Inflation and the making of macroeconomic policy in Australia, 1945-85

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy, Political Economy, Faculty of Economics and Business, University of Sydney, August 2010.
Statement of originality

This is to certify that to the best of my knowledge, the content of this thesis is my own work. This thesis has not been submitted for any degree or other purposes.

I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Mike Beggs
This thesis traces the impact of inflation on the making of macroeconomic policy in Australia between the end of World War II and the mid-1980s. I take issue with accounts of policy change that focus primarily on ideological change on the part of policymakers. Instead, I present policy as strategic activity within a complex, evolving economic system which is not centred on policy, and in which, therefore, policy does not have a monopoly on initiative. I draw on Marxian state theory and Tinbergian theory of economic policy to explore why counter-inflationary policy emerged as an imperative for the capitalist state and how it came to play a dominant role in organising macroeconomic policy in general. I also focus in detail on the development of central banking in Australia, drawing on post-Keynesian structuralist monetary theory.

The body of the thesis is divided into two parts, one dealing with ‘the long 1950s’ and the other ‘the long 1970s’. Both are treated as periods of transition, rather than of stable policy regimes. In ‘the long 1950s’ macroeconomic policy was brand new, and the authorities had to build an effective system of macroeconomic management, sometimes against the active opposition of other groups. A contradiction developed between full employment and price stability, and the latter was prioritised because of limits set by the balance-of-payments under the Bretton Woods international monetary system.

The long 1970s was a period of crisis and distributional class conflict. The break-up of Bretton Woods and the movement towards flexible exchange rates changed the form of constraint but continued to impose a counter-inflationary imperative. Monetarism provided an organising and legitimating principle for extremely restrictive macroeconomic policy and the abandonment of full employment as a policy goal, even though policymakers were sceptical of its propositions. Finally, I discuss the movement towards deregulation as something which strengthened rather than undermined the central bank’s power to pursue monetary policy.
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Throughout I have followed the regular practice of the Reserve Bank of Australia’s historical statistics in converting pre-decimal prices into dollars at the 1966 conversion rate of £1 = $2.

Where the original publication or speaking date of a reference is relevant, I have indicated it in parentheses alongside the publication date of the edition consulted. For example, [Coombs, 1971 (1954)] refers to a lecture given in 1954, but published in 1971.
PART I

Introduction
1: Introduction

1.1 Social structures, systems and historical time

With no disrespect to history, one is obliged to believe that an excessive concentration on research into
the past can be a source of confusion in analysing the present, at least as far as money and credit are

This thesis traces and attempts to explain the development of counter-inflation policy in
Australian between the end of World War II and the early 1980s. I believe that a focus on this
specific aspect of policy illuminates the historical evolution of the role of the state in capitalist
society much more broadly. Furthermore, although I focus on Australia alone, and the
particulars of this history are unique to that country, the shape of the evolution and the
contradictions that drove it were common across much of the advanced capitalist world. I
hope the thesis will contribute to a broader discussion of the history of economic policy in the
last half of the twentieth century, and ultimately how it got to where it is today.

I begin from two premises. The first is that the control of inflation is of central importance to
the structural role of the state within contemporary capitalism. It is in some sense more
important than it seems to be for its own sake: it is not only because inflation is inconvenient,
distorts relative prices, adds to uncertainty, erodes nominally-fixed incomes and so on that it is
policy enemy number one. These are all reasons why price stability would be a policy concern
among others, but inflation has become an overriding concern which trumps most others. The
independent inflation-targeting central bank has become the queen of economic policy, its job
so important that this branch of the state has been deliberately isolated from democratic
control. It sits in tacit judgement on the macroeconomic policy of the government of the day,
ready to take away with interest rates whatever may be given with fiscal policy, should it
seem inflationary. Governments have generally not wanted to push the envelope anyway,
because fighting inflation first is the common sense of responsible politics. The apparent
importance of inflation as a policy concern above others is no accident, but arises because it is
the focal point of other structural political-economic tensions. Investigation of the
phenomenon of inflation quickly leads into, and links, a range of economic spheres: money and the financial system, wage-bargaining and the labour market, fiscal policy, and the relative value of currencies. Inflation connects distributional conflict and macroeconomic instability. For these reasons, understanding why counter-inflation policy is so important to the contemporary capitalist state is a way into understanding the structure of contemporary capitalism.

The second premise is that inquiring into the history of the primacy of counter-inflation policy can give insight into its structural role. This is not obvious or uncontroversial, because to trace the origins of something is not to understand its connections within a structure or system, the ways by which it is presently reproduced and plays its role in reproducing other elements.

Pierre Berger’s warning, quoted above, that history can be especially misleading when it comes to money, reflects the fact that money exists only as an element within a system. It is the quintessential ‘thing’ that mediates social relations, and there is a risk in narrating its history that a focus on the particular things that circulate as money misses the reconfigurations of the social relationships around it. Yet, as something so essentially quantifiable, it invites spurious inter-temporal comparisons and extrapolations. Berger’s comment was made in a context (the 1960s) in which historical econometric studies depending on precise definitions of quantifiable money were coming into vogue, even while financial innovations were again destabilising the forms money could take. Inflation, referring as it does to the value of money, is caught up in this problem. As a category ‘inflation’ includes such famous historical instances as the price revolution of the sixteenth century, the devaluation of paper resulting from the suspension of gold convertibility during the Napoleonic War, the German hyperinflation of the 1920s, the ‘creeping inflation’ of the post-WWII period and the ‘stagflation’ of the 1970s. Yet few theorists would believe that these are all specimens of the same social process, which could be understood by plugging the same variables into the same model.

There seems to be a conceptual chasm between history and system, but I will argue that each is necessary to understanding the other. The potential pitfalls of giving a spurious historical account of structure are real. On the other hand, historical questions inevitably arise in the treatment of structure, and a failure to seriously engage with the nature of history often leads to naïve and superficial explanations – I will suggest below that two widely accepted presentations of the history of economic policy fall into this category. The alternative, which I hope this thesis succeeds in contributing to, is a properly structural account of policy history,
which is at the same time a properly historical treatment of structure.

It is necessary to begin rather abstractly with definitions, to be as clear as possible. I use the term ‘social structure’ in a broad sense to mean any enduring social phenomenon not reducible to individual action. It therefore includes such diverse things as central banks, the science of biology, the English language, and the world economy. Structures depend on other structures, but are not ‘made up’ of other structures as they are heterogeneous things: e.g., the reproduction of the science of biology involves universities, but it is not made of universities. Structures are relatively autonomous from one another, i.e., they are shaped by but not fully determined by the other structures they depend upon: it makes a difference to the science of biology that universities are heavily involved in its reproduction, but does not fully determine its content. Biology depends on some structure(s) to create and transmit its content, but no structure in particular – the functions could be performed by networks of gentleman amateurs, or by contractual networks of corporate laboratories.

The relationship of structure with human agency is complicated – it is of course the perennial sociological problem. Social structures are emergent out of the activity of human agents, but not consciously formed. They may be the object of agents’ cognition and deliberate support, but as they are (by the definition above) irreducible to individual action they can never be fully shaped by individual consciousness. ‘Deliberate support’ involves playing roles – for a person to support a political party, for example, means not creating it wholesale but voting for it, possibly going to meetings, fundraising, canvassing, etc. Structures may be collective projects, deliberately intended, but many social structures are intended by no-one in particular, emergent out of the behaviour, strategic or otherwise, of many. Despite claims to methodological individualism, economics has always been at heart about the way in which structures (e.g. of prices and quantities produced) intended by no-one in particular emerge out of the interaction of many strategic actors.1 Agency cannot be legitimately considered to causally precede structure, as people find themselves in “circumstances not of their own choosing”, including ideological circumstances. On the other hand, structure does not fully determine action; there is an irreducible creativity inherent in human action, including the ability to conceive and promote new structures.

This thesis is very much concerned with agency – in particular the agency of macroeconomic

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1 In the opening chapter of The German Ideology a young Marx and Engels approvingly describe the use by “an English economist” of an “invisible hand” as a metaphor for understanding how it is that “the social power... which arises through the co-operation of different individuals as it is determined by the division of labour, appears to these individuals... not as their own united power, but as an alien force existing outside them, of the origin and goal of which they are ignorant, which they thus cannot control...”
policymakers. Partly because of the unpredictable creativity of agency, the body of the thesis is much less abstract than this introduction might suggest. It is by no means a story of determinism by the interplay of super-human social forces. But, as I argue in more detail in Chapter 2, it is the job of macroeconomic policymakers to think in terms of functions and dysfunctions within a social whole, and the fact that policy action is agency in service of perceived structure allows a history of policy to register important aspects of the development of the economic sphere as a whole without losing sight of agency or indeterminacy. At many points in the story contingent events and decisions are crucially important – thus a detailed historical treatment is necessary even to explaining the evolution of broad social structures.

Structures depend on functional relationships, but this does not in itself explain the networks: the science of biology did not have to exist, but was brought into being by the conjuncture of other structures (including the non-social structures of the biological itself). A system is an ensemble of structures connected by such functional relationships. (By the above definition, they are also themselves structures.) To identify functional relationships is not in itself to explain them. The system may be an accidental outcome of the interaction of structures sustained for external reasons, or it may involve feedback mechanisms through which structures support each other. Those feedback mechanisms may include the deliberate, conscious promotion of supporting structures by agents – economic policy being such a case.

System seems to be essentially a synchronic concept, as it refers to the mutual support of the elements within a whole – they are involved in reproducing one another. Its diachronic aspect is then simply the structure’s extension or evolution through time. But the synchrony of a social structure is not “concrete co-presence”, e.g., in the sense of the structure of a building, in which the supports hold together simultaneously in real time and are all fully actual at any instant in time. [Althusser and Balibar, 1970: 107] Social structures are maintained through practices, processes of activity, which necessarily involves the passage of time – and, given the variety of such practices, a variety of time frames, rather than linear, homogeneous time. For example, as discussed in later chapters, the structure of counter-inflation policy involves such diverse social domains and processes as financial innovation, union strategy, academic theoretical controversy and the international market for wool – all of which have distinct timeframes, even as they interact with one another. Social structure cannot be seen in a single instant ‘cross-section’.

So social systems cannot be conceptualised without reference to time, or really a plurality of times. However, it is precisely this plurality of timeframes that motivates one of the stronger
arguments for the necessity of isolating the consideration of structure from that of history: that a historical narrative of ‘one thing after another’ can only confuse the complex interrelationships between structures with heterogeneous time horizons. Althusser presents a sophisticated case along these lines, accepting that structure has a temporal dimension (really, temporal dimensions plural), and yet can still be isolated from ‘history’, defined in terms of changes in structure. A historical fact, he writes, is a “fact which causes a mutation in the existing structural relations”. [Althusser and Balibar, 1970: 102, emphasis in original] Social structure may thus be stable while many kinds of events happen in time. A distinction can be drawn between ‘non-historical’ events that emerge endogenously within the system or as predictable reactions to changing parameters, and ‘historical’ events that change the system itself.

This sense of abstract, non-historical, plural times resonates with economic theory. Economics has always wrestled with conceptualising the temporal dimension of the economic system: what is ‘equilibrium’ but a way in which a temporal process can be flattened into simultaneity by a focus on its end result? The repressed returns in the proliferation of concepts of time and rhythm within economics: ‘short-run’ and ‘long-run’, ‘stability’, ‘comparative statics’ and ‘dynamics’, ‘time-preference’, ‘expectations’, ‘temporary equilibria’, ‘sequence economies’, and so on. Models of business cycles and secular growth make use of abstract time, which is non-historical in Althusser’s sense because structural relations remain constant.

Drawing this distinction between structure and history is an epistemological device; it would be difficult to make it an ontological distinction about what really exists. It does not draw a line between the synchronic and the diachronic, but depends on a concept of structure as a closed system, i.e. it models a part of reality as if it were unaffected by outside developments or internal reconfigurations. This is, in fact, the normal mode of economic theory, with its ceteris paribus assumptions. I am not arguing that it is illegitimate – on the contrary, as a technique for thinking about complex systems, such modelling is indispensable. But it is never able to account for the structure's existence in the first place or for its historical (mutational) developments, which come, by definition, from outside the system. It can never be more than a step towards an understanding of social reality; history must be brought in, and in one way or another it is in crossing the gap from theory to ‘applied’ economics. It is a commonplace of business cycle research that, like Tolstoy’s unhappy families, each cyclical

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2 On the concept of closure, see Bhaskar [2008: 63-126]. Lawson [1997] applies Bhaskar’s concepts in a critique of neoclassical economic theory and provides a positive methodological program for working with the ‘demi-regularities’ of economic data in conditions of ‘partial closure’.
downturn happens in its own way (see, e.g., Samuelson [2003: 361]). Likewise, actual growth trends involve non-repeatable qualitative shifts in technological development and industry structure. The structural models of theory are used as heuristic devices, ideal types.

Inevitably, events raise questions that are not answerable within the closed systemic frame. As approximations of social reality, the ideal types of the models always eventually break down. All too often, the most rigorous system-builders offer inadequate, unsystematic answers to these questions. This is true of certain common approaches to a question of the historical transition at the heart of this thesis: what reshaped economic policy in the advanced capitalist countries between the ‘Keynesian’ postwar period and the ‘neoliberal’ 1980s and 1990s? I will deal with two such approaches here, using them as bad examples to highlight what is distinctive about my own approach.

**The origin myth of the ‘new macroeconomic consensus’**

The first is the origin myth of the ‘new macroeconomic consensus’ of the 1990s and 2000s. It projects its understanding of the economic system back over the whole period, denying that there was a systematic transition, but instead only a change in the behaviour of one element in the system: bad policy was replaced by good policy. Its narrative of change thus centres on the intellectual history of the working out of good theory to inform the good policy, amid breakdowns resulting from the policy application of bad theory.

By the ‘new macroeconomic consensus’ I mean both the policy convergence towards a regime based on a central bank targeting inflation (formally or *de facto*) with a variable interest rate, and the body of theory supporting it, centred on a conception of the ‘output gap’ between potential and actual output, *defined* in terms of a non-accelerating rate of inflation.\(^3\) The state is deeply implicated in the management of money, to the extent that it is common for inflation to be explained as a result of what the authorities *failed* to do. The projection of this worldview backwards has generated a new crop of neoclassical research into the stagflationary episode of the 1970s, and thus the consensus’ own origins. Despite significant debate on the details among this recent literature, Cecchetti et al [2007: 8] note that “[a]ll of

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\(^3\) See the collection of essays in Arestis [2007], especially Arestis’ own summary. For a specific discussion of ‘new consensus’ monetary policy, see Arestis and Sawyer [2008]. Wren-Lewis [2007] writes: “Twenty years ago, a standard way to teach macroeconomics was to contrast alternative ‘schools of thought’. There was a Keynesian approach, a Monetarist approach, a New Classical approach and so on... Nowadays macroeconomics, at least at the more advanced level, is taught in a very different way. Different schools of thought have largely disappeared. Instead we teach students that in macroeconomics, as in microeconomics, there is a mainstream core...” This has been claimed both as the ‘triumph of monetarism’ [DeLong, 2000], and the ‘triumph of Keynes’ [Dalziel, 2002]. The extent of the effect of the global financial crisis of 2008-09 on the consensus remains to be seen.
these accounts view the Great Inflation as a result of monetary policy error and the Inflation Stabilisation as a restoration of more effective monetary policy.” For example, Nelson [2004] puts forward the ‘monetary policy neglect hypothesis’, while from a different perspective, Cecchetti et al [2007: 42] themselves explain ‘the Great Inflation’ in terms of policy deviations from the Taylor rule, i.e., that a central bank should set interest rates according to a formula linking them to the output gap and the distance between actual and target inflation:

Summing up the international comparisons, three of the four countries exhibit a qualitatively similar pattern in which deviations from a simple policy rule in the 1970s and early 1980s are consistent with the timing of the increases and declines in trend inflation (and its volatility). The peak in the inflation trend and the undershooting of interest rates relative to those implied by a Taylor rule generally occurred around the mid-1970s. There also is some evidence that increases in deviations from policy rules (in an accommodative direction) accompanied increases in trend inflation in the early 1970s.

Yet the Taylor rule was not formulated until 1993. Such confidence in the current macroeconomic consensus is tied to an implicit belief that the economic system has remained essentially the same over time – at least in its macroeconomic properties. It is inevitably reflected in a certain teleology in historical narratives, as the errors and instability of the past are easily explained as a failure to be more like the stable present, and the emergence of that present appears as the inevitable triumph of correctness over error. The stories can be more or less complex: for example, Romer and Romer [2002: 1] present the zigs and zags of U.S. policy history as truth forgotten but eventually regained with sharper vision: “... an evolution from a crude but fundamentally sensible model of how the economy worked in the 1950s, to more formal but faulty models in the 1960s and 1970s, and finally to a model that was both sensible and sophisticated in the 1980s and 1990s.” Alternatively, politics can play a role, alongside the evolution of theory: economists and policymakers knew what they should do but were prevented by the irrationalities of politics. Or political choices were rational but preferences changed: the public once preferred low unemployment to low inflation, and later changed its collective mind. [Meltzer, 2005]

But all these accounts share a conception of policy history as driven primarily by changes in policy conception and action, while the economic environment in which policy operates remains stable – in the sense that given some policy action, other elements will react in a stable way. In fact, much of this wave of research largely dismisses or downgrades the importance of once-common supply-side explanations for stagflation: such as supply shocks from oil and commodity prices and/or structural effects from the labour market. [Cecchetti et al, 2007: 26-31]
This notion that “the mystery element in monetary policy” [Coombs, 1971 (1954)] has finally been cleared up has been a recurring theme in economic thought. Time and again, paradigms have been knocked over and pre-Enlightenment history re-written as a tragicomedy of grievous, incomprehensible error. Since World War II, there have been three such Enlightenments: the postwar Keynesian-neoclassical synthesis, the monetarist moment of the 1970s and early 1980s, and the ‘new macroeconomic consensus’ solidifying in the late 1990s. They are incapable of understanding the basis of pre-Enlightenment theory as anything other than misguided because they fail to conceive of the economic system itself as capable of evolution. They do not register that the closure imposed by theory can lead to a valid and useful generalised model of real structures and yet be broken down because the systems are not closed in reality – they can be broken down by exogenous shifts in their supporting structures, or by their own internal contradictions.

From ‘Keynesianism’ to ‘neoliberalism’

A second problematic approach to the transition is the discourse of ideologically-driven policy regime change. Generally critical of the present policy regime, it implies a total rupture between the so-called Keynesian postwar system of capitalism, and the present neoliberal system. Each system is a coherent whole, though no doubt plagued by its peculiar contradictions, and each is an expression of the policy choices of governments, which are in turn explained by their guiding ideologies. Its change narrative centres on the rise of 'neoliberalism' as an ideology, due to some combination of the influence of myopic technocratic economists, and the deliberate strategy of capital (e.g., Harvey [2005]).

A typical instance of this very well-known trope in left/liberal discourse is George’s [1999] “short history of neoliberalism”. She traces its success as “the major world religion” to a promotional network beginning from a “tiny embryo at the University of Chicago with the philosopher-economist Friedrich von Hayek and his students like Milton Friedman at its nucleus”:

They have built this highly efficient ideological cadre because they understand what the Italian Marxist thinker Antonio Gramsci was talking about when he developed the concept of cultural hegemony. If you can occupy people’s heads, their hearts and their hands will follow... [T]his vast neo-liberal experiment we are all being forced to live under has been created by people with a purpose. Once you grasp this, once you understand that neo-liberalism is not a force like gravity but a totally artificial construct, you can also understand that what some people have created, other people can change. But they cannot change it without recognising the importance of ideas. [George, 1999]
In Australia, detailed histories of the rise to ideological dominance of ‘economic rationalism’ (a local synonym for ‘neoliberalism’) have been written from both a critical liberal (Pusey [1991]) and a more sanguine conservative perspective (Kelly [1994]) – both sharing a vision of change as a result of ideological conversion at the top of political parties, business and the policy bureaucracy. More recently, and famously, sitting prime minister Kevin Rudd [2009] put his name to an essay which draws on and itself exemplifies this tradition, criticising “the 30-year domination of economic policy by a free-market ideology that has been variously called neo-liberalism, economic liberalism, economic fundamentalism, Thatcherism or the Washington Consensus”:

The ideology of the unrestrained free market, discredited by the Great Depression, re-emerged in the 1970s amid a widespread belief that the prevailing economic woes of high inflation and low growth were exclusively the result of excessive government intervention in the market... The advocates of neo-liberalism have sought, wherever possible, to dismantle all aspects of the social-democratic state... Neo-liberalism progressively became the economic orthodoxy. [Rudd, 2009: 22]

In some ways this is the critical mirror image of the ‘new macroeconomic consensus’ history.\(^4\) Instead of a stable system in which one element changes (policy), it presents a total systemic transformation initiated by one element (policy). Instead of a narrative of correct ideas triumphing over error, it presents a story of bad or malignant ideas triumphing over good.

What both approaches share is a collapsing of history into one dimension, into a narrative centring on a single structure – policy. In the one case, although the economic system depends on policy, policy has no effect on it, it can only play its assigned role properly or the system breaks down. In the other case, the whole system is essentially an expression of policy. Even though each presents either system abiding, or old system before and new system after a break, the system – as an ensemble of heterogeneous functionally-related elements, each with its own time horizon – falls out of the picture so far as history is concerned, collapsed flat into a single element.

1.2 The approach of this thesis

My own approach is to present a more structural account of this historical transformation of economic policy within the broader economic system, which will also involve a properly

\(^4\) Not all accounts of ‘neoliberalism’ are subject to these criticisms. Howard and King’s [2008] recent account of “the rise of neoliberalism in advanced capitalist economies”, for example, is closer to my own approach. They too criticise ideology-centred narratives and make a much more subtle argument about the multiple historical tendencies which reversed the previously apparent movement towards a de-marketisation of capitalism. Their argument focuses on micro-economic developments – my thesis could be seen as a complementary account of macroeconomic tendencies.
historical approach to economic structure itself. This means taking seriously the nature of systems as functional relationships between heterogeneous structures, with no guarantee simply from the fact of functionality that functionality will continue. Social systems are never simply self-reproducing – as discussed above, the modelling of a system always involves treating provisionally as closed what always depends on conditions external to it. A historical approach to structure can find its material in tracing precisely the changes undermining the closure.

Such changes may come from outside the system, i.e. an *exogenous* impact on one or more of its supporting structures from a source itself not directly implicated in the system. Or they may come *endogenously* from the undermining of a supporting structure resulting from side-effects of the workings of the system. Development occurs through the working out of these external and internal contradictions. Because the imposition of system closure is epistemological rather than ontological (though particular functional relationships between structures are certainly real), the identification of particular contradictions as internal or external depends on the frame of reference. In my treatment of history I make use of contemporary economic theory as frames of reference – the self-image of the policymakers of the age – relating them to disturbing events which seemed to come from outside the frame, even if very much inside the social sphere.

I do not attempt to present an account of the economic system as a whole, as that is an impossible task. However, I believe a focus on economic policy is a useful vantage point for viewing shifts in the wider system. In Chapter 2 I argue this case, drawing on the Poulantzian tradition of state theory as developed by de Brunhoff and Jessop. This tradition emphasises that policy is only an element within the economic system. While policy has particular powers and strategic objectives, it is in no way above the system. It thus avoids the error of treating the system as an expression of policy, which I have argued above has been a common problem in narratives of successive policy regimes. Yet, at the same time, it recognises that policy takes on the responsibility of ‘troubleshooting’ the system – it generates a form of agency which is driven to conceptualise the system as a whole and act to support its integrity and healthy development. This is why tracing policy is a useful entry-point to tracing wider systemic evolution. I discuss the tradition of economic policy theory inaugurated by Jan Tinbergen in relation to this state theory. Tinbergen, a Dutch economist and policy adviser of the postwar period, developed a language for thinking about policy within economic models – ‘endogeneity’ and ‘exogeneity’, ‘targets’ and ‘instruments’ and so on. This language provides
a bridge between the critical state theory and the frames of reference of policymakers themselves and so helps me to set up this approach for later chapters. Chapter 3 is a more specific discussion of the position of the central bank within the monetary and financial system, developing the themes of the earlier chapter with reference to the visions of Marx, Keynes and the post-Keynesian 'structuralist' monetary theorists.

If economic policy provides a vantage point for viewing broader systemic change, following the thread of counter-inflation policy provides a useful focal point within policy as a whole. This is for reasons suggested at the beginning of this chapter: inflation’s connection to a wide range of economic sub-systems, and its apparent central role in the dysfunctions of the 1970s and in the organisation of policy afterwards. This judgement is clearly specific to the particular period of history under investigation. But in tracing the thread all the way back to the immediate post-war period, I go further back than many accounts centred on the crisis of the 1970s. These accounts, being preoccupied with crisis and rupture, miss or underplay the continuities with the policy problems of earlier decades. I argue that even though inflation was not an immediate systemic threat in the post-war period, it nevertheless shaped ‘Keynesian’ macroeconomic policy to a much greater extent than is now commonly remembered. Macroeconomic policy in the two post-war decades was often a matter of restraint rather than stimulus, and the capacity for such restraint had to be built – in particular the powerful central bank that would become so important later. A consequence of this is to counteract the idea that the policy transition from ‘Keynesianism’ to ‘neoliberalism’ was a complete reversal, a return to pre-Keynesian orthodoxy. On the contrary, I argue that neoliberal macroeconomic policy – considered as institutional capacity and strategy as much as theory – is very much built on a Keynesian foundation.

The body of the thesis, Chapters 4 through 9, is structured in two chronological parts which divide my whole period in two: the first deals with 1945-65, and the second with 1965-85. This division appears somewhat arbitrary, and does not sit well with the argument above about the structured nature of historical time. In fact, though, I do not present the history chronologically and evenly spread over the years. In each section, I cover the same chronological ground three times in separate chapters with reference to different aspects of counter-inflation policy. Although they overlap and connect to one another at many points, each chapter has its own rhythm in which different periods of chronological time are more important than they are in their companion chapters. This structure of presentation allows me to cope with the nature of social structure, as discussed above: composed of relatively
autonomous spheres with different historical time frames. In general, events in some periods stand out as more important to the story than others – for example, there is less material on the whole of the relatively stable 1960s than on the first half of the 1950s – and I have accordingly dubbed my periods ‘the long 1950s’ and ‘the long 1970s’.

Both periods are treated as periods of movement – structural development – rather than as static ‘regimes’. This is surely unsurprising with regard to the ‘long 1970s’, which were more obviously transitional. But my argument is that the ‘long 1950s’ were as much a period of systemic evolution. ‘Keynesianism’ did not arrive as a ready-made template for policy – its instruments had to be forged, often in opposition to other agents; it ran into unforeseen problems, most notably chronic inflation; and the economic system more broadly was evolving relatively autonomously of policy. There is nothing in my treatment of structure and history above to suggest that systems change only by passing through crisis. All too often political economic treatments of history emphasise total ruptures between discrete regimes. I aim to avoid this by showing both the structural dynamism of the supposedly static ‘Keynesian’ period, and by documenting the length of time over which the problems of the 1970s worked themselves out. The crisis in the latter period was no sudden break, but a long, drawn out stretch of policy confusion.

The three frames through which I treat the periods are:

A. international linkages (Chapters 4 and 7);

B. inflation, unemployment, and distribution (Chapters 5 and 8); and

C. monetary policy (Chapters 6 and 9).

I begin each period with the relationship between counter-inflation policy and Australia’s economic embeddedness in the world economy. This may seem an unusual angle from which to approach the subject, but I have put it first because of its argument that problems with the balance of payments (in the earlier period) and the exchange rate (in the later period) were decisive in forcing policy to prioritise counter-inflation. The middle chapter is the core narrative of how policymakers perceived inflation’s relationship to other policy goals, what they tried to do about it, and how they went about it. The third chapter takes a narrower focus on a more complex topic: the development of monetary policy as a counter-inflationary tool – the importance of which shifted dramatically over time, but whose paths in the later period were partially set in the earlier.

Chapter 10, my conclusion, reviews the developments discussed in the body of the thesis in a
broader context. The increasing prioritisation of inflation within economic policy represented a major historical shift in the place of the state within the capitalist economy, in Australia as elsewhere. In fact it was the culmination of a very long trend in state management of the value of money. It saw the link between money and a particular commodity finally cut, replaced by management in terms of the rate of change of the value of a basket of commodities. As always, the management of money’s value set limits to other policies. Capitalism’s need for a stable standard of value ultimately made full employment non-viable as a policy goal.

1.3 A précis of later chapters

PART ONE: INTRODUCTION

2: Explaining economic policy

I draw on Poulantzas, de Brunhoff and Jessop to outline a Marxian theory of economic policy. This tradition emphasises that economic policymaking institutions are not above the economy but strategic actors within a conflict-ridden, sometimes dysfunctional system, with a responsibility for maintaining its coherence. This justifies the basis of the main body of the thesis in narratives about policymakers’ action and the policy/theoretical discourse in which they represent the economy and their place within it. A critical study of Tinbergen’s theory of economic policy provides a bridge between the Marxian state theory and the discourse of policy in the postwar period.

3: The state in the financial system

This is a more detailed development of the themes of the previous chapter focusing specifically on the shifting strategic position of the central bank within an evolving monetary/financial system, providing the theoretical basis for Chapters 6 and 8. I contrast Marx’s and Keynes’s theories of central banking, arguing that Marx provides a more appropriate vision of a less-than-omnipotent central bank, but that Keynes’s concept of liquidity provides something necessary. I show how Minsky and other post-Keynesian ‘structuralists’ deal with liquidity ‘as a social relation’ in a manner that problematises central bank control and fits with Marx’s vision.

PART II: THE LONG 1950s

4: Inflation and ‘external balance’
This chapter examines the connections between international economic relationships and domestic inflation and counter-inflation policy. The fixed exchange rate meant that cumulative payments deficits could be sustained only so long as foreign currency reserves lasted, and also that shifts in international demand and prices would have direct macroeconomic impacts on Australia. I look at how Australian economists conceptualised these relationships, focusing especially on the Swan model, which emphasised that ‘external balance’ and the level of domestic output/employment depended on the same two factors: the level of domestic expenditure and the ‘cost ratio’ of domestic to foreign prices, so that policy required control over both factors to maintain external balance and full employment simultaneously. The wool boom of 1950/51 fuelled a massive and sudden inflation which left the Australian ‘cost ratio’ and money-incomes high, generating a persistent tendency towards balance-of-payments crises. This, in turn, motivated policy to prioritise counter-inflation policy – in terms of the Swan system, policymakers lacked control over the cost-ratio and sought to gain such control.

5: Counter-inflation policy in general

This chapter is based around the growing realisation of a contradiction between full employment and price stability. The idea that maintaining both simultaneously was about positioning the level of aggregate demand at a single point that would satisfy both goals was disappointed. I trace the disappointment as perceived theoretically and dealt with practically by policymakers, and show how these two lines of development interacted. Theory moved from the simple ‘inflation gap’ analysis in two directions. First, it explored the grey area of aggregate demand in which inflation and unemployment coexisted, which involved questions of the relationship between unemployment and money-wage growth. Second, it attempted to deal with the phenomenon of inflationary momentum, in which previous periods’ inflation fed future rounds. Internationally, the Phillips curve emerged as a partial resolution of these questions, but the first more than the second, and I show that it was received less favourably by Australian economists. Practically, these questions played out in the government’s attempts to use the arbitration system to restrain money-wage growth and moderate inflationary momentum, and thus improve price stability without the cost of unemployment. But it had limited success, and I argue that unemployment was allowed to discipline wages and prices in the recession of the early 1960s.

6: Monetary policy

This chapter covers the development of monetary policy as a counter-inflationary tool in the
postwar period. Australia was really starting from scratch here, as the pre-war Commonwealth Bank had not performed normal central bank functions except in a very limited sense as a clearing house and monopoly foreign exchange dealer. The private banks resisted the advent of monetary policy with all their political might, sparking first the failed attempt at nationalisation and then a protracted process of conflict and compromise over the 1950s, culminating in the creation of the Reserve Bank in 1959 and the private bank acquiescence to central bank control via variable reserve ratios. Even as the central bank achieved this measure of control, a bank-centred monetary policy was being undermined by the rapid development of non-bank hire purchase and other finance companies. I discuss this evolution in light of the structuralist perspective outlined in Chapter 3, showing that it was related to tight official controls on interest rates, which opened a space for the new financial institutions that could evade those controls. By the end of the 1950s they were seriously interfering with bank-centred policy, because whatever success policy had in restraining bank credit sent borrowers to the non-banks. Fine control over non-banks proved impossible without varying interest rates, and an attempt to choke them off wholesale as another balance-of-payments crisis approached in 1960 sparked the ‘credit crunch’ and ensuing recession. In the long run, policy was forced to take a more flexible approach to interest rates and increasingly work through market operations.

**PART III: THE LONG 1970s**

7: Inflation and the exchange rate

Picking up the threads of Chapter 4, this chapter examines how the twin impact of increased capital mobility and increasingly flexible exchange rates modified the constraints on domestic macroeconomic policy. I argue that the imperative to control inflation remained throughout, but the mechanisms by which it was enforced changed their form. Once again, I begin with the transformation of theoretical discourse, and then trace how the issues played out in policy practice. The Swan model of the links between ‘external balance’ and domestic macroeconomic conditions treated capital flows as an exogenous afterthought. This was increasingly untenable by the late 1960s and the Swan vision was a thing of the past. The newer Mundell-Fleming model and the monetary approach to the balance of payments (and exchange rate) assumed complete capital mobility, which was a thing of the future. In between, the dynamics were messy and uncertain and policy strategy shifted chaotically as crises piled up in the 1970s. There is no alternative to treating this chaos narratively – as one
thing after another – but I try to maintain a focal thread by focusing on the pressures on the exchange rate as authorities moved from attempting to use the rate as a counter-inflationary tool to progressively abandoning any attempt to withstand market forces on the rate. These, in turn, were driven – or at least, interpreted to be driven – primarily by expectations of domestic inflation relative to that abroad. Given the feedback effect of a falling exchange rate on domestic inflation, to avert the risk of a downward spiral governments were obliged to ‘fight inflation first’ and reassure the market that policy would do whatever it took to contain inflation, at least relative to the globally prevailing rate.

8: Counter-inflation policy in general

In this chapter I build my argument by contrasting it with two popular arguments. The first of these is the orthodox story that stagflation was a result of policy trying to exploit a trade-off between unemployment and inflation that did not exist in the long run, while the other blames the permanent rise in unemployment of the 1970s on a deliberate policy decision to end full employment. Picking up the argument of Chapter 5 that the Phillips curve was received sceptically in Australia, I show that economists and policymakers did not in fact neglect inflationary momentum (whether due to expectations of future inflation or income catch-up from past inflation). When Phelps-Friedman-type ‘expectations-augmented’ Phillips curve models were used by contemporary econometricians investigating Australian data, they generally found the ‘non-accelerating inflation rate of unemployment’ to be around 2 per cent, i.e. the same figure that had been used to represent ‘full employment’ by Keynesians in the 1950s. Only in the 1970s does the figure move, jumping to above 5 per cent. Thus incorporating inflationary expectations in this way does not explain that jump – which was recognised at the time. However, because the rise in unemployment accompanied the rise in inflation in the 1970s, rather than being preceded by it, it is difficult to maintain that it was deliberately provoked by policy choosing to prioritise fighting inflation for ideological reasons. I suggest instead that the emergence of stagflation was not a result of bad policy, but rather occurred for reasons beyond the scope and reach of demand management policy – involving distributional conflict over a declining rate of output growth.

9: Monetary policy

Having dealt with the expectations-augmented Phillips curve aspect of monetarism in Chapter 8, here I deal with its other side – the restated quantity theory of inflation. As the financial system became increasingly complex and internationally connected, ‘control of the money supply’ became even less what the central bank did that it had been in the 1950s and 1960s. I
contrast the increasingly ornate strategy of the monetary authorities with the political rise of the demand that it simply control the money supply. When monetary targeting was imposed on the Bank by the Fraser government, I show the difficulties it presented in practice and the inevitable failure. I discuss the Financial System Inquiry and the program of deregulation insofar as it intersects with these issues and reflects upon the problem of counter-inflation policy.
2: Explaining economic policy

2.1 Explaining policy

This chapter takes up the abstract discussion about social structure and agency from the Introduction and focuses slightly more concretely on the particular social structure and practice of economic policy, drawing on the Poulantzian tradition of state theory as developed by Jessop and de Brunhoff. Or should that be ‘structures’ and ‘practices’, plural? I discuss the extent to which the various economic policymaking bodies can be considered to act as a coherent strategic unit in Section 2.2, arguing that the ‘macroeconomic revolution’ in policy was partly about the deliberate forging of such a unity, which nevertheless remained incomplete and problematic. In Section 2.3 I discuss the theory of economic policy developed by Dutch economist and policymaker Jan Tinbergen, a true organic intellectual of the postwar technocracy. I show how his language of instruments and targets, parameters and exogenous and endogenous variables represents political-economic contradictions when it comes across them. This provides a bridge between the Marxian state theory of the earlier section and the self-image and strategic thinking of policymakers discussed in later chapters. Finally, in Section 2.4 I foreshadow the later discussion of the issues raised by inflation as a problem for economic policy.

My explanation for the development of policy is structural rather than ideological. By this I mean that I do not explain the shifts in policy in my forty-year period as an outcome of ideological struggles, first as the rise of ‘Keynesianism’ and then its fall at the hands of ‘neoliberalism’. I suggest that the relative strengths of the ideologies in political struggle was itself determined by the changing, interdependent structures of state and economy, which exerted strong pressures of selection. This is not to deny independent influence at specific points from the details and discursive structures of the warring ideologies, or from particularities of the actors and groups through which they warred, but I will argue baldly that this is the less enlightening part of the story, and in any case a story already many times told.
Beyond the ‘Keynesians versus neoliberals’ story are more subtle questions about how the mainstreams of those ideologies were themselves sculpted by the political-economic field in which they sought to embed themselves: Why, from Keynes, effective demand and the IS-LM apparatus, and not “the euthanasia of the rentier”? On the other side, why Friedman’s strong, rule-bound central bank and not von Hayek’s free banking? Ideologies do not conquer by the superiority of their reasoning, and the structures of the social networks through which they take material political form and come into contest are shaped by selective pressures from the broader social conditions in which they emerge.

What form do these selective pressure take? I follow Jessop’s [1990: 260] analysis (adapted from Poulantzas) of the state as “a system of strategic selectivity,” that is

a system whose structure and modus operandi are more open to some types of political strategy than others. Thus a given type of state, a given state form, a given form of regime, will be more accessible to some forces than others according to the strategies they adopt to gain state power; and it will be more suited to the pursuit of some types of economic or political strategy than others because of the modes of intervention and resources which characterise that system.

Or, as he later developed the concept:

The state is an ensemble of power centres that offer unequal chances to different forces within and outside the state to act for different political purposes. How far and in what way their powers (and any associated liabilities or weak points) are actualised depends on the action, reaction, and interaction of specific social forces located both within and beyond this complex ensemble. [Jessop, 2008: 37]

This notion has the advantage of conceiving social structure in a way that does not neglect agency and subjective creativity; it merely emphasises that they are embedded in social structures that put up more resistance against some strategies than others, and thus tend to select some over others. It is not determinist, as history remains open to choices and the chance outcomes of interactions between the intertwining strategies of many social actors. Thus these outcomes more often than not unintended by anyone in particular.

My object of study, therefore, is the structural pattern that tended to select counter-inflation policy as a dominant aspect of economic policy in Australia during the period studied, and tended to shape it in a particular form. It is not simply a narrative history of the development of counter-inflation policy. It seeks to go one step deeper than such a history to explain why, although other counterfactual histories were certainly possible, the structure of capitalist society was such that the dominance of counter-inflation policy was no accident. The structure was in fact strategically selected, not by the arbitrary ideological whim of policymakers but
by the structure of the interdependent state and economic systems in capitalist society at that point in their historical development.

The protagonists of my story are ‘policymakers’, a collective term which denotes a diverse assortment of individuals and institutional actors from Treasurers to central bankers. But in what sense can we consider ‘economic policymakers’ collectively as a strategically-acting subject/actor? For Poulantzas and Jessop subjectivity and agency are explicitly denied to the state as such. Rather, the state is a *social relation*, in the same sense in which for Marx, capital is a social relation – a structure reproduced through relationships between people, mediated by things. However, de Brunhoff [1978] – writing within the Poulantzian tradition – argues that economic policy, in specific historical conditions, came to act *as if* it were a unified strategic actor. I will retrace this argument, which explains my reasoning for centring my narrative on the strategic action of policymakers as a group.

### 2.2 Economic policy as an emergent strategic agent

The reproduction of capitalist society occurs (among other things) through the continual reproduction of both the economic and state systems. Both systems are complex ensembles of institutions and practices. They are not separate from one another, but interpenetrate, with each dependent on the other. Nevertheless, we can distinguish them from one another as *relatively autonomous* structures of quite different types. The capitalist economic system is one of production and distribution organised primarily through a combination of property (and therefore the capital-labour relation) and value (competition and exchange) relations. Capitalist states are organised around a legal system, bureaucracy and sovereign deliberative system, the latter a site where the other two branches are constituted and reconstituted.

The economic system is not self-reproducing and depends on the state in a number of ways, most obviously for the legal foundation and enforcement of property rights, contracts, and so on. Beyond these ‘night-watchman’ duties acknowledged by classical liberalism, it also depends on the state for the reproduction of certain moments in the circuit of capital, namely, labour power and money. Though historically capitalism emerged partly through the convergence of the spontaneous production of these elements (i.e., it developed originally on

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5 Note that the systems have quite different geographical extents. The economic system is a global system, a world market, though forces of competition and therefore value relations are disrupted by national boundaries and other geographical factors. States, on the other hand, are territorial. Of course at a global level we can talk of an international state system, individual state systems are interrelated with those of other states, and so on, but in quite a different way to the relatively smooth geography of economic interaction. This will be elaborated with respect to economic policy below.
the basis of commodity money and the surplus rural population emerging in late-feudal society), their reproduction proved to be ridden with contradictions and tending towards periodic crisis. In both cases state institutions and activities emerged to stabilise their reproduction. As de Brunhoff [1978] describes, work discipline and a wage compatible with the generation of surplus value depends upon the reproduction of a pool of unemployed labour (the ‘reserve army’) which competes with the employed for work but receives no subsistence from capital and therefore requires state management, in some form from workhouses to the dole. Capitalist forms of credit money develop on a basis of commodity money but are unstable, resulting in periodic devaluations and/or deflations – so central banks emerged to manage banking systems, counteract the cycles of over-extension and crash, and facilitate integration with world money. In neither case does the state control what it intervenes in, but it becomes “necessarily involved in the reproduction” process. [de Brunhoff, 1978: 40]

The state has a certain institutional unity, based, in the case of the typical democracy, on the unity of the top executive branch, answerable to the law-making body. But at the same time, its structure contains a very diverse range of elements. These elements develop in an uneven way in response to a wide range of ‘problems’ in wider society, and are not necessarily perfectly co-ordinated. Potentially different branches work at cross-purposes, as the ‘problems’ they deal with represent social contradictions in the sense that ‘solutions’ counteract one another. Different ideologies develop within different branches, reflecting the different perspectives their particular ‘problems’ throw on the social whole; for example, a ‘Treasury line’, a police worldview, and so on. State power, in Poulantzas’s terms, is at best a “fissiparous unity”. [Poulantzas, 1978: 136]

To follow de Brunhoff’s examples, the problems involved in reproducing labour power and those of managing money historically led to the evolution of quite different state apparatuses, with little apparent overlap: on one side institutions from workhouses to pensions, and on the other central banks and banking legislation. She does note the historical proximity of the Poor Law (1834) and the transformation of the Bank of England into a central bank proper a decade later: “The law seems to have defined its gold reserves and its reserves of labour power almost simultaneously.” [de Brunhoff, 1978: 61] But it is debatable whether this is much more than coincidence, and the more important point is that the central bank and the operation of the Poor Law were completely unco-ordinated, despite the fact that the unemployment and monetary phenomena they each dealt with were closely connected in the
economic sphere. There was, in the nineteenth century, nothing like a unitary state subject intervening in the economy.

By the mid-twentieth century this had changed. For de Brunhoff the Depression, New Deal and Keynesian revolution are an historic break in this regard, before which ‘economic policy’ – as opposed to _ad hoc_ management of labour power and money – cannot be said to have existed. In my view, at least in the case of Australia, the mobilisation of World War II was the watershed. The ideological/scientific shift within economics during that period was crucial, including not only Keynes but a wider range of developments including especially the development of econometrics and great expansion in government statistical collection. But it did not, I think, come entirely out of the blue. We can trace the roots of this emergence further back, in the developing awareness and playing out of the contradictions between the emergent power of organised labour and the demands of world money – a story I will develop with regard to Australia below.

A crucial symptom of the turning point, for de Brunhoff, is the emergence of the state within theoretical economic models as a coherent actor, even a ‘subject’, with the power to set key systemic variables in the pursuit of certain objectives.

> What is significant here is the notion of involvement by the state in some global task of an economic character… The reproduction of labour power and the general equivalent [i.e. money] remain the key points of state intervention, but the forms of their management have been modified because of their incorporation of a global framework, whose emergence reflects real changes in bourgeois strategy which require examination. [de Brunhoff, 1978: 62-63]

A material precondition for this ideological shift was that branches of the state had _already evolved_ into key points within the economic system. Central banks occupied the apex of the domestic banking pyramid, and by centralising foreign exchange formed a nexus between domestic credit-money and world money. Income flows of a substantial size passed through treasuries in taxation and public expenditure. Arbitration systems of various types (in Australia, judicial) had emerged out of industrial conflict. The theoretical reconceptualisation of the economic system in macroeconomic terms identified these points as potentially _strategic_ points from which money flows could be strengthened, weakened, and rechanneled.

The macroeconomic reconceptualisation centred on two key variables: aggregate demand and the money-wage. The first is the most widely-acknowledged element of the ‘Keynesian revolution’ – the insight that unemployment of labour and other resources was not necessarily a matter of relative prices being either in disequilibrium – the problem therefore being
temporary – or distorted by market power, especially that of labour organisation. Involuntary unemployment could be a result of insufficient aggregate demand, and wage adjustment might be counter-productive. A Say’s Law world in which monetary flows were a minor secondary phenomenon faded before a vision of monetary leakages and injections, a system which could be mapped with the host of new statistics collected for the purpose. One such map was Copeland’s [1952] Study of Money-Flows in the USA:

In his model of the entire circuit, transactions are defined as transfers of rights agreed between two subjects representing units of account receiving and spending money. Each sector is located ‘between’ other sectors, so that none has an initial or final role. After this presentation of a homogeneous circuit, with no beginning or end, Copeland attempts to define the strategic sectors: those which have some power over their own monetary flows (like the government with a war time budget) or some power over the monetary flows of others (like the banks). The characterisation of public expenditure in terms of flows inserted into the circuit is an essential precondition for the presentation of state regulation as economic policy. [de Brunhoff, 1978: 76]

The reconceptualisation made new practices possible with existing institutions: the government budget, formerly considered simply in bookkeeping terms as the accounts for government operations, now became a lever. Likewise, central banking shifted from being a relatively passive clearing house and overseer of the banking system, where policy was mainly a by-product of its own reserve management, towards macroeconomic responsibility. Because their target was the same – aggregate demand – both institutions were unified, however imperfectly, in a collective enterprise in which they became two arms of a single ‘economic policy’.

The new theory prescribed a new role for these state institutions. But it took some time, and organisational restructuring, before the treasuries and central banks fitted the part. The ‘Keynesian revolution’ was an ideological child of the Depression, and the 1930s saw some experiments with stimulatory public works spending – contemporaneous with, but not inspired by, the General Theory. [Bleaney, 1985: 49-80] But the full development of ‘economic policy’ in de Brunhoff’s sense was really a postwar phenomenon. It took the mobilisation of war and reconstruction to overcome institutional inertia and reorganise the institutions, and it took a decade or two for the new sensibility in economic theory and policy to cohere into a fully-developed orthodoxy. Even in the 1950s, as we will see, the formation of an institutional ensemble capable of filling its prescribed role was still a project rather than a finished reality.

The transformation of the Australian Treasury is illustrated by Crisp [1961]. From a duty, in
Gladstone’s words, “to save what are meant by candle-ends and cheese-parings in the cause of the country”, by 1954, Deputy-Secretary Randall was reporting that it was “mixed up in all manner of activities not dreamt of half a century ago”. Crisp summarises:

What we may broadly call the Keynesian economics and public finance became available only in the late 1930s as a theoretical framework and justification for a whole set of new methods and policies. They emerged just in time to be matched with wartime exigencies and opportunities and, enriched by experience then gained, to form the foundations of thinking about post-war policy… The Budget’s ‘housekeeping’ purpose still retained its intrinsic importance sufficiently to determine, or at least powerfully to influence, many policy issues. But this role was not transcended by the new conscious and positive – and far from simple – instrumental use to be made of the Budget in the wider context of national economic policy. Its magnitude and detail were now designed to influence investment decisions, the general levels and pattern of investment and the demand for goods and services. Its extremely complex effects on incentives, cost structures, inventories, labour supply, the balance in the supply of basic necessities and ‘inessentials’ would be carefully watched, for they were shot through with political as well as with economic significance. [Crisp, 1961: 321, 323-24]

The map was not the territory, and the theoretical map was continually redrawn as policy practice met unforeseen resistance, unintended consequences, and new problems in the economic sphere. Note, for example, the list Crisp gives above of the “extremely complex” effects of fiscal policy on incentives, cost structures, etc. Things were not as simple as a model in which policymakers selected the appropriate level of aggregate demand. Most importantly, the policy apparatus forged intellectually in the battle against Depression was called upon for quite a different kind of war.

There was irony in the fact that their first applications occurred under conditions of full (even over-full) employment and vast unsatisfied demand, rather than of unemployment and underconsumption such as challenged the powers of constructive analysis of Keynes and his colleagues in the inter-war years. [Crisp, 1961: 321]

Keynes’s General Theory was motivated by, and organised around, a single problem: “the failure of the economy to generate enough aggregate income to keep its people employed… proximately due to firms’ unwillingness to operate at a sufficiently high level of production; that unwillingness in turn… due to their estimate, fulfilled in the case of unemployment equilibrium, of inadequate demand for their output.” [Chick, 1983: 47] However, addressing that problem involved a much wider vision of the economic system, a theoretical system which could deal with many other phenomena, and versions of this vision were developed by many others besides Keynes in many different directions. Likewise, the great problem of

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6 Gladstone’s remark comes from a speech in Edinburgh, 1874, quoted by Crisp [1962: 316], and Randall, quoted [ibid: 319].
Depression unemployment motivated the reorganisation of the state’s economic apparatus into a coherent mechanism for acting strategically within the economic system – though of course, still exhibiting Poulantzas’s ‘fissiparous unity’. The third part of the story, and the part this thesis as a whole explores (focusing on the Australian case), is the subsequent development of this institutional ensemble and the strategy which motivated it against an entirely different phenomenon – inflation.

2.3 Thinking like a state about economic contradictions: Tinbergen

The fact that the economic ‘problems’ appearing for policy resolution are plural raises the prospect that the demands made on the state pull in different directions. Even if the various branches of economic policy are pulled together as if to form a unified strategic actor, there is no guarantee of an optimal strategy capable of resolving the contradictions underlying the symptomatic problems. Rather, the contradictions reappear in the political realm. The original Keynesian objective of ‘full employment’ was in reality only one among several objectives governments attempted to steer the economic system towards, including rapid growth, ‘external balance’, and, of course, price stability. A number of objectives, then, but only one economic system, and within the system the objectives were not independent of one another. Some were very much in tension with others.

In this thesis I am concerned with the tension between price stability and other goals: first why it appeared, given the structures of the economy and state, and second, why it – originally a subsidiary goal – increasingly came to dominate policy strategy.

Australian policymakers became increasingly aware over the course of the post-war period of the tensions between their objectives, as I discuss in Chapters 4 and 5. Such a sense of contradiction and trade-off pervades the 1965 report of the Committee of Economic Enquiry, commissioned by Prime Minister Robert Menzies precisely to investigate the tangled mess policy seemed to be in following the credit crunch and recession of the early 1960s:

> It must be recognised that the attainment or near attainment of any one of the seven objectives of economic policy may make the attainment of others more difficult… Thus, the nearer an economy is to full employment, the more difficult it is to achieve stability of costs and prices. On the other hand, stability of costs and prices makes for external viability, although action to achieve external viability, for example, by exchange devaluation, may operate against stable prices. In short, all objectives cannot be ‘maximised’ simultaneously… [Vernon et al, 1965: 46]

Similar conclusions had been reached in other countries, and the 1950s had seen the
emergence of a new genre of economic theory examining precisely this issue. Perhaps its most clear and influential expression came from Dutch policymaker and academic economist Jan Tinbergen [1955, 1966]. In Tinbergen’s work we get something approaching a picture of how the economic policy ‘agent’ might think if it really did have a brain. The crisp formal models are still far from the messy uncertainty of diagnosis and action in the real-world economic bureaucracy. Nevertheless, his models capture with some clarity the structure of the economic policy problematic, opening the way for analysis of its contradictions and structural development – even if this aspect was not often followed up in the genre he established, with its ‘policy mix’ and ‘policy reaction functions’.

Tinbergen’s [1966] project is essentially about working out the interconnections between multiple economic objectives and assessing how, in consequence, policy instruments must be co-ordinated. This reflects the pseudo-agent-making process de Brunhoff [1978: 83] refers to:

> It is not possible to define an ‘economic policy’ simply by enumerating and adding together these various elements [– isolated institutions and goals]. A certain necessary homogeneity, affected by the reduction of these elements to monetary flows and interdependent sectors, is also required. But this alone is not enough. One cannot begin with a coherent project resulting from a global objective, towards which the various complementary policy measures would be combined. Such a model presupposes the existence of the state as subject, instead of showing how, in certain circumstances, the state ‘can be called upon to function as a subject’ of economic policy, even as the policy in question does not in any sense have a coherently defined totality of objectives or the mechanisms able to attain them.

Compare Tinbergen’s complaint of – and remedy for – a “tendency to an incoherent treatment” in economic policymaking:

> Measures regarding various instruments are taken separately, often at different moments and without much co-ordination. This tendency is to some extent based on the belief that there is a one-to-one correspondence between targets and instruments, that is, that each instrument has to serve one special target. Taxes and government expenditure are thought to be relevant to financial equilibrium, wage rates to employment, exchange rates to the balance of payments and so on. The interdependence is neglected or underestimated… It would seem that a better approach has now become possible. It is no longer necessary to neglect the interrelations, and a simultaneous consideration of all targets and instruments, as well as their quantitative relations, should be considered. [Tinbergen, 1966: 49]

His procedure is to build a formal model of the economic system which incorporates all the goals authorities pursue. He starts from a simple model in which only employment is targeted, and gradually adds in extra goals to show the additional complexity at each step. In each model, the relationships are corralled into a list of

- target variables;
• instrument variables directly controlled by policymakers;
• exogenous data neither controlled by the policymaker nor targets in themselves; and
• a system of equations linking the variables together.

Targets are either absolute values (e.g., absolute price stability, or a given rate of inflation, or a rate of unemployment), or ‘flexible’ values to be maximised or minimised given other conditions. Targets might be ranked, as they are in practice, so that one overriding goal has an absolute value while another is pushed as far as possible given that limitation.

Instrument variables are assumed to be set by authorities. Depending on which variable is identified, this might stretch reality quite far: for example, where Tinbergen treats aggregate expenditure as an instrument, he grants far more control to fiscal and monetary policy than they actually have. It would be more realistic to identify only those components or determinants of aggregate expenditure which are genuinely under state control as instruments: the fiscal stance and the base interest rate, for example.7 Other influences on aggregate demand could then appear as exogenous data. Where to draw the line between (2) and (3) depends on the real conditions in which policy works.

In fact much of the history of policy development involves not the working of a fixed system of instruments, but attempts by policymakers to extend their effective reach, and counter-developments somewhere or other in the socio-economic sphere that frustrate them. All elements of ‘exogenous data’ are not equal: some are truly beyond potential state influence, while others are just beyond reach, more predictable or more susceptible to being coaxed in one way or another, holding out the prospect of pulling them fully into the policy orbit. Rather than a tight distinction between ‘instruments’ and ‘exogenous data’, then, it is better to think of a chain of causal influence between the instrument directly set by authorities and the ultimate target, with some elements closer to direct control than others. Tinbergen does not put it exactly in these terms, but he does make a distinction between ‘quantitative policy’, involving the working of an established system of policy transmission, and ‘qualitative policy’, which aims to reshape the system itself.8

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7 Even these variables grant too much control to the authorities – in reality fiscal stance is somewhat unpredictable, given its two-way causal interaction with private flows of expenditure, and even the stability of the central bank’s control over the base rate can come into question, while its effectiveness over other rates and quantities is uncertain and shifting.

8 In fact he distinguishes between ‘qualitative policy’ “in which the structure of the economy is changed” and ‘reforms’ in which changes affect “spiritual aspects or relations between individuals”, but it seems to me that this is a difference of magnitude rather than kind. Examples he gives of the former include rationing of goods or foreign exchange, welfare measures, changes to tariff structures and anti-monopoly legislation, and his examples of the latter include the introduction of a full-scale social security system, nationalisation and industrial democracy. [Tinbergen, 1966: 149]
Much of the policy theory inspired by Tinbergen’s work took on board only the idea of the formal models. The medium really was the message here, because the lesson of representing the policy system as a system of equations is that if conflicts are to be avoided, there must be one instrument per target, just as a solvable system of equations requires one equation per unknown. The best-known result here, which I discuss in Chapter 4, is the idea pervading 1950s theories of the balance of payments: that the apparent contradiction between external balance and full employment could be resolved with an extra policy instrument, the exchange rate. But Tinbergen’s own views are more subtle, because he is also preoccupied with both the technical and the social limits to the use of policy instruments. The bare system of equations implies that so long as there are equal numbers of instruments and targets, it does not much matter which instrument is assigned to which target. But Tinbergen, a practical policymaker as well as a theorist, recognises the material reality of the instruments: that using a policy instrument is both rarely as simple as choosing a value for a variable, but works within limits, and often has ’side-effects’ on groups within society which they resist.

Tinbergen thinks of such things in terms of ‘boundary conditions’, which could in principle be imposed as limits to variable values within the system of equations, but for the practising policymaker are of course much more nebulous and ill-defined. A classic instance of a technical boundary condition in the neoclassical-Keynesian literature is the ‘liquidity trap’ in which expansionary monetary policy fails to influence the interest rate beyond a certain point. In practice policy is continually grappling with many kinds of slippages in the effectiveness of its instruments. For example, investment was long seen in the postwar period to be interest-inelastic, so that interest rate adjustment would affect aggregate demand only at levels which were, in practice, inconceivable. On the fiscal side, there were real practical limits to the rate at which government expenditure could increase or decrease coming from the simple fact that it was not merely a component of ‘aggregate demand’ but also spent on real things – infrastructure, etc. – which could not be turned on and off like a tap.

Then there are the boundary conditions arising from social groups’ ‘defence lines’. Tinbergen [1966: 26] mentions, for example, limits to taxation beyond which the costs of evasion outweigh the desired effects, and wage reductions provoking worker rebellion. Here class conflict intrudes upon the system of equations, and once it does, there is no guarantee of a

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9 “With sufficiently complicated non-linear equations all phenomena of saturation, bottlenecks, etc., will be accounted for and no boundary conditions will have to be added. Boundary conditions are needed only as corrections on too simple linear equations.” [Tinbergen, 1966: 54]

10 “This may be so for physical reasons: if government building activity were an instrument, this activity cannot surpass the production capacity present in the relevant industry.” [Tinbergen, 1966: 59]
‘solution’, especially when the defence lines of different groups are simply incompatible, or irreconcilable by policy in its current form. Tinbergen gives a telling example from his own experience as a Dutch policymaker:

In the situation of that year [1950] and as far as the model used was a true representation of the Dutch economy, the calculations showed that the target set would require a wage decrease of 5%, a decrease in profit margins of some 13%, an increase in labour productivity of 4% and an increase in indirect taxes equal to 2% of prices. Both the wage decrease and the profit reduction seemed to be beyond the boundary conditions. A long list of alternative targets was then studied. Accepting a boundary condition of no reduction in the nominal wage meant the necessity of still heavier reductions in profit margins and a heavier increase in indirect taxes; accepting a boundary condition of no profit margin reduction implied impossible requirements as to labour: either a reduction in real wages of 13% or a reduction of employment by the same percentage, both accompanied by increases in labour productivity. [Tinbergen, 1966: 60]

Social contradictions are then manifest as policy contradictions, and something has to give: policymakers are driven into ‘qualitative policy’, i.e., attempts to change the structure of the economy, which in such cases must involve an attack on one or more groups’ capacity to maintain their defence lines, and/or moral suasion convincing them to pull back their demands ‘for the sake of the national economy’. To complete the picture, we need to recognise that the state does not have a monopoly on initiative in the changing structure of the economy.

Tinbergen [ibid: 149] gestures towards this in his distinction between (policy) ‘induced’ and ‘spontaneous’ changes in organisation, but spontaneous developments – that is, change emerging from the socio-economic system independently of policy – get no further mention. In reality, many ‘policy problems’ emerge not from any deliberate action on the part of authorities, but from the dynamics of the wider system and changes in subjective consciousness and strategy within classes, groups and institutions.

As long as it is remembered that Tinbergen’s instruments, parameters and targets are social relations, and ‘boundary conditions’ often tied up with the expectations and consciousness of classes and class fractions, the framework is helpful in specifying the Jessop-Poulantzas concept of ‘strategic selectivity’ for the particular realm of economic policy. It is not a deterministic approach because it acknowledges the creative agency of policymakers and other actor-groups. The projects of the latter of course impinge upon economic policy from outside policymaking in two ways: (1) through directly political attempts to influence or capture legislative and executive capacities of the state; and (2) through power bases within the economic sphere, such as those occupied by capital by virtue of their control of investment, or labour through industrial organisation. Nevertheless, the approach recognises
that a serious limit is placed on economic policy by an overall requirement for coherence: that is, that the capitalist economic system is not one which can be bent into any shape, and in fact in many ways is not very flexible at all. This imperative exerts a strategic selectivity on political projects, and even motivates policy attempts to reshape aspects of the economic system to shift the power bases of actor-groups within it, or ideological attempts to manage expectations, in order to work out contradictions.

This leads to a different analysis of the relationship between class and politics than one which seeks to explain political ebbs and flows as a consequence of the ‘balance of class forces’. Rather, the ‘balance’ can be seen as – at least in part – a result of the selective pressure of this need for the socio-economic system to function, which requires that the state do particular things and not others. Causation runs both ways. Functional failures do not force political adaptation. But when they manifest as crises, they change the political dynamic so that political actors are expected to resolve them one way or another, even though their ability to do so may be uncertain. Policy action which fails to end a crisis is likely to be ‘deselected’, along with its ideological champions in the political sphere.  

For the state involves a paradox. On the one hand, it is just one institutional ensemble among others within a social formation; on the other, it is peculiarly charged with overall responsibility for maintaining the cohesion of the social formation of which it is merely a part. Its paradoxical position as both part and whole of society means that it is continually called upon by diverse social forces to resolve society’s problems and is equally continually doomed to generate ‘state failure’ since so many of society’s problems lie well beyond its control and may even be aggravated by attempted intervention. [Jessop, 2007: 7]

Thus my thesis attempts to explain the shifts in the policy importance of inflation in my period – which, I will argue, goes some way towards explaining much wider policy shifts – in terms of its ‘strategic selection’ by the responsibility of economic policy to maintain cohesion of the socio-economic system as a whole. This is in contrast to explanations centred around ideological ‘paradigm shifts’ or those which take ‘the balance of class forces’ to be entirely causally prior to political-economic change.

2.4 Inflation as a policy problem

Understanding inflation as a policy problem requires an understanding both of its causes – at least as perceived by policymakers – and of the relationships of these causes with policy instruments and other policy goals. If there were a clear chain of influence between a policy

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11 Radical political projects aiming to fundamentally alter the economic system face an extremely formidable challenge on this front, in that any single reform incompatible with overall cohesion is likely to be ‘rejected’ by the system as a whole; everything needs to change before anything in particular can.
instrument and the target of a stable price level, and no competing demands on the instrument, inflation would present no particular problem. The message of the monetarists is that such is the case: the only barrier to price stability is a failure to understand inflation's nature as “always and everywhere” a question of the money supply (a clear chain of policy influence) and/or that policy can have no long-run effect on unemployment (no competing demands on the instrument). From such a perspective, inflation is a problem only because policymakers misunderstand it – or because they pander to a public that misunderstands it.

My own story is very different. First, I recognise that inflation has no single cause; rather, it develops from the conjuncture of a number of conditions. It may be argued that this is implicit in the ‘new macroeconomic consensus’ literature (discussed in Chapter 1) with its acknowledgement that ‘potential output’ (i.e., the level of real output associated with a stable rate of inflation) and the corresponding rate of unemployment are not fixed, but depend on factors such as labour productivity, the institutional structure of the labour market, and so on. However, the main point of these models is precisely to fix all these diverse factors in place, at least ‘in the short run’, and in focusing the attention on a few variables, the structure itself is reified and slips into the theoretical unconscious. The apparatus of the output gap, the ‘non-accelerating inflation rate of unemployment’ (NAIRU), and the Taylor rule form an assemblage of a number of factors which could be pulled apart and reassembled in different ways. The particular form it takes represents a decision about which factors to take as given – permanently or in the short run – and which to treat as variables.

Second, I argue that the changing way in which the theoretical structure was assembled not only informed policy but was also strongly influenced by the development of policy itself. The material shape of the state policy apparatus within the economic system, and policy strategy in using it, were among the complex of factors determining inflation. For theory, what was considered a constant, what was an exogenous variable, and what was a policy variable depended partly on policy capacity. Or, rather, it depended, on what was perceived as policy capacity, which was subject to dispute. Furthermore, given that price stability was one of a number of policy goals, there was the possibility that policy capacity that could potentially be brought to bear on inflation would not be fully available, given inflation's interrelationship with other goals. In particular, I argue that inflation theory developed alongside counter-inflation policy in the tension between price stability, full employment and 'external balance'. Finally, the field on which these tensions played out reflected not only the developing capacities and strategies of policy, but also those of other social actors. All these
factors influenced the structure of inflation theory, which in turn informed policy strategy.

So, while my narrative could be read as a long pre-history of the 'new macroeconomic consensus' which finally cohered in the 1990s, it is not teleological, while that consensus's own origin myth is: the consensus was right all along, even before it was formulated, and economists and policymakers eventually realised it. Instead, I present a narrative of a development that could have been different. Policy change comes from contradictions, both internal to policy and external clashes of policy with the defence (and offence) lines of other group-actors. Consequently, also, there is no suggestion in my story that policy history has ended with the consensus: my excavation of the past points to contradictions which still exist below the surface today. (See Chapter 9.)

Note that throughout the thesis I do not criticise from a transcendent perspective the conceptions held by policymakers and their economist contemporaries. Although I pay serious attention to debates within this sphere, I do not develop an alternative theory of inflation itself. Instead I consider how inflation appeared within policymakers’ own horizons, how they themselves connected it to a broader economic system riven with contradictions (even if they called them ‘trade-offs’) and social conflict among classes and other institutions and groups (even if they called them ‘special interests’), and how those contradictions and conflicts drove the further development of policy. My strategy of presentation, in other words, involves the immanent critique of policymakers’ own worldview. By viewing the historical development of this worldview as it changes in response to circumstances, and as circumstances themselves change, particular theories appear as moments, not wrong in themselves, but always ultimately destined to be washed away by contradictions they did not perceive, or perceived but could not change.

The non-expectations-augmented Phillips curve relating (inversely) unemployment and inflation is the beginning of the new consensus story, which presents it as the pre-monetarist Keynesian theory of inflation. In my own narrative, it is only the half-way point, already representing a conglomeration of factors which had previously been theoretically separate. It rose to prominence in the 1960s because it appeared to unify two strands of Keynesian inflation theory: ‘demand-pull’ theory focusing on inflation’s relationship with effective demand, and ‘cost-push’ theory centred on its relationship with money-wage growth. These two strands of theory matched separate avenues of policy influence: the first implicated aggregate demand management through fiscal and monetary policy, while the second implicated wages policy. The rise of the Phillips curve internationally was related to the
failure of policy to secure direct influence over the money-wage. Targeting it indirectly with aggregate demand put the goal of price stability in conflict with that of full employment, though policy often still aimed to ‘shift the curve’ rather than accept a fixed trade-off. In Australia, where the arbitration system seemed to put the money-wage closer to policy control, the Phillips curve took longer to find policy favour, though a trade-off between unemployment and inflation was recognised as a possibility early on. (See Chapter 5.)

It is far from the case that policy was unaware of the potential for inflationary momentum before the introduction of expectations into Phillips curve models by Phelps [1967] and Friedman [1968]. On the contrary, the reaction of money-wages to price inflation was at the centre of Australian policy attention. Even in the Phillips curve literature, there is recognition that experience of inflation could shift the curve – right from Samuelson and Solow’s [1960] original Phillips curve article. The changing way in which inflationary momentum was understood is in itself an interesting story, but as I argue in Chapter 8, is not an explanation for the policy turn of the 1970s. I show that expectations-augmenting the Phillips curve does not explain the 1970s jump in the ‘non-accelerating inflation rate of unemployment’ apparent in such models. The explanation for this jump must be sought elsewhere. I present the policy upheaval of the 1970s and 1980s not in terms of policymakers seeing the light, but as a result of the need to reconcile expectations of a growth rate of real living standards and employment with an economic system that could no longer provide them.

2.5 Conclusion

In this chapter I have set out my approach to understanding economic policy and its historical development within the broader social structure of capitalism. To summarise: Economic policy exists at the boundary between two relatively independent systems, the state and the economy. These two systems are only relatively independent, because each is necessary to the other's reproduction, and they are not even institutionally separate, in that, for example, the economic system depends everywhere on a system of laws and their enforcement, while state activities involve the use of money and wage-labour.

The capitalist state has historically evolved certain structures and processes which deal with dysfunctions in the economic system, and thus modified the way in which the two structures reproduce themselves as a whole. Two fields in which state involvement has been especially important are the reproduction of labour power and the management of money. This evolution can be understood in more-or-less functionalist terms, though it is of course driven by
conscious political activity – within legislative, executive and judicial structures – focused on solving specific 'problems', which dysfunctions appear as politically. This is definitely not to say the process is driven by a singular state subject.

However, in the course of the Great Depression and the Second World War, something like a unified strategic actor in the field of economic policy emerged (though the unity is of course contingent and can break down). It was unified partly on the basis of new macroeconomic theory which posited it as such an actor, calling for a rational and combined use of certain state structures which had already developed independently within the economic system for other reasons. It involved especially the use of state budgets (fiscal policy), central banking (monetary policy) and arbitration system (wages policy) as instruments.

The work of Jan Tinbergen on economic policy illustrates well the 'point of view' from the 'subjectivity' of economic policy. The economic system appears as a problem to be solved – in fact, even abstractly represented as a system of equations. However, the contradictions of the system – especially those arising from the conflicting aims of classes and other groups with the social power to pursue them – mean that it may lack a solution. Contradictions can reappear at a policy level, with instruments torn in different directions. This can motivate policy attempts to restructure its own apparatus and to reshape the economic system itself to attack the social power bases of the groups in pursuit of functionality. Meanwhile, groups themselves are actively seeking to improve their own strategic position. This may include attempts to use political power to restrain or direct policy itself. However, the fact that policy has come to be held responsible for the functionality of the system as a whole places powerful selective pressures on political possibilities.

My use of this conception of economic policy to explain the development of counter-inflation policy in Australia between 1945 and 1985 is in sharp contrast to the neoclassical 'new macroeconomic consensus’s’ narrative of its own emergence, through the triumph of correct views over error. Here I briefly pointed to some problems in the standard narrative, and signalled some aspects of my own story, which will be expanded upon in the coming chapters.
3: The central bank in an evolving financial system

3.1 Commodity money, state money, capitalist money

In this chapter, the last of the theoretical introductions, I focus on a specific domain of economic policy: central banking. It remains fairly abstract, in that I do not yet refer to the specific institutional environment of post-war Australia. In fact, what concrete references there are tend to be more antiquated, because I proceed by way of a discussion of Marx and Keynes, whose own main concrete reference points were the financial systems of Victorian and interwar Britain, respectively. This is in one sense strange, since an important part of my argument is a need for analysis of the financial system to be historically and institutionally specific. But here I aim to establish only a broad framework for understanding the evolution of the financial system and the role of the central bank within it – in other words, to select what specific details are important to watch for in building a more concrete picture of the Australian financial system in historical motion in Chapters 6 and 8.

Why Marx, why Keynes, and why both? Both writers develop their theories of money against Say’s Law and against the Quantity Theory of the price level.\textsuperscript{12} They share an understanding that the fact that purchasing power can be held outside circulation – and both removed from the circular flow of income-expenditure and injected into it – is of crucial importance in explaining economic dysfunction. Both also foreground income-expenditure flows as economic phenomena relatively independent of the stocks of money and commodities which they circulate. That is, their economic visions are not organised around a general equilibrium of stocks, in which each agent trades to obtain its optimal basket of goods. Rather, they envision the economy as a continually-reproduced circular flow in which production depends on monetary expenditure and creates monetary incomes – but in which some income is not immediately spent, and some expenditure does not come from immediate income. In both

\textsuperscript{12} At least in Schumpeter’s [1954: 1096] sense of the non-trivial quantity theory – in which causation runs from the money supply to prices, as opposed to the equation of exchange, “itself nothing but the statement of a formal relation without causal connotation.” Keynes [1924: 74-87] defends ‘the Quantity Theory’, but means the heuristic usefulness of the equation of exchange in Schumpeter’s sense.
visions, the monetary/financial system is treated as mediating these injections and leakages into and from the circular flow, rather than money being treated as one good among many brought into a general stock equilibrium of supply and demand.

There are of course major differences between Marx and Keynes. In some respects, they appear at opposite poles of monetary theory. Marx is the theorist of commodity-money, for whom “the money-form is merely the reflection thrown upon a single commodity by the relations between all other commodities” [Marx, 1976: 184], and “gold confronts the other commodities as money only because it previously confronted them as a commodity” [ibid: 162]. Keynes, on the other hand, is patron saint of modern cartalists, writing that “the Age of Chartalist or State Money was reached when the State claimed the right to declare what thing should answer as money to the current money-of-account – when it claimed the right not only to enforce the dictionary but also to write the dictionary.” [Keynes, 1930: 5] Commodity-money versus state-money: this disagreement does indeed stem from deeper, fundamental differences of vision regarding the place of the state within capitalism.

Yet, from these different starting points, both Marx and Keynes enter the same territory when they come to write about the financial system. Naming the essence of money only gets each one so far, and far greater space in both *Capital* and the *Treatise on Money* is given over to analysis of what happens to money when structures of credit are built upon it, and when the bulk of actually-circulating money is neither gold nor fiat currency, but credit-money (Marx) or Bank Money (Keynes). A large and sprawling segment of the third volume of *Capital* is given over to tracing patterns of credit rising out of the circulation of commodities and the circuits of capital, patterns which coalesce and centralise into a banking system, with a central bank at its centre. In Keynes’s *Treatise*, it quickly becomes clear that while the state might print numbers on bills, it cannot control the corresponding numbers on price lists. To show how the purchasing power of money is determined, Keynes follows the money through the banking system and into the sphere of commodity production – divided, in a manner similar to Marx’s second volume, into consumer goods and investment goods sectors. The central bank, it transpires, must manage the banking system so as to stabilise the value of money in terms of commodities.

The theorists meet, then, in the banking and broader financial system, a zone which borders on both the state and on the sphere of commodity production and exchange. This common ground provides the basis for a productive synthesis. As Chick [1978: 4] writes: “Simply to say that two theories are in principle not comparable is too boring, and too negative an
approach.” She does not make an argument for eclecticism, in the sense that two incompatible visions each see different things that are obscured by the blind spots of the other, so that it is best to look first from one perspective, then from the other. Neither is she making the banal point that ‘the truth must lie somewhere in the middle’. Instead, her procedure is to attempt translation between two theoretical visions that seem to be talking past each other (in her case, those of the neoclassical-Keynesians and monetarists of the 1970s): asking how the structure of one might incorporate the concerns of the other, and attempting to explain what it is about the structural differences between the theories that blocks such translation of content. This approach is theoretically productive insofar as the reflection on comparative theoretical structure informs a new structure of explanation – which may be some kind of synthesis of the theories or a rejection of one or both.

The concerns of the analysis ought to guide the selection of what is important in any synthesis. In this case, I need a framework for thinking about the co-evolution of monetary policy and the financial system over a long period of forty years, which can cope with major institutional change. I believe that Marx’s vision is more attuned to structural change, and also treats the central bank as a strategic actor within the financial system, rather than above it. His monetary theory was developed against the backdrop of great institutional change – most fundamentally, the substitution of bank liabilities for gold in general circulation. Keynes, in contrast, is generally focused on the short-run, with fixed structural parameters, and in which policy can simply set the money supply or base interest rate.

However, the concept of liquidity, and its complex role in mediating between various forms of money, and between money and credit, is crucial to understanding the problems facing policy in its attempts to manage money. Marx does not develop a systemic theory of liquidity although, as I show in Section 3.2, the concept pervades his treatment of credit, the private banking system, and central banking. Keynes’s theory of liquidity preference is more systematically developed, and in Section 3.3 I outline it and begin to discuss how it might shed light on Marx’s concerns. Keynes links it to the banking and broader financial system in only a limited way, neglecting institutional particularities and evolution, and most problematically, ignoring the problems it poses for state management of money.

In Section 3.4 I discuss the extension of Keynes’s theory of liquidity preference by post-

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13 Some writers have noted the parallels between this development in 19th century British money, with its associated controversy between the Banking and Currency Schools, and the development of non-bank financial institutions with liquid liabilities in the post-WWII decades – a development which is very important to my story. See Davis and Lewis [1980: 6-11]
Keynesian structuralist theory – in particular that of Minsky. Although Minsky is widely known today mainly as a theorist of financial crisis, my focus is upon his much broader observations about the wider economic system. While Minsky sees himself as an interpreter of the *General Theory*, he reintroduces all of the financial system’s complexity of innovation and evolution over time, and in doing so comes closer to Marx’s vision. He provides the tools to update it for a modern financial world in which banks interact with other financial intermediaries in a dense net of interdependent financial markets, all embedded in circuits of capital with a basis in commodity production, and in which private financial preferences and institutional innovation can frustrate state monetary control. In other words, I argue that this strand of post-Keynesian theory provides a framework into which Marx’s concerns can be translated in Chick’s sense.

Many writers have noted the similarities between Minsky’s and Marx’s treatment of money and finance. (See, for example, Crotty [1986]; Evans [2004].) However, most comparisons have focused on their treatments of financial crisis. My concern with central banking, and counter-inflationary monetary policy in particular, brings the comparison into relatively new territory. One reason why it is new is that Marx had relatively little to say about inflation, because under the gold-standard institutional circumstances he dealt with, inflation would be ultimately checked by the gold link, or represent the devaluation of inconvertible paper relative to gold. In mid-19th century Britain, inflation preceded gold drains and crisis – and so inflation was not a problem separable from the overextension of banking credit relative to gold reserves. It is only with the loosening of the link between national currencies and gold

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14 However, Arnon [1994] and Hein [2004] have traced theoretical affinities between Marx and Minsky that go deeper than similarities in conception of financial crisis. Mollo [1999] also takes a broader perspective and argues for using Marxian insights to “improve” the Minskian approach. None of these writers are specifically concerned with inflation.

15 That is, because banks had to be ready to meet their liabilities with central banknotes, and the Bank of England with gold – so that inflation would tend to lead to arbitrage with gold and foreign currency and ultimately generate an external gold drain, which would gather steam once suspension of convertibility becomes a possibility in the minds of speculators. See Marx’s [1981: 699-727] description of this balance-of-payments dimension of crises with reference to the 1847 and 1857 episodes, and his explanation as to why it is decisive in limiting the Bank of England's room to manoeuvre, given the gold link – because ultimately stopping the external drain required British deflation. “The dispute simply turns on a plus or minus and on the more or less rational way to cope with something unavoidable.” [ibid: 707]. On the rarely-remarked-upon currency arbitrage dimension to Marx’s monetary theory, see Foley [1998]. A suggestive passage on what Marx thought would happen if a currency permanently broke from commodity backing can be found in the discussion of Darimon’s proposals for the Bank of France in the *Grundrisse*: “Now suppose that the Bank of France did not rest on a metallic base, and that other countries were willing to accept the French currency or its capital in any form, not only in the specific form of the precious metals... The notes with which it discounts the bills of exchange of this public are at present nothing more than drafts of gold and silver. In our hypothetical case, they would be drafts on the nation's stock of products and on its employable labour force: the former is limited, the latter can be increased only within very positive limits and in certain amounts of time. The printing press, on the other hand, is inexhaustible and works like a stroke of magic... Thus [after a
that inflation became a separate problem for policy, though as I discuss in Chapters 4 and 7, international anchors continued to operate on the domestic price level.

I leave the precise links between monetary policy and inflation to the detailed treatment of later chapters, because both the transmission channels of policy and policymakers’ own theories of the relationship between money and inflation changed over time. The basic framework developed in this chapter, focusing on liquidity and liquidity preference, is capable of being adapted to deal with policies targeting inflation through income-expenditure flows via interest rates and credit quantities, and through monetary quantities.

3.2 Stretching money: liquidity, credit and credit-money

5306. If there should not be currency to settle the transactions at the clearing house, the only next alternative which I can see is to meet together, and to make our payments in first-class bills, bills upon the Treasury, and Messrs Smith, Payne, and so forth.’ — ’5307. Then, if the government failed to supply you with a circulating medium, you would create one for yourselves? — What can we do? The public come in, and take the circulating medium out of our hands; it does not exist.’ — ’5308. You would only then do in London what they do in Manchester every day of the week? — Yes.’ [Chapman, a banker, testifies before the Bank Acts Committee in 1857, quoted in Marx 1981: 671]

One of the peculiar insights of Marx’s theory of money is that money is more than what money does. Though he begins his analysis of money with two passages on the functions it is called on to perform in circulating commodities – as measure of value and means of circulation – the following section is called simply ‘Money’. Money emerges as a means of circulating commodities, but emerges as an independent thing – “an external object, capable of becoming the private property of any individual” [Marx, 1976: 229-30] – and therefore capable of adaptation to new ends. Because it is always capable of being exchanged for its value in commodities, it can be hoarded as a store of value, remaining outside circulation to be spent at an uncertain later date. Credit contracts begin to separate purchases and payments, and money moves to new rhythms. This is the basis for Marx’s rejection of both Say’s Law and the Quantity Theory: sales without immediately subsequent purchases, purchases without crop failure] the directly exchangeable wealth of the nation (i.e. the wealth which can be circulated and is acceptable abroad) absolutely diminished! On the other side, an unlimited increase in bank drafts. Direct consequence: increase in the price of products, raw materials and labour. On the other side, decrease in price of bank drafts. The bank would not have increased the wealth of the nation through a stroke of magic, but would merely have undertaken a very ordinary operation to devalue its own paper.” [Marx, 1973: 121-22]

16 See also Harvey [2006: 241] on money “as the incarnation of general social power, independent of and external to particular production processes or specific commodities”, though also “a contingent social power, ultimately dependent upon the creation of real value through the embodiment of social labour in material commodities.”
sales and movements of money unconnected to either.

This simple fact about money – that the patterns in which it circulates through society are capable of change, whether through conscious strategic innovations or blind systemic evolution – does not exhaust the issue. Norms of credit shift. Institutions emerge to specialise in money and credit dealing – banks, brokers, discount houses, and so on, and financial markets form new channels through which money flows. Certain debt instruments – already a store of value – begin to function as means-of-payment also, becoming credit-money. This capacity for private innovation in the use of money and credit periodically undermines previously predictable relationships and complicates or thwarts modes of state intervention predicated upon them.

How to conceptualise such changes? The first instinct is still to think in terms of the quantity identity: the quantity of money and the velocity with which it circulates. Financial developments do leave their traces in both variables, though they sometimes raise questions about what is an increased quantity of money and what is an instrument which economises money use. But for Marx the quantity of money is not directly related to either of the ultimate points of interest: flows of income-expenditure through the channels of commodity circulation\textsuperscript{17}, and flows of value through circuits of capital and revenue\textsuperscript{18}. He is explicitly a theorist of variable velocity, but arguably the dynamics of credit rather than money are more directly important to the explanation of cyclical and crisis phenomena which concern the central bank.\textsuperscript{19} This is both because of the importance of credit as a source of expenditure – implicating it in the circulation of currently-produced commodities – and because of its pre-validation of inherently uncertain future revenue flows. Credit is able to stretch the circulation of a given quantity of money because it can restructure when payments are ultimately made, sometimes make actual payments unnecessary (when credits cancel one another out), and, in

\textsuperscript{17} The conceptualisation of prices and output with reference to income-expenditure flows rather than monetary quantities and velocity was the major focus of Keynes [1936] but was already a current within mid-19th century political economy. The ‘income approach’ was most clearly stated by Tooke [1844], who was highly influential on Marx’s monetary theory. See Schumpeter [1954: 708-10] who writes that Tooke’s formulation opened new paths of monetary analysis, “one of which ends at Keynes’s General Theory.”

\textsuperscript{18} By ‘circuits of capital’ I refer to the processes through which firms invest in means of production and labour power, recover their investment with profit, and reinvest. ‘Circuits of revenue’ refer to the analogous processes through which financial instruments, real estate, etc., store and expand value. These circuits involve income-expenditure flows but are not reducible to them.

\textsuperscript{19} In the analysis of the first volume of Capital, velocity is variable due to the possibility of hoarding money outside of the channel of circulation. In the Volume III analysis, a more complex treatment emerges once credit and credit-money are brought into the picture. Marx [1981: 653] approvingly quotes an anonymous pamphlet by “a banker in England”: “The great regulator of the velocity of the currency is credit. This explains why a severe pressure upon the money-market is generally coincident with a full circulation.”
some forms, circulate directly as means-of-payment in itself, credit-money. The quantity of money and its modes of circulation are important at one remove, inasmuch as they limit credit relations and ultimately validate credit as means-of-payment.

Marx’s focus on credit rather than money is especially clear in his discussion of the determinants of the interest rate. He insists that the interest rate reflects supply of and demand for money-capital and not money as such. The supply of money-capital in a period is the quantity of money which its holders are willing to exchange for future repayment plus interest at the going rate, which is a much more restricted category than the quantity of money. The supply of money-capital in a given period reflects the willingness of holders of money to exchange it for a debt instrument, sacrificing the purchasing power of money for the term of the debt (or at least, until the debt instrument is sold to someone else). (See Harvey [2006: 255-307] and de Brunhoff [1976: 72-123] for reconstructions of Marx’s theory of interest, which is somewhat scattered through the second and third volumes of Capital.)

At first sight this appears very similar to the classical theory of interest in which the interest rate adjusts to equate savings and investment. A high interest rate encourages those who earn money to convert more of it into money capital, rather than spend it on goods, even as it discourages capitalists from borrowing new money capital to expand investment. If this were Marx’s view, little seems to be gained from having a monetary theory of interest at all; saving and investment are all you need. But in fact Marx’s theory was an important departure from the classical theory, because he recognised that the supply of new money capital was not limited to that coming from savings: it could be augmented by the mobilisation of idle money hoards by the banking system, and once banking liabilities themselves circulate as means of payment, the banks could expand the supply of money-capital even further. The banking system’s ability to expand in this way is limited by the convertibility of banknotes into the money-commodity (or, at least, notes of the central bank, themselves convertible into gold): the banks are limited by the need to be always ready to redeem their liabilities. The flexibility of the credit money supply, and therefore the capacity of the banks to extend credit, is based on the fact that at any given time few holders of bank liabilities will in fact seek to redeem them, and that the average call on reserves will normally fall within a predictable range.

The possibility for instability in abnormal times is obvious, and it is out of the need for the banks to borrow base money to meet these convertibility obligations from time to time that the central bank emerges – as lender of last resort. The rate at which the banks can borrow reserves from the central bank – the Bank Rate – becomes the basic interest rate over which
the private banks’ own loan rates are marked up. The central bank’s gold reserves being finite, in normal times its governors move the Bank Rate up and down to discourage or encourage the expansion of credit. For Marx, the central bank emerges out of the private banking system, and the potential for state manipulation through it is limited, mainly confined to the prevention and alleviation of crises. Although the chapters are among the most fragmentary and unfinished of Capital (according to Engels, who pieced them together the section of the manuscript is headed “the Confusion” [Marx, 1981: 95]). Marx uses Parliamentary reports on the crises of 1847 and 1857 to explore the relationships between the Bank of England, the private banks, and their depositors and creditors in some institutional detail. [ibid: 607-748] He notes that a high Bank Rate motivated the banks to develop new instruments of inter-bank credit and payment among themselves, allowing the boom to extend longer than it otherwise would by stretching the existing means-of-payment further. It is an fascinating and observant description, but hardly a systematic treatment – which would require the development of the concept of liquidity.

3.3 Liquidity preference and the interest rate in Keynes

Keynes, like Marx, criticised the classical theory of interest. By this time, neoclassical loanable funds theory recognised the possibility that part of the supply of loanable funds might come from new money – created by banks or the state – or from the activation of ‘idle balances’, rather than from savings alone. But Keynes [1936] goes further, implying that the modern loanable funds theory still overestimates the importance of new savings in determining the interest rate. The interest rate mediates supply of and demand for money, and the latter schedule is dominated by holders of wealth, not those responsible for the new flow of savings, because potential sales of non-monetary financial assets accumulated in the past outweigh the increment newly saved in the present period. The decision to save has a negligible impact compared with the decision about how to hold savings. [Chick, 1983]

This is a very different line of argument from Marx’s. First, Marx is explicit that the interest rate is about supply of and demand for money-capital, which is neither money nor savings. For Keynes it reconciles supply of and demand for money. Second, Marx’s argument is primarily concerned with how financial institutions economise on the use of money, while financial intermediaries are curiously absent from the discussion of interest rates in Keynes’s General Theory. Keynes focuses on changes in the demand for liquidity, and assumes its supply is fixed by the central bank. Marx sees both supply and demand (of/for credit, not
money) as variable and beyond the tight control of the central bank.

These separate focuses are in my view complementary rather than incompatible. Marx’s attention to the institutional specificities of the financial system and its evolution is vital, and highlights the slippage between the Bank Rate under the control of the monetary authorities and the interest rate facing borrowers. However, he is vague on the limits to this flexibility, on the macroeconomic relationship between money and money-capital. This is where the Keynesian concept of liquidity preference helps, even though we must drop Keynes’s assumption of a fixed money supply. In fact, writers of the so-called structuralist school of post-Keynesianism (as labelled by Pollin [1991]), in elaborating Keynes’s concept of liquidity preference for a more complex vision of financial institutions and markets, move the analysis towards some of Marx’s concerns. In the remainder of this section I introduce a structuralist conception of liquidity preference and suggest how it integrates with Marx’s concerns.

For Keynes [1936: 167], the rate of interest is “the inverse proportion between a sum of money and what can be obtained by parting with control over the money in exchange for a debt for a stated period of time”. This is the basis for the concept of ‘liquidity preference’: money and debt are substitutable within units’ portfolios. The money-value of the income stream from holding a debt is its present value; against this is weighed the subjective value of the liquidity service of money itself, which is for Keynes related to three uses of money – for transactions, precautionary and speculative purposes. In Chapter 13 of the General Theory discussing “the general theory of interest”, Keynes sets up a pure dichotomy between debt and money, though he acknowledges in a footnote that in reality the distinction is blurry and that the line should be drawn “at whatever point is most convenient for handling a particular problem”. [ibid: 167] Later, however, in Chapter 17, discussing “the essential properties of interest and money”, the dichotomy is replaced by a more general discussion of asset valuation, including not only money and debts, but even productive capital assets and commodities. The value of everything held as an asset derives from (1) the present value of its expected yield minus (2) its carrying costs plus (3) the implicit value of its liquidity services. For assets of equal value, what one lacks in liquidity it must make up in net yield, generating the spectrum pattern of interest rates in which short-term securities normally have lower interest rates than long-term securities. Now ‘liquidity’ is no longer an either-or property, but something which assets can have in greater or lesser quantity. The valuation of liquidity itself presumably still depends on the three motives of Chapter 13, but now there is the additional complication of variations in the ‘quantity’ of liquidity inherent in different assets.
This complication of Chapter 17 is welcome, because beyond means-of-payment itself, which could be said to be absolutely liquid, there is indeed a kind of spectrum of liquidity, with some assets more liquid than others, in the sense that they can be more readily exchanged for means-of-payment at a more-or-less certain rate. But this raises major complications for the earlier ‘general theory of interest’. First, it is problematic for the ‘speculative motive’ for holding liquidity. The rationale for this in Chapter 13 is that speculators will hold money when they expect capital losses on bonds and hold bonds when they expect capital gains. The motive for holding money here is more about capital certainty – the store of value function of money – rather than money’s liquidity – deriving from the means-of-payment function. But in a more realistic institutional setting, a number of assets provide capital certainty without liquidity (e.g., bank term deposits), and, with the possibility of inflation and exchange rate movements, it cannot be taken for granted that the most liquid asset – means-of-payment – is also the most capital certain. While the transactions motive and precautionary motive are unambiguously linked to liquidity, the speculative motive is not necessarily so. In reality, the speculative choice between different non-monetary assets can be more relevant than the choice between money and other financial instruments: for example, ‘bears’ buy bonds and ‘bulls’ buy shares.20

A second problem concerns the supply of liquidity. In Chapter 13, Keynes assumes that the money supply is fixed by the authorities. This need not mean that private liabilities cannot function as money, but it does require a predictable relationship between these and the instruments whose supply the state does control, e.g., because of a constant bank reserve ratio. This is an institutionally-specific condition, not a general one, and not one which holds in the historical period I am discussing, as will be seen in later chapters. When liquidity is a property inhering to greater or lesser extent in a wide range of assets, private and public, theory needs to address the more general determinants of their supply.

20 Chick [1983] presents liquidity differently. For her, prospective capital gains and losses are a part of liquidity rather than yield. Thus capital security and the rapidity with which an asset can be converted into means-of-payment are both ‘dimensions’ of liquidity. This is a difference in terminology but not a difference in substance from my argument. Chick's presentation relates to another issue: the question of where risk – not explicitly dealt with by Keynes in that context – fits into his description of the components of asset value. It could be argued that expected risk, in terms of the uncertainty of recovering the value of the instrument upon sale or maturity, could be added to liquidity as a fourth factor in the value of an instrument. Chick argues conversely that it is difficult to distinguish between liquidity and risk, that, in effect, they are two sides of the same concept – because an instrument can always be liquified at some price – the problem of illiquidity lies in obtaining an acceptable price. However, it seems possible to distinguish, at least in theory, between risk as referring to the payment stream underlying the asset's yield, and liquidity as referring to the possibility of secondary sales. The former is a pure relationship between security-holder and borrower; the latter refers to conditions in the secondary market.
3.4 Minsky's structural theory of liquidity

Minsky's [1986, 2008] reinterpretation of Keynes deals with these two problems in ways that take us quite a distance from the Chapter 13 theory of interest, and even further from the familiar neoclassical Keynesian IS-LM model based upon it. It incorporates a theory of banking and financial intermediation more generally, hence taking us closer to Marx's concerns, and most importantly, it points the way towards a more realistic picture of the place of the central bank within the system as a whole – not as a power above the financial system controlling the money supply or interest rate, but as a strategic actor within a contradictory system, though certainly a powerful one. Minsky’s starting point is Keynes’s Chapter 17, but he argues that this discussion of the valuation of assets in general, “though perceptive, is flawed because [Keynes] does not explicitly introduce liability structures and the payment commitments they entail at this point, even though this entered into his definition of the precautionary demand for money”. [Minsky, 2008: 77] This comment actually signals a striking twist of Keynes’s argument, because for Keynes, the precautionary demand for money relates the volume of present transactions to the present interest rate, whereas Minsky is linking future payment commitments to present liability structures arising from debt contracts entered into in the past and present. This implicitly switches the determinant of the interest rate away from the portfolio demand for money and towards the present demand for credit. This is one step closer to Marx and his relation of interest to money-capital rather than money.

For Minsky, every economic unit can be characterised in terms of its cash inflows and outflows over periods of time and its balance sheets at points in time. The stocks of assets and liabilities have present values based on the expected cash flows they promise over future periods (as well as the implicit value of their liquidity, as with Keynes). These assets include not only financial instruments but also the physical capital assets firms need to generate cash flows from production. Every unit inherits its balance sheet from the past, but makes decisions in the present to buy and sell assets in the present based on expectations about future cash flows. This framework leads to quite different senses of the transactions, precautionary and speculative demands for money.

First, cash flows are unambiguously related to means-of-payment, rather than any broader form of money. A unit must have an adequate stock of means-of-payment to meet its outgoings in any period. For the most part, cash outflows are funded from cash inflows in the same period, whether from income, or, in the case of banks and other depositary institutions,
from deposits. If such inflows are not enough to meet mandatory outflows, the unit must adjust its balance sheet, selling assets or taking on new liabilities (i.e. borrowing). Minsky terms this ‘position-making’, the position being the units’ liability structure and ‘position-making instruments’ being the relatively liquid instruments units typically have on their balance sheet to meet such contingencies – whether they be liquid assets or readily available sources of credit. Besides the mandatory outflows from contractual payment commitments, consumption needs, operating costs, etc., units make decisions about what to do with ‘excess’ cash inflows (savings) and always have the option of rearranging their balance sheet of existing liabilities and assets.

Keynes links transactions and precautionary money demand to income, and speculative demand to the interest rate. Minsky’s schema is different. Transactions demand concerns means-of-payment specifically, and is linked not only to income from production, but also to contractual financial payments and to transactions arising from portfolio adjustment. Precautionary and speculative motives are closely linked and relate not only (in fact not much) to means of payment, but to the whole range of assets, including shares as well as bonds, and even physical means of production and real estate. Precautionary and speculative motives are linked because they are essentially the inverse of one another; for Minsky speculation is all about sacrificing liquidity to earn a better return. In the terms of the Chapter 17 framework, the implicit monetary value of liquidity rises and falls – relative to the present money-value of expected net yields – along with confidence or appetite for risk. (In fact since confidence is partly a view about future yields, expected yields would usually be rising even as the value placed on liquidity falls.) When a unit’s confidence rises, liquidity preference declines and a unit adjusts its balance sheet away from liquid assets. At a macro-level, this means a fall in long-term interest rates relative to short-term.

The heart of the difference is that in Keynes’s presentation bonds are the only alternative to money, whereas Minsky deals with the whole range of assets, and pays attention to the portfolio choice between more liquid short-term securities and less liquid long-term bonds. Keynes takes no account of the liability side of the bonds, of whose obligation it is to pay the interest and principal – they appear only as assets. In fact, he refers to them as ‘consols’, a particular kind of government bond. This leads to a certain arbitrariness about the interest rate, because there is no sense in which interest is paid for out of other kinds of cash flows. Speculators buy and sell bonds based on their views about departure from the ‘normal’ interest rate, but Keynes deliberately does not attempt to explain the norm itself. This, I think,
reflects an implicit assumption that the monetary authorities can intervene to achieve whatever rate they wish. This may be true in certain institutional conditions for certain short-term rates, but it does not hold in reality for the longer rates.

Minsky’s is a more general theory which is able to deal with rate spreads, not only ‘the’ interest rate, and this problematises state control in a more realistic way. This is because in his framework, one unit’s financial assets are always another unit’s liabilities, and the analysis integrates these financial linkages with the cash flows of income and expenditure in production. For Minsky, as for Marx, there is no split between the ‘real’ and the ‘monetary’; transactions in goods and services necessarily involve real flows of means-of-payment, and the financial structure of promises-to-pay is built on this structure. The structure of interest rates reflects the interaction of all kinds of units given their expectations of the future and their liquidity preferences.

So far I have talked in terms of undifferentiated units, but of course the system involves the interaction of different kinds of units with different sources and uses of cash and different balance sheets. Within the productive sphere are firms and worker and rentier households. The distinction between worker and rentier households is functional rather than classificatory and households can be both to varying degrees: individual households are workers insofar as their incomes come from wages and rentiers insofar as their incomes come from interest and dividends; a higher proportion of rentier income than wage income is saved. At any rate, income from production flows between firms and households in a familiar circular fashion, as both wages and profits flow ultimately to households and are spent on consumption goods and saved. Savings, except to the extent that cash is held, always involves the purchase of an asset, thus connecting income flows to asset stocks.

As with Keynes, Minsky treats firms’ investment decisions as the autonomous driver of macroeconomic fluctuations. But, unlike Keynes [1936], he takes seriously the financial constraint on investment. The analysis thus takes a step in the direction of loanable funds theory. Investment in physical productive assets is treated as a balance sheet decision, though one that happens to feed back into the circular flow of cash through the productive sphere rather than remaining within the realm of financial instruments, because these assets are produced by firms employing labour. A firm decides to invest in means of production when the supply price – the cost of purchasing such an asset, including the cost of borrowed funds – is below the demand price – i.e., its value to the firm, as derived from the Chapter 17 schema (i.e., the present value of expected yield minus carrying costs, plus the liquidity value). An
investment good being generally much less liquid than most financial assets, investment is a function of (i) expected profits, (ii) firms’ liquidity preference, (iii) the purchase price of investment goods, and (iv) financing costs.

The first two factors being volatile, cyclical ‘animal spirits’ variables, and the third being relatively stable (though tending to rise in a boom), the fourth depends on the financial system, and is of course the factor through which monetary policy must work. In the absence of financial intermediation, the demand schedule for credit becomes the supply schedule of financial assets. Unless new means-of-payment are introduced into the system by net government asset purchases, the funding for a net increase in the stock of financial assets (i.e. new credit minus repaid credit) comes from either (i) new savings or (ii) purchases out of savings previously held as cash. The second possibility depends on some combination of a change in the average value placed on liquidity by asset holders and a rise in interest rates. In the now-familiar Chapter 17 framework, both of these things raise the present value of the yield on interest- or dividend-bearing financial assets relative to the liquidity value of cash. Minsky expects the liquidity preference of asset-holders, like those of firms, to move cyclically with confidence about future cash flows. Some of the decline in cash balances may arise out of increased efficiency in the payments system rather than portfolio decisions. But these sources of credit are ultimately limited by the quantity of means-of-payment circulating around the system, which is under the control of neither firms nor households. In such an economy, states would have a tighter monetary influence, though still not complete control due to private decisions about liquidity holdings and liability structures.

Financial intermediation greatly increases the degree of freedom, especially when some liabilities of intermediaries themselves function as means-of-payment, as in a modern banking system. Minsky treats financial institutions as units in some ways like any other, with cash inflows and outflows and balance sheets linked to future flows. Yet they are also fundamentally different in that their inflows are not income in the sense of money earned from production: inflows are borrowed, outflows are lent. The typical intermediary makes a profit from maintaining a balance sheet in which its liabilities are more liquid than its assets – borrowing short and lending long – and therefore exploiting the yield differential.

21 This could be expanded into a more complex story, given financial instruments with a range of liquidity-return profiles. In the more general case, funds for net increases in the stock of less liquid financial assets can come from net decreases in the stock of more liquid financial assets if liquidity preference declines or if long rates rise relative to short rates.

22 Intermediaries may also specialise in spreading risk, but here I have focused on liquidity rather than risk throughout. The concepts of liquidity and risk are related in a complex way, as discussed in note 9 above.
Intermediaries exploit the fact that individual units hold liquid assets for precautionary purposes: they want to be able to quickly convert them into means-of-payment should the need arise, but most of the time most units do not actually exercise the possibility of conversion. An intermediary whose liabilities are the liquid assets of a large number and wide variety of units can be reasonably confident that only a fraction of these liabilities will be redeemed and require a cash outflow in any given period. The intermediary itself manages its balance sheet portfolio to cover contingencies, holding a reserve of means-of-payment and also developing position-making practices on either the asset or liability sides of the balance sheet. Position-making assets are liquid instruments an intermediary can itself quickly convert into cash; position-making liabilities are readily available sources of credit.

The fact that banks’ liabilities circulate as means of payment puts the banking system in a unique position at the heart of the payments system and as custodians of precautionary balances. A bank can, and usually does, lend its own liabilities, so that when the borrower spends the money with another customer of the same banking system, the liability changes hands without reserves leaving the system. Thus while banks, like other units, must manage their balance sheets to be able to meet outflows when necessary, the relevant flows for banks are reserves (balances with the central bank and central banknotes) rather than cash, because ‘cash’ includes bank liabilities which they can create at will (regulations permitting).

Individual banks lose reserves to other banks when their customers’ payments to customers of other banks exceed the reverse flow, so that the expansion of the system as a whole limits the expansion of individual banks. But the system as a whole loses reserves only through (i) net transactions with the central bank (ii) net transactions abroad or (iii) net hoarding of central banknotes outside the banks (generally unimportant outside of bank runs).

Once banks, in extending credit, are able to create the means-of-payment used by non-banks, a much wider gap opens up between previously accumulated savings and new borrowing. Now, new credit (the net new financial liabilities of non-financial units) can come not only from (i) new base money (from central bank asset purchases), (ii) new savings or (iii) a decline in the liquidity of non-financial units’ balance sheets, but also from (iv) a decline in the liquidity of bank balance sheets (in terms of base money reserves), or from (v) a decline in the liquidity of non-bank intermediaries. In each case, the change of liquidity for each type of

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23 This generally refers to transactions with customers of foreign banks, but banking systems need not coincide with national borders. A banking system is properly defined in terms of the intertwining payments of its customers, and could possibly be sub- or trans-national.
unit will be associated with some combination of interest rate changes at the relevant part of the spectrum and changes in liquidity preference. It is possible, in other words, for banks and other intermediaries to stretch the liquidity of the system as a whole without any change in the liquidity profiles of non-financial units’ balance sheets – except, of course, that of the ultimate borrower. The systemic cost is focused on bank/intermediary balance sheets, where a decrease in liquidity means the institutions take on a greater risk of a mismatch between future inflows and outflows – the possibility a costly position to make (from forced asset sales or borrowing) or, in the worst case, insolvency.

In such a situation, a central bank which operates in the at the short end of the interest rate spectrum (with open market operations and/or lending reserves to the banks) has an influence on, but not control over, rates further up, which also depend on the changeable liquidity preference of banks, intermediaries, households and firms. Chick and Dow [2002] and Dow [2007] model this in terms of multiple levels of liquidity preference, reflecting the multi-tiered nature of the financial system, i.e. with banks settling with central bank and currency reserves and non-banks settling with bank liabilities. Bank liquidity preference and non-bank demand for credit determine the long-term interest rate and money supply, which meets non-bank liquidity preference to determine the short-run interest rate in the money market. This in turn affects the cost of funds to banks, feeding back into the long-term interest rate. Thus although the bank money supply is flexible, the portfolio choices of non-banks, as well as the intervention of the central bank, affect the liquidity and cost of funds to banks, which affects their decisions about credit extension. Competition and other interactions with non-bank intermediaries complicates the story further.

The complex of interrelations between institutions of different types are clearly historically specific, and so must be the analysis. The structuralist post-Keynesians are focused on the evolution of the system as much as (or more than) its workings as a relatively stable configuration. Minsky [1986] focuses on the rapid succession of financial innovations since World War II and their impact on monetary policy. Chick [1992] goes further back in time, discussing the emergence and development of the capitalist banking system. She emphasises that the function of bank liabilities as means of payment was an historical institutional development which happened to fundamentally alter the macroeconomic system, and argues that it was a material precondition for Keynes’s theoretical reversal of the classical causal relationship between savings and investment.
3.5 Back to Marx

In fact the power of the [central] bank begins only where the private ‘discounters’ stop, hence at a moment when its power is already extraordinarily limited. [Marx, 1973: 124]

This brings us back to Marx, because his analysis of money, credit and credit-money is a response to precisely this historical development, still underway in his own time. Discussing it in terms of ‘liquidity preference’ may appear to do violence to Marx’s analysis, since the term carries a connotation of methodological individualism – as a set of psychological preferences, so that a macroeconomic liquidity preference schedule appears as the average across a whole society of all individual liquidity preferences. A Marxian approach to the question must be systemic.

The ‘portfolios’ themselves, ‘hoards’ in Marx’s terms, form for two major reasons: first, within circuits of capital, accumulating and spent to various rhythms, from the week-to-week circulation of wages and raw materials to the very slow turnover of means-of-production. We can also include a certain level of ‘precautionary’ hoarding to meet the unexpected. Secondly, hoards form out of revenue income not spent (including wages) and the accumulation of money-capital not (or not immediately) reinvested in the circuit of capital that generated it – ‘savings’ and ‘retained earnings’. The extent to which these hoards will be kept in liquid form depends on the frequency and predictability which they need to be turned into means-of-payment and spent, and the expected alternative reward available for sacrificing liquidity, including interest, dividends, capital gains, etc.

Alongside hoard formation, credit needs congeal in various parts of the system. Some form within circuits of capital: rolling credit can substitute for the need to accumulate hoards for regular spending on wages, raw materials, etc., and long-term loans can finance capital equipment. Others come from the possibility of new capital formation, investing borrowed money-capital in new or expanded circuits. Credit can fund consumption, durable good, or dwelling expenditure, capitalising future wage or other revenue income. Finally, credit can fund asset purchases for speculative or other purposes.

Thinking in terms of liquidity provides a way of systematically relating these two ruptures Marx identifies in the link between the quantity of money and expenditure: hoarding and credit. These two practices are related because in the extension of credit, the lender converts a money hoard into a less liquid store of value. Both money and the debt instrument function as stores of value to the holder, but the former can be readily spent while the latter must first be

24 For a discussion on the increased importance of household credit in recent decades, see Lapavitsas [2008].
converted into means-of-payment, through sale or redemption. Interest, of course, is the compensating reward, with the spectrum of interest rates corresponding to the spectrum of liquidity (modified by perceived credit risk). The development of a credit system changes the relationship between hoarding and the money supply, because hoarding itself no longer governs the amount of money held outside circulation, but the amount hoarded in liquid form. Interest rates mediate between the system’s demand for liquidity and the demand for credit. Portfolio adjustment, and therefore speculative demand, will be a substantial determinant of this systemic demand, because wealth portfolios are carefully managed. But as Minsky demonstrates, there is a disconnect between the liquidity profiles of non-financial units’ balance sheets and the liquidity of the system as a whole. Financial institutions, in managing their own balance sheets, create, destroy and shuffle around the system’s means-of-payment ‘behind the backs’ of the ultimate wealth-holders.

Where does this leave the central bank? Marx, as we saw above, sees the central bank as exercising its influence through the bank rate. In Minsky’s terms, it operates on the cost and availability of credit by affecting the cost of bank position-making. Its effectiveness depends on the major position-making practice of banks involving borrowed reserves from the central bank. But Marx noticed that in periods of tightness, the banks developed what Minsky would call innovatory position-making practices. They began to settle payments imbalances among themselves not only with gold or banknote reserves, but with “first class bills, bills upon the Treasury, and Messrs. Smith, Payne and so forth” [quoted in Marx, 1981: 671]. Marx could see the importance of this emergent practice, but did not quite know what to make of it. It only came to light when it was implicated in the 1857 banking crisis: the interbank market for these bills froze up, and suddenly insolvent banks and brokers demanded that the Bank of England temporarily exchange them for fully-fledged central banknotes to halt bank collapses and all the unemployment they would lead to. Ultimately, Marx concluded, the Bank of England was not able to avert crisis because of the limitations on its own gold reserves, which were rapidly draining overseas. English prices had stretched away too far from the gold anchor in the boom, and there were limits to the banking system’s capacity to maintain convertibility in such conditions; credit-money was therefore over-extended, and had to be jerked back in one way or another.

With the gold anchor fading away gradually under Bretton Woods, and definitely a thing of the past by the mid-1970s, Marx’s ultimate limit no longer held, at least not for the American central bank. The same period was one of rapid financial innovation, which Minsky [1986]
shows to be linked to the evolution of bank position-making practices. Without the ultimate anchor of gold, there was no reason to dismiss the possibility of continual inflation, and the problem of central banking was more open-ended, with two sometimes incompatible goals – the traditional one of avoiding financial over-extension and crisis, and a new one of limiting the pace of price inflation. [Minsky, 1982] But in both cases private finance’s ability to stretch systemic liquidity on any given reserve base means that the central bank is often in a reactive position, far from being the setter of ‘the money supply’ or even ‘the interest rate’ of Keynes’s *General Theory*.

I have deliberately refrained in this chapter from discussing the precise relationships between money, income-expenditure flows, employment and inflation, and therefore on the specific transmission channels by which the central bank attempts to influence its ultimate targets. Both the channels themselves and theories about them changed substantially over the period I discuss, and I have left this discussion to the later chapters. I will show in Chapters 6 and 9 that the issues discussed here in general terms matter for monetary policy whether it seeks to influence expenditure flows or the money stock.
PART II

The long 1950s
4: ‘External balance’ and the counter-inflationary imperative

4.1 Introduction

In Chapter 2 I quoted the conclusion of the Committee of Economic Enquiry in 1965 that

the attainment or near attainment of any one of the seven objectives of economic policy may make the attainment of others more difficult… Thus, the nearer an economy is to full employment, the more difficult it is to achieve stability of costs and prices. On the other hand, stability of costs and prices makes for external viability, although action to achieve external viability, for example, by exchange devaluation, may operate against stable prices. In short, all objectives cannot be ‘maximised’ simultaneously… [Vernon et al, 1965: 46]

I used this quotation as a classic example of how socio-economic contradictions appear as policy dilemmas. Policymakers must either find a way to reshape the social structures generating the contradictions, or accept a trade-off between goals. This chapter and the next explore this particular ‘trilemma’ at the heart of postwar economic policy. The Vernon Report (as the Committee’s report became known) suggests a policy choice to be made between full employment, price stability and ‘external viability’, in which only two can be pursued simultaneously. I explain why this trilemma developed, why attempts to resolve the contradiction failed, and why in fact external balance and price stability began to be prioritised at the expense of full employment.

This chapter centres on ‘external viability’ and its interconnections with price stability. Contemporary theory in the Tinbergenian tradition often combined full employment and price stability in the single goal of ‘internal balance’, and focused on the tension between it and ‘external balance’. While there is much of interest in this literature, it misses the real issue. Instead, I argue, the imperative of ‘external viability’ forced policymakers to privilege price stability above full employment within the duality of ‘internal balance’. Chapter 5 focuses in much more detail on this duality, but I will foreshadow some of its arguments in this chapter.
In the next section I look at the Bretton Woods order and how it shaped the way in which Australia was integrated into the world economy. I stress that Bretton Woods did not create international constraints on national policy, which were inherent in the fact of Australia’s integration in a world economy, but shaped the specific form it took. The meaning of ‘external balance’ was contingent on the particulars of this order. It was defined around the capacity of the central bank to maintain the fixed exchange rate, given the finite nature of its foreign exchange reserves.

In Section 4.3 I discuss contemporary theoretical representations of the policy problem, focusing on the influential framework initiated by Trevor Swan and developed in a number of directions by academic economists in Australia. While this framework made use of some important stylised facts of the Australian situation, it remained abstract. In Section 4.4 I move to less abstract accounts of the particular problems facing Australian policy in the 1950s and 1960s, as policymakers came to terms with “Australia’s long-run balance-of-payments problem”.

4.2 “A balance of hopes and desires”: Bretton Woods shapes the constraint

The very sovereignty of this Nation is in jeopardy... Whilst our men and women were making tremendous sacrifices to prevent the establishment of a world dictatorship, the International Financial Interests were working out the details of a plan – more insidious because they remained unseen – whereby the whole world would come under their domination... I am convinced that the Agreement will enthrone a World Dictatorship of private finance, more complete and terrible than any Hitlerite dream. It offers no solution of World problems, but quite blatantly sets up controls which will reduce the smaller nations to vassal States and make every Government the mouthpiece and tool of International Finance. It will undermine and destroy the democratic institutions of the country – in fact, as effectually as ever the Fascist forces could have done – pervert and paganise our Christian ideals; and will undoubtedly present a new menace endangering world peace... World collaboration of private financial interests can only mean mass unemployment, slavery, misery, degradation and final destruction. Therefore, all freedom-loving Australians should reject this infamous proposal. [Eddie Ward, quoted in Crisp, 1977: 205]

The ‘infamous proposal’ in question was that Australia sign up to the Bretton Woods Agreement. The speaker, on a radio broadcast in April 1946, was not a marginal figure but Eddie Ward, a Cabinet minister at the time, campaigning against his own Labor government’s plans. Most of the nations represented at the international conference had already signed; but the American plan for an International Monetary Fund (IMF) had prevailed over the British Clearing Union proposal, which “ushered in a year of fierce domestic strife within the Labor camp.” [Crisp, 1977: 205] Despite the hyperbole, Ward’s rhetoric reflected the fierce
opposition of much of the labour movement. It was haunted by the ghost of Oscar Niemeyer, emissary of the Bank of England, dispatched to Australia during the Depression to deliver the message that it was ‘living beyond its means’ and must deflate. For Ward, Bretton Woods was the gold standard reborn, “but in a different form from that in which we previously knew it” [ibid: 205] – and a worse form, because the relative informality of the gold standard carried the possibility of unilateral suspensions and adjustments of par, while under Bretton Woods these would require IMF approval, possibly tied to policy adjustment.

Yet its supporters promoted the Bretton Woods Agreement as machinery to *increase* the capacity of governments to pursue domestic macroeconomic goals, to defend national economic spaces from the unforgiving judgements of mobile capital and other governments’ narrow self-interest. Keynes’s plan stipulated that “there should be the least possible interference with internal national policies” [Keynes, 1969 (1943): 19]. This could be interpreted in the sense of *negative* freedom for national governments, *freedom from* specific constraints from the international monetary institutions. This was a clause the Americans could sign on to also; their problem with the Clearing Union proposal as a whole was that it was in fact out of step with this sentiment: it disciplined creditor governments as well as debtors and created a new form of inter-state liquidity. It was a proposal for *positive* freedom, *freedom to* aim at full employment with less fear of payments difficulties. The alternative to reasonable IMF supervision was the blind supervision of gold, which cared nothing for employment; Keynes’s argument was that tighter but consciously chosen, rational international institutional discipline would facilitate domestic full employment policies.

Here the Australian government proved itself “more Keynesian than Keynes” [Markwell, 2000: 52] and its delegation made a minor nuisance of itself at Bretton Woods. It argued that full employment was beyond the capacity of any single state, given economic interdependence. This push culminated in a resolution at Bretton Woods: “... that Governments which are to be invited to accept an International Monetary Agreement should be invited to accept con-curren an international agreement in which the signatories will pledge themselves to their own people and to one another to maintain high levels of employment in their respective countries, and to exchange information on measures necessary to prevent the growth of unemployment and its spread to other countries” [quoted in Markwell, 2000: 57].

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25 Even to Keynes himself. In April 1945 Keynes wrote a letter to his old friend T. S. Eliot: “Not so long ago I was at a Conference where the Australians urged that all the Powers in the world should sign an international compact in which each undertook to maintain full employment in their own country. I objected on the grounds that this was promising to be ‘not only good but clever’... Insufficiency of cleverness, not of goodness, is the main trouble.” [quoted in Markwell, 2000: 59]
Despite the support of Britain and New Zealand, the proposal was predictably voted down, it being “plain from the outset that in the eyes of the United States Administration the proposal smacked of socialism and that the implied interference in domestic policy was politically unacceptable.” [Butlin and Schedvin, 1977: 647]

Constraint on policy from beyond state borders was hardly a creation of Bretton Woods, but inherent in the fact that the economic system extends across national borders. As Knafo [2006] argues, the gold standard itself actually enabled the carving of national currency spaces out of a world of commodity-money, and aided the discipline of domestic credit monies by central banks. Like the gold standard before it, Bretton Woods did not create the constraints but shaped them into a particular form, and represented an attempt to open new spaces for deliberate management. Though Ward’s preference for flexible exchange rates, despite all his hyperbole, foreshadowed the consensus among academic economists only a decade or two later, they would not have removed constraints on domestic policy – as I will discuss below and in Chapter 7. Given that in this period around a fifth of production within Australia was oriented towards the world market, and slightly more than that of Australian incomes was spent on foreign goods, currency movements could not but have their own profound implications for policy goals.

Any particular mode of international integration would be constraining of policy in some ways, and enabling in others. It is not surprising that Australia ultimately did sign up to Bretton Woods: the International Monetary Fund quota system left the government with more access to effective foreign exchange reserves than it would have had in its own central bank vaults, and hence more room to move, even if the Clearing Union proposal would have entitled Australia to three times as much.26 [Butlin and Schedvin, 1977: 645] Nevertheless, the particular problems facing Australian policymakers inherent in the requirement for ‘external balance’ appeared in forms specific to the Bretton Woods order. The Australian negotiators were right to believe that full employment policy could come into conflict with ‘external balance’, and the labour movement was right to foresee that this would set policy against its

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26 The quantity of available reserves do not quantify the ‘room to move’ precisely, however. A secondary impact of the quota system was to increase the quantity of effective reserves to the world as a whole and thereby reduce the impulse to hoard gold or US dollars. Also, by centralising them so that the same credits were available to whichever country needed them, rather than locked in a single government's balance sheet, they stretched the effect further. Probably even more important than the quotas themselves was the great expansion of the supply of dollars to the world from the large American payments deficit that unexpectedly opened up in the 1950s. Australia would thus have benefited from some expansionary effects of both whether or not it joined Bretton Woods. Conversely, it is possible that the real value of extra reserves implied by the Clearing Union plan could have been eroded by a higher rate of world inflation made possible by the extra liquidity.
power.

The nature of that order is not fully described by the Bretton Woods Articles of Agreement, but was a complex of formal and informal rules as well as evolved policy strategies for dealing with them. Although much of the discourse at the time described ‘external balance’ or ‘external viability’ as one policy goal among others (e.g., in the terms of reference given to the Committee of Economic Enquiry [Vernon et al, 1965: v]), or counterposed it to ‘internal balance’ (e.g., Swan [1963 (1955)]), the separation is not so clean. It is better to describe it as a constraint that had implications across the range of domestic policy goals.

As under the gold standard, the ultimate constraint was the official reserve of gold and foreign exchange. The advent of Bretton Woods did not change much about the technical operation of Australia's reserve management, since it had always worked with sterling reserves and ‘London balances’ rather than gold. The short period of variability between the Australian pound and sterling between 1928 and 1931, over which the former fell in value by 25 per cent, was the only break in a long run of exchange rate stability. The Australian pound remained at 1.25 to sterling from 1931 until the UK devaluation of 1967, though Australia devalued with sterling against the dollar in 1949. Australia had always been on what Keynes [1971 (1913): 11-25] called the ‘gold-exchange standard’ rather than the gold standard proper, and Bretton Woods changed this only in bringing the US dollar into the equation, which slowly edged out sterling within Australian reserves.

Ultimately, just as under the gold standard, the finite nature of reserves meant that net supply and demand for the national currency other than that arising from deliberate official support out of its reserves had to eventually be reconciled. Official support could only be a holding pattern, possibly supplemented by borrowing reserves overseas, while other factors came right or were made right. Perhaps the most important difference from the pre-war status quo was the comparative lack of capital mobility under Bretton Woods. But the effects were more ambiguous than is sometimes recognised: under the gold standard speculative flows could be stabilising, counteracting other outflows, so long as there was confidence of official willingness and capacity to maintain the peg over the long run. This goes some way to explaining why governments remained committed to the gold standard for so long, despite its evident constraints. [McKinnon, 1993: 7-8; Eichengreen, 1996: 7-44] Given the destabilising potential of speculation once confidence was lost, there was no going back to a time before

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27 It was only in this period, also, that holdings of gold and foreign exchange scattered among private banks were centralised into the Commonwealth Bank reserve.
the Fall of the 1920s and 1930s. But without speculative flows, the task of maintaining the peg fell entirely on official reserves and official borrowing capacity. The buffer of IMF quotas took the place of capital flows as a buyer of time, though they were much more reliable and in this way increased policy capacity.\footnote{Note also that Australian authorities never used a Bank rate-type mechanism to attract capital flows under the gold standard. In this they were far from alone; the gold standard mechanisms of the textbooks tended to reflect British practice.}

The meaning of ‘external balance’ or ‘the balance of payments’ was not confused with the trade balance \textit{per se}, or any accounting category – at least not usually in policy and academic circles. Capital flows were not seen as automatically accommodating a current account deficit, and neither trade balance nor current account balance were seen as equilibrium positions, in the sense that there were market tendencies towards them. In his book on \textit{The Balance of Payments}, an early and definitive landmark in post-war Keynesian thinking on the subject, Meade [1951: 7] cautions at the outset that the balance of trade “in no sense measures the disequilibrium in the country's balance of payments.” Instead he puts forward a distinction between ‘autonomous’ and ‘accommodating’ payments. He gives a very broad general definition of autonomous payments as those which “take place regardless of the size of the other items in the balance of payments”, while accommodating payments occur “only because the other items in the balance of payments are such as to leave a gap of this size to be filled”. [Meade, 1951: 11] By this definition, private capital flows are as ‘autonomous’ as trade flows, and ‘accommodating’ payments are (almost entirely) those that come out of official reserves for the purpose of maintaining the exchange rate. However, because capital flows were less amenable to policy influence, policymakers were generally much more concerned with trade. It was not that imports and exports had to balance, even in the long run, but that the value of imports could not persistently exceed export earnings and net capital inflows together, and \textit{all three} were relatively independent from one another.

In criticising the post-war notion of the ‘dollar shortage’ associated with the international payments problems of the sterling bloc and Europe in the early postwar years, Machlup [1950] makes a cogent distinction between the ‘market balance of payments’ and the ‘program balance of payments’. (He dismisses accounting definitions on grounds of their arbitrariness.) His concept of the market balance is similar to Meade’s definition above: a balance of supply and demand for the nation’s currency such that movements in official reserves are not necessary to support the exchange rate. This is the balance that bites, because if it cannot be reached before reserves run out, the government is forced to suspend
convertibility or devalue.

The program balance is more nebulous. Machlup explains that US dollars were ‘short’ from the point of view of European policymakers not in an absolute sense, but with respect to each nation’s projected needs for “development, improvement of plant, productivity and plane of living” [ibid: 67]. Were a government indifferent to these things, a market balance-of-payments deficit would have no bite, even if it were committed internationally to a fixed exchange rate; there would be nothing to lose in carrying out deflationary policies to reduce domestic income, or imposing exchange or import restrictions.

Assuming that a government is not indifferent to such things, it will find some remedies for a persistent drain of reserves more amenable than others. Ideal, perhaps, would be a spontaneous solution which carries no pain for local residents: e.g., a sudden discovery of large and valuable mineral deposits, which draws in foreign investment in the short run and eventually sets up a substantial new stream of exports. But government has no power to conjure such an outcome, and if the country is not so lucky, it must take some other action. Machlup [1950: 55-60] calls the program balance “a balance of hopes and desires” – emphasising that it is not entirely ‘external’.

Machlup’s argument resonates with de Brunhoff’s [1978: 83] statement, discussed in Chapter 2, that “[i]t is not possible to define an ‘economic policy’ simply by enumerating and adding together these various elements.” ‘External balance’, full employment, price stability, and so on, cannot be understood as incidental items on a list of desirables, linked only through being policy objectives. They emerge together as elements in a structure which creates a unified ‘economic policy’ in which they are crystallised as semi-independent targets. ‘External balance’ was a policy goal or problem in the Bretton Woods period because of its relationship with the internal commitments, and this relationship was determined not within policy but because of the nature of the economic structure of which policy institutions were parts. The labour market and the private market system through which prices emerged were as ‘external’ to policy as flows of money and goods across borders. Yet all these things are ‘internal’ to one another in the sense of reciprocal influence as part of a system. Machlup’s practical insight is that Bretton Woods felt constraining not necessarily because it imposed new limitations on policymakers from outside, but because higher domestic aspirations had been imposed upon policymakers, bringing policy up against the limits of its powers to maintain the fixed exchange rate.

This realisation was part of the growing consciousness that contradictions between policy
goals, originating from their structural relationship in the economic system, required a strategic unification of the arms of policy, as well as their extension into certain areas and strengthening in others. The work of Tinbergen, as discussed in Chapter 2, shows this consciousness at its most developed within the period’s policy theory, with his injunction that “[i]t is no longer necessary to neglect the interrelations, and a simultaneous consideration of all targets and instruments, as well as their quantitative relations, should be considered.” [Tinbergen, 1966:49] Conceptualising policy in his systematic way provides a means to conceptualise not only how policy itself must work as a system, but also to portray why policy finds itself apparently facing contradictions, being pulled in different directions, forced to choose between evils. Recall his distinction between ‘quantitative policy’ as the routine workings of an ensemble of instruments, and ‘qualitative policy’ as attempts to reform the structures of state and economy itself to resolve contradictions and set up a new configuration of instruments for smoother, more effective quantitative policy. In Australia in the 1950s a literature along Tinbergen’s lines on the interrelationship between the balance of payments and domestic policy goals developed around the groundbreaking work of Trevor Swan. I now turn to consider how it captured the structure of problems facing Australian policymakers and guided their own attempts at ‘qualitative policy’, which was bound up with the relationship between the twin domestic goals of full employment and price stability.

4.3 Swan’s way: a contemporary model of policy coherence

Meade’s [1951] The Balance of Payments was such a comprehensive theoretical treatment of the relationship between ‘external balance’ and domestic economic conditions and policy goals that it seemed to say all that needed to be said. According to Pearce [1961: 1], one reviewer (unnamed) remarked that “since everything is fully worked out therein, we should now be spared the large number of articles we might otherwise have had to read.” In it, Meade integrated the pre-Keynesian wisdom of the so-called ‘elasticities approach to the balance of payments’, which concentrated on the price effects of shifts in real exchange rates, with the newer concerns of Keynesian economics: income-expenditure aggregates and money. The new, Keynesian wave of balance-of-payments theory would come to be known as ‘the absorption approach’ (after Alexander [1952]), but it did not so much supplant the traditional concerns with price shifts as supplement them.

However, in the course of the 1950s a distinctively Australian approach to balance-of-payments theory emerged. Its central structure was almost universally acknowledged to be the work of Trevor Swan, and though he did not publish a model until 1960, it had already
reportedly been circulating in conference papers and lecture notes since at least 1952, and developed as an ‘oral tradition’ at Australian National University and within the public service. Swan had been a public servant prior to his appointment as the first chair in economics at ANU; he had worked on the *Full Employment* white paper (see Chapter 5), and his model was first presented to a meeting of economists at the central bank in the wake of the wool boom and bust (see below). It had a substantial influence on both official and academic economists. [Arndt, 1976]

Swan’s theory fits into the Tinbergenian tradition discussed in Chapter 2, framing the analysis around policy, elucidating the trade-offs facing policymakers:

> This exploration may be described as an essay in political algebra. The iron law of political arithmetic says that we can’t have our cake and eat it too. In political algebra, with more kinds of freedom, we can eat some kinds of cake and still have others – but only if we discriminate according to the rules of the economic system. Those who are too ignorant, too greedy, or too ambitious to keep their choice within the rules will be disappointed; they will suffer that ‘economic remorse’ which Croce called the heart of Economics, and which Politics too often wears upon her sleeve. [Swan, 1960: 52]

It also fits into the Meade tradition of integrating the elasticities approach with a macroeconomic treatment of income-expenditure flows. Swan differs from Meade [1951] in focusing on the relationship between the price level of tradables and the price level of non-tradables, rather than the terms-of-trade relationship between export and import prices. Both export and import prices – and therefore the terms of trade – are treated as determined on world markets, with negligible influence from domestic supply or demand conditions, and no possibility for policy influence. They are exogenous, but not necessarily constant. This makes for a greatly simplified model, compared with Meade’s, but also one more in line with Australian reality. [Swan, 1960: 53-54]

The system is stripped down to its basics. The technical and competitive structure of the economy – and therefore the relationships between labour productivity, output and pricing – are taken as given, beyond the reach of policy, though not necessarily invariant. Again, the terms of trade and capital flows are also considered exogenous. The model contains six core variables:

- domestic output (in real terms), Y;
- the import surplus (i.e. imports minus exports, measured in the same real units as...
production), \( J \); aggregate domestic demand (also in the same real terms), \( D \);
the internal price level (measured by a consumer price index), \( P \);
the external price level in domestic currency (measured by an import-export price index), \( R \); and
the average money-wage level, \( W \).

There are four equations, though one is redundant because implied by another, leaving three independent relationships:

1. \( D = Y + J \)

Domestic demand is the sum of production and the import surplus. Note that ‘demand’ is here defined as the expenditure of domestic residents, rather than the demand confronting domestic producers. Exports are not part of demand in this sense, though they form part of domestic production \( (Y) \). Imports are a part of domestic demand, but by using the import surplus \( (J) \) instead of imports as a whole, the contribution of exports to production \( (Y) \) is eliminated. This is an identity rather than a behavioural equation.

2. \( Y = f(D, R/W) \); or \( J = g(D, R/W) \)

Only one of these equations is necessary because once either production \( (Y) \) or the import surplus \( (J) \) is determined, the other is also by equation (1): the pair must sum to equal domestic demand \( (D) \). They state that the level of domestic production depends on both domestic demand and the ratio of external prices to domestic wages. Demand is related positively to both: all else being equal, the higher domestic demand, the higher will be both domestic production and the import surplus, though the shape of each function will be quite different. The ratio of tradables prices to domestic wages is positively related to domestic production and inversely related to the import surplus, because the more profitable the domestic production of tradable goods is, the more exports and import-replacing goods will be produced, and because a high relative price of tradables will switch domestic demand towards non-tradables. [Swan, 1960: 54-55]

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30 The price index problems involved here are dealt with by Pearce [1961: 3-4].
31 Although defined with reference to import and export price indices, Swan often uses the external price level as a price index of tradables – which is a broader concept including goods and services which are potentially but not actually traded – and thus whose prices depend on competition on the world market. Import and export price indices weighted by actual trade will not necessarily be a good representation of the broader class. See Chapter 7.
3. $P = h(D, R, W)$

The price level is positively related to domestic demand, tradables prices, and domestic money-wages.\(^{32}\) The average price mark-up over wage and materials costs varies with turnover. Swan does not spell it out, but presumably turnover is more proximately represented by domestic output ($Y$) than by demand ($D$); however, given the other factors, $Y$ depends on $D$ and hence can be dropped out to make this equation symmetrical with (2).

Having established these simple interrelationships, Swan makes three of the six variables exogenous as policy targets. Targeting *internal balance* means that policymakers aim for a level of output consistent with “full employment without inflationary pressure”. The tension and indeterminacy in that definition is symptomatic of an extremely important real tension, as I will discuss, but Swan treats it as generating an unambiguous aggregate production target, i.e., a value of $Y$ given from outside the system by the technical and competitive structure of the economy. *External balance* refers to a specific level of import surplus ($J$) – not necessarily zero (a balance of imports and exports) as there may be capital inflow, which is treated as exogenous. *Internal price stability* clearly means targeting some given internal price level ($P$).\(^{33}\)

With $Y$, $J$ and $P$ so determined, Swan's system is left with three equations and three unknowns: therefore, a fully determined system. The three unknowns, aggregate domestic demand ($D$), the tradables price level in domestic currency ($R$), and the money-wage ($W$) are not policy targets in themselves, but must be controlled by authorities to achieve the desired values for the three targets. Domestic demand must be brought into equality with the sum of target domestic production and the target import surplus. Given this level of demand, its split between domestic production and import surplus determines the necessary *ratio* of tradables prices to the domestic wage level. Finally, given demand and this ratio, the target price level determines the necessary *absolute* level of money-wages and tradables prices. This also determines the domestic real wage – apparently not a goal in itself, it is subordinated to the objectives.

This is the bare essence of the Swan system. The main point, which remained throughout all the restatements, revisions and critiques was this: *if a government is committed to full employment, and required to maintain external balance, demand management is not enough;*

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\(^{32}\) In fact, according to Swan, the price level may be negatively related to demand where decreasing costs apply. But in conditions around full employment, the relationship will be positive. [Swan, 1960: 55]

\(^{33}\) Swan refers to a price level rather than a rate of inflation; this reflects the early post-war, pre-Phillips Curve norm (see Chapter 5). But this need not imply that authorities aimed at a constant price level (zero inflation).
it must also pursue a sustainable division of demand between domestic and foreign goods. In another paper, Swan [1963 (1955)] presents in a simple diagram the interrelationship between internal and external balance. The price level and the third goal from the earlier paper, internal price stability, drops out as a variable, but is still implicated in the definition of internal balance as “full employment without inflationary pressure”. The money-wage remains, but collapsed along with tradables prices into a single variable, the ‘cost ratio’ between domestic costs of production and tradables prices. In the diagram, reproduced as Figure 4.1, the cost ratio is represented on the y-axis and ‘real expenditure’ on the x-axis. In this space, the possible configurations compatible with internal balance are represented by a downward sloping curve: the higher are foreign costs relative to domestic costs, the lower real expenditure must be to maintain balance between domestic supply and demand for that supply. The points of potential external balance are represented by an upward sloping curve: the higher are foreign costs relative to domestic costs, the higher must real expenditure be to maintain the target trade deficit (not necessarily zero, again, because of independent capital flows).

There is a single point at which external and internal balance co-exist. It is unlikely to be an equilibrium point, in the sense that there is some tendency of market processes to automatically deliver the economy there. In the earlier paper, Swan [1960 (1952): 61-63] argues the contrary: demand and price-level movements could interact in a perverse, self-reinforcing way in the short run, while market exchange rate adjustments and their effects are unpredictable and may not tend towards an equilibrium. Market wage determination connects the wage level to the level of domestic production (via the unemployment rate), with more potentially perverse feedback effects. No, hitting the sweet spot depends upon policy.

Simultaneous achievement of price stability and internal and external balance is a simple matter of having as many instruments as targets and assigning each one appropriately. In the original paper, fiscal policy is assigned to domestic demand (D), the central bank controls the effective foreign price level (R) by setting the exchange rate, and the arbitration court controls the money-wage (W) through national wage rulings. All is determined. In the later paper with the geometric representation, the discussion is somewhat different: policy needs some way of controlling domestic demand, and some way of controlling the cost ratio. The former raises no

34 Under the ‘gold standard solution’ of a fixed exchange rate, market mechanisms are likely to take care of internal and external balance, but “only if money wages and prices are flexible to an unrealistic degree, and even then only at the expense of a corresponding violence in departures from the objective of Internal Price Stability.” [ibid: 62-63] In other words, a fixed exchange rate means that either domestic wages and prices must carry the burden of domestic adjustment to shifts in the external price level, or full employment must be abandoned: the familiar impasse of the pre-war gold standard.
real problems – it is standard Keynesianism; the latter is the difficulty. The difficulty arises because Australian policymakers were committed to fixed exchange rates, and wage adjustment was the only alternative.

Figure 4.1: Swan’s zones of economic unhappiness


At this point it becomes difficult to keep politics out of the model; indeed, in his second paper Swan abruptly switches registers in the second half from the flat geometric field in which all policy situations are possible to the very specific current affairs of mid-1950s Australia. But for my purposes, there is a further step to take before getting to the specifics. Swan’s model is not by itself a sufficient basis for explaining the policy of the period. The exercise generates the standard vulgar Tinbergen maxim, that policy must have as many instruments as it has targets.

I say ‘vulgar Tinbergen’ because, although this was the central message of much of the policy
theory literature taking its lead from Tinbergen, Tinbergen himself criticised it – as discussed in Chapter 2:

This tendency is to some extent based on the belief that there is a one-to-one correspondence between targets and instruments, that is, that each instrument has to serve one special target. Taxes and government expenditure are thought to be relevant to financial equilibrium, wage rates to employment, exchange rates to the balance of payments and so on. The interdependence is neglected or underestimated… [Tinbergen, 1966: 49]

In missing the fact of interdependence – the practical difficulty of, for example, ‘assigning’ fiscal policy to one objective and monetary to another, when both objectives are affected by both branches of policy – the literature on the ‘policy mix’ removed itself from policy relevance. The ‘mix’ often implied extreme policy settings that looked possible only on two-dimensional diagrams. Policymakers themselves recognised the often limited room within which their instruments could be moved meant that more often than not pursuing a single goal required the combined effort of multiple instruments.

The ‘policy mix’ is thus connected to the question of instrument capacity more broadly, which the Swan system does not consider at all, with its assumption that policy can simply set aggregate demand and the money-wage. The Swan model’s relationship to real world policy is essentially a normative one: it makes the case that policy needs more flexibility (in the case of the exchange rate) or more power (in the case of wage-setting). It is not much use in explaining policy if the advice is not taken up, or understanding the obstacles. As a normative argument, it helped to constitute, guide and legitimate the policy-making technocratic subject as a strategic actor seeking to reorganise the political-economic structure. But inevitably, a broader, more practical literature accumulated around the Swan system (including Swan’s own less abstract commentary) which dealt with the more complicated problems, and I now turn to this literature.

4.4 Beyond Swan

As discussed in the previous section, in Swan’s [1960 (1952)] original paper policymakers are presumed to be able to set the three instrumental variables: ‘Treasury’ sets aggregate domestic demand (D), ‘the Bank’ sets the external price level (R) via the exchange rate, and ‘the Court’ sets the money-wage level (W). This is true, at least, until the concluding remarks, where “errors”, “current political realities”, and “dynamic and institutional considerations” come briefly into the picture. [ibid: 64-66] But much of the story of real world policy lies in
precisely these areas. Rather than setting aggregate demand, fiscal policy was one ‘autonomous’ component among others and was used with some uncertainty regarding private investment or net exports, the other two major autonomous components with which it wrestled. The Commonwealth Conciliation and Arbitration Commission was a judicial body for whom macroeconomic policy was just one consideration, of uncertain status, and in any case its control over the wage level was beginning to slip in the face of privately negotiated over-award payments. (See Chapter 5.) The exchange rate remained fixed, freeing the central bank to help with aggregate demand, but its capacities were limited.

If policy cannot set the intermediate targets as it pleases, further relationships between the variables need to be introduced into Swan’s system. For example, a shift in the domestic price level (P) may feed back into the money-wage level (W), while the level of output (Y) may also be associated with wage pressures. Since incomes are derived ultimately from production, and demand is related to incomes, there would be a casual relationship running from output (Y) to demand (D).\footnote{Although Swan's equation (1) may appear to admit such a link, it is definitional rather than causal, and the discussion establishes causation running only the other way, since policy is presumed to set demand while it targets output.} This means fluctuations in trade volumes and prices will affect domestic incomes and hence demand.\footnote{Swan’s import surplus (J) and external prices (R) variables are not adequate by themselves to represent these effects, because fluctuations in export and import quantities and prices will have different relationships to incomes. It would be more appropriate to separate out export and import volumes and prices into four variables.} A model representing all these interconnections would be considerably more complex than Swan’s, which was of course deliberately kept simple to emphasise the (valid) point that aggregate demand management alone would not be enough to maintain both full employment and external balance.

Even the most complex and general formal models of the Swan type (e.g. Pearce [1961]) did not attempt to incorporate dynamics, being content to focus on the existence or otherwise of static ‘solutions’. Yet these interconnections and uncertainties about the future were central to the problems facing policymakers, and unsurprisingly a literature oriented towards these more concrete problems developed alongside the formal models, gesturing to the latter but relying more firmly on rough-and-ready empiricism, inferring from facts of the recent past and projecting into the future. If a dynamic understanding of the inter-relationships between external and internal balance is considerably more complex than the Swan model, the complexity is moderated by the fact that I do not need to consider all possible permutations, only the situations which Australian policymakers actually found themselves dealing with. I first present several ‘stylised facts’ about Australia's integration into world markets, facts
which remained more or less constant over the period. I then turn to what changed, identifying three more-or-less distinct sub-periods with different problems.

The stylised facts

What follows is a highly condensed summary of the relevant facts of Australia's trade and capital flow situation over the period 1945-65. Detailed narratives can be found in McColl's [1965] book, and the relevant chapters of Vernon et al [1965: 405-16, 1081-95], and annual data in Foster [1996]. These are the main sources from which I have distilled 'the facts'.

Australian domestic conditions had negligible influence over tradables prices. The price index for exports was volatile and trended downwards, while the price level for imports was remarkably steady.

Price indices for export, imports and consumer prices are shown in Figure 4.2. The export index is dominated by the price of wool, which made up half the total value of exports in the period. Both the long-run downward trend in wool prices (the mid-1960s apparent recovery would not be sustained) and the brief but enormous spike of 1950/51, are of major importance, as discussed below. The import price index has a comparatively flat trend, after a rise around the turn of the 1950s associated with the devaluation of 1949. The consumer price index indicates the divergence between domestic prices and tradables prices opening in the early 1950s.

Exports were dominated by agricultural products, whose output was unresponsive to demand in the short run. Consequently, short-run fluctuations in the value of exports were dominated by price.

Figure 4.3 shows McColl’s [1965: 69] breakdown (by value) of goods exports over the period. Exports of services are not included here, but remained relatively steady, and small, at 1.7 per cent of GDP throughout. [Foster, 1996: 20] Exported goods were overwhelmingly primary commodities – 91 per cent over 1946-50, falling to 86 per cent by 1962/63 – mostly rural, and with wool alone accounting for around half, though it fell away rapidly from its wool boom peak in 1950/51.37 This concentration of exports in agriculture and associated industries is important to the story. The variability in export prices, and hence values, flowed initially into exporters' incomes, which were not spread broadly across the economy but concentrated in

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37 However, this should not be overstated: when sectoral contributions of value-added to exports are considered, the contribution of rural industries is much reduced, and domestic transport and commerce appears as a major ‘export industry’. [McColl, 1965: 70]
rural Australia. Consequently, the wool boom inflation of 1950/51 was associated with a three-way distributional conflict between farmers, labour and capital. (See below.)

**Figure 4.2: Australian export, import and consumer price indices (1949/50 = 100)**

![Australian export, import and consumer price indices graph](image)

Source: Foster [1996: 24, 28, 242]

Figure 4.4 shows the value of goods exports in current prices; the volume of exports was much steadier than export prices, so that the latter accounts for most of the variation in their value. Note also that the money-value of exports barely rose over the 1950s as a whole.

*Demand for imports was positively and steadily related to money incomes, though this demand was suppressed in the 1950s by import controls.*

This is a more difficult fact to establish because it cannot be read directly from the statistics on actual imports, which were repressed by a system of quota restrictions.\(^{38}\) Quota levels were regularly moved up and down throughout the 1950s, and finally lifted in 1960. The actual fluctuations in imports thus reflect movements in the quotas as much as in underlying demand. Given the stability in import prices, fluctuations in the value of goods imports, shown in Figure 4.5, were also fluctuations in volume. Rough estimates of the underlying

\(^{38}\) At their peak in 1952, these controls limited imports of Category A (deemed essential) to 60 per cent of 1950/51 values, and Category B (less essential) to only 20 per cent. [Lundberg and Hill, 1963 (1956): 364]
demand for imports, repressed by the quota system, are made by Lundberg and Hill [1963 (1956): 363-66], projecting forward from pre-quota relationships to income. McColl [1965: 64] suggests that such a projection connects appropriately with the value of imports after the lifting of the quotas.

**Figure 4.3: Goods exports by type, % to total**

![Goods exports by type, % to total](source: McColl [1965: 69])

**Figure 4.4: Goods exports at current prices ($m)**

![Goods exports at current prices ($m)](source: Foster [1996: 4])
Figure 4.5: Goods imports at current prices ($m)

Source: Foster [1996: 4]

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Figure 4.6: Current account and its elements (% to GDP)

Source: Foster [1996: 3]
Non-trade elements of the current account were relatively small and predictable.

The other two categories in the current account were net income flows and net transfers. The first was a fairly consistent outflow averaging 1.8 per cent of GDP, and the second (mainly official aid) a negligible outflow averaging 0.2 per cent of GDP. Being so consistent, they could be thought of as a permanent 2-percentage-point handicap, but most of the income outflow was associated with foreign investment which brought payments gains elsewhere – directly through capital inflows and indirectly through the expansion of export capacity.\(^{39}\) The current account position as a whole is shown in Figure 4.6.

Private capital flows were autonomous from trade flows, relatively small but less predictable.

Private capital flows were not driven by the trade balance, and were not seen as such by contemporary commentators – even if to some extent their occurrence could only be inferred from a gap in the current account statistics.\(^{40}\) Though current and capital accounts balance by definition, no direction of causality is given \textit{a priori}. The same applies to the necessary equality between domestic investment, domestic saving and external borrowing. Figure 4.7 shows the value of gross private inflows and its (somewhat arbitrary) division between direct investment, portfolio investment, and undistributed income (i.e., funds accruing to foreign investors but not repatriated). The latter item implies not an inflow but a ‘failure to outflow’: it has a counterpart in the property income component of the current account. Figure 4.8 shows net private flows: Australian private investment abroad was a small fraction of foreign investment in Australia, so the story is mainly about inflows.

Net private capital flows were, on average, comparable in quantity to the non-trade components of the current account. But capital flows were more volatile. Thus while they were similarly exogenous, beyond the control of policymakers, they could not be bracketed away or relied upon as a permanent feature of the landscape. Large inflows, when they came, allowed much more room to move with the trade deficit, and thus made the policy job easier. But they could not be taken for granted.

\(^{39}\) Note also that a substantial proportion of what was recorded as an income outflow did not in fact flow out of the country – it was undistributed income earned by foreign investors but reinvested, and the ‘outflow’ here was counted again as an inflow on the capital account.

\(^{40}\) More than half of net apparent capital inflow 1947-50 was unidentified, but less than 20 per cent went unidentified by the 1960s. [McColl, 1965: 95] Of the unidentified ‘balancing item’, some reflected errors and omissions of measurement elsewhere in the accounts, but it also included a substantial “effect of timing difference between the statistical recording of exports, imports, share transfers, etc., and the crediting or debiting of payments for these transactions against Australia's international reserves.” [Commonwealth Statistician, quoted in Vernon et al, 1965: 1087]. One reason for the large proportion of unidentified capital inflows over the 1947-50 period was no doubt the deliberate use of these ‘leads and lags’ to speculate on a revaluation of the Australian pound (see below).
Figure 4.7: Capital inflow ($m)

Source: Foster [1996: 38]

Figure 4.8: Net private capital inflow and capital account (% to GDP)

Source: Foster [1996: 36]
The period as a whole

The difference between net private capital inflow and the overall capital account balance (see Figure 4.8) is the official capital account balance, which is made up mainly of movements in the central bank’s foreign currency reserves – other official capital account transactions are minor compared to those involving the central bank’s currency reserves.\textsuperscript{41} The impact of the balance of payments can be read from the size of official reserves in Figure 4.9. These figures from the central bank balance sheet give a better sense of the balance of payments situation than the national accounting figures: being monthly, they capture movements within each year (the crisis of 1960/61 does not show up in the annual figures at all), and they show the cumulative impact of payments flows on the stock of reserves, which represented the ultimate capacity for the authorities to maintain the exchange rate.

![Figure 4.9: Reserve Bank of Australia foreign exchange reserves](source: White [1971])

The movements in official reserves appear to be cyclical in nature, and indeed, the payments deficits came naturally with booms, but there was nothing automatic about the reversals – the

\textsuperscript{41} The statistics also count acquisition of government securities on the domestic market by foreigners – arguably more properly a private capital inflow – as official borrowing abroad, but this is in fact a small negative figure (i.e., representing net sales by foreigners) in each year for which data is available in this period. [Vernon et al, 1965: 961]
reversal of reserve depletion required deliberate policy action. For this reason, the three periods of rapid decline apparent in 1951/52, 1954/55-56/56 and 1960/61 were felt as ‘balance-of-payments crises’ which forced policymakers to take macroeconomic restraining action.\textsuperscript{42} In each case, had the downward trend continued, reserves would have been exhausted within a year or two. Thus reserve depletion was part of the process generating the downswing of the post-war business cycle, and not a mere epiphenomenon.

\textit{Breaking down the period}

The period’s more concrete balance-of-payments literature revolved around the idea that Australia in the 1950s suffered from “long-term balance-of-payments problems”. [Lundberg and Hill, 1956] The temporal part of that phrase – ‘long-term’ – is what sets the diagnosis apart from Swan's [1960] model.\textsuperscript{43} That model being static, the variables all have a temporally flat, simultaneous relationship to one another; one appears as susceptible to immediate policy ‘choice’ as another. The diagnosis of ‘short-term’ and ‘long-term’ balance-of-payments problems reflects the admission of a realistic dynamic element in which some variables have different patterns of movement and/or are more susceptible to policy influence than others. Specifically, aggregate demand is the short-run, more easily-targeted element, while the cost ratio between domestic costs and international prices is less flexible. Furthermore, the domestic components of aggregate demand tend to move in a cyclical pattern (around an upward trend), while the cost ratio has no such tendency. Following from this is the possibility of a cyclical tendency towards balance-of-payments crises, arising from an unfavourable cost ratio. At a high cost ratio, a cyclical rise in domestic aggregate demand may cause balance-of-payments problems before it becomes a problem of internal balance. Policy is repeatedly compelled to use macroeconomic policy to pull back aggregate demand as domestic business cycles raise demand for imports, regardless of the state of demand for domestic output.\textsuperscript{44} Escaping this tendency requires a lower cost ratio.

When these dynamic considerations are combined with the argument above that there are other causal relationships among Swan’s variables (and components of these variables) which

\textsuperscript{42} The fourth decline, in 1964/65, caused less concern because of the substantial preceding accumulation.

\textsuperscript{43} Swan [1963 (1955)] himself contributed to this less abstract literature also. This was the paper with the geometrical representation of the “zones of economic unhappiness” (see above), which was in fact entitled “Longer-run problems of the balance of payments”. In its second half Swan investigates the consequences of the different time frames involved in adjusting expenditure and the cost ratio.

\textsuperscript{44} The diagnosis of both kinds of problem was subject to change. Balance-of-payments problems were relative to available foreign currency reserves, i.e. the size of the outflow relative to the stock. ‘Internal balance’ is treated in the Swan [1963 (1955)] diagram as a single point, suggesting that full employment and price stability are compatible at the same level of demand for domestic output. I discuss the breakdown of this conception below and at length in Chapter 5.
may be stronger than policy influences – such as the effect of export prices on domestic incomes and demand – it is possible to understand the relationship between ‘external balance’, domestic inflation and macroeconomic policy in the period. I now break the period up into sub-periods divided by shifts in the cost ratio to examine the problems facing policy and the strategic response.

Capital inflow and wool boom: to 1950/51

The period around the turn of the 1950s appears unusual in the above charts. It was a time of strong payments surplus, and the Commonwealth Bank accumulated reserves at a very rapid rate, almost quadrupling their value between the end of the war and the end of June 1950/51 – against the pessimistic expectations of the wartime planners and negotiators. The reserves were not a problem in themselves; quite the opposite as they increased the stock available to lose in any subsequent outflow. Trouble arose, however, from the relationships between trade and capital inflows and domestic income and expenditure.

There were two main waves of external impact. Though there was a modest trade surplus throughout the late 1940s (though not always a current account surplus), thanks to wartime dislocations elsewhere [Vernon et al, 1965: 1088; McColl, 1965: 36], this was dwarfed by an accelerating tide of capital inflow. Much of it was speculative in character, anticipating a revaluation of the Australian pound, or, at least, stability while others devalued. It was still the transitional period so far as the Bretton Woods Articles of Agreement were concerned; exchange rate shifts were still expected. Capital controls applied only to residents, and resident traders could still join in with leads and lags in trade account settlement. When sterling parity was preserved through the British devaluation in September 1949, the inflow picked up the pace amidst debate about Australian revaluation in Cabinet, in Treasury and the Commonwealth, in academia, and not least, in the press. [Schedvin, 1992: 169-70]

Anybody speculating on revaluation was ultimately disappointed, but as net capital inflows slowed in the second half of 1950 a new dynamic appeared with the sudden run-up in the price of wool (and to a lesser extent, other agricultural and mineral prices) – in 1950/51 the unit-value of wool exports was on average three times higher than in the previous year, which was already far above the pre-war level. [Schedvin, 1992: 172] This was demand driven – mainly by US stockpiling associated with the Korean War – and meant a 64 per cent increase in the money-value of exports in 1950/51, while imports increased by only 38 per cent.

These two phenomena, along with the devaluation, had distinct impacts, but all fed into the
largest spike in domestic inflation in Australian history, as evident in Figure 4.2. There were three main causal connections:

- The windfall farm incomes had a multiplier effect on domestic aggregate demand (part, but not all of which spilled over into demand for imports);
- The capital net inflow and the monetary inflow associated with the trade surpluses could not be entirely sterilised, cheapening borrowing and increasing the availability of credit; and
- Automatic cost-of-living adjustments in the Award system fed consumer price increases into generalised money-wage increases.

These channels of causation clearly cannot be reduced to a purely external impact; they presuppose certain characteristics of the domestic economy and its institutions. Policymakers took aim at all three linkages, as discussed in Chapters 5 and 6, but clearly their actions were not enough to prevent the inflation.

Distributional conflict was a common trope in the contemporary analysis of the wool boom. The automatic cost-of-living adjustment of Award wages attracted considerable blame at the time and afterwards for the policy problems of the 1950s. (See Chapter 5.) But, given the farm windfall and its inducement of further domestic expenditure, the alternative was a redistribution of real income away from labour. Indeed, the immediate impact of the wool boom was to raise real farm incomes at the expense of wages; the non-farm profit share remained steady. [Downing, 1963 (1956)] The subsequent rise in money-wages cannot be entirely put down to the cost-of-living adjustments, either: the boom meant intense demand pressures in the labour market, too, as shown by the rise of over-award payments. [Schedvin, 1992: 167] There was some fatalism that inflation was inevitable given the export price spike, and this is probably right. As Rowan [1971 (1954): 130] wrote in the aftermath:

> The plain fact of the matter is that in a fully employed dependent economy inflation is the process through which the gain in real incomes resulting from an improvement in the terms of trade is spread through the economy. Any attempt to prevent this process completely is likely to involve labour unrest.

However, Downing [1963 (1956): 3] argued that a properly timed exchange rate adjustment

45 There were also independent domestic factors; as Auld [1967] argues, the federal Budget of 1949/50 was the most stimulatory of the period between 1948/49 and 1963/64. On the political background to pre-wool boom fiscal policy, see Whitwell [1986: 96–101], and Chapter 5 of this thesis. There was also an increase in the basic wage over and above the cost of living, and a narrowing of the gap between the male and female basic wage, in an October 1950 judgement of the Commonwealth Conciliation and Arbitration Commission [ibid: 101], though as I discuss in Chapter 5, arbitration rulings cannot necessarily be taken as an entirely independent factor.
“could have achieved most of the required adjustment between wages and farm incomes without the price inflation which accompanied the method of wage increases which was in fact used”. In fact the capital inflow and wool boom marked the emergence of a split in expert opinion over exchange rates. Economists who would later promote exchange rate adjustment as a regular instrument of policy – Trevor Swan and Colin Clark – supported revaluation as a tool against domestic inflation. [Clark, 1950: 179; Schedvin, 1992: 170] The counterargument from veteran policy adviser Douglas Copland and others was that exchange rate adjustment was too blunt an instrument. This was echoed by official advisers in the Bank and Treasury, with new central bank Governor Coombs warning that capital inflows were too fickle a basis for a permanent rate shift, and Treasury Secretary Wheeler that the risk of overshooting was too great, given that “in practice the exchange rate cannot be altered frequently”. [Quoted in Whitwell, 1986: 100]

The politics of the exchange rate might be seen as distributional conflict by other means. Within the new Coalition cabinet in 1949/50 the Country Party represented its rural constituency by refusing to countenance a revaluation and the Liberals were divided. With Country Party Treasurer Fadden vaguely threatening to lead his party out of the Coalition, a majority Cabinet decision to revalue was blocked by Prime Minister Menzies. [Knott, 2009] A compromise for the 1950/51 Budget resulted in the increase of a levy on wool proceeds – first imposed the previous August – from 7.5 per cent to 20 per cent, but as this was credited against tax liabilities the following year, its impact was blunted. [Schedvin, 1992: 172] Thus a highly contingent political decision had a long-lasting impact; the debate turned out to have large stakes that were not immediately obvious. It cannot be said with any certainty that a revaluation in 1950, or a decision not to follow sterling down in 1949, would have solved the problems, though; wool prices would still have collapsed the following year in any case, and the cost ratio would still have been elevated thanks to the higher Australian pound – or might a devaluation then have been allowed? It cannot be known, but such flexibility was not in the character of the Bretton Woods system. After going down with sterling in 1949, the Australian currency would not move again against the US dollar until 1971.

Recurring crisis: 1951/52-1960/61

The upshot was a large upward shift in the cost ratio and money incomes relative to import prices. The price of wool, and the export price level as a whole, spiked in 1950/51 and then fell back within a year. Domestic prices, however, remained at a permanently higher level, along with money-wages, money-incomes in general and expenditure. This ratchet
phenomenon would have a dual effect. Even if there was little actual overlap between the kinds of goods produced domestically and the kinds imported, there would be some movement of demand towards imports due to their relative cheapening. There would also be a decline in the profitability of exports and import-competing goods relative to non-tradable production, since prices in the former industries are not responsive to domestic costs, and hence, over the long run, a tendency for capital to drift away from, and/or fail to enter, these lines. An important caveat is that these very cost pressures may motivate technical changes and intensify capital investment aiming to reduce unit costs – which farmers were in a position to do given the windfall of the boom.

Figure 4.2 above shows the extent of the divergence between the Australian consumer price index and export and import price indices. A comparison with actual import and export prices alone does not quite capture what is meant by the cost ratio, because their indices do not incorporate potentially traded goods (or potentially import-replacing goods), which are important to supply adjustment effects. A broader ‘competitiveness index’, comparing domestic prices or unit wage costs to those of trading partners, or competitors in the markets for major exports, would be a useful supplement. Such indices have been constructed by Reserve Bank statisticians only from 1971/72 [Foster, 1996: 30-31]. But as a crude measure, a comparison of price levels between Australia and major trading partners may suffice – as shown in Figure 4.10. Here the divergence is not quite as stark as with the trade price indices, given inflation overseas, but it is still clear that Australia was particularly strongly affected by the Korean War inflation, and continued to be more inflationary through the 1950s.46

The income effect was more direct and immediate in effect. The crisis of 1951/52 was the most severe: the central bank lost in a single year three-quarters of the exchange reserves it had accumulated since 1946/47. That reserves were still above the level prior to 1948/49 is beside the point: the rate of change matters, and another year of the same would have been sustainable only with recourse to the IMF (and in fact, the government did borrow $30 million from the IMF in August 1952). Money-incomes and expenditure had been left much higher: the consumer price index rose 22.5 in total over the two years 1949/50 to 1950/51 and a further 22.5 per cent in 1951/52, the highest annual inflation rate recorded before or since.

46 Care should be taken in comparing the price indices: they all take their starting points at 100 in 1949/50, but it cannot be assumed that this year’s relativities were ‘normal’ – although this does capture the turning point after which Australia moved towards persistent deficits. Bear in mind especially that the Australian and British pounds devalued 30 per cent against the US dollar in 1949, so the apparent gap between their price levels and that of the United States exaggerates the effective difference. Despite these issues, a comparison of price indices shows the cumulative effect of differences in year-on-year inflation. Lundberg and Hill [1963 (1956)] discuss the Australian cost position relative to the British.
While the value of exports collapsed by a third in 1951/52, the value of imports increased by a third. Resurgent capital inflows were not enough to relieve the necessity of rapid policy action.

I discuss the specifics of counter-inflation policy in the next two chapters; for now it is enough to say that this was a watershed, leading to a great strengthening of disinflationary resolve and a sharpening of policy techniques with lasting consequences. It was a turning point, inaugurating the ‘Keynesianism of restraint’ in a serious way, enforced by the need to keep foreign exchange reserves above water. Despite capital controls, Treasurer Fadden had already warned Cabinet in early 1951 of the potential for a “flight from the currency” and urged that “it is one of our most urgent tasks to see that it gets no closer” [quoted in Whitwell, 1986: 104]. At the time, reserves were still piling up, but when the sudden outflow began his position was impossible to ignore. Following the election in 1952 came the ‘Horror Budget’, “the first explicit use of fiscal policy for anticyclical purposes” [ibid: 105]. It was also the first serious test of the new monetary policy regime (see Chapter 6.) Given the extremely high rate of inflation, a policy of restraint would quite likely have been carried out regardless of the external position, but the balance-of-payments crisis was decisive and a major political justification for the deeply unpopular policy. The only recession of the post-war period – in the sense of negative GDP growth (the unemployment rate would be higher in the early 1960s) – eventuated in 1952/53, though this had as much to do with the reversal of the wool price boom and its effects as it did with policy.

Announcing measures in the 1955/56 Budget to check a slower, but still serious, drain of reserves, Treasurer Fadden commented that “sometimes it is instability abroad that shakes our own stability” but “our difficulties today are preponderantly of local origin and that is a vitally important fact”. [quoted in Whitwell, 1986: 128] It its 1956 survey of the economy, Treasury concluded likewise that “our troubles largely arise within Australia, from which it follows that they lie within the ambit of our own control”. [quoted ibid: 128] That is, this time there was neither an export price boom to blame for inflation (CPI growth of 4.1 per cent in 1955/56 and 5.8 in 1956/57) nor a collapse to blame for the payments deficit. Domestic demand was the culprit.47

But it was out of the diagnosis of this episode that the ‘long-term balance-of-payments problem’ trope emerged in the academic literature, the first wave including Swan [1963

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47 For a counterargument that Australian macroeconomic developments in the mid-1950s still had much to do with overseas connections, see Arndt [1957].
The basic point was introduced above: the domestic costs being more-or-less inflexible in a downward direction, Australia was destined to have recurring balance-of-payments crises. It follows from this argument, although this was not always stated, that the crises of the mid-1950s and 1960/61 did have something to do with the wool boom, which had permanently ratcheted up domestic prices and money-wages relative to overseas prices. [Lundberg and Hill, 1963 (1956): 363-64]

This argument did not let policy off the hook, but on the contrary intensified the pressure to restrain domestic inflation. In the short run, because Australia was seen to be at full employment, any method for diverting demand from foreign goods to domestic goods would not be met by domestic supply, and hence would push up prices and/or squeeze demand back towards foreign goods by some other channel. This was a fundamental conclusion of the original Swan model and later refinements: the ‘absorption problem’, “that a fully employed economy cannot improve its balance of payments unless real expenditure is reduced” [Corden, 1960: 17]. Over the longer run, of course, a higher rate of inflation than that prevailing abroad would worsen the cost situation.

The policy path of least resistance, quantitative import restrictions (progressively relaxed...
since 1952 but tightened again in 1955), was heavily criticised for this reason. Some economists supported them in the short run, but always as a supplement to disinflation, not an alternative.\textsuperscript{48} According to inflation gap analysis (see Chapter 5), an expansion of imports could act as a pressure valve releasing domestic inflationary pressures (see, e.g., Downing [1963 (1956): 4]; Schedvin [1992: 234]), but import restrictions closed off this valve and hence increased the pressure. Extra policy effort would need to be devoted to disinflation, or restrictions would need to be progressively tightened until international payments balanced “with nought on both sides and all of us flat on our backs.” [Swan, 1963 (1955): 392]

There was considerably more support among the academic economists for devaluation as a quick way of adjusting the cost ratio (e.g., Meade [1956], Mathews [1958]). But this too was seen as a supplement rather than an alternative to internal disinflation, in the first place because it also worked by switching demand towards domestic output. Furthermore, given full employment conditions and the workings of arbitration, there was every chance that money-wages and prices would rise in response to devaluation to maintain most of the real wage. Finally, given the inelasticity of supply of Australia’s major exports – at least in the short-run – a devaluation would recreate many of the distributional consequences of the wool boom, with gains from higher effective export prices flowing into profit windfalls for farmers. [Firth and Hagger, 1959] Although exchange rate adjustment and even ongoing flexibility continued to have many backers in academic controversies, they were never seriously considered by policymakers in this period. Perhaps the decisive argument against was the dependence on capital inflows, without which the payments situation could have been considerably worse – a state of affairs rarely mentioned in the academic literature but clear to authorities. Given the uncertain impact of devaluation on domestic costs and prices, there could be no guarantee that it would be a one-off event, and once confidence in the fixed rate was shaken there could be no going back. [Henderson, 1961; Corden, 1968: 17]

This meant that improving the cost ratio would necessarily involve domestic wage and price restraint. Given the (regrettable to some) implausibility of an outright money-wage reduction, this would be a grinding process over a number of years, as in Meade’s [1956: 253]

\textsuperscript{48} Downing [1963 (1956): 5] argued that the policy was correct “as long as we are beset by the problem of excess domestic demand” because “while excess domestic demand persists tariff and exchange rate adjustments would have to be carried to absurd lengths in order to limit our imports to what we can pay for... [and] until we can eliminate excess demand, it is impossible to judge what long-term adjustments need to be made...” Swan [1963 (1955): 389] argued that “attempts to maintain short-run equilibrium by movements in [the cost ratio] might involve violent and wasteful instability in the cost structure and distribution of incomes”, so that import restrictions were appropriate short-run instruments when the cost ratio was at an appropriate level over the long run.
description of what would need to happen if his favoured option of devaluation was not on the table:

It is quite uncertain what will happen to foreign wage costs; they will rise in so far as foreign money wage rates go up and they will fall in so far as foreign currencies may be depreciated or the productivity of foreign labour rises. All these developments are uncertain and beyond Australia's control. She can only hope that foreign wage costs will rise so that her adjustment can be made with smaller pressure on Australian wage rates. The best that can probably be expected from Australian wage policy is that for some time money wage rates should not actually rise.

In other words, eternal vigilance against inflation was essential. The relationship with international payments problems was not, of course, the only thing economists and policymakers had against inflation. But in the tension that began to be recognised in the 1950s between full employment and price stability – discussed in Chapter 5 – it was decisive in swinging the technocratic imperative towards the latter.

This played out over the rest of the period. The literature just reviewed emerged out of criticism of actual policy in the mid-1950s. The inflation and payments deficits of 1954/55 were not initially met by serious policy restraint. Rowan [1963 (1956): 32] complained that the 1955 Budget was announced with “strictures” from the Treasurer about the need for voluntary private restraint, followed by “attempts of the Prime Minister to evoke restraint by exhortation and consultation” – but did not, in fact, plan any fiscal restraint. Schedvin [1992: 233] suggests that Menzies planned to call an early election to take advantage of Labor division, and hence ruled out a tough budget. In any case, the government’s hand was forced by the sudden loss of 9 per cent of reserves in a single month – August – and supplementary measures hurriedly put into place, so that 1955/56 and 1956/57 turned out to be two of the fiscally tightest years in the postwar period. 49 [Artis and Wallace, 1971 (1967): 398]

The only tighter year was 1960/61. The pattern was repeated – delay then urgent restraining action. The government had been so confident of the external position – with reserves stable since 1957 despite a 15 per cent fall in export prices – that it removed most import controls in February 1960. This was itself intended partly as a counterinflationary measure, allowing domestic demand to spill overseas. [Phillips, 1971 (1964): 72] Monetary policy was deployed to choke off a credit expansion and asset price boom (unsuccessfully), and the government argued strongly (more successfully) against a general wage increase at the Commonwealth Conciliation and Arbitration Commission’s basic wage hearing. But again, the 1960/61

49 In the event, a fortuitous spike in export prices and a good season of agricultural production in 1956/57 greatly helped reverse the flow of reserves – policy alone cannot claim the credit. See Figure 4.2 above.
Budget in August planned for barely a surplus, and again, the government had restraint thrust upon it by a rush of reserves abroad – nearly a quarter lost between the high point in May and the supplementary Budget in November.  

This began the longest imposition of macroeconomic restraint of the whole period, combining fiscal and monetary policy to provoke and sustain a ‘credit crunch’ (as it became known in the press), pushing unemployment up to a post-war record of 2.6 per cent in 1961. As a major milestone in counter-inflationary policy, I examine the details in the next two chapters; here I note the motivating role of ‘external balance’. As Arndt and Harris [1965: 171] argue, the domestic consequences of inflation alone were not enough to explain the intensity of the policy response. The 1961 Treasury survey of the economy explained that while restraint was “becoming urgent for many other reasons”, external balance was decisive, and made the argument that reimposing import controls would ultimately have worsened matters, “for the effect of that would have been to reduce the flow of supplies and turn back the demand now being satisfied by imports upon already overstrained internal resources.” [quoted in Vernon et al, 1965: 1089] 

This was, then, exactly what the Swan line recommended for the short run – domestic ‘absorption’ (i.e. spending on domestic and foreign goods) must be cut. What about the message of longer-term restraint of domestic costs and prices? The depth and length of the ensuing recession, and the delayed return to stimulatory policy, has often been portrayed as official bungling, a prime example of the difficulty of timing state action. But, as I will discuss in Chapter 5, it was quite deliberate, or at least it is the case that substantial elements in the policy bureaucracy pushed for a longer dose of unemployment, and even a permanent downward revision in the definition of ‘full employment’. In doing so, they were following Swan’s [1963 (1955): 394] advice that getting the cost ratio under control might require that employment be kept “sufficiently on one side or other” of full employment: 

The experience of recent years provides some reason to think that the acceptable range of ‘full employment’ is fairly wide, and that towards the lower limit of that range real wages can perhaps be restrained from increasing. Similarly, Lundberg and Hill’s [1963 (1956): 380] prescription for the resolution of “Australia's long-term balance of payments problems” urged policymakers to learn from the Great Depression: 

50 As shown in Figure 4.9, reserves continued to fall until March 1961, a loss of one third since the (local) peak in May 1960. The loss was less severe than that of 1954/55-55/56 in absolute terms and as a proportion of the peak, but it was more rapid, and in stemming it the government drew $156 million from its IMF quota, and negotiated permission to draw a further $89 million which was never actually called upon. IMF assistance had not been deemed necessary in the mid-1950s. [Vernon et al, 1965: 1089-90]
The changed price relations between foreign and home goods after 1931 had useful effects under the conditions existing then. These conditions cannot be reproduced of course – nobody wishes that – but a lower degree of full employment – say 98 per cent instead of 102 per cent – would make the price system work more efficiently, create more competition and reduce the likelihood of a new wage-price spiral which under present conditions would tend to follow any rise in import prices.

The reprieve: 1961/62-64/65

The credit crunch did, in fact, bring in three years of price stability: the consumer price index rose just 1.5 per cent in total over the three years 1961/62-63/64. As can be seen in Figures 4.2 and 4.10 above, while the import price level also remained steady over this period, this improved Australia’s cost position relative to its own export price level, to the United States, and especially to Britain. The actual trade and current account balances of the first half of the 1960s were not on average more favourable (relative to GDP) than they had been in the 1950s – the best that can be said is that they were somewhat less volatile. Crucially, though, these levels were sustained without the intense import controls of the 1950s.

Though relatively independent of one another, the export and import aspects of the trade balance could both plausibly be affected by the shift in the cost ratio – although there were also other factors at work. The downward movement in the propensity to import imposed by the controls was sustained after they were lifted. Even before the wool boom, the value of imports of goods and services had been the equivalent of well over 20 per cent of GDP, rising to a high of 32 per cent in 1951/52. Under the import controls it was suppressed to around 15 per cent of GDP, and this level was sustained throughout the 1960s, after their removal (though tariff protection still applied.) Given the stability of import prices, the decline in demand for imports relative to GDP was entirely due to a greater proportion of the growth in incomes being spent voluntarily on domestic goods and services. Some of this reflected the survival of import replacing industries despite increased exposure to international competition, and could be put down to domestic cost containment. But much also reflected the ongoing structural shift in demand in Australia, as in other industrialised countries, towards service industries, most of whose products were non-tradable.51

The second part of the story was a halt in the decline of exports – also stabilised around 15 per cent of GDP – which limited the trade deficit that would otherwise have resulted. Part of this

51 Industrial output was a fairly stable 25-30 per cent of Australia's GDP across the period. Agricultural production fell from more than 20 per cent after the war (peaking at 29 per cent in the wool boom year of 1950/51) to less than 10 per cent by the mid-1960s. The gap was filled by the tertiary sector, including utilities and construction. Mining’s rise was yet to come. See data in Vernon et al [1965: 628] and Norton and Kennedy [1983: 120]
was due to a stabilisation, and towards mid-decade, recovery of export prices. But it also reflected a substantial expansion in quantity terms. In 1964/65, Australia exported almost twice as much as it had in 1949/50, measured in terms of the value of exports deflated by the export price index.\footnote{Calculated from Foster [1996: 4, 24].} Given aggregation issues, not too much precision should be read into this figure, but it is broadly in line with statistics on the physical output of most individual export industries. [McColl, 1965: 74-88]

These results were too good and too soon to be entirely explained by the shift in the cost ratio, which was supposed to take effect only over a long period of time as capital moved between sectors. The acceleration in trend growth in export volumes began in the late 1950s, before the suppression of domestic costs had begun. One reason is that instead of capital flowing out of the farm sector when it was squeezed between domestic costs and international prices, as the Swan system would predict, farmers in general responded by increasing investment and restructuring their production processes – especially in wool. Ironically, the farm windfall from the very wool boom that was responsible for the cost increases also funded a great accumulation of farm capital – a one-third increase in livestock numbers and a substantial increase in output per animal. [McColl, 1965: 77-78] Furthermore, tax and price stabilisation policies were able to deliberately maintain the profitability of the agricultural sector against the price and cost squeeze trends. McColl [ibid: 73-75] shows that agriculture was indeed tightly squeezed between input and output prices over the 1950s, but that this was alleviated somewhat by price support in domestic markets and tax concessions. (See also Vernon et al [1965: 161-66].) Nevertheless, the cost improvements of the early 1960s would not have hurt, and were certainly necessary to broadening the export base to new industries beyond agriculture. More importantly, even if all else was not equal, the apparent success of the kind of policy the cost ratio doctrine entailed supported the case of those in the policy bureaucracy pushing for a prioritisation of inflation.

At least as important as these trends in trade was the increasing tempo of private capital inflows. As a proportion of GDP, the net flows of the early 1960s appear as only a slight increment over those of the previous decade. But they were much more important to the balance of payments because of the relative decline in trade. For the currency reserves, what mattered was the absolute money flow, and this was substantial: the net inflow 1960/61-64/65 was almost double that of the previous five years, and four times that of the first half of the 1950s. [Foster, 1996: 36] The impact on the reserves can be seen in Figure 4.9: the inflow far
more than made up for the continuing current account deficits; reserves reached an all-time high, surpassing the wool boom in nominal terms.

Despite the more substantial buffer, considerable pessimism about the balance of payments remained, and with it the policy imperative to restrain domestic prices and wages. Net current account flows were no better than they had been in the 1950s, although achieved without import quotas. Without the accelerated capital inflow of the early 1960s, the cyclical tendency to dangerous reserve depletion in upswings would have continued; but in fact the substantial deficit of 1964/65 could be taken in stride – it was not seen as a ‘crisis’ of the order of the three earlier episodes described above. [Corden, 1968: 18] But capital flows were too unpredictable to be taken for granted. The pessimistic argument was exemplified in the 1965 Report of the Committee of Economic Enquiry, with which I take up this narrative again in Chapter 7.

Meanwhile, among the flood of capital recorded in the statistics in 1962 was that associated with the merger of a British mining company with Australia’s Consolidated Zinc, forming a new company called Conzinc Riotinto. While economists debated the future of Australia’s balance of payments, geologists discovered iron ore deposits at Mount Tom Price, which turned out to hold in a single site more iron than had been previously been discovered across the entire country. In a joint venture with Kaiser Steel, Rio Tinto developed a mine there and in 1964 signed an unprecedented agreement with Japanese steel firms to supply its output until the 1980s. Another transnational venture involving Broken Hill Proprietary and Esso was exploring for offshore oil and struck big in the Bass Strait in 1966. World mineral prices were on the rise throughout the decade, and all over the continent known deposits became economic. [Salsbury and Sweeny, 1988: 347-50] Growth in mining output, as a proportion of GDP or of exports, is hardly perceptible in the period covered in this chapter. But within five years, the relationship between Australia’s domestic prices and its international connections would be utterly transformed.

4.5 Conclusion: rules and strategies of the game

The essence of the argument which I have developed in this chapter may be grasped by contrasting it with other literature on the constraints on domestic policy entailed by the fixed exchange rate of Bretton Woods. The standard Mundell-Fleming textbook ‘policy trilemma’ framework suggests that a country cannot simultaneously maintain capital mobility, a fixed exchange rate and domestic monetary policy autonomy. (I discuss this framework in detail in
Chapter 7.) Obstfeld and Taylor [2002], for example, characterise the early Bretton Woods period as allowing policy autonomy to coexist with fixed exchange rates by restraining capital flows, a coexistence which was undermined once “global capital could not be held back so easily.” [ibid: 125] The Mundell-Fleming framework is quite different from the argument I have made in this chapter and in fact does not cover the Australian situation very well. It focuses exclusively on the relationship between capital flows and monetary policy, with ‘policy autonomy’ defined narrowly as a capacity to control domestic interest rates or money supply.

It is true that through the 1940s and 1950s the Australian financial markets were not subjected to international interest rate arbitrage so that Australian authorities did not have to consider foreign rates in setting their own policy. But interest rate arbitrage was hardly the only thing capable of limiting domestic policy, and policy is broader than monetary policy. Discipline on Australian macro-policy came largely from the impact of net trade flows on foreign exchange reserves. Though the need to attract capital inflows to make up for the usual net current outflows was also important, these were largely attracted by profitable opportunities for direct investment rather than interest rate differentials. It was less direct a discipline than one which locked down interest rates, but also one that was more difficult to deal with. Rather than being managed with a simple policy setting, it forced policy to grapple with forces that were not entirely within its control – as I discuss in the next chapter.

Another influential interpretation of the Bretton Woods period is given by McKinnon [1993], who compares it with the other international monetary regimes of the century. McKinnon summarises each regime with a set of ‘rules of the game’, including not only formal policy obligations (e.g., under the Bretton Woods Articles of Agreement), but also the informal ‘rules of thumb’ and strategies policymakers tended to follow in order to meet those obligations. This is closer to Machlup’s ‘program balance’ concept, described in Section 4.2 above, in which domestic objectives are interwoven with the international framework, which is seen to have both enabling and constraining aspects. McKinnon acknowledges that the Bretton Woods regime turned out to be significantly more constraining than its drafters anticipated, with the possibility of exchange rate adjustment very rarely invoked. The ‘fixed rate dollar standard’ thus turned out to have many similarities to the gold standard, with the expanded buffer of reserves replacing stabilising speculation in opening space for policy discretion in the short-term.

Especially relevant to the argument here is McKinnon’s Rule 4: “Subordinate long-run growth
in the domestic money supply to the fixed exchange rate and to the prevailing rate of price inflation (in tradable goods) in the United States.” [McKinnon, 1993: 16] This implies that, at least in countries other than the United States, the price level and rate of inflation was determined abroad (and the implication is confirmed in the corresponding rule for American policymakers, “anchor the dollar (world) price level for tradable goods by an independently chosen American price level” [ibid: 16]). The domestic price level was, over the long run, not up to national policy. Likewise, real output is assumed to be “dominated by domestic supply-side determinants of growth”.

McKinnon has little to say about short-run movements of the price level, the rate of inflation and real output around the long-run anchors, and there are no ‘rules’ for them, implying that they were of little concern to policy. Short-run adjustments revolve around the balance of payments alone. Rule 6 (“Limit current account imbalances by adjusting national fiscal policy... to offset any divergences between private saving and investment”) suggests that fluctuations of aggregate demand around trend supply are entirely met by fluctuations in international payments, without any role for domestic price or output adjustment. The only sign that policy is concerned with domestic conditions at all is Rule 5’s injunction to “offset substantial short-run losses in exchange reserves by having the central bank purchase domestic assets to partially restore the liquidity of domestic banks and the money supply”.

All this reflects the basis of McKinnon’s framework in the assumptions of the ‘monetary approach to the balance of payments’, and a reduction of demand-side factors to the quantity of money. This was a theoretical perspective which was gaining currency, so to speak, only at the end of the Bretton Woods period, and then only controversially. (See Chapter 7.) As Frenkel [1976: 201] notes, this position, by focusing on equilibrium supply and demand for money and other asset stocks, reverses the earlier Keynesian foregrounding of income-expenditure flows, though he argues that propositions can be translated between the two frameworks once assumptions are made clear. But since Australian policymakers in the two postwar decades overwhelmingly thought in terms of flows, there is an immediate problem with McKinnon’s rules. They do not reflect how policymakers conceived what they were doing. Neither do they capture the essentials of how the policy objectives were interrelated, so it cannot be said that policymakers followed them unconsciously. To deal with real output and inflation (or the price level) as long-run anchors only, while treating the balance-of-payments as a short-run problem, is to distort their relationships.

Policymakers and contemporary economists did think in terms of different time horizons, but
the long run was not defined in terms of an equilibrium, and certainly not an equilibrium of supply and demand for money. Rather, the short run was always bounded by a necessity to keep foreign currency from running out, and the long run involved projects of reshaping economic relations to lessen the cyclical tendency towards payments deficits. It is not that the long run was seen as simply ‘a succession of short runs’; rather, short-run payments deficits were understood to be related to cost relativities that could be changed only over a long period of time. Individual instances of net outflows could be diagnosed as ‘accidental’, or related to ‘cyclical’ or ‘structural’ tendencies; policy strategy developed elements related to stemming immediate flows if necessary, and elements taking aim at the tendencies.

McKinnon is right, though, to point out that the preoccupation of postwar balance-of-payments theory with tension between ‘internal’ and ‘external’ balance was misplaced. He refers to Meade [1951] and Mundell [1962], but the point applies equally to the Swan system discussed above. He quotes Michaely’s [1971] study of policy reactions to foreign exchange reserve movements in eight countries, which found that “the requirements of external and internal balance tended much more often to provide policy indications in the same direction, or at least not to contradict each other, rather than to point in opposite directions.” [Quoted in McKinnon, 1993: 23] Reserve drains rarely coincided with domestic slumps.

This was generally true of the Australian experience also. As I have shown, it was not that balance-of-payments problems pulled policy in a direction opposite to that called for by ‘internal balance’. Such situations were represented in half of Swan’s ‘zones of economic unhappiness’, but did not occur in practice. But my argument is different – that ‘external balance’ was in fact not entirely ‘external’ to the domestic concerns of policy. The commitment to a fixed exchange rate and the associated necessity to sustain foreign exchange reserves was part of a structure of interrelated policy goals. ‘External balance’ did not turn out to be in tension with ‘internal balance’ as such, but was interposed amid a tension within ‘internal balance’ – between full employment and price stability.

The tension appeared immediately in short-run balance-of-payments problems as a contradiction between external balance and full employment. In Tinbergen’s terminology, it appeared as a tension within the existing configuration of ‘quantitative policy’, in that the policy action necessary to address each problem ran up against the ‘boundary conditions’ of the other. The diagnosis of this as a recurring, structural problem rather than a transitory one generated a pressure towards ‘qualitative policy’, attempts to restructure the political-economic system itself. This meant solving the ‘long-run balance-of-payments disequilibrium’
by holding down domestic inflation below that of international prices. Ultimately, this transformed the ‘quantitative’ tension between external balance and full employment into a further tension between the two core domestic goals of price stability and full employment. I now turn in the next chapter to consider in detail why this tension existed and the ways in which policy was shaped by the attempt to resolve it.
5: Inflation and the Keynesianism of restraint

5.1 Introduction

... in Keynes’ *General Theory* there was a conceptual framework providing a means of communication between me and my colleagues in the Bank, between the Bank and the Government and its Treasury advisers, and between the Bank and its principal clients in the private banks. It was one of the attractive features of the Keynesian analysis that it seemed to by-pass the most divisive issues within our society. It seemed in everybody's interest that expenditure should be pitched at levels adequate to sustain business activity reasonably close to capacity and so to maintain high levels of employment, while avoiding inflationary pressures. [Coombs, 1983: 146]

‘Nugget’ Coombs, Director General of the Ministry for Post-War Reconstruction 1943-49, central bank Governor 1949-68, and pre-eminent organic intellectual of the post-war technocracy, suggests here that Keynesian ideas were a material force. They unified the economic bureaucracy by working as a “means of communication”, a system for reaching a common understanding of the economy and a path through the “divisive issues” to a common strategic objective. This is very close to de Brunhoff’s insight, discussed in Chapter 2, that macroeconomic thinking helped to constitute economic policy as if it were a unified strategic actor.

I argued in Chapter 4, though, that international economic integration, on which the *General Theory* had very little to say, was of decisive importance for the making of Australia’s post-war economic policy regime. The maintenance of sufficient foreign exchange reserves under the fixed exchange rates of Bretton Woods pushed policymakers to prioritise price stability,

53 As it happens, the book’s only acknowledgement of the strange consequences of dealing theoretically with a ‘closed’ economy emerges in an illustration regarding Australian wage policy: “If, as in Australia, an attempt were made to fix real wages by legislation, then there would be a certain level of employment corresponding to that level of real wages; and the actual level of employment would, in a closed system, oscillate violently between that level and no employment at all, according as the rate of investment was or was not below the rate compatible with that level; whilst prices would be in unstable equilibrium when investment was at the critical level, racing to zero whenever investment was below it, and to infinity whenever it was above it... In the actual case of Australia, the escape was found, partly of course in the inevitable inefficacy of the legislation to achieve its object, and partly in Australia not being a closed system...” [Keynes, 1936: 269-70]
especially after the wool boom episode ratcheted domestic costs and money-incomes well above those of trading partners. In this chapter I follow the consequences of that imperative on domestic policy strategy as a whole. In particular, I trace the emergent conflict between the two aspects of what Coombs reports as being “in everybody's interest”: full employment (looking back from 1983, Coombs tellingly substitutes “high levels of employment” in the passage quoted above) and price stability.

In the next section I describe the development of the mode of macroeconomic policy as it settled in the 1950s. Australia did not come out of the war with Keynesian policy instruments already calibrated and deployed. They had to be built through a project of ‘qualitative policy’, in Tinbergen's phrase. The focus is on fiscal policy specifically, reserving the treatment of the special problems of monetary policy for Chapter 6, but the discussion of general demand management strategy here is relevant to both policy branches. I show that the balance-of-payments crisis in the aftermath of the wool boom was a turning point, establishing counter-cyclical demand management as the primary mode of macroeconomic policy, against more ambitious, partly supply-oriented alternatives entertained in the 1940s. The crisis exposed the fact that Keynesian policy had not “by-pass[ed] the most divisive issues within our society” – the first explicitly Keynesian budget went down in history as ‘the Horror Budget’ of 1951, inaugurating a Keynesianism of restraint. The rest of the section provides an overview of fiscal policy and macroeconomic outcomes over the period. I find that the levers of fiscal policy were strong enough to potentially counteract swings in other components of aggregate demand. Actual departures of output and employment from potential can be explained partly by uncertainty about the future course of those other components, and about the effects of policy measures themselves, and by political considerations that interfered with ‘optimal’ policy. But they also reflect a contradiction within policy rationality itself – that full employment and price stability may require different levels of aggregate demand, thus pulling policy in two directions.

Section 5.3 moves into the realm of contemporary inflation theory to investigate representations of this contradiction within economic theory. The notion of a single point of optimal aggregate demand, with unemployment on one side and inflation on the other, broke down, leaving a grey area in which both unemployment and inflation could coexist. This meant a dilemma for policy, and the notion of a trade-off between unemployment and inflation was born. Mediating between them was the money-wage, and a multitude of theories emerged to explain the relationship. These generated not only the ‘trade-off’ concept, but also
an understanding of inflation as dynamic – determined by past as well as present variables.

The emergence of the wage as a variable in the heart of the neoclassical-Keynesian system opened a rupture in its claim to (again in Coombs’ words) “by-pass the most divisive issues within our society”. In Australia, centralised wage bargaining through the arbitration system seemed to put the money-wage closer to policy control than elsewhere, and yet the juridical form of the institution and its commitment to goals other than macroeconomic rationality kept it still so far. The concrete form the ‘wage-inflation question’ took in Australia is the subject of Section 5.4. I discuss the arrival and fate of the Phillips curve in Australia. At a theoretical level, it provided a way to resolve the rupture opened by the money-wage variable in the neoclassical-Keynesian worldview, re-endogenising it as a function of the level of aggregate demand. But the notion of a stable trade-off between unemployment and inflation was received particularly poorly by Australian economists. Although they recognised a tension between full employment and price stability, they held out hope of changing the terms of the deal. Politically, the notion of using unemployment to discipline wage and price inflation was anathema, but there are good reasons for believing it was very much in the minds of policymakers during the recession of the early 1960s. I conclude with a discussion of what this meant for policy strategy – the consolidation of the Keynesianism of restraint, and the prioritisation of price stability over full employment, motivated by the problem of external balance.

5.2 The making of fiscal policy

To the ‘Horror Budget’

The Liberal-Country Party (LCP) Coalition's 1951 budget was, according to Whitwell [1986: 105], “an event of major significance in Australia’s budgetary history... the first explicit use of fiscal policy for anticyclical purposes... Keynesian in practice, principle and spirit and openly so.” It was deployed not against unemployment, but against the most rapid inflation Australia had ever seen, and followed the Treasurer’s warning earlier in the year that “the stage at which a ‘flight from the currency’ could begin is now (and for the first time) within foreseeable distance, and it is one of our most urgent tasks to see that it gets no closer” [quoted in Whitwell, 1986: 104]. This first taste of Keynesian medicine did indeed seem to unite society – but against it:

The budget was greeted with a frenzy of rage and execration, and all classes of society were at last united
in denouncing the government. In the first of two front-page editorials, the *Sydney Morning Herald* spoke of the budget as ‘A Staggering Blow to the Nation’; and in the second described it as ‘an unholy alliance between an improvident Government and a set of self-opinionated bureaucratic planners’... The director of the Associated Chamber of Manufacturers said that the budget was more inflationary than deflationary, and there was a tendency in business circles to stigmatise it as ‘academic’ and blame it all on [eminent economist and wartime Prices Commissioner] Sir Douglas Copland... The new Leader of the Opposition, H. V. Evatt, called it a ‘blueprint for depression’ and feared that Australia’s policy of full employment would be threatened. His deputy, A. A. Calwell, declared ‘This is an extraordinary, gruesome and fantastic budget. It has shocked, bewildered and amazed the people of Australia. It is not merely unpopular; it is unsound. It will destroy the standards of life that it is supposed to be defending...’ The budget, he predicted, ‘will seal the fate of anti-Labor parties for many generations to come’. [Waterman, 1972: 87]

I established in Chapter 4 the connection between domestic inflation and external balance under a fixed exchange rate. This explains how the ‘set of self-opinionated bureaucratic planners’ could persuade the government to undertake something as deeply unpopular as a disinflationary budget.

In the 1940s a whole genre of writing emerged expressing the lament of professional and academic economists over the gulf between their rational and totalising vision of the economy and what they saw to be ignorantly populist or simply self-interested pressures upon the state. Firth addressed the 1951 ANZAAS conference on the “democratic dilemma” of counter-inflation policy, complaining that people “at all levels of politics” were not aware of the “purely technical requirements of a full employment economy”, interest groups had been “magnifying by the representations to ministers the apparent importance of adverse electoral repercussions” and politicians had responded by “assessing the practicability of economic measures in terms of political symbolism which is not necessarily based on rational analysis”.

[Quoted in Whitwell, 1986: 103 ] The most dramatic complaint was Giblin’s [1945] venture into dystopian science fiction. He painted a picture of an Australia led astray by “organised interests... Satan’s last and cleverest invention for the destruction of mankind” [p. 60], ruined by inflation for twenty years, until a new generation, properly educated in economics at school, was mature enough to make full employment non-inflationary. Cornish [1993] and Whitwell [1986: 74-79, 102-04] catalogue the complaints, and the many reiterations of the moral that education would be required – or else a truant public would learn in the school of hard knocks.

The ‘Horror Budget’ was not only a milestone for the hegemony of macroeconomic rationality over policy, but also signified the ascendancy of one Keynesian strategy over another. Writing in the *Economic Record* in 1945, Firth – who had co-written the first draft of
the *Full Employment* white paper within the Department of Post-War Reconstruction and witnessed the intense wrangling over the following seven drafts – noted a split among Australian economists between the ‘planners’ and the ‘compensators’, and this distinction captures well the poles of debate in the late 1940s.\footnote{54 \cite{Firth, 1945} A gulf separated both sides from the pre-war, pre-Keynesian doctrines of balanced-budget public finance; they agreed that society’s labour power was the real budget constraint, and that inflation was a problem of an excess of effective demand over supply at the prevailing price level. The planners went one step further, arguing that the composition and not merely the level of aggregate demand mattered. At least some of the ‘inflation gap’ could be closed from below, with a more rapid growth in supply, and the state should direct private expenditure to engineer a more balanced growth path.\footnote{55 \cite{Firth, 1945: 10}} The compensators saw this ambition as unfeasible or undesirable, restricted their focus to income-expenditure aggregates in the short run, and simply advocated more force and flexibility in fiscal and monetary policy to counteract swings in aggregate private demand.

Firth predicted that comprehensive planning would be possible only with the co-operation of private enterprise, which would not likely be forthcoming. On the other hand, he recognised that a great increase in public capital expenditure was necessary and inevitable, so “the potentially fluctuating parts of expenditure [would] form a smaller proportion of the total.”\footnote{\cite{Firth, 1945: 10} He proved correct on both points. Planners in parts of Treasury, the Commonwealth Bank and the Department of Postwar Reconstruction attempted to reorient wartime controls in order to direct investment towards the bottlenecks – most promisingly with capital controls and the central bank’s qualitative controls over private bank lending. But these initiatives ran into a number of problems, not least political resistance from industry and the private banks, as well as ideological reservations about planning, and were mostly abandoned after 1948. \cite{Jones, 2003} But even if policymakers abandoned attempts to manage the composition of private production, public investment and the ambitious postwar immigration program raised the same problems on a smaller scale: it raised productive

54 On the tortured production of the document, see \cite{Butlin and Schedvin, 1977: 673-79}

55 The central problem, summed up in anxiety about a ‘milkbar economy’, was that investment was being misdirected into consumer goods industries, because consumer spending was abnormally high and supplies from overseas temporarily disrupted, while capacity was not being expanded rapidly enough in basic industries such as steel, coal and building materials. Heavy industry was not keeping up because of geographical factors, housing and labour shortages, and was outbid for labour. Such bottlenecks in core industries raised input prices for consumer industries and aggravated inflation. The solution was to restrain consumer spending and encourage the redirection of investment away from domestic consumer industries, which, in any case, were seen to have a bleak future once foreign competitors recovered and trade barriers fell, and once the burst of consumer demand pent up by the war was exhausted. \cite{Whitwell, 1986: 86-87; Jones, 2003}
capacity in the long term, but contributed to demand immediately. A contradiction remained between the necessity of extended and improved public infrastructure – which all agreed upon – and the short-period macroeconomic requirements on fiscal policy. The 1945 White Paper presented public expenditure as the ‘swing variable’ of fiscal policy, with project plans “kept in an advanced state of preparedness” to be taken off the shelf in periods of unemployment, and equally readily shelved when private spending revived. [pp. 5, 8] The Chifley government initially followed this strategy [Artis and Wallace, 1971b: 409], but public capital expenditure proved much less flexible than expected, and tax adjustments came to the fore – which made fiscal policy more politically exposed.56

The ascendancy in 1951 of the ‘Keynesianism of restraint’ over the combined (and sometimes countervailing) political pressures of industrial capital, banks, farmers and the labour movement, as well as over the alternative technocratic strategy of the ‘planners’, reflected the urgency of the balance-of-payments situation, and the sheer rapidity of inflation, and not the 1949 change of government. (However, the Coalition’s second victory in the double-dissolution election of 1951 helped, since the government would not face the voters again for a full three years). The Coalition had campaigned with the slogan ‘put value back in the pound’, but its approach was entirely oriented to the supply side, fighting inflation by attempting to stimulate supply with tax cuts and accelerated public infrastructure investment. This, combined with the intransigence of the Country Party, which supplied Treasurer Fadden, meant Treasury and Commonwealth Bank officials privately saw the new government as even less amenable to Keynesian rationality than Labor had been. [Catley and McFarlane, 1983: 79; Whitwell, 1986: 97] Only the perception of crisis allowed disinflation to trump developmentalism.

_Fiscal policy in the Fifties_

The ‘Horror Budget’ turned out to be the first of three major episodes of disinflationary fiscal policy in the period, each coinciding with run-downs in foreign exchange reserves, as discussed in Chapter 4. Here I will look at these in overview, bearing in mind that interpretation of both the impact of fiscal policy and the intent of policymakers is full of difficulties. Revisionism about postwar fiscal policy began in the late 1960s, with Auld [1967] 56

56 On the inflexibility of public capital expenditure, see Coombs’ remark in 1948 that “our practical experience has been such as to doubt the wisdom of emphasising too much the ‘compensating’ character of anti-depression programmes... It is clear that Government investment programmes are much less flexible than we had hoped...” [quoted in Whitwell, 1986: 95] In 1951, Douglas Copland spoke at a conference of “a law of increasing government expenditure based on political and social factors, which both political parties find it impossible to reject in the interests of economic stability.” [quoted in Whitwell, 1986: 102]
and Artis and Wallace [1971a, 1971b] suggesting that much of the contemporary discourse about budgets had been confused or misguided, especially that of official statements.

The raw deficit or surplus is a poor indicator of the effect of fiscal policy. In the first place, a government’s spending on goods and services is a part of aggregate demand as it is spent, even if an equivalent amount is drawn back as tax. The principle of the balanced budget multiplier (generally, as a first approximation, one) was widely understood among economists by the late 1940s, and it is hard to imagine those in the Australian Treasury were an exception, certainly by the 1950s. Furthermore, different forms of spending, transfer and tax have different first-round effects on demand – due, for example, to varying propensities to save at different levels of income. Yet into the 1960s Treasurers were still presenting the raw deficit or surplus as the key – or even only – indicator of policy [Nevile, 1975: 66], and it remains the primary indicator for the media to this day.

Since I am investigating the formation of policy strategy, I am interested in what policymakers thought they were doing, and from this point of view misconceptions are interesting primarily when identified and learned from. But budget speeches and other official statements about fiscal policy are unreliable guides to official thinking. Being political documents, they tend to be more optimistic and certain about fiscal impacts than policymakers and politicians actually are, and there is plenty of evidence of deliberate misdirection about real intent, especially with regard to disinflation, always the less popular side of fiscal policy. In some respects, the revisionists’ reconstructions may give a better guide to thinking behind the scenes of the budgets than the public documents. Their criticisms of the official lines were already being made by economists within the period – the revisionists’ innovation was mainly to bring them together and develop consistent frameworks for interpreting policy. Artis and Wallace [1971a: 358] conclude that the policymakers of the period did in fact know better, but continued to present the raw deficit/surplus as the main indicator of the fiscal stance because it gave a result, and one with “much the same latitude

57 Samuelson [1975] gives an interesting history of the profession's gradual realisation of the balanced budget multiplier concept, initially counterintuitive: it was implicit in many early multiplier models, and independently 'discovered', i.e., made explicit, by at least six economists by the mid-1940s before entering the textbooks. It was being discussed by US Treasury officials for policy purposes by 1944 or 1945. [p. 51] It would be very interesting to know about equivalent discussions within the Australian Treasury.

58 For example, the Chifley government hid would-be surpluses of the Consolidated Revenue Fund (taken to be a headline indicator of fiscal stance) by relabelling some of income tax as social security contributions and placing them in a National Welfare Fund. Also, in its last three budgets the papers projected Consolidated Revenue Fund deficits, though actual large surpluses eventuated, and the projections are likely to have been deliberately pessimistic. [Artis and Wallace, 1971b: 414-15; Whitwell, 1986: 90-93] As discussed below, the public statements are least reliable on the most important problem – the vexed question which forced itself forward in the course of the 1950s: should (and did) policy aim at less-than-full employment in pursuit of price stability?
for interpretation as a horoscope.” Here, I will simply admit there is wide room for different interpretations of fiscal intent, and present the actual deficit figures as well as the measures of Abbott [1996], Auld [1967] and Artis and Wallace [1971a, 1971b].

Figure 5.1 displays the nominal actual Commonwealth fiscal deficit and a measure of the ‘constant employment deficit’ as calculated by Abbott [1996]. The latter adjusts the raw figures to give a structural deficit, i.e. the deficit as it would be, given the tax and benefit structure, if unemployment were at its long-run average. (Abbott works with the surplus rather than a deficit but I have reversed this to ease comparison with the other interpretations below.) This attempts to strip out the influence of other factors influencing GDP, reflected in the raw budget, to give an indicator of the direction of deliberate fiscal policy itself. It arguably gives a more accurate picture of policy intent than the official budget projections themselves, since these are political documents and also do not incorporate fiscal adjustments between annual budgets. The figures present the Commonwealth government’s deficit and not that of the whole public sector, but this is standard practice and a good guide to the fiscal situation as a whole since, as Artis and Wallace [1971a: 352] write, the Commonwealth’s “control of the purse strings is quite sufficient for it to be regarded as capable of designing a consistent fiscal plan for the economy as a whole.”

The approach of Artis and Wallace [1971a] is cautious: they do not attempt to assess the size of the effect of fiscal policy on aggregate demand, preferring to simply present side-by-side each year’s whole public sector expenditure and tax adjustments, as a proportion of total domestic private consumption, private investment and public expenditure. They emphasise that expenditure and tax changes of equivalent magnitudes will have differing effects on aggregate demand, but refrain from firm judgements about the size of the differences. Accordingly, they present expenditure and tax changes on different axes to stress their independence. The 45-degree line through each chart indicates the point at which expenditure

59 Later rounds of revisionism tended to drop the earlier years of very patchy statistics: Nevile [1975] begins in the mid-1950s and Perkins [1975] begins in 1960. Since the 1980s it has been common to begin historical time series in the mid-1960s, from which point a much greater selection of statistics is available. I use Abbott’s [1996] figures for the structural surplus immediately below, but I do not present his favoured indicator, emphasising a wealth effect arising from the devaluation of outstanding government securities by general price increases, i.e., an ‘inflation tax’, and accordingly finding policy to be more deflationary than earlier writers to the extent that inflation occurred. I think he exaggerates the importance of this effect; the effect of such capital losses on aggregate demand is likely not nearly great as an equivalent decline in incomes. This may be more important in the 1970s and 1980s and I discuss the issue in Chapter 8. The Committee of Economic Enquiry [Vernon et al, 1965] might have been expected to make a sustained assessment of fiscal policy, but surprisingly it does not. Waterman’s [1972] economic history of the period has much of interest to say about fiscal policy in passing, as do Whitwell’s [1986] and Schedvin’s [1992] institutional histories of the Treasury and Reserve Bank, but none of these develop a new theoretical framework for assessment.
and tax changes would cancel one another out *if their effects were equivalent.* Assuming that the effects of changes in expenditure are larger than equivalent changes in taxation, the actual line of equivalence would be steeper – but given changes in the incidence of tax over the years, instability in propensities to save, and so on, it would be misleading to present this as a straight line, so Artis and Wallace make no attempt to estimate a slope. [ibid: 393]

**Figure 5.1: Commonwealth Government deficit, % to GDP**

Source: Abbott [1996:387]

They also emphasise the room for interpretation arising from secular output growth. If all increases in public expenditure are treated as expansionary, then ‘neutral’ public expenditure would be shrinking relative to the size of the economy. They present a chart under such a definition anyway, reproduced here as Figure 5.2 – which shows that public sector expenditure expanded in every year except two. But they suggest a more appropriate indicator of fiscal intent tracks the departure from a norm – for which they select the series’

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60 The line in the chart in Figure 5.2 does not in fact cross the axes at 45 degrees, but it would if the axis scales were even.
trend rate of growth. This is reproduced in Figure 5.3.

Artis and Wallace deliberately exclude the effects of ‘automatic stabilisers’ and ‘bracket creep’ from their quantification of the tax side of policy, i.e., they include only the effects of changes in the tax structure and not changes in the tax take resulting from independent changes in private income. [ibid: 356-57] (They consider all public expenditure to be deliberate.) This has the advantage of separating out deliberate budget action from unintended effects, but since policymakers work with forecasts of movements in other variables, it also unfortunately misses any deliberate reliance on automatic stabilisers. Auld [1967] is much less cautious about estimating the effects of policy on aggregate demand, and his results are accordingly more interesting but must be taken as more speculative – as he readily admits. Auld’s findings are summarised in Table 5.1, in which all monetary figures represent real values in 1948/49 prices. His central concept is the ‘multiplicand’ – the first-round income-creating and destroying effects of federal government expenditure and taxation.\footnote{It does not cover the public sector as a whole, but does incorporate Commonwealth advances and transfers to the states and public enterprises, accounting for a large proportion of total public sector expenditure. Auld’s model assumes the states and public enterprises spend all these advances and transfers within the year.} It is effectively a deficit/surplus measure with each component weighted by a rough estimate of its immediate (pre-multiplier) effect on private incomes: so transfers and purchases of goods and services are weighted at unity, while interest payments and various kinds of taxation have lesser weights reflecting estimates of the spending they displace (that is, reflecting the fact that some portion would have been saved rather than spent in the absence of the tax). It is not a measure of the full effect of the budget – as the term suggests, the multiplicand is the figure upon which the Keynesian multiplier operates. It is given for each year in columns 2 and 3, with year-to-year changes in column 4. The next three columns break down the change in the multiplicand between the automatic effect of changing private incomes given the tax structure, the effects of changes in the tax structure, and changes in government expenditure.
Figure 5.2: Changes in public revenue and expenditure, % to consumption + investment + public expenditure

Source: Artis and Wallace [1971a: 394]

Note: Expenditure and tax scales differ.
Figure 5.3: Changes in public revenue and expenditure, departure from trend, % to consumption + investment + public expenditure

Source: Artis and Wallace [1971a: 392]
<table>
<thead>
<tr>
<th>Year</th>
<th>Multiplicand (1948/49$)</th>
<th>Multiplicand (% to GNP)</th>
<th>change in multiplicand from previous year (1948/49$)</th>
<th>automatic tax response (1948/49$)</th>
<th>tax changes (1948/49$)</th>
<th>expenditure changes (1948/49$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>49/50</td>
<td>205</td>
<td>4.37%</td>
<td>155</td>
<td>14</td>
<td>75</td>
<td>66</td>
</tr>
<tr>
<td>50/51</td>
<td>221</td>
<td>4.47%</td>
<td>16</td>
<td>4</td>
<td>-108</td>
<td>120</td>
</tr>
<tr>
<td>51/52</td>
<td>219</td>
<td>4.31%</td>
<td>-2</td>
<td>-52</td>
<td>-68</td>
<td>118</td>
</tr>
<tr>
<td>52/53</td>
<td>283</td>
<td>5.61%</td>
<td>64</td>
<td>84</td>
<td>56</td>
<td>-76</td>
</tr>
<tr>
<td>53/54</td>
<td>219</td>
<td>4.10%</td>
<td>-64</td>
<td>-110</td>
<td>79</td>
<td>-32</td>
</tr>
<tr>
<td>54/55</td>
<td>250</td>
<td>4.50%</td>
<td>-2</td>
<td>-41</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>55/56</td>
<td>242</td>
<td>4.14%</td>
<td>-8</td>
<td>-61</td>
<td>-12</td>
<td>65</td>
</tr>
<tr>
<td>56/57</td>
<td>240</td>
<td>4.01%</td>
<td>-2</td>
<td>-62</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>57/58</td>
<td>253</td>
<td>4.18%</td>
<td>13</td>
<td>-46</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>58/59</td>
<td>366</td>
<td>5.55%</td>
<td>113</td>
<td>-5</td>
<td>11</td>
<td>108</td>
</tr>
<tr>
<td>59/60</td>
<td>318</td>
<td>4.65%</td>
<td>-48</td>
<td>-91</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>60/61</td>
<td>263</td>
<td>3.71%</td>
<td>-55</td>
<td>-45</td>
<td>-25</td>
<td>15</td>
</tr>
<tr>
<td>61/62</td>
<td>438</td>
<td>6.10%</td>
<td>175</td>
<td>20</td>
<td>33</td>
<td>122</td>
</tr>
<tr>
<td>62/63</td>
<td>472</td>
<td>6.24%</td>
<td>34</td>
<td>-21</td>
<td>18</td>
<td>37</td>
</tr>
<tr>
<td>63/64</td>
<td>493</td>
<td>6.18%</td>
<td>21</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Auld [1967]

Table 5.2 sets the multiplicand next to figures for inflation, GNP growth and Auld’s measure of the ‘output gap’ – the percentage of estimated full employment output by which actual output under- or overshoots it. The final column presents the ‘multiplicand gap’, i.e., the percentage gap between the multiplicand that would have been consistent with full employment and the actual multiplicand adjusted to full employment tax levels (on the grounds that if policy gets the discretionary settings right, the automatic stabilisers take care of themselves). This is a measure of policy ‘error’, assuming policy meant to target full employment output.

This is a very speculative measure, because it involves not only estimates of the first round budgetary effects and full employment output, but of the multiplier as well – which Auld estimates at a constant 4.2 across the period, but which was probably in fact much less stable, as he admits. Nevertheless, assuming it is of the right order of magnitude, these results tell us something important about fiscal policy capacity. The size of some actual variations in the multiplicand (absolute and proportional) were comparable with the largest multiplicand gaps, suggesting that fiscal policy had by the 1950s the potential flexibility to bridge gaps left by swings in private demand. The explanation for the gaps needs to be found, then, in problems of forecasting and timing, political will, and, not least, the deliberate aiming of fiscal policy at targets other than full employment.

62 In this period Australian economists and statisticians used Gross National Product (GNP) to refer to output produced within Australia, not only by Australian nationals. [Waterman, 1972: 8]
Table 5.2: Auld’s multiplicand, inflation and output

<table>
<thead>
<tr>
<th>Year</th>
<th>CPI inflation (%)</th>
<th>Change in GNP (1948/49$\text{m}$)</th>
<th>Output gap (%)</th>
<th>Discretionary multiplicand gap (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949/50</td>
<td>8.4</td>
<td>324</td>
<td>3.3</td>
<td>28</td>
</tr>
<tr>
<td>1950/51</td>
<td>13</td>
<td>252</td>
<td>3.8</td>
<td>38</td>
</tr>
<tr>
<td>1951/52</td>
<td>22.5</td>
<td>136</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1952/53</td>
<td>9.4</td>
<td>-34</td>
<td>-2.3</td>
<td>-8</td>
</tr>
<tr>
<td>1953/54</td>
<td>2</td>
<td>304</td>
<td>-0.3</td>
<td>-1</td>
</tr>
<tr>
<td>1954/55</td>
<td>2.5</td>
<td>204</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1955/56</td>
<td>4.2</td>
<td>296</td>
<td>1.1</td>
<td>5</td>
</tr>
<tr>
<td>1956/57</td>
<td>5.8</td>
<td>136</td>
<td>-0.6</td>
<td>-2</td>
</tr>
<tr>
<td>1957/58</td>
<td>1</td>
<td>74</td>
<td>-3</td>
<td>-24</td>
</tr>
<tr>
<td>1958/59</td>
<td>1.6</td>
<td>534</td>
<td>1.3</td>
<td>16</td>
</tr>
<tr>
<td>1959/60</td>
<td>2.6</td>
<td>244</td>
<td>0.7</td>
<td>6</td>
</tr>
<tr>
<td>1960/61</td>
<td>4.1</td>
<td>264</td>
<td>0.4</td>
<td>4</td>
</tr>
<tr>
<td>1961/62</td>
<td>0.4</td>
<td>84</td>
<td>-1.9</td>
<td>-11</td>
</tr>
<tr>
<td>1962/63</td>
<td>0.2</td>
<td>382</td>
<td>-1.4</td>
<td>-6</td>
</tr>
<tr>
<td>1963/64</td>
<td>0.9</td>
<td>408</td>
<td>-0.6</td>
<td>-4</td>
</tr>
</tbody>
</table>

Source: Auld [1967], Foster [1996]

Figure 5.4: CPI inflation and unemployment rates, annual average

Source: Foster [1996: 180, 243]

Note: Unemployment figures for 1964/65 and 1965/66 are in fact figures for August of that year, rather than annual averages.

To set alongside these measures of fiscal policy, Figure 5.4 presents annual rates of
unemployment and inflation, and Figure 5.4 reproduces the chart from Chapter 4 showing the level of foreign currency reserves on a monthly-average basis.

**The ‘horror budget’ in perspective**

Compared with later in the 1950s and 1960s, the ‘Horror Budget’ of 1951 hardly looks extraordinary, by any of the measures presented above. But it does represent a major break with the years immediately before it. While fiscal policy cannot take all the blame for the inflation around the wool boom, public expenditure was growing more rapidly than it would for the rest of the period covered in this chapter, and 1949/50 also saw major tax concessions. The 1950 budget had included a very large ‘wool sales deduction’, but as this was credited to the following year’s tax bill the effects are debatable.63 [Artis and Wallace, 1971b: 422-23] It also increased sales taxes substantially, even as income tax continued to be rolled back from wartime levels – though the former were significant as the first tax impositions since the war. These measures were “designed to create the impression of being mildly deflationary” [Whitwell, 1986: 100] as well as to focus restraint on particular sectors – wool farmers and consumer goods. But at the same time the Coalition government continued – even accelerated – Labor’s developmentalism, and public expenditure growth reached its high water mark. It put its faith in monetary policy as “the front-line soldier” [Schedvin, 1992: 189], though as discussed in Chapter 6 the central bank was having its own problems. Despite the ambiguity of the 1950 budget, it is worth noting the substantial brake applied to demand over 1950/51 by the automatic stabilisers as money-incomes grew with inflation. (See Table 5.1) This has rarely been commented on in the literature, but should not be seen as entirely accidental, as the Chifley Government had deliberately restructured the tax system (including by introducing the social security contribution) to enhance this effect.

The ‘horror’ of the 1951 budget was all on the tax side: it took a further year to rein in government expenditure (though when the reining in began, it was serious – public expenditure shrank *in absolute terms* in 1952/53 and 1953/54, which rarely happened before or after). It has ever since been seen as terribly mistimed, a year late, and taking effect just as the wool boom turned into bust. The following year the budget went hard into reverse with tax concessions, but because of the expenditure cutbacks, it relied on the automatic stabilisers embedded in the tax system to make policy unambiguously stimulatory. Against the great increase in unemployment it was weak. The critics of counter-inflation policy in 1951 felt

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63 Figures 5.2 and 5.3 place 1950/51 and 1951/52 in two positions each, according to whether this deduction and the associated next year’s credit are considered as tax changes or not.
themselves vindicated, to the chagrin of economists within and without the policy bureaucracy – who had been advocating restraint much earlier, and blamed the debacle on the government’s delay.

Another round: mid-1950s

The whole episode seemed to repeat itself over the middle of the decade. Inflation picked up in 1955, milder than that of the wool boom, but this time generated primarily by domestic factors rather than shifts in tradables prices and export incomes. Economists accordingly began to urge fiscal restraint. The 1955 budget speech was full of concern about rising prices, with Treasurer Fadden stressing that “our difficulties today are preponderantly of local origin and that is a vitally important fact.” [Quoted in Whitwell, 1986: 128] But, astonishing the Keynesians, he went on to argue that because “in the main the expansion has occurred on the side of private expenditure”, it was not the government’s fault.64 The budget would do its part simply by balancing, the rest was up to the private sector: “restraint on the part of the banking system, on the part of business, on the part of everyone who has money to spend.” [quoted in

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64 For examples of Keynesian astonishment, see the collection of responses to recent fiscal policy in the *Economic Record*, 1956, such as Rowan [1971 (1956)].
Artis and Wallace, 1971b: 430-31] It was a macroeconomic argument, but policy was to be carried out by the private banks, firms and the public in general! At the end of September as foreign exchange reserves drained away, the government took extra-budget measures, cutting back expenditure plans, and Prime Minister Menzies embarked on a series of conferences with bankers, finance companies and large retailers to encourage them to do their bit for aggregate demand management.

The outcome of the ‘horror budget’ had poisoned the politics of disinflationary fiscal policy, and an election called for December 1955 to exploit the Labor split was a strong force against a tough budget. After the election, the government had a freer hand and the continuing plunge in exchange reserves overrode public opinion. In March the Treasurer announced a second package of supplementary budget measures, this time centred around indirect taxes, targeted especially on cars. As Figures 5.2 and 5.3 show, it was significantly less harsh than the taxation components of the 1951 budget (unless the 1951/52 exemptions due to the 1950/51 Wool Sales Deduction pre-payment are counted as a concession). But given the much more restrained growth of public expenditure over the year as a whole, the restraint was comparable,65 and the 1956 budget a few months later held the March tax changes in place.

Yet there was much less political angst over the fallout. The ensuing downturn was milder than 1951/52 – not a recession in the sense of an absolute fall in output, but a slowdown in growth. However, it was more sustained. The unemployment rate increased over the following two years, 1956/57 and 1957/58, and Auld [1967] finds the gap between output and potential to be larger in the downturn’s second year, than during 1951/52 (see Table 5.2 above). A swift reversal of policy did not come, and there was no automatic tax response as money-incomes continued to grow, however slowly. The Treasurer firmly defended a lack of stimulus in the 1957 budget speech, prioritising price stability. [Artis and Wallace, 1971b: 434] The second brush with a crisis of exchange reserves had apparently strengthened the goal in the political culture, at least at the level of government. Economists continued to complain for the remainder of the decade that the public failed to understand the rationale for counter-inflation policy and that ‘private interests’ thwarted it.66 But there was a noticeable shift in the political debate as ‘enlightened’ critics and the Opposition increasingly adopted macroeconomic counter-arguments instead of dismissing ‘self-opinionated bureaucratic planning’ outright.

65 Indeed, Auld finds the deliberate adjustments to have almost identical effects on the multiplicand over the whole year as policy had over 1951/52, and once the automatic tax response is included, 1955/56 looks harsher – though in the context of larger aggregate demand. See Tables 5.1 and 5.2.

66 See, for example, Coombs [1959]; Arndt [1960].
Early 1960s: credit squeeze and aftermath

This was seriously tested by the third period of disinflation in the period. The response to building inflation around the turn of the decade was typical at first: a reluctance to use fiscal policy, reliance on monetary policy which was too weak for the task, then an abrupt plunge in the foreign exchange reserves and a belated slam on the brakes. The automatic tax response was a substantial drag on money-income growth in 1959/60, but deliberate budget policy was stimulatory. The 1960 budget, presented in August, planned for a small surplus. Three months later, the government was forced into a new tax package. Neither Artis and Wallace’s nor Auld’s measure capture its full impact. Perhaps the most important measures in the package were a hike in automobile sales tax and an announcement of plans to change the rules on the tax deductibility of interest payments: minor in their income effects, they had major effects on the non-bank finance companies and ultimately the whole financial sector – although it is possible the finance companies would have run into liquidity problems even without them.

This was tax rather than central banking policy, but it worked as monetary policy (and I accordingly deal with it and the ensuing ‘credit squeeze’ in Chapter 6). For that reason, its full effects do not show up in the income effect measures of Artis and Wallace or Auld as discretionary fiscal policy.

Nevertheless, what ensued was the worst downturn since the Depression. The disinflationary action was roundly blamed for “Australia’s first independent slump” [Lydall, quoted in Whitwell, 1986: 137], i.e. the first that could not be blamed on international linkages. But more surprising was the government’s delay in returning to a stimulatory setting. Unemployment surged upwards throughout 1961 – the 3.2 per cent average for 1961/62 was a post-war record which would not be beaten until the crisis of the 1970s. But the 1961 budget planned for a weak stimulus at best, and Treasury’s annual survey emphasised inflation as a more important problem than inflation in no uncertain terms:

[Inflation] is a grave social evil; it is also a pervasive economic malady and Australia has reached a point where there can be no compromise with it… That prices and costs, the basic factor in our trading strength, should be kept stable has … become a matter of almost fateful importance. [Quoted in Whitwell, 1986: 135]

Not until February 1962, at least a year into the downturn, did the government announce a major extra-budget stimulus package – focused, unusually, on increased social security transfers and grants to the states. [Artis and Wallace, 1971b: 451-54] The delay was especially surprising given that 1961 had been an election year (and the government only barely scraped
through the election), reversing the usual ‘political business cycle’ effects that were apparent in the 1950s. The 1962 budget a few months later was restrained, and Auld’s estimation of the ‘multiplicand gap’ suggests policy remained less stimulatory than it should have for the next two years, if full employment was the target. Inflation, however, was truly choked off – prices were more stable than they had been since the war.

The problems of fiscal policy in the 1950s could be put down to technical issues of forecasting and timing, exacerbated by the political unpopularity of disinflation. Progress was made in addressing these problems – my focus on discrete episodes of tightening has perhaps obscured this, but the machinery of fiscal policy showed secular improvement over the period, from the deliberate design of automatic tax stabilisers by the Chifley government (mentioned above), to the design of more flexible forms of taxation and transfer around the turn of the 1960s. [Artis and Wallace, 1971b: 437-65] But these were problems involved in the pursuit of a single objective, a level of aggregate demand. The recession of the early 1960s exposed the pulling of macroeconomic policy in two directions: one level of demand for full employment, another for price stability. To understand where this came from, and why it was surprising, I will backtrack and look at how the understanding of the relationship between inflation and unemployment changed over the course of the decade.

5.3 Inflation theory before the Phillips curve

The Phillips curve is so often seen as the Keynesian theory of inflation that it is important to remember that Phillips’s famous paper was published only in 1958 and that it was not until 1960 that the empirical regularity was fleshed out with theory. Arguably, the Phillips curve did not dominate Australian economists’ thinking on inflation until it was ‘expectations-augmented’ by Friedman and Phelps in the late 1960s. (See Chapter 8.) It is the omega, but certainly not the alpha, of postwar inflation theory. The notion of a ‘trade-off’ between unemployment and inflation (a broader idea than ‘the Phillips curve’ as such, which posits a regular, predictable relationship) grew in influence over the course of the 1950s and 1960s – a result of policy difficulties as much as theoretical development.

In 1954, H. C. Coombs set out to explain to the public how modern policymakers thought about inflation. He told a conference that “the mystery element in monetary policy was sharply reduced with the emergence of what has been described as the ‘Keynesian Revolution’ in economics”, and set out a basically ‘demand-pull’ or ‘inflation gap’ view of inflation:
In a market economy the level of production and employment is determined by the level of spending: spending by households, by firms and businesses and by public authorities and governments. And consequently it follows that there is a level of spending which is sufficient to employ the whole of the labour and available resources of the economy. If spending falls short of that level the economy will experience unemployment and resources will be idle. On the other hand, if spending exceeds that level, since output and employment can be increased no further, the increased spending will show itself in rising prices and shortages of goods, labour and materials. [Coombs, 1971 (1954): 22-23]

Inflation, then, is something like the opposite of unemployment, and the goal of macroeconomic policy is to balance the economy at the point where aggregate nominal demand matched full-employment aggregate supply at the existing price level. The rest of Coombs’s speech focuses on problems involved in influencing the components of aggregate demand on which policy has purchase, in order to counteract swings in those it does not. There is no conflict between price stability and full employment. It may be only a fine line, a ‘knife-edge’ or ‘brink’ between inflation and unemployment, but the former is clearly on one side and the latter on the other. The remedy for inflation is symmetrical to the remedy for unemployment. The only problems concern the accuracy of policymakers’ projections, and the strength and dexterity of the policy instruments.

But far from having been cleared up, inflation had by the time of Coombs’s speech become one of the great loose ends of macroeconomic theory. In their lengthy survey of the field, Bronfenbrenner and Holzman [1963: 594] write that the experience of inflation since the war has “shaken many economists’ faith in the orthodoxies of preceding generations” and that “neo-orthodoxies... are only dimly in evidence”. Their paper is presented as “a guide through chaos”. The confusion was not only theoretical, but political, because inflation had turned out to be a trickier problem than the balancing of aggregate demand at the correct point. Inflation theory in the 1950s progressively complicated the simple approach relating aggregate demand (the policy-controllable variable) and full-employment supply at constant prices (the independent parameter) to either inflation or unemployment (the dependent variable). The full employment knife-edge widened into a grey area in which employment, output and the price level could all rise together with demand. Fixed parameters were re-conceived as variables and foregrounded by different theories in different ways. The novel experience of chronic ‘creeping inflation’ insisted that theory account for inflation as a dynamic phenomenon rather than as a rise in the price level to a new equilibrium level. The money-wage, absent in the inflation gap story, moved to centre-stage.

The theoretical difficulties were connected to policy difficulties, and the possibilities of policy...
control had a decisive influence on how theory settled. The theoretical debate between ‘demand-pull’ and ‘cost-push’ models of inflation was about what to treat as exogenous and what endogenous. But a different distinction is of prime importance for policy: which of the exogenous variables does policy control, and which must it take as given? Theory tended to treat time in an abstract way, focusing on equilibrium, with differences emerging over the appropriate way to treat inflation as a dynamic phenomenon. Policy worked in calendar time and the development of pragmatic statistical forecasting techniques developed in parallel to theory. The Phillips curve and other assessments of the relationships between unemployment, money-wage growth and price inflation emerged in the region in which theory and policy-oriented statistical estimation met. I now survey how these theoretical and practical developments came together.

Towards dynamics

Keynes himself had not seen unemployment and inflation as symmetrical. In Chapters 20 and 21 of the *General Theory* he explicitly deals with a grey area in which increases in effective demand could raise both real output and the price level. [Keynes, 1936: 280-309] An increase in effective demand will be met by some combination of increased real output and increased prices – their elasticities must sum to one.\(^67\) In itself, this is only definitional\(^68\), but it emphasises just how special the conditions would have to be for the L-shaped supply curve implied by ‘knife-edge’ divide between inflation and unemployment to hold: below full employment, price elasticity would be zero and output elasticity infinite; above full employment, an abrupt switch to the opposite. Instead, Keynes argues, the price level would begin to rise before output reaches its maximum for four reasons:

1. Since resources are not homogeneous, there will be diminishing, and not constant, returns as employment gradually increases.
2. Since resources are not interchangeable, some commodities will reach a condition of inelastic supply whilst there are still unemployed resources available for the production of other commodities.
3. The wage-unit [money-wage level] will tend to rise, before full employment has been reached.

\(^{67}\) In an earlier chapter, Keynes argues forcefully against the aggregation and quantifiability of heterogeneous output, thus raising doubts about the concept of a price level, at least as a precisely quantifiable measure: “To say that net output to-day is greater, but the price-level lower, than ten years ago or one year ago, is a proposition of a similar character to the statement that Queen Victoria was a better queen but not a happier woman than Queen Elizabeth – a proposition not without meaning and not without interest, but unsuitable as material for the differential calculus.” [Keynes, 1936: 40] In the chapters discussing inflation this concern is set aside, and the differential calculus applied.

\(^{68}\) Friedman [1972: 930-31] complains that the formula connecting the set of elasticities is a truism. As Chick [1983: 283] responds, that is the point: they are a heuristic, the beginning of analysis rather than the end.
The remunerations of the factors entering into marginal cost will not all change in the same proportion. [Keynes, 1936: 296] 69

This part of the General Theory was one of many lost in translation as the neoclassical-Keynesian synthesis took shape. Hicks, the originator of the IS-LM system, later revealingly argued that Keynes’s Chapter 21 on “The Theory of Prices” presumed a quite separate model from the earlier chapters from which IS-LM was extracted. [Hicks, 1980: 145; Chick, 1982: 443] The price level necessarily appears as a parameter within the IS-LM system in at least one place, connecting the money supply with the ‘real’ liquidity preference schedule, even if all other variables are specified in ‘real’ terms. But the system is not well set up to treat the determination of the price level as a dependent variable. In theory the price level could be endogenised by adding a relationship between it and ‘real’ effective demand/output. Even if the goods market (IS) functions are defined in real terms, the price level reacts back upon effective demand through demand for money in the money market (LM), therefore generating a determinate equilibrium. But such an approach would run into difficulties if the assumptions that real demand function and the money supply were unaffected by changes in the price level did not hold in practice. Indeed, early postwar macroeconomic projections in the United States based on such assumptions turned out to be an empirical “fiasco”, and the high rate of inflation took the blame. [Bronfenbrenner and Holzman, 1963: 602]

Dealing with this problem – that movements in the price level affected the various determinants of aggregate demand and supply, which in turn affected the price level – drove inflation theory into dynamic territory. Theory of the 1950s turned from considering the equilibrium price level to its rate of growth, i.e., inflation itself. This was novel. Models now considered the cycles of action and reaction following the initial disturbance, moving from the position of the price level to consider the determinants of its velocity and finally in what conditions it would peter out (decelerate), become explosive (accelerate), or sustain itself at a constant pace. (See, for example, Duesenberry [1950]; Holzman [1950]; Simkin [1952]; Pitchford [1957].)

The intent of these models was to trace the effects of an initial exogenous inflationary shock, whether from demand or costs. Where was policy in this? In the one-period model implied by Coombs [1971 (1954)] policy could achieve price stability simply by setting the right level of aggregate demand in any given period. In the dynamic models, in contrast, if it fails to

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69 Keynes’s list actually has five items because he is listing reasons why prices might not rise in proportion to the quantity of money rather than effective demand: the other item is therefore: “Effective demand will not change in proportion to the quantity of money.”
prevent the initial shock, macroeconomic policy appears to be helpless, with the circling price and wage variables reacting to one another in private bargaining and pricing rounds, though the state may have a foothold in the wage-setting process (see below). However, if the ‘inflation multiplier’ is considered a process which may occur simultaneously in calendar time with other unrelated (or at least partially independent) macroeconomic influence on aggregate demand and supply, a bigger role for macroeconomic policy remains. Further inflationary shocks, exogenous to the echoing of previous periods’ shocks, may have an additive influence on the rate of price increase. Conversely, downward shocks could have a subtractive influence. Policy thus had a continuing role, not only in preventing further additive shocks, but potentially in dampening the momentum of previous impulses. But along with this possibility came dilemmas, because policy’s influence over demand and costs was concentrated on specific variables, and it would have to lean on these more heavily to overcome the momentum of forces beyond its grasp. Thus, for example, monetary policy worked in the first instance on investment expenditure, and to use it to counteract a wage-price spiral conflicted with growth aspirations.

Note that this is a different vision of dynamics than the Phillips curve of the 1960s. In a Phillips curve model, the rate of change of the money-wage, or the price level, is the dependent variable, in contrast to the early IS-LM models dealing with an equilibrium price level. The Phelps-Friedman critique of the Phillips curve was its failure to deal with the possibility of accelerating inflation. It might be thought, then, that the Phillips curve represents the mid-point in an evolution of inflation models from the static price level of the early IS-LM models to its second derivative in the ‘expectations-augmented’ models of the 1970s. In this story, the step-by-step dynamics of the 1950s models might appear as clunky proto-Phillips curves, which were finally smoothed out to more elegantly treat the rate of inflation as the dependent variable, rather than an ever-unstable ‘temporary equilibrium’ price level. However, the Phillips curve models smoothed out the bumps only by restoring a single period focus, and thereby losing some of the content of the messy multi-period models. In the standard (non-expectations-augmented) Phillips curve framework, neither the past nor the future matters, only the current rate of unemployment and the shape of the curve. In the multi-period models, by contrast, past price rises matter for the present. Although the price

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70 Not every model of inflationary momentum delved into these possibilities for policy, or even mentioned the interaction of momentum with new shocks. But some did, such as Pitchford [1957] (Australian), and it certainly figured in the intuition of policymakers and eventually broader political discussions of inflation. 71 Hansen’s [1951] dynamic factor and goods market model, for example, popularised in the mid-1950s for inflation analysis by Turvey and Brems [1951] and others in the mid-1950s, might also appear as a milestone along the way, with its ‘quasi-equilibrium’ rate of inflation.
level was their focal point within each period, they were perfectly capable of telling a story of its acceleration, deceleration or steady velocity across multiple periods depending on the parameters of the feedback mechanisms.

*Cost-push, demand-pull, wages and distributional struggle*

But to understand the reception of the Phillips curve in Australia it is first necessary to bracket dynamics and understand the other tension in 1950s inflation theory which it promised to resolve. Where pre-Phillips curve Keynesian theory is discussed at all, it is often presented as divided into two camps: cost-push and demand-pull [e.g., Frisch, 1983: 239-49]. This division was certainly part of the contemporary discourse. [Bronfenbrenner and Holzman, 1963] But for many who used it, the classification was a rhetorical strategy, defining the terms of a debate among others, which the writer intended to transcend. Furthermore, even those who identified themselves with one camp or another discussed elements from the ‘other side’ as parameters or additional variables. It was not so much that there was a third camp in the middle, but that the logic of inflation itself made a one-sided treatment impossible. Increasingly, the demand-pull cost-push divide did not denote disagreement over the causes of inflation in general, but over chains of cause and effect in *particular* inflationary episodes, and more importantly, which links in the chain would be most amenable to policy influence. It must be seen in the context of the shift towards dynamics discussed above.

Early post-war Keynesian inflation theory was certainly ‘demand-pull’, seeing shifts in effective demand as the exogenous impulse behind any rise in the price level. But the framework depended upon cost conditions as parameters, as they determined the shape and position of the aggregate supply curve. There was no logical reason why these might not shift for independent reasons while demand remained stable (or increased at a rate which was not in itself inflationary). Self-defined ‘cost-push’ theory got a lot of its impetus in the 1950s from the observation that inflation continued to occur through recessions even as unemployment grew. Bronfenbrenner and Holzman [1963: 613] write dismissively that “cost inflation has been the layman’s instinctive explanation of inflation of general price increases since the dawn of the monetary system”. But their survey makes clear that it had considerable professional support in the 1950s too, particularly once the United States experienced inflation through recession as well as boom. It was, as they write, associated with the identification of ‘the new inflation’, i.e., “monotonic secular inflation”, at a slow and steady rate. [Thorp and Quandt, 1959; Fellner, 1959: 226]

This was not necessarily an inexplicable anomaly for the dynamic demand-centred theories
discussed above – when the wage reacted to prior price inflation, it was at least implicit that
the supply curve rose, and if this happened while exogenous components of aggregate
demand fell, further inflation could coincide with a decline (or slower growth) in output and
employment. But it doubtless took the experience of chronic inflation in the 1950s and
engagement with cost-push theory to bring these aspects of the theory out and make them
explicit.

Just as demand-pull theorists could not leave costs out of the story, cost-push arguments could
not neglect demand. If money demand did not increase along with costs for whatever reason
(say, because the costs concerned were import prices) the general price level could rise only at
the expense of real output. They generally saw profit margins as passive, with firms free to
raise prices in order to maintain them, either because of imperfect competition, or simply
because wage rises ‘created their own demand’. [Simkin, 1952: 151]

In fact, the emergence of cost-push elements in inflationary models did not so much threaten
demand-centred theory, as supplement them, and they were folded into dynamic models.
Australian economist Karmel’s [1959: 350-51] view was typical:

Demand pressures and cost pressures are conceptually distinct, but they are likely to be intersecting in
fact... Thus demand pressures will tend to increase wages, either simply because of the state of demand for
labour or because prior price increases influence wage claims on account of the cost-of-living, so that cost
pressures will be induced by demand pressures and become inextricably mixed with them... [T]o infer
anything about the causes of rising prices from the fact that prices are rising is a dangerous procedure.
Various forms of price-wage behaviour are, generally speaking, consistent with either demand or cost
pressures.

By the late 1950s making a distinction between cost-push and demand-pull was increasingly
seen as a moot point. As he had with the balance of payments (see Chapter 4), Machlup
[1960] attempted to clarify the terms of debate. Neither cost-push nor demand-pull purism
was tenable. The argument that cost increases alone could not generate inflation was
theoretically correct but practically irrelevant, because of the tendency of the banking system
to create purchasing power in line with wage and price rises. [p. 126] A converse argument
that demand alone cannot cause inflation, based on evidence of cost-plus pricing across a
large part of the economy, also misses the point: even if firms never raised prices without a
prior (or expected) increase in costs, a response to increase pressure of demand in the labour
market may cause such an increase in costs. The attempt to meet a demand increase with
increased supply raises costs, and therefore prices, and the cost increase is simply an
intermediate link in the chain that begins with higher demand and ends with higher prices.
Furthermore, inflation – at least the type that prevailed since WWII – is a *dynamic* continual shift of the price level rather than a movement to a new equilibrium price level. But if costs and aggregate demand themselves react to prior and/or expected inflation, it is difficult and probably pointless to identify which came first. “If prices and wages have risen in turn, in successive steps, the choice of a base period is quite arbitrary and a conclusion assigning the leading or initiating role to one factor or the other would be equally arbitrary.” [Machlup, 1960: 128]

Machlup suggested that the real problem was not distinguishing between cost and demand variables, but distinguishing between *autonomous* and *induced* movements on both sides – a very similar solution to his reconceptualising of the balance of payments a decade before. Truly *autonomous* increases in demand are those not linked to previous or expected cost increases. *Induced* increases are those which are direct consequences of cost increases – for example, from higher wages, funded initially with bank credit. There is also a grey area – *supportive* increases – which are not directly related to the cost increases but are brought about by policy responses aimed to avoid any unemployment that would otherwise eventuate. On the cost side, Machlup distinguishes between *responsive* wage increases which result from the blind pressure of demand in the labour market (or for raw materials), and those which reflect a more conscious and deliberate bargaining between workers and firms, or the deliberate exercise of monopoly power. The latter are divided into *defensive* increases which maintain a customary real wage or profit rate from previous or expected erosion, and *aggressive* increases which improve the real position. This puts distributional struggle at the heart of a persistent inflation, ultimately the most important legacy of the cost-push literature. (See also [Holzman, 1950; Robinson, 1956: 48-50].)

But at least as important for policy as the question about ‘who started it?’ was ‘what can stop it?’ As discussed above, the message of the dynamic demand models was not that once an initial inflationary impulse had occurred there was nothing policy could do to stop it – independent movements in demand could have an additive or subtractive effect on inflation, increasing or decreasing the momentum of inflation. From the point of view of policy, the

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72 Rate rather than share, because Machlup emphasises that increased replacement costs on fixed capital might motivate an attempt to defend the rate by increasing the share. [Ibid: 131]

73 This raises the vexed question of norms – what was legitimate defence, and what was aggressive? Machlup’s classification includes wage increases aiming to capture average productivity gains as ‘aggressive’, though he realises they are not necessarily inflationary. Some cost-push writers explored the complexities of the relationship between productivity growth, distribution and inflation. See, for example, Streeten [1962] on the possibility that uneven productivity growth might actually contribute to inflation rather than dampen it, and Schultz’s [1959] argument about a ratchet effect on the price level from productivity growth when money prices adjust upwards more easily than downwards.
important question in the demand-pull/cost-push debate was not whether inflation was ultimately a result of excessive cost or demand increases, but whether or not distributional issues – including the recovery of real income levels eroded by past and expected future inflation – had an effect on the rate of inflation that was not reducible to (i.e. fully explicable in terms of) aggregate demand. Nobody disputed that workers and capitalists alike would desire to increase their share of output – the question was whether distributional norms, aspirational targets and institutions would have any actual impact on money-wages or mark-ups independent of that explained by the state of demand for labour and goods. This was deeply controversial, but of immense importance for policy. On the one hand, it held out the prospect of another policy instrument – if policy could get a foothold in the wage-setting process, price-setting being beyond the pale. On the other hand, it held out an uncomfortable prospect if distributional aspirations were an independent factor and yet policy was unable to rein them in with wages policy: the alternative then would be the use of macroeconomic policy to lean against workers’ bargaining power, deliberately aiming at less-than-full employment.

5.4 Targeting wages

An escape route from this unpleasant conclusion would exist if wages could somehow be brought under policy control, or if labour could be persuaded to voluntarily restrain nominal wage growth. Indeed, prescriptions for wage policies proliferated about the world, and Australia was no exception. But, almost uniquely, Australia already had a centralised system of wage determination in the Commonwealth Conciliation and Arbitration Commission.74 While in many other countries the continuing post-war inflation created the need for a wages policy and hence for institutions to operate it, in Australia the institutions came first and a national wages policy became an institutional necessity. [Corden, 1968: 3]

The frustration for policymakers, however, was that this did not seem to make a centralised wages policy any easier – and it often made things worse. The Arbitration system was a juridical institution, guided by judicially-evolved norms of fairness, conflict resolution and legal precedence, as well as economic rationality.75 Since 1921, the basic wage had been automatically adjusted to rise quarterly with a cost-of-living index, protecting wage decisions from increases in the price level between judgments. In the 1950s and 1960s, inflation, and its relationship with external balance, played major parts in arguments against basic wage

74 Before 1956, the Commonwealth Court of Conciliation and Arbitration.
75 For historical overviews of the changing criteria by which arbitration judgments were made, see Hawke [1967 (1956)]; Laffer [1966]; Isaac and Ford [1967]; and Hancock [1975].
increases. The economic arguments set out in arbitration judgments were often derided by academic economists. But it is clear that, however well understood, “... ideas from the learned literature have found their way into submissions and have influenced the judges and the parties to the dispute.” [Corden, 1968: 4] That is, the hegemony of macroeconomic rationality spread into the arbitration system, promoted especially in the arguments from government and capital (since the rationality nearly always implied restraint), and forcing labour to couch counter-arguments partially in the same language.

The question of how inflation related to ‘capacity to pay’ featured in many arguments at the Court, between representatives of employers and those of labour, as well as between the judges themselves. Was ‘capacity to pay’ to be judged in monetary terms or real terms, and if the latter, how was this capacity to be measured? If a certain increase in the nominal basic wage would cause inflation, did this mean the economy did not have the ‘capacity to pay’ it? How much inflation was acceptable? Should money wages be automatically adjusted for inflation to maintain the real wage, even if that contributed to further rounds of inflation? [Laffer, 1966: 235-42]

The fundamental rule was relatively uncontroversial among professional economists: nominal wages and salaries should not rise faster than average labour productivity. Elaborating discussion revolved around secondary issues, such as the impact of terms-of-trade shifts, and questions of the wage relativity structure. The basic rule was premised on the belief that nominal wage growth was the active element in price inflation. Profit margins were assumed to be passive. Inflation was not generally perceived to be a symptom of conflict over income shares between capital and labour – at least, not a rational one. Wage-profit shares in national output were believed either to be stable in the long run (reflecting either the market’s stable valuation of productive services – and, implicitly, factor-neutral development – or the pricing power of firms) [Vernon et al, 1965: 126-27] or, if not stable, to be relatively independent of

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76 “... little above the level of amateur economics...” [Corden, 1968: 4]; “... at least some cause for doubting the judges’ understanding of basic economic and statistical material...” [Isaac, 1967 (1954): 275].
77 See, for example, Karmel [1959: 351]; Vernon et al [1965: 142-43].
78 For example, how to deal with wage rises in excess of average productivity growth in particular sectors or strata – since abnormally higher rises in one sector ‘use up’ capacity to raise wages elsewhere, while wage structure norms call for the maintenance of established relativities. A particularly difficult version of this problem concerned the impact of narrowing the gap between female and male wages.
79 Statistical evidence for this proposition was contested, and different conclusions appeared to come from different statistical definitions. Figures in the Vernon Report show a stability of the share of wages and salaries in GDP at factor cost between 1948/49 and 1961/62: except for the aftermath of the wool boom, it varies within a range of just 2.6 percentage points. However, according to Laffer [1966: 239] these figures were later revised, and in 1966 three members of the Vernon Committee subpoena’d to appear before the Arbitration Court accepted union submissions that the wage share had in fact declined significantly during this period, when primary production, mining and quarrying were excluded from GNP. See similar
bargaining over the nominal wage [Whitehead and Cockburn, 1963].

It was certainly true that conflict over income shares did not happen exclusively through bargaining over nominal wages, and of course real wages, and to some extent wage relativities, were workers’ actual targets. But labour’s only leverage for attaining those goals was in the nominal wage bargain – price setting was out of its control. So it is not surprising that exhortations such as Coombs’ [1959: 345] “to trade unions and other representatives of wage earners that it may be worth their while to consider whether... their interests would not be better served by higher real wages made possible by falling prices...” had little impact.

At any rate, even the economists’ consensus broke down over how an ideal income policy should deal with shifts in import and export prices, and the broader issue of the relationship between the non-tradables sector (where firms are generally able to raise prices in response to cost increases) and the tradables sector (exporters and income-competing firms being limited in their ability to raise prices regardless of costs). Should wages vary with changes in Australia’s terms of trade, as argued by Karmel [1959]? This would share the gains and burdens of the external sector with the rest of the economy, but the mechanism would work by way of inflation. [Corden, 1968: 10] Or should such shifts generally be ignored, as argued by the Vernon Committee [1965: 138]? This would keep prices more stable, but at the expense of the wage share, and possibly of real wages.

This was not merely an academic question. As discussed in Chapter 4, the wool boom in 1950/51 tripled wool prices compared to the previous year’s average (taking them to 14 times the 1939 level). [Schedvin, 1992: 172] With fixed exchange rates, the sudden windfall directly boosted farmers’ money incomes, and though the Commonwealth Bank made Special Account calls to prevent it from augmenting bank reserves (see Chapter 6), the increase in expenditure was enough to take consumer price inflation to an annual rate of around 20 per cent.

Of course, labour productivity was growing rather more slowly. But had money wage growth therefore been ruled out, so as to not feed further inflation, real wages would have substantially declined. Instead, under normal arbitration practice, the basic wage and margins continued to be automatically adjusted in line with the cost-of-living index. Though pressure had begun to build at the Court for an end to this automatic adjustment, on the grounds that it exacerbated inflation, the argument that the terms-of-trade windfall meant the economy had the ‘capacity to pay’ prevailed. As Rowan [1971 (1954): 130] argued afterwards:

conclusions in Department of Labour and Immigration [1975] and Catley and McFarlane [1983: 78-80].
The plain fact of the matter is that in a fully employed dependent economy inflation is the process through which the gain in real incomes resulting from an improvement in the terms of trade is spread through the economy. Any attempt to prevent this process completely is likely to involve labour unrest...

But after the wool price and general terms-of-trade reverse the following year, amid the outflow of foreign exchange reserves, while the price and wage adjustment process continued to echo (see Chapter 4), the ratchet effect was demonstrated. Wage and price inflation spread the agricultural gains from the wool boom across the sectors, but there was no such automatic reverse process. At the 1953 basic wage case, a majority of the judges ruled that automatic cost-of-living adjustments would end.

This inaugurated a period in which inflation concerns were taken very seriously by arbitration judges. But almost immediately, this began to expose the limitations of the arbitration system as a tool of wage restraint. The gap between the minimum basic wage set by the system and the average wage – including margins for skill, overtime, and over-award payments bargained at an enterprise level – began to widen. The arbitration system, after all, was not a wages policy – it set minimums, and bargaining at less centralised levels was free to determine higher levels of pay, or more overtime. In full employment conditions, both the pressure of demand for labour and the enhanced bargaining position of workers, particularly skilled workers, inexorably pulled money wages up.

Furthermore, the arbitration system could not ignore what was happening to the overall wage level. If the Court was to keep nominal wages from rising faster than productivity, then over-award agreements had to be considered to ‘use up’ the available wage rises. But considerations of equity demanded that the Court raise the basic wage to minimise the gap between it and the wages of the most skilled and better organised, regardless of the impact on prices. The judges also came to realise that if the basic wage did not keep up, decentralised bargaining would spread further, and the system would be further undermined. In the end, the arbitration system resisted use as an arm of economic policy, decisions ultimately reflecting the relative industrial power of capital and labour – and full employment enhanced the latter. But the late 1950s, the Courts were again granting basic wage increases alleged to be inflationary, and in 1961 the cost of living was restored as a baseline for adjustments.

The ‘earnings drift’ phenomenon was distressing to labour market economists who held out hope for a non-inflationary wage regime. If the arbitration system could not be forged into an

80 A further cause of ‘wage drift’ was a movement of workers into higher skill categories.  
appropriate wages policy, either inflation would have to be accepted, or the bargaining position of workers would have to be weakened and pressure taken off the demand for labour. As Hancock [1967 (1962): 136] wrote:

The earnings drift may be reversed in short periods as a result of recessions, but it is otherwise likely to be positive unless serious unemployment exists more or less permanently or there is a radical change in the demand and supply relationships for skilled employees.

And as he was later to conclude: “The earnings-drift is therefore an important reason for believing that the widely professed goals of stable prices and full employment are irreconcilable.” [Hancock, 1967: 254]

5.5 Conclusion: Phillips in Melbourne

The Phillips curve may seem to be an obvious candidate for conceptualising the conflict between full employment and price stability that policymakers were clearly conscious of by the late 1950s. The curve is easily translated into a Tinbergen conception of policy, because it purports to describe a regularity inherent in the economic system, but a conditional one which can be exploited by policy – a stable ‘trade-off’ between unemployment and inflation. ‘Quantitative policy’ can then be conceived in terms of this policy choice about where to set aggregate demand, constrained by the rival ‘limit conditions’ of public acceptance of unemployment and the effect of inflation on external balance. However, the Phillips curve was widely rejected by Australian economists and policymakers in the late 1950s and early 1960s. To conclude this chapter and draw its strands together, it is helpful to consider the reason for this reception and the alternatives that were suggested in place of the curve.

A. W. Phillips visited Australia soon after writing his famous paper [Phillips, 1958] – in fact, he complained that the paper was “a rush job [because] I had to go off on sabbatical leave to Melbourne”. [Quoted in Pitchford, 2000: 263] He used some of his time at the University of Melbourne to do a similar exercise with Australian data, and the resulting paper was presented as a draft in Adelaide in 1959, where “it was so criticised and dissected... that it never saw the light of day in the public domain.” [Harcourt, 2000: 304] Copies of the working paper did circulate, though, and it was finally published 40 years later as part of Phillips’ Collected Works, also the occasion for the memoirs quoted here. The ‘Phillips curve’ that played such an important role in macroeconomics internationally in the 1960s and after is quite a different thing to Phillips’ original studies – he related unemployment to money-wage growth, not price growth, focused on the econometrics and left theoretical elaboration to others.
The Australian Phillips curve [2000 (1959)] is constructed with data covering only the period 1947-58, while the original UK paper had used data running all the way back to 1861. There are striking differences in the variables employed to explain the Australian data: Phillips realised that unemployment (and its rate of change) alone would not suffice. As well as demand for labour, he notes that consumer price inflation fed back into money-wage growth because of cost-of-living adjustments granted by the arbitration system, and that movements in import and export prices have important independent effects. However, because money-wage growth was the primary determinant of consumer price inflation, as well as being partially determined by it, consumer price inflation is endogenous and can be removed from the model. This leaves as independent variables, lagged appropriately, in order of descending importance, demand for labour, export prices, and import prices. (See Figure 5.6.)

Though he finds the effect of export prices on money-wage growth comparable in influence to the demand for labour, it is not subject to policy influence (the possibility of exchange rate adjustment is not considered). Therefore, for policy purposes, it can be stripped out, leaving a curve similar to those he generated for the UK, but which the exogenous shifts in export prices would shift. (See Figure 5.7)

The immediate criticisms of Phillips' Australian paper surrounded the econometrics: Eric Russell demonstrated that the official Australian wage data were so patchy – non-homogeneous – “as to make completely unsound any attempt to fit a curve to them”. [Harcourt, 2000: 304] More fundamentally, Russell and others doubted that such a stable curve would be found even if the appropriate data existed. This criticism had two aspects: first, that a stable relationship between unemployment and inflation was particularly inappropriate for Australia, because of its centralised wage-setting system; and second, that such a relationship was problematic whatever the nature of the bargaining system.

The most detailed (printed) criticism of Phillips’ Australian curve appeared in a paper in the British Economic Journal by Australian labour market economist Keith Hancock [1960]. For his regressions on wage data, Phillips uses an index of Award rates, i.e. the legally-binding rates established by the Arbitration Courts.^82^ Hancock [1960: 547] argues that even if the statistics Phillips used were accurate (having since been officially “completely revised”) they would be “hardly more than a descriptive summary, quite devoid of predictive value”. This

^82^ Elsewhere in his paper Phillips also presents a chart of average hourly earnings, incorporating privately-negotiated over-award and overtime rates. He admits that this would be a more appropriate measure for his purposes, but uses the official wage rate index instead because the data are more complete. [Phillips, 2000 (1959): 269-70]
was for the obvious reason that Award wage rates were set by the tribunals:

Figure 5.6: Phillips’ Australian results: money wage growth (top, %) and contributing factors (below)

Is it likely that the decisions of arbitrators, who entertain a wide and varying range of preconceptions and who attempt to evaluate many different considerations, could be accurately predicted on Professor Phillips’s basis? A perusal of arbitral decisions suggests that, even when the influence of export and import prices is neutral, the tribunals dance to far less predictable patterns than an unemployment slow-step. [ibid: 547]

Hancock did not, however, disclaim any influence of demand for labour on earnings rates (i.e. actually paid rates, including over-award and overtime payments) or even ultimately on Award rates. Immediate demand pressure should be gauged by ‘wage drift’, i.e. the drift of privately-bargained pay rates over Award rates. As discussed in Section 5.4, this drift (as well as profit margin inflation from any increases in demand not passed on to wage earnings) was
likely to have affect on Award decisions through (1) cost-of-living adjustments due to associated price increases; and (2) considerations of equity, traditional wage differentials and a fear of losing arbitration system influence over wages. Finally, the unemployment rate would have a direct effect on Award wages as one of the factors considered by arbitrators. [ibid: 549-50]

Thus the argument was certainly not that there would be no relationship between unemployment and inflation – only that it was not a stable or predictable relationship, because there were other factors at play. This conclusion was not entirely out of line with the broader international literature that was emerging around Phillips’ results, as ‘the Phillips curve’ underwent its transformation from empirical regularity observed in historical statistics to theoretical framework. Both of the most influential early theoretical interpretations of Phillips’ [1958] UK results – Lipsey [1960] and Samuelson and Solow [1960] – allow for the possibility of a shifting and/or morphing curve as underlying structures and motivations change. That is, they insist that the real relationship between unemployment and inflation involves not only movements along the curve, but also such shifts.

If there is a difference between the Australian reception of the Phillips curve and its reception elsewhere, it comes down mainly to the idiosyncrasy of the arbitration system: the British and American institutional factors referred to by Lipsey and Samuelson and Solow appear more nebulous and state interventions more uncertain, while the Australian courts interpose themselves between the labour market and wage determination. On the other hand, as we saw in the last section, market conditions had begun to erode the control of arbitration over wage earnings. Hancock’s criticism of Phillips centred on the stability of the quantitative relationship between unemployment and money-wage growth. I have already shown in the previous section that he was himself reaching the view that a higher rate of unemployment might be necessary to choke off ‘earnings drift’.

The essential difference facing Australian policymakers, the basic thing that prevented the Phillips curve from representing their policy problematic, was this politicisation of wage-setting through the arbitration system. The element of indeterminacy was too clear, even though arbitration decisions and their impact on actual wages were affected by labour market conditions. The relationship between inflation and wages, involving a genuine distributional

83 Leeson [1994: 12] writes that “dozens of distinguished economists, writing in prestigious journals, rubbished the quality of the statistical work of the Phillips Curve authors, and drew attention to the list of omitted variables.”

84 On these two papers as the critical link between Phillips [1958] and ‘the Phillips curve’ of the 1960s, see Frisch [1983: 30-89]
conflict in which labour was driven to protect its real income from price increases, whatever
their origin, was transparent. The lesson of the wool boom and the battles over wage
indexation at the Arbitration Commission emphasised to Australian policymakers that
inflation would have momentum, so that any relationship between unemployment and
inflation within a single period would be highly unlikely to be stable. Most importantly, the
political nature of the wage bargain resisted the transformation of the relationship between
unemployment and inflation into a merely technical relationship. In Tinbergen’s terms, the
‘boundary conditions’ of wage-earners were a more direct limitation of the scope for policy.85

In the United States, the Phillips curve was associated with the liberal-left of politics and the
technical nature of the relationship a plus for the labour movement, because it was deployed
in arguments that unemployment could be reduced. In Australia, as in the United Kingdom,
the notion of an unemployment-inflation trade-off was associated with the conservative, anti-
labour side of politics, because it was deployed to argue for the acceptance of a higher rate of
unemployment.86 Australian economist Peter Samuel [1965: 14] remarked in 1965 that
“Treasury harbours a number of confirmed Paishs”, explicitly drawing a line with the British
economist and folk villain who was arguing for a rise in unemployment. So when the Menzies
government did drag its feet in stimulating the economy after the 1960/61 recession, allowing
unemployment to hover at postwar highs, it certainly did not admit as much publicly, talking
about a ‘recession we had to have’, as Keating would in the 1990s. But its seeming success in
knocking back inflation to the point of a stable price level must have confirmed the wisdom
of the Treasury Paishs.

85 Phillips was obviously struck by the discourse of class conflict around inflation during his Australian visit,
and in a lengthy passage of his paper lectures the labour movement: “If the relationship which I have
estimated is approximately the true one, it follows that the two main objectives of monetary and fiscal policy,
namely full employment and stable prices, cannot be completely and simultaneously obtained without a
change in the present attitudes to and methods of wage determination. Arguments for wage increases are
usually put in terms of the need to increase money wages in order to increase real wages, or more strongly in
terms of a conflict between labour and capital, an increase in money wages being needed to prevent
capitalists from exploiting workers and grabbing too large a share of the national product. I think this line of
argument is inappropriate under present conditions... The capitalist has control of the prices of the main
products entering into consumption. The wage earner cannot prevent him from adjusting his prices in
response to increasing costs. And if wages and prices rise together so that we have a steady inflation, it is not
the capitalist who will lose by it. He owns real capital goods financed largely by borrowed money and so will
usually gain relatively to workers as a result of inflation. The workers may gain temporarily from
agriculturalists as a result of inflation since the prices of most agricultural commodities are determined in
world markets, but if the process went very far it would have to be offset by a depreciation in the external
value of the Australian pound which would restore the real incomes of agriculturalists.... I will go further. Is it
really to the advantage of workers that the share of profits in the national product should be reduced?
Technical innovation and capital expansion are financed mainly from profits and it is technical innovation
and capital expansion which provide the continual increase in productivity which forms the only possible

86 On the different political receptions for the Phillips curve in the United States and United Kingdom, see
Leeson [1995a; 1995b]
By the mid-1960s the policy ensemble seemed to have settled into a more-or-less stable configuration. This involved not only factors internal to policymaking, but that the goals and modus operandi of macroeconomic policy had achieved a level of acceptance in society more broadly. The boundary conditions had been effectively shifted so as to make policy routine. Commenting on Treasury's ebullient 1964 economic survey, which praised “a fairly strong community attitude which, though it wanted to see growth pushed on vigorously, equally did not want a renewal of inflation”, Whitwell [1986: 149] writes:

Certainly there had been an element of luck but more important was the fact that, unlike the 1950s, Australians had managed to act responsibly and with restraint. The behavioural ideals which permeated Treasury documents in the second half of the 1950s had now, apparently, been attained.

One reason for this was the Treasury surveys themselves, published since 1956, presenting the technocratic view to the public in language that could be incorporated into the common sense of newspaper editorials and the perceptual filters of journalists and commentators. It was part of a deliberate attempt to build an enlightened constituency for macroeconomic rationality. Criticism persisted, of course, but increasingly spoke the same language: its catchwords were ‘stop-go policy’ and the need for ‘planning’. Unlike in 1951, the tendency for critics was less to castigate the whole project of macroeconomic policy, and more to call for different macroeconomic policy – especially better timing and more consultation and co-ordination. It could still be put stridently, but the problem was not so much economic management as poor economic management. The ‘self-opinionated bureaucratic planners’ (of outraged press comment circa 1951) might still be scapegoats, and in turn they continued sometimes to lament the “preoccupation of public opinion with questions of income distribution, equity and social security [which] has cut across the major objectives of monetary policy, ruling out measures which might have been useful...” [Arndt and Harris, 1965: 171].

It is hard to say for certain whether a willingness to use unemployment to discipline wages and prices, at least opportunistically if not deliberately, had been permanently embedded in the routine ‘quantitative policy’ of the later 1960s. The issue did not arise again for more than a decade. The balance-of-payments reprieve discussed in Chapter 4 meant that policy was not forced to prioritise inflation to such a degree: when inflation began to climb in the late 1960s, it was connected not with balance-of-payments crises, but the opposite, thanks to persistent capital inflow. The ‘trade-off’ sank below the surface, to re-emerge in the 1970s.

Nevertheless, it was clear to policymakers that the goals confidently proclaimed in the 1945 Full Employment White Paper were in tension with one another, thanks to the structural
relationship between unemployment and price stability. In Chapter 2 I quoted from the Vernon Report of 1965 a prime example of Tinbergenian thinking about such contradictions within policy, and it bears repeating here:

It must be recognised that the attainment or near attainment of any one of the seven objectives of economic policy may make the attainment of others more difficult… Thus, the nearer an economy is to full employment, the more difficult it is to achieve stability of costs and prices. On the other hand, stability of costs and prices makes for external viability, although action to achieve external viability, for example, by exchange devaluation, may operate against stable prices. In short, all objectives cannot be ‘maximised’ simultaneously… [Vernon et al, 1965: 46]
6: From the ‘battle of the banks’ to the ‘credit squeeze’: monetary policy in the long 1950s

6.1 Introduction

In this chapter I bring together the framework for analysing economic policy outlined in Chapter 2 with the vision of central banks as strategic actors developed in Chapter 3. This means first developing an idea of how policymakers early in the period saw their strategy in terms of the relationships between their instruments (levers which they firmly control) and their ultimate targets. Between instrument and target is a chain of intermediary links, with influences independent of policy at each link of the chain progressively complicating the transmission process. I have dealt with the ultimate targets of policy, especially price stability, employment and ‘external balance’, and the problems of their interrelationship, in the previous two chapters. Here, I treat aggregate demand as the target of monetary policy – although it is obviously an intermediate target on the chain to the ultimate goals – because there is nothing specific to monetary policy about the relationship between aggregate demand and prices and employment. (The money supply, as discussed below, was a target only inasmuch as it mattered for aggregate demand.) The concern of the last two chapters with the tensions between these goals is now set aside, and I focus on the problems involved in strengthening mechanisms of policy.

Between monetary policy instruments and aggregate expenditure, it is possible to identify discrete links in the chain at points where autonomous influences meet policy influences. For example, aggregate demand is composed of various elements, some of which monetary policy has little influence over – government spending, the bulk of consumer spending – and some of which it has more substantial influence over – firm and household investment. Trace the chain one link further up and consider investment spending. This depends to some extent on the cost and availability of finance, which policy has some influence over, and to some extent on accumulated undistributed profits and household wealth, which policy does not influence (at least not directly or in the short run). A further link up the chain, policy influences on the
availability and cost of finance contend with the independent decisions of banks and other financial institutions in managing their balance sheets – and so on.

The story of monetary policy in this period is not about the exercise of a stable configuration of policy instruments in a stable environment – it is not, in other words, Tinbergen’s ‘quantitative policy’. For most of the period monetary policy was at best only partially successful in its aims, even while it was called upon to take a greater part of the burden of macroeconomic restraint. The story is therefore one of ‘qualitative policy’, of policymakers attempting to forge an effective system of policy by strengthening its instruments and seeking greater purchase at various links up and down the chain of policy transmission.

In Section 6.2 I describe the unusual situation of central banking in Australia at the end of World War II. In short, it was brand new. There had been no central banking in the regular sense before the war, and establishing it involved a tough political struggle with the private banks. In Section 6.3 I trace the development of a bank-centred monetary policy between the end of the war and the end of the 1950s. This continued to involve conflict between monetary policymakers and the private trading banks, as the strengthening of policy ran up against ‘limit conditions’ set by the banks’ defence of their autonomy and profitability. A stable policy framework depended ultimately on a compromise which would give policy hegemony over the banking system with the consent of the private banks.

Policy did not have all the initiative in modifying the institutional configuration of the financial system through which it operated. Even as it enhanced its influence in the banking system, financial innovation was undermining the relative importance of the banks within the broader financial system. This affected policy at a number of links on the transmission chain, as other independent influences grew at the expense of those of the central bank. In Section 6.4 I discuss the emergence of non-bank financial institutions in the 1950s and the associated deepening of securities and money markets. The innovation was not unconnected to policy, in that success in restricting the availability of credit through one channel encouraged the development of new channels which policy did not control. It forced policymakers to develop a broader approach to monetary policy, moving beyond the trading banks. I emphasise that the state itself was involved in promoting the development of a short-term money market, to secure its strategic interests. Finally, in Section 6.5 I discuss the ‘credit squeeze’ which helped provoke the recession of 1960/61 and signalled a turning point in policy.
6.2 Peculiarities of the Australian banking system

The ‘battle for the banks’, and the wider war

The role and functions of Central Banks have evolved naturally over time, and play a necessary part within the banking system. [Goodhart, 1988: vi-vii]

Central banking in Australia has had an unusual history. It did not grow naturally as the result of practical experience and accumulating tradition. [Giblin, 1951: vii]

Goodhart’s argument represented in the above quote is that central banks are not impositions on the capitalist financial system by the state, but have shown a historical tendency to emerge in an evolutionary fashion, as a functional part of a variety of banking systems. Only over time, under the influence of macroeconomic theory and driven by successive financial crises, did they converge in the 20th century to the kind of state institution familiar today. Despite coming from a very different theoretical background, his argument is strikingly similar to de Brunhoff’s, discussed in Chapter 2. However, as Giblin suggests, the development of central banking in Australia was anomalous. It is hardly an exaggeration to say that there was no central bank in Australia before World War II. Banking business was concentrated in the hands of a few large banks, whose cartel-like behaviour performed some of the functions central banks provided in less-centralised systems.

Before the war, the Commonwealth Bank could hardly be spoken of as a central bank: it had operated as a compulsory clearing house between the trading banks since 1925, but had no control over private bank reserve ratios or lending practices. Banks were “masters in their own house” [Schedvin, 1992: 17]; even the troubles of the 1930s led to (partial) centralisation of foreign exchange on only a voluntary basis. It was the imminent outbreak of war in 1939 that led the government to complete this centralisation by law, and it was not until the election of the Curtin ALP government in 1941 that the Commonwealth Bank was granted modern central banking powers aimed at restraining the private banks domestically. Even then, these were wartime national security powers. When they were made permanent via the Commonwealth Bank Act and Banking Act in 1945, peacetime central banking with macroeconomic aims was brand new. That this was a total novelty cannot be stressed enough. [Schedvin, 1992: 17-18, 24-25, 59-63; Butlin and Schedvin, 1977: 310-38].

The Chifley Government’s attempt to nationalise the trading banks in 1947, defeated in the High Court the following year and on appeal at the Privy Council in 1949, has entered political legend as the most dramatic episode of the postwar period. But it is now often misinterpreted as a quixotic eruption of Depression-era populism. In reality, although the
energy of the labour movement’s animus against banking was certainly tapped for the government’s struggle, it fits uneasily with that tradition. While the pre-war criticism of the banks surrounded the tightness of their credit during the Depression, post-war nationalisation was born from the government’s fear of loose money and the need to control inflation. It was a response to the banks’ resistance to the 1945 central banking powers, and driven in large part by the imperative of counter-inflationary monetary policy.

Prime Minister Ben Chifley and Attorney-General Bert ‘Doc’ Evatt, who fought the nationalisation battle in the courts, were not radicals. They had previously been not at all inclined to implement nationalisation. Although it had been part of Labor policy for more than 25 years, no-one expected them to. When the plan was suggested to Cabinet in August 1947, “the reaction was ‘complete stunned shock’ followed by a ‘good deal of jubilation’”.

[Schedvin, 1992: 78] It did not come out of the blue, but in response to a High Court judgement in favour of a challenge against certain provisions in the Banking Act. The challenge had been brought by the Melbourne City Council, and specifically against Section 48 of the Act, which required public bodies to bank with the Commonwealth Bank. However, the Council’s case was built by Garfield Barwick, who had worked with the National Bank on a comprehensive brief on the legislation, and who recommended a challenge on constitutional grounds to Sections 18-22. These sections contained the key central banking powers, without which “the whole of the Banking Act would fall” [ibid: 76] Originally included in the City Council’s challenge, reference to these sections was deleted by the time it got to court. But Chifley and Evatt concluded following the Council’s victory that the banks would soon challenge Sections 18-22.

The banks had indeed reacted politically against the 1945 legislation, with several joining in a public campaign against central banking with the wordy slogan “Permanent government control of the banks simply means permanent political control of the money placed in the banks by the people”. [ibid: 71] Opposition leader Robert Menzies opposed the legislation, arguing that the government should rely on voluntary co-operation of the banks with policy. According to Chifley’s biographer, the Prime Minister and Evatt concluded that “the Government could either swallow the decision and await an attack by the private banks on the vital sections of the 1945 Acts, or they could remove the challengers by nationalising the banks.” [quoted in Schedvin, 1992: 78] Chifley’s press statement announcing nationalisation focused on the macroeconomic justification: “the Government must accept responsibility for the economic condition of the nation and must have complete powers over banking policy to
assist it in maintaining the national economic health and prosperity.” [Quoted in Schedvin, 1992: 79]

Although the government was beaten in ‘the battle for the banks’ [May, 1968], it emerged with a stronger position in the wider war. The central banking provisions in the 1945 legislation were never challenged. The succeeding Menzies Coalition Government did not reverse it, having come to accept the need for a bank-centred monetary policy. Although 1953 amendments imposed more limits on central bank exercise of the Special Account powers (see below), these limits were never approached by actual policy so had little material effect. The nationalisation attempt left a legacy of bitterness between central and private banks during the 1950s, with important consequences, discussed below. But central banking was there to stay.

**Why a bank-centred monetary policy?**

Despite the 1954 claim of Commonwealth Bank Governor H. C. Coombs that Keynes had removed “the mystery element” from monetary policy (see Chapter 5), the specifically monetary aspects of the *General Theory*, or its IS-LM interpretation, are conspicuously absent from his explanation. There are three fundamental differences between 1950s Australian monetary policy and the ideal type represented in the Keynesian textbooks:

- Trading bank balance sheets were the pivot of policy, rather than open market operations in the money market.

- Neither the money supply nor interest rates were targets of *countercyclical* monetary policy, though authorities certainly actively intervened to maintain low and stable interest rates, and exogenous shifts in the money supply (e.g. from the sterilisation of net international flows) mattered to the extent that they interfered with control of bank balance sheets.

- The system was based on *rationing* rather than market clearing – would-be borrowers went unsatisfied despite their willingness to borrow at or above the going interest rate.

These differences did not all result from peculiarities in the Australian system – to some extent they were a function or the failure of the ideal type to represent *any* actual financial system. For example, banks play a larger independent role than the IS-LM representation allows in all historically existing capitalist monetary systems, as discussed in Chapter 3.87 And

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87 Keynes gave more sophisticated accounts of banking and the financial sphere in the *Treatise on Money* and elsewhere in his oeuvre, and opinions differ as to why they were left out of the *General Theory*. Dow [1997: 67] argues that he was “abstract[ing] from bank liquidity preference”, legitimately, but only in the institutional context of the UK in the 1930s. Robinson [1971: 81-82] argues that he bastardised his insights.
though the *General Theory* portrays the central bank targeting the interest rate by adjusting the money supply, in fact certain interest rates are often more directly under the influence of policy than the money supply (dominated by private bank liabilities) even where the bank reserve-deposit ratio is relatively stable. [Moore, 1988; Goodhart, 2002]

**Figure 6.1: Face value of securities listed on the Sydney Stock Exchange, selected years ($m)**

![Figure 6.1: Face value of securities listed on the Sydney Stock Exchange, selected years ($m)](image)

Source: Matthews [1964: 14]

Nevertheless, the Australian system was peculiar compared to the British and American systems that theorists tend to generalise from (though it must be said that these two are equally peculiar relative to one another). There was no money market – the only instrument with a maturity of less than two years was the three-month Treasury bill, for which no secondary market existed; these were simply a place for banks to park spare funds. Open market operations, the centrepiece of Bank of England policy, were simply not possible in Australia, at least not with any degree of precision. The market in longer-term securities was undeveloped – thin, illiquid, tradable only in large blocks and dominated by transactions into the monetary sphere for strategic reasons, so as to take on the orthodoxy just one sacred cow at a time. Moore [1988: 171-208] believes, like Dow, that he was simplifying in order to focus attention elsewhere, but describes how the place of the banks became a sticking point in the debate following publication, so that Keynes was “forced under heavy pressure to concede that the banks ‘hold the key position’ in the process of economic expansion”.

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among the banks and authorities rather than non-financial capital and individuals. Figure 6.1 shows the face value of various types of securities listed on the Sydney Stock Exchange in selected years. It can be seen that Commonwealth government securities dominated the market throughout the post-war period, and that equities by far predominated over bonds for private finance; private fixed interest securities were negligible until the late 1950s.

The other peculiarity was the commitment to low and stable interest rates. This was very much a policy choice rather than something forced by the financial system; in fact, as discussed below, the system strained against it. As a political proposition, however, ‘cheap money’ had few enemies in Australia in the early post-war years. “Those who questioned its validity, or suggested that interest rates deliberately held down might prove inflationary and promote misallocation of resources, were few and without influence.” [Schedvin, 1992: 128; see also pp. 125-30; Corden, 1968: 33-34; Arndt and Harris, 1965: 203; Coombs, 1971 (1954): 29-30] Though ‘cheap money’ was most vigorously backed by the left and the labour movement, cemented in the popular consciousness by the Depression experience, it also found support among the Country Party’s rural constituency – “more dedicated to low interest rates than the most doctrinaire Keynesians” [Coombs, 1983: 150-51] – as well as among home-owners and industrialists in the cities. The weight of public debt from the war and a desire that bondholders not suffer (or perceive risk of) capital losses ensured that state and local governments, as well as the Commonwealth Treasury, had a natural preference for low interest, though the latter’s responsibility for public finance here conflicted with its macroeconomic responsibilities. Even the private trading banks had an interest in low rates in the early postwar years, because government securities made up a large proportion of their assets, so a rise in yields would have “made serious inroads into shareholders’ funds.” [Schedvin, 1992: 18] This perspective began to change only in the later 1950s when banks began to lose deposit market share to institutions not subject to banking regulations and so able to pay higher rates, as discussed below. Finally, Treasury was concerned about the implications for government finance, since investors in public bonds risked capital losses if yields were allowed to vary.

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88 Banks, government agencies and life insurance companies held around 60-65 per cent of government securities in the early 1950s. [Schedvin, 1992: 31]

89 High interest rates do not necessarily mean high profitability for the banks – it is the spread that counts. Furthermore, once rates did begin to move, authorities deliberately tried to prevent any boost to bank profits until 1958. So when the maximum overdraft rate was allowed to rise in 1956, the central bank lowered the interest payable on trading bank special account deposits, due to Menzies’ insistence that the government did not intend that the “profits of the trading banks should rise as a result of counter-inflationary action taken by us”. [Schedvin, 1992: 238-39]

90 For example, in September 1955 the Commonwealth Bank was not allowed to slacken support for the bond
This broad coalition for ‘cheap money’ can be considered one of Tinbergen’s ‘limit conditions’ on policy. For reasons discussed below, it would eventually come into conflict with other policy goals and generate a classic dysfunctional clash of limit conditions, so that something had to give. Reflecting this, opposition came mainly from the central bank itself and from academic economists. Note, however, that the economic arguments were against \textit{fixed} rates rather than against \textit{low} rates. Throughout this period there was considerable scepticism that aggregate expenditure was interest-elastic, so interest rate movements were not seen as having much potential to affect aggregate investment, unless they were very large. This was the orthodox opinion of the time, \textit{not} limited to Australian conditions, and backed up by empirical evidence [e.g., Radcliffe, 1959: 158-60].

The state fixed interest rates at various points on the spectrum in different ways, partly by fiat and partly by market activity. Bank rate maxima were set by the central bank, with the Treasurer’s approval, under the Banking Act of 1945. This included both lending rates and deposit rates, and the Act forbade any interest at all on current accounts. Rates on government securities were maintained by the central bank acting as market maker, committing to buy or supply what the market demanded at the target rate determined by the Treasurer. The rate at which banks could borrow reserves from the central bank was obviously also under the latter’s control. Rates on private securities were left to the market, the only realm of rate flexibility – but as shown in Figure 6.1, this was a tiny proportion of the securities market.

The commitment to fixed interest rates explains the third peculiarity – that credit rationing was the main ‘moving part’ of countercyclical monetary policy. Because the demand schedule for credit tended to shift pro-cyclically, clearly counter-inflation policy had to ensure that some boom-time demand for financing went unsatisfied. Because monetary policy normally sought to shield housing finance from the effects of monetary policy, the finance of business investment was the main target. (Consumer credit was subject to severe repression, as discussed below.) As Table 6.1 shows, most business investment was ultimately funded by market and allow yields to rise because new securities were being marketed at the current rate. [Schedvin, 1992: 234]

See for example, Treasury advice in 1951: “… a Government decision deliberately to raise interest rates unless carried to very high levels could not be regarded as an important contribution to anti-inflationary policy.” [Whitwell, 1986: 104] See also Schedvin [1992: 237]: “Both the Bank and Treasury continued to believe [in 1956/57] that for developmental reasons interest rates should be as low as possible; they also accepted that interest rate adjustment was a weak macroeconomic tool.” Although views shifted in the 1960s, as discussed in Chapter 9, this assessment has never been unambiguously overturned by empirical research. See, Goodhart’s [1989: 271-74] survey of the literature: “This suggests that the interest elasticity of demand for expenditures has been rather low and, given the actual historical experience of interest-rate fluctuations in recent decades, would seem to imply that monetary policy measures cannot have been of primary importance for the determination of money incomes. Particularly during the earlier period of pegged exchange rates under the Bretton Woods system up till 1973… the interest elasticities of expenditure were just too low.”
retained profits, and share and bond issues, and very little (3.6 per cent) by the banks. But bank finance was the key source of short-term finance – which does not show up in the figures of Table 6.1 covering net financing over an eight-year period. It was also the marginal source of finance, even for investment in fixed capital, with Arndt [1960: 45] estimating that “possibly as much as one-third to one-half of all trading bank advances outstanding at any time are for investment in fixed capital.” Finally, bank advances were in the form of newly created money, thus not requiring ex ante saving elsewhere. Trading bank advances were by far the most volatile component of total sources of funds. When it aimed at restraint, the central bank aimed to drive firms away from bank finance to compete with one another for a limited pool of funds on the securities market. According to Governor Coombs [1971 (1954): 38], the idea was “that if capital projects sought credit funds from the market [i.e. outside the banking system] they would absorb some of the pressure being exerted by the swollen money supply and the discipline of having to go to the market would itself exercise a restraint on the more exuberant.”

Table 6.1: Sources of funds for companies, 1953/54 to 1960/61

<table>
<thead>
<tr>
<th>Net sources of funds</th>
<th>$m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving</td>
<td>4720</td>
</tr>
<tr>
<td>Share issues</td>
<td>1310</td>
</tr>
<tr>
<td>Debenture, note and deposit issues</td>
<td>600</td>
</tr>
<tr>
<td>From rest-of-world</td>
<td>990</td>
</tr>
<tr>
<td>Trading bank advances</td>
<td>300</td>
</tr>
<tr>
<td>Borrowing from other financial intermediaries</td>
<td>450</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8370</td>
</tr>
</tbody>
</table>

Source: Vernon et al, 1965: 947

Why did policy focus on the quantity of credit rather than the quantity of money? One reason is that the authorities did not see the money supply as under their control. This is corroborated in Coombs’ [1971 (1954): 25-26] account: central bank operations were only one influence on the volume of money (“which fluctuates wildly”); alongside the balance of international payments, government deficits and surpluses, and changes in bank loans and investments. What is more, because bank liabilities made up the vast bulk of the money supply92, the effects of all of these factors were filtered through bank portfolio decisions. There was no

92 In the 1950s, trading bank current deposits made up more than three-quarters of the most restrictive (M1) definition including only means-of-payment held by the non-bank public. They made up close to 90 per cent of M3, which includes less liquid trading bank fixed deposits and savings bank deposits. [Foster, 1996: 110-11]
stable bank multiplier, because no legal restrictions limited bank reserve ratios. Thus Australia’s institutional conditions made control of the money supply especially difficult: it was not merely a consequence of the interest rate target.

A second reason is that the relationship of the money supply to the policy target – aggregate expenditure – was unclear. The traditional quantity theory was at a low ebb: the velocity of money was variable in an unpredictable way, so the monetary aggregates were ambiguous indicators, though authorities still kept an eye on them. Figure 6.2 shows that the quantity of money indeed did not have a stable ratio to nominal income; velocity was variable, and trended upwards. Broad money – which incorporates the liabilities of non-bank financial institutions – showed a more stable velocity, but this concept of money was not tracked during the period itself. Authorities were only beginning to become conscious of the role of financial innovation in economising money balances – and the details were debated. Further complexity came from the large seasonal variations in the demand for money – which are abstracted from in the annual statistics represented in the chart.

Nevertheless, the quantity of money was still monitored by policymakers. Coombs [1971 (1954): 23] describes it as a subsidiary target. But his account is problematic. He writes: “Spending can be influenced by the amount of money which is available in a community and also by the freedom with which people will draw upon their stocks of money to spend or lend.” But there is no explicit discussion of liquidity preference or financial intermediation, and at different times he appears to interchangeably use the one term ‘money’ to represent quite separate quantities – bank reserves, means-of-payment, and even savings. In fact the main concern of central bankers with respect to money concerned bank reserves rather than money as such: growth in the money supply from net international inflows (the wool boom being the most notable instance) allowed the banks to expend their lending, if all else remained equal. Because concern with money was subsidiary to concern with credit, Rowan [1980: 120] goes so far as to say that central bank activity in the 1950s is more properly called ‘banking policy’ rather than ‘monetary policy’, and indeed, the authorities often talked of ‘credit policy’. The drive to build a workable system was initially all about harnessing the trading banks.

93 See, for example, Vernon et al [1965: 964], for whom the “striking” decline in the ratio of the volume of money to GNP is a mystery. They partly explain it as the run down of idle balances left over from the war, but this becomes less convincing as the distance from it mounts. See also Arndt and Harris [1965: 38-41], who suggest the trend “reflects institutional changes but is probably also connected with post-war methods of monetary policy.”
M3 is currency, plus current deposits with trading banks, plus fixed deposits and certificates of deposit issued by trading banks, plus deposits with savings banks. Broad money is M3 plus non-bank financial institution borrowings, less currency holdings and bank deposits of these institutions.

Source: Foster [1996]

The dominance by the trading banks of the supply of credit to the private sector in the early postwar period can be seen in Figure 6.3. In 1947, they accounted for almost 70 per cent of outstanding loans. As Figure 6.4 shows, they accounted for a smaller proportion of total financial institution assets. The main reason for the discrepancy is the weight of government securities held by savings banks. The savings banks were primarily vehicles for holding household savings and channelling them into government and semi-government securities, and to a lesser extent, housing. They did not lend to business. Until 1956, they were all publicly owned – one a part of the Commonwealth Bank, and the rest owned by state governments. Therefore, their behaviour was easily controlled by the authorities. They were required to hold at least 70 per cent of deposits in public securities plus liquid assets, with the rest going into mortgages. They performed a dual function for monetary policy, helping support government bond prices and allowing authorities to isolate housing from general credit squeezes. They were not, however, important for active monetary policy. [Vernon et al, 1965: 957]
Figure 6.3: Loans outstanding by institution type, June average, percent of total

Source: Vernon et al [1965: 253]

Note: ‘Retail instalment credit’ includes retail credit extended by finance companies.

Figure 6.4: Financial assets by institution type, end June, percent to total

Source: Foster, 1996: 120-21
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overseas funds of central bank</td>
<td>-46</td>
<td>142</td>
<td>332</td>
<td>354</td>
<td>312</td>
<td>-904</td>
<td>318</td>
<td>64</td>
<td>-280</td>
<td>-198</td>
<td>406</td>
<td>-66</td>
<td>-42</td>
<td>70</td>
<td>16</td>
<td>60</td>
<td>102</td>
<td>452</td>
</tr>
<tr>
<td>2. Government deficit items</td>
<td>80</td>
<td>-94</td>
<td>-184</td>
<td>64</td>
<td>144</td>
<td>234</td>
<td>268</td>
<td>-35</td>
<td>30</td>
<td>108</td>
<td>28</td>
<td>26</td>
<td>184</td>
<td>120</td>
<td>58</td>
<td>242</td>
<td>88</td>
<td>176</td>
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<tr>
<td>b) Commonwealth Government debt position</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>-12</td>
<td></td>
</tr>
<tr>
<td>3. Central bank balance sheet items</td>
<td>-134</td>
<td>-105</td>
<td>-188</td>
<td>-118</td>
<td>-26</td>
<td>102</td>
<td>-52</td>
<td>-142</td>
<td>-46</td>
<td>2</td>
<td>12</td>
<td>4</td>
<td>-70</td>
<td>-44</td>
<td>58</td>
<td>-110</td>
<td>-140</td>
<td>-216</td>
</tr>
<tr>
<td>a) Rural credits advances</td>
<td>30</td>
<td>0</td>
<td>34</td>
<td>-60</td>
<td>-54</td>
<td>100</td>
<td>-124</td>
<td>46</td>
<td>74</td>
<td>108</td>
<td>-104</td>
<td>-90</td>
<td>66</td>
<td>58</td>
<td>-182</td>
<td>-50</td>
<td>130</td>
<td>-32</td>
</tr>
<tr>
<td>b) Other assets and liabilities</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>-34</td>
<td>-88</td>
<td>44</td>
<td>-156</td>
<td>46</td>
<td>94</td>
<td>86</td>
<td>-76</td>
<td>-8</td>
<td>52</td>
<td>-196</td>
<td>-4</td>
<td>38</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>b) Savings banks</td>
<td>-8</td>
<td>30</td>
<td>30</td>
<td>42</td>
<td>102</td>
<td>-12</td>
<td>16</td>
<td>50</td>
<td>46</td>
<td>24</td>
<td>56</td>
<td>38</td>
<td>82</td>
<td>130</td>
<td>-2</td>
<td>130</td>
<td>210</td>
<td>232</td>
</tr>
</tbody>
</table>

Source: Vernon et al [1965: 976]

Notes

1. Bank liquidity includes trading and savings bank holdings of liquid assets, government securities and compulsory special account/statutory reserve deposits.

2. Inflows of international currency less that held by trading banks. Since foreign currency had to be sold to the central bank, the latter includes only temporary small balances. Note that this item includes drawings from the IMF in 1949/50 ($18m), 1952/53 ($25m) and 1960/61 ($1.5m), without which the figure would be lower. It includes repayments to the IMF in 1953/54 ($20m), 1954/55 ($24m) and 1961/62 ($1.5m), without which the figure would be higher. These drawings and repayments are also reflected in 3b), where they are offset by corresponding changes in central bank liabilities.

3. Rural credits advances are loans from the Rural Credits Department of the central bank to government authorities and co-operative associations to assist the marketing, processing or manufacture of primary produce [Vernon et al, 1965: 953]

4. This is a residual item reflecting changes in public holdings of notes and coins, miscellaneous bank assets and liabilities (e.g. in the accounts of state governments and interbank deposits), and small discrepancies resulting from differences in timing of the collection of different statistics.
6.3 Forging a bank-centred monetary policy

The 1945 banking legislation, which made permanent certain wartime powers that had not existed before the war, gave the central bank three basic controls over the trading banks:

- the power to call trading bank reserves into Special Accounts where they would be unavailable for normal reserve purposes;
- the power to set deposit and lending rates; and
- the power to “give directions as to the classes of purposes for which advances may or may not be made by banks” – the so-called ‘qualitative controls’.

Variations in bank interest rates were not generally used as an active instrument of policy, for reasons discussed above; however, this changed in the course of the 1950s. The third power appears very potent – but the wording was extremely vague, and ‘directions’ could be interpreted as anything from suggestions to comprehensive control of lending. In practice there was no mechanism for enforcement and they depended on bank co-operation. The real extent of these powers would be determined by politics and the relations between the central and trading banks. In the 1950s, though still termed ‘qualitative’, they had become mainly quantitative in operation: instead of specifying industries, the requests now usually specified that lending should be restricted to working capital, to force companies into the share and securities markets for long-term finance. They were also used to choke off lending for hire purchase (see next section) and for financial speculation. The strength of wording of these directives varied depending on the urgency felt by authorities. [Arndt and Harris, 1965: 200-01]

This left the Special Accounts as the major active instrument of policy. The Special Accounts had been implemented in mid-1941, under the influence of Keynes’s [1940] How to Pay for the War, to ensure that the build-up in deposits did not allow banks to expand their lending and crowd out government military spending. Under the 1945 legislation, the Commonwealth Bank had the power to call in any increase in reserves above the level in July 1945. In the 1953 amendment calls were further limited, but the restriction was not of practical importance as policy never approached this limit. [Arndt and Harris, 1965: 180-81] The mechanism differed in form from the variable reserve ratios device used, for example, in the United States, but was similar in effect. The main difference was that the Special Accounts paid a higher rate of interest than the banks would have received for the funds as simply immobilised reserves. Also, central bankers in Australia were technically allowed to discriminate between
banks, but this was a major complaint of the banks and discrimination was politically difficult.

Between the instrument and the intermediate target – trading bank lending – were three links at which other influences vied with policy intent. The first was the state of trading bank liquidity, inclusive of reserves quarantined in the Special Accounts. The quantity of cash reserves in the system as a whole would fluctuate beyond the control of the monetary authorities as a result of movements in the balance of payments, because of the commitment to a fixed exchange rate. It would also fluctuate due to the combined impact of movements in the quantity of outstanding government debt and private sector portfolio decisions about how much to hold at the going yield. Because the central bank was required to support that yield, it was necessarily a quantity-taker in the market; the monetary base was demand-determined.

The second link in the chain was trading bank liquidity management: their decisions about how much to lend given the level and structure of reserves and deposit liabilities. The banking legislation set no restrictions in this regard. Thus there was no stable ‘money multiplier’ relationship between reserve base and money supply or bank lending. Furthermore, banks were able to ‘make position’ with their portfolio of government securities, which could be considered almost as liquid as cash reserves given the central bank’s commitment to maintaining their yield. There was considerable variation in liquidity ratios over time, and between banks. Variation in bank liquidity ratios over time had a seasonal and a cyclical dimension. Seasonal variations were substantial, but can be ignored, except to note that they made real-time diagnosis of cyclical turning points more difficult for both the banks and policymakers. [Arndt and Harris, 1965: 36; Rowan, 1980: 55-56] The third link in the chain was the demand for trading bank finance from firms. Because most trading bank lending was by overdraft, and because at most times there was a substantial distance between agreed limit and actual borrowing, credit was demand-determined in the short run, and banks could only adjust their lending commitments over a period of months.

Table 6.2 represents the first link in the chain, changes in bank liquidity, broken down by component. It is too complex a table to take in all at once, but I will refer to sections of it where necessary below. Liquidity incorporates both bank cash reserves and holdings of government securities. Item 1 presents fluctuations due to central bank purchases and sales of foreign exchange, i.e. due to international payments. It is immediately clear that this element was the most volatile contributor to overall fluctuations. Item 2 presents the contribution of public sector budget deficits, minus net sales of government securities to the non-bank private sector. These are quite independent phenomena, because of course portfolio decisions about
holdings of government debt have no necessary connection to the government deficit over the same period. Item 3 presents other net monetary flows from the central bank. Rural credit advances are usually inconsequential, and involve central bank activity stabilising the supply of credit to farmers. Much of the other component of this item involves reserve borrowing (and repayment) by the trading banks from the central bank (discussed below). Finally, Item 4 is a modest balancing item, accounted for partly by changes in the circulation of notes and coin, and partly by data discrepancies. The final rows show the total net increase in bank liquidity, broken down between savings banks and trading banks, with the latter the main concern of the authorities.

The Special Account instrument was used to smooth these large exogenous fluctuations in trading bank liquidity by quarantining excess liquidity, with the liquidity target varying according to the stance of policy. Table 6.3 illustrates the point at which the Special Account instrument met the second link in the chain, intervening between the exogenous movements in trading bank liquidity and their loan advances. The column showing ‘free liquidity’ indicates changes in the quantity of cash reserves and government securities held by the trading banks, other than the reserves quarantined in the Special Accounts. Interpretation of policy stance is not a simple matter of tracking changes in the Special Accounts, because of the independent influences. Neither can it be judged solely by reference to the achieved level of free liquidity. First, this was because the target would depend on the authorities’ expectations of other influences on aggregate demand. Also, the authorities were sometimes constrained in their ability to make calls, and banks had an alternative source of liquidity in ‘last resort’ borrowing from the central bank, as discussed below. Rowan [1980: 73-91] discusses some problems of interpretation and sets out his own judgements, which are reported in the final column of Table 6.3.

After a few years of ad hoc policy, the central bank centred on a systematic way of using the Special Accounts to target trading bank balance sheets in January 1950. Dubbed the SACT system, for Special Accounts, cash and Treasury bills, it centred on the maintenance of a base ratio of those assets to deposits of “roughly 50 per cent”, with the ratio “increased from time to time according to circumstances and the needs of our general credit policy”. [Memo to trading banks, quoted in Schedvin, 1992: 176] The bank would use Special Account calls to maintain the ratio – it had no means of control over the other assets. Note that the system referred to Treasury bills (a short-term instrument) rather than government securities as such; the ease with which the banks could make position with bonds was not yet appreciated.
### Table 6.3: Change in trading bank liquidity and advances ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in Trading Bank Liquidity</th>
<th>Net Effect of Special Account/SRD Call-ins</th>
<th>Change in Free Liquidity</th>
<th>Change in Advances</th>
<th>Monetary Policy Stance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946/47</td>
<td>-106</td>
<td>-33</td>
<td>-139</td>
<td>154</td>
<td>---</td>
</tr>
<tr>
<td>1947/48</td>
<td>34</td>
<td>-34</td>
<td>0</td>
<td>152</td>
<td>---</td>
</tr>
<tr>
<td>1948/49</td>
<td>160</td>
<td>-178</td>
<td>-18</td>
<td>100</td>
<td>---</td>
</tr>
<tr>
<td>1949/50</td>
<td>238</td>
<td>-130</td>
<td>108</td>
<td>138</td>
<td>---</td>
</tr>
<tr>
<td>1950/51</td>
<td>318</td>
<td>-250</td>
<td>68</td>
<td>208</td>
<td>R</td>
</tr>
<tr>
<td>1951/52</td>
<td>-596</td>
<td>535</td>
<td>-61</td>
<td>384</td>
<td>A</td>
</tr>
<tr>
<td>1952/53</td>
<td>350</td>
<td>-58</td>
<td>292</td>
<td>-206</td>
<td>E</td>
</tr>
<tr>
<td>1953/54</td>
<td>-16</td>
<td>-39</td>
<td>-55</td>
<td>240</td>
<td>ME</td>
</tr>
<tr>
<td>1954/55</td>
<td>-240</td>
<td>146</td>
<td>-94</td>
<td>292</td>
<td>MR</td>
</tr>
<tr>
<td>1955/56</td>
<td>-64</td>
<td>41</td>
<td>-23</td>
<td>-36</td>
<td>R</td>
</tr>
<tr>
<td>1956/57</td>
<td>220</td>
<td>-160</td>
<td>60</td>
<td>-48</td>
<td>R</td>
</tr>
<tr>
<td>1957/58</td>
<td>-138</td>
<td>115</td>
<td>-23</td>
<td>164</td>
<td>ME</td>
</tr>
<tr>
<td>1958/59</td>
<td>80</td>
<td>65</td>
<td>145</td>
<td>-54</td>
<td>ME</td>
</tr>
<tr>
<td>1959/60</td>
<td>46</td>
<td>-108</td>
<td>-62</td>
<td>204</td>
<td>MR</td>
</tr>
<tr>
<td>1960/61</td>
<td>-70</td>
<td>88</td>
<td>18</td>
<td>26</td>
<td>R</td>
</tr>
<tr>
<td>1961/62</td>
<td>108</td>
<td>131</td>
<td>239</td>
<td>48</td>
<td>E</td>
</tr>
<tr>
<td>1962/63</td>
<td>88</td>
<td>-57</td>
<td>31</td>
<td>178</td>
<td>ME</td>
</tr>
<tr>
<td>1963/64</td>
<td>406</td>
<td>-232</td>
<td>174</td>
<td>146</td>
<td>MR</td>
</tr>
</tbody>
</table>

R = restraint; MR = mild restraint; A = accommodating/neutral; ME = mild expansion; E = expansion

Source: Vernon et al [1965]; Rowan [1980]

The SACT target was always successfully met [Schedvin, 1992: 177], suggesting that the central bank had a reasonable degree of control over this variable; it can be considered an instrument. However, its effects down further down the chain of transmission were another story. The wool boom of 1950/51 quickly revealed the system’s strengths and weaknesses. Despite the size of the inflows, by quarantining most of their addition to bank reserves policymakers were able to prevent much of any secondary increase in money supply, i.e., that which would have resulted from a full multiplication of the additional reserves into bank balance sheet expansion. Rowan [1971 (1954): 146] argues that in this respect “the Special
Account device proved well-adapted to Australian requirements”. The SACT ratio was maintained above 45 per cent. M3 growth in 1950/51 was only 58 per cent of money-income (GDP) growth. But “this was about the limit of quantitative restriction”. [Schedvin, 1992: 178] Maintaining the SACT ratio meant that most, but not all, of what the central bank paid to the banks for incoming foreign currency would end up in the Special Accounts – leaving enough new reserves to cover the primary increase in deposits accrued by the original recipient of the overseas inflow. Calling more than this would have meant attempting to force the trading banks to offset the primary increase by denying credit to other customers – effectively restraining industrial growth to accommodate rural exporters’ windfall – which authorities were apparently unwilling to do. [Rowan, 1971 (1954): 132-39] The trading banks were still able to greatly expand their lending that year and the next, as Table 6.3 shows.

Although this was partly due to the authorities’ unwillingness to clamp down harder and increase the SACT ratio, it had more to do with a slippage of the gears between that ratio and bank lending. There were three major weaknesses in the system. First, there was no liquidity requirement on the trading banks themselves. Though the Special Accounts forced them to hold reserves, there was nothing to prevent them from running down all other forms of reserve, in the knowledge that the central bank would not let them run into payments difficulty while they had funds in quarantine. Secondly, as noted above, official maintenance of the yield on Treasury bonds meant the banks could easily sell them at a guaranteed price to replenish reserves. The combined effect of these factors can be seen in Table 6.4, showing the percentage of major trading bank cash reserves and government securities to deposits. Over the course of 1950/51, the banks ran this ratio down by almost two percentage points. To staunch the flow, the authorities allowed bond yields to rise, as shown in Figure 6.5. For the first time, but not the last, the needs of counterinflation policy pushed back the limit condition of ‘cheap money’ – though given the rate of inflation, money was still very cheap.


The Commonwealth Bank found its [securities] purchases rising day by day. For the central bank to be a heavy buyer of securities involved adding to the money supply – a procedure clearly inappropriate in an already inflationary situation. The issue had to be faced whether the Commonwealth Bank would continue to push out central bank credit to bolster the government security market and so add to the mounting inflation or whether a new and higher level of interest rates had to be accepted. After a brief period in which the Commonwealth Bank bought millions of pounds worth of government bonds in an attempt to hold the market, the inevitability of the change was accepted…
### Table 6.4: Liquidity ratio, major trading banks

<table>
<thead>
<tr>
<th>Average in June of:</th>
<th>Liquid assets and government securities, percentage to deposits</th>
<th>net movement over year to June</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>23.9</td>
<td>-10.8</td>
</tr>
<tr>
<td>1948</td>
<td>21</td>
<td>-2.9</td>
</tr>
<tr>
<td>1949</td>
<td>17.1</td>
<td>-3.9</td>
</tr>
<tr>
<td>1950</td>
<td>19.1</td>
<td>2</td>
</tr>
<tr>
<td>1951</td>
<td>17.2</td>
<td>-1.9</td>
</tr>
<tr>
<td>1952</td>
<td>17.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>1953</td>
<td>25.3</td>
<td>8.2</td>
</tr>
<tr>
<td>1954</td>
<td>21.6</td>
<td>-3.7</td>
</tr>
<tr>
<td>1955</td>
<td>18.6</td>
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<tr>
<td>1956</td>
<td>18.5</td>
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<td>1957</td>
<td>18.9</td>
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<td>1959</td>
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<tr>
<td>1960</td>
<td>18.9</td>
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<tr>
<td>1961</td>
<td>19.4</td>
<td>0.5</td>
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<tr>
<td>1962</td>
<td>24.5</td>
<td>5.1</td>
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<tr>
<td>1963</td>
<td>23.9</td>
<td>-0.6</td>
</tr>
<tr>
<td>1964</td>
<td>24.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: Vernon et al, 1965: 955

The third problem was that the trading banks had easy access to borrowed reserves from the central bank, another “serious deficiency in the anti-inflationary policy of the time” [Coombs, 1971 (1954): 33] The rate at which banks could borrow from the central bank was 1-1.5 percentage points lower than the standard overdraft rate, and some banks continued to draw on this facility to expand their lending even when policy was being tightened – what the Commonwealth Bank took with one hand it was giving with the other.
Figure 6.5: Yields on Commonwealth Government securities, at year end

Source: Foster [1996: 168-69]

Strengthening the chain

The central bank learned quickly from these failures and set out to improve the tightness of the relationship between its Special Account instrument and the targets further down the chain. If interest rates were to remain out of bounds, it needed surer control over the private trading banks’ advances. As the export boom reversed, the Bank tried to take advantage of a period when it did not need to pull on the reins, in order to improve its position for the next time. But the story of how the powers of the Commonwealth Bank developed in the rest of the 1950s is a directly political one, because the private banks had very different ideas of their own, and resented that their lending policies carried the burden of anti-inflation policy.

The nationalisation attempt was still recent history, and though the Coalition Government was committed to private banking, the banks remained suspicious of the Commonwealth Bank and Governor Coombs. While at the start of the 1950s their criticisms were “uncoordinated and somewhat misinformed” [Schedvin, 1992: 156], they began to regroup for political combat. The major irritant remained the Special Account powers, and the irritant became a grievance during the tightening of 1951. The banks felt the central bank had the power to call in too much of their reserves, and that the system was still being used to control their profits (as it openly had during and after the war). Their criticism also focused on the commercial side of the Commonwealth Bank, which the banks argued was unfair competition, especially as it
was not subject to special deposit calls and did not pay tax. [ibid: 156-57] They addressed these concerns to the government, trying to drive a wedge between it and the technocrats of the Commonwealth Bank, taking the line that they were worried more about the potential for the use of these powers by a future Labor government. The cause was taken up by a number of government backbenchers, though it was resisted by government leaders, particularly Treasurer Fadden, whose Country Party “harboured within its ranks a good deal of the popular resentment against banks that differed from the Labour Party’s only in the detail.” [ibid: 161]

The trading banks hitched their campaign to the popular antipathy against anti-inflation measures, following the ‘horror budget’ of 1951. During this period there was no great constituency for ‘fighting inflation first’, and the banks used general ill-feeling against the central bank powers to wage a campaign against ‘unfair competition’. The *Australian Financial Review* and the rest of the Fairfax press promoted the campaign for separation of the central bank from general banking business, Warwick Fairfax even writing articles himself. [Tsokhas, 1984: 106]

The Bank’s officials vigorously defended the Special Account system, as it was the only instrument available for restraining bank advances. They were prepared to give more ground on the issue of separating commercial and central banking functions. This had some bearing on inflation control, because the officials saw the Commonwealth Bank’s commercial business as a legitimate tool of monetary policy. In the 1954 lecture Coombs [1971 (1954): 38-40] defended central banking influence over the commercial arm of the Commonwealth Bank, as a finer instrument than those affecting across-the-board lending. He defended it elsewhere on the grounds that it kept the organisation in “direct and widespread contact with the economy” and “provides a source of staff trained in commercial banking which is of great importance in the working out of credit, market and exchange policies and in its negotiations with the private banks.” [Cited in Schedvin, 1992: 160] But the Bank began to recognise that change was coming and some Board members supported a separation. The banks were appeased, though only barely and temporarily, with legislation in 1952 separating the General Banking Division from the central bank functions of the Bank with Chinese walls, though still controlled by its Board. At the same time, the Special Account system was revised, limiting the amount the Bank could call in to 75 per cent of any growth in deposits. [Schedvin, 1992: 164-65]

The Commonwealth Bank was already looking beyond the Special Account system, but it
wanted more influence over advances, not less. Yet the banks’ hostility remained, and had proven its political force. The central bankers’ strategy was to offer a trade: funds would be released from the Special Accounts in return for a convention on minimum liquidity requirements. The move was made easier by the monetary policy about-face made necessary in 1952/53 as the wool boom abruptly reversed, and the banking system’s liquidity flowed out with the balance-of-payments tide. (See Table 6.3.)

The Bank worked with the trading banks to establish the LGS (liquidity and government securities) convention – a target ratio of free liquid assets (i.e. not in the Special Accounts) and government securities to deposit liabilities. The lesson had been learned that government securities were almost as good as cash reserves to the trading banks. At the end of 1952 the LGS ratio was tentatively specified at 25 per cent, on average over the year, initially as a target for the banks to work towards. Reserves of 15 per cent to deposits were retained in the Special Accounts. The system of central bank loans was tightened to make it more of a last resort by increasing the interest rates, especially for loans beyond three months. The double system of LGS and Special Account ratios, both variable by the Bank, was complex but designed to be make the effects of monetary policy more even across the trading banks. They had hitherto been maintaining very different levels of liquidity, making it difficult for the central bank to find a Special Account level that would constrain all banks without distressing some. As time went on the focus shifted away from the special accounts and towards the liquidity convention, leaving a system more typical of banking policy around the world.

According to Schedvin [1992, 196]:

It marked the end of the wartime style of regulation in which the central bank accepted full responsibility for banking policy. The essence of the new regime was a partnership between the central bank and trading banks. The banks were to use their new freedom to manage seasonal and other short-term influences on their balance sheets. The central bank would in future concentrate on cyclical or more ‘fundamental’ changes in liquidity.

At the same time, the Bank “cheerfully abandoned” [Coombs, 1971 (1954): 38] the contentious qualitative controls, or lending directives, though they would be back within a few years.

The Bank’s hopes that a mere convention would establish a stable system for hitching bank advances to the needs of monetary policy were soon disappointed. The LGS ratio had no regulatory basis, and was backed only by the central bank’s threat to return to heavy calls into the Special Accounts. Over the next few years a game of ‘chicken’ ensued, as the trading
banks in general ran their ratios well below the central bank’s requested 25 per cent. (See Table 6.4.) Some went *much* further than others. Competition for market share trumped the policy desire for a finely-calibrated instrument. The Australian and New Zealand Bank (ANZ) and the English, Scottish & Australian Bank (ES&A) in particular faced a decline in market share and made “an almost desperate attempt to retain existing business”, the latter reaching an LGS ratio as low as 6.4 per cent in 1955.94 [Schedvin, 1992: 215] All the trading banks also faced a new competitive threat – the hire purchase companies, which began to grow rapidly in the mid-1950s, as discussed in Section 6.4 below. Furthermore, the banks complained that the level of their lending was not entirely in their control in the short-run, as the overdraft system allowed customers to automatically expand their borrowing. Still, there was an element of politics in the non-compliance.

The authorities were not inclined to duck first. Tightening began at the end of 1953.95 During 1954 and 1955 the central bank deliberately pushed the ANZ and ES&A towards the edge, but was prevented from restraining the other banks as much as it wished without risking payments difficulties among the overextended. Eventually, these banks restrained their lending and the liquidity spread between banks narrowed. But in the meantime at least 18 months of intended lending restraint had been lost and the inflation predicted had emerged.96 Lending directives were resurrected in 1955.

The following year the central bank presented the trading banks with an ultimatum: submit to the LGS convention, or face a return to the bad old days with a large proportion of their reserves held in the Special Accounts. This time the LGS target was more modest – a minimum of 14 per cent to deposits instead of a 25 per cent average, though it was understood the authorities could vary it. Should LGS assets fall below the minimum, the trading bank was supposed to borrow from the central bank at a punitive rate. The Special Accounts would be used to sterilise the impact of international monetary flows, and to influence the banks’ LGS ratio countercyclically in accordance with policy. Special Account calls were still the policy lever, but now would be more effective as the liquidity ratio would be more uniform across...

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94 This bank was based in Britain, so this figure only reflects its Australian operations.
95 According to Coombs [1971 (1954): 57]. Rowan [1980: 80] maintains that restraint started several months later. This dating disagreement may reflect the interpretive difficulty of separating central bank action from deliberate inaction – as can be seen from Table 6.2, because of international outflows, tightening in this instance was concurrent with releases from the Special Accounts, only not enough to match the loss of reserves overseas. Therefore a reserve squeeze was allowed to happen by authorities rather than initiated by them.
96 Schedvin [1992: 215-20] details the extended negotiations, arguing that the non-compliance of some banks was not simply misbehaviour, but resulted from a mixture of misunderstandings, competitive pressure, the difficulty of distinguishing a seasonal fluctuation in reserves from a cyclical one, and a lack of control over their lending due to the overdraft system. See also Arndt and Harris [1965: 196-98], who judge that “the new policy failed completely.”
the banks, and the banks would not counteract policy by spreading their reserves more thinly.

The banks signed on to this convention, perhaps partly out of fear and partly out of a growing identification with policy in inflationary circumstances. Though the central bankers did not see the system as ideal – for example, Coombs [1971 (1958): 60] expressed disquiet about its tacit acceptance of the “immediate marketability of government securities” at a fixed price\(^{97}\) – it promised a firm basis for policy. Finally the gears would mesh properly. Central bankers could now operate on trading bank liquidity confident that their lending would follow.

[Schedvin, 1992: 220, 241-44; Arndt and Harris, 1965: 198-99; Coombs, ibid: 61]

In 1959 the seal was set on an apparent truce between central bank and trading banks with the Reserve Bank Act. The central bank had been a separate division within the Commonwealth Bank; now it became a completely separate organisation: the Reserve Bank. The LGS convention was not set into the legislation. The Special Accounts were replaced by ‘Statutory Reserve Deposits’ (SRDs), which was “little more than a change of name” [Arndt and Harris, 1965: 176-77], although it abolished the upper limit on the proportion of reserves the Reserve Bank could call and established a requirement that it inform the banks at least once a quarter of expected policy settings. Central bank officials were happy to lose direct control over the Commonwealth Bank’s trading operations in return for a settled system and an air of consensus.

By establishing what, at least for the time being, appeared as a generally acceptable banking structure, [the Reserve Bank Act] ended the post-war banking controversy…. In making these concessions, however, the Government was careful to avoid a weakening either of the powers of the central bank or of the government-owned trading bank. [Arndt and Harris, 1965: 176]

But by the time the central bank finally seemed to have strengthened its influence over the banking system, the position of the trading banks as the dominant species in the financial ecosystem had been eroded, and monetary policy had a host of new problems.

6.4 Beyond the banks

In a 1958 lecture Governor Coombs spoke of a split between ‘political’ and private attitudes towards interest rates:

I qualify my reference to Australian attitudes towards interest rates by the adjective ‘political’ because in their private and business capacities Australians seem content, indeed anxious, to pay or receive interest at rates which to bankers seem abnormally high. [Coombs, 1971 (1958): 53]

\(^{97}\) The experience of bank position-making with government securities repeated itself during the attempted mid-decade tightening, and authorities allowed yields to rise again, as shown in Figure 6.5.
An unexpected consequence of the complex of regulations and policy practices that maintained ‘cheap money’ in the 1950s was the emergence of a network of new institutions and markets that evaded official control. It is hard to think of a better illustration of the structuralist account of financial innovation discussed in Chapter 3 than the convoluted way in which an outgrowth of retail capital blossomed into a money market which ultimately completely transformed the financial ecosystem in Australia. The niche existed because of unsatisfied demand for credit on one side, and unsatisfied demand for higher-yielding, if riskier, financial assets on the other. Policy prevented the banks from moving into the niche, but new forms evolved in the gaps between regulations.

It was unexpected, but in retrospect no accident that it began with the retail practice of hire purchase. The specific legal form of the hire purchase contract was of great importance in the evolution of tertiary financial institutions, even though they would later use the base built in consumer credit to expand into other territories. Though hire purchase finance companies made their profits in a similar way to banks from the spread between short- and long-term interest rates, technically they did not lend money at all. When Commonwealth Bank authorities became concerned about the rapid growth of these companies in 1955, they were advertising for ‘deposits’ from the public, but their liquidity positions were more stretched than the trading banks. The Bank was worried from both macroeconomic and prudential perspectives, but received very uncertain legal advice on its powers to intervene, which hinged on the question of whether these companies lent money. One opinion stated that hire purchase was

purchase of the goods followed by a hiring to the person desiring the accommodation… [W]e would not consider that these Companies (in respect of their Hire Purchase business) lent money at all, but that they utilised the money they have borrowed in purchasing goods which they subsequently let on hire with the option of purchase. [Pape and Aickin, quoted in Schedvin, 1992: 224]

The only favourable legal opinion was less than confident:

In form, hire purchase arrangements are expressed… as a trade in goods. In describing them rather as the financing of trade in goods by the borrowing and lending of money (which is of course the very essence of banking), I have allowed what I think to be the substance of the transactions to contradict their form. But such an assessment is of a highly individual character… In acting on the advice given above, therefore, the Commonwealth Bank would be taking a certain amount of risk, or perhaps I should say an uncertain amount of risk. [Bailey, quoted in Schedvin, 1992: 224]

The Bank declined to take this risk, and for the time being relied on informal and powerless requests to the industry.
The niche into which hire purchase finance companies (and divisions of retail companies) moved was not entirely new, in fact, but had been narrowed in the previous two decades. Finance companies had emerged in the 1920s to facilitate car purchases, but had done badly in the Depression and the wartime period of repressed supply. [Runcie, 1964: 131] Their post-war re-emergence was rapid, moving from the margins of finance to become an important part of the credit system. From June 1945 to the end of 1960 (the height of a boom), outstanding hire purchase obligations expanded by a factor of almost one hundred. [Runcie, 1964: 131] From only 4 per cent of total outstanding credit in 1947, instalment credit made up 27 per cent by 1962. [Vernon et al, 1964: 253] Most of this was credit for retail purchases, though by 1962 non-retail advances made up a third of finance company lending. This explosive growth is apparent in Figures 6.3 and 6.4 above, which show the rapid emergence of the finance companies to rival banks – although by the end of the decade the major trading banks each had their own finance company subsidiaries.

Between a fifth and a third of hire purchase and other instalment credit debt in this period was provided by retailers themselves, with the rest coming from finance companies. Most retail credit was provided for household and personal goods, while finance companies dominated motor vehicle finance. Plant and machinery made up only around 5 per cent of total instalment credit advances. This niche existed to be exploited by new institutional forms because (i) a growing section of the working class was in a position and willing to borrow to purchase consumer durables, especially cars; and (ii) banks were kept from direct involvement by central bank control. Monetary policymakers deliberately discouraged the trading banks from expanding consumer credit, on the grounds that it would divert real resources away from investment and the expansion of capacity.

To some extent the story of hire purchase is the story of the consumer durable industries in the postwar period. According to the submission of the Australian Hire Purchase and Finance Conference to the Vernon Committee, in the 1950s about 40 per cent of new car, 70 per cent of used car and 75 per cent of household appliance purchases were financed through hire purchase arrangements, either with the retailer. [Vernon et al, 1965: 255] Hire purchase arrangements.

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98 It should also be noted that official figures for retail instalment finance are under-estimates of total consumer credit because they do not include credit arrangements that do not involve regular, predetermined repayments, such as store credit accounts. See Vernon et al [1964: 255]

99 The exact figures are difficult to assess because of a lack of data before 1959 for instalment credit that was not defined as ‘hire purchase’. Figures show a decline in the share of hire purchase credit extended by retailers from just over one-third to one-fifth between 1944-45 and 1957-58, but with other types of contract included in the data the following year, retailers’ share is restored. Also, the official data make no distinction between vehicle purchases – accounting for about a half of instalment credit advances – by households and by firms. Runcie [1964: 133-43] discusses the general sketchiness of the data.
finance thus played a mediating role – by spreading payments for such products over a longer period, it increased demand, which increased economies of scale. Its expansion relied on working class confidence in rising money incomes, which the 1950s provided.

The development of the industry can be divided into three periods. Between the war and 1949, three institutions pioneered the rush, expanding to cover 70 per cent of the total hire purchase debt as a group, from 36 per cent as of 1946. In fact the Industrial Finance Department of the Commonwealth Bank itself, with 30 per cent, was the biggest single player by 1949 (though limited to industrial lending), but in 1950 monetary policymakers demanded that it stop expanding. A decade later it accounted for just 3.3 per cent of total outstanding debt. But the just as the toughest competitor was leaving the field, a host of others were entering. Over the next five years, the other two giants, Industrial Acceptance Corporation and Australian Guarantee Corporation, held their market share but could not expand into the gap left by the Commonwealth.

The third period, from 1956, was a period of consolidation, during boom conditions in the economy as a whole. By 1960-61 there were 1400 businesses registered as finance companies, but 14 of them shared 85 per cent of the market (with the top three accounting for 43 per cent). [Runcie, 1964: 135-36] The most important development was the entry of the trading banks. Though discouraged, the banks were not outright prevented from participating directly, but the oversight by the central bank of their interest rates and liquidity put them at a competitive disadvantage. For example, the ES&A Bank started extending hire purchase credit in 1953, but found it quickly eroded its overall liquidity position, so created a subsidiary to take it off the main balance sheet. By 1957 the other major private trading banks had entered the market by acquiring controlling stakes in up-and-coming finance companies.100 [Schedvin, 1992: 223-24]

The finance companies, liquidity, and the birth of the money market

So the growth of the finance companies was a structural change in the financial system, resulting from innovation in the institutional form of financial capital. It was induced by a growing opportunity to capitalise wage revenue, which previously had been open mainly to long-term mortgage lending, and which could not be accessed directly by the trading banks. The question remains as to what extent this development extended credit that would not otherwise have been available, and to what extent it diverted credit from other uses. This was

100 The exception was the ANZ, which took the route of buying a 14 per cent stake in the market leader, the Industrial Acceptance Corporation.
of vital importance to monetary policy. As discussed in Section 6.2, monetary policy concentrated on the trading banks not because they were the primary source of finance, but because of their ability, based on the circulation of their deposits as money, to expand their lending ex nihilo. The strategy of squeezing bank balance sheets and ultimately lending was intended to force would-be borrowers onto the capital market, where the availability of finance was limited to the growth of funds investors were willing to hold in the form of private securities. If the finance companies simply rechannelled such funds from other purposes, the importance for macroeconomic policy would not have been great. But the growth of finance companies was associated both with the deepening of the bond market and the contemporaneous emergence of a short-term money market (i.e., for short-term paper). These developments began to profoundly change the structure of the financial system in a way that was of major importance to policy, because it expanded the potential liquidity in the system.

Figure 6.6 gives some indication of the growth of the capital market during the 1950s, particularly from mid-decade. In 1959/60 – admittedly a boom year – fully 40 times the value of ten years previously was raised by listed companies through the issue of debentures, notes and (non-bank) deposits. That this growth was largely a story of the emergence of the finance companies is shown in Figure 6.7 – and note that some of the borrowing attributed to ‘commerce’ was associated with retail hire purchase finance.

In itself, the development of the securities market in this way was good news for monetary policy, because central bankers looked forward in the long run to more effective open market operations, which depended on a mature market with a variety of active participants who would accept fluctuations in yield. (See Chapter 9.) The problem was, as Coombs [1971 (1958)] discussed in his 1958 lecture, “that to the extent that monetary policy relies primarily upon action through the banking system it is operating in a steadily contracting field.”
Figure 6.6: Private capital raisings by type ($m)

Source: Foster, 1996: 159

Figure 6.7: Private capital raisings by industry ($m)

Source: Foster, 1996: 159
The interaction between bank and finance company balance sheets was complex. The finance companies were effectively a third tier of the financial system: just as the trading banks kept their reserves with the central bank, the finance companies kept reserves in the form of trading bank balances. When a finance company induced a non-bank unit (household or firm) to shift money from a bank deposit to into one of its own deposits or other instruments, reserves did not leave the banking system, at least not immediately. Rather, a bank liability would be transferred from non-bank unit to finance company. If the original deposit was a trading bank deposit, there would be no effect on trading bank liquidity. If it had been a savings bank deposit, there would be an increase in trading bank liquidity, with consequences for monetary policy, because of the large proportion of reserves savings banks were required to maintain as government securities and mortgages. (Finance companies did not bank with savings banks, which were open only to households and non-profits.)

The immediate effect of such a shift in deposits on the liquidity of the non-financial private sector was minimal – it sacrificed a deposit (current or term) for a slightly less liquid, slightly riskier finance company deposit or short-term security. However, it facilitated an increase in credit that was subject to no limitation in the form of LGS ratios or anything similar – it was limited only by the liquidity preference of the finance companies themselves, i.e., decisions about what proportion of their own liabilities to hold as bank deposits. Thus monetary policy could operate so as to bring the trading banks to their balance sheet limits, preventing further extensions of bank credit, and yet credit still expand due to the attraction of deposits to the non-bank financiers and/or a shift in their liquidity preference. This would enable an increase in the supply of credit for a given state of liquidity preference among the non-bank private sector, even though there would be no net gain in the holdings of liquid assets (money and the near-money of finance company deposits). This was in contrast to the non-intermediated financing that took place when households or non-financial firms bought bonds or equities – because this meant a decline in the liquidity of the non-financial private sector, an exchange of a liquid asset for a less liquid one.

There were two systemic limits to the expansion of credit via the finance companies – one centred on bank liquidity and one centred on finance company liquidity. Although, as just explained, a shift in deposits between bank and finance companies would have no immediate effect on bank liquidity, there would be secondary effects to the extent that the increase in credit facilitated an increase in income-expenditure, and ultimately and net monetary flows overseas and to the government in tax. “It is in this situation that we see the central role of the
trading banks in the financial system; they alone provide the basis for making payments outside the private sector of the domestic economy.” [Hogan, 1971 (1960): 191]

Ultimately, then, there was a limit set by bank liquidity – although it was not necessarily the limit that would bite first, and crucially, it would not necessarily bite the finance companies themselves. It would manifest as a problem for the trading banks, who would find their reserves diminishing for reasons not under their control. The only way to sustain their liquidity in the face of such a drain was to pull back their own credit expansion. But the resulting tightness of bank credit would push more borrowers into the arms of the finance companies, which were free to raise deposit rates to attract funds, and raise lending rates to take advantage of the tighter market for credit. Ultimately, the problem was also the central bank’s, which would be forced to either allow this further expansion of the finance companies, or accommodate the trading banks by lowering the LGS ratio or releasing reserves from the Statutory Reserve Deposits. [ibid: 193-94]

The limit due to the finance companies’ own balance sheet was capable of being stretched, but the more it stretched the more likely it was to snap. Like banks, finance companies borrowed short and lent long; unlike banks, they had no access to central bank lender-of-last resort facilities and faced unsympathetic monetary policymakers. Finance companies in the 1950s were left on their own to develop private position-making practices, and thus emerged in a symbiotic relationship with another new form of financial practice – money market dealing. This began as a side-business of stockbrokers, which in the course of the decade spun off into specialist institutions. Well into the 1950s there were few short-term interest-bearing financial instruments available to non-banks other than trading bank fixed deposits, with a minimum term of 3 months. Likewise, there was no source of short-term finance other than trading bank overdrafts. A secondary market began to emerge between companies, facilitated by stockbrokers, in maturing government securities. Two-year bonds were the shortest term available to the public, but as they approached redemption they became shorter-term *de facto.* By 1954 a number of brokers developed repurchase arrangements, whereby they sold government securities along with an agreement to buy them back at a later date, either fixed or at call. [Schedvin, 1992: 254-55]

The emergence of the finance companies brought an expansion of the supply of short-term instruments, and an expansion of demand for the services of the nascent money-market dealers. The finance companies developed position-making practices in which they could quickly borrow on this money market in the event of an unforeseen outflow of deposits or
trouble selling their own instruments. The money market dealers themselves made position with government securities and with lines of credit from the trading banks, ultimately tapping into the nexus that connected the trading banks and the central bank.

So long as calls on the available liquidity of this system reflected the particular circumstances of individual institutions, rather than a general movement towards cash, it would work well, balancing supply and demand with small interest rate variations. But by the late 1950s, when the market had developed to a substantial size along with the finance companies, the authorities realised the potential for systemic risk in the event that many institutions turned to the market at once, for instance because of a movement of finance company depositors back to the banks, or because of overextension in a boom, or a rise in bad loans during a recession. In early 1959, the central bank agreed to extend lender-of-last-resort facilities to money market dealers who agreed to abide by certain regulations, and the ‘official short-term money market’ was born. The facilities were open only to registered institutions that dealt primarily in government securities, so there was no direct contact between the central bank and finance companies. But of course this would have impact on the liquidity of short-term instruments as a whole – the ‘official money market’ was tightly interwoven with the ‘unofficial money market’, both directly on the same institutions’ balance sheets, and indirectly, via market interactions.\textsuperscript{101}

The development of the money market had ambiguous consequences for monetary policy: on the one hand, like the deepening of the securities market in general it presaged a greater scope for open market operations; on the other it made possible further systemic economisation of money balances and bank reserves and further slippage of central bank control. It seemed to secure the place of the finance companies. Schedvin [1992: 255] describes the view of central bank investment adviser and later Governor J. G. Phillips in 1957 when the authorities were planning their strategic response:

\begin{quote}
He agreed that the development of a deeper market in short-term securities would have a number of desirable consequences, including an enhanced capacity to place government loans with the private sector, and greater ability to manage seasonal liquidity movements and to undertake open market operations. He was well aware, however, that market deepening would result in the formation of specialist financial institutions and that this carried a number of dangers. It would result in some further reduction in the relative importance of the banking system and thus impair the effectiveness of special account action.
\end{quote}

The problem was that the benefits would not arrive for years, while policy was being

\textsuperscript{101} The development of the money market in Australia and its eventual connection with the central bank was strikingly similar to the slightly earlier evolution of the money market in the United States, as described by Minsky [1957].
undermined in the present. When restraint was attempted at the end of the 1950s with bank-centric instruments, which had been so painfully developed over the decade, the result was a debacle that permanently changed the way monetary policy operated.

6.5 Conclusion: the ‘credit squeeze’ and a turn to interest rates

The acceptance by the banks of the LGS convention and the Statutory Reserve Deposits seemed to give the central bank “a solid fulcrum and a lever of unlimited power” [Davis and Wallace, 1971 (1963): 254] over trading bank lending. As described above, authorities were fairly successful in herding the banks into closer alignment of their liquidity ratios in 1956. But it was not to last. Once policy switched into an expansionary setting in mid-1957, with the central bank releasing funds from the Special Accounts, the trading banks rebuilt their liquidity to quite different degrees. By the time restraint began again in October 1959, there was once again a large spread in free liquidity between the banks. On average, the banks were highly liquid with LGS assets at 26 per cent of deposits, far above the conventional minimum of 14 per cent. In February 1960 the Reserve Bank both raised the LGS fulcrum (to a 16 per cent minimum) and pulled the SRD lever, calling in an extra 1 per cent of trading banks’ deposits. Because of the spread between the banks, there was a limit to how much this tool could be used, though – the most liquid banks could be reached only by severely crippling the least. Bond yields were allowed to rise above 5 per cent again. (See Figure 6.5.)

The trading banks complained that it was simply not in their power to manage their liquidity in the way asked of them – it was at this point that the processes described above, by which attempts to restrain the bank fed the growth of finance company credit, seriously began to take hold. Figure 6.8 shows that although banks still held twice as much private sector debt (in all forms) as the non-bank financial institutions in 1960, the latter had been responsible for much more new lending since 1957. While bank lending merely kept pace with GDP growth, non-bank credit was substantially exceeding it.

Without reining in the finance companies, monetary policy would be ineffective, but the central bank had no direct influence over them beyond moral suasion. The only hope was to directly attack their competitive position in order to drive their customers back to the banks. In November 1960, in the midst of a speculative real estate boom, the authorities used a two-pronged strategy against the finance companies. First, the trading banks’ maximum deposit interest rates were lifted by a full three-quarters of a percentage point, to make them more

102 Restraint was weak at first – the central bank requested a “moderate expansion of advances” but began to use the SRD ratio to neutralise any increase in liquidity from this point. Real tightening began in February 1960. [Davis and Wallace, 1971 (1963): 243]
competitive with finance company deposits and notes. The second part of the package was technically tax rather than monetary policy: sales tax on cars was increased by 10 percentage points, and it was announced that the tax deductibility of interest payments would be severely limited. Both these policies aimed to strike at the heart of hire purchase companies, the former by reducing demand for their credit, and the latter by threatening their business model and decreasing their competitiveness. [Henderson, 1961: 224-25; Schedvin, 1992: 312]

**Figure 6.8: Outstanding loans to private sector by financial institutions, % to GDP**

![](image)

Source: Foster [1996: 114]

The extent to which the subsequent troubles of the finance companies was a result of these policy measures, and how much due to their overextension and fragility, is debatable. In any case, several institutions collapsed dramatically and many ran into serious liquidity problems, with which the central bank declined to assist. There was, as the authorities desired, a rapid shift among firms and households back toward bank deposits. Looking back on the ‘credit squeeze’, J. G. Phillips [1971 (1964): 79], now Deputy Governor of the Reserve Bank, noted with satisfaction that “lenders paid much closer attention to the quality of the paper they were acquiring and sought redemption of a large volume of earlier subscriptions as they matured.” Figure 6.8 shows that their lending fell back substantially by 1963.
They remained, however, a substantial part of the financial system and necessitated a turning point in monetary policy strategy. Over the course of the 1950s the central bank had struggled to secure control of the trading banks at the heart of the system. The lesson learned from the growth of the finance companies was the successful policy would need to pay attention not only to bank credit, but the financial system as a whole, as Phillips [1971 (1964): 88] put it, “the total credit situation”. The quantity of credit, rather than money, would still be the main intermediate target of policy, but that link in the transmission process was no longer about banks alone. And because the Reserve Bank had no direct purchase on the behaviour of the non-bank financial institutions, it had to begin to target another area: the portfolio decisions of the non-financial private sector on the form in which to hold their liquidity. This meant that policy would have to pay attention to the interest rate differentials between bank and non-bank instruments. Interest rates would have to become a more flexible element of policy – not so much the absolute level of rates, but the relativities between rates. This also happened to be a major message of the 1958 Radcliffe Report on the financial system of the United Kingdom, which was of great interest to officials at the Reserve Bank of Australia. I pick up the story of the ‘Radcliffe Period’ of Australian monetary policy in Chapter 9.
PART III

The long 1970s
7: From Bretton Woods to the float: constraint changes form

7.1 Introduction

…the float transformed the economics and politics of Australia. It harnessed the Australian economy to the international marketplace – its rigours, excesses and ruthlessness. [Kelly, 1994: 76]

But the float of the dollar was more than a monetary policy adjustment. It represented a whole change of attitude about how Australia viewed its relations with the rest of the world. Henceforth, we would not be able to insulate ourselves against the changes in the world economy. [Macfarlane, 2006]

For Keating and his supporters within both Treasury and the business community this reform also had the positive effect of ensuring Australia’s rapid integration into the harsh realities of global competitiveness. [Wiseman, 1996: 98]

The demise of Bretton Woods has called into question the feasibility of that national regulation… The present alternative, an anarchic international monetary order, appears to have undermined the possibilities for national autonomy. [Banuri and Schor, 1992: 2]

These four quotations, from a range of political and analytical perspectives, all present what has become part of the common sense of political-economic history: that the transition from the Bretton Woods regime to a world of flexible or floating exchange rates imposed on governments the discipline of the global economy. This idea – that international constraint was a novelty of the post-Bretton Woods period – is contradicted by the argument of Chapter 4: that Australian macroeconomic policymakers were motivated to prioritise disinflation in the 1950s by the demands of ‘external balance’. Furthermore, I showed there that many economists of the 1950s and 1960s saw a flexible, if not floating, exchange rate as a way out of this constraint – an extra policy instrument and another degree of freedom.

This chapter, covering the period from the twilight of Bretton Woods to the brave new world of the 1980s, attempts to square my argument of a continuity of constraint with the perceptions that the constraint was new. Part of the answer is that the form of constraint was fundamentally altered – the channels by which competition on the world market disciplined Australian prices, and the place of macroeconomic policy within those channels, underwent
major changes, even though the content of the constraint – the need to prioritise domestic cost/price stability, relative to world prices, remained. The rest of the answer is that, independently of policy, the relationship between inflation and unemployment changed for the worse so that maintaining the same discipline on price and wage inflation was more traumatic: the postwar commitment to full employment, shaky as it already was (see Chapter 5), completely broke down. This second part of the explanation is the focus of the next chapter; as with Chapters 4 and 5, the arguments of this chapter and Chapter 8 are tightly intertwined, covering the same ground from different perspectives. Here, the focus is on the transformation of the form of the external constraint.

The changes in Australia’s trade situation and the inflow of foreign direct investment early in the period involved no novel problems for international economic theory, but it was a novel situation for Australia. In the twilight years of Bretton Woods, Australia became a surplus country, after so many years facing chronic deficit problems. In a sense, the problems echoed those of the wool boom of 1950/51, more faint but longer sustained. Policymakers were released from the disinflationary imperative of the postwar period imposed by the threat of reserve exhaustion. Instead, they faced the converse problem of ‘imported inflation’. This switch in circumstances is the subject of Section 7.2.

If the supply and demand for Australian currency reflected only net trade flows and flows of foreign direct investment, the postwar Keynesian framework of Swan and others discussed in Chapter 4 would have continued to suffice as a way of understanding the policy problems. But another novelty emerged in the late 1960s – an increasing bulk of internationally mobile portfolio investment capital. The treatment of capital flows as exogenous, an extra complication to a story mainly focused on the current account, would no longer suffice. In Section 7.3 I look at how capital flows and their relationship to domestic interest rates, prices and the exchange rate came to be theorised. One theoretical perspective, the ‘monetary approach to the balance of payments’, turned the Keynesian income flow-centred approach inside out, focusing instead on portfolio stock equilibria. Meanwhile, Keynesians adapted their models to pay more attention to capital flows and price adjustment.

The breakdown of the Bretton Woods system of fixed exchange rates was determined largely outside Australia. But it had enormous consequences for policy. In Section 7.4 I discuss the movement to a flexible and finally floating exchange rate. Many economists and policymakers had long looked forward to the day when the exchange rate would become an instrument of policy. But maintaining a peg directed at domestic policy goals remained
limited by the capacity of the central banks’ exchange reserves to support it. In conditions of international capital mobility, it ultimately depended upon market confidence. Market expectations about the exchange rate could conflict with policy aims, and eventually the tool became the master: policy had to pursue relative price level stability in order to maintain confidence in the currency, or risk a downward spiral of depreciation and inflation.

7.2 From ‘the balance-of-payments constraint’ to ‘imported inflation’

Footnotes to Swan

What looks in retrospect like the beginning of the troubles of the 1970s appeared at first as good news. By the late 1960s the tendency towards balance-of-payments crises which had dogged policy in the 1950s seemed to have been shaken off, although Treasury remained vigilant. Australia had embarked on a mining boom: between 1960 and 1970, mining output grew at an annual average of 14 per cent, and over the same period mining exports grew from 6.6 per cent to 27 per cent of total exports. Manufacturing, too, had matured to account for a further 18 per cent, from 5 per cent at the start of the 1950s. [Whitwell, 1986: 177] Not only were exports less dependent on the seasonal and price fluctuations of agriculture, but the new export industries were linked to a great inflow of foreign capital: direct investment and speculation on the Sydney Stock Exchange’s “fourth mining boom”1 [Salsbury and Sweeney, 1988: 345-86]. For the first time since the war, the upturn between 1967 and 1970 did not bring international payments trouble, despite a strong upturn in inflation. [Perkins, 1975: 53] In its 1971 survey, Treasury looked back over the last few years and reported that “it began to seem as though we might at long last have unlocked our perennial balance-of-payments problems.” [Treasury, 1971: 11]

In the late 1960s, and even well into the 1970s, Australian economists’ vision of international macroeconomics, at least insofar as it concerned Australian policy, was still dominated by the Swan model type discussed in Chapter 4. One reported: “Most of the writing about internal-external balance in the Australian context derives from Swan’s ANZAAS paper of 1955 – and indeed, adds little to it.” [Cain, 1967: 452] Another wrote: “Thanks to Professor Swan, it is now clear to every undergraduate How Employment and the Balance of Payments are Jointly Determined.”[Waterman, 1966: 447] Neither man’s paper was an exception, with Waterman presenting his contribution as ‘footnotes’ to Swan. The Mundell-Fleming vision, which began

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1 The others being the Peak Downs metals boom of the early 1870s, the Broken Hill “silver mania” of the late 1880s, and the “gold fever” of 1934-37.
to excite the international journals from the early 1960s, had relatively little impact. This was
due not to ignorance, but to a reasonable view that its assumption of high capital mobility in
response to interest-rate differentials was not (or not yet) relevant to Australian conditions.²

To recap from Chapter 4: the basic insight of the Swan system is that domestic
output/employment and the balance of payments both depend on (1) domestic aggregate
demand and (2) the ratio of domestic costs to tradables prices, and there is no reason why –
given the cost ratio – the same level of demand will be compatible with both policy targets.
Therefore, if policy is to be successful in simultaneously achieving full employment and
external balance, without import restrictions, it needs influence over the cost ratio as well as
aggregate demand. ‘External balance’ is a constraint on policy because the capacity to
maintain the fixed rate is limited by the finitude of foreign currency reserves. It is defined in
terms of a balance not only on the current account, but in flows of funds of all kinds except
those involved in the official support of a fixed exchange rate. Capital flows are, however,
treated as exogenous to the system: a net inflow is fortuitous in sustaining a current account
deficit that would otherwise not be sustainable, but such flows are not considered subject to
policy influence. With other components of the current account of slight importance, trade
flows are the main game.

The basic system was open to extension in various ways to explore other relationships
between the variables initially ignored by Swan himself – such as the impact of
foreign/tradables prices on domestic costs (e.g., via cost-of-living adjustments), or the
relationship between domestic output/employment and changes in domestic costs. Such
feedback effects were already central to practical discussions of the issues, for example in the
rejection of the possibility of using the exchange rate as a tool for adjusting the cost ratio,
partly on the grounds that devaluation would simply feed back into domestic costs and fail to
have the predicted cost-ratio effect. Formally modelling such effects kept economists busy
well into the 1960s. For instance, Waterman’s [1966] ‘footnotes to Swan’ were an attempt to
integrate the system with the Phillips curve, a formalisation of a relationship between
employment and wages that had already been widely recognised as part of Australia's

² See, for example, the (very short) discussion of the Mundell framework in Perkins’ [1969] Australian
textbook on international monetary economics: “In actual fact, however, the international flow of capital does
not usually respond so perfectly to minor changes in the level of interest rates in one country as to offset
completely the effects of efforts by that country to reduce its money supply (in order to raise its interest
rates). Such efforts to raise interest rates are most likely to be frustrated in the case of a country with a very
strong balance of payments, which is using monetary measures to restrain domestic inflation... But if the
country raising interest rates is doing so... at a time when its balance of payments is somewhat weak, there
may well be fears that the country may have to devalue, or that it may in future limit any subsequent
repatriation of capital.” [Perkins, 1969: 49]
tendency towards balance-of-payments crises in the 1950s.

This was the theoretical milieu that received the Report of the Committee of Economic Inquiry in 1965. [Vernon et al, 1965] Its “balance-of-payments pessimism” [Corden, 1968: 18-20] was among its most controversial findings, judged and attacked as a weak point by the jealous Treasury.³ The Report’s estimates of likely export earnings, propensity to import, and capital flows, painted a picture of a return to the 1950s’ periodic crises, despite wage-cost containment since the early-1960s recession. All three estimates were widely criticised, but the committee and its critics all shared an understanding that the problem was defined by the conjuncture of three factors, considered to be relatively autonomous from one another: the value of exports, the value of imports and the flow of capital (and its associated counterflow of foreign earnings). Dispute centred around different projections of these three factors and the causes behind them: import and export prices, foreign and domestic aggregate demand, productivity in export industries, capital flows and rates of return associated with them. [Perkins, 1966] Pessimists tended to extrapolate from the 1950s; optimists pointed to the nascent minerals boom. Net private capital inflow was a key battleground in this war of projections, and seen by all as vital to Australia's future ‘external balance’, but it was treated by all as a question of foreign direct investment, determined by expected profitability relative to opportunities elsewhere.⁴

The constraint lifts

As it happened, the pessimists were wrong, and there were no more balance-of-payments crises.


⁴ Both the Committee of Economic Inquiry and Treasury found that the profitability of foreign investment had fallen substantially since the 1950s, and Treasury found the rate of return on foreign investment to be generally lower than that of domestic firms in the same industries. [Vernon et al, 1965: 993; Treasury, 1966] This was good news so far as remittances were concerned, but raised the prospect that the inflow would slow. Johns [1967], however, in a more nuanced survey, argued that average profitability on foreign investment was a misleading aggregate, and that attention should be focused instead on specific competitive conditions in particular industries at a worldwide and local level. He found the apparent decline in profitability to be localised in the petroleum and motor vehicles industries, linked in each case to industry-specific profitability declines, suggesting that it had no effect on capital attracted by promise in other areas, such as mining. Furthermore, he expanded the motives for investment and reinvestment to include defensive and strategic outlays, so that present (or expected near-future) profitability is only loosely related to present investment. None of these studies gave much thought to other capital flows. Vernon et al [1965: 276] do record overseas purchases of government securities and portfolio investment in local companies (defined as investment not “implying control over the local company”), reporting that the former made up 8.3 per cent and the latter 13.2 per cent of total foreign investment 1948/49-1962/63. But the statistics pass without comment: nothing is said about what units did the investing or their motivation. The figures would include such investments purchased by foreign-owned firms, and should not be seen as necessarily involving cross-border transactions – but given that such firms were the first units in a position to make international comparisons and act upon them relatively conveniently, this is precisely the origin of ‘short-term capital mobility’.

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crises until the break up of Bretton Woods. Figure 7.1 shows the state of the Reserve Bank’s foreign exchange reserves over the whole period from 1945 to 1985. There was a slow, unthreatening decline from an unprecedented peak of 1964 to a trough in 1968, a rising trend for the rest of the decade, developing into an incredible torrent of an inflow between 1970 and 1973. The jury remained out on balance-of-payments prospects for a few years after the Vernon Report. Even the relatively optimistic Treasury gave considerable space to balance-of-payments concerns in its annual surveys, pointing out the reliance on capital inflows that could not be taken for granted and worrying about the return of the ‘cost problem’, as discussed in Chapter 8. (See, e.g., Treasury [1968: 13])

As discussed in Chapters 4 and 5, the price level was nearly stable in Australia for two years after the credit crunch of 1960, with unemployment at a post-war high. In the recovery of 1963, CPI inflation returned to 4 per cent, and settled at around 3 per cent for the rest of the decade. But in the 1960s, unlike the previous decade, Australian inflation tended to be substantially below that of its major trading partners. (See Figure 7.2.)

Swan conceived the cost ratio as a relationship between the domestic wage-price level and tradables prices, rather than foreign price levels. It was presumed to impact the trade balance in two ways (which were not entirely independent from one another): through its influence on the profitability of export and import-competing industries relative to non-tradable industries.
– and therefore on the domestic supply of tradables; and through its influence on the domestic
demand for tradables as a proportion of total demand, i.e. the propensity to import. Figure 7.3,
shows that the rate of increase of CPI over import and export price deflators slowed in the
1960s – though the ratio continued to increase until the commodities boom of the 1970s.

**Figure 7.2: CPI inflation in Australia and major trading partners (%)**

![CPI Inflation Chart](chart1.png)

Source: Norton and Kennedy [1985]

**Figure 7.3: Cost ratio: consumer price index / export and import price indices**

![Cost Ratio Chart](chart2.png)

Source: Foster [1996]
This ratio to the price indices of actually traded goods may mislead as a gauge of the factors promoting expenditure-switching towards domestically-produced goods. Competitive pressure is felt well beyond actual import-competing and export industries, because beyond these are a wider group of potentially traded goods and services which are equally subject to it. To the extent that domestic industry replaces an import it falls out of the import price index. The bare indices also fail to give a sense the changing composition of total traded goods.

These things were of great importance to Australia in the 1960s – as described at the opening of this section, manufacturing and mining had expanded between 1950 and 1970 from 11 to 45 per cent of exports, and these industries could not but have also had an impact in replacing imports. The repression of inflation relative to overseas levels was surely necessary to this process in the 1960s, though the element of luck in minerals discoveries cannot be overlooked either. It would be going too far to ignore tradables prices and focus solely on broad price level relativities, as some urged with the revival of purchasing-power-parity doctrines in the 1970s (see below), because the commodities price boom of the that decade was important to Australia’s experience. It is best to keep one eye on each measure.\(^5\)

The current-account balances of the 1960s do not show much sign of improvement over the previous decade, as seen in Figure 7.4, although it should be remembered that imports were held down by restrictions in the earlier decade. The value of traditional rural exports could not keep pace with domestic output and income growth and their associated imports [Foster, 1996: 8], so it was necessary for the new export and import-competing industries to run for Australia’s trade balance to stand still.\(^6\) In their absence, unless capital inflows had been much greater (and these were strongly associated with the new mining and manufacturing industries), Australia would have faced escalating balance-of-payments crises through the 1960s. Instead, the average propensity to import out of income declined alongside the value of exports (while the net income deficit remained steady) leaving an average annual current

\(^5\) Choices about which price indices to compare, and how to represent an effective ‘world price level’, remain controversial. After the trend towards purchasing-power-parity measures in the 1970s, opinion swung back to emphasising tradables prices. [Pitchford, 1993] See Reserve Bank of Australia [1998 and 2008a], and Ellis [2001], for more recent approaches to Australia’s trade-weighted exchange rate and real exchange rate. Recent approaches have attempted to use more nuanced conceptions of international competition, involving ideas such as ‘third-country effects’ (where a country which is not a major trading partner nonetheless influences export or import prices as an alternative source – e.g., Brazil as a rival iron ore exporter.) Despite the intricacies, the overall impact of such adjustments appears slight: the Reserve Bank of Australia [2008b] concludes that its new Augmented Trade-Weighted Index is “complicated and data-intensive” but “is highly correlated with the [regular Trade-Weighted Index]”, so the “much simpler, more transparent TWI serves well as a measure of Australia’s exchange rate competitiveness.”

\(^6\) This had more to do with the rate of growth in the volume of rural output than trends in agricultural prices – wool prices declined by 25 per cent over the 1950s and 1960s (from their pre-wool-boom level) but this was compensated by meat and other prices. [Foster, 1996: 26]
account deficit of almost 3 per cent of GDP across the 1960s, a gap which was usually covered (or almost covered) by a net inflow of private capital. This can be seen in Figure 7.5, which compares the total capital account with the balance of private capital flows – the difference (apart from a small balancing residual) being official accommodation out of foreign currency reserves.

It would be a mistake to conclude from this that the net capital inflow was induced by the current account deficit, or that this meant Australia was ‘living beyond its means’ and therefore had to borrow abroad. Causality runs both ways: for example, foreign direct investment augments domestic income, some of which would be spent on imports; while domestic pressure of demand for credit on available domestic supply may attract funds via banking mediation or rising yields in the securities market, regardless of whether or not the credit’s immediate purpose is to fund imports. The fact was that capital flowed in because firms and other investors expected relatively profitable opportunities for its investment there – and this too could be related partly to the improvement in the cost ratio. Capital flows were exogenous to the original Swan system, but they increasingly called for explanation – new footnotes to Swan.

A fairly steady annual gross inflow of foreign direct investment of around 2 to 2.5 per cent of
GDP goes all the way back to the mid-1950s. What was new in the late 1960s, and especially from 1967, was its being joined by an additional annual inflow of around 1 to 2 percentage-points-worth of portfolio capital flow, as shown in Figure 7.6. It was a great inflow of liquid capital that made a vital difference to Australia’s payments balance in the last years of Bretton Woods, first shoring it up, and from 1970 helping (along with the effects of the commodities price boom on the current account) to generate a surplus so large that the Reserve Bank accumulated foreign currency at a rate that would have astonished the Vernon Report’s authors and critics alike – faster than the wool boom and almost quadrupling reserves within three years.

The capital inflow reflected both ‘push factors’ involving a growth in liquid, internationally mobile capital worldwide, and ‘pull factors’ attracting it to Australia in particular. Worldwide, the development of the Euromarkets and international banking facilitated the mobility of capital. The strains became ever more apparent in the Bretton Woods regime fixing currencies to the US dollar and the dollar to gold, and this sparked an exodus of funds from the United States, as its current account deteriorated while the Vietnam War escalated. The 17 per cent
The decision of the Australian government *not* to devalue along with sterling, to which the Australian dollar was formally tied and in which most official reserves were held, signalled a substantial degree of confidence in ‘external balance’ even before the run-up in reserves. The subsequent inflow of capital over the next few years proved that currency speculators believed the Australian dollar would be more likely to go up than down in the coming reckoning, which seemed more and more inevitable as the months went by. Currency speculation was entangled with asset value speculation on the Australian securities market and eventually in real estate too: foreign capital fed the twin bubbles, which sucked in still more capital. Finally,
the Reserve Bank’s attempt to restrain inflation with higher interest rates and securities sales, beginning in late 1969, further reinforced the inflow. (See below) The external policy problem was no longer about domestic inflation causing external imbalance, but domestic inflation fuelled by external instability

‘Imported inflation’

Few economists doubted that the international wool price boom of 1950/51 was responsible for the giant spike in inflation in Australia that year, even though the chain of causation ran through domestic channels like farmers’ expenditure and the arbitration system’s automatic cost-of-living adjustment. (See Chapter 4.) The acceleration in Australian inflation during 1971 followed mounting inflation abroad (see Figure 7.1 above). Was a similar process of ‘imported inflation’ at work? In its 1971 survey, Treasury rejected the idea:

That... parallels exist does not establish that inflation has been transmitted here in any direct sense. The old notion of inflation being exported from one country to another through export or import price increases just does not fit the facts of this situation. Such a rise in import prices as there has been has not been such as to affect our price structure seriously or cause a strong diversion of demand to home-produced goods. If anything, the rise in import prices has lagged behind domestic prices. Nor has there been any great upsurge in the prices of Australian exports on world markets... By and large, however, the conclusion to be drawn is that our inflationary problem has in the main had its origins here and has gained its impetus from home sources. [Treasury, 1971: 32]

This argument pre-dates the global commodity price boom which began in 1972/73. By mid-decade, with consumer price inflation topping 15 per cent, the idea that the problem was at least partly ‘imported’ was harder to summarily dismiss, though the extent to which overseas forces could be blamed was hotly debated. Since by that time the exchange rate was adjustable, it could be argued that in the final instance the failure to make countervailing adjustments to external price movements was responsible for their translation into domestic inflation. In the debate about ‘imported inflation’, questions of policy capacity and strategy were never far below the surface.

Marking out one extreme of the debate was the ‘international monetarist’ assumption that, as Johnson [1972: 1560] put it, “a country’s price level is pegged to the world price level and must move rigidly in line with it.” An assumption of purchasing power parity was necessary to avoid indeterminacy in international monetarist models, for reasons discussed below, but was not itself explained by the model – so defending the model motivated defences of the assumption. This usually involved an argument that international competition had become...
more pervasive, so that it no longer made sense to hold to a firm distinction between ‘tradables’ and ‘non-tradables’ prices:

[A]t least among the advanced industrial countries, industrial competition is so pervasive that elasticities of substitution among the industrial products of the various countries approximate infinity more closely than the relatively low numbers implicit in the standard model. [Johnson, 1972: 1560]

Since continual parity does not fit the facts, the fall-back position refers to the long run, with Johnson arguing that “changes in relative national price levels can only be transitory concomitants of the process of stock adjustment to monetary disequilibrium”, while “long-run equilibrium price relationships... for simplicity can most easily be taken as constant.” [ibid: 1561] This raises questions of the dynamic path of the transition to the long run, and because the model was indeterminate in the shorter-run if the price level could not be pinned down, the temptation remained to shorten the length of the long run as much as possible. In Australia, for example, Kasper [1976] argued that ‘exchange rate illusion’ had been eroded since the war by increased economic integration, implying that the more agents expect long-run purchasing power parity to hold, the more quickly adjustment will take place.7

In general, though, the more empirically-oriented economists accepted that certain prices were more directly linked to international conditions than others and did not shirk the challenge of tracing the paths of transmission. Once some relative autonomy of the domestic price level is granted, there are a number of possible transmission channels by which inflation might be ‘imported’:

1. directly, as tradable goods immediately form some proportion of the consumption basket, and are necessary to the production of a further proportion;

2. through wage adjustments in response to such increases;

3. through an impact on domestic income and therefore expenditure – though the impact on exporters’ incomes from high export prices and high foreign demand is offset by the impact on real aggregate incomes of high tradable prices; and

4. through an impact on the domestic money supply and credit conditions.

Note that these refer not only to movements in international prices as the stimulus, but also foreign demand for domestically-produced goods (which may or may not be associated with price movements) and capital flows, which can impact both through effects on domestic

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7 For surveys of the revival of the purchasing-power-parity doctrine in this period, and comparisons with its past, see Frenkel [1976: 201-05] and Dornbusch [1987].
income and domestic monetary/financial conditions.

Attempts to answer the question ‘how much of Australia's inflation has been imported, and how much domestically produced?’ reached dramatically different conclusions, despite using similar econometric approaches and in some cases the same basic models. The standard approach was to use a model which accounted for the actual path of inflation to estimate inflation in counter-factual histories in which the international variables remained steady or continued to move at their trends of the stable 1960s. Reserve Bank economist P. D. Jonson [1973] used the central bank’s house model to test the impact of above-trend private capital inflow, import prices and exports on inflation. He then compared these effects with those of above-trend award wages, cash benefits, tax and public spending, finding that the external variables had by far the strongest effect on domestic inflation, accounting for 2-3 percentage points annually between 1970 and 1973, while above-trend award wage increases accounted for around 0.5 percentage points per year, and public taxation and spending a negligible amount. Jonson [1973: 26] concludes that “Australia's current inflation owes considerably more to foreign influences than to ‘domestic cost pressures’” – effectively a direct public attack by a Reserve Bank analyst on Treasury, which had focused on “the cost problem” in its public statements since 1967. (See Chapter 8.) “These results are quite devastating for the cost-push hypothesis... [and] a larger than usual increase in government spending is not in any sense an important contributing factor, some recent press comment notwithstanding.” [ibid: 26]

Most of the period analysed by Jonson pre-dates the world commodity price boom – and the great inflation of the 1970s was only just getting started at the very end of his time series. Later in the decade other economists revisited the question of ‘imported inflation’. Argy and Carmichael [1976] develop both a Keynesian model and a dynamic monetarist model (i.e. dynamic in the sense that it assumes purchasing power parity to be established only over time through a process in which traded goods prices adjust more rapidly than those of non-traded goods). In the monetarist model, for a small country like Australia with a negligible impact on world prices, all inflation is ultimately imported, except to the extent that exchange rate adjustment removes price level differentials. Only in the Keynesian model does it make sense to distinguish between domestically-generated and foreign-generated inflation, and for econometric estimation, Argy and Carmichael use a version of the same Reserve Bank model employed by Jonson [1973], and conclude likewise that “the external factors dominated the

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domestic inflation”, at least from 1969 through 1973. Furthermore, in 1969/70 and again in 1972/73, domestic impulses were disinflationary: “the policy impulses, notably exchange-rate policy and domestic monetary policies, tended to be deflationary – however not sufficiently deflationary to offset the external contributions.” [Argy and Carmichael, 1976: 215] Nevile [1976], working with a different Keynesian model, however, comes to quite a different conclusion: that only about a third of the rise in Australia’s inflation rate from 1969/70 to 1973/74 was directly due to export and import price increases. The rate of increase of Award wages was more important.

It is interesting to look more closely at why the studies diverged. This question is asked by Nevile [1976] himself, who tries to explain why his own study found external factors to be less important than did Argy and Carmichael [1976]. The answer lies largely in a different treatment of wage determination. Argy and Carmichael treat wage growth as determined endogenously in the labour market, whereas Nevile includes a large exogenous element in his explanation, reflecting the role of the arbitration system. For the former, external inflationary impulses are transmitted partially through the labour market, while for the latter wages are socio-politically determined and therefore ‘domestic’. Jonson [1973], for his part, argues strongly, on the basis of econometric evidence, that growth of the arbitration system’s official wage awards is determined over the long run by labour market conditions, though the timing of increases is exogenous. Although Nevile [1976] accepts that tradables prices will be taken into consideration in the determination of wages, he sees no way to quantify the influence other than arbitrarily, and suggests that the econometric techniques by which the other models do this are themselves arbitrary.

The question of policy autonomy raises another issue. Policy reacts to changed conditions, ‘external’ and ‘domestic’, but unless the reactions are predictable and can be endogenised into the model, there is no way of estimating the policy variables in the counterfactual control data-set representing the alternative early-1970s in which world inflation never took off. Jonson [1973] simply uses the same actual historical policy settings in both simulations, while the logical corollary of Nevile’s argument about the indeterminacy of wage determination implies that a failure of domestic policy to prevent inflation should be considered ‘domestic’ inflation, even if it partly reflects external impulses. Perhaps, then, the notion of ‘imported inflation’ is a misleading metaphor. It implies a flow of inflation across space, while the writers all focus on something subtly but importantly different: a comparison of historical experience with a constructed counterfactual experience with certain variables, labelled
‘external’, modified. But it was equally important to Australia’s experience that the balance of payments no longer acted as a discipline on domestic inflation, because this discipline was always about relative, not absolute, price levels. This absence of discipline does not show up in the statistical record, and quite a different counterfactual control would have to be set up to measure it – where domestic inflation accelerated while world prices and demand did not.

The acceleration of Australia’s inflation in the 1970s was undoubtedly tangled up with world inflation, both because of impulses from overseas transmitted into the domestic macroeconomy, and because the balance-of-payments constraint was lifted, allowing domestic inflationary impulses to be sustained without the discipline of the balance of payments constraint. It is not important or possible to judge exactly what proportion of inflation was of domestic or foreign origin.

7.3 Capital flows and macroeconomic policy

The Canadian contribution to balance-of-payments theory

Alongside this concern with ‘imported inflation’ was a growing realisation of the interdependence of macroeconomic policy and cross-border capital flows. In the previous section I wrote that international economics in Australia remained relatively untouched by the Mundell-Fleming vision in the 1960s, remaining within the universe of the Swan system. But after the government and the Reserve Bank launched a counter-inflation campaign in 1970, raising bank interest rates and engaging in open market purchases, capital inflow accelerated to the point that in 1971 it equalled 28 per cent of trading bank deposits. [Lewis and Wallace, 1981 (1973): 45] The Mundell-Fleming message, of the interdependence of domestic monetary policy and international capital movements, had arrived.

The Mundell vision⁹ of international macroeconomics was a world away from the concerns of Australian policymakers in the 1960s – literally: it was no accident that it should be a Canadian economist (Mundell) who conceptualised a world of capital mobility and floating exchange rates, given the entanglement of the Canadian financial system with the vast markets of New York, and given that its dollar had floated while most of the world was fixed between 1950 and 1962. Just as the Swan system could be touted as “the Australian contribution” to balance-of-payments theory [Arndt, 1976], Mundell’s is “the Canadian contribution” that, in the early 1960s, projected the shape of things to come, the world over.

⁹ I focus here on Mundell and neglect Fleming’s [1962] similar argument, because Mundell’s vision was further developed over a range of papers.
Australia included.

In his best-known paper, Mundell [1963] argues that if capital moves so freely that foreign and domestic securities are “perfect substitutes”, and if the exchange rate is inflexible, monetary policy cannot have any effect on domestic macroeconomic conditions. Any purchase or sale of securities that puts pressure on the interest rate one way or another will attract or repel capital, and the associated official sale or purchase of foreign exchange will restore the initial money supply. Attempted sterilisation will “merely perpetuate the self-generating process until exchange reserves are exhausted, or until the world level of interest rates falls”. [p. 481] If the exchange rate is allowed to shift with market supply and demand, monetary policy will have domestic effects via the exchange rate: an open market purchase of securities, for example, puts downward pressure on the interest rate, provoking an outflow of capital, and thereby a balance-of-payments deficit. The exchange rate depreciates and the balance of trade therefore improves, expanding domestic production.¹⁰

This framework is the basis for the well-known ‘policy trilemma’, according to which policy cannot simultaneously maintain capital mobility, a fixed exchange rate and monetary policy autonomy. (See, e.g., Obstfeld et al [2005].) This ‘trilemma’ has been greatly overblown as a guide to the actual problems facing policymakers between the war and the twilight of Bretton Woods. It considers only monetary policy autonomy, defined in a narrow sense as the capacity to influence the domestic money supply. It has nothing to say about other constraints on policy, such as the balance-of-payments constraint and associated necessity of containing the cost ratio. Furthermore, the other side of Mundell’s argument is that fiscal policy operates in a complementary way to monetary policy: effective in a fixed exchange-rate regime and ineffective with a floating rate. In both cases, the instrument ineffective on domestic conditions does have an impact on the balance of payments. Mundell’s intention is to signal the need for a different ‘policy mix’ between monetary and fiscal policy in different exchange rate regimes, and the ‘policy trilemma’ follows from his argument only if fiscal policy drops out of consideration.

The Mundell system formulated the undeniable insights that capital mobility in response to interest rate differentials would change the policy meaning of the balance of payments, downgrading the importance of the trade balance, and would at least interfere with domestic

¹⁰ Note that Mundell explicitly assumes that even when the exchange rate is allowed to vary, market participants always expect it to remain at the current rate. [Mundell, 1963: 475-76] This means the effect of exchange rate expectations on capital flows need not be considered and all adjustment to rate movements occurs through trade. But it also limits the model’s relevance as a guide to really-existing flexible exchange rate regimes.
monetary policy. However, it formulated them for the strong case of complete capital mobility, where foreign and domestic securities are perfect substitutes, i.e. there is no difference in price between instruments of the same risk and liquidity profiles whatever their country of issue. According to Mundell [1963: 475]: “This assumption will overstate the case but it has the merit of posing a stereotype towards which international financial relations seem to be heading.” But in the meantime? This was one of those questions that assured a theory a productive career in the journals of playing around with assumptions, and with the increasing popularity of econometric techniques, attempts to estimate the degree of capital mobility from data on interest-rate differentials.

In fact, Mundell’s [1961] earlier model, in which capital flowed in response to interest rate differentials – but not at such a rate that made such differentials completely impossible – was more relevant to Australia in the early 1970s. There, Mundell presents a general theory in which balance-of-payments, goods market and money market equilibrium are determined simultaneously: an elegant extension of IS-LM analysis into IS-LM-BP, as it would eventually appear in the textbooks. This posed the problems for domestic policy in a more complex way, in that capital and trade flows would both react to and have effects on domestic macroeconomic conditions via both goods and money markets. Mundell describes his system as a restatement of the classical price-specie-flow mechanism within the Keynesian paradigm: ‘income-specie-flow’.

However, policy sterilisation of monetary inflows breaks the tendency towards balance-of-payments equilibrium. This was already happening under the gold-exchange standard but had become much more sustained and deliberate with the post-war commitment to full employment. [Mundell, 1961: 153] The international monetary system had become a ‘disequilibrium system’, because if net international flows were prevented from having their full effect on domestic money supplies, there was no reason to expect an automatic tendency towards balance-of-payments equilibrium, and disequilibrium could be sustained so long as deficit countries’ reserves hold out. But Mundell introduces the ‘international disequilibrium system’ only to claim that it is being gradually eroded by patient processes slowly but inexorably leading back towards a long-run equilibrium, even if a reserve-exhaustion “day of reckoning” never comes. Sterilisation, he argues, cannot absolutely counteract the monetary effects of inflows and outflows, because the official buying and selling of securities through which sterilisation takes place is not monetarily neutral: it blunts the impact but does not entirely remove it. Though the time-frame of adjustment may be very protracted, the pressures
were there, and the more sensitive capital movements became to international interest-rate differentials, the more difficult it would be to isolate the domestic macroeconomy from international pressures.

The monetary approach to the balance of payments

By the time this seemed applicable to Australian conditions in 1970/71, theory had moved on. Of particular importance, because of its impact on the Australian policy debate via the contribution of Porter [1974], was the ‘monetary approach to the balance of payments’, or ‘international monetarism’ – mentioned above with reference to ‘imported inflation’ – which ploughed through the problems of the distance between ideal type and reality by making even stronger assumptions. It is difficult to draw a firm line between the ‘international monetarists’ and Mundell-Fleming, and indeed, the later Mundell is often considered part of the tendency. (See, e.g., Dornbusch [1987: 1078].) It can be seen as taking the Mundell system to an extreme, by way of special assumptions. Johnson [1972] presents the Mundell of the early 1960s as an early, imperfect forerunner of the monetary approach, certainly not an opponent.

The basic international monetarist criticism of Mundell [1961] and [1963] involves Mundell’s preoccupation with flow rather than stock equilibria. It is unrealistic to relate a constant flow of capital to an interest-rate differential, as if wealth stocks were inexhaustible. Instead, flows are better thought of as the adjustment of stocks when portfolios are reconfigured in response to changes in money supplies:

And, since the demand for money is a demand for a stock and not a flow, variation of the supply of money relative to the demand for it associated with deficit or surplus must work toward an equilibrium between money demand and money supply with a corresponding equilibration of the balance of payments. Deficits and surpluses represent phases of stock adjustment in the money market and not equilibrium flows and should not be treated within an analytical framework that treats them as equilibrium phenomena. [Johnson, 1972: 1559-60]

At heart, the ‘monetary approach’ is the traditional quantity theory of money with the typical channel of causation – from money supply to the price level – blocked within a national economy, adjustment instead occurring through the balance of payments. As in the quantity theory, each country’s money-demand function (depending on nominal income and the interest rate), is assumed to be stable. The money supply for each country is split into two parts: money created when foreign exchange flows in (since the authorities maintain the exchange rate by exchanging base money for it at a fixed rate), and money created alongside an extension of domestic banking credit. Besides this bifurcated money supply, the major
difference from the traditional quantity theory is that the price level, along with the interest rate and real income, is treated as exogenous to each country. Instead of affecting the price level, any gap between domestic money demand and supply is removed through adjustment of the foreign exchange-backed component, as the aggregate effect of units’ adjustment of their money balances is a balance-of-payments deficit or surplus. This adjustment may take place through both the capital and current accounts – it does not depend on a high degree of capital mobility, although working through the trade balance might be expected to take longer to reach equilibrium. Net international flows of money are disequilibrium phenomena, but international differentials in secular growth of real income, money-demand and credit-money supply are likely to continually recreate stock disequilibria, generating the false appearance of balance-of-payments flow equilibria.

As in Mundell [1963], monetary policy has no domestic effect given a fixed exchange rate, but only influences the balance of payments. The approach leads to predictions that are counterintuitive from the perspective of the old Swan/‘absorption approach’ vision. For example, the Swan system would predict a worsening balance-of-payments deficit if domestic income rises while all else remains equal, because imports would rise while exports and capital inflow remained steady. But in the system of the monetary approach, a payments surplus is possible as the increased real income induces higher demand for money, which will be filled by the ‘importation’ of foreign exchange if it is not by the expansion of domestic credit-money.\footnote{If this conclusion were to be translated into the Swan system, it effectively entails a partial endogenisation of capital flows in response to domestic demand for money, if capital flows freely, and/or an effect on the propensity to import and even on exports.}

It should be clear that the monetary approach depends on stringent assumptions: the exogeneity to each country of real income, the rate of interest, and the price level, so that an excessive increase in the domestic component of the money supply can only be reconciled with demand by ‘pushing out’ foreign exchange. This led the international monetarists to defend these assumptions, and given the impact of the theory within Australia in the 1970s, the argument about the anchoring of the domestic price level is of as much interest for this thesis as the system itself. Johnson [1972: 1560-62] argues that an assumption of full employment (and thus exogenous real income) can be justified on the basis of experience since WWII, or alternatively on the grounds that the theory was concerned with the long run. The exogeneity of the interest rate can be based either on familiar grounds of international capital market arbitrage, or on an argument for a ‘real’ interest rate determined by rates of
return on capital investment.\textsuperscript{12}

The exogenous price level is effectively a revival of the doctrine of purchasing power parity for a situation of fixed exchange rates. Earlier Keynesian models had implicit links between the domestic and foreign price levels, but the anchor tended to be enforced through balance-of-payments crises in above-average inflation countries. In the familiar Swan system, for example, not only does the cost ratio worsen as the domestic price level rises, but assuming nominal income is rising along with the price level faster than real output, the propensity to import would increase even without a worsening cost ratio. But the monetary approach cannot use the balance-of-payments to explain the price level anchor, because it needs the latter to explain the balance-of-payments! Thus Johnson and his followers have a tendency to emphasise a more direct anchor via trade arbitrage, as discussed in Section 7.2. As I mentioned there, the recognition that purchasing power parity does not hold in the short run drives Johnson to invoke the long run. But consideration of the dynamics takes him onto the territory of the cost ratio and other concerns of the earlier Keynesian approaches, reducing to a claim that the elasticity of substitution between domestic and foreign goods is higher than had been typically treated. Indeed, Johnson implies a degree of wage flexibility that Australian policymakers might have laughed at.\textsuperscript{13}

The theory is left in the strange position of determining what it considers to be a transient stock disequilibrium with reference to three variables – the price level, the interest rate and real income – that are determinate only in long-run equilibrium (and whether these three phenomena with their heterogeneous dynamics can all be considered to have the same long run is another story). This is not a theory that would seem to have much to offer policymakers operating in the face of a very uncertain future, in which none of those variables could be taken as given, and none of which, on experience since the war, was in fact independent of the international payments flows which they supposedly determined. The best the model can offer is an understanding that, in the medium run, all these factors are interrelated. Perhaps the judgement Dornbusch [1987: 1075] passes on purchasing power parity applies here also:

\textsuperscript{12} Johnson [1972: 1562, 1564] draws on both arguments in a fairly casual way. He also writes that an interest-rate differential can be incorporated provided it is “fixed by economic conditions”, by which he presumably means based on non-monetary factors. [ibid: 1563-64] The system cannot deal with an endogenous interest rate; it would be underdetermined. At a global level, it is presumed determined by ‘real’ factors, leaving the world money supply and real income to determine the world price level.

\textsuperscript{13} “If rectification of a balance-of-payments deficit requires that the domestic marginal product of labour in terms of foreign goods falls, because the price of domestic goods relative to foreign goods must be reduced in the foreign and home markets to induce substitution between these goods favourable to the balance of payments, it requires no money illusion but only economic realism for the workers to accept this fact.” [Johnson, 1972: 1361]
“strict versions are demonstrably wrong while soft versions deprive it of any useful content.”

Nevertheless, even if the soft versions have no ‘useful content’, their form may be helpful in focusing the attention on relationships the Swan framework neglected. The issue of the interdependence between monetary policy and capital flows became extremely important in the early 1970s, as the Coalition Government attempted to deal with domestic inflation with tight monetary policy, while interest rates relaxed in the United States and on the Euromarkets.

_Holding back the tide: capital inflow and monetary policy in the early 1970s_

The ‘Johnson thesis’ was introduced into Australian political debate by the unions and the Labor Party. The Australian Council of Trade Unions used international monetarist arguments in its submissions to the Arbitration Commission in 1972. It argued that the acceleration in domestic inflation was a result of overseas inflation which would necessarily be transmitted in the absence of currency revaluation; targeting wages would not stop it but merely stop workers from maintaining their real incomes. The argument was enthusiastically adopted by Labor in its election-year criticisms of the Coalition's macroeconomic policy, and motivated Labor’s adoption of revaluation as an alternative counter-inflation strategy. The Coalition strongly rejected the framework, with former Treasurer Snedden referring to Harry Johnson as “a discredited American academic” in Parliament in 1973 and claiming the new government's use of the idea a “most fanciful and most desperate attempt to distort the issue” of inflation.

[Guttmann, 2005: 27-28]

While the framework was therefore not an influence on the Coalition Government at the turn of the 1970s, it soon became the basis for a retrospective interpretation of the problems it had run into, with the publication in 1974 of Michael Porter’s econometric model of the relationship between domestic monetary policy and capital flows in Australia. It is based on the Johnson framework, but drops the assumption the domestic interest rate is firmly locked to the foreign rate, with the understanding that international capital markets are not perfectly integrated – and in fact that the size of differentials give an indication of how integrated they are. (Domestic and foreign price levels do not enter directly into the model at all, with _nominal_ income and wealth exogenous and determining demand for money.) Net capital inflows therefore do not fully remove money market disequilibrium, with interest rates adjusting also. In some respects, then, Porter’s [1974] model is closer to Mundell’s earlier framework than to Johnson’s, except that he focuses on stock equilibria – of supply and
demand for money – in which capital flows do the equilibrating. Thus the net domestic assets of the central bank are treated as the instrument of policy, even though policymakers targeted interest rates.

His model is estimated for the whole period between the third quarter of 1961 and the end of 1972, but the main point of interest is the 1970-72 period of tight policy and mounting capital inflow. Perhaps surprisingly, he finds no evidence of increasing capital mobility over the decade – the parameters remain stable, although he introduces a ‘trigger’ proxy variable to incorporate lagged exchange rate speculation once official reserves reach a certain point, with speculative inflows beginning in January 1971. (Porter [1977] extends the time series through 1975 and admits some parameter variation.) He concludes that the tightening of foreign financial linkages – implied by the fact that in 1970-71 inter-company interest rates began to track the Eurodollar market more closely than yields on official securities – was an effect of the capital attracted by a tight money market rather than an independent cause. Foreign direct investment may be motivated by independent factors, but because of its monetary impact, it will merely change the composition of capital flows, with overall net flows depending entirely on monetary factors. [Porter, 1974: 7]

Porter finds that, other things being equal, a $100 million bond sale by the central bank induces about $48 million of net capital inflow within the quarter; that is, it is immediately offset by almost 50 per cent. A 1 per cent fall in the Eurodollar interest rate generates about $20 million in net inflow, and a rise in GNP of $1,000 million generates an inflow of $40 million from increased demand for money. [ibid: 11] The acceleration in capital inflow in the first years of the 1970s (see Figures 7.5 and 7.6 above) thus initially reflect both a combination of lower world interest rates and tighter domestic monetary policy alongside Australian boom conditions amidst a world slowdown. In such circumstances monetary policy is blunted in its effect on domestic conditions, but still has some power in the short run. However, the story does not end there. Policy sterilisation of the monetary effects of the

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14 “This evidence would suggest that the growth of the merchant banks in their role as processors of foreign funds was in response to market conditions, such as the fall in Eurodollar rates and the tightness of Australian monetary conditions relative to those abroad in 1970-72.” [Porter, 1974: 12] However, in a later paper in which he investigates more seriously the possibility of parameter changes over time, he appears to revise this conclusion: “What is interesting, in retrospect, is that many neutral observers have said that the period 1968-69, when the mineral boom swept Australia, led to a far higher degree of financial linkage with the rest of the world than had previously been the base. Merchant banking, for example, took off at this time. The plots of the time-dependent offset coefficients appear, then, to point to a definite structural change around 1968, a change which has strong implications for the conduct of monetary policy from that time onwards.” [Porter, 1977: 426]

15 In contrast to many countries to which Porter applied his model, such as Germany and Canada where markets were more tightly internationally integrated.
inflow recreates the conditions which induce it, so that foreign exchange reserves pile up. Eventually this triggers speculation on exchange rate revaluation, accelerating the inflow still further, to the point at which destabilising financial impacts cannot be avoided.

Given that capital controls would in Porter’s view be ineffective, tending only to hurt “small domestic firms without foreign linkages” [ibid: 17], the government therefore had only two options: to abandon domestically oriented monetary policy, or to allow the exchange rate to adjust. The new Labor Government’s revaluation in December 1972 – which it intended to carry out in any case – would have been inevitable even if the Coalition had won the election, due to “explosive” monetary growth. [ibid: 16] Because of the speculative trigger, monetary policy would in the long run be completely counteracted by capital flows if the exchange rate was inflexible – it could be partially effective only if every reserve build-up was reversed before the trigger point was reached, i.e., within moderate cyclical limits.

The specifics of Porter’s [1974] model and [1977] refinement and update would be subject to some criticism (e.g., Murray [1978]; Hunt and Valentine [1978]). In response Porter [1978] revised downwards his calculation of the short-run capital flow offset to monetary policy, to about 40 percent, compared to the original figure of 48 per cent. The extreme assumptions of the international monetarist approach of immediate adjustment to money market equilibrium and short-run purchasing power parity – which Porter had already compromised on in his modelling – would be further whittled back. But in 1978 Reserve Bank economist P. D. Jonson demonstrated the mainstream acceptance of the school’s message in a moderate form – the equilibrating forces were there, but they may work slowly and through domestic prices and output as well as international flows:

In the open economy case, changes in prices in the rest of the world will influence domestic prices through a variety of channels, setting up disequilibria in all markets which generally appear to be eliminated only after a relatively lengthy adjustment period. Similarly, any domestic monetary disturbance will be followed by domestic price and output responses which have indirect effects on the balance of payments which work to eliminate the original monetary disequilibrium. [Jonson, 17]

16 In his later refined model, Porter [1977: 427-28] finds “quite sizable” negative impact from capital controls imposed between 1972 and 1974 on net inflow, although the controls had a positive offsetting effect on flows through alternative channels – undistributed income, direct investment, etc. – which may have mounted over time had the controls been maintained.

17 The Reserve Bank’s house model RBA76 was constructed so as to cope with just such disequilibrium states, having to register adjustments in historical time, though sliced into discrete periods, rather than long-run equilibrium. See Laidler [1981 (1977)], who describes the model as being in the forefront of inflation theory worldwide, along with the UK cousin developed by the same economists: “the only models of an economy that make the consequences of such a state of affairs the focal point of an analysis of the economy's dynamics... an important departure in macroeconomics, bringing theoretical and empirical work one step closer together.” [p. 225]
But the basic message was undisputable: under fixed exchange rates monetary policy could not be isolated from international financial forces, and once the balance of market opinion expected a shift in the exchange rate, it would be increasingly difficult to resist.

### 7.4 Flexible exchange rates

Due to the mounting capital inflow, the Australian dollar would no doubt have been revalued whoever won the 1972 federal election. Although the Reserve Bank believed the speculative component of the inflow was overstated, it was running out of appropriate bonds with which to sterilise.[Schedvin, 1992: 473, 475-76] An embargo on overseas borrowing of a term less than two years imposed in September may have re-channeled the flow but showed no sign of stopping it. [Perkins, 1975: 72]

But when the incoming Whitlam Labor Government immediately revalued on coming to office in December, it did so gladly, following a broad economic consensus: the currency should rise to counteract ‘imported inflation’ and to end the mounting speculative inflow so as to restore the effectiveness of monetary policy. Economists had been calling for a degree of exchange rate flexibility throughout the post-war period – the logic of the Swan system called for a third instrument enabling policy to secure the appropriate cost ratio for simultaneous full employment and external balance. As discussed at the beginning of Chapter 4, sections of the labour movement too had long associated a fixed exchange rate with the gold standard and domestic deflation, and the ‘Keynesianism of restraint’ in the face of payments crises in the 1950s confirmed the suspicion. Revaluation was central to Labor’s counter-inflation strategy, directly and indirectly in freeing up monetary policy, so that fiscal policy could be expansionary in the strange new circumstances combining high unemployment and inflation.

By no means did Labor’s 1972 revaluation (4.85 per cent, with another US devaluation soon after bringing the total to 11.1 per cent)\(^\text{18}\) signal regular rate adjustment, but it did make adjustment more thinkable. Arguably, the era of exchange rate flexibility had begun for Australia in 1967 when the government did not follow a sterling adjustment downwards. But the Coalition had been incapable of actively using the exchange rate for macroeconomic purposes. The primary political obstacle had been the Country Party, which thwarted even the 8.6 per cent upward movement along with sterling against the US dollar following the Smithsonian Agreement in 1971 as Bretton Woods began to break up. Farmers were now

\(^{18}\) In fact the actual revaluation was even larger than these official figures, because the authorities had previously held the dollar at the bottom of its official band and now kept it at exactly the official parity.
joined by a vocal mining lobby in opposition to revaluation. [Hughes, 1980:62] In the event, after a “protracted and acrimonious series of cabinet meetings” [Whitwell, 1986: 197], the link to sterling was broken and the US dollar was allowed to fall only 6.3 per cent against the Australian, so that Australia actually devalued against a trade-weighted index by 1.75 per cent as most other currencies rose faster. [Manuell, 1986: 88] The Whitlam victory reversed this and the exchange rate became a tool of macroeconomic policy.

But a tool for what, exactly? There were a number of competing objectives which the exchange rate could be ‘assigned to’:

1. to isolate the domestic macroeconomy from international price movements;
2. as a direct aid to domestic macroeconomic policy (i.e. revalue to counter inflation, devalue to stimulate)\textsuperscript{19};
3. to target current account balance;
4. to target overall payments balance;
5. to target the domestic money supply;
6. to improve competitiveness with a devaluation or to use a revaluation to intensify international competitive pressures on domestic industries in the hopes of improving their efficiency; or
7. to aid other countries’ objectives (e.g., negotiated revaluation against another country to help its overall devaluation, as in the Smithsonian Agreement).

Alternatively, deliberate targeting of an exchange rate may be forsaken, giving another option:

8. allow market determination, possibly smoothing in the short term.

Economic theory of various stripes commonly held that this last option would in itself have essentially the same effect as one or more of the other goals above, especially with the presence of some automatic balancing mechanism such as ‘rational speculators’ who would speed up the adjustment to equilibrium by anticipating it. A float was not yet a question, but the determinants of market pressure on the rate were of major importance to policy, for the familiar reason that the capacity to sustain a peg would depend on sustaining the balance of payments.

Exchange rate theory was in a state of flux in this period. It was in many ways a translation of

\textsuperscript{19} This is a subtly different objective to #1: policymakers may actually wish to ‘import’ international inflation or deflation for domestic purposes.
balance-of-payments theory, just as Keynesian balance-of-payments theory developed out of pre-war Keynesian exchange rate theory. An exchange rate equilibrium, in the short-run sense of a clearing of the market without official intervention, would also by definition be a point of balance-of-payments equilibrium, if the latter is also defined in terms of official purchases and sales. But as discussed in the last section, balance-of-payments theory had been undergoing major change to deal with the growing dominance of capital flows. The factors behind trade flows – the elasticities and absorption structures so important in the 1950s – continued to be downgraded as independent determinants of the payments/exchange-rate situation. Not only were capital movements potentially of a size that could swamp these flows, but capital portfolio and market adjustments towards equilibrium were much more rapid. As the economics profession internationally gained experience with floating currencies in the 1970s (while the Australian dollar remained on an adjustable peg), an asset market equilibrium framework truly became the consensual basis for exchange rate theory. Two flavours remained: an international monetarist strand which focused on the supply of and demand for money within each country, and a ‘Keynesian’ strand emphasising an equilibrium in which exchange rates shifted to align interest rate differentials with expected exchange rate movements.

The short-run market-clearing equilibrium depended upon expectations of the future value of currencies, and changes in expectations about the future of the exchange rate could dominate movements in the market, or capital flows in the case of an officially pegged rate. The determination of expectations was the weakest point of the models. Rational expectations, based on an assumed long-run equilibrium real exchange rate determined by purchasing-power-parity, generated a simple, elegant model in which successive short-run equilibria would tend to converge towards the long-run equilibrium. It was of limited use for practical policymaking, both because of doubts about the long-run tendency towards purchasing-power

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20 This balance-of-payments equilibrium should not be confused with the balance of payments as it appears in national accounts, which is a net flow over time. A further distinction arises when a national currency is traded in transactions not involving nationals of its country – since the balance of payments is defined in terms of international flows and not currencies as such. But this complication was not of much importance in this period, and theory generally assumed that only nationals would have cause to hold their own national currency for anything other than transactions purposes, though of course they would hold other assets denominated in foreign currencies.

21 The June 1976 issue of the Scandinavian Journal of Economics contains the “proceedings of a conference on flexible exchange rates and stabilisation policy”, including classic papers by Frenkel, Mussa, Dornbusch, Kouri and Corden, which together provide a sense of the spectrum of exchange rate thinking in the mid-1970s as it converged to orthodoxy. The “general discussion” is particularly interesting for attempts to synthesise the international monetarist and Mundell-Fleming perspectives. The textbook ‘Mundell-Fleming model’, which remains the standard textbook approach today (e.g., in Krugman and Obstfeld [2009]), is a product of the second half of the 1970s. See Obstfeld’s [2001] history.
parity (Dornbusch [1987]; Rogoff [1996]), and what seemed to be sometimes eminently irrational shifts in market sentiment. But, whatever the status of a purported long-run equilibrium, there was little doubt that expectations of shifts in relative price levels, i.e. inflation differentials, tended to generate expectations of exchange rate movements in the medium run, which was enough to start the speculative pressures building. The determinants of market expectations of inflation differentials then become the vital variables.

It is the duality between policy’s desired exchange rate and market pressures on the exchange rate that would determine the nature of the ‘external policy’ problem until the float in December 1983, which resolved the tension by finally abandoning the rate to the market. Still relevant to understanding policy strategy is Machlup’s [1950] discussion of the ‘program balance’ described in Chapter 4 – the “balance of hopes and desires” – making the point that ‘external balance’ is in some ways a misnomer. It is not that some demands on policy originate from outside, but that policy goals must be reconciled with the fact that the economy is an international system. The exchange rate mattered for a range of policy goals. Balance-of-payments equilibrium meant that the exchange rate was at the market equilibrium exchange rate, and this was still not a goal in itself, but a constraint. The capacity to use the exchange rate as an instrument of policy for any other purpose continued to be bounded on one side by the central bank’s foreign exchange reserves, and on the other by the potential for a destabilising runaway capital inflow. Ultimately, therefore, the policy problem was the more complex one of aligning the determinants of the market exchange rate so that the resulting rate was consistent with domestic policy goals.

Note that if inflation is a policy target, it appears on both sides of the equation: policymakers want an exchange rate that promotes, or is at least consistent with, a low rate of inflation, and the market equilibrium exchange rate depends partly on expected inflation, relative to that abroad. A virtuous circle beckoned. But by the same token, a vicious cycle threatened: a failure to sustain expectations of relative price stability would drive the equilibrium market rate downwards, and a lower exchange rate would feed domestic inflation – exactly the fear that prevented policymakers from seriously considering devaluations in the 1950s. Not only was the policy problem to balance on a knife edge, but the knife edge itself would swing around with changes in foreign inflation and fickle market sentiment. Figure 7.7 shows the fluctuations of the Australian dollar against a trade-weighted index.
High-dollar discipline and its enemies: January 1973 – November 1976

There is some irony that it was precisely when external discipline on domestic macroeconomic policy was at its nadir, when it finally seemed possible to use the exchange rate to isolate macroeconomic policy from external constraint, that policymakers wanted to use it as a surrogate for external discipline of the Bretton Woods kind. This was the opposite of what had been in the minds of those economists who had called for exchange rate flexibility as an alternative to disinflation during the years of chronic balance-of-payments deficits. A second irony is that once high-dollar discipline entrenched itself politically, the market turned against it, and by the end of 1976 the Australian dollar had been devalued below its Bretton Woods level (against a trade-weighted basket). This was a cruel turn indeed for those who saw market determination and macroeconomic rectitude as identical, and explains much of the initial hostility of Treasury to a float.

To return to the objectives listed above, initially after the Whitlam revaluation, all the stars seemed to be aligned. A high dollar lowered world prices relative to the domestic price level; exerted disinflationary pressures domestically; and was justified on the grounds of overall

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22 However, because the period of currency appreciation was also one of an extraordinary commodity price boom – of which the first oil shock was the most dramatic instance – external price pressures were still pulling upwards.
payments balance. The large trade surplus of 1972/73 turned out to be temporary, but until then the revaluation seemed justified even on current-account grounds. The tables were turned on the arguments of manufacturers and rural exporters, and the high dollar was defended as a welcome pressure to force industrial restructuring and improve international competitiveness in the long run – and to complement this, the government lowered tariff levels by 25 per cent across the board – equivalent to a further 5 per cent revaluation [Pagan, 1987: 118] – taking the advice of former Reserve Bank Governor Coombs against that of the Treasury.23 [Whitwell, 1986, 212-14; Hughes, 1980: 64] Finally, and not least importantly, up was where the market was pushing – the rise in the dollar halted and reversed the capital inflow.

It quickly became clear, however, that revaluation was not an alternative to domestic counter-inflation policy, because the previously ‘imported inflation’ had already caught Australia in a spiral sustained by distributional conflict between capital and labour, as discussed in Chapter 8. World commodity prices continued to rise – and the first OPEC oil shock hit – with a complex effect on this conflict, given that Australian exports were still dominated by primary commodities. The Reserve Bank’s 1973 Annual Report was typical in stressing the need for combined exchange-rate, fiscal and monetary policy against inflation. [p. 40] That staple of policy theory since the 1950s, that if only policymakers had enough instruments each could be assigned to a separate goal, was incoherent in practice. By 1974 Australia’s CPI inflation had crossed the line from below to above the OECD average, and a ‘wages explosion’ fed market expectations of further acceleration. (See Chapter 8.) But at the same time, Australia had fallen into recession and unemployment was rocketing upwards to a rate unprecedented since the Depression (from 1.8 per cent in 1973, it averaged 2.4 per cent in 1974 and 4.6 per cent in 1975 [Foster, 1996: 180]).

The brief period when all the possible targets for the exchange rate lined up was over. It was caught in the same stagflationary dilemma as other arms of policy – target employment or inflation? Given that stagflation itself was widely blamed on a profit squeeze, the revaluations and tariff cuts of 1972-73 began to look like a mistake. Both Pagan and Gray [1983] and Mohun [2003] find a sharp drop in the net rate of return on capital or profit rate over the five years beginning 1973, and while there were a number of factors at work (see Chapter 8), the shock to competitiveness from the revaluation was surely among them. Pagan [1987: 116-18] shows that the rise in the real exchange rate in those years had much more to do with the

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23 Of course both the revaluation and the tariff reductions were deeply controversial, even within the government, and resisted by those directly affected. This is not the place to discuss the issue. For discussions of the political conflict between different sections of capital as well as with labour, see Tsokhas [1984: 17-26, 42-46, 63-64]; and Catley and McFarlane [1983: 119-21, 128, 158-64].
nominal revaluation than with relative price level movements. Of course, given the speculative inflow of 1972, it had not really been a choice at all.

In September 1974, the government abruptly devalued by 12 per cent against the US dollar, and simultaneously switched to a complex peg against a trade-weighted basket of currencies, which would defend against other countries’ devaluations – the Australian currency had continued to rise substantially against its trading partners between its official shifts against the US dollar. The devaluation occurred against Treasury opposition [Whitwell, 1986: 216] and that of the growing chorus of economists urging the prioritisation of inflation – and even those otherwise sympathetic to prioritising unemployment. Perkins [1975: 85-87], for example, called the devaluation “almost as misguided as the Liberal-Country Party government's exchange rate policy in 1972... not even a very efficient way of beggaring Australia's neighbours”. Amid the wage-price spiral, the argument went, it was not a solution to the competitiveness problem since the devaluation would quickly feed into domestic inflation for no net real exchange rate gain.

The Fraser Government promised in no uncertain terms to ‘fight inflation first’, and by any means necessary. Revaluation was not among its instruments – not by choice, but because it was having enough trouble holding the dollar up against a speculative outflow of capital following the dramatic change of government and election, and most of all, reflecting the continued upward spiralling of Australian wages and prices at a faster rate than elsewhere. In 1976, right up until November, the government, the Reserve Bank and Treasury defended in concert the principle of a high exchange rate. Treasurer Lynch emphasised that devaluation “was not part of the Government’s economic strategy, and would be contrary to the thrust of the Government’s anti-inflation policy.” [Quoted in Manuell, 1986: 100] The Reserve Bank’s 1976 Annual Report stated strongly that inflation was the proper target of exchange rate policy issue rather than the balance of payments, and that the latter should be addressed by tightening domestic policy. [ibid: 100] This was also the line taken by Treasury: conceding that the dollar was now overvalued relative to market judgements, it argued vehemently that

24 This resonates with Brenner's [2006: 122-42] argument about the transmission of a decline in profitability in American manufacturing to the rest of the world via a falling US dollar, though he probably overestimates the importance of this element of the 1970s crisis worldwide.

25 It is difficult to make a judgement on the extent to which the devaluations at this point and in 1976 did feed into the inflationary spiral. Hughes [1980: 95] has it three ways, coming to the contradictory conclusion that “there was undoubtedly some reaction both times, but... no noticeable blip in the CPI growth path in subsequent quarters. On each occasion the quarterly CPI increases retreated downwards.” The problems are separating the effect of the devaluation from other policy and non-policy factors changing at the same time, and judging the lag with which an exchange rate movement affects prices – which Hughes [ibid: 106] later suggests is long.
the government should borrow internationally to defend it, and reverse the balance-of-payments by a continuation of tough anti-inflationary policy.\textsuperscript{26} [Whitwell, 1986: 228-30]

The government borrowed more than A$800 million in foreign exchange from the IMF and elsewhere to defend the exchange rate in the last half of 1976 – more than a third of its total reserves at the beginning of the year. [Manuell, 1986:100] (Because of the borrowed funds the extent of the payments problem does not appear in the reserve statistics, Figure 7.1 above). This was a payments crisis as dramatic as those of the 1950s, and in November the government buckled and devalued a massive 17.5 per cent against the trade-weighted basket – so that the Australian dollar fell below its position against the same basket over the whole Bretton Woods period.

7.5 Conclusion: the exchange rate tool becomes the master

The devaluation of November 1976 began a long period in which the government no longer tried to maintain a fixed peg, yet did not leave the dollar to float. The system was one of frequent adjustment against the trade-weighted index – a so-called ‘flexible peg’. The line the dollar traced, shown in Figure 7.7, is suggestive: beginning with straight lines and sharp, boxy turns, it becomes progressively both smoother and more volatile. From such a chart alone it would be impossible to tell where the flexible peg ends and the float begins. This is in fact not far off the mark as the practical reality goes – the five years before the official float prefigure that regime and the shape of the new form of external discipline can already be seen.

The flexible peg regime did not mean the authorities immediately abandoned attempts to use the exchange rate for counter-inflation purposes. The strategy of the 'simulated float' was sometimes a very active policy, deliberately trying to make exchange rate movements unpredictable to discourage speculation. In the medium run, the government wanted to move the dollar back up to assist with ‘fighting inflation first’ again. Crucially, success would depend on domestic policy being ‘credible’, in the sense that speculators had to be convinced (1) that the long run destiny of the dollar was indeed where authorities wanted it; and (2) that the central bank had the reserves to hold out until the long run arrived. Domestic policy had to perform for the market. In part this meant convincing the market of the tightness of domestic policy, and in part the borrowing of large quantities of reserves abroad and announcing the loans, to convince speculators that it would be capable of holding out against major

\textsuperscript{26} In fact, when the government began to waver on this front, Treasury officials allegedly went so far as to leak information and internal opinions to the press. According to Whitwell [1986: 230] this was a major factor behind Fraser’s decision to split the Department of Finance away from Treasury.
downward pressure. [Manuell, 1986: 106-13] This dual strategy began to have some success, and the dollar climbed slowly back up over 1980/81, helped along by another wave of the commodities price boom. This was remarkable given the great hike in interest rates abroad following the Volcker shock. But it was not to last; Australian inflation again began to outpace that abroad, and the government’s tight policy faltered in the face of a recession in 1981/82. (See Chapter 8.)

From here, although for a while the authorities attempted a strategy of moving the exchange rate to target the current account balance, it was only a matter of time before the authorities lost control again. Events during the election campaign of 1983 gave a demonstration of how the markets kept a watch on policy: with Labor likely to win, and judged “to indicate that the budget deficit and inflation in Australia would rise” [Manuell, 1986: 123], capital flowed out at a rapid rate. In the month leading up to the March election nearly a third of the central bank’s foreign exchange reserves drained away. These reserves had more than doubled over the previous year, so even after the drain they stood at a historically high level, but the dollar was immediately allowed to fall 10 per cent after the election (in which Labor was indeed victorious) and the outflow was reversed. (See Figure 7.1, but note that the full extent of the fluctuations do not appear in these monthly average figures.)

The need to pacify the foreign exchange market was keenly felt by the incoming government, and led to its renewal of the commitment to monetary targeting, even though by that time few policymakers saw it as worthwhile for its own sake. (See Chapter 9.) For the rest of the year, market opinion reversed, the exchange rate moved steadily back up to its pre-election position, and foreign exchange reserves reached a new record height – expanding the domestic money supply. In the course of the year, the government concluded that official support for the rate was a recipe for instability: it would either require capital controls or a further exchange rate revaluation that would simply reward the speculators. [Whitwell, 1986: 246] The dollar was floated in December.

It should be clear that it was not the float itself that imposed the discipline of the exchange rate market on policy – that had been present ever since the early 1970s, and was an effect of international capital mobility in an environment in which exchange rate variations were a regular occurrence. Policy had to perform for the market whether or not it attempted to maintain a fixed rate. The float increased domestic policy capacity, by increasing the control of the central bank over the domestic supply of banking reserves, as discussed in Chapter 9. It did not increase the freedom to direct that capacity – but neither did it diminish it.
8: Inflation and macroeconomic policy in the long
1970s

8.1 Introduction

In Chapter 1 I criticised a group of recent accounts of the policy shift of the 1970s which I
characterised as the origin myth of the ‘new macroeconomic consensus’. In this chapter, after
giving a brief overview in Section 8.2 of the operation and context of fiscal policy in this
period, I turn in Section 8.3 to the origins of this origin myth itself – the emergence of the
‘natural-rate, expectations-augmented Phillips curve’ (N-REAP) model of inflation. To recall,
this story of policy transition is a very simple one. Policymakers had a conception of the
economic system in which aggregate demand was set so as to make a choice reflecting a
stable trade-off between unemployment and inflation. This policy strategy failed because it
was mistaken about the stability of the trade-off, because it neglected the effect of adaptive
expectations on inflation. An alternative, superior strategy developed to take account of the
impact of expectations and the fact that there was no long-run trade-off between inflation and
unemployment. In Tinbergenian terms, the instruments remain the same, and one goal is
redefined downwards: instead of ‘full employment’, which is unsustainable under any policy
arrangement, the target becomes the ‘natural rate of unemployment’. This shift takes place
within the sphere of policy decision-making with existing instruments; there is no need for
‘qualitative policy’, i.e., seeking to change the institutional configuration of policy or the
broader economic system.\(^\text{27}\)

In Chapter 1 I characterised this kind of narrative as one of ‘Enlightenment’, and criticised its
failure to register changes in the political-economic system around policy, and shifts in the
strategies of other actors. I also called it the mirror-image of another kind of narrative of
policy transition, which focuses on the ideological conversion of policymakers to

\(^{27}\) However, it was certainly possible to derive qualitative policy projects from this system: labour market or
other supply-side reform to improve the ‘natural rate’, and/or the institutional embedding of policy rules or
bureaucratic independence to remove the influence of political temptation on use of the instruments. Note that
I consider the natural-rate, expectations-augmented Phillips curve system to be distinct from the quantity
theory elements of monetarism. The implications of the latter are discussed in Chapter 9.
‘neoliberalism’ or ‘monetarism’, while criticising this ideology as misguided or malign (at least from the perspective of labour). Such a narrative also locates the origin of policy change in a change of mind on the part of the policymakers.

Section 8.4, laying out my own argument about the policy transition of the 1970s, can be seen as a dialogue with a sophisticated version of this narrative, Courvisanos and Millmow’s [2006] account of ‘how Milton Friedman came to Australia’. For them, Friedman’s 1975 visit, the intense media interest it attracted, and the widespread conversion of businesspeople, financial journalists, some academic economists and most importantly politicians, were decisive in shaping the policy shift of the last half of the 1970s. Monetarism, in Australia as elsewhere, was “the start of a political trend, enabling the capitalist class to assert its economic and social dominance over labour and to cleanse the capitalist economies of inefficient businesses and oversupplied old capital stock.” [Courvisanos and Millmow, 2006: 113]

They argue that the development was anticipated in Kalecki’s famous 1943 essay on “the political aspects of full employment”. Kalecki predicted that macroeconomic policy would be capable of sustaining full employment, but that the improved bargaining position of labour would be somewhat inflationary, alienating rentiers, while ‘big business’ would come to oppose policy partly due to political prejudice and partly due to the effects of labour indiscipline in the factories.

In this situation a powerful block is likely to be formed between big business and the rentier interests, and they would probably find more than one economist to declare that the situation was manifestly unsound. The pressure of all these forces, and in particular of big business – as a rule influential in Government departments – would most probably induce the Government to return to the orthodox policy of cutting down the budget deficit. [Kalecki, 1943: 330]

Kalecki’s heralded prophet (or Antichrist), claim Courvisanos and Millmow, turned out to be Milton Friedman. The great strength of Kalecki’s argument is to recognise the class dimension to policy. There are some immediate problems, however, with using it wholesale as a guide to the Australian situation of the 1970s. First, he explicitly argues that full employment would not squeeze industrial profits, because given a policy commitment to the appropriate level of effective demand, firms would be in a position to set prices to recover any inroads made by money-wages. Inflation would trouble rentiers, but industrial businesspeople would have

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28 I emphasise that I choose this representative to engage with because it cannot be accused of being a crude idealist argument, emphasising as it does the material contradictions plaguing Australian policy in the mid-1970s. It is also of value as an excellent account of the ideological transmission of Friedman’s ideas through the Australian media and business ‘common sense’.
more nebulous objections to full employment, relating to the erosion of their authority and political status. Instead, I will argue, a profit squeeze was critical to the Australian experience.

Second, Kalecki gives no explanation for why the political block against full employment would prevail, beyond the phrase that big business is “as a rule influential in Government departments”. This is surely true, but if it is a general rule, what explains transitions? Why did it take thirty years from Kalecki’s prediction for the block to get itself together and shift policy against full employment? This is perhaps more of a problem for those who would invoke Kalecki to explain the 1970s than for Kalecki himself. The economists ready to “declare that the situation [full employment] was manifestly unsound” already existed in abundance in the 1940s, and businesspeople were already agitating about its inevitable propensity to generate inflation. As discussed in Chapter 5, the novelty of chronic inflation was already a major political issue in the 1950s, and while the balance of payments certainly meant price stability clashed with full employment throughout, the abandonment of full employment, as opposed to its temporary suspension, was politically unthinkable. Explaining its rise to political common sense in the late 1970s and early 1980s requires more than explaining its appeal to capital and rentiers – it needs to explain its wider political hegemony in a democracy in which, after all, the working class – in the broad sense of those who live from the selling of their labour – was a great majority.

My argument is that such a political hegemony did not require an ideological conversion – not on the part of the broad populace, and not even within the policy bureaucracy and its wider milieu of politicians, journalists and academics. Rather than conversion from one vision to another, the story of the 1970s so far as economic policy strategy goes is one of fragmentation and competing perspectives. The two broad types of strategy were in fact consistent from the 1950s: on the one side, the argument that demand management needed to be supplemented by incomes policies to directly manage money-wage and/or price-setting; on the other side, that such policies were unhelpful or doomed and that acceptance of less-than-full unemployment was necessary to tame inflation. The two strategies came in a variety of flavours, and both strands lasted through the 1980s.

Furthermore, as argued in Section 4.2, the end of full employment was not a deliberate design of policymakers. It was a phenomenon emerging out of dysfunction in the economic system, which policy initially attempted to reverse. It is far from certain that it was within the power of policy as it was (or conceivably could have been) constituted to successfully do so, whatever the strategy. Nobody had to like unemployment in order for it to be eventually
accepted as the socio-political status quo. All that was necessary was a lowering of expectations about what policy could do.

None of this is to say that ideology was epiphenomenal. Far from it; it was a real material force in a number of ways. I will focus on two in particular. One is that within the realm of policymaking it continued to function as a unifying principle within and across different branches. This could be the case even if some of the policymakers involved doubted a paradigm as an adequate representation of reality. As discussed in Chapter 9, there is considerable evidence that senior economists in both the Reserve Bank and Treasury were sceptical about a stable relationship between control of the money supply and the price level, but still found monetary targets useful as a way to integrate fiscal and monetary policy and to encourage discipline. Second, outside the policy sphere, ideology helped to manage consent and expectations. It did not have to convince everybody to be effective, it was enough to build a constituency in the media, political parties and broader electorate such that a return to full employment was impossible, uncertain, or depended on the actions of the unions rather than policy – all of which had some basis in truth. Courvisanos and Millmow [2006] provide an excellent account of how monetarism could function as a political legitimation of the abandonment of a full employment goal, but I will argue that policymakers themselves did not need to be converted. Monetarism was a convenient cover allowing policy to ‘fight inflation first’ and attempt to restore profitability, which Treasury saw as the real key to a restoration of employment. In other words, it was deployed as an organising principle for intervening in a distributional struggle between capital and labour.

8.2 Demand policy, inflation and unemployment

For this period there are no counterparts to the detailed studies of post-war fiscal policy I drew on in Chapter 5, breaking down the budget into components and estimating different multipliers for each one. One reason is that high and volatile inflation makes such estimations, always speculative, more complex and perhaps impossible. Another is that fiscal policy in this later period was much more volatile, so that the finely graded shifts which made the detailed treatment necessary in the earlier period are less relevant, at least to getting a broad sense of policy intent. Nevile [1990: 27], reversing his earlier [1979] judgement, writes:

In the 1960s and the early 1970s changes in the stance of fiscal policy were small, and, if one wished to comment sensibly on the sort of fine-tuning changes that occurred, it was necessary at least to weight broad categories of outlays and receipts. However, in recent years changes in the stance of
fiscal policy have been so large that weighting makes only small changes to the general picture which emerges.

On the other hand, it has seemed more important to find a way of treating the interference of inflation with the effects of fiscal policy. The effects due to ‘bracket creep’, as taxpayers reach higher nominally-defined taxation brackets, present no particular problem, as they appear in the raw budget figures. It is the effect due to the fall in real value of outstanding government debt that raises a problem. Many economists approach this as an ‘inflation tax’ on wealth held in the form of government debt, duly adding it to the official budget balance. (See, e.g., Perkins [1987: 16-20]; Abbott [1996].) Considered in this way, it is open the objection that a wealth effect due to this phenomenon is unlikely to have the same impact on expenditure as an extra imposition of income tax. Furthermore, it is difficult to see why this effect would be limited to government debt, since all nominally-fixed long-term debt instruments would be devalued by inflation in this way.

Nevile [1990], however, accepts the argument that wealth effects will differ from income effects of tax (and are better considered through the lens of monetary policy), but reverses its implications: since interest rates tend to rise to compensate bondholders for inflation, and interest payments on government debt appear on the outlay side of the government balance sheet, it is actually the raw surplus/deficit figures that give an erroneous impression of the income/expenditure effect of the public sector balance. That is, “that part of interest receipts equal in size to the inflation tax is not perceived as current income” [ibid: 25], and so does not have the expenditure-stimulating effect implied by counting it towards a deficit. He cites econometric evidence for this, but it must be considered somewhat speculative, especially since I am interested in policy intent more than effect. In any case, he provides his fiscal policy figures both with and without the adjustment for inflation, shown in Figure 8.1 below. The adjustment of course reduces the public sector deficit to the extent of inflation, so that surpluses prevail through the entire Whitlam period, which appears as an oasis of surpluses between two big-spending Coalition governments!29 But in terms of shifts in the fiscal stance, ultimately more relevant, the difference is not so stark. The inflation-corrected figures suggest generally more intense shifts in policy, and in the mid-1970s reverse the direction of policy movements: the merely cyclically-adjusted figures show modest tightening under the new Fraser government, while the inflation-adjusted figures show substantial stimulus. I am inclined to put more importance on the merely cyclically-adjusted figures as a closer guide to

29 See also Abbott’s [1996] extension of this approach back through the post-war period, mentioned in Chapter 5, where I rejected it as a guide to policy intent.
policy intent, especially since they accord more closely with the contemporary perception of policy, especially up to and including the mid-1970s.

Figure 8.1: Nevile’s [1990] deficit measures, all levels of government, % to GDP

Source: Nevile [1990]

Figure 8.2: OECD deficit measures, all levels of government, % to GDP

Source: Perkins [1987: 17]
For a second opinion, and to show how much uncertainty surrounds the interpretation of fiscal policy, I also present the OECD figures for the period from 1970 in Figure 8.2. [Perkins, 1987: 17] These statistics also include an inflation-adjusted series, but as can be seen it makes very little difference to the direction and magnitude of shifts in fiscal stance. The merely cyclically-adjusted figures do not disagree with Nevile’s over the direction of policy shift (except for at the turn of the 1970s), but give a substantially different interpretation of the strength of some shifts. In particular, they show a large loosening of policy and subsequent severe tightening in the years from 1972-74 which barely appears in Nevile’s figures, and portray a much more severe tightening between 1976 and 1977. Partly these differences reflect different time frames – Nevile’s figures are based on financial years and the OECD’s on calendar years. Partly they also reflect different methods of estimating potential output for the cyclical correction. The effect of the ‘supply shocks’ of the 1970s makes any judgement on potential output controversial. For contemporary policymakers the uncertainty was even greater, so it would perhaps be more misleading to imply a definitive conclusion is possible than to leave the interpretation open. Figure 8.2 also shows the estimate of the output gap on the basis of which the OECD’s cyclical adjustment is made.30 Figure 8.3 presents the rate of unemployment and Figure 8.4 presents the rate of inflation.

![Figure 8.3: Unemployment rate (%)](image)

Source: Reserve Bank of Australia

Note: Series to November 1977 is not seasonally-adjusted, series from February 1978 is.

30 A positive figure represents above-capacity output and vice versa. Nevile [1990] does not present this figure, though his procedure is outlined on pp. 26-27 of his paper.
An overview of fiscal policy in the long 1970s

The entire decade following the recovery from the 1960/61 recession presented no great surprise to the policy paradigm and institutional infrastructure that had been built in response to the difficulties of the 1950s. Its techniques and theoretical assumptions were not really tested during this period. This meant consolidation, in that the instruments and the ways of using them, which had been developed with such difficulty, came to be taken for granted. But it also meant complacency. The reprieve from ‘long-run balance-of-payments problems’, discussed in Chapter 7, meant that the tension between full employment and price stability was much more likely to be resolved in favour of the former than it had been in the 1950s. It is certainly not my argument that policy neglect of inflation in the late 1960s was responsible for its acceleration in the 1970s, as discussed in the next section. By complacency I simply mean that it was easy to mistake the fortuitous conditions in which policy operated as themselves created by policy – although this view had critics from both right (e.g., Horne’s [1964] The Lucky Country) and left (e.g. McFarlane’s [1968] Economic Policy in Australia).
In Tinbergen’s terminology, it was a period in which ‘quantitative policy’ remained relatively stable, with no pressures driving ‘qualitative’ projects to change the policy apparatus or the broader economic system.

Policy advisers in the public service continued to urge that more attention be paid to inflation. Treasury, in particular, began to develop an obsession with ‘the cost problem’ in the late 1960s, consistently devoting a section to it in its annual surveys from 1968. [Treasury, 1968: 11-13; 1969: 13-14; 1970: 12-14; 1971: 16-17] The statistics are at their most confused in interpreting this period: Nevile’s figures (Figure 8.1 above) show a fairly consistent tightening, while the OECD estimation (Figure 8.2) suggests a stimulus at the beginning of the 1970s. At the time, policy was seen to be set somewhere between modest tightening and neutrality until 1971/72. [Perkins, 1975: 53-64; Whitwell, 1986: 181-87] It was certainly not as tight as Treasury advised, and hostility developed between Treasury and the government, with Prime Minister Gorton restructuring the Department of the Prime Minister and Cabinet so as to build an alternative source of economic advice. [Whitwell, 1986: 19-20, 186]

The rapid escalation of CPI inflation past 8 per cent (at an annual rate) in 1971 shook the McMahon government, and it returned to the Treasury fold. Treasurer Snedden announced a strongly disinflationary 1971/72 budget (mainly on the tax side) saying that it was determined to “hobble and slow down... this pernicious trend” [quoted in Hughes, 1980: 58]. The strength of the budget plans do not show up in the above charts because the stance was in fact quickly switched. There had been signs of slowing private investment since late 1970, and in the second half of 1971 unemployment lurched upwards towards 3 per cent. Unemployment and inflation were giving mixed signals – a first taste of stagflation, although inflation subsided back to around 5 per cent over 1972. Fiscal policy (and monetary policy as well) was shifted towards stimulus by the end of 1971, though mainly with a more rapid expansion of expenditure rather than a reversal of the budget’s tax measures.

This dose of stagflation was not at all paradigm-smashing. It was generally interpreted along the lines of the 1950s, as the echoing of previous inflation, at least partially of external origin, as money-wages caught up. It still posed a great problem for aggregate demand policy. The astonishing acceleration of inflation to nearly 15 per cent as employment recovered over the course of 1973 meant that macroeconomic policy was pulled in two directions like no time since 1951/52. The analogy to the aftermath of the wool boom perhaps looked appropriate from the perspective of 1973: a sharp spike of inflation (then it had been even bigger, above 20 per cent) from the working of international price influences through domestic wages and
prices. The currency revaluations following Labor’s ascent to government were an option not taken in the 1950s, and there was hope that this would deal with the price problem while fiscal policy focused on unemployment. This time around, however, there was no sudden reversal of international prices, and in fact the commodity price boom was just getting started. (See Chapter 7.) The rising Australian dollar did not appear to have any restraining effect on the rate of inflation, which continued to trend upward until the middle of the decade. Meanwhile, the recovery and boom of 1973 was very sharply reversed in 1974/75, with unemployment reaching 5.4 per cent in February 1975 before retreating slightly.

Nevile’s and the OECD’s judgements of fiscal policy in the early days of the Whitlam Labor Government are markedly different: though both suggest a stimulus (partly inherited from the Coalition’s 1972 budget) and then its reversal, the shifts are very mild in Nevile’s figures and sharp in the OECD’s. The difference of opinion matches ferocious contemporary disagreement [Whitwell, 1986: 208], though Nevile’s judgement of nearly-neutral fiscal policy overall until 1974/75 (‘inflation tax’ aside) is closer to the retrospective judgements of Whitwell [ibid] and Hughes [1980: 66-67]. The 1973 budget was presented as neutral rather than actively disinflationary, and although many commentators saw it as expansionary given a rapid increase in expenditure alongside the fulfilment of a campaign promise not to raise income tax, the combined real boom and inflation meant the increased tax take more than covered the expansion of outlays. In any case, given the high rate of inflation, neutrality represented a deliberate decision not to fight inflation with unemployment – at least not through the budget. This was a year of textbook ‘policy mix’, in which the government hoped to maintain employment with fiscal policy while fighting inflation with the exchange rate, tariff cuts and tight monetary policy.

The alternative of a ‘short sharp shock’ was already being urged by Treasury: to turn all instruments on inflation. After re-election in May 1974, Whitlam himself favoured the strategy. The Premiers’ Conference of June 1974 was “the first occasion on which the government had implied in public that it was prepared to abandon full employment in order to deal with inflation.” [Hughes, 1980: 87] It quickly mobilised opposition within the labour movement and Labor Party, with opposition spearheaded outside the Commonwealth government by South Australian Premier Don Dunstan and Bob Hawke, then president of the Australian Council of Trade Unions, and within the federal caucus by Minister for Labour Clyde Cameron. These forces beat back the ‘shock’ so that only rhetoric remained in a July mini-budget. Treasurer Crean was a supporter of the Treasury line, but was forced to deliver a
deliberately stimulatory budget in August, and distance the government from the now politically poisonous idea of the ‘short sharp shock’:

The conventional response to inflation has relied almost entirely on the creation of mass unemployment. Those who advocate such a course in present conditions are unable to say what level of unemployment would markedly reduce inflation. The Government is not prepared deliberately to create a level of 4 or 5 per cent, or perhaps even higher unemployment… Crucial as the fight against inflation is, it cannot be made the sole objective of Government policy... The relatively subdued conditions in prospect in the private sector provide the first real opportunity we have had to transfer resources to the public sector. [Quoted in Whitwell, 1986: 215-16]

As can be seen from both Figures 8.1 and 8.2 above, fiscal policy in 1974/75, following this budget and a succession of further stimulatory packages in the following months, was intensely stimulatory – an expansion of the deficit by almost 4 percentage points of GDP – and it was combined with devaluation a week after the August budget. In retrospect this policy has become somewhat notorious, especially in association with the unfortunate new (from December 1974) Treasurer Jim Cairns and the Loans Affair that was the official trigger for the Dismissal. But it must be seen in the context of the recession and great explosion of unemployment. (See Figure 8.3.)

It is also very important to note that this rise in unemployment came in spite of greatly expansionary fiscal policy, not because of it, and was genuinely very much against the intentions of the government. This was the great break in the unemployment rate that would not, to this day, be reversed. It is not that policy had nothing to do with it – the credit stringency of 1973/74, as well as the elevated exchange rate and tariff cuts certainly played a role. But in no sense was it deliberately chosen at this point as a method to fight inflation, by disciplining wage-growth or otherwise. Sustained unemployment would soon be accepted by policymakers, either as an active part or an unfortunate by-product of the counter-inflation strategy, but it was not deliberately provoked in the first instance. The most intense fiscal stimulus that had yet been seen in Australia was deployed against it, but was not enough.

The reversal the following year demonstrates that the pivot of policy towards ‘fighting inflation first’ happened under the Whitlam Labor Government and did not wait for Fraser and the Coalition. The reasons for the change in strategy will be discussed in the next two sections, but the conversion of the Labor cabinet took place in early 1975, was signalled with the replacement in June of Cairns as Treasurer with Bill Hayden, and announced in no

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31 Hughes [1980: 102-03] points out the irony of Cairns’ association with the stimulus, as he was apparently sceptical of macroeconomic thinking and accused Treasury of neglecting ‘allocative’ questions.
uncertain terms in his 1975 budget speech:

We are no longer operating in that simple Keynesian world in which some reduction in unemployment could, apparently, always be purchased at the cost of some more inflation. Today, it is inflation itself which is the central policy problem. More inflation simply leads to more unemployment. [Quoted in Whitwell, 1986: 217]

The early years of the Fraser Coalition government were thus a continuation of what begun under Hayden, as far as fiscal policy was concerned. In fact, policy was possibly even mildly stimulatory in 1977/78. But this must be seen against the background of continued deep unemployment, which exceeded 6 per cent for the rest of the decade. According to the OECD estimate (Figure 8.2 above), GDP fell to 4 percentage points below potential in 1977 and remained there until 1981. The surreptitious foot-dragging of the government after the 1960/61 recession had become proudly proclaimed policy: there would be no attempt to revive employment through macroeconomic policy. The government fell out dramatically with Treasury (and to a lesser extent the Reserve Bank) over the decision to devalue at the end of 1976 instead of borrowing abroad to defend the exchange rate. (See Chapter 7.) But in macroeconomic policy the Treasury strategy (discussed below) prevailed, and its satisfaction is evident in successive surveys from 1977.

The boom of 1980/81 appeared as a partial vindication of this strategy, although CPI inflation still hovered around 10 per cent per year, with a recovery at last of private investment to the proportion of GDP it had occupied until a decade earlier, and with unemployment finally edging below 6 per cent. There was heady talk of a new resources boom, and a return of concerns (following the ‘Gregory thesis’ first appearing in Gregory [1976]) about the effects of too much mineral boom on agriculture and industry. In the 1981 budget papers, Treasury rejected the argument that the recovery had much to do with luck, saying instead that it could be attributed in no small way to the general anti-inflationary thrust... [T]he speed and vigour with which investors have moved to take advantage of Australia’s increased comparative advantage in the energy-related resource sector owes a good deal to steps having been taken earlier to re-establish the pre-conditions for a high level of investment, in resource and non-resource areas alike. [Quoted in Whitwell, 1986: 239]

But the boom was short-lived and Australia sunk into recession in 1982, with a demoralising further rise in the unemployment rate to more than 10 per cent. While inflation eventually

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32 See also Treasury Secretary John Stone’s argument against the view “fashionable in some quarters” that “put our current relatively fortunate position down to good luck and the machinations of the oil sheikhs... Not only is the investment upsurge much more widely spread that that, but even in the energy or energy-related area it can also be said that those developments alone would not have been sufficient to stimulate investment if the more general climate for investment had not improved so markedly.” [Quoted ibid: 239]
moderated somewhat, it remained above 8 per cent until the second half of 1983, showing that “even record levels of unemployment will not necessarily bring down inflation” [Perkins, 1987: 44] Once again, a shift of fiscal strategy preceded the change of government, with a major fiscal expansion initiated by the 1982 budget, the package advocated by the Prime Minister’s Department against the stubborn advice of Treasury. [Whitwell, 1986: 252] A recovery was underway by the time of the election of the Hawke Labor government in 1983. The centre of counter-inflationary action shifted away from fiscal policy towards the Prices and Incomes Accord, though the government was not averse to tightening policy again in 1984/85.

8.3 Augmenting the Phillips curve

In 1958 Professor A.W.H. Phillips, known as Bill Phillips, published a paper with the uninspiring title of “The relations between unemployment and the rate of change of money wage rates in the United Kingdom, 1861-1957”. This important paper showed that there had been an inverse relationship between the rate of wage inflation and the rate of unemployment over that period. That is, when wage inflation was low, unemployment was high, and vice versa. This relationship became known as the Phillips Curve, and it lent empirical support to the view that there was a choice between a low unemployment high inflation situation, or a high unemployment low inflation situation, and the various combinations between these two extremes. Not surprisingly, given this choice, the vast majority would choose a point that had low unemployment, even though it meant higher inflation. Unfortunately, there was a very serious dynamic problem with the Phillips Curve, of which its creator was aware… What this means is that to get unemployment below the level that was originally consistent with low inflation will take a series of increases in inflation with no apparent equilibrium end point in sight. In other words, you cannot go to a permanently low unemployment rate by accepting inflation at a constant higher level; what is required is a constantly increasing rate of inflation… This critique of the overly-ambitious use of Keynesian demand management policy was mainly the work of Milton Friedman. For a decade or more, it was hotly debated, but was ultimately proved right and is accepted today by economists of virtually all political persuasions. [Macfarlane, 2006]

This, in a paragraph, is the policy legend about what happened in the 1970s: the same story for Australia as elsewhere. The author is Ian Macfarlane, in 2006 just-retired as Governor of the Reserve Bank of Australia, giving the Boyer Lectures on ABC radio, his topic the origins of the macroeconomic stability of the 1990s and 2000s (thus far). Macfarlane was a junior economist at the Reserve Bank in the early 1970s and thus had personal experience of the policy problems and thinking of the time. Nevertheless, in this section I seek to show that this legend is somewhere between caricature and myth.
I do not deny that the emergence of simultaneously high and rising inflation and unemployment in the 1970s was the decisive policy problem of the decade, and arguably the half-century. Neither do I deny that economists and policymakers of the time found inflationary momentum important – whether explained with reference to expectations or to other factors – and a key reason why demand management alone could not solve the problem of stagflation. My argument is rather that the Friedman-Phelps ‘natural rate expectations-augmented Phillips curve’ (N-REAP) does not in itself explain the extent of ‘stagflation’ that developed, and was not generally seen to do so by contemporary Australian economists. It is true that the myth has its origins in the period itself, but it served more a rhetorical, political purpose than as a guide to technical policy-making.33

As I showed in Chapter 5, the notion that Australian policymakers in the postwar period believed in and tried to exploit a stable relationship between inflation and unemployment is mistaken. The Phillips curve was greeted with scepticism in Australia, partly because of the place of the arbitration system in wage-determination, and partly because of a recognition of the importance of disturbing international forces via tradables prices. Politically, a ‘trade-off’ was associated with conservative, anti-labour forces, as in the UK, rather than with the left, as in the US – for the basic reason that it implied the necessity of a higher rate of unemployment than that which prevailed, rather than a lower one, and thus a break with full employment. Though policymakers (probably) deliberately used unemployment to discipline wage and price inflation by prolonging the recession of the early 1960s, the alternative of changing the terms of the trade-off through wages policy remained the more palatable alternative.

The Australian academic studies of inflation in the last half of the 1960s – and there were very few34 – continued to reflect this. To the extent that a Phillips curve could be said to be present in these models, as a relationship between unemployment and money-wage or price growth, it

33 For example, in announcing a mini-budget in 1974, new ALP Treasurer Hayden claimed, “We are no longer operating in that simple Keynesian world in which some reduction in unemployment could, apparently, always be purchased at the cost of some more inflation.” [Quoted in Hughes, 1980: 115]

34 Looking back from another survey in 1978, Hagger writes: “On looking back at Corden’s 1968 volume [reviewing theoretical debates about Australian economic policy] one is surprised to find that there is no chapter dealing specifically with anti-inflation policy. The more one thinks about it, however, the more reasonable the omission becomes, for one of the most striking features of the Australian discussion of anti-inflation policy in the postwar period is that practically all of the really significant contributions have appeared in the last ten, perhaps in the last five, years.” [Hagger, 1978: 135] He argues that, besides the obvious reason of the stagflationary experience, inflation research was motivated by the development of econometric techniques and “the development in recent years of an unusually fertile idea – that there exists a definite relationship between the inflation rate and the unemployment rate”. [Ibid: 135] That this development could be called “recent” in 1978 supports my argument that the Phillips curve really only began to fly in Australia at the dusk of the postwar boom, and that the Friedman-Phelps critique was partly responsible for its solidification into a supposed statistical regularity.
was always an element among others, rather than the dominant centrepiece. That is, the Phillips curve was always ‘augmented’ in the Australian literature. When Phelps [1967] and Friedman [1968] inspired the new model form in the international literature – an unemployment-wage/price relationship combined with an expectations term – it spread to Australia also in the early 1970s. But it was one of those conquests in which the coloniser’s forms blend with the established ways of the land.

The rise of the Phillips curve internationally and its Friedman-Phelps transformation were bound up with the development and popularisation of econometric techniques. Australia was no exception. Rather than being abstract representations of ideal-typical processes with the complications stripped out, they increasingly moved out of their geometric planes and were constructed in dialogue with statistical time series. *Ceteris paribus* was still the watchword, but statistical techniques now held the ‘all else’ equal while the factors determining the dependent variable were calibrated one by one. It became common for studies to present multiple hypothetical structures which could be whittled away in confrontation with the data. Alternatively, factors could be progressively brought into the picture, dropped, re-weighted or lagged until the error term shrunk away and the predicted series more closely traced the statistics – generating models whose structure would never have been conceived *a priori*. The typical structure of a model was now one or more equations made up of several terms, each weighted with a scalar. Dealing with a time series, past variables could be terms in the present period.

The econometric study of inflation in Australia (beyond a casual search for correlations) really begins with Hagger [1965], who builds several models with different frameworks to test them against the Australian data. Significantly, none of them is based around a Phillips curve relationship between unemployment and inflation. One is a pure cost-push model, two are ‘mixed’ models (one of these *including a term representing inflationary expectations*)35, and one is a pure excess demand model. The role of aggregate demand is measured not in terms of unemployment, but against aggregate real output: i.e., full employment is assumed, and the wage growth variable is exogenous in the cost-push and mixed models.

He tests these models against Australian data between 1958/59 and 1962/63 (which he admits

35 “…[T]he price increase which follows any given cost increase will be larger if further cost increases are expected in the near future than if costs are expected to be stable or to fall. The most natural way to formalise it, therefore, is to introduce one or more variables into [the equation] to represent the main determinants of cost expectations… [P]ast excess demand may exert an influence through the rate of price increase of the immediate past and, in turn, through cost expectations.” [Hagger, 1965: 39] This model is based on Ackley [1959] and demonstrates again that inflationary expectations or momentum were not a theoretical innovation of Friedman and Phelps.
is a very short period from which to draw conclusions) and finds the simple pure demand model (based on Keynes [1940]), without an expectations variable, a better predictor than the others. But Hagger insists that this surprising result does not necessarily mean the simple inflation-gap model gives the best description of the actual causal dynamics of inflation:

At first sight, the main difference seems to be that, whereas [the inflation gap model] takes all prices to be market-determined, [the cost-push models] take them to be administered on the basis of some cost rule. But this view is based on a very narrow interpretation of [the inflation gap equation]; a wider interpretation, which appears equally legitimate, is that prices respond to excess demand as though they were market determined, regardless of whether they are, in fact, market determined or administered on the basis of cost changes or in some other way… The essential difference is rather that, whereas [the cost-push models] attempt to assess the impact of excess demand on each in turn, [the inflation gap model], in effect, applies a simple rule of thumb: whatever the immediate determinants of the price level may be, the impact of excess demand on the price level via these immediate determinants can be accurately assessed by proceeding as though all prices are market-determined. [Hagger, 1965: 51-52]

The important point here is the shift in concern away from a theoretical explanation of inflation and towards a predictive, empiricist project. It is on this field that the Phillips curve eventually conquered, but still only as a central element of inflation models, rather than as a complete model in its own right. Both the other two econometric studies of the rest of the decade – Hancock [1967] and Pitchford [1968] – contained terms linking unemployment to wage (Hancock) and price level (Pitchford) growth. Neither model ended up incorporating ‘expectations’ as such, but not for lack of considering it. Hancock [1967] finds 88 per cent of inflation explained by the current period’s ‘excess demand’ (proxied by unemployment) and import prices. Pitchford, using time series running from 1947 through 1967, finds the same two variables dominant. To give a sense of the structure of model this pre-N-REAP approach generated, this is Pitchford’s final equation for the determination of the quarterly inflation rate, explicitly generated through a trial-and-error process of shuffling and lagging variables:

\[
\text{Quarterly inflation rate} = 0.44 \\
0.33 \times \text{excess demand for labour, two quarters lagged} \\
0.16 \times \text{rate of change of import price index, three quarters lagged} \\
0.033 \times \text{rate of change of export price index, three quarters lagged} \\
0.15 \times \text{wage pressure variable, one quarter lagged}
\]

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• $0.12 \times [\text{wage pressure variable, two quarters lagged}]$

Because the variables have different magnitudes and volatility, the size of the scalars alone do not give a sense of the relative importance of the terms. Figure 8.5 presents the breakdown (excepting the constant term) in graphical form, which gives a better idea. It also shows how much the data is dominated by the wool boom and its aftermath. Pitchford’s estimations would not have surprised contemporary policymakers; they reflected the consensus view of inflation’s causes: domestic demand pressures, tradables prices and independent wage growth due to the arbitration system. The precision of the estimation would not have improved (or been expected to improve) the precision of policy, because of questions over the stability of the equation generated: it can be seen from Figure 8.5 that the model appears to predict better at the middle and end of the period that it does in the middle. The constant term (0.44) is substantial, amounting to a base, unexplained annual inflation rate of 1.76 per cent, but Pitchford was unable to reduce it with other potential variables.

Pre-N-REAP treatments of inflation would be accused of neglecting inflationary expectations, and thus feeding the idea that there could be a long-run ‘trade-off’ between unemployment and inflation. Why do expectations not appear in Pitchford’s estimates? It is important to realise at the outset that N-REAP models in general, and certainly those in the Australian literature of the 1970s, do not measure inflationary expectations directly, but use previous periods of inflation as a proxy. That is, although ‘expectations’ implies looking towards the future, they are invariably are treated as ‘adaptive’, backward looking. Besides the name, there is no distinguishing between such variables and a general measurement of inflationary momentum, or ‘spiralling’: it could as easily emerge from ‘catch-up’ behaviour as wages are adjusted to compensate for previous inflation – and in fact this was more natural in a context in which Award wages were regularly adjusted for that reason, rather than in anticipation of future inflation. Pitchford [1968: 132-33] accordingly expects to find inflationary momentum and tests the hypothesis by including as explanatory variables previous periods’ inflation with various lags. In the best fitting model, such variables are found not to be significant.

36 Oddly, though, he finds export price fluctuations to have only a very muted impact, reflected in its small scalar, so that the wool boom inflation appears to have more to do with import prices – “…it would appear that the rest of the economy is insulated in some way from export price fluctuations.” [Pitchford, 1968: 133]
Figure 8.5: Pitchford’s model of inflation

Source: Pitchford [1968: 131]
This does not mean, however, that he believes there is no such relationship in reality – as Hagger [1965] emphasises (see above), econometric estimation is not the same as tracing the real causal channels in operation, and in reduced form equations the implication is simply that over the period of the time series, some variables stand in for broader processes. In Pitchford’s case, it is likely that some inflationary momentum is reflected in the large constant term, and some in the exogenous ‘wage pressure’ variables. It is not surprising that the latter would not be found consistently related to previous inflation over Pitchford’s period, and therefore not endogenisable, because the arbitration system’s response to inflation changed, most strikingly with the ending of automatic quarterly wage indexation in 1953. (See Chapter 5.)

When Michael Parkin, a visiting Canadian economist and early and consistent champion of monetarism in Australia, began to propagate the N-REAP vision in the early 1970s, he spread the myth that Australian economists had hitherto modelled inflation as a simple relationship between unemployment and inflation. Parkin [1981 (1973a): 234] presents the relationship between 1960 and 1973 on a chart to show how badly unemployment alone explains the inflation rate, and how much better a fit can be reached by incorporating expectations (really, lagged prior inflation). How blind and how stupid these economists must have been! Did they never think to test their theory against the data? On the contrary, Hagger [1965], Hancock [1967] and Pitchford [1968], who all presented multi-variable models and all achieved a rough fit with the data, despite not explicitly incorporating ‘expectations’, show Parkin is wrong. The issue is not that economists and policymakers thought in simple terms of a stable relationship between unemployment and inflation.

**Australian natural-rate expectations-augmented Phillips curve (N-REAP) studies**

The essential difference between the Hancock-Pitchford style of model to the N-REAP models that dominated the field in the 1970s is that the latter include terms in which the inflation of previous periods feeds back into the present. The basic theoretical form of these models is simple, but the structure of terms, scalars and lags used to square the data with the form could be rather complex. Hagger [1978: 137-42] presents a skeletal N-REAP model based on

5. an equation relating average money-wage growth ($w$) to unemployment ($u$) and the

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37 In any case, Pitchford [1068: 132-33] finds momentum significant in another estimation, which is ultimately dropped because it is a less tight fit overall. Extending conclusions from this into the favoured estimation, he speculates that eradicating the inflationary cycle and stabilising the price level would require raising unemployment above 2.5 per cent, “but too much should not be made of this as it involves using non-significant results.”
expected rate of price inflation \( (p^e) \);

6. a second equation relating the rate of price inflation \( (p) \) to the rate of growth of the average money-wage and the average rate of labour productivity growth \( (o) \) (with the \( t \) subscript denoting the period); and

7. a third equation relating changes in the expected rate of price inflation to the size of any error of anticipation in the previous period:

\[ 8.1 \quad w_t = f(u_t) + bp_t^e \]
\[ 8.2 \quad p_t = w_t - o_t \]
\[ 8.3 \quad p_t^e - p_{t-1}^e = \Theta (p_{t-1} - p_{t-1}^e) \]

The constants \( b \) and \( \theta \) represent, respectively, the extent to which the money wage is adjusted for expected inflation, and the extent to which expected inflation adjusts to erroneous expectations in the previous period – both will be between zero and one. Because according to equation 8.3 present inflationary expectations depend partly on the previous period’s actual rate of inflation, and that period’s expectations depend partly on actual inflation in the period before that, and so on, the expectations term is actually “a weighted arithmetic average of all past actual inflation rates”. [Hagger, 1978: 138]

Equation 8.1 can be substituted into equation 8.2 to give the basic short-run expectations-augmented Phillips curve:

\[ 8.4 \quad p_t = [f(u_t) - o_t] + bp_t^e \]

The value of the constant \( b \) is all-important, because it determines whether or not there will be a stable long-run trade-off between unemployment and inflation, i.e. convergence to a stable rate of inflation if unemployment and the rate of productivity growth remain constant. If \( b \) is less than one, inflation will increase but at a decreasing rate, approaching a stable limit rate. (The value of \( \theta \) does not affect the point of convergence, only the speed at which it is arrived at.) There will be a long-run Phillips curve relating inflation and unemployment with a steeper slope than the short-run curve, but not vertical. But if \( b \) is equal to one, the long-run curve will be vertical, so that the rate of inflation will continue to increase so long as unemployment is below a certain point, and decrease if unemployment is above it. That point, the only point at which inflation will continue at a steady rate, is the so-called ‘natural rate of
There is nothing in Hagger's [1978] model to suggest that the 'natural rate' is immutable or, in Friedman’s [1968: 8] words, “ground out by the Walrasian system of general equilibrium equations”. It is an artefact emerging from the behaviour of the system over a number of periods in which all variables except the rate of inflation and the expected rate of inflation are held constant. Its stability depends on the constancy of the rate of labour productivity growth ($\sigma$) as well as the coefficient ($b$) reflecting the extent to which inflationary expectations feed into wage growth. (The model does presume a stable mark-up of prices over wage-costs, but a slightly more complex model could incorporate a variable profit share also, in which case this would also make a difference.)

The flurry of Australian N-REAP studies in the 1970s, including larger econometric models in which the N-REAP played a part, were especially concerned with two questions: was there a long-run trade-off between unemployment and inflation? and, in some cases, what, then, was the ‘natural rate of unemployment’? Each study had to find real statistical data to represent the variables above, so they tended to be more complex in form than the above, and sometimes different in their variables, though similar in their ultimate dynamics. For example, Parkin [1973b] has money-wage growth depend on the rate of change of unemployment as well as its absolute level. He and Nevile [1977] relate expectations to both movements in tradables and non-tradables prices. Jonson et al [1974] and Rao [1977] use composite measures of labour market pressure involving registered vacancies as well as unemployment, and the former also relate money-wage growth to the rate of increase of foreign reserves to proxy the impact of foreign forces. Carmichael [1974] and Nevile [1977] include growth rates of various forms of tax in their money-wage and price equations. Nevile [1977] uses a rather complicated wage determination schema, in which money-earnings growth depends upon exogenous award increases in the short run, unless this figure amounts to less than the expected rate of inflation and productivity growth together, or if excess demand is positive – and in the long run, the growth rate of award wages is itself endogenous, depending on expected price increases.

All the above writers ultimately concur that there is no long-run trade-off between unemployment and inflation. The consensus is remarkable in spreading across the spectrum from dedicated monetarist (Parkin) through Reserve Bank model-builders (Jonson et al) to committed Keynesian (Nevile). But such a wide agreement suggests that not too much of

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38 This symmetry around the natural rate, with inflation falling when unemployment is above it, was generally assumed or implied in N-REAP models of the early 1970s, but became increasingly controversial.
policy importance can be read directly from it. As discussed above, the meaning of the ‘long-
run’ in this kind of model is rather unusual: the question of whether there is a long-run trade-
off or not depends on whether – given a constant rate of productivity growth and
unemployment – the cycle of adaptive expectations and actual inflation will eventually peter
out to generate a constant rate of inflation at any rate of unemployment, or whether there will
be only a single unemployment rate at which this stabilisation will occur. Based as they are on
Australian data from the 1950s through the first half of the 1970s, no such process appears in
the time series, and the judgements essentially come from extrapolations of inflationary
accelerations and decelerations within much more limited time frames. The acceptance of an
N-REAP model as a representation of the inflationary process did not necessarily mean
accepting a hands-off policy stance. It did mean demand management alone would not
permanently improve the situation, so policy would need other levers – either through labour
market institutions to shift the extent to which expectations (or catch-up from previous rounds
of inflation) would be embodied in actual money-wage growth, or through reforms to improve
the rate of productivity growth. This was not out of line with mainstream policy opinion of the
previous two decades, as discussed in Chapter 5.

Answers to the question of the level of the ‘natural rate’ are extremely interesting in historical
perspective. Of the above studies, only Parkin [1973b], Rao [1977] and Nevile [1977] attempt
estimations. Rao puts it at 2 per cent, and Nevile estimates 2.3 per cent – the latter stressing
many caveats, including that indirect tax rates do not rise and that award wage growth follows
the pattern established from 1954/55 to 1969/70. Parkin’s [1973b] model generates a negative
natural rate, which he dismisses as meaningless. Elsewhere, however, he gives his “best guess
that it is in the order of 1.7 per cent.” [Parkin, 1981 (1973a)] These estimates are not a
departure from earlier post-war estimates of ‘full employment’!

Reading Parkin’s own policy conclusions drawn from the N-REAP vision and urged on
policymakers in a 1973 public lecture, it becomes absolutely clear that these models in
themselves do not explain the degree of ‘stagflation’ that subsequently developed. He
recommends that

an unemployment rate of 2 per cent could be expected eventually to reduce inflation to zero... My
guess is that a 2 per cent unemployment rate would bring inflation close to zero in something like five
years... the best we can achieve if we insist on avoiding inflation is the natural unemployment rate of
approximately 1.7 per cent... It is pious nonsense to suggest that direct controls can change this.
By mid-1975 unemployment was above 4.5 per cent and rising, while CPI inflation had accelerated to more than 15 per cent at an annual rate – around triple its rate during 1973. (See Figures 8.3 and 8.4) When Parkin revisited his earlier claims in 1976, he admitted that no plausible treatment could explain what had happened with reference to expectations. Rather, the natural rate of unemployment must have shifted. Pointing to a peak in unemployment at five per cent in the third quarter of 1975, and a decline in inflation back to around 10 per cent, he confidently predicts that “a natural rate of around 2.5 per cent is rather likely”, implying that inflation would continue to rapidly decline and unemployment return to a more acceptable rate. As for why the natural rate had shifted, he gives “only the most obvious factors: improved unemployment compensation which makes unemployment more agreeable; revaluation and tariff cuts which raise labour turnover; the oil price rise... and massive about-turns in monetary and fiscal policy...” [Parkin, 1981 (1976): 249] Calmer policy settings and a return to international stability should then return the natural rate to normalcy.

In retrospect, of course, these predictions appear as unfortunate as the earlier ones. The natural-rate, expectations-augmented Phillips curve has since the 1970s continued to function at the core of mainstream macroeconomic treatments of the relationship between inflation and unemployment, though ‘natural’ fell out of fashion to be replaced by the more literal but more awkward ‘non-inflation accelerating rate of unemployment’ (NAIRU). It is widely accepted that such a NAIRU is ‘time-varying’ – shifting over the long run due to various factors in the labour market and elsewhere. [Gordon, 1997; Pollin, 1999] A 1999 Reserve Bank of Australia study attempting to establish the Australian NAIRU and its variations over time by recursively estimating it from an N-REAP model finds that it was stable at around 2 per cent up to the early 1970s, and stable at around 6 per cent from the mid-1980s – and chaotically fluctuating in between. [Gruen et al, 1999] (See Figure 8.6.)

Because of the apparent instability of the ‘natural rate’, the usefulness of the N-REAP paradigm for purposes of prediction was limited from the mid-1970s. It was not in itself an explanation for the combination of high unemployment and inflation that had erupted. The message from those who accepted a variable natural rate – that it could potentially be influenced via wage-setting institutions – was not at all a break from the Keynesian views of the 1950s and 1960s. The importance of expectations, or at least momentum, to the inflationary process was generally accepted, and the impact of the N-REAP model framework on economists in Australia as elsewhere is undeniable. But to say that few economists or policymakers expected that there was a 'trade-off' between inflation and unemployment in the
long run is not to say much at all, when the unemployment rate was in any case so far above what even the most pessimistic thought to be the long-run norm.

**Figure 8.6: Estimated time-varying NAIRU in Australia**

![Graph showing estimated time-varying NAIRU in Australia from 1969 to 1997.](image)

Source: Gruen et al [1999: 17]

On the other hand, the myth that responsibility for the troubles of the 1970s lay with policymakers who had for too long foolishly or cravenly tried to exploit a trade-off that did not exist, and let expectations get out of hand, was undoubtedly of great political value. I now turn to the making of policy in the 1970s.

### 8.4 Inflation, distributional conflict and ‘fighting inflation first’

Mid-1973 was a turning point in the public discussion of inflation, according to Hagger [1978]. ‘The inflation-unemployment trade-off’ gave way to a framing in terms of wage-price spirals and incomes policies. This was related both to the first taste of stagflation, in which prices kept rising though unemployment increased, and to the perception of ‘imported inflation’ discussed in Chapter 7 because it was simultaneous with rising food prices associated with the commodity price boom, as well as domestic climatic conditions. Inflation
first hit double figures (on a previous-four-quarters basis) in the September quarter, and food prices punched well above their weight in the consumer price index. [Hughes, 1980: 59]

Figure 8.7: Money-earnings and labour productivity growth (%)

Source: Foster [1996: 207]

Note: Prior to 1981/82 the figures for money-earnings growth are ‘male unit equivalent’ earnings – total earnings divided by the number of male employees plus a proportion of female employees weighted to take account of the earnings differential. From 1981/82, the figures are male average weekly earnings. See Foster [1996: 207] for an explanation.

Treasury had been emphasising ‘the cost problem’ in its annual statements on the economy since 1968. “To the Treasury, the ‘cost problem’ was essentially a ‘wages problem’, for the simple reason that wages were the main element in costs. The ‘wages problem’, in turn, referred essentially to the escalation in the rate of increase in wages apparent since the mid-1960s.” [Whitwell, 1986: 181] As can be seen in Figure 8.7, average money-earnings growth outpaced that of labour productivity throughout the last half of the decade. Treasury repeated the orthodoxy of the post-war period (see Chapter 5) that over the long run the wage-profit share was constant, and such an excess of money-wage over productivity growth could only raise the price level:

Although increases in money wages will increase real wages in the short run, the gain in real terms will be whittled away if prices rise in due course... Any employer who cannot increase productivity fast enough to offset continuously increasing wage costs will obviously be forced to raise his price or accept losses which if not relieved must in the end force him out of business... That they have in the main succeeded in doing so seems evident... This relative constancy of the proportions [of gross
national product going to wages and profits] suggests that raising money wages faster then productivity can in fact increase the share of wages in gross national product very little and then only for a short time. Higher prices will help to restore the share of business profits and the result will be continuously rising costs and prices with all the difficulties that must make for export producers or others who cannot adjust their prices to higher costs. [Treasury, 1968: 12-13]

Until 1973/74 the data were consistent with this argument: as Figure 8.8 shows, real unit labour costs remained fairly steady, suggesting that firms were on average able to recover the costs of higher money-wages with higher prices.\(^{39}\) However, it did not follow from this that money-wage growth was the cause of inflation, since it could just as much be about workers achieving compensation from previous price rises. As discussed in Chapter 5, the notion of inflation as a circular phenomenon was already current in Australia in the 1950s, and Treasury’s argument here was well out of step with the emerging doctrine of inflationary expectations, which it would become enthusiastic about. Without the pressure of balance-of-payments crises, the implication that policy should be further tightened to slow money-wage growth did not carry the day in the late 1960s. Nevertheless, Treasury statements became increasingly vitriolic against the unions in the early 1970s:

![Figure 8.8: Real unit labour costs index (average 1966/67-1972/73 = 100)](source: Foster [1996: 207])

\(^{39}\) Note, however, that average real earnings were able to grow slightly faster than productivity growth over the same period. This can be consistent with steady real unit labour costs because the real earnings figures deflate money-earnings with the consumer price index, while unit labour costs deflate it by the implicit price deflator non-farm product. [Foster, 1996: 280]
the Treasury's prose, usually dry, became almost animated when describing trade union behaviour. Trade unions emerge from Treasury documents of 1970-72 as essentially avaricious institutions relentlessly pursuing higher and higher wages, leaving in their wake the unprotected to struggle against their inflationary legacy. To the Treasury, such behaviour could not be tolerated. Its message was that at the very least it was necessary to ‘stiffen resistance’ – to use its phrase. There was no point in attempting diplomacy. For the techniques of persuasion were impotent in the face of such avarice. There was no other remedy but the use of strongly deflationary policies. [Whitwell, 1986: 189]

The 1971 survey complained about “a hardening disposition to obtain greater improvements in money wages and working conditions... [and] amongst broad sectors of the workforce a greater readiness to press claims to the limit, less readiness to accept delay in the settlement of claims and a considerable speed-up in the cycle of claim, settlement and new claim.” [Treasury, 1971: 23] It was, in fact, the case that labour had become more militant in the last years of the 1960s, in line with workers in the United States, Britain and Europe in what Nordhaus [1972] dubbed “the worldwide wage explosion”. In Australia unions increasingly pushed for wages and conditions outside the framework of the arbitration system, and even against it. This was most dramatically symbolised by the general strike against the penal sections of the Conciliation and Arbitration Act following the jailing of Tramways Union Secretary Clarrie O’Shea in 1969. Figure 8.9 shows the wave of strikes and other industrial disputes around the turn of the 1970s. In the three years from 1969/70 labour was very successful in achieving a high rate of real wage growth. But at this point there was no squeeze on profits: productivity was also growing at a rapid rate, so that real unit labour costs were no higher in 1972/73 than they had been in 1966/67. Treasury had no reason to question its assumption that wage increases in excess of productivity growth would simply feed inflation.

Milton Friedman and his disciples were firm in arguing against any independent role for money-wage growth in the inflationary process, and this had formed a second pole in the policy debate on inflation in Australia by 1973. Parkin [1981 (1973a): 235-36] dismissed the idea that labour militancy could increase the rate of inflation. He argued that expectations-augmented Phillips curve models explained the data so closely without a variable for militancy that “there is not much left over for such a variable to explain”, and pointed out that wage and price inflation had been occurring in countries with “very different union structures and militancy levels”. However, “[w]hat [militancy] can do is lead to a redistribution of income as the increasingly militant group extract the larger share of real output which their new-found strength makes possible.” Further, when unions know that government demand management policy will not allow wage growth to lead to unemployment, they bear no risk in
pushing for as much as they can. “This leaves in the air the question of what determines how much they can get and we are back to the climate of excess demand and inflationary expectations as the only candidates seriously offered and shown to come through.” [ibid: 236]

Friedman himself, during his 1975 visit, was eager to explain on Australian television that although “trade unions – in your country and mine – do a great deal of harm... [but] the harm which trade unions do is not in producing inflation”. [Monday Conference, 14 April, 1975: 12] He advocated indexation of wages alongside indexation of “all kinds of contracts” as “not itself a cure for inflation, but... a very desirable measure to reduce the costs of curing the ills of inflation.” [ibid: 8] This advice flew in the face of Treasury’s opinions and advice on indexation. It was not only committed monetarists who took the view that wage pressures were not an independent influence on inflation. As noted in Chapter 7, the RBA’s macroeconomic model endogenised even Award wage decisions. [Jonson, 1973: 21]

The third pole of policy debate that had emerged by 1973 was the advocacy of prices and incomes policy to manage wage and/or price growth from above, which had been a minority opinion earlier in the decade, but the emergence of stagflation and seeming inadequacy of demand management alone made a lot of converts very quickly: by the end of 1974, writes Hagger [1978: 175], “Australian economists appear to have reached an impressive consensus

Figure 8.9: Industrial disputes

Source: Foster [1996: 213]
on prices and incomes policy. Practically all economists who discussed inflation in this period went on record as favouring the immediate introduction of a prices and incomes policy.” This is an exaggeration, but such policies were much favoured in the press.

The proposals were motivated by the idea that the cycle of inflationary momentum could be broken if some way could be found of negotiating a consensual distribution of real income between profits and wages, and between different groups of workers.\(^{40}\) Two groups of academics promoted plans in the press in 1974. The first came from the Institute of Applied Economic and Social Research at the University of Melbourne – the so-called ‘Melbourne Plan’. It proposed a package of measures based on an agreement with the unions to restore quarterly wage indexation in return for a commitment to limit claims beyond this to three per cent per year. The Commonwealth Government would grant no wage increases beyond this; the Prices Justification Tribunal (see below) would disallow any price increases on the basis of excess wage increases; excess wages could not be claimed as a business expense for tax purposes, and there would be a 100 per cent marginal income tax rate on excess wage increases. Another group from South Australia presented a similar plan (the ‘Adelaide Plan’), but in which indexation would wait until inflation was no longer accelerating. [Guttmann, 2005: 20-22] These plans were popular not only on the left – as instruments for restraining the unions, they sat easily with a conservative worldview. In opposition, the Coalition’s counter-inflation policy was actually centred around incomes and prices policies. Economist Donald Whitehead, who in the 1950s and 1960s had championed the message that money-wages should not grow faster than productivity, was an opponent of monetarism, now author of a book advocating incomes policies as a solution to stagflation [Whitehead, 1973], and “the dominant adviser” to the Coalition in 1973 and 1974. [Guttmann, 2005: 25]

Meanwhile, the Whitlam government made a practical experiment with the Prices Justification Tribunal, which began operating in August 1973, and to which every company with annual sales of more than $20 million had to report its planned price increases. This was an odd creature with no power to actually enforce price restrictions – which would be counter to the Commonwealth constitution. Instead, it simply imposed a time-consuming and public process on firms intending to increase prices, and no firm defied its recommendations.\(^{41}\) It

\(^{40}\) Nieuwenhuysen and Sloan [1978: 95-96] emphasise that supposed wage-wage spirals were as important to the proposals as wage-price spirals, given the ‘follow-the-leader’ manner in which wage settlements for one industry or skill category would influence others. Hughes [1980: 106-13] gives interesting background about the strong views of Clyde Cameron, Minister for Labour in the Whitlam Government, regarding inequality between different groups of workers, and his desire to narrow the gap between blue and white collar professions.

\(^{41}\) Officer [1976: 58-59] explains the process, which involved a submission to the Tribunal, a three-week
probably had a minimal impact on inflation, mainly affecting the timing of increases, and it was often seen as a political gimmick, but it lasted until 1981. [Chapman and Junor, 1981; Whitwell, 1986: 212-14] At the end of the year, the government initiated two referenda on giving the Commonwealth parliament power to control prices and incomes, and both failed, though price control proved more popular. [Guttmann, 2005: 25] Incomes policies could not be imposed from above – as in the 1950s and 1960s, it would depend upon persuading either arbitration judges or the unions.

*Profit squeeze*

But ultimately 1973 was a turning point not only because of the crystallisation of these three points of view – the Treasury line, monetarism, and the advocacy of incomes policies. It was also the year of the global commodity price shock – of which oil was only a part. It is often said that Australia as a national unit gained as much as it lost from the commodities boom of the 1970s, as a major commodity exporter. The terms of trade leapt up by more than 25 per cent over 1972/73 and 1973/74, but then fell back to their starting point over the next four years. [Foster, 1996: 30] But it is misleading to interpret the experience at this aggregated level, because gains and losses were unevenly distributed, as in the wool boom. Rural and minerals exporters benefited enormously in the first instance, though many of their costs also rose. But to industrial capital and labour, of course, the commodities boom was a great increase in costs. Figure 8.10 shows the *Economist* commodity price index, which is weighted towards the imports of industrialised countries, and the more general IMF index – with Australia’s situation somewhere in the middle (though the exchange rate movements discussed in Chapter 7 should also be born in mind.)

The ‘wages explosion’ of 1974 must be seen in the context of the commodities boom. But it is not reducible to it. Wages did more than keep up with inflation: in 1974/75, nominal average weekly earnings grew by 25.4 per cent, beating inflation by a full 8.7 percentage points (see Figure 8.11). What happened was the result of a conjunction of factors: the acceleration in inflation in 1973 ‘imported’ due to the commodities boom, which fed into a wave of catch-up money-wage growth in that year. This wage growth gathered momentum over the following year due to conditions of labour shortage in some industries and union confidence, and fed through the wage structure as a whole as other sections of industry followed the leaders.

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consideration period and then potentially a counter-recommendation, which, if refused, triggered a public enquiry.
Hughes [1980: 57-84] traces this pattern of price and wage increases across 1973 and 1974 in great detail. He shows the importance of the initial shock from the commodities boom through food prices, which led the consumer price index: inflation would have been a third lower in 1973 had the cost of food maintained its prior rate of growth. [ibid: 59] In that calendar year money-wage growth lagged inflation slightly, and only began to recover in 1974. Figure 8.11 shows that over the financial year 1973/74, real wages grew, but not as strongly as productivity. Hughes thus dismisses the suggestion that a supportive attitude on the part of the new Labor Government was responsible for the acceleration of price increases.

Thus the allegation that [Minister for Labour Clyde] Cameron’s encouragement of unions led to a more hectic pace of wage rises in 1973 can only be equivalent to the proposition that in the absence of this friendly voice at court, real wages would have declined significantly. The previous three decades gave not the slightest hint of such a result. Time and again unions demonstrated that they were perfectly capable of protecting their interests. In only two post-war years had real wages declined, and then only minutely. What is remarkable about 1973 is the fact that real wages did not rise, given that demand turned in the unions’ favour... Along with everyone else, the unions were overtaken by inflation. [Hughes, 1980: 61]

The wage push of 1974 began in the steel industry of New South Wales, with a 20.5 per cent (average) wage increase negotiated between BHP and metal-workers unions, presented as a
fait accompli to the state Industrial Commission and stamped on 2 January. It quickly spread through the broader metal and car industries and into transport. Hughes [1980: 72-78] argues that although unemployment was “barely inside conventionally accepted estimates of the full employment zone”, this outcome was largely a result of labour shortages in those industries. The reason was the previous government’s sharp reduction in the immigration intake, which disrupted heavy manufacturing’s regular source of labour. The industry was quick to cave in when the unions sought recompense for the previous year’s inflation plus substantial real gains. The pattern-setting national metals award was somewhat more modest – an average increase of 15 per cent. The national basic wage decision in May amounted to only a 4.5 per cent rise for the typical worker – but this apparent attempt at halting a wage-price spiral by not allowing money-wages to keep up backfired, because “it could hardly hope to persuade unions that their future interests would be better served by decisions of the commission than collective bargaining.” [ibid: 81] It was a recipe for ‘earnings drift’ on a grand scale, and following a General Motors deal in April “the wage scene was one mad scramble” in industry after industry. [ibid: 81]

**Figure 8.11: Real earnings and productivity growth**

Source: Foster [1996: 32]

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42 He bases this argument on a divergence between unemployment and vacancies rates, which had previously closely tracked one another.
The ‘wage explosion’ in many industries proceeded “by consent” in that firms – especially large firms – acquiesced in the expectation of recovering additional costs with wage rises. But it turned out that firms on average were not able to adjust their mark-ups enough, and real wages ate into the profit share. Figure 8.12 shows Mohun’s [2004] calculation of the share of profits in money value-added in Australia. It is clear that 1974 is a major turning point, cutting 8 percentage points out of the profit share. The two major reasons why the money-wage growth resulted in a profit squeeze rather than flowing fully into price increases were (1) the large loss in international competitiveness for trade-exposed firms from the combination of exchange rate revaluation and tariff reduction in 1973 (see Chapter 7); and (2) the serious recession beginning in 1974/75.

Although this contradicted Treasury’s earlier view that firms would always maintain their income share by raising their prices in line with wage costs, Treasury advisers quickly adapted their argument. Wages were still the core problem, and behind it union militancy, but now policy had to contend with a ‘real wage overhang’. The new argument, which first emerged in the 1975 Budget statement [Whitwell, 1986: 217] was an explanation for stagflation rather than simply inflation. The role of expectations in sustaining inflation was part of the story, but unlike the monetarists, the Treasury line explained the stagnation side of stagflation with reference to income shares. It did not depend on an argument that there was an underlying ‘natural rate’ of unemployment – for reasons discussed above in Section 8.3, it was difficult to hold that unemployment gravitated towards such a rate when it had jumped well away from its historic norm.

The argument took on some variations over the next few years. From 1977 its statements sometimes gave a textbook neoclassical argument that the rate of unemployment was a result of high unit labour costs leading firms to substitute capital for labour – although this ran against the evidence of a declining investment-capital ratio and continuing decline in labour productivity growth – the problem was a lack of investment rather than too much investment in labour-saving equipment. [Pagan and Gray, 1983: 265] It was on firmer ground with the simpler argument that the wage push had undermined profitability and thereby business confidence, as well as the retained funds which financed most investment. The restoration of business confidence would require “a marked improvement of the profitability of business activities and the restoration of some sort of normalcy in the historical relationship between wage and profit shares.” [Whitwell, 1986: 217]

Although the real wage growth of 1974 was an extremely important reason for the slump in
profitability in the mid-1970s, the fall in the profit share was not the only factor. According to Mohun, the profit rate in the 1970s fell by nearly 50 per cent between its peak in 1968 and 1974. (See Figure 8.13.) Besides the profit share, this reflected a steady decline in the output-capital ratio from the beginning of Mohun’s time series in 1965 until the mid-1980s. Over the whole period 1965–85, each of these two factors account for roughly half the total decline in the profit rate. [Mohun, 2003: 91] While the reasons for the decline in the output-capital ratio are not entirely clear, part of the explanation lies in the great increase in non-wage costs associated with the commodities boom, as well as structural problems as industrial structure adapted to the pressure of international competition. Given such a decline, maintaining the rate of profit would have required not a steady profit share, but an increasing one: unit labour costs would have had to decline. It is important to realise, then, that the distributional conflict of the 1970s involved this squeeze at both ends. Furthermore, in the last half of the decade and into the 1980s, labour productivity growth grew substantially slower than it had in the 1960s and early 1970s. Labour and capital were thus fighting over a cake that was growing more slowly.

Figure 8.12 Profit share of money value-added

Source: Mohun [2003: 90]

43 Pagan and Gray [1983: 265] reach similar conclusions about the trend of the rate of return on capital, despite a very different methodology.
The upper echelons of Treasury at least were never very taken by the monetary side of the monetarist argument, that controlling inflation was ultimately about controlling the money supply. (See Chapter 9.) But when the Fraser Government committed itself to monetary targeting in 1976, its practical results in terms of demand management were no different from what Treasury thought necessary on the above grounds. Treasury believed macroeconomic policy was simply powerless to deal with unemployment until it had fought inflation first, eliminated the ‘real wage overhang’ and restored profitability and business confidence. The monetarist line that by simply maintaining a steady rate of money supply growth was neutral, ‘hands-off’ policy was an illusion. By any metric based on aggregate demand, the period of monetary targeting meant restrictive fiscal and monetary policy, plain and simple – and this was how Treasury wanted it. This fiscal policy of the late 1970s was thus the product of a tactical alliance between two of the three schools of thought on counter-inflation policy that had defined themselves in 1973 – the Treasury line that wages were the problem, and the monetarist argument. In a way, monetarism provided a perfect alibi for a policy of restraint tighter than anything that could have been countenanced in the postwar years.

Nowhere is this better illustrated than in the government’s deployment of the monetary targets in its representations to the Arbitration Commission. It presented the projected growth in
nominal income over the coming year as a fait accompli of the monetary target, and stated outright that the judges’ decision on wage growth would determine how much of that growth would be job-creating real growth, and how much simply eaten up by inflation. See, for example, this extract from a 1978 submission:

[T]he monetary framework is consistent with a continuation of the Commission’s past practice of awarding an average of about 75 per cent indexation. The wage assumptions on which the monetary framework was developed should thus be seen as providing a ceiling beyond which wage increases themselves would directly aggregate our economic problems. However, they should not be construed as targets, as optimum results, which the Commission should endeavour to obtain. The Commonwealth, of course, would prefer to see a lower rate of award wage increases than the 75 per cent assumed. That would be a better outcome. Wage increases less than those assumed in the Budget would mean a further reduction in inflation with greater scope for real growth. It would also result in a more rapid alleviation of the imbalances in the economy which are restricting recovery, and would therefore lead to improvement in labour market prospects. [Commonwealth Government, 1981 (1978)]

8.5 Conclusion: towards the Accord

In Section 8.2 I showed that fiscal policy in the last half of the 1970s shifted into restraint, reducing the budget deficit year after year, despite high levels of unemployment. In Section 8.3 I showed that ‘natural-rate expectations-augmented Phillips curve’ (N-REAP) models did not explain the combination of unemployment and inflation Australia experienced in the 1970s. This means that the policy transition cannot be explained as a result of policymakers ‘seeing the light’ about the role of expectations in the inflationary process.

On the other hand, Section 8.4 has shown that it cannot be understood as a simple ‘conversion’ of policymakers to monetarism, either. I argued that there were three competing paradigms of counter-inflationary policy. Although the monetarists were the most dismissive of active macroeconomic policy, they had a technical view of the problem, arguing that the economic system was essentially predictable and subject to stability if only policy set its instruments according to the correct theory. Both the other paradigms saw inflation as a problem of competing income claims within the economic system. The advocates of incomes policies believed that policy could tame this conflict and restore full employment and price stability through the rational management of income shares. The Treasury line was pessimistic about the possibility of incomes policies, holding instead that a sustained period of unemployment was probably necessary to hold real wage growth below productivity growth long enough to restore the traditional distributional share between labour and capital.
Although the Treasury line had major differences from the monetarist argument over the nature of the problem of stagflation, the practical form of their prescribed policies were identical. An alliance was therefore possible, in which monetary targeting provided an organising principle for policy, and more importantly, a public justification for restraint despite the high rate of unemployment.

Figures 8.8 and 8.11 show that the policy was reasonably successful in doing what Treasury hoped it would: hold back real wage growth below the rate of productivity growth and reduce unit labour costs. By 1980 the profit share had been nearly restored to its level prior to the 1974 ‘wage explosion’ (See Figure 8.13). (The average rate of profit was not restored to quite the same extent on account of a continued decline in the output-capital ratio.) The boom of 1980/81 seemed at last a vindication of the strategy.

However, the subsequent recession and further blow-out of unemployment, while inflation rose back into double digits, was a severe blow. Fiscal policy was finally reversed to expansion in the 1982 budget. The third of the paradigms – incomes policy – finally had its day. Once again, a policy transition preceded the change in government, with the Fraser Government initiating a ‘wages pause’ in December 1982. But this was quickly superseded by the Prices and Incomes Accord between the incoming Labor Government and the Australian Council of Trade Unions, which finally seemed to succeed where Arbitration-centred attempts had failed – at persuading the unions to identify themselves with a macroeconomic variable and act accordingly as a policy instrument. As Barry Hughes would later put it: “The role that was being played by the -1 part of M-1 was taken over by the Accord.” [quoted in Guttmann, ibid: 175]

An assessment of the Accord period is beyond the scope of this thesis. But in its first years it appeared to be remarkably successful, with CPI inflation reduced to 4.3 per cent in 1984/85, even as unemployment slowly retreated below 8 per cent. But the pendulum would swing again: another half a decade and Treasurer Keating would be talking about “the recession we had to have.”
9: Monetary policy in the long 1970s

9.1 Introduction

The development of monetary policy through the 1960s, 1970s and 1980s is often portrayed as a story of movement from regulation to deregulation, or from a state-centred system to a market-centred system. This is the basic story, for example, which Schedvin [1992] sees underlying his intricately detailed history (though it leaves off in 1975):

Running through the story of monetary management was a gradual swing of the pendulum of central banking philosophy towards liberalisation and to reliance on markets as the fulcrum of action. As the memory of depression and war faded, suspicion of the markets receded. The change was imperceptible at first, became more pronounced in the 1960s, and gathered momentum with global financial integration following the breakdown of Bretton Woods and the revolution in electronic communication. Towards the end of the period covered in this book, the myth of market invincibility emerged that helped to dismantle the remaining tangle of regulation and create a largely free environment for financial institutions. [Schedvin, 1992: 544]

It would be easy to integrate this story into a broader narrative of the ‘rolling back of the state’ in favour of markets. But the state-market dichotomy is problematic – certainly ideologically important to ‘neoliberalism’ as a political project, and to some of its opponents, but questionable from the perspective outlined in Chapters 1 and 2, which sees states and markets as mutually-dependent structures. From this perspective, it makes little sense to say that where the market is, the state is not, and vice versa, i.e., to see the political-economic system as a zero-sum game. The aim of policy, after all, is not to restrict the economic system for the sake of restriction, but to improve its functioning. The power or capacity of policy is better judged in terms of its ability to attain its objectives.

Considered in this way, there is no contradiction between seeing policy as becoming both more market-oriented and more powerful. It is still necessary to be explicit about what ‘more market-oriented’ means: the phrase evokes certain associations but is in itself too vague. On the one hand, it means that the chains of causation between policy instrument and target came to rely less on directives to non-state actors and more on voluntary trading with them. On the
other hand, it also refers to ‘deregulation’, or the removal of state-imposed restrictions on non-state actors. This was certainly a feature of the later part of the period – but it is important not to overstate the extent to which the structure of the financial system is described by regulation. It is clear from Chapter 6 how much the financial system can evolve under a particular system of regulation, which is mainly a set of negative proscriptions rather than a positive shaper of the system. In some ways the term ‘deregulation’ may mislead if it gives an impression of a one-way process of the removal of restrictions, when the real process is often about the removal of restrictions made obsolete by the system’s evolution, and their replacement by a new regulatory program.

In either case, again, there is no necessary connection between a more ‘market-oriented’ or ‘deregulatory’ policy and a weaker policy apparatus considered in terms of policy’s ability to achieve its targets. I argue to the contrary in this chapter that monetary policy continued to be strengthened on balance over the period. In fact, policy’s movement towards market-orientation happened largely because such shifts strengthened monetary policy, given the direction of evolution of the financial system itself. The movement makes sense in terms of Jessop’s concept of strategic selectivity, discussed in Chapter 2. Though there was certainly an ideological element favouring the shift, a mode of policy strategy was unlikely to have been selected if it was dysfunctional for policy, particularly when the magnitude of the problem of inflation made such large demands on monetary policy.

In Section 9.2, I discuss the maturation of market-based policy in the 1960s and early 1970s, in the context of an evolving financial system of greater depth and complexity. The evolution of the market and its institutions was a relatively independent cause of the policy shift, making certain market operations possible that were previously not. At the same time, I emphasise that the banking regulation developed in the 1950s remained a necessary precondition for this policy since banks continued to be the major players in the financial markets and their lending behaviour a key source of variation in the money supply.

In Section 9.3, I discuss the monetarist period of policy from the mid-1970s to the early 1980s. Monetary targeting was imposed politically on the central bank and did not reflect an internal conversion to Friedmanite monetarism. However, monetary policymakers were not opposed to the tightening the projections entailed. The monetarist framing enabled a strengthening of monetary policy by any means necessary to chase the targets – via bank regulation as much as by market operations. Even so, policymakers faced increasing difficulties meeting the projections for a variety of reasons, and the projections were retained
as long as they were mainly to play to market expectations. A critical aspect of the monetarist period is that it involved, at least in its early years, increasing recourse to active use of banking controls as policy instruments – in a partial reversal of the apparent trend to ‘market-oriented policy’ – as policy sought to deal with the accumulating instability of the early 1970s. A teleological narrative of a one-way drive towards the market would have difficulty accounting for this reversal. But it presents no problem to my account, based on the strategic selectivity of functional policy.

Finally, in Section 9.4 I discuss the Campbell Financial System Inquiry and the deregulatory movement of which it was a part. I argue that although deregulation would make monetary targeting intractable, it was, again, functional for monetary policy in a broader sense. The rationalisation of the complex of regulations that had evolved in an ad hoc way alongside the evolution of the financial system had the potential to further strengthen policy, because it strengthened the competitiveness of the trading banks on which policy still relied, and facilitated effective open market operations. Thus it was strategically selected.

9.2 Banks, markets and monetary policy into the 1970s

Policy, banks and markets

In Chapter 6 I described how a bank-centred monetary policy was progressively undermined by the development of non-bank financial institutions in the 1950s. Finance companies grew to fill a niche in the environment which existed in part because of demand for consumer credit which the banks were not allowed to supply, and in part because of a demand for financial assets of greater yield (but greater risk) than the banks were able to offer, given regulatory interest rate maxima. This eventually forced policy to move towards a greater degree of interest rate flexibility. Thus the immediate reason for interest rate variation playing a more important role as a policy instrument was to defend a bank balance-sheet-centred monetary policy. This depended on the trading banks not continuing to lose market share to non-bank financial institutions, which in turn required that their interest rates be competitive with these rivals (even though these ‘rivals’ were often subsidiaries of the trading banks). Figure 9.1 shows that the non-bank financial institutions did indeed retreat in the first half of the 1960s; the proportion of financial assets held by trading banks stabilised, while the savings banks expanded. From the perspective of the onward march of market-based policy, this was a reversal.
However, the initially defensive nature of the use of interest rate variations should not be seen entirely in terms of financial innovation threatening a monetary policy that was dirigiste by choice. As discussed in Chapter 6, it was not central bankers who favoured low, inflexible interest rates, but the broader coalition of political forces behind ‘cheap money’.44 The central bank had consistently favoured more flexible exchange rates, and the shift can be seen as a strengthening of its position: the gain of an instrument for monetary policy. Furthermore, the development of the finance companies in the 1950s had been bound up with the deepening of a market for private fixed-interest securities and the emergence of a money market (i.e. for short-term paper), which the authorities promoted and guided, in the hopes of eventually fostering the capacity for open-market operations. Central bankers saw open market operations, involving voluntary transactions, as a more subtle policy technique than the system of variable impositions on bank balance sheets, which put them in continual tension with the trading banks.

Figure 9.1: Assets of financial intermediaries by type, % of total

![Chart showing assets of financial intermediaries by type from 1953 to 1985.]

Source: Foster [1996: 124-25]

But for most of the 1960s the central bank remained the main player in the market for bonds (short and long-term), such that the very existence of a market depended on state

44 Although, again, flexibility was more important to central bankers than an absolutely higher rate. According to Schedvin [1992: 343]: “The Bank was only slightly less addicted to cheap money than Treasury; the chief difference between them was the degree of interest rate flexibility within the regime of cheap money.”

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involvement, and the great bulk of fixed-interest securities were still government bonds. Turnover on the public ‘on ‘change’ market based in the stock exchanges was much smaller than the ‘off ‘change’ market between banks and other institutions, and the central bank was necessarily heavily involved in both to smooth mismatches between buyers and sellers. Effectively the Reserve Bank worked as a broker, because there were many more desired small-scale sales of bonds than desired small-scale purchases: buyers could simply subscribe to regular new issues. To talk about ‘market determined’ interest rates in such an environment as something opposed to ‘state determined’ interest rates would be misleading: it is difficult to distinguish between the provision of liquidity to a market and the support of rates.

In the 1960s, the use of interest rate shifts as a policy instrument was almost as common as movements in the Statutory Reserve Deposit (SRD) ratio quarantining bank reserves. (See Figures 9.2 and 9.3.) But the channels of transmission through which interest rates were presumed to affect aggregate demand were different from textbook neoclassical-Keynesian (IS-LM) conceptions, or the later assumption that interest rates would normally work via the demand for credit. Scepticism about the interest-elasticity of demand for credit (at least within the range of thinkable interest variation) remained. Instead, interest rates were supposed to work at least as much through the supply of credit. It was the structure of relative rates that mattered here, with policy aiming to influence the attractiveness of bank deposits vis-a-vis other short-term instruments, on the grounds that a shift from the former to the latter facilitated a greater volume of credit for a given supply of bank reserves. (See Chapter 6.) Reserve Bank Deputy Governor J. G. Phillips [1971 (1964): 77-78] explained the thinking in a public lecture in 1964, saying that “[s]cope to vary interest rates... means that steps can be taken to make bank deposits more competitive with other forms of short term investments.”

45 Coombs’ [1981 (1960)] testimony to the UK Radcliffe Committee on Australian monetary policy arrangements is an excellent source of information on the technical workings of the market and government involvement in it – though the picture was changing rapidly even as he spoke.
Figure 9.2: Indicators of bank liquidity

Source: Davis and Lewis [1978: 21]
Figure 9.3 Selected interest rates

Source: Davis and Lewis [1978: 23]
For this reason, Rowan [1980: 122-23] describes the 1960s as “the Radcliffian period” in Australian central banking, after the British government’s Radcliffe Report of 1959. Radcliffe [1959] emphasised the relationship to expenditure of all liquid assets, rather than means-of-payment alone. It followed from this that the spread of interest rates between more and less liquid assets would be important to policy. It is clear from Phillips’ mid-decade discussion of the workings of policy that the central bank continued to be concerned mainly with the quantity of available (or potential) credit and its relationship to aggregate expenditure. This meant a preoccupation with the complex of market relationships by which the banks and non-bank financial institutions stretched the liquidity of the system during an upswing, rather than thinking in terms of an institutionally flat, predictable relationship between the money supply, nominal income and interest rates.

In terms of the quantity relationship, policymakers believed the velocity of money would be variable. The variability of velocity would be irreducible to a stable function with respect to ‘the’ interest rate, because differences between interest rates on different deposits or instruments would result in the transfer of funds between institutions with different capacities for leverage. Furthermore, the precise relationships involved would be difficult to predict and unlikely to remain stable thanks to the flux of the institutional environment. Therefore, policy had come to resemble a complicated game in which policymakers needed to co-ordinate all available instruments – the Statutory Reserve Deposit ratio to modify available trading bank reserves, variations in bank interest rate maxima, and open market operations – in response to moving targets, as non-financial units shifted their funds around in line with changing expectations and competition among financial institutions. For example, Phillips explained the counter-inflationary action of 1963/64 as follows:

[M]onetary measures were directed to influencing both the supply of and demand for liquid assets. Calls to statutory reserves were made progressively to immobilise increases in the banks’ liquid assets; the rate of banks’ lending was to be firmly contained... and the central bank, in its open market operations, moved more firmly to the position of a reluctant buyer and a willing seller... These actions were supplemented in April 1964 by a rise in bank interest rates designed to ensure continuing support for fixed deposits and to dampen the climate of expectations about the future course of asset prices. Fixed deposit facilities were also made more attractive to investors by reducing the minimum term for large deposits from three months to thirty days... The increases in bank interest rates were followed promptly by similar adjustments in other rates, including bond yields. [Phillips, 1971 (1964): 80]

The policy of the 1960s, then, was flexible, and involved market operations, but was

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46 See Chick [1977: 58-74] on the affinity (as well as the differences) between the Radcliffe approach and the structuralist post-Keynesian monetary theory discussed in Chapter 3 of this thesis.
extremely baroque and continued to depend on direct controls over the banking system. These actions in 1963/64 revived trading bank political pressure against the Statutory Reserve Deposit system, which the Reserve Bank withstood, but which strengthened its resolve to shift the weight of policy onto other instruments as much as possible. [Schedvin, 1992: 349]

A vision of ‘normal’ central banking based mainly on open market operations in an undifferentiated, level field of perfectly substitutable financial assets beckoned. Such was the Platonic monetary policy of the *General Theory*, with only two alternative stores of value, money and bonds. It was also the vision of the monetarists, who worked with a very broad conception of potential stores of value including real capital goods and commodities in general, but kept to a strict division between ‘money’ and everything else. Between these poles, the portfolio theory pioneered by Tobin [1961; 1963; 1969] and Brainard and Tobin [1968] offered a vision of high substitutability between assets (including real capital assets) of varying degrees of liquidity, but in which expectations of profitability and risk appetites were moving parts. In such a system, the transmission of policy works not only through the supply of and demand for money, but also through the supply of and demand for government debt instruments of various profiles, which play the role of money substitutes. This, as Chick [1978: 95] notes, has some similarities to the Radcliffe vision, in that a range of forms of liquidity are considered. However:

Consumers, firms, the banking system, other intermediaries, and the stock market have disappeared, as they did in IS-LM analysis. People and institutions are replaced by a portfolio of assets: money, Treasury bills, bank deposits, and machines, for which there are demands and supplies. The identity of the demanders, suppliers, and owners is unknown. Only the government retains its identity. It conducts policy, changing asset supplies. [ibid: 98]

Such a consideration can be read into Phillips’ [1971 (1964)] discussion of the difficulties facing policy in the mid-1960s. Policy cannot be indifferent to institutions because the kind of institution holding an instrument makes a difference to how much liquidity it contributes to the system as a whole. Australian policymakers were necessarily aware that the financial markets were not an undifferentiated, level field, but a tiered system involving multiple levels of liquidity, as I have described in Chapter 3. That is, banks must stand ready to pay net outflows with central bank liabilities, while non-bank financial institutions and non-financial units make payments largely with bank liabilities. When securities are sold between levels of the hierarchy, it makes a difference to the capacity of the system to leverage liquidity from a given supply of central bank liabilities.
So Phillips notes that open market operations have a different impact depending on what kind of institution is on the other side of the transactions. If the banking system buys new bonds and the government spends the money so raised, “bank deposits of the community rise and the level of bank cash is restored [so] the money supply and banks’ holdings of liquid assets... have increased”. But if non-banks buy the debt, “money supply (bank deposits) and bank cash decline and the supply of money substitutes (bonds) rises; if the government spends the funds raised, money supply and bank cash return to former levels... money supply and bank cash are unchanged, but the supply of liquid assets (money supply plus bonds) has increased.” [ibid: 81] Clearly the same basic principle applies not only to such initial sales of government debt, but to sales of government debt between banks and non-banks, which do not involve the authorities at all. This explains why, so long as policymakers aimed to use credit and liquidity (or potential expenditure) as intermediate targets, the active use of the flexible bank balance sheet controls was necessary.

One reason the authorities fostered the growth of a money market, maintaining lender-of-last-resort facilities with dealers of short-term securities, had to do with this multi-tiered conception of liquidity described by Phillips [1971 (1964)]. Money market funds worked primarily by attracting deposits from the public in competition with the banks and investing the funds in government securities. Their balance sheets were highly sensitive to yields on those securities, which drove the interest rates they offered depositors. Open market transactions between them and the central bank had a stronger impact on the liquidity of the banks and non-bank public than transactions between the central bank and the trading banks. This is because a purchase of a security from the Reserve Bank by a money market dealer, funded by a deposit attracted from the public, reduced bank holdings of central bank money without leaving a government security on the trading bank’s balance sheet in return. Remember that for bank purposes a government security was almost as liquid as central bank money – and the LGS convention set a minimum ratio of cash, Treasury Notes and government securities holdings to deposit liabilities, not cash alone.

Gurley and Shaw [1960], whose monetary theory has some resemblance to the liquidity approach of the Radcliffe Report, argue that the interest elasticity of demand for money, or liquidity, would increase with the progress of financial innovation. From the perspective of IS-LM analysis, this was destabilising, a shifting or morphing of the money-demand curve in an unpredictable way. But from the point of view of Australian policymakers, it could also hold out the prospect of a more effective, more direct link between instrument (interest rates
under the control or influence of the authorities) and target (expenditure). Added to this was the prospect that the level of certain interest rates could be used as a more direct channel of policy, as well as working via the channel of institutional liquidity. Although, as discussed in Chapter 6, economists of the 1950s generally did not believe the interest-elasticity of investment would be very high, opinion on this shifted in the 1960s, so that there was more confidence in the ability of policy to affect the demand for credit and not only its supply.47

More powerful market interest rate effects on both the demand for liquidity and the demand for credit would allow policy to rely less on the direct management of bank liquidity. That is not to say that the banking controls developed in the 1950s would become irrelevant. Even if policy worked entirely through open market operations, the chain of policy would still run through bank balance sheets, as banks remained the main supplier of liquid assets. The predictability of the effect of open market operations depended on some stability in the money (or broader liquidity) supply, and therefore in bank balance sheets. The struggle to impose liquidity constraints on the trading banks in the 1950s would thus have been necessary no matter how deep the money market. It is only that the banking controls would not have needed to be varied as an instrument of policy: movements in interest rates on bonds would control bank liquidity through quite voluntary non-bank portfolio shifts. It is interesting to note that central bankers in the 1960s considered expanding the scope of open market operations to private securities to improve their effectiveness. Phillips [1971 (1964): 84] complains: “The fact that open market operations are confined to government securities tends to limit the efficiency of the technique... the central bank’s capacity to influence the structure of debts and assets and money flows would be enhanced if it were possible to deal in other marketable assets that were widely held by the community.” Although government securities continued to dominate the market, shifts in their yields would affect the cost of capital to firms only with a lag. He does not say why this road was not tried, but it surely involved an ideological opposition to the idea of the central bank funding private enterprise.

Market development in the 1960s and 1970s

In the mid-1960s the prospect of a policy based on open-market operations was still a projection into the future. Financial markets were deepening, but it was a slow, evolutionary process. Figure 9.4, displaying the amount of Commonwealth Government debt held by different classes of institution, gives some sense of the expansion of the market. It can be seen

47 Griliches and Wallace [1965: 326] suggest that econometric tests in the 1960s began to find a significant interest rate effect on investment simply because of greater interest rate variance in the (United States) data.
that the share held by banks remained within 45-50 per cent of the total in most years until the late 1970s, at which point there is also a substantial rise in the proportion held by non-financial units. In itself, this division says little about market turnover, for which statistics are not available. It would possibly be more relevant to distinguish between active traders and more passive holders than between banks and non-banks, but again, there are no data to enable this distinction. It can be assumed, however, that savings banks are less active traders than trading banks, because of the regulatory requirement that they hold a large proportion of their assets in government securities. If it can also be assumed that non-bank financial institutions and other holders are generally active traders (though this may be less true of certain sub-classes such as pension funds), then the conclusion can be drawn that the market was becoming gradually more active and less-reliant on government support.

The Committee of Inquiry into the Australian Financial System (Campbell et al [1980; 1981]) reveals that turnover in government debt had greatly increased in the 1970s, suggesting that financial evolution had sped up despite the confusion of high and volatile inflation. Unfortunately the lack of earlier turnover data mean it cannot compare this period with the 1960s, but it notes a quadrupling in turnover on stock exchanges in Commonwealth Government securities between 1973/74 and 1978/79, to $1.7 billion. Most such on-exchange trading was in longer-term bonds (five-year plus), and Campbell et al [1980: 194] conclude that even at the end of the decade “it is not a well-developed market”. The off-exchange market in Treasury Notes and shorter-term bonds – mainly between banks and specialist money market dealers – was much bigger ($15 billion turnover in 1978/79) and had doubled in size since 1973/74.

Alongside the expansion of trading in government debt was a maturation of markets for private securities. Figure 9.5 shows that corporate debt issue generally exceeded capital raising via equity throughout the 1960s, and dwarfed it in the 1970s. Data on holdings of this debt, volume outstanding or turnover are not available, but clearly the market was maturing rapidly. Much of the corporate debt was short-term, and the development of a commercial paper market was encouraged by the central bank in the 1960s. [Campbell et al, 1980: 194-95]
As in the 1950s, finance and property companies accounted for the bulk of these capital raisings, except during the mining booms of 1968-72 and the turn of the 1980s, so much of it was about a different form of intermediation rather than of disintermediation. (See Figure 9.6.) Also as in the earlier decade, the deepening of the market was bound up with the emergence and growth of new kinds of institution. To some degree, in fact, it was a re-emergence. Figure 9.1 above shows that non-bank financial institutions began to reverse their post-credit crunch decline in market share in the mid-1960s, and their share of total institutional assets grew at a rapid rate in the early 1970s.

Figure 9.7 breaks down the non-bank category to show what form this growth took. Three types of institution dominate the growth: finance companies, permanent building societies and money market corporations. Finance companies were the major force of the first round of financial innovation in the 1950s, discussed in Chapter 6, and consolidated and re-emerged in the recovery from the 1960/61 recession. They raised money mainly by issuing bonds and notes, much of it with a maturity of less than two years and held by households. They filled a niche by offering relatively high yields on relatively short-term but riskier instruments, and
lending for purposes not covered by the banks. Consumer credit, especially for cars, continued to be important but the higher-risk end of business lending grew faster in the 1960s, and there was a turn to real estate in the 1970s. The sector was concentrated, with the seven finance company groups majority-owned by the trading banks accounting for almost half the sector’s assets, although there was also a ‘long tail’, with 30 per cent of assets held by 160 company groups. [Campbell et al, 1980: 139-45]

Figure 9.5: New capital raisings by listed companies, by type ($m)

Source: Foster [1996: 159]

Permanent building societies concentrated on real estate and were mostly co-operative non-profit institutions. Nevertheless they had an important impact on the market, being financed almost entirely through call deposits and withdrawable share capital. They borrowed very short term and lent very long term, mainly for owner-occupier mortgages. Their rapid growth is mainly a story of the 1970s, based on the rapid growth in household demand for mortgages beyond the capacity of the banks to provide it, and was symbiotic with the emergence of mortgage insurance facilities. They grew mainly at the expense of the savings banks, and thus represent a re-routing of household-to-household intermediation. Because savings banks were subject to regulatory requirements to hold 40 per cent of their assets in liquid and public securities, the building societies were able to extend much more housing credit for a given quantity of deposits, which they could attract by offering better interest rates to depositors. A
side-effect was therefore a decline in the ‘captive market’ for government securities and an increase in the proportion held by active traders. [Campbell et al, 1980:125-32, 155-60; 1981: 184-85]

**Figure 9.6: New capital raisings by sector: ($m)**

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<thead>
<tr>
<th>Year</th>
<th>Permanent building societies</th>
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Source: Foster [1996: 159]

**Figure 9.7: Non-bank financial institutions, total assets: ($b)**

- Permanent building societies
- Money market corporations
- Finance companies and general financiers
- Other

Source: Foster [1996: 120-21]
Though the smallest of the three categories, the rise of the money market corporations was the most remarkable from the perspective of monetary policy. (In fact the measure by assets understates their relative importance because their turnover was very high and they played an agency role.) These became known in Australia as ‘merchant banks’, but as Schedvin [1992: 382] notes this was “strictly a misnomer”, as they had little in common with the classic merchant banks of Europe. On the other hand, ‘money market corporation’, their regulatory definition, overstates their concentration at the short-term end of the market. They played a variety of roles in the financial system, advising and underwriting for large companies and public authorities as well as trading securities on their own account across the liquidity spectrum. They grew into a number of niches left by the regulation of the trading banks and competed vigorously with those banks and other institutions, and among themselves. They were of vital importance to the evolution of the system as a whole in this period because of their interstitial position and quickness to find opportunities to engage in arbitrage between different kinds of instrument and institution, thus helping to knit the liquidity/risk spectrum together into a more continuous form. [Campbell et al, 1980: 145-51]

Finally, they were immensely important in linking the Australian financial system into international markets. Figure 9.7 shows that their initial burst of growth came between 1968 and 1973, the great period of capital inflow discussed in Chapter 7, which they were both directly a part of and facilitated. Because foreign banks were prohibited from entering the Australian market as banks, they invested in subsidiaries which were not, technically, banks, but which did bank-like things and rapidly exploited the regulatory handicaps of the trading banks: “As the authorised banks did not pay interest on deposits of less than 30 days and, in any case, had to meet SRD requirements, the merchant banks were presented with an open field at the very short end of the money market.” [Schedvin, 1992: 388] I mentioned in Chapter 7 an important consequence: that short-term market rates began to be influenced by movements in the Euromarket at a time when policy was attempting tighter conditions than prevailed overseas.

The 1970s were a period of consolidation and slower growth, and the fortunes of the money market corporations were volatile – the collapse of Mineral Securities in 1971 emphasised the risk element in their securities and triggered a panic; the credit squeeze of 1974 induced more collapses. By late in the decade it was common to see the sector as overcrowded, a product of a bubble: “The wave of optimism certainly did not carry through to the profit and loss account.” [Tsung and Yuill 1981 (1978): 80] Their spreads between interest paid and received
were lower than those of the trading banks and other institutions, though this was compensated somewhat by their high degree of leverage. In any case, the narrowing of spreads reflects the fulfilment of the money market corporations’ historic mission so far as Australian financial markets were concerned — as catalysts of the homogenisation of financial space, filling out the possible paths of intermediation between the portfolio choices of non-financial units regarding how to store their wealth, and of borrowers about how to access money-capital. Because of the involvement of these institutions across the range of markets, and their ability to create new instruments, they intensified the interconnection between different institutional classes.

The ‘other’ category in Figure 9.7 is composed of credit co-operatives, pastoral finance companies, and authorised money market dealers. Credit co-operatives were non-profit institutions distinguished from building societies primarily by not being very involved in mortgage financing; pastoral finance companies have a long history in Australia and specialise in managing the particular liquidity and financing issues of farmers. The nine authorised money market dealers were of significantly more functional importance for monetary policy than the bulk of their assets suggests ($2 billion in 1983). As discussed in Chapter 6, these developed mainly out of brokerage companies and were fostered by the central bank at the end of the 1950s through the provision of lender-of-last-resort facilities — the only non-bank institutions to enjoy this. In return they “observe a capital gearing ratio, a requirement to invest the great bulk of their funds in shorter-term Commonwealth Government securities and a commitment to make and develop a secondary market in government paper.” [Campbell et al, 1980: 152] Their funding came primarily from at-call and short-term deposits, with a deposit minimum of $50,000 meaning most depositors were large firms, public authorities and banks. The essential differences from the money market corporations were (1) that they did not create their own tradable short-term instruments; (2) they dealt primarily in government securities; and (3) that they were the proximate vehicle for the central banks’ open-market operations in the money market. [Tsung and Yuill, 1981 (1978): 79-80]

**Policy eclecticism**

That the Reserve Bank was placing greater weight on interest rates as an intermediate target, and open market operations as an instrument, was apparent by the early 1970s. J. G. Phillips, then Governor, gave another public lecture in 1971 indicating that the bank had “been coming
to regard [open market operations] as the key instrument of monetary policy”. [Phillips, 1981 (1971): 27] At the same time, he explained that monetary policymakers now thought in terms of a variety of channels between its instruments and the ultimate target, still aggregate expenditure. The quantity of credit remained the focal point, but now interest rates were seen as the most important way for policy to influence it. The Radcliffe-like attention to the institutional balance sheet effects of interest rates was replaced by a Tobin-like vision of portfolio substitution: “As individuals seek to adjust [to interest rate changes] by shifting away from assets that have become less attractive, interest rates on other assets also change, and the process continues until actual holdings of all assets have been brought into line with desired positions.” [ibid: 20] Besides the credit effect, interest rates would also have a wealth effect on expenditure by changing the value of existing bonds and equities, and to some extent the quantity of money would affect expenditure directly, though Phillips was at pains to explain that the authorities did not have very tight control over the money supply, and the discussion of the quantity effect can only be described as half-hearted: “If money were showered from the roof of the Reserve Bank, it would, among other things, raise spending on goods.” [ibid: 21]

However, institutions remained part of the story insofar as financial markets are regulated:

In a completely free market, rationing of credit would be made effective purely by price. In most economies, however, there are various constraints, such as imposed or traditional maximum rates of interest charged by lenders. In such cases, the lenders have to resort to non-price rationing. [ibid: 20]

For this reason, the direct, variable controls on trading bank balance sheets – the Statutory Reserve Deposit system in conjunction with the LGS convention stipulating a minimum ratio of cash and government securities to deposits – would continue to be necessary. This raised the question of why the bank interest rate maxima continued to be used as a policy instrument, if the price mechanism would have been perfectly adequate in an unconstrained market. Phillips’ answer was simply that the direct rate controls were faster and more certain than the working of market rates through the spectrum. However, he made clear that the Reserve Bank had to take into account market interest rate pressures in setting the bank rates, because otherwise in the long run financial innovation would re-route around the banks: “as time goes on the market tends to find ways around a direct control”. [ibid: 28]

After the recovery from the 1960/61 credit squeeze, monetary policy was not seriously tested for the rest of the decade: according to Rowan’s [1980: 84] schema, policy was not set for more than ‘moderate restraint' until the second half of 1969. However, when policy was
further tightened in early 1969, the newly eclectic use of instruments was in evidence. As can be seen in Figure 9.2 above, calls to the Special Reserve Deposits were very mild in comparison to earlier tightening episodes, and there was no variation in the LGS minimum.\textsuperscript{48} However, the Reserve Bank operated in the market to drive yields on government securities to post-war record heights (at least in nominal terms), and progressively raised a range of maximum banking rates. It approved the introduction of negotiable certificates of deposit by the trading banks, as a way for them to compete in the short-term securities market with the emergent money market corporations, although a maximum rate of 4.5 per cent limited their effectiveness at first. [Schedvin, 1992: 441-43] The higher official rates were successfully transmitted to corporate bonds across the liquidity spectrum: Figure 9.3 shows this with respect to the 12-month debenture rate.

The Bank was initially happy with its timing, having been gradually increasing its restraint since 1968/69, but the impact of the serious tightening on bank advances did not begin to be apparent until halfway through 1970 – a lag of at least a year, blamed on the continued predominance of the overdraft form of most trading bank lending, as it was in the 1950s: “the rate of growth of limits responded to restraint fairly rapidly; but as one would naturally expect, the usage of limits increased very markedly.” [Rowan, 1980: 164] The volume of borrowing on the capital market continued to increase through 1970 despite the higher rates, but finally in the first quarter of 1971 “virtually collapsed”, while the equities boom peaked in early 1970 and began to fall in the third quarter. Meanwhile, the rate of growth in finance company credit slowed during 1969 but did not decline until 1971. [ibid: 165-66]

Timing continued to be a weakness of policy, then, and policymakers did not foresee the recession beginning just as policy was beginning to take its full effect in 1971. Policy was reversed late in that year when the extent of the rise in unemployment became apparent. As discussed in Chapter 7, domestic monetary conditions in 1971 and 1972 were being disrupted by an intense inflow of capital from overseas attracted by the internationally-high interest rates and expectations of revaluation. Because the central bank was committed by the fixed exchange rate to purchase the incoming foreign currency with Australian dollars, this inevitably had a major impact on money supply growth. However, the impact on the intermediate targets of policy – interest rates and credit growth – is less clear: rates remained

\textsuperscript{48} Assessment of the policy \textit{stance} should not, however, be confused with assessment of policy \textit{action} – since the instrument of policy (in this case the SRD ratio) was not the only influence on the intermediate target (trading bank liquidity as measured by the LGS ratio), a given variation in the instrument may reflect a judgement of the strength of other influences as much as a desired movement in the intermediate target. See Davis and Lewis [1978: 20-26] for a discussion of ‘the indicator problem’.
high through 1971 until policy shifted into an expansionary setting, and the fall in official bond yields preceded that of private bonds, although the latter eventually fell further and faster in 1972. (See Figure 9.3)

In 1973, following the Whitlam Labor election victory the previous year, monetary policy was enlisted as an element in the counter-inflation strategy, which also included the revaluation of the currency and tariff cuts. It became progressively tighter over the year as the ‘policy mix’ strategy required it to take on a greater burden to allow for the expansion of government expenditure, and it was intensified again following the double dissolution election in 1974. Again, interest rates were the central element of the strategy, with Special Reserve calls used but still to a smaller degree than in the 1950s and 1960s, though (non-binding) lending directives were still issued to the banks. Figure 9.3 shows that the rise in Commonwealth bond rate came in two dramatic waves, with 10- and 2-year rates peaking at almost 11 per cent in 1974, double their level in 1972. Of course this mirrored a similar spike in inflation, so that real rates were in fact lower than they had been at the beginning of the decade, but the nominal leap was of great importance to financial institutions that borrowed short to lend long, which is to say, most of them. The yield curve inverted so that short rates were higher than long. The impact of policy, then, ran very much through the balance sheets of institutions, it was far from a frictionless cascade of rates through undifferentiated portfolios. “Liquidity management continued to carry the burden of monetary policy.” [Schedvin, 1992: 498]

The trading banks, with their access to lender-of-last-resort facilities, were never at risk of failure. Their term deposit and overdraft rates were moved upwards in lockstep. As Figure 9.2 indicates, however, their liquidity was severely drained, with a large scale sell-off of government securities and only last-resort borrowing from the central bank keeping them above the LGS convention. (The extent to which the banks’ apparent LGS ratio depended on this borrowing does not show up in the chart, but it began in April 1974 and continued for several months, totalling more than 3 per cent of deposits by August, at penal interest rates of about 15 per cent. [Rowan, 1980: 217; Schedvin, 1992: 506-07] In addition, the government entirely lifted the ceiling on their certificate of deposit rates, allowing the banks an unregulated rate for the first time, which promptly leapt to nearly 18 per cent in a money market environment in which 90-commercial bill rates reached 21.75 per cent. [Schedvin, 1992: 506]

These banks, in fact, had acted as a buffer for the rest of the financial system in the early
stages of restraint, with net bank credit (new lending minus repayments) accelerating until mid-1973 – once again the overdraft system made it difficult for lending to be quickly restrained from the supply side. [Rowan, 1980: 214-15] There was no sign of a slowdown in non-bank institutional credit or private capital raisings in nominal terms before 1974, but given the rate of inflation its steadiness meant some real restraint. In 1974, the amount financed by finance companies fell back strongly even in money terms. [ibid: 221] By mid-year the most exposed institutions were in serious trouble, and the collapses of Mainline, a property company, and Cambridge Credit Corporation in August and September respectively were followed by a run on building societies, which were funded mainly through household call-deposits. This prompted the Acting Treasurer to promise lender-of-last-resort action if necessary. [Schdevin, 1992: 513-15] The extreme tightness in the money market, signalled by the above-20 per cent interest rates, drove the central bank to temporarily broaden its open-market operations to bank-accepted commercial bills from May 1974. Outside the financial sector, countless firms were in trouble, in desperate need of credit to bridge the gap between rapidly growing wage costs and slower growth in receipts as real demand fell back. The collapse in share prices across the year rivalled that of 1930, and by the end of 1974, the Sydney All Ordinaries index had fallen to half its level of its 1973 peak.

The ensuing downturn was fast and deep, and monetary policy was again reversed to expansion from the last quarter of the year. There had already been releases from the Statutory Reserve Deposits during the squeeze; these now accelerated and Commonwealth bond yields brought back down somewhat, though the yield curve remained inverted and the rate on Treasury notes was held above 9 per cent. (See Figures 9.2 and 9.3) The severity of the financial crisis was not only a lesson to the authorities about the limits to policy – “it probably represented something like a maximum in the speed and severity with which monetary policy can be reversed in the direction of restraint” [Rowan, 1980: 227] – but also that interest rate adjustment, even through open-market operations, was not a smoothly manipulable lever for managing private sector portfolios and expenditure in a predictable manner. It necessarily worked through interlocking institutional balance sheets, actively managed in such a way that policy could take a long time to have any appreciable impact, and then snap as expectations shifted and provoked a sudden run towards liquidity. Australian central bankers were facing the same dilemma as their counterparts in the United States. As Minsky [1982: 199] writes:

The Federal Reserve therefore is in a dilemma. It is dealing with a very sophisticated and convoluted financial system in which the available financing is responsive to demand. The existence of this
complex system means that a great many payments have to be made among the financial institutions and that a set of financial relations exists that depends upon the availability of bank financing as a ‘fallback’ source of funds. The Federal Reserve can bring a halt to an inflationary process only as it forces high enough interest rates so that units which need refinancing are found to be ineligible for financing in the market because of inadequate expected profits or cash flows. Since the mid-1960s the Federal Reserve has been able to force a contraction only as it has taken the economy to the brink of financial crisis. Disorderly conditions and widespread overt or covert failures in financial markets draw forth lender-of-last-resort intervention. The Federal Reserve intervenes to halt that which it has triggered. Intervention and government deficits set the stage for a subsequent inflationary expansion.

The conditions of 1974 provoked the government to consider the possibility of bringing the non-bank institutions under central bank control in the same manner as the trading banks. As discussed in Chapter 6, constitutional law had prevented the central bank from regulating the balance sheets of the finance companies in this way. The Financial Corporations Act of 1974 was intended to be a supplement for the Banking Act, but covering “any corporation whose sole or principal business in Australia is borrowing money for the provision of finance” as well as any company for whom more than 50 per cent of its assets in Australia arose from the provision of finance, and retail companies whose instalment credit finance exceeded a certain amount. It required these firms to regularly supply balance sheet information to the Reserve Bank. Part IV subjected them to “such controls as may be prescribed in respect of asset ratios, lending policies and interest rates.” [Campbell et al, 1980: 250-51] However, although the information gathering came into force and would become very useful to policymakers at the Reserve Bank, Part IV was never proclaimed and its measures did not come into operation. It was soon buried in the political chaos of 1975 and the subsequent change of monetary strategy and government.

9.3 “Through fire or over ground which moves”: monetarism in Australia

Changes in policy thinking have occurred, but they have not resulted in a wholesale recasting of implementation procedures. [Davis and Lewis, 1978: 13-14]

Long and variable lags: monetarism and the econometricians

The government and Reserve Bank worked with a money supply target between March 1976 and January 1985. Australia was one of the first countries in the world to adopt the monetarist advice and focus policy through such a target. Yet policymakers within the central bank were generally ambivalent about monetarism. I argued in Chapter 8 that the monetary targets served as a useful device for organising coherence between arms of macroeconomic policy.
and legitimating non-stimulatory policy. Here I discuss its impact on the workings of monetary policy. Since the money supply was not under the direct control of the central bank, it meant focusing on an intermediate target, replacing (or supplementing) aggregate demand on the chain to price stability, now privileged above high employment and seen as its prerequisite. In itself, this redirection does not say much about the manner in which instruments were deployed in pursuit of that goal. Here I will argue that the commitment of the government to monetary targets helped the central bank to further strengthen its instruments and position within the financial system.

Opinion among Australian academic economists about the merits of Friedmanite monetarism was divided, especially among those specialising in monetary economics. If monetarism is taken broadly to mean that the quantity of money, however defined, matters to the determination of nominal aggregate income and/or the price level, and therefore matters to the transmission process of monetary policy, most monetary economists subscribed to it. This was not controversial, though whether particular attention to it would improve models of the economy was more so. Fewer would support the proposition that the quantity of money is the most important or unique determinant of macroeconomic conditions, with velocity stable or predictable, or that it was more helpful to think in terms of money quantity and velocity than income-expenditure. Fewer still believed the authorities had unproblematic control over the money supply – and no-one believed the money supply was directly an instrument of the central bank.\textsuperscript{49} The question of whether there should be discretionary monetary policy at all, or whether policy should follow some rule, was separate from the question of whether that rule should relate to the growth of the money supply. No doubt, though, the continuing problems of timing and lags in the policy transmission process, described above, bolstered professional support for monetary targeting among those who were less than convinced by monetarist arguments.

The notion that maintaining a steady, moderate growth in the money supply would stabilise prices depended on the stability of the demand function for money: not that money-demand was proportional to income alone, but that it had a steady relationship involving a number of identifiable factors, such as the interest rate. A large number of econometric studies of the demand for money in Australia were published in the 1970s: Davis and Lewis’s [1978: 36-45] survey discusses twelve.\textsuperscript{50} These studies assumed that the money supply was usually on or

\begin{footnotes}
\item[49] As Friedman himself told his Australian television audience, “you cannot simultaneously control your money supply and have a fixed or rigid exchange rate between the Australian dollar and other currencies.” [\textit{Monday Conference}, 14 April, 1975]
\item[50] The stability of the demand for money was not of interest to monetarists alone: Adams and Porter [1981
\end{footnotes}
approaching the demand curve, because units could dispose of excess balances, and would do so until they left the system (e.g. by deposit cancellation through bank debt repayment or payment to the Reserve Bank, including for foreign exchange) or were absorbed by interest rate and/or price level increases. Excess balances could be absorbed by price level increases, most writers believed, because money demand would be related to real rather than nominal income.

Econometric estimation of the models typically involved an equation relating real money demand to real income and the rate of interest. Some also incorporated additional variables for inflationary expectations, while others assumed the influence of inflation would work through the nominal interest rate. Decisions had to be made about which definition of money and which rate of interest to work with – and different studies used M1, M2 and M3, and rates from the 90-day commercial bill rate through 12-month bank fixed term rates, to 10-year Commonwealth Government bonds, in various combinations. [Davis and Lewis, 1978: 37-38] Clearly there was a lot of room for experimentation with different variables and lags. All the studies estimated money demand functions that were stable for data from the 1950s and 1960s. Though the estimations of interest and income elasticities varied substantially, there was general agreement that demand for money was interest-inelastic (elasticity less than 0.5) and income-elastic (elasticity of around unity, though there was a lot of variation between studies).

However, there could be a lag of several quarters from the time of disturbance before adjustment was complete – many of the studies concluded that only half to two-thirds of the adjustment towards desired money balances would be complete within a year. As Adams and Porter note, “these lags do not sit easily with our preconceived notions that money markets facilitate rapid adjustment within the hour, let alone the quarter or the year.” [Quoted in Davis and Lewis, 1978: 41] A typical argument was that the lags resulted from imperfect financial markets with inflexible interest rates, as well as inertia on the part of wealth-holders, so that portfolios and rates adjust only gradually over time. Lewis [1978], however, presents a more complex argument: short-term interest rates adjust fairly quickly to clear the money market, but the relationship between income and the money supply is cyclically variable (e.g., with

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(1976): 137] point out that the neoclassical-Keynesian IS-LM framework also depends upon a money demand function, although it should be clear from Chapter 6 and the above sections of this chapter that Australian policymakers did not operate or think in IS-LM terms, i.e. that policy targeted the interest rate by shifting the money supply curve to meet the money demand curve at the appropriate point. 51 Wealth and ‘permanent income’ played a small role in the Australian literature compared with their importance elsewhere: “There are few estimates of private wealth in Australia, and no generally accepted set of weights for calculating permanent income.” [Davis and Lewis, 1978: 39]
demand for money balances declining in an upswing) and tends only to adjust to equilibrium over a longer period. This implies that ultimately the initial interest rate effect on income may shift the long-run demand schedule for money balances before equilibrium is reached at its original level. The gulf between Lewis’s hypothesis about the transition and those of others illustrates how open to interpretation the econometric evidence is. It was as capable of incorporation into an income-expenditure flow-focused model as into a stock equilibrium monetarist model.

The stability of demand for money in the 1950s and 1960s appeared to break down in the 1970s. Norman and Purvis [1975] extend the models of earlier studies estimated with 1950s and 1960s data (Norton, Cohen and Sweeny [1970] and Valentine [1973]), and find them to predict the early 1970s poorly. Davis and Lewis [1978: 41-42] show that “all the errors of prediction follow a fairly common pattern... where out-of-sample predictions commence at 1972(1).” The length of lags also appears to vary, “suggesting some change in the nature of the adjustment process”. This meant either that the models had neglected to include one or more relevant variables that would have maintained their stability, or alternatively that the actual structural relationships evolved over time. A similar breakdown in stability was common to the literature worldwide.

These difficulties in establishing that a stable money-demand function existed might seem to have undermined the monetarists – as Adams and Porter [1981 (1976): 139] put it, “if demand functions turn out to be relatively unstable, this takes some heat off the monetary authorities – the finger points more at the marketplace than at the government sector.” But it proved no great obstacle for the ‘practical monetarists’ urging policy implementation of money supply targets. The demand-side instability could be considered a reaction to instability in the money supply. To quote Adams and Porter [1981 (1976): 150] again: the instability of the demand function in the 1970s “is in line with the notion (of Friedman and others) that money demand would be less stable in a period marked by dramatic and unforeseen changes in prices, interest and exchange rates.” The authorities’ fixing of exchange and interest rates, along with the series of strong, sudden policy reversals, caused the money supply to move erratically, and this, combined with the uncertainty of high and volatile inflation, upset hitherto stable money-demand. 52 Policy committed to a steady rate of growth for the money supply could restore stability in the demand schedule. Further, while the path of the short-run adjustment process

52 They also argue that movements in money balances were much larger than the errors in the money demand model estimated from pre-1970s data, so that the degree of the function’s instability should not be overstated – it did not completely break down.
may move around, monetarists were confident of the ultimate long-run relationship between money supply and price level, with real interest rates and output determined by non-monetary factors. This was the notorious ‘long and variable lags’ argument, which effectively isolated the monetarist argument from falsification by transitory, short-run data, while turning the argument against the critics: if we cannot understand the complex processes by which monetary impulses are transmitted through countless portfolio decisions, how can the authorities be expected to make useful decisions?  

There was thus considerable room for scepticism to coexist with conversion within the community of professional economists. There was also a substantial gap between the complexity of the disputation in academic journals and conferences, and the rhetorical career of monetarism in the media and politics. Hughes [1980: 44] writes that monetarism was a “minority taste” among academics but had a “vocal following in the business world”. Of course journalists had no trouble finding academic defenders of monetarism, but the standards of evidence and debate were different. John Nevile, then Professor of Economics at the University of New South Wales, later reported his annoyance during Milton Friedman’s 1975 visit that the statistics and charts he used in his public and media appearances were misleadingly simplistic, implying conclusions he would not have maintained or got away with in the academic literature. [Courvisanos and Millmow, 2006: 125]

Implementing the targets

The economists in the Reserve Bank and Treasury were representative of their profession, though with perhaps a greater appreciation of the practical problems and possibilities of policy. That is to say, there would have been general approval of the idea that the availability of money or liquidity mattered, even if the ultimate target was credit or expenditure, but serious scepticism that it was all that mattered. Governor Phillips, in the 1971 speech referred to above, discussed Friedman's work, concluding that

The similarity between this and the results of those who have extended Keynesian liquidity preference into theories of optimum portfolios of assets should be obvious enough. At this level of generality, there is little difference between the various schools on the theory of demand for money. The differences that have been so well publicised seem to have arisen either from different assessments of the relative significance of the factors mentioned above or from selection of the ‘best’ empirical measure of the theoretical concepts. [Phillips, 1981 (1971): 17]

By 1976, when the Fraser government imposed monetary targeting, the scholarly debate was old hat. According to Guttmann [2005: 274], who interviewed officials of the time thirty years on, “Friedman’s visit had little or no impact on thinking within the Reserve Bank and Treasury.” When journalists asked Treasury officers about control of the money supply in the mid-1970s, “they encountered a... marked lack of enthusiasm. Treasury was actively promoting inflationary expectations as an economic product, but not monetarism.” [Hughes, 1980: 45] One reason was that control of the money supply conflicted with the Treasury's determination to maintain a high fixed exchange rate, as discussed in Chapter 7.

Phillips’ successor as Reserve Bank Governor, Harold Knight, in office from 1975 to 1982, over most of the monetary targeting period, was very circumspect about his views and publicly deferential to the government’s strategy. In any case, whatever monetary policymakers thought of monetarism as a theory, there was a great deal of affinity between the practical consequences of a monetary target and central bankers’ desire for a tighter policy. Pursuit of a monetary target was a political elevation of monetary policy to hegemony, clearing the ground of obstacles like the ‘cheap money’ objection to high interest rates and bank objections to liquidity management, and subordinated fiscal and exchange rate policy, which had previously undermined tight money. As the Reserve Bank’s submission to the Campbell Committee of Inquiry into the Australian Financial System put it, monetary policy was being asked to “pick its way as best it can ‘through fire or over ground which moves’”, and the monetary target at least provided it with a path and cleared away some of the obstacles. [Reserve Bank, 1979: 7.3]

The discussion of monetary targeting in the Campbell Committee’s report in 1981 is entirely secularised, with little trace of any Friedmanite inspiration or faith in a special relationship between the money supply and the price level. Rather, some publicly announced target is justified on such grounds as that

it provides an additional encouragement to the authorities to control the budget deficit... it provides market participants with information concerning policy intentions... to the extent that it is taken as an affirmation of the Government’s resolve to pursue a disciplined monetary policy, it can contribute to a favourable climate of expectations.... [Campbell et al, 1981: 53]

54 Then-Deputy President of the Conciliation and Arbitration Commission Joe Isaac reported to Guttmann that Friedman’s visit “was a rather amusing episode because I don’t think he had any effect on our thinking at the time. I mean we’d heard about it before; it was nothing new to us. Our feeling was there he goes again with \( MV = PT \), we've done the Fisher equation to death; it’s not going to help very much now. We were suspicious of his econometrics on causal grounds. Obviously these things must add up – it’s an axiom, it’s an identity – but there are no causal connections indicated there. So I don't think Friedman’s visit made any kind of impact.”
That the intermediate target should be some monetary aggregate, rather than bank reserves, an interest rate, or nominal GDP, is defended not on the basis of a predictable relationship with the price level or any ultimate target, but on the grounds that it is predictable, controllable, and “imposes a discipline on governments and on various groups of decision makers in the economy”. [ibid: 54] The particular aggregate targeted – M\textsuperscript{3} – was selected, however, because of a “fairly close relationship with nominal income” and because it “embraced a large part of the private sector’s liquid assets and the authorities could regulate it through the use of direct controls on the banking system”. [ibid: 55-56, emphasis added]

Of course, M\textsuperscript{3} was not under the direct control of the authorities: most of it was made up of private bank liabilities, and the rest was cash the public chose to hold instead of bank liabilities. The proximate creator of money, then, was the banking system. The banks were limited in their capacity to expand their liabilities by their own liquidity situation – by the size of their cash and liquid reserves, and by their liquidity preference. This was ultimately constrained by the LGS ratio convention (and in the case of the trading banks, by LGS-like balance sheet regulations), but the banks were not typically at this limit and so had some discretion.

The textbook ‘money multiplier’ approach divides the sources of money supply changes into changes in the monetary base (liabilities of the central bank) and changes in the ratio of the money supply to this base. This multiplier can be decomposed into components depending on the proportion of the private sector’s money balances held as cash (i.e. base money) rather than private bank deposits, the required ratio of private bank reserves to monetary liabilities, and the ratio of private bank excess reserve holdings to monetary liabilities. The point of such a division is, according to Brunner [1973: 489], “to construct a framework which decomposes the money stock in the most informative manner into two components. One reflects completely the behaviour of the authorities and the other describes approximately (and dominantly) the variations due to the public’s and bank’s behaviour.” If the private sector behaviour generating the multiplier is constant or predictable, the authorities can control the money supply by managing the base.

However, “the assumptions implicit about public and bank behaviour in the Australian work have not always coincided with the view of overseas writers who derived the approach.” [Davis and Lewis, 1978: 46] Not only were there difficulties in predicting the banking

\textsuperscript{55} That is, cash in the hands of the public and non-government, non-interbank current deposits with trading banks (M\textsuperscript{1}), plus non-government, non-interbank fixed deposits with trading banks, plus certificates of deposit, plus all savings bank deposits.
system’s leverage from its reserve base, but there were problems in policy control of the base itself. The latter issue was related to competing policy targets with monetary effects. Specifically, so long as the exchange rate was pegged, the central bank was compelled to pay domestic currency for foreign exchange to whatever extent the market demanded at that rate. The same principle applied with respect to pegged interest rates on official bonds. Banks could easily ‘make position’ by selling government securities at a predictable price, and in the tightest conditions could resort to lender-of-last-resort borrowing from the Reserve Bank. Thus up to the mid-1970s at least, it was more typical for Australian economists to treat the money supply as demand-determined, as discussed above and with reference to the monetary approach to the balance of payments in Chapter 7. In other words, that the money supply was endogenous was an entirely mainstream proposition, supported even by those sympathetic to monetarism. For the latter, the point was to change the system so that this was no longer the case. As Douglas Purvis, another visiting Canadian Chicago graduate, put it:

Several proposals for institutional change were suggested which might make the existing system more compatible with the model. This is not done in the belief that there is anything sacred about the model but rather because those features of the system which gave rise to the problems in using the model are the same features which render precise short-run control of the money supply difficult. [Purvis, 1976: 81-82]

If Australian policymakers traditionally had less control over the monetary base than the money multiplier approach suggested, they had in their banking controls instruments of influence over the multiplier itself. Thus Brunner’s strict division between the base as being under policy control, and the multiplier as not, did not describe their policy problem. In Australia, targeting the money supply meant a combination of (1) subordinating the competing policy objectives with impacts on the base (exchange rate, interest rate and fiscal policy) to the monetary target; (2) using the direct controls to manage bank liquidity; and (3) influencing the demand for money via income. The third, demand-side element had no role in the monetarist program, and made no sense within its theoretical system, because causation was supposed to run from the money supply to nominal income. But policymakers did not necessarily hold to this paradigm, so it was perfectly possible to see the transmission process working in reverse: for example, with high interest rates and/or rationed credit slowing income-expenditure growth the old-fashioned way, and thereby slowing the growth of demand for money to meet the targets.

The Budget Speech statements dealing with the monetary target broke down the components
of money supply growth not into base and multiplier, but as follows:

\[ \text{change in M3} = \]

\[ \text{government domestic budget deficit} \]

\[ + \text{change in Reserve Bank holdings of gold and foreign exchange} \]

\[ - \text{change in private non-bank holdings of government securities} \]

\[ + \text{change in advances of trading and savings banks} \]

\[ + \text{balancing item [Davis and Lewis, 1978: 46]} \]

The Reserve Bank’s Annual Report took a similar approach, except that the budget deficit did not appear as a separate item, and instead of subtracting changes in non-bank holdings of government securities, it added changes in the banking system holdings, including those of the Reserve Bank itself. These treatments amounted to the same thing, since the budget deficit would contribute to banking system holdings of government securities, except to the extent that the non-banks purchased them. [ibid: 45]

From the perspective of the money multiplier approach, the most curious thing about separating the components out in this particular way is that a fundamental divide is made between bank and non-bank balance sheets, but not between the balance sheets of the central bank and the private banks. The movement of a government security between the Reserve Bank and a private bank makes no difference to M3 formation according to this breakdown, whereas according to the textbook money multiplier approach, the sale of a government security by the central bank to a private bank would reduce the monetary base, and given a constant money multiplier, reduce the money supply to a greater extent. The reason for the Australian difference is that the reserve requirement – the LGS convention (and the similar, tighter, restriction on the savings banks) – includes government securities as well as cash among the stipulated minimum reserves. As discussed above and in Chapter 6, this was a legacy of the central bank’s maintenance of fixed yields by buying and selling whatever quantity of these securities the market demanded at the going price, so that they were almost as liquid as cash. Insofar as the central bank now allowed yields to vary, their liquidity had lessened, but the reserve requirement nevertheless continued to include them.

Figure 9.8 shows the percentage point contribution of each of the above factors to M3 growth before and during the money-targeting period. The first thing to notice is the difference made by exchange rate flexibility. In the first three years of the decade, central bank purchases of
foreign exchange were responsible for a large proportion of the money supply growth: not only directly, but also indirectly via the effect on bank reserves, as some of the substantial expansion of bank lending was made possible by the inflow, particularly in 1972/73. Following the revaluations of 1972/73, foreign exchange had a much smaller impact on the money supply for the rest of the decade. In the early 1980s, when market pressures on the exchange rate were again resisted to some degree (see Chapter 7), it returned as a contributor, so that monetary policy had to lean against it in pursuit of the targets. In 1984/85, after the float, of course foreign exchange no longer made any difference to the money supply; but by then monetary targeting was almost finished. Fiscal policy’s contribution to restraint of the money supply in the targeting period can also be clearly seen. As discussed in Chapter 8, the Fraser government progressively tightened the budget until the recession of 1982. The contribution of this to monetary restraint can be seen particularly in the three years from 1979/80.

![Figure 9.8: Contributions to M3 growth](image)

The rest was a job for monetary policy. The change in intermediate target in itself made no difference to the modus operandi of policy: as in previous periods of tightening, it worked by restraining bank balance sheets and open market operations – exactly as it did when the target was credit-financed expenditure. The biggest difference in the workings of policy was simply
the vigour with which it was pursued. 1976 saw the immediate reversal of any previous intent
to ease off supposedly dirigiste bank-centred policy in favour of a ‘market-based’ approach:

The [Statutory Reserve Deposit] ratio, for example, was changed six times in 1976, six times in 1977, three times in each of 1978 and 1979, and once in 1981. It ranged from a low of 3.5 per cent to a high of 10.0 per cent. Lending guidelines were in force for most of the period, with explicit guidelines announced by the authorities of 10 and 12 per cent increases over 1980-81 and 1981-82 respectively. The trading bank LGS ratio was increased from 18 to 23 per cent between February 1976 and March 1977 as an explicit monetary control device. [Davis, 1985: 42]

This is not to say that open market operations fell into the background: on the contrary, they too were pursued with great vigour. The main difference now was that there were fewer scruples about high interest rates. There were still some difficulties: new debt issues continued to interfere, and the captive market for government bonds arising from the liquidity regulations on banks, money market dealers, etc., made demand for them less interest-elastic than it would otherwise have been. [ibid: 42] Active management of bank interest rate maxima did recede: having been lifted to 10 per cent for trading bank fixed deposits and 9 per cent for savings bank deposits in 1975, deposit rates were not adjusted again until restrictions were lifted entirely in 1981, though overdraft rate maxima remained regulated and sometimes adjusted until 1984. [Foster, 1986: 160-61]

One new ‘market-based’ instrument emerged in 1976: the introduction of Australian Savings Bonds. These were heavily marketed to households as a high-yielding but relatively liquid store of wealth (being redeemable at a month’s notice). The point was to increase the proportion of government debt held by the non-banks, and it was relatively successful on this front, although its ease of redemption meant holdings would fluctuate quickly if their interest rates got out of line with the rest of the market. In fact this disintermediation of government borrowing worked too successfully at first, with some non-bank financial institutions needing public support. [Davis and Lewis, 1978: 39] These bonds show the continuing importance of the use of relative interest rates to deal with the multiple tiers of liquidity in the financial system. Thus elements of the ‘Radcliffe approach’ of the 1960s (discussed in Section 9.2 above) continued to operate into the 1980s – the Australian Savings Bonds made up more than 15 per cent of total government securities in Australia by 1984. [Foster, 1996: 96]

Table 9.1 shows the M3 growth projections and actual M3 growth over the targeting period, alongside the Budget Papers’ forecast of growth in real output and growth in the price level, given the rate of monetary expansion. It can be seen that the projections were reached in the
first two years as the authorities attempted to slow monetary growth, but the 1978/79 attempt at further restriction was unsuccessful. In 1979/80 even the more modest attempt to repeat the achieved rate of two years before failed, and despite diminished expectations, in future years M3 growth continued to exceed the projections, except in 1983/84 when it scraped in. In the first half of 1984/85, M3 grew much faster than the projection and targeting was suspended, never to return.

Table 9.1: Forecast and actual M3, real GDP, CPI and velocity growth (%)

<table>
<thead>
<tr>
<th></th>
<th>Forecast</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M3</td>
<td>Real GDP</td>
</tr>
<tr>
<td>1976/77</td>
<td>10 – 12</td>
<td>4.0</td>
</tr>
<tr>
<td>1977/78</td>
<td>8 – 10</td>
<td>4.0</td>
</tr>
<tr>
<td>1978/79</td>
<td>6 – 8</td>
<td>4.0</td>
</tr>
<tr>
<td>1979/80</td>
<td>Max 10</td>
<td>2 – 2.5</td>
</tr>
<tr>
<td>1980/81</td>
<td>9 – 11</td>
<td>3.0</td>
</tr>
<tr>
<td>1981/82</td>
<td>10 – 11</td>
<td>3.5 +</td>
</tr>
<tr>
<td>1982/83</td>
<td>9 – 11</td>
<td>2.3</td>
</tr>
<tr>
<td>1983/84</td>
<td>9 – 11</td>
<td>3.0</td>
</tr>
<tr>
<td>1984/85</td>
<td>8 – 10</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Source: Guttmann [2005: 252]

In its own terms, then, monetary targeting was not a success. Even the early years’ apparent success was marred by large fluctuations within the year. [Davis and Lewis, 1978: 29] The forecasts of real and money-income growth with which the M3 forecasts were associated fared even worse in several years. Neither were the targets a success in monetarist terms – even if generous excuses are made for ‘long and variable lags’, after several years of monetary restraint, inflation was back above 10 per cent in the early 1980s. Early statements about the projections often gave the impression that monetary growth determined the growth of nominal income, and the wage-determination process would determine how much of that would be taken up by real growth and how much inflation.\(^{56}\) (See, for example, the government submission to the 1978 National Wage and Wage Indexation hearing discussed in Chapter 8.) But the income-velocity of money was very unstable, as shown in the last column of Table 9.1 – the relationship between M3 and money-income was variable.

\(^{56}\) Guttmann [2005: 90–94] shows that at the outset of targeting the Treasury and Reserve Bank appeared to hold inconsistent views on the processes by which a retardation of the rate of monetary growth would affect the growth of real income and prices.
I have already noted that by the time of the Campbell Inquiry into the financial system, and especially within its 1981 report, the justification for the monetary projections had become pragmatic. It had more to do with their benefits for the organisation and discipline of policy than with monetarist propositions about firm causation from money supply to money-income. The Treasury’s review of the monetary projections in the 1979 Budget Papers stressed their conditional nature, and both why they might be difficult to reach and why policymakers might legitimately revise their views in the course of the year:

8. the composition of M3 growth was not neutral, e.g., growth coming from sales of government securities between banks and non-banks had different implications than growth from central bank purchases of foreign currency;

9. unpredicted external influences on cost growth, e.g. from shifts in tradeables prices, might mean that meeting the projections would be possible only with less-than-desired real output growth;

10. smooth growth in the money supply might require extreme instrument settings that are undesirable in themselves; and

11. tight control of a given monetary variable can induce portfolio shifts into substitutes for little functional difference. [Guttmann, 2005: 109-10]

All these arguments further confirm that monetarism had not at all displaced an older, eclectic neoclassical-Keynesianism among policymakers. Further, the justification for continuing with the projections, despite these concerns, rested entirely on their role in “demonstrating that the aims of monetary policy fit within a coherent overall policy” and “providing a ‘peg’ of stability [to] exert a direct influence upon public expectations, which in present-day conditions are central to the inflationary process.” [Quoted in Guttmann, 2005: 110-11] In other words, the projections were not of much use in themselves, but partly for public consumption and partly to focus the organisation of policy instruments coherently. The real effect of monetarism in Australia was thus to allow the old instruments to be used in a stronger, more coherent fashion for the purpose of old-fashioned financial restraint, working through bank balance sheets and interest rates.

Considered in these terms, monetary targeting was a qualified success. Although M3 growth generally exceeded the projections, it was certainly slower and more stable than in had been previously in the 1970s. This had more to do with the flexibility of the exchange rate and tighter fiscal policy than with monetary policy as such. But even in terms of monetary policy,
targeting facilitated a tightening that might have been difficult without it. Far from being a ‘hands-off’, neutral policy, by the standards of the previous decades, monetary policy was simply tight over the targeting period. As shown in Figure 9.1, after 1976 real interest rates rose higher than they had been since the beginning of the decade, and in the 1980s headed to record post-war highs. As discussed above, the first few years of targeting were also associated with active use of the Statutory Reserve Deposit system, though after 1979 the authorities focused on interest rates and open market operations. Monetary targeting finally killed ‘cheap money’, and it would not be revived.

**Figure 9.9: Long-term real interest rates (%)**

![Graph showing long-term real interest rates](image)

Source: [Fraser, 1991: 7]

Although policy in Australian did not at this point reach the intensity of the ‘Volcker shock’ in the United States, the role of monetary targets played an analogous role. Charles Schultze, at the time Chair of President Carter’s Council of Economic Advisers, would later explain:

> In theory the Fed could have kept on raising the bejesus out of the interest rates, but that’s what it couldn’t do politically. The beautiful thing about this new policy was that as interest rates kept going
up, the Fed could say, ‘Hey, ain’t nobody here but us chickens. We’re not raising interest rates, we’re only targeting the money supply.’ This way they could raise the rates and nobody could blame them.
[Quoted in Greider, 1987]

9.4 Conclusion: towards deregulation

There was a tension within conservative politics of the 1970s and 1980s between a commitment to ‘rolling back the state’ and a commitment to strong monetary policy. Friedman’s monetarism was presented as a withdrawal of the state from discretionary macroeconomic policy, and thus as consistent with a broader message of deregulation. But as I have argued in the previous section, the implementation of really-existing monetarism involved a strengthening of the central bank and its ability or willingness to use its capacity for restraint. Furthermore, deregulation of the financial system turned out to be in conflict with monetary targeting, in Australia as elsewhere – because it destabilised demand for and supply of the various monetary aggregates as processes of dis- and re-intermediation took place.

I argued above that the relationship between policy, private financial institutions and markets is a complicated one that is not well understood by considering the financial sector as a zero-sum game between ‘state’ and ‘market’. As discussed in Chapter 2, the state is essential to the reproduction of money within capitalism, and it is not surprising that it could not easily ‘withdraw’. In Section 9.2 I emphasised the extent to which the structure of the financial system can be changed by private financial innovation, which is both reactive to policy and relatively independent from it. I also showed that the apparent move towards more market-oriented policy in the 1960s did not weaken the power of the central bank, but on the contrary, was driven by a vision of more effective policy. After all, policymakers did not want control for the sake of it, but wanted greater control over particular intermediate targets, and welcomed and facilitated the maturation of extra-bank financial markets on the grounds that these would eventually make possible more predictable, frictionless transmission channels. A dichotomy within the private sector between institution and market is equally misleading: even open market operations depended for their success on the relative predictability of balance sheet management of institutions, and the trading banks in particular. The open market operations of the 1960s and after depended on the banking conventions and regulations established in the ‘dirigiste’ 1950s. The financial system deregulation of the first half of the 1980s can be understood within this framework: it may have been in contradiction with monetary targeting, but on the whole it did not conflict with the capacity of the central
bank to influence the cost of finance and thereby macroeconomic conditions.

The variety of institutions and the depth of the markets that developed between the mid-1960s and the end of the 1970s (a second wave of a process that had really begun in the 1950s) emerged within the regulatory framework that would be ‘deregulated’ in the 1980s. The particular forms of institution and market were, therefore, partly creatures of that regulatory framework. I showed in Section 9.2 how the money market corporations in particular grew in the interstices of the regulated system and developed a host of instruments to bridge gaps in the spectrum of liquidity and credit – a kind of deregulation before deregulation. But a key fact about the financial ecology of Australia in the 1970s was that many of its niches existed because its dinosaurs, the trading banks, were hampered by interest rate and liquidity controls from competing at full strength in important parts of the market.

It was, of course the early 1980s that are cast as the watershed in monetary policy, because of the floating of the dollar and lifting of certain capital controls – the first change of which met Friedman’s requirement for floating rates, while the second (still with Friedmanite approval) undermined the stability of national money supply. The deregulation of the early 1980s was primarily about removing the restrictions on trading and savings banks: deposit rate maxima were removed in December 1980; the minimum terms on certificates of deposits and various fixed deposits were reduced over the next two years; bank lending guidelines were abandoned in June 1982; the same year, the asset class restrictions on savings banks were greatly reduced, and they were permitted to accept business deposits. In August 1984, the Hawke Labor Government removed all remaining restrictions on bank deposits, and savings banks were allowed to offer chequing facilities, ending the monopoly of the trading banks over the payments system. Finally, in 1985 the trading bank LGS ratio was replaced with a Prime Assets Ratio relating to a broader group of assets, and the government opened the possibility for foreign banks to operate in Australia. [Schedvin, 1992: 548-49; Guttmann, 2005: 189-90]

From the end of 1980, then, trading banks deposits were fully competitive with the non-bank substitute instruments that had emerged because banks could not match their interest rates. The ensuing reintermediation through the trading banks could not but disrupt money targeting, because M3 included their fixed deposits and certificates of deposit. While financial innovation had previously been associated with increases in monetary velocity as the system stretched liquidity (see Chapter 3), it is unsurprising that the income velocity of M3 should slow in the 1980s, because of a flow back to trading bank deposits as a store of wealth. (See Figure 9.1 above.) This was perfectly clear to the monetary authorities: a Reserve Bank report
of 1982 concluded that M3 would “not be a very useful guide to policy” in the transition period during deregulation, while a broader aggregate would be more difficult for policy to control over the short run. [Guttmann, 2005: 168-69] Guttmann [ibid: 171-73] concludes that the M3 target survived as long as it did after that only because the Labor Government did not want to risk further spooking the financial markets at a time when capital was already flowing out of the country. (See Chapter 7.)

Deregulation of bank interest rates had a further major consequence on the path of transmission for monetary policy, unintended but not unwelcome. I noted in Section 9.3 above that policymakers placed great importance on the boundary between bank and non-bank balance sheets: government securities held by the former rather than the latter were supposed to have a multiplied effect on the money supply because they were almost as liquid as cash reserves given central bank support for their price/yield. The more yields were allowed to vary, however, the less liquid they became, because banks could take heavy capital losses if forced to dispose of them in a hurry. Consequently, bank position-making strategies changed. Once restrictions were lifted from their deposit rates and from the terms for which they could issue certificates of deposit, they very quickly began to manage their liquidity on the liability rather than the asset side of their balance sheets. That is, instead of selling securities when they needed to boost cash reserves, they could raise deposit interest rates to attract deposits away from the non-bank institutions, and issue more short-term instruments into the money market. After 1981, the trading banks ran their reserve holdings of cash and government securities right down to the LGS convention minimum, close to which it remained until the convention was lifted. [Davis, 1985: 43-45] (See Minsky [1986: 72-77] on an earlier analogous shift in American banking strategy.)

The liquidity of government securities thus declined and the elasticity of demand for them increased, as deregulation reduced their captive market, so they became just another security with no particular claim to form part of the monetary base. On the one hand this simplified open market operations and the relationship between budget deficits and monetary conditions. On the other hand, the banking system turn to liability management also involved a reader recourse to foreign sources of funds. So long as currency management continued, any pressure on the liquidity of the banking system as a whole could be relieved by such an inflow of funds. Following the float in December 1983, however, such borrowing no longer affected the reserve base of the banking system as a whole: “Since currency demand of the non-financial sector is relatively interest inelastic, and non-bank intermediaries hold most of their
liquid reserves in the form of bank deposits, there is little scope for reshuffling of the monetary base to meet short-term demand.” [Davis, 1985: 45]

Ultimately, the combined effect of the deregulation of interest rates and the exchange rate was to greatly increase the purchase of central bank open market operations on the reserve base of the banking system. The relationships between the base and the ultimate supply of credit and liquidity were still subject to change as a result of changes in institutional liquidity preference and innovation. But the increased dependence of banks on liability management in the short-term money market, and their tendency to set their lending rates on the basis of a mark-up over their cost of funds, made possible a new future for monetary policy, centred on control over the base short-term rate in the money market. Finally, in the mid-1980s, following deregulation, Australian monetary policy began to resemble the textbook.
PART IV

Conclusion
10: Conclusion

10.1 Introduction

Chronic low-level inflation has come to be taken for granted as a feature of the modern economy. Nobody expects absolute stability in the price level, or oscillation around a constant point. But for much of the history of capitalism, this was not the case. It was a novelty of the period since World War II. Alongside this development came an expectation that the state ought to prevent this inflation from getting out of hand. This latter development, as manifested in Australia, has been the focus of this thesis. In this concluding chapter, I put the period into longer historical perspective, showing it to be a major transition in the history of capitalism.

This is a story of the decline and replacement of the gold standard by a different, more complex standard: the value of money in terms of commodities is now no longer anchored to a single commodity, but to a basket of commodities; and no longer to a fixed target, but to a moving point, i.e. the price level is expected to rise at a modest rate. For each national government this relation of the value of the currency in terms of a basket of commodities within the country is more important than its value in terms of other currencies, which is generally left to take care of itself. (When it is not, the peg is often part of a strategy of domestic price stabilisation.) This too is in contrast to the gold standard, when the maintenance of the exchange rate usually took precedence over the domestic price level, which had to adjust.

The change is not something that simply happened within the economic system, to which policy had to adjust. Neither is it something which policymakers decided on and imposed. State institutions and activities were necessary to the gold standard, even as the commitment to the standard set limits on them. The same can be said for Bretton Woods and the period of flexible exchange rates that followed it. The state institutions and practices of the gold standard – e.g., keeping the currency convertible, banking regulations, lender-of-last-resort facilities – evolved as a complex of strategies for maintaining the functionality of money.
within the economic system. At no point was it designed as a whole ensemble. These institutions and practices changed the working of the system. For example, reliable convertibility at the mint supported the circulation of state-backed representative money at a value greater than that inherent in its material. The emergence of the central bank as a lender-of-last-resort increased trust in bank credit-money and thereby expanded its role.

Thus while commitment to a commodity-money standard may have operated as a constraint on state practices, it also had positive aspects. Parts of its operation may have taken on a ritualistic character, their reasons forgotten or misinterpreted, and may have outlasted their usefulness as the system evolved around them. These things were debated as the political economists of the 19th century became conscious of them and parliamentarians fought them out. Surely reason did not always win, and sometimes there was no possibility of winning, given contradictory forces in the economic system. The forces involved and the theories conceptualising them could be interpreted along the lines I developed in Chapter 2. (Here I refer to the paradigmatic case of the Bank of England around mid-century.) The commitment to convertibility and restrictions on currency issue imposed by Parliament, under the influence of Currency School doctrine, set ‘limit conditions’ on the central bank, which nevertheless still had room for strategic manoeuvre. Its actions aimed at defending its gold reserve and maintaining the stability of the banking system, its nascent public responsibilities mingled with traditional senses of banking propriety. At times of crisis, other limit conditions would suddenly reveal themselves and prove powerful enough to override the gold standard restraints: e.g., the suspensions of the Bank Charter Act in 1847, 1857 and 1866.

In the next two sections I present two bare sketches of how the complex systemic relationship between the state and value of money appeared at two moments in the history of the gold standard. I present them not as they appeared to the authorities, but to Marx and to Keynes. It may appear a somewhat arbitrary way into the issues, except that these two have been in the theoretical background to this thesis, as discussed especially in my comparison in Chapter 3. But there is some sense in presenting their perspectives. Marx and Keynes were both the culmination and harshly critical of their economic traditions – classical political economy and Marshallian neoclassical economics respectively – and their alienation from those traditions led them to problematise what had been taken for granted. Their respective historical locations at the height of the gold standard (at least as far as Britain was concerned) and at its decline place them usefully for assessing its trajectory. For Marx, the value of money does not present itself directly as a problem for the state. The standard of value depends upon the
market valuation of the money-commodity; the state has no power over it. However, with the
circulation of representative monies not materially composed of the money-commodity, the
problem arises of their own valuation relative to the money-commodity. Except for non-
convertible fiat money with ‘forced circulation’, the valuation of a representative money is
usually an all-or-nothing question – either an institution is able to guarantee its convertibility
into the money-commodity (or a higher-level money which is itself convertible), or it loses its
status as money entirely. The monetary problem facing the state is thus one of managing
convertibility: that of its own currency, and that of private credit-money. Inflation is a cyclical
phenomenon, associated with the overextension of private credit-money, periodically reversed
by crises during which the money-commodity anchor reasserts itself. The regulation of private
banks and the countervailing activity of the central bank can check over-expansion and
mitigate crises, but cannot stand in the way of the ultimate reassertion of the commodity
anchor. This is because in the last instance the central bank’s activity is limited by its stock of
world money, over which the national state has no control.

For Keynes in the 1930s, the value of money is more directly a problem for the state. This is
not merely a matter of Keynes’ different conception of the economic system, but of real
institutional changes since the high gold standard of Marx’s time: the position of the central
bank is stronger and its strategies more flexible. Although it cannot control the value of its
currency by decree, it is responsible for managing its value via regulation of its quantity
and/or the base interest rate. Keynes views the gold anchor as arbitrary and ritualistic and
acknowledges that other policy goals might outweigh the commitment to a particular parity.
Sensible practices in the management of money have already evolved by trial and error, but he
hopes to put it on a more rational basis. He still sees a stable gold value over the long run as
the natural aim of sound ‘managed money’, though he mentions the prospect of a link to a
broader basket of commodities. He does not at all foresee management in terms of a rate of
inflation rather than a stable price level.

I then return to the period of the thesis, suggesting that it can be seen in terms of a mutation in
Keynes’ ‘managed money’. I begin with Hicks’ [1955] idea that a ‘labour standard’ has
replaced the gold standard. Hicks captures some of what caused the abandonment of the gold
standard – that the policy instruments responsible for managing the value of money were
pulled away or limited by the rise of the labour movement and forced to prioritise full
employment. He also recognises the core policy contradiction of what followed: the tension
between full employment and price stability. But he does not adequately grasp the relationship
between domestic price stability and the value of money with respect to foreign currencies, which I have stressed in my argument. Following the discussion of Hicks’ ‘labour standard’ I review the argument of my thesis. It shows with reference to the Australian case how a new form of ‘managed money’ evolved out of the gold standard, through the tensions of Bretton Woods and the stagflationary crisis of the 1970s. The tendencies promoting a ‘labour standard’ within domestic politics were counteracted by developments of world money: first by the need to support a fixed exchange rate under Bretton Woods, and later by the potential for a vicious spiral connecting a falling exchange rate and domestic inflation. ‘Managed money’ as it settled in the 1980s and 1990s would mean a gradual fall in the value of money vis-a-vis a basket of consumer goods prices, with the rate of employment subordinated to this goal, as necessary to discipline money-wage growth.

10.2 Marx and the gold standard

For Marx, money is emphatically not a creature of the state, and the state cannot control its value. Money is an emergent phenomenon of exchange; it “crystallises” [Marx, 1976: 181] from among commodities as the ‘universal equivalent’: “the money-form is merely the reflection thrown upon a single commodity form by the relations between all other commodities.” [ibid: 184] To describe it as ‘emergent’ in this way is not to refer to only to its historical origins; rather, it establishes a tendency inherent in any durable network of exchange. Beyond a certain level of complexity, such a network depends upon money, because inefficient barter cannot sustain it, and in reaching that level of complexity, the processes of exchange tend to promote a single standard object as means of exchange, which becomes money. “The problem and the means for its solution arise simultaneously.” [ibid: 182, and see the whole section, pp. 178-87]

The value of money is determined in the same way as any other commodity. Custom may determine the conventional unit of the money-commodity in which prices are quoted, and the state may play a major role in establishing or maintaining the convention, but this is of little consequence. The value of this standard in terms of other commodities depends solely on the underlying value of the money-commodity, established in the market.

[The sphere of circulation has a gap in it, through which gold (or silver, or the money material in general) enters as a commodity with a given value. Hence, when money begins to function as a measure of value, when it is used to determine prices, its value is presupposed. [Marx, 1976: 214]

He presents a dynamic causal process by which changing conditions in the industry producing
the money-commodity spread their influence through the network of exchange and eventually change the value of money everywhere:

If that value [of the money-commodity] falls, the fall first shows itself in a change in the prices of those commodities which are directly exchanged with the precious metals at their source. The greater part of all other commodities, especially at the less developed stages of bourgeois society, will continue for a long time to be estimated in terms of the former value of the measure of value, which has now become antiquated and illusory. Nevertheless, one commodity infects another through their common value-relation, so that their prices, expressed in gold or silver, gradually settle down into the proportions determined by their comparative values, until finally the values of all commodities are estimated in terms of the new value of the monetary metal. [ibid: 214]

This is clearly presented as a process by which over time processes of production and exchange anchor the value of money to the production price of its underlying commodity. The presentation of this process is at the same time an acknowledgement of a potential divide between this production price and the value of money as reflected in price lists at a given moment (Marx has no precise concept of a ‘price level’ but writes of “the general level of commodity prices”, e.g. [Marx, 1981: 681]). ‘The value of money’ now appears in a more complex way. In effect there are two values of money: one of “the precious metals at their source”, and the other the inverted reflection of the price list; the first gradually ‘infects’ the second. There is, in other words, a tendency towards equilibrium, but disequilibrium may persist “for a long time”.

A second gap in this process of equilibration emerges from the fact that what circulates as means-of-payment may not necessarily itself be the requisite quantity of the money-commodity, but instead a symbol for it. The face value of a coin may depart from its value as metal, and paper may circulate with a face value alone. These monies may be issued by the state, or they may be privately issued as with banknotes. In either case, their value in terms of commodities and in terms of other monies is not directly under the control of the issuer simply by fact of being the issuer. Equivalence is established by what, in fact, they can be exchanged for. This may be through some institution, whether or not the issuer, standing ready to ‘convert’ between monies or ‘redeem’ a note at a previously established rate, or between third parties at a rate established in the market. Clearly, an institution’s capacity to maintain convertibility is limited by its possession of or access to the money-commodity. A representative money may be utterly devalued if it is no longer convertible to the money-commodity (or another money whose convertibility is more certain) – in which case it will also no longer be accepted in exchange in payment – or it may be partially devalued in the
market if its convertibility becomes uncertain, or if the redeemer changes the rate as which it will convert. As Marx writes, the disjunction between the weight which lends its name to a currency (e.g. a ‘pound’) and the weight of precious metal it is now exchangeable for tells a history of devaluation. [Marx, 1976: 194-95]

So there is a double gap between the value of the money-commodity vis-à-vis other commodities, and the value of what actually circulates as means-of-payment: first, between the production price of the money-commodity and the standard of value, and second, between the standard of value and circulating money (or, more accurately, monies plural). The crucial fact, for Marx, is that representative monies circulate at the sufferance of the market: the maintenance of a fixed value relative to the money-commodity depends upon the possibility of convertibility, without which the money in question will be devalued on the market, potentially to zero. A total devaluation occurs when the non-convertible money in question is not acceptable as means of payment, as in the case of notes issued by a bankrupt bank. A lesser devaluation takes place when the money remains acceptable as means of payment, as with, for example, the British pound in the period of non-convertibility at the turn of the 19th century. The extent of the devaluation depends on the quantity of the currency in circulation: if it exceeds the quantity of commodity-money which would otherwise be in circulation, “it will still represent within the world of commodities only that quantity of gold which is fixed by immanent laws.” [Marx, 1976: 225] That is, it will be devalued in proportion to its over-extension.

Here the dynamic process by which the value of a type of money – non-convertible fiat money – is less developed by Marx, and raises some serious difficulties for his broader approach to the value of money. Marx counterposes his approach to the quantity theory of Hume and Ricardo, and much of his criticism, discussed presently, is valid. But some apply equally to his own presentation of the determination of the value of non-convertible money, and there are unresolved questions regarding his own view of the determination of the value even of commodity money.

At first glance, Ricardo’s reconciliation of quantity and commodity theories of money may appear to have an affinity with Marx’s theory. Like Marx, he sees money as essentially a commodity, its value ultimately determined by the conditions of its production or extraction. The quantity theory determines the value of money within a country in the first instance, but Hume’s price-specie-flow mechanism determines the quantity of money within a country, and relative conditions of profitability in the money-commodity industry regulate the quantity of
money at a world level, keeping its value from departing permanently from its cost of production. [Ricardo, 1811] But Marx is highly critical of the quantity theory as explanation of the value of money even in the short run. He argues that Ricardo illegitimately depends on the assumptions that all the money-commodity circulates as money, and that only the money-commodity circulates as money. He further criticises the price-specie-flow mechanism for the false assumption that money flows across national borders only to equilibrate international differences in the value of money. [Marx, 1970: 157-87]

These criticisms are all valid. The quantity of money in circulation cannot be taken as exogenous, both because of the potential for hoarding and the potential creation of symbolic and credit monies. However, Marx’s counterposed theory has problems of its own. He argues that the quantity of money in circulation is determined by the quantity and price of commodities sold in a period and the velocity of circulation over that period – a reversal of Ricardo’s direction of causation. It is, in modern terms, a theory of the real transactions demand for money – excess non-convertible money, as discussed above, is devalued to fulfil this condition. It is in line with the Keynesian view of the transactions demand for money, which also posits one-way causation from income-expenditure to the amount of money required to circulate it. The problem lies in an inadequate treatment of the other reasons for choosing to holding money and the denial of a potential causal influence from monetary stocks to income-expenditure flows.

Specifically, Marx gives no explanation of how individual hoarding decisions are reconciled with the needs of the channel of circulation. He treats the volume of commodities circulated in a period as exogenous, and hoarding as endogenous. But it is not clear how this can be sustained without some version of Say’s Law holding output to be exogenous to circulation, which Marx repudiates elsewhere. When Marx introduces hoarding into his analysis, he states that (under developed commodity production) it occurs because producers need to accumulate reserves to cover “the continual purchase of other people’s commodities, whereas the production and sale of his own commodity costs time and is subject to various accidents”. [Marx, 1976: 228] This corresponds to Keynes’ transactions and precautionary demands for money (at least, that of producers). But there is no reason why the hoarding motivated by the possibility of “various accidents” should correspond to the level of hoarding necessary to keep the quantity of circulating money in line with some exogenous value of circulating

57 The criticism is developed in Marx’s Contribution to a Critique of Political Economy [1970] and referred to often in Capital.

58 “The reserves created by hoarding serve as channels through which money may flow in and out of circulation, so that the circulation itself never overflows its banks.” [Marx, 1976: 232]
commodities, given the velocity of circulation. When Marx introduces the banking system and credit-money at a lower level of abstraction, the reflux of surplus banknotes plays the same role as the hoarding of gold in the earlier analysis.

Likitkijsomboon [2005: 163-64] notes that Marx’s analysis of hoarding/reflux seems to be in conflict with his analysis of the credit cycle. In the latter, the rate of interest affects profit and thereby capitalist investment and ultimately commodity sales and production. In the former, the interest rate does not figure at all, influencing neither hoarding nor the total value of commodities circulated. For Likitkijsomboon, Marx made a mistake in siding with Tooke and Fullarton against the quantity theory, and a more consistent theory could be derived along the lines of Ricardo. [ibid: 172-73] This would have the advantage of providing a theory of the value of money both in the short-run before the money-commodity anchor has fully asserted itself, and in conditions where there is no money-commodity anchor.

Even in the long run, there are problems with treating the value money-commodity as independent of demand. As Marx acknowledges in the case of other commodities, the socially-necessary labour time necessary for their production, and hence their value, may depend on the quantity demanded at different prices.59 [e.g., Marx, 1981: 282] The production price of precious metals depends to a great deal on the level of output, because of the differential ‘fertility’ among mines and potential mines: as market prices shift, mines may move from unprofitability to profitability or vice versa. And the precious metal which functions as the money-commodity is a peculiar commodity in a further respect: it is not consumed (or only extremely slowly) but remains in circulation or in hoards. The flow of newly produced gold in the course of a year is small relative to the existing stock, and so the social need for new production is related only at a distance to the social need for the stock.

My own view is that despite these problems, Marx rejected the quantity theory for good reasons.60 That he did not develop a fully coherent alternative comes, I think, from a failure to

59 Note that I am not making a distinction between values and prices of production here, which would only introduce irrelevant complications. Although most of Marx’s discussion of money and the money-commodity proceed under the assumption that things exchange at their value, the equalization of the profit rate can be expected to apply to the industry producing the money commodity as elsewhere, so its price of production should really be seen as the anchor rather than labour value. In the present discussion, I use ‘price of production’ interchangeably with ‘value’, and technically mean the former.

60 Marx [1859] criticizes Ricardo’s reconciliation of the quantity and commodity theories of the value of money on the grounds that it assumes gold is demanded only as money, and that all money is always involved in circulation — that is, in Keynesian terms, it acknowledges only the transactions demand for money. Ricardo’s fundamental mechanism of adjustment, however, is unobjectionable at that level of abstraction — that the relative profitability of the goldmining industry is a regulating mechanism preventing the value of convertible money departing permanently from its commodity basis. Where Ricardo introduces the international dimension, however, Marx raises the further criticism that he errs in assuming that national monetary balance fully determines international flows of gold.
integrate the analysis of monetary income-expenditure flows with the analysis of the
determination of value/production-price. These are separate questions in Marx’s system: when
he comes to discuss flows, he takes value for granted, and vice versa. In Chapter 3 I discussed
aspects of how this integration could take place, through an engagement with the Keynesian
concept of liquidity preference and particularly post-Keynesian structuralist versions of it.

It is hardly surprising that Marx did not take this route himself. Given that there were few
theoretical resources in the political economy of his time for dealing with income-expenditure
flows, it is more remarkable that he made them as central as he did. According to Schumpeter
[1954: 710], in this era only Tooke developed an ‘income theory of money’, which could have
been developed in different ways, “one of which ends at Keynes’s General Theory”. Tooke
was clearly influential on Marx’s theory of banking and interest, but less so on his theory of
the value of money. More importantly, a theory of the value of money in the short run, during
periods in which it stretches away from the gold anchor, was simply not seen as an
independent phenomenon worthy of analysis, as it would become in the 20th century when the
anchor loosened and dropped away. It was enough to know that the anchor would assert itself
eventually. The problem for the state or central bank was not the value of money per se, but
the convertibility of particular monies.

Although central banknotes and official coins may circulate as means-of-payment and serve
in place of gold as bank reserves: these state monies may be interposed into the money
commodities place in circulation, but always as representatives of it. They may be more or
less successful at the representation, and how successful depends on the valuation of the
market. Because Marx could usually take for granted the commodity basis of convertible
national currencies as an institutional fact of his time, there is little analysis of inflation or
shifting exchange rates in his work, except as transitory phenomena destined to be undone in
a crisis as the anchor reasserts itself. In periods of currency inconvertibility, the value of the
currency is not discussed in terms of a price level, but in terms of the market valuation of the
currency in terms of gold: the complex of relative values remains steady, and only the place of
the overextended currency within it shifts. Money is an emergent phenomenon of generalised
commodity exchange, and that system adapts the state’s imposed monetary symbol to its
function of representing relative values and mediating their exchange.

The accounts of the mechanisms by which this happens appear in some of the least abstract
sections of Marx’s work – elsewhere he simply assumes that money circulates at its
commodity value – specifically, in the discussion of monetary crises in Capital, Vol. 3, and
the polemic against Proudhonian monetary reformers in the Grundrisse. Because some of the mechanisms survived the institutional particulars of mid-19th century Europe, they remain suggestive for the later evolution of the system. It is quite possible, Marx acknowledges, for the value of even fully-convertible money within a country to depart for substantial periods from the value implied by its official rate of conversion into gold or foreign currencies. The mechanisms that anchor the value of money may be counteracted for some years by expansionary tendencies. In the long run, though, the anchor will catch and reassert the commodity value of money, generally through a monetary crisis. [Marx, 1981: 681] For a country with no substantial goldmining industry, the effects of the anchor work through the exchange rate and international flows of the money commodity. The proximate limit on domestic monetary expansion is the country’s reserve of world money: gold (and/or silver) and foreign exchange. This was the limit Marx saw in his discussions of the crises of 1847/48 and 1857 and the problems facing the Bank of England and the Bank of France.

In Chapter 3 I discussed Marx’s views on the limitations facing the central bank’s attempts to regulate the quantity and/or velocity of money in circulation, because “the power of the [central] bank begins only where the private ‘discounters’ stop, hence at a moment where its power is already extraordinarily limited.” [Marx, 1973: 124] Private innovation in creating substitute monies and economising on ‘higher level’ monies makes it difficult to rein in a boom, though Marx acknowledges that central bankers’ adjustments of the interest rate charged on their own advances would have some impact. The central bank is forced to raise the Bank Rate to defend its own reserves, as they drain away due to domestic circulatory needs, and net international trade and capital movements – the last two factors gathering speed as domestic prices and expenditure take off. At the sign of trouble, whether related to a foreign drain or domestic banking fragility, the strain will be intensified by a rush back to gold from its substitutes. Finally, payments will fail and bankruptcies spread, beginning the downswing period of the cycle in which prices fall and the value of money as commodity is reasserted.

To many observers the practices of the central bank in defending its reserves are seen as responsible for the crisis. Marx argues the contrary against both bankers and Proudhonian monetary reformers. The central bank is stuck in the middle of contradictory forces, being incapable of restraining private monetary expansion on the one hand, and committed to convert its own liabilities into gold on the other. The appearance that its actions or omissions are responsible for the crisis are illusory: without the central bank and its lender-of-last-resort
function, expansion would be even less stable and inevitably checked much earlier. The central bank could postpone or alleviate a crisis – and Marx is scathing of the British 1844 Bank Act and the Currency School theory behind it for pointlessly limiting the central bank’s room to move with its requirement that its note issue be almost completely backed by gold. But it does not have to power to abolish crises entirely. Marx comments on the “great naivete” of the money market dealer Chapman’s view that the central bank ought to stand ready in a time of need to rediscount with its own banknotes any bill of exchange accepted by the major firms. Not to do so could precipitate a payments crisis due to a shortage of liquidity, even though the bills would ultimately be repaid. [Marx, 1981: 668] But with its own banknotes convertible into gold, the Bank of England is limited in its ability to rediscount by calls on its reserves. Thus the ability of the entire national banking system to stretch the circulation of money is limited by the world money at the base.

A logical response to that is to question why the state could not abandon for once and for all convertibility of its money into gold and free itself from this constraint. Marx considers such an argument in his criticism of Darimon, Proudhonist author of a mid-century treatise on banking reform.

Now suppose that the Bank of France did not rest on a metallic base, and that other countries were willing to accept the French currency or its capital in any form, not only in the specific form of the precious metals. Would the bank not have been equally forced to raise the terms of its discounting precisely at the moment when its ‘public’ clamoured most eagerly for its services? The notes with which it discounts the bills of exchange of this public are at present nothing more than drafts on gold and silver. In our hypothetical case, they would be drafts on the nation's stock of products and on its directly employable labour force: the former is limited, the latter can be increased only within very positive limits and in certain amounts of time. [Marx, 1973: 121]

The meaning of this is vague but suggestive: so long as economic relations – trade and capital flows – cross borders, there is no way for a national currency to escape the establishment of equivalence with world money. The state cannot control the rate at which this equivalence is established: over-extension eventually means depreciation, whether smooth or discontinuous in a sudden crisis. Marx is arguing that a non-convertible currency would not release the central bank from its position as a manager of contradictions. The acceptance of a currency depends upon trust that it will not be subject to sudden devaluations. The establishment of...
such trust in the case of even gold-convertible state-issued paper currency was a fragile thing that developed over decades. Its establishment in a “draft on the nation’s stock of products and… labour force”, when conversion into such commodities depended on market rates rather than any direct official commitment, could be even more fragile. The central bank would not be free to dispense any quantity of a non-convertible currency and still expect it to maintain its value; it would face different problems of crisis management, but would not be free from crisis. Darimon is wrong that monetary crises could be abolished by abolishing the metallic monetary base: even if at some point a financial crisis appears as a failure of the central bank to supply necessary means-of-payment at a crucial moment, the establishment of some limit on this supply would be a condition for such a currency to circulate in the first place.

There was little historical experience of capitalist monetary systems based on non-convertible state money for Marx to draw on: only exceptional, temporary situations such as the suspension of convertibility around the Napoleonic Wars. Several decades after Marx wrote, the money-commodity anchor would weaken and eventually fall away. He was correct that this would not release the state from its place at the centre of contradictions around the value and/or convertibility of money. But as the anchor weakened, the nature of the immediate monetary problems facing the state or central bank had more and more to be seen in terms of income-expenditure flows and the supply of and demand for money – because it became progressively less appropriate to neglect these questions on the grounds that the anchor would ultimately reassert itself.

10.3 Keynes and ‘managed money’

These were the terms in which Keynes reformulated the relationship between the value of money and the state. Because I have dealt with Keynesian treatments of the value of money in earlier chapters (see especially Chapter 5), I do not rehearse it at length here, but only discuss his formulation of ‘managed money’.

Pictures of the Queen and signatures of central bankers seem to mark money as a creature of the state – at least, the cash that serves as legal tender final means of payment. For Keynes [1930: 4], it is the state that decides

what it is that must be delivered as a lawful or customary discharge of a contract which has been concluded in terms of the money-of-account... to determine and declare what thing corresponds to the name, and to vary its declaration from time to time – when, that is to say, it claims the right to re-edit the dictionary.62

62 In fact, Keynes is more ambiguous – in the beginning of the analysis, it is “the State or the Community” [ibid:
The Australian government re-edited the dictionary on one occasion within my period, when the dollar superseded the pound in 1967. But the advent of decimal currency was of so little consequence that I have not referred to it in the chapters above. The value of money is not determined by the numbers printed on the bills, but is the inverse of the numbers printed on the price lists. These are generally private decisions, strategic reactions to competition, money-costs (others’ prices) and money-demand. A policy attempt to anchor the value of money to one standard or another requires that the state become involved in the flow of money around the sphere of exchange: it must actively manage money, with a view to affecting the conditions on which strategic pricing decisions are made.

Attempts to manage the value of money have historically taken different forms, both because of the evolution of monetary and broader economic systems, and because of change in theories about those systems. Classically, the value of money was managed by either or both committing to exchange currency for a commodity or foreign currency at a fixed rate, and/or managing the quantity of state-issued currency in circulation. Both these methods lasted well into the twentieth century. In the last half of the century, however, they were both supplanted, and this thesis has told the story of how and why, at least so far as Australia is concerned.

Keynes’ [1930] conception of ‘managed money’ throws into relief how far actual management would evolve from his initial conception. Again, for Keynes, money is always state money, in the sense that the state nominates or confirms what will serve as legal tender. The state cannot unilaterally proclaim the value of money, and private banks may expand the money supply by creating instruments that are convertible on demand into ‘money-proper’, so that the state can not unilaterally control the quantity of money. But the state’s decree of legal tender has implications for the market determination of money’s value; it may take action in the markets (financial and/or goods) to influence it; and it may take regulatory action to influence the behaviour of private actors. Depending on the state’s activity, money will fall into one of three categories: commodity money, fiat money, or managed money. According to Keynes’ definition [ibid: 7], the first covers only circumstances in which gold (or some other produced commodity) itself, or certificates of title to gold (i.e. with 100-per-cent reserve backing)

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4, emphasis added]. But ‘the community’ quickly drops out. There are a number of historical and contemporary cases in which ‘the community’ has substituted other currencies for the official one, as, e.g., with the domestic circulation of US dollars in countries whose own currencies have become unstable. Even in determining what circulates as ‘money-proper’, the state’s role depends on the circumstances.

63 And, as Keynes [ibid: 6-7] notes, the state may in turn bring some bank money into the fold of ‘money-proper’, acceptable in payment to the state: specifically, central bank money. He does not note, but possibly should, that the private sector has also shown the capacity to turn bank money from an instrument at one remove from a means-of-payment, and needing conversion before payment, into ‘money-proper’, widely acceptable in its own right as means-of-payment.
actually circulate as money-proper.\textsuperscript{64} The other two forms of money are ‘representative’, i.e., “the material substance of which is divorced from its monetary face value” [ibid: 7]. Fiat money is paper money issued by the state with no undertaking to convert it to any other thing at a fixed rate. Managed money is paper money issued by the state, but with a commitment – “by convertibility or otherwise” – to a fixed rate of exchange with another standard. [ibid: 8] Note that this does not necessarily entail that the state itself commits to exchange the standard for the money. It may be that it intervenes in other ways, attempting to influence market valuations so that money exchanges for the standard between private actors at the given rate.

In this sense, an inflation target can be considered a form of money management, though with a basket of commodities instead of a single commodity standard, and with a moving target – a rate of change of value rather than a fixed value. Keynes foreshadows the possibility of management in terms of a price level in a brief mention of unnamed “Monetary Reformers” who “argued that gold possesses now, even less than formerly, the qualities of a satisfactory objective standard, and they proposed to substitute for it some composite representative commodity on the general lines of the Tabular Standard on which has been long familiar in economic writings.” [ibid: 21-22] He has no premonition of the possibility of a moving target, however.\textsuperscript{65}

Keynes represents in theory the possibility of a new rationality guiding state policy. He presents ‘managed money’ as something which has already evolved without the managers necessarily being properly conscious of it. By becoming conscious of it, they would be in a better position both to improve their practice, and to defend it against traditionalists who defended the totem of gold convertibility at pre-war parity, without understanding why. Keynes [1924: 172] portrays the gold standard as a “barbarous relic” to be supplanted by rational management via central bank open market operations (and later, fiscal policy also).

But as Knafo [2006] argues, and as discussed in Chapter 4, the gold standard of the last half of the 19\textsuperscript{th} century can be seen as an evolution towards greater state power in the monetary sphere, because in imposing it the state asserted the power of the central bank over private banks and money creation, centralised the national hoard of world money, and carved out a

\textsuperscript{64} This definition of ‘commodity money’ is quite different from that of Marx and the classical theorists, for whom it referred to the standard of value, and certainly not necessarily actually circulating money.

\textsuperscript{65} There is a discussion in the \textit{General Theory} of an upward tendency of the price level in “the very long run”, but it is couched in terms of a periodic change of the otherwise stationary monetary standard. [Keynes, 1936: 307]
national monetary space. Even amid the troubles of the interwar period, the advocates of a strict commitment to gold parity at the pre-war rate were not devoid of rational arguments: while foreign exchange speculators had confidence in a government’s commitment to a rate, their activities would be stabilising, but as soon as this confidence was lost it would not be easily regained. [McKinnon, 1993: 7-8; Eichengreen, 1996: 7-44]

The real problem was that the state had been caught in a contradiction, its policy capacities pulled in different directions by different social forces. With most circulating money state or private representative money, there was nothing automatic about the gold standard: Keynes was right to recognise that this too was ‘managed money’ relying upon continual state activity. What was new was the rise of political forces that could make different, conflicting demands on the instruments of state power – specifically the labour movement. The spread of Keynes’ ideas into policy consciousness – and their transformation along the way – was not simply a superior rationality driving out irrational ‘barbarism’. It had to involve a management of contradictory political forces operating on policy, and this shaped not only the use of existing instruments, but also the emergence and form of the new instruments after the Second World War.

10.4 Hicks and the ‘labour standard’

In the mid-1950s, with a decade of experience of Bretton Woods and a policy commitment to full employment, J. R. Hicks announced an epiphany regarding the value of money in the new circumstances: “It is hardly an exaggeration to say that instead of being on a Gold Standard, we are on a Labour Standard.” [Hicks, 1955: 391] What he meant was that the ultimate regulator of the value of money in terms of commodities was now the money-wage bargain, around which everything else adjusted itself. This was in profound contrast to the gold standard, under which the money-wage bargain was ultimately subjected to the value of money, which was harnessed to gold at a fixed rate. Not only was the money-wage the fulcrum around which the domestic price level moved, but it also ultimately determined the exchange rate:

If the value of the pound is fixed in terms of British labour, and the value of the mark is fixed in terms of German labour, the pound-mark exchange will not remain steady unless the value of British labour in terms of German labour remains steady. [ibid: 391]

Is there an echo here of Marx’s argument almost a century earlier, that should the state abandon gold convertibility, and other countries accept its currency in international payments,
it would be as “a draft on the nation’s stock of products and on its directly employable labour force”? [Marx, 1973: 171, see above] For Hicks the ‘labour standard’ had an internal tension, though he was at pains to “make it quite clear… that I myself regard the Labour Standard as an unquestionable benefit” [Hicks, 1955: 391] But the tension was quite different in form from Marx’s prediction that the state would need to defend the value of even non-convertible currency. It did not stem from any need for authorities’ monetary restraint in the face of recession. This was precisely what had died with the gold standard. It had been threatened by the strength of the unions in the labour market and the spread of notions of a ‘fair wage’, first into political discourse and then into regulatory institutions. This was evident to everyone by the 1920s. At the end of that decade the balance of educated opinion on the ‘wages question’ was that the price for money-wage rigidity would be unemployment, and past a certain point, the institutions and the unions would break. But, writes Hicks,

as we know, it is not what did happen. Unemployment did increase, as… expected, but though the wage-structure yielded a little, on the whole it did not give way. What did give was another link in the chain – the Gold Standard. [ibid: 391]

This outcome, in Australia as in Hicks’ native Britain, was far from certain in the 1930s – things could perhaps have gone either way. It took the wartime mobilisation to initiate a clean break in economic management, and the postwar political settlement (in both British and Australian cases, under new Lab(o(u)r governments) to confirm the break. What happened can be understood in the Tinbergen terms I introduced in Chapter 2: the labour movement successfully imposed a limit condition on economic policy, such that unemployment was no longer politically tolerable.

For Hicks, the internal contradiction in the ‘labour standard’ involved, rather, its relationship to instability in the value of money, both domestic and international.

Whereas, under the Gold Standard, the value of the national money in terms of the Standard was fixed by the State (and the maintenance, or in a few cases the regulation, of this gold value was recognised as a major responsibility of the State), under the Labour Standard the value of money in terms of labour undergoes no deliberate determination. It is a mere by-product of the process of wage-fixing; wage-fixing being sectional, the value of money in terms of the standard comes to be determined by impersonal forces, and these forces seem to have a strong tendency to pull it one way. [ibid: 392]

The problem was that full employment was not the only limit condition. Despite the proclamations at the end of the war that full employment would henceforth be the overriding political commitment (the 1944 Beveridge report on *Full Employment in a Free Society* in the UK, and the 1945 White Paper on *Full Employment* in Australia), it could not be the only
commitment. Monetary instability in itself might not be a problem in itself: “if we have to expect an age of monetary instability, but are guaranteed against the accompanying unemployment, the expectation can be borne with equanimity.” [ibid: 392] But should labour begin to anticipate inflation and pursue money-wage compensation for it, it could accelerate and eventually destroy the ‘labour standard’ itself.

Surprisingly, Hicks does not make much of the international aspects of the problem. He acknowledges that they were “a grave preoccupation” in the years immediately after the breakdown of the gold standard, and initially given much more anxious attention than problems of the domestic price level. [ibid: 391] But he believes that the domestic issue has come to overshadow the international, and he gives no sense of connection between the two aspects of the value of money. Neither does he give any indication of the major change in form the international aspect took between the shifting exchange rates of the interwar period and the fixed rates of Bretton Woods. It is possible that from the perspective of Britain, 1955, the change did not look so major – given the devaluation of sterling in 1949, the exchange rate may not have seemed so fixed. In any case, insofar as Hicks’ concept of the ‘labour standard’ pertains to foreign exchange, it is arguably ahead of its time: better suited to the post-Bretton Woods world of flexible exchange rates, though even then relative price levels were not the only factor determining exchange rates, as the failure of purchasing power parity to hold demonstrates.

This thesis can be seen as an alternative explanation of the nature of the change in the responsibility of the state for the value of money, at least in the Australian context. Like Hicks, I see the change as driven by a change in policy aims brought about by a rise in the political power of the labour movement. But I see the ‘labour standard’ as under pressure from the beginning by the ‘limit condition’ set by balance-of-payments constraints, which arose from the commitment to fixed exchange rates under Bretton Woods. The relationship between the state and the value of money was not a settled regime in the 1950s, but destabilised by the tension between the commitments to price stability and full employment. I have shown ‘managed money’ to involve not a finished set of practices and institutions, but a trajectory, driven not by an internal logic but by the playing out of mutually contradictory forces upon policy.

10.5 Mutations of ‘managed money’ in Australia

Because the state itself did not draw up the price lists that determined the value of its
currency, internally (vis-a-vis commodities) or externally (vis-a-vis other currencies), managing money was not a matter of decree, but involved strategic activity in the economic system with instruments of specific and limited capacity. In Chapter 2 I drew on de Brunhoff, Jessop and Tinbergen to develop a framework for understanding policy strategy. The state is a social structure charged (among other things) with integration and troubleshooting tensions and dysfunctions in the rest of society. This is possible because of certain powers that have evolved within the state: the creative power of the legislature to constitute new institutions and ‘edit’ the law (which makes the form of the state mutable), and the strategic activity of executive branches previously constituted with specific powers.

These are indeed powerful institutions, but powerful in specific ways, not able to shape the economic and other social systems just as they wish. Agents of various branches of the state face competing interests with their own powers in the economic system, and the state terrain is itself contestable by political interests with competing projects. This political competition should not, however, be seen as prior to and above the agencies of the state itself, however: the existing structure of the state and its extant connections with surrounding social systems themselves exercise a strategically selective [Jessop, 2007] influence on the competition itself. That is, the pressures on the state to resolve social and economic contradictions, and the difficulties of pursuing a course that is dysfunctional for the economic system, work to favour certain political projects and strategies over others. Not only do conflicting social forces press upon the policymaking field, but the force with which they press is not independent of the policy process itself, because of its tendency to select against dysfunctional combinations of policies. This, in turn, reflects back upon the strategies of different social forces, who modify their aims and means so as to claim compatibility with an overarching structure. In other words, realism is a powerful principle, and what is realistic in economic policy has come to be determined within a totalising framework of macroeconomic theory.

I used the policy theory of Jan Tinbergen to flesh out the specific selectivities of economic policy. The array of policy targets must be seen as interrelated to the extent that they are not independent within the economic system itself. Instruments have specific capacities within the economic system of greater or lesser strength and predictability, and they are exercised amidst other forces, exogenous to policy – whether the deliberate strategies of other groups or the unanticipated outcomes of market processes. Problems facing policy can fall into three categories, though they may overlap. (1) Policymakers may be working with a misguided theory of the interrelationships between targets and/or the relationship between instruments
and targets. (2) The available instruments may be too weak or unpredictable to achieve the targets. (3) Given a set of instruments, targets may be in contradiction with one another, in that they cannot be simultaneously achieved. All three of these problems drive the evolution of policy, as policymakers revise their theories, attempt to improve their instruments or develop new ones, and/or revise their targets – all, of course, within a political context in which the technocrats of the bureaucracy do not call all their own shots, and in which branches of policy enjoy, at best, a ‘fissiparous unity’.

As I quoted Coombs [1983: 146] in Chapter 5, “It was one of the attractive features of the Keynesian analysis that it seemed to by-pass the most divisive issues within our society.” In fact it turned out that the divisive issues were not to be bypassed. Keynesian theory (or the neoclassical-Keynesian synthesis, as it developed) did not provide a technocratic key for Australia’s economic problems – rather, tensions old and new came to be represented within its framework, some resolved, to be sure, but others merely displaced.

Most importantly, there was a tension between the goals of full employment and the stability of the currency. After World War II in Australia, as elsewhere, the management of the value of money appeared to policymakers as two separate goals: domestic price stability, and the fixed exchange rate. Fixing the exchange rate was, within limits, directly within the power of the authorities, and thus did not appear directly as a policy problem. However, the instrument used to fix the exchange rate had a limit, and had implications for other policy objectives, so it manifested to policymakers indirectly as the goal of ‘external balance’. The ‘instrument’ involved the central bank buying and selling whatever foreign currency the market demanded at the going rate. By acting as price-maker, the central bank was a quantity-taker, transforming the price question of the value of the currency into an issue of flows – the balance of payments. The instrument was limited on one side by the finite stock of foreign exchange reserves. On the other side, there was no limit to the exercise of the instrument itself, because stocks could accumulate indefinitely. But because the central bank’s accumulation of foreign exchange had the expansion of domestic banking reserves as a corollary, and because exchange rate movements could not mediate any movement in relative price levels or demand for tradable goods, the goal of a fixed exchange rate could not be independent of the goal of price stability even in conditions of persistent payments surplus.

Key aspects of the structural connections between ‘external balance’ and the domestic policy goals were captured in models devised by Trevor Swan, which were extremely influential
among Australian economists and policymakers. His central insight was that both the level of domestic output and the balance of payments depended on both domestic expenditure and the ‘cost ratio’, i.e. the ratio of domestic prices or money-wages to foreign or tradables prices. At a given cost ratio, the target level of domestic output may require a different level of aggregate demand than the balance of payments. To ensure both targets could be simultaneously met, policy would need control over the cost ratio as well as aggregate demand, whether through exchange rate adjustment or some form of wages policy.

I called the basic Swan model ‘vulgar Tinbergianism’ because it presents a policy problem in a formal system and concludes that it is soluble like a system of equations – so long as there are as many instruments (equations) as there are targets (unknowns), policy can simultaneously reach all its goals. Policy is simply about the right mix of settings. This ignores Tinbergen’s insights about the limit conditions set on policy instruments by their material technical form and by countervailing political-economic resistance by groups affected by the instruments.

However, around the Swan system developed a less abstract literature dealing with the particular situation of Australian policy in the 1950s, which was more attuned to these issues. They also recognised certain extra interconnections between the variables and dynamic aspects of the external balance problem. Specifically, domestic aggregate money-demand was not independent of export earnings, and the pressure of demand for domestic output could cause movements in the cost ratio via inflation. The Korean War wool boom combined both of these effects, feeding a huge wave of domestic inflation. Even if domestic policy instruments had been technically strong enough to offset the spike of farm incomes by holding down other components of aggregate demand, or to prevent money-wages from adjusting upwards with the cost of living, it would have faced insuperable political difficulties, because industrial capital and/or labour would have had to absorb the shock. Meanwhile, the political power of rural interests prevented an exchange rate appreciation, though it is not certain this would have avoided the problems of the rest of the decade unless it could have been readjusted back down with export prices the following year.

The wool boom left the Australian cost ratio permanently high relative to tradable prices and trading partners. This generated a cyclical tendency towards balance-of-payments crises, as expansions were associated with widening deficits threatening to exhaust official foreign exchange reserves. Thus ‘external balance’ forced policymakers to prioritise disinflationary
policy – immediately in the event of a crisis, and over the long-run in the hope of eventually lowering the cost ratio.

In Chapter 5 I explored why this prioritisation of price stability conflicted with the goal of full employment – why, ultimately, macroeconomic policy often meant a ‘Keynesianism of restraint’. That these two goals were in conflict was not immediately obvious within some early postwar models of inflation which portrayed unemployment as essentially the ‘opposite’ of inflation, a consequence of aggregate demand set above full employment levels. This view of a line, with unemployment on one side and inflation on the other, could not be sustained, and had never been assumed in Keynes’s *General Theory* in the first place. More sophisticated theories of inflation were developed in the course of the 1950s, recognising both a grey area of effective demand over which both unemployment and inflation would coexist, and the inertial, circular character of inflation resulting from wage-price and wage-wage spirals.

I emphasised, however, that the Phillips curve, with its implication of a stable relationship between unemployment and inflation, was initially received poorly among Australian economists. While it was recognised that there could be a policy ‘trade-off’ in that unemployment would slow money-wage growth, it was not seen as a stable or predictable relationship. Most importantly, policymakers held out hope that the ‘trade-off’ could be improved if unions restrained their claims voluntarily or if the arbitration system could be used to implement a macroeconomically-oriented wages policy.

But the arbitration system’s judicial basis meant that it was not amenable to being integrated into the policy apparatus. The government could make requests, and macroeconomic reasoning entered the arguments of industry and labour, but arbitration was not a wages policy. There were some successes in convincing the judges to consider and sometimes prioritise inflation in their decisions – as with the termination of automatic indexation in 1953. But to the extent that the system was successful in restraining Award wages, market wages began to drift away from these minima, and the judges could not ignore ‘earnings drift’ or risk losing what wage control they had.

Following the ‘credit squeeze’ of 1960/61 the government allowed unemployment to remain elevated for an extended period. Although it would not have admitted deliberately allowing unemployment to discipline wage and price growth, there is evidence that policy advisers in Treasury at least were advising such a course of action. In any case, several years of relative price stability eventuated and the cost ratio improved.
In Chapter 6 I turned from the theme of structural tensions between the goals and focused on the construction of a functional chain of influence for monetary policy. Central banking was brand new in Australia after the war, and it had to be established in the face of trenchant resistance from the trading banks, especially after the nationalisation attempt poisoned relations between them and the Commonwealth Bank.

Monetary policy focused on the balance sheets of the trading banks for several reasons. A broad political coalition for ‘cheap money’ set limit conditions on the active use of interest rates, while financial markets were not nearly deep enough for flexible open market operations. The trading banks were not the dominant source of finance for investment, but they were a marginal source, and because their liabilities circulated as money, they could extend credit without any decline in liquidity preference on the part of the non-bank private sector.

The use of the Special Accounts instrument to manage trading bank liquidity ran into a number of problems. There was no regulatory requirement on the trading banks to maintain a minimum ratio of free reserves to deposits; they had easy access to borrowed reserves from the central bank in the event of liquidity difficulties; and the authorities’ commitment to stable yields on government securities meant they were almost as liquid as cash reserves. It took most of the 1950s for central bankers to establish a viable mode of operation for banking policy, with the LGS system – stipulating a minimum reserve ratio of liquid assets and government securities – finally gaining some measure of bank acceptance in return for the separation of the Reserve from the Commonwealth Bank. Even then, the system did not function entirely smoothly in the boom at the end of the decade.

By that point, the trading banks’ dominant position in the financial system had been eroded by the emergence of finance companies. These originated partly as a side-effect of policy restrictions on the trading banks, especially the limits set on their deposit and lending interest rates, and discouragement of their involvement in consumer credit. The finance companies emerged in a symbiotic relationship with money market dealers, and were both cause and beneficiary of the development of a deeper securities and money market. The system they created was able to expand credit beyond the control of the authorities and force the liquidity consequences onto the trading banks, which made it more difficult for the latter to restrain their balance sheets in accordance with the wishes of the central bank. Monetary policy was forced to adapt to the development of non-bank financial institutions and markets by allowing bank interest rates to become more competitive, and the central bank extended lender-of-last resort
facilities to certain money market dealers – partly out of fear of financial instability, and partly in the hope of eventually enjoying a sophisticated enough financial system to support open market operations. The transition to a broader, more market-oriented monetary policy was not smooth, however – in the ‘credit squeeze’ of 1960/61 the authorities caused severe liquidity problems for the non-bank sector in trying to re-intermediate finance through the trading banks.

By the early 1960s, then, macroeconomic policy had been established as a more-or-less coherent amalgamation of fiscal and monetary policy, which had been turned towards restraint as much as stimulus. The failure to integrate the arbitration system into the apparatus meant that the money-wage would not be an instrument of policy – and therefore could only be an intermediate target, potentially disciplined by unemployment if necessary. However, for the rest of the decade this was not necessary, because the improvement of Australia’s balance-of-payments situation relieved pressure on policy to prioritise price stability.

In Part III I traced the transformation by crisis of the macroeconomic policy framework that had been built up over the postwar period. My aim was to discuss the transitional crisis period of the 1970s as precisely that – a transition – and not as a total rupture with the previous decades. In contrast with accounts presenting ideological change as driving the transition – either as an Enlightenment of rational policy replacing bad policy, or as a malign or misguided shift – I emphasised the relatively autonomous evolution of the political-economic structures within which policy operated.

In Chapter 7 I discussed the change in the nature of the external discipline on policy after the breakdown of the Bretton Woods system of fixed exchange rates. The last years of that regime were sunny for Australia, in terms of ‘external balance’. Enjoying a minerals boom and a sustained inflow of capital, balance-of-payments crises were a thing of the past. But I wrote that what seemed like good news also turned out in retrospect to contain some of the seeds of the troubles of the 1970s. I reviewed the debate on the extent to which Australia’s inflation early in that decade could be said to be ‘imported’. I argued that the metaphor may be misleading, because it was just as important that balance-of-payments difficulties no longer checked domestic inflation as it was that there was some direct influence of international prices, demand and capital flows on domestic prices. Nevertheless, there is little doubt that Australian inflation was connected to the global experience.
I then discussed the transition to flexible and finally floating exchange rates. That the exchange rate should be an instrument of policy had been an aspiration of many economists in the post-war period. It turned out to be more difficult than anticipated. Maintaining an exchange rate peg for policy purposes still required that international payments balance in the medium- to long-run. Now that freely flowing capital shifted in line with exchange rate expectations, the meaning of that balance changed. A peg could ultimately be maintained only so long as market sentiment expected it to be sustainable. Because expectations were based partly on expected relative movements in the price level, policy was again constrained to prioritise inflation, perhaps even more tightly than it had been under Bretton Woods – motivated by fear of a downward spiral in which depreciation and inflation would reinforce one another. Exchange rate policy tended to become more passive, second-guessing the market less and less – except for a brief period in the early 1980s – until the Australian dollar was finally floated in 1983.

Chapter 8 discussed the transformation of counterinflation policy itself. Reviewing the contemporary literature on the natural-rate, expectations-augmented Phillips curve, I showed that in themselves these models did not predict or explain the simultaneous rise in unemployment and inflation from the early 1970s. Instead, I suggested that Treasury was essentially correct in its view that a profit squeeze was at the core of the problems. The world commodity boom combined with domestic labour shortages localised in key industries, and trade union confidence, to trigger a ‘wage explosion’ in 1974 that succeeded in increasing the wage share of aggregate income at the expense of profits. Firms were prevented (on average) from fully adjusting prices in line with the money-wage growth because of the high Australian dollar and because of the slump in demand in 1974/75. To say this is of course not to sympathise with capital or Treasury against labour – only to admit that the economic system itself limits the possibility of redistribution so long as investment depends upon private profit and business confidence. I stressed that the shift in the wage-profit share was not the whole story of the decline in average profitability, as there was also a longer-running trend decline in the output-capital ratio. Maintaining the profit rate of the 1960s and early 1970s would have required a declining wage share, not mere stability.

Counter-inflation policy strategies in the 1970s divided into three camps, including the Treasury line invoking a profit squeeze. Advocates of incomes policies agreed that there was a need to restrain wage growth, but hoped to do it through consensual central management. Monetarists denied the independent influence of wages and urged restraint in the growth of the money
supply – but the practical implications of such a policy were the same as Treasury’s favoured strategy of ‘fighting inflation first’. Monetary targeting performed organising and legitimising functions for a combination of fiscal and monetary restraint, and the government also used it in an attempt to bring the arbitration system in line. This strategy had some success but was undermined by the slump in employment and return of double digit inflation from 1982. The third strategy, incomes policy, came to the fore with the wages freeze and then the Labor Government’s Accord with the Australian Council of Trade Unions, which had some initial success by persuading the labour movement to internalise macroeconomic goals.

Finally, in Chapter 9 I discussed the increasing complexity of the financial system and its interaction with policy. I showed how in spite of – or even because of – the ensemble of financial regulations, the non-bank sector flourished in the late 1960s and 1970s. Finance companies began to expand again, and most importantly money market corporations arrived and functioned so as to fill many gaps in the spectrum of intermediation. The deepening of markets allowed open market operations and interest rate adjustment to play much more important roles as monetary policy instruments. But I argued that the control of trading bank liquidity remained crucial to monetary policy throughout the period.

Just like their counterparts in Treasury, central bankers in Australia had an ambivalent but pragmatic relationship with monetary targeting. They did not generally support the strong claims of the monetarists about the predictable relationships between money supply and nominal income growth, or believe that controlling the money supply would be simple. But the targets legitimatized a policy of serious restraint. I also made the case that although financial deregulation was not compatible with monetary targeting, it was quite compatible with strong monetary policy and further facilitated a policy based on open market operations, setting up a stable instrument for the future.

10.6 Towards the inflation target

In the mid-1980s, where my story leaves off, ‘managed money’ could not be said to have settled in a stable form, with annual inflation still running above 10 per cent. It would take Keating’s ‘recession we had to have’ to finally kill off inflation. The Accord would fade away, wage policy thoroughly beaten by the discipline of unemployment as a technique for restraining money-wage growth. In 1993 the Reserve Bank would be given independence from government control in its day-to-day pursuit of an inflation target. But in their broad contours, the macroeconomic policy vision that would dominate the next 25 years at least had
been laid down. Policy was expected to prevent the acceleration of inflation as its top priority.

As discussed in Chapter 1, I have presented an alternative narrative to those which portray the rise of ‘economic rationalism’ or ‘neoliberalism’ in Australia as primarily resulting from a change of ideology on the part of a political and business elite, whether for good or for bad. Changes in economic vision have of course been a part of the story, but I have presented them as shaped by a complex set of factors in which policy evolved in attempts to deal with economic dysfunction arising from mutually contradictory political-economic forces. I have emphasised policy rationality as a relatively autonomous selector of political projects and strategies. The policy ensemble known as ‘economic rationalism’ was shaped by the capitalist economic system’s need for price stability as much as it chose price stability as a goal.

Otherwise, what is to explain the selection of Friedman’s strong central bank over von Hayek’s free banking? Or, for that matter, the flexible workings of modern monetary policy over Friedman’s rule-following?

In Chapter 8 I criticised former Reserve Bank Governor Ian Macfarlane’s account of the career of the Phillips curve in Australia. But his recollections about the views of monetary policymakers to financial deregulation in the 1980s are more cogent:

> It is sometimes claimed by opponents of these reforms that they were implemented because policymakers were enraptured by the idea of the free market and so embraced the concept of *laissez-faire*. This may be true for a few, but for most I think the process was much more prosaic than this, at least in the macroeconomic sphere. I think politicians and economic bureaucrats came to realise that the process of setting key financial prices, such as interest rates on government bonds, lending rates by banks or the exchange rate, was not working. It was just too difficult to do it properly, and if you got it wrong, as you inevitably would, the consequences could be painful – for example, trying to defend an over-valued fixed exchange rate. [Macfarlane, 2006: 45]

In this concluding chapter, I have tried to put the post-WWII evolution of macroeconomic policy in a much broader perspective, discussing the shifting responsibility of the capitalist state for the value of money since the gold standard. The state has never *controlled* the value of money, which has always been determined as the inverse of price lists for commodities, as traded competitively on markets. But the value of money has always presented problems for the state. When the standard of value was a specific money-commodity, private and public representative monies emerged which were not composed of that commodity but were convertible into it. The state was drawn into managing this convertibility and regulating the banking system so as to mitigate crises of convertibility.

Under the gold standard, the private financial system evolved around the central bank such
that the latter played a critical functional role within it. There could be no such thing as *laissez-faire* so far as money was concerned: the state was always implicated whether through action or omission. Again, this did not mean money was the creature of the state – merely that the state was inevitably bound up as a functional part of the monetary system. When the rise of the labour movement put different demands on the state’s monetary instruments, monetary management was riven by a dilemma. The macroeconomic vision emerging with Keynes provided policymakers with a set of tools for conceptualising the tensions and managing them in a more sophisticated way. ‘Managed money’ pulled away from its basis on a single commodity. But the tensions were never removed, only displaced in various ways. This thesis has told the story, so far as Australia is concerned, of how capitalism’s functional need for a stable standard of value folded somewhat (so that a steady decline in the value of money would come to be accepted), but ultimately pushed back against the political demand of the labour movement for full employment.


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