditor	The debtor
Epistemology	Risk	Uncertainty

The next two chapters will show how these contrasting clusters of thinking worked themselves out in the theory of monetary policy.

2

The Fight for the Gold Standard

'Whoever, then, possessed the power of regulating the quantity of money can always govern its value.'

David Ricardo, House of Commons, 1821

'Nearly every theme in the [contemporary] monetary debate is a replay ... of the controversies between the Currency and Banking Schools over a century ago.'

Tim Congdon, 1980[1]

Figure 2. Four key monetary debates

Chronology of monetary debates	*The two sides of each debate* (and their proponents)	
Recoinage, 1690s	*Commodity / essentialist* (Locke, Newton)	*Credit / nominalist* (Lowndes)
Convertibility, 1797–1821	*Bullionists* (Ricardo)	*Real bills [BoE]* (Thomas Attwood [Birmingham School])
	(Henry Thornton)	(Henry Thornton)
Currency vs Banking School, 1840s	*Currency School* (Overstone, Torrens)	*Banking School* (Tooke)
Bimetallism, 1880s–1890s	*Gold standard*	*Gold and Silver standard* (William Jennings Bryan)

I. PRELUDE TO THE GOLD STANDARD: THE BRITISH RECOINAGE DEBATE OF THE 1690S

In the 1690s, Britain, then on a silver standard, was at war with France. Full-weight silver coins were being exported to pay for foreign military expenses; 'clipped' or lighter-weight coins with the same face value but less silver were informally substituted in domestic circulation. By 1695, it was estimated that the vast majority of domestically circulating coins contained only 50 per cent of

their official silver content.[2] Prices rose by 30 per cent over the 1690s as the purchasing power of coins declined. The monetary authority (then the Treasury) had lost control of the money supply.

What was to be done to stop the country running out of money? William Lowndes, the Secretary to the Treasury, proposed devaluation. The Treasury would mint new coins of the same face value as the older coins but containing 20 per cent less silver, equivalent to a devaluation of 20 per cent, and declare them to be legal tender. Unless a limit was placed on counterfeiting, the result might be hyperinflation.

However, the philosopher John Locke, who was also asked to advise on the currency, rejected devaluation in favour of revaluation. Locke distinguished between intrinsic value and market value. It was because of its intrinsic value that metallic money could serve as a standard of value for all marketable things. A 'pound' sterling was simply a definite weight of silver. Its price, once settled, 'should be inviolably and immutably kept [the same] to perpetuity'.[3] Lowndes's proposal was as deceitful as claiming 'to lengthen a foot by dividing it into fifteen parts ... and calling them inches'.[4] The answer to Locke is that a quantity of silver is not an objective measure of value, but just a less fluctuating one than cows. His argument for fixing the currency in terms of a weight of silver was political: a fixed metallic standard was a token of the government's integrity, not a property of the metal itself.

Locke's proposal to revalue the currency reflected his political aims. In his social contract theory, the state was given a duty to maintain its citizens' property. Silver coin was property, therefore its devaluation was akin to robbery. Behind Locke's proposal to keep the value of money constant was the ideology of the creditor. The creditor should be repaid in coin of the same value as the coin lent. Any other course would defraud him. Such a 'hard' money regime would prevent the state 'stealing' the property of its citizens by devaluing the currency in which it settled its debts.

Locke had a practical argument for keeping the value of money (or price level) constant. He said that the previous standard had served England well for nearly a hundred years. The harm came from changes in the standard, which 'unreasonably and unjustly gives away and transfers men's properties, disorders trade, puzzles accounts, and needs a new arithmetic to cast up reckonings, and keep accounts in; besides a thousand other inconveniences'[5] – certainly valid concerns.

Both sides in the debate accepted the fact that changing the quantity of money would have real effects. Isaac Newton, then Master of the Mint, accepted the case for devaluation, arguing that if the coinage was revalued, as Locke wanted it to be, the money supply would fall, resulting in trade depression: fixed

therefore 'get out of order'. The alternative claim that money, being created by bank loans and liquidated by their repayment, could neither exceed nor fall short of business conditions, while popular among businessmen and some bankers, was rejected by the professors of political economy as false reasoning: political economy taught that money, while it facilitates barter, can be a veil which hides from the eye the true value of the goods being traded. Therefore money could not be assumed to be automatically proportioned to real economic need: it had to be kept proportional by rules governing its issue.

III. BULLIONISTS VERSUS THE 'REAL BILLS' DOCTRINE

The first of the debates came about as the result of the Napoleonic wars. War brought heavy military outlays, at home and abroad. In 1797, the Prime Minister William Pitt authorized the Bank of England to suspend the convertibility of the Bank's notes into gold, as gold drained out of the country. The exchange rate of the pound against other currencies immediately dropped by 20 per cent. Gold was hoarded, causing the price of gold bullion to rise. The government resorted to printing notes to offset the fall in prices and to pay for ever-enlarging expenditure. The national debt soared to 260 per cent of GDP.[9]

The suspension of convertibility coincided with increases in agricultural prices. The average price for a 'Winchester quarter' (eight Winchester bushels, or just under a quarter of a ton) of wheat, for example, rose from 45s 9d in 1780–89 to 106s 2d in 1810–13.

The inflationary boom raised directly the question of the direction of causation. Did more paper money cause prices to be higher? Or did higher prices cause more money to be produced?

In *The High Price of Bullion* (1810), David Ricardo blamed the Bank of England for issuing more paper money than the economy could usefully absorb. Prices, he argued, would go up, and the exchange rate down, 'to the same amount' as the increase in money. The over-issue of money, in turn, had provided people with the means to buy government debt, issuance of which would have been impossible had the Bank not been relieved of its obligation to convert its liabilities into gold. Ricardo stated that 'the necessity which the Bank felt itself under to guard the safety of its establishment [gold reserve], therefore, always prevented, before the restriction from paying in specie [i.e. the suspension of convertibility], a too lavish issue of paper money'.[10] Once the gold convertibility obligation had been removed, the Bank's directors were 'no longer bound by "*fears for the safety of their establishment*" to limit the quantity of their notes to that sum which should keep them of the same value as the coin which they represent'.[11] Ricardo went further, arguing that without a gold check there might be 'no amount of money' which banks 'might not lend'.[12] The ever-present