Before the storm: the making of Australian anti-inflation policy, 1945-65

Mike Beggs
PhD candidate, Political Economy, University of Sydney
m.beggs@econ.usyd.edu.au

Introduction

It is clear from many obituaries for Milton Friedman last year that of all his work and ideas on money and inflation, it is the concept of the 'natural rate of unemployment' that has had the biggest impact on orthodox economics.[1] Monetary policymakers today have little time for stable monetary functions or rules for targeting the money supply, but closely watch the unemployment rate, mainly for its connection to 'wage pressure'. The award of the 2006 'Nobel' Prize in Economics to Edmund Phelps, for his own work on the 'equilibrium rate of unemployment' and inflationary expectations, confirms the continuing prestige of such ideas.[2] Though it is rarely put so bluntly, a certain amount of unemployment is considered functional for macroeconomic stability. Indeed, perhaps the most striking difference between the post-war long boom and the present is in the level of and attitudes towards unemployment. In Australia today we are often reminded that our current rate (now 4.8 per cent) is at its "lowest in a generation" (e.g., *Australian Financial Review* [2006]); in the early 1960s, the Menzies government nearly lost an election when unemployment hit the crisis level of 2 per cent.

Between the periods, of course, was the stagflationary crisis of the 1970s. Most accounts of the political-economic transition from 'full employment' focus on this crisis as the turning point – and with justification, as that point was the moment when the inflationary contradictions of the post-war long boom reached major proportions and burned themselves into the political consciousness. But the problem with this periodisation – Keynesian long boom, crisis and political paradigm shift, neoliberalism – is that it underplays the dynamism within the periods which it identifies. This paper focuses on inflation during the post-war boom in Australia, and the changing policy response to it. My purpose is to emphasise that, and explain why, well before the 1970s economic policymakers in Australia were moving towards an acceptance of unemployment as macroeconomically functional, and a view that price stability should trump growth as a policy goal.

This challenges the popular view that Keynesian economists and policymakers under their influence underestimated the seriousness of inflation, and let it get out of control. Such a view is hard to reconcile with the 'horror budgets' and credit squeezes in the 1950s and early 1960s, and the difficulty in finding evidence of unambiguously expansionary fiscal policy, as Ian Macfarlane remarked in his Boyer lectures this year. [Macfarlane, 2006] That economists and policymakers in the 1950s and 1960s were obsessed with inflation is established by Cornish [1993], and in the relevant chapters

[1] See, for example, Brittan [2006].
[2] According to Bank of England chief economist Charles Bean, Phelps' ideas are "a central tenet of policymaking". [Quoted in Giles, 2006]

of the institutional histories of Treasury and the central bank by Whitwell [1986] and Schedvin [1992].

Cornish argues that Keynesian economists recognised a need for stronger disinflationary action, but were for the most part ignored by politicians whose “judgment was influenced not only by economic considerations”. [p. 67] Governments rejected the advice because of the adverse electoral consequences of tightening budgets and credit, and showed an inexplicable predilection for direct economic controls instead of trust in the market. Cornish’s judgement is essentially the same as the economists he quotes: rational policy was blocked by short-sighted politicians and interest groups.

In contrast, I argue in this paper that the post-war economic orthodoxy itself was over-confident in policy’s ability to simultaneously meet all its objectives: full employment, rapid growth, price stability and external balance. In fact this golden combination was unattainable in really-existing capitalism. Further, I present an explanation for why, once the existence of a trade-off was acknowledged by the early 1960s, the policy priority shifted away from full employment and growth, and in favour of price stability.

I give a broad outline of the material policy contradictions rather than a narrative of the politics of inflation. This not only reflects a limit of space, but also my belief that the development of anti-inflation policy cannot be seen simply as the outcome of political-ideological battles, reflecting shifts in the balance of power between labour and capital, or ideological differences between ‘left Keynesians’ and ‘the Treasury view’. This is not to deny the existence of real conflicts in the economy – in fact, these are crucial to my explanation. It is to argue that the experience of inflation itself shifted the terrain over which these conflicts were fought.

In the next section, I outline the goals economic policymakers optimistically hoped would be simultaneously achievable. While they recognised tensions between the objectives, they believed the right policy mix could maintain a balance between full employment, internal and external price stability, and rapid growth. I then explain how price stability related to the other goals.

In the second section, I explore the tension between rapid growth and disinflationary macroeconomic policy. On the one hand, investment was necessary for economic expansion and productivity improvements, and in the long-run could be assumed to expand output and eliminate inflationary bottlenecks. But in the short-run, high rates of investment raised aggregate expenditure without a corresponding expansion in supply. I explain the conflicting pressures this put on fiscal and monetary policy.

Next, I look at the contradiction between full employment and price stability. The effect of labour shortages on wage growth in a rapidly growing economy was obvious to policymakers. This tension was at first hoped to be managed by an ambitious immigration program, and by greater attention paid to inflation in arbitration hearings. When it became clear that money wages were difficult to control in this way, economists argued for either a stronger wages policy, or an end to full employment.

Finally, I examine the interrelationship between external balance and internal price stability. With exchange rates fixed, the balance of payments made it impossible to tolerate Australian inflation above levels prevailing elsewhere in the world for long, on penalty of foreign exchange exhaustion. The balance-of-payments crises of 1956 and 1960 insisted that inflation be kept under control, reinforcing those arguing for tighter policy.

Policy goals

> *It was one of the attractive features of the Keynesian analysis that it seemed to by-pass the most divisive issue 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 creating inflationary pressures.*
>
> - H. C. Coombs, quoted in Jones [1989: 37]

Price stability was one of four primary policy goals in the post-war period. The other three were full employment, rapid development, and external viability.[3] These goals remained throughout the period, but with declining confidence that they were reconcilable with one another.

There was little sense in the 1945 white paper *Full Employment in Australia* that full employment was inconsistent with the other goals. It assumed that the pressure of consistently high demand and full utilisation of resources would promote rapid growth, while rapid growth would in turn keep up demand for labour: "… a tendency towards a shortage of men instead of a shortage of jobs." [p. 6] Concerns that assured high demand and the absence of a pool of job seekers might hinder industrial change were dismissed: demand maintenance would give businesspeople a more secure environment in which to take risks, and full employment would foster "a revival of a spirit of enterprise amongst workers." [p. 11] Full employment might strengthen the hand of unions in wage bargaining, but it would not be in unions' interests to push for inflationary wage increases because the movement "includes the great majority of consumers" and co-operation would be assured as gains from productivity growth were passed on to wages. [p. 12] Inflation was perceived as a problem of excess spending, which could be controlled by changes in government spending. [p. 9] Unemployment and inflation were rocks to steer between with careful demand management. In "abnormal circumstances" where the balance could not be kept, the government should make use of capital, price and goods controls. [p. 6] Likewise, abnormal balance-of-payments deficits could be met with import controls, and the

[3] These four goals were stated in different ways in different documents, but all four were consistently listed together. The Commonwealth Bank Act 1945, and its successor, the Reserve Bank Act 1959, listed the duties of the central bank board as "the stability of the currency, the maintenance of full employment and the economic prosperity and welfare of the people of Australia". The first point combines internal price stability with external currency stability. The terms of reference given to the Vernon Commission of Economic Enquiry in 1963 list seven objectives: "[1] a high rate of economic and [2] population growth [3] with full employment, [4] increasing productivity, [5] rising standards of living, [6] external viability and [7] stability of costs and prices". [Vernon et al, 1965: v] [1], [2], [4] and [5] together constitute my "rapid development". It could be argued that in both cases concerns with "rising standards of living", or "prosperity and welfare" constituted a separate goal, but I consider it part of 'rapid development', since economists and policymakers generally considered the wage and profit shares of output to be constant.

government would pursue efforts abroad to open markets for Australian exports and promote full-employment policies elsewhere. [p.13]

After twenty years of full employment experience, however, the *Report of the Committee of Economic Enquiry* commissioned by Menzies was much more apprehensive. Vernon et al wrote of "the conflict between full employment and price stability… evident in Australian experience since 1948-49." [p. 43] They also reported that in cases where domestic inflation outstripped that overseas, "it may be necessary for a government under certain circumstances to take action that will, for the time being, cause a reduction in the rate of economic growth." [p. 47] It was a more pessimistic analysis, but that there were conflicts between objectives was, if anything, understated compared to other conclusions, such as those drawn by Treasury.

The post-war economic experience looks in retrospect to be happy – in all four goals performance outstrips later periods – with the possible exception of external viability. But for policy to be judged a success on this basis requires that policy be established as the main cause of the post-war boom. In fact, the active role of the state was only one element in sustaining the long boom. So-called 'Keynesian' demand-management policy was at best a supporting player, as argued by Jones [1989], Maddock [1987] and (with reference to the post-war boom elsewhere in the world) Bleaney [1985]. My argument is not that these economic phenomena necessarily contradict one another – though there are certainly tensions – but that as goals they pulled policy in different directions. State power used in support of one goal contradicted what the state was called to do for another.

The theoretical framework informing post-war macroeconomic policy sustained the optimistic view that there was no contradiction between these four goals was Keynesian macroeconomics – or at least, the 'bastard Keynesian' neoclassical synthesis. The Phillips curve looms so large in discussions of 'Keynesian' anti-inflation theory and policy that it is easy to forget that Keynesian economists had theories of inflation before its arrival. It was the idea of a stable trade-off between inflation and unemployment that Phelps, Friedman and others attacked – but such a trade-off was in fact already a climb down from earlier optimism that full employment was perfectly compatible with price stability.

The earlier theory of inflation saw it as the outcome of an excess of aggregate money demand over full-employment output at pre-inflation prices. This excess demand was the 'inflation gap'. Essentially it was the opposite of unemployment, and the goal of macroeconomic policy was to keep the economy balanced at the point where aggregate money demand matched full-employment aggregate supply.

The origin of inflation gap analysis was Keynes' [1940] essay, *How to Pay for the War*, "much discussed by Australian economists" in the 1940s. [Markwell, 2000: 50] The essay analysed the effect of an injection of additional expenditure (originally, government wartime deficit spending) into an already fully-employed economy. Prices would rise to close the gap between expected real expenditure and real output.

It was not difficult to adapt the analysis to the peacetime economy, and integrate it with the neoclassical synthesis.[4].

In this simple form, the lesson for policy was obvious: eliminate the 'inflation gap'. With demand and supply represented as undifferentiated aggregates, this seemed easy enough. There would be no conflict between price stability and full employment. It may have been only a fine line, a 'knife-edge' or 'brink' between inflation and unemployment, but the former was clearly on one side and the latter on the other.[5]

Crucially, the ultimate cause of the opening of an inflation gap is exogenous: a government decision to deficit spend (as in *How to Pay for the War*), or an autonomous rise in investment. Neither seems much of a challenge to macroeconomic policy – the first is a policy decision anyway, the second generally a cyclical phenomenon. The lesson in the first case is to restrain government spending or cover it with taxation in full employment conditions; in the second case it is to use fiscal and monetary policy counter-cyclically. Many models also included an endogenous element explaining the dynamic of inflation once begun – often revolving around how nominal wages adjust to each round of inflation. (See below.) But if policy could prevent the gap from appearing in the first place with wise, well-timed macroeconomic policy, these concerns would not arise.

This is a view of inflation without class conflict over distribution. Full employment represents the maximum productive capacity of the economy, and any nominal income gains beyond this would be illusory. In fact economists in Australia were constantly frustrated by political opposition to disinflationary policy – but they saw this as fundamentally irrational, the product of sectional 'interest groups', for which the best cure was simply economic education. [6] Likewise, there is no conflict between

---

[4] For an exhaustive literature review of inflation gap analysis in the 1940s, 1950s and early 1960s, see Bronfenbrenner and Holzman [1963]. This supports my interpretation that inflation theory became progressively more concerned with endogenous distributional conflict, particularly the role of wage bargaining in sustaining an inflation gap. For a briefer overview, see Frisch [1983: 227-49]. For an Australian perspective, see Hagger [1963].

[5] Weintraub [1971: 43] points out that Keynes himself cautioned that "deflation in employment and inflation in prices were not symmetrical concepts". Chapter 21 of the *General Theory* [Keynes, 1936: 292-309] is a complex discussion of the relationship between money and the price level. Here Keynes suggests that there is no single point of 'full employment', below which an increase of demand brings forth only an increase in output, and above which it brings forth pure price increases. Instead, wage rises and bottlenecks in some sectors will mean some of the increase in demand will raise prices rather than output at levels below full employment of labour. Thus full employment can be redefined as the stage "when output has risen to a level at which the marginal return from a representative unit of the factors of production has fallen to the minimum figure at which a quantity of the factors sufficient to produce this output is available." [ibid: 303] Though this chapter was less influential than the simpler discussion in *How to Pay for the War*, it foreshadows the later downward redefinition of 'full employment'. Keynes argues trenchantly against the possibility of formalising the relationship between unemployment and inflation. [ibid: 297-98; 302] The Phillips curve filled this gap with an apparent empirical regularity.

[6] There are many examples in journal articles and speeches throughout this period. Cornish [1993] and Whitwell [1986] catalogue numerous complaints, such as economist Gerald Firth in 1951: "…most methods of control (including direct controls) necessarily operate by restricting expenditure, and consequently cut across the immediate economic interests of the groups adversely affected. In the post-war period, political resistance has been sufficient to confine disinflationary measures within the narrow limits set by 'practicability', which has prevented the introduction of any measure likely to offend the susceptibilities of influential interest groups." [quoted in Whitwell, 1986: 103] Also see Coombs [1948]: "… we are certainly better equipped than ever before to deal with economic

rapid growth and full employment – in fact, they would be mutually reinforcing because a fully-employed economy would produce more output, resulting in more profit, more investment, and a continuing state of full employment. If aggregate demand crossed that line into inflation territory, the monetary and fiscal reins were there to pull it back.

Development versus price stability

> *…to frame [a Central Bank] advance policy meant the framing of an industrial policy, the two being really different aspects of the same thing…*
> - Richard Randall, Treasury Principal Research Officer, in 1947 [quoted in Jones, 2003: 12]

The static character of the inflation gap analysis meant that it had a blindspot obscuring the process of economic growth. From the point of view of aggregate demand management, investment was a swing variable to be repressed in inflationary conditions. But over time investment creates new output capacity, thus expanding full employment aggregate supply.[7]

This created a dilemma for macroeconomic policy. Restraining consumption spending via tax increases was politically much more difficult than restraining government spending or investment. But restraining the latter two got in the way of development. This was the essence of the contradiction between policies promoting development and those aiming at price stability. The former often overrode the latter, and in the 1950s set tight limits to anti-inflationary fiscal and monetary action. It was only at moments of inflationary and/or balance-of-payments crisis – 1950/51, 1956 and 1960 – that price stability trumped developmental concerns, and in each case action was delayed.

The role of the state in sustaining the long boom went well beyond demand management, which was "the icing on the long boom rather than the cake itself." [Jones, 1989: 34] At the same time, the state was not *directly* responsible for the growth of capital investment or demand that underpinned the boom. Unlike elsewhere, the public sector in Australia did not dramatically increase its share of

---

fluctuations. The difficulties are primarily political and social rather than economic and technical." Rowan [1963 (1956): 33]: "The root cause of many of the 'political' difficulties which beset the Commonwealth authorities is the lack of understanding of economic affairs displayed by the general public." The most dramatic complaint came from Giblin [1945], whose brief venture into dystopian science fiction painted a picture of an Australia ruined by inflation for twenty years, until a new generation, properly educated in economics at school, comes of age and is mature enough to make full employment non-inflationary. Giblin was particularly animated against organised interests: "Organisations seem to collect all the vices and reject all the virtues of their members. Organised interests are in fact Satan's last and cleverest invention for the destruction of mankind." [p. 60]

[7] Arguably, this was a major theoretical fault in the early neoclassical-Keynesian synthesis – a neglect of growth dynamics. The policy conflict between growth and stability no doubt contributed to a revival of interest in growth models, however. Karmel [1959: 349] observed: "At the same time as the problem of successfully employing *given* resources has diminished in importance, so an increasing emphasis has been placed on growth, expansion and development. The popularity of growth theory in the Schools of Economics in Western Universities cannot be solely attributed to a philanthropic interest in under-developed areas. On the contrary it has a real relevance in advanced economies where demands are pressing on resources and economic scarcity has regained its pre-eminence."

GDP in this period. [Maddock, 1987: 82; Catley and Macfarlane [1983: 68]. But active government policy decisions[8] played several vital roles. These included:

1. Providing essential public infrastructure;
2. Maintaining stable, low interest rates;
3. Ensuring a rapid growth in the labour supply with an ambitious immigration program; and
4. Directing capital to particular strategic industries, with capital controls, qualitative monetary policy, tariffs, etc.

These activities were inconsistent with disinflationary policy. It did not always seem so. In the immediate post-war years, the instinct of many economists in and out of the bureaucracy was to advocate closing the inflationary gap from below, not above: that is, to increase supply rather than reduce demand. Inflation was a result of supply bottlenecks, partly due to reorientation for peacetime, but also likely to be a chronic problem, because private investment was not far-sighted or co-ordinated enough. Inflation was partly a problem of misdirected capital.[9]

Writing in 1945, Firth noted a split among Australian economists between the ‘planners’ and the ‘compensators’. The latter took a more conservative, classic Keynesian approach to inflation, advocating more flexibility in fiscal policy to offset swings of investment, and use of interest rates. He 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.” [Firth, 1945: 10]

This proved correct. 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 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.[10] (For a detailed account of the plans and their defeat, see Jones [2003].)

But, as Firth predicted, even with the abandonment of detailed state direction of capital, development would pull policy in different directions to what counter-cyclical activity would call for. Menzies’ coalition government was no less dedicated to rapid

---

[8] As opposed, I mean, to those regular functions of the state which are always essential to capitalism: protection of private property, etc.

[9] 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. [Whitwell, 1986; Jones, 2003]

[10] Both capital and bank lending controls continued to be used in the 1950s, but then mainly as tools of overall credit restraint.

development than Labor had been. The tension between policies aimed at price stability and those aimed at development were apparent right from the 1949 campaign: promises to “put value back into the pound”, to reduce government spending relative to gross national product, coexisted with grand developmental plans, and the idea that inflation should be tackled from the supply side. [Catley and McFarlane, 1983: 79] According to Whitwell [1986: 97]:

> While in opposition, Liberal and Country Party members had consistently argued that the problem of inflation arose because of supply-side difficulties. Governments needed to play an active role in stimulating and supporting the private sector and in providing the right framework within which the private sector could expand production. This implied not only a reduction in taxation… but also a considerable increase in government spending to meet the infrastructural requirements of a rapidly expanding economy. Indeed it was the view of the Treasury and Commonwealth Bank that the LCP government was potentially more spendthrift than Labor and that their developmental plans… were potentially disastrous.[11]

Consequently, fiscal policy was less flexible than it had been assumed to be. The *White Paper on Full Employment* had argued that “public capital expenditure is the principal type of expenditure that can be readily varied to offset variation in the unstable parts of expenditure.” [p. 5] It implied that plans for public projects could be “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. [p.8]

But as early as 1948 H. C. Coombs was reflecting 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] Major projects took years of planning, and once underway could not simply be put on pause. Housing projects and social services were developed for real needs and raised expectations, and likewise were not easily cut back. On the other hand, tax increases were a very politically difficult way of running a surplus. While Australian media, business and public opinion accepted the reasoning behind running counter-cyclical deficits more readily than, say, the United States, surpluses were political poison – from capital as much as labour – in themselves, aside from the specific direct effects of reduced expenditure or raised taxation. [Corden, 1968: 35-36]

The Chifley Labor government attempted to disguise surpluses with creative government accounting and the creation of trust funds. Menzies’ coalition government was equally reluctant to run surpluses. The same basic series of events repeated in the inflations around 1950/51, 1956, and 1960: advisers in the central bank and Treasury urged early action; the government acted half-heartedly, if at all; inflation reached major proportions (in 1951) or a balance-of-payments deficit threatened to exhaust foreign currency reserves (1956 in 1960); the government was forced to take serious disinflationary action; this took its effect too late and exacerbated a downturn already underway; in the following year fiscal policy was abruptly reversed to deal with the downturn. Each time the original fiscal action was

[11] In fact the coalition oversaw a rise in the proportion of national expenditure controlled by government from 14.9 per cent in 1949 to 19.4 per cent in 1965, compared to a growth under Labor from 13 per cent to 14.9 per cent, including wartime. [Catley and McFarlane, 1983: 79] However, the growth of government spending did not outpace that of private spending as markedly as happened elsewhere. [Maddock, 1987] For further material on the Menzies’ government’s commitment to development, see Schedvin [1992: 167].

widely attacked by the press and Opposition (the 1951 'horror budget' and 1960 'credit squeeze' are still remembered – e.g. in Macfarlane [2006]), and each time the abrupt reversal discredited counter-inflationary fiscal policy and made the government reluctant to use it next time around. Thus the cycle continued – and became known derisively as 'stop-go' fiscal policy.[12]

Greater hopes were therefore put on monetary policy. According to Rowan [1971 (1954): 150], fiscal policy was the "heavy artillery" – more powerful than monetary policy, but difficult to deploy quickly. Monetary policy was weaker, but "tactically agile." Furthermore, monetary policy was less well understood by the public, and did not need to be publicly announced and shepherded through caucus, Cabinet and Parliament.[13]

But developmental concerns placed a crucial limitation on monetary policy also: interest rates were not available as a tool of demand management. A commitment to 'cheap money' is often associated with the left, but had broad support across the spectrum, particularly in the farming support base of the Country Party (from whose ranks came Treasurer Arthur Fadden). It even had support within state and federal treasuries because it kept down the cost of government borrowing. Furthermore, policymakers had little confidence in the ability of small variations in interest rates to have much macroeconomic influence, especially with Australia's relatively small capital markets, while large increases were completely off the cards.[14]

So bank rates were kept low by direct control, bond rates (the market dominated by government securities) by Commonwealth Bank support. The main tool of monetary policy, instead, was direct control of bank reserves. The central bank had the power to call private bank reserves into Special Accounts (after 1959, replaced by the similar system of Statutory Reserve Deposits). This was a far-from-perfect way of controlling the real target, bank advances, especially before the establishment of reserve requirements.[15]

Pressure for interest rate flexibility to increase the power of monetary policy mounted throughout the 1950s. First, the need to use open market operations to support security prices had a perverse effect during inflationary episodes. As bondholders sold instruments whose real rate of return was rapidly diminishing (while equities and

---

[12] This potted history does, of course, glide over important differences between 1950/51, 1956 and 1960. For a detailed analysis of fiscal policy in this period, see Artis and Wallace [1971 (1967) a] and Artis and Wallace [1971 (1967) b].

[13] "Since the 'political' constraints affect mainly the use of fiscal devices, it is urgent to consider whether the admitted lags in fiscal policy cannot be partly offset by endowing our monetary techniques with greater breadth, precision and flexibility. This is not to deny that 'political' difficulties also exist in the monetary field as do constitutional obstacles. It is merely to suggest that, in this particular field, it may be possible to overcome them – at least in part." [Rowan, 1963 (1956): 34]

[14] For example, Treasury advised against raising interest rates even during the rapid inflation of the wool boom: "… 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." [Quoted in Whitwell, 1986: 104]

[15] The period from the end of the war to the early 1960s were a watershed for the development of central bank powers in Australia, and the Commonwealth Bank was frequently involved in political conflict with the private trading banks as it attempted to increase its strategic power in the monetary system. This is an important story, but the details are beyond the scope of this paper. See Schedvin [1992: 62-332] for a detailed account.

property boomed with the inflation)[16], the central bank was forced to buy, thus injecting liquidity into the economy precisely when it was trying to restrain it. This pattern was repeated, much to central bankers' frustration, in 1950/51, 1956 and to a lesser extent, in 1960. [Coombs, 1971 (1954): 30-31; Coombs, 1971 (1958): 52-54; Arndt and Harris, 1965: 206] At times, the sell-off of securities was too much for the Commonwealth Bank to bear, and rates rose in 1951, 1952 and 1955.

Secondly, the 1950s saw the rapid development of non-bank financial institutions – especially finance/hire-purchase companies – and the capital market. This was partly an autonomous development of financial innovation, but also partly a re-routing around the banking system when authorities tightened bank liquidity. [Arndt and Harris, 1965: 187] The central bank had no legal control over institutions not defined as 'banks', and was unable to do anything but attempt to use moral suasion to encourage these institutions to act in line with monetary policy. [Schedvin, 1992] In the absence of a Constitutional change extending central bank powers, as non-bank finance expanded, interest rate flexibility appeared more and more vital as a tool for influencing liquidity in the economy.[17]

Price stability vs. full employment

As mentioned above, the starting point for inflation gap analysis was the two big Keynesian swing variables – government spending and investment, which could be taken as exogenous, and which were presumed to be manipulable targets for macroeconomic policy. But increasingly in the 1950s theoretical attention focused on the dynamics of inflation once underway – how wages, profit margins and prices reacted to the first round of inflation and sustained further rounds. This meant a greater concern with how income shares were determined: theorised either through neoclassical microeconomics or analyses of wage bargaining, pricing power, and inflationary expectations. At first this fit comfortably into inflation gap analysis – in fact Keynes [1940: 57-74] included a wage-price spiral in his original exposition. Money wages were assumed to adjust to recover their real value to some extent, but this would re-open the inflation gap for another round, and the price level would continue to rise until the gap closed (e.g., because the effective real demand of those unable to adjust their money incomes upwards would decline in each round).

Furthermore, cost-push explanations for inflation began grow in popularity[18], particularly in order to explain an anomaly observed in several countries during the

---

[16] Or sold to meet liquidity needs denied by the banks, as described by Arndt and Harris [1965: 186]: "The more tightly the central bank restrained bank credit, the greater the incentive to bondholders to meet their own or other investors' need for funds by selling securities. In these circumstances, bond rates could be prevented from rising only by the central bank standing ready to buy bonds in unlimited amounts, thus surrendering all control over the money supply."

[17] See Arndt and Harris [1965: 181-88]. They write: "The problem for central banking was similar to that faced by the Bank of England a hundred years earlier when, happy at last to have solved the problem of control of the currency by the Bank Act of 1844, it found bank deposits gradually displacing notes and coin as the main form of money and opening up the whole question afresh." [pp. 187-88]

[18] A number of models contained both inflation-gap demand-pull elements and cost-push elements: so-called 'mixed' theories of inflation. See, for example, Duesenberry [1950], Holzman [1950], Simkin [1952], Pitchford [1957]. For a discussion of models in which the cost-push element dominates, see Bronfenbrenner and Holzman [1963: 613-30].

1950s: inflation continued in conditions of substantial and rising unemployment and spare production capacity. Wage determination also gained in theoretical prominence because of political controversy over perceived increasing union power and militancy in the United States. [Thorp and Quandt, 1959: 48; Fellner, 1959: 226]

Cost-push theories of inflation 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', moving the same competitive situation to a higher general price level. [Simkin, 1952: 151] Cost-push theories did not allow demand to fall out of the theoretical picture, since if money demand did not increase along with costs for whatever reason (say, because of an increase in import prices), the general price level could not rise. In fact, the emergence of cost-push elements in inflationary models did not no much threaten demand-centred theory, as supplement them.[19] The main effect of the shift in focus was to emphasise that not only could wages play a passive role in inflation, rising because of a general state of high demand, but that wages could also themselves be an autonomous cause. Even maintaining the real wage in the face of a previous rise in the price level would feed further rounds of inflation.

There were two important consequences. First, it suggested that inflation resulted from conflict over distribution of real output. This was disguised in the simpler forms of inflation gap analysis because the active cause of inflation was treated as exogenous. Later theories, by bringing wages in, acknowledged that the economy could endogenously generate money-backed income claims that exceeded the output of the economy at the current price level; or, alternatively, that cost increases could raise prices independently of the level of aggregate demand. Secondly, this removed the clear theoretical line with unemployment on one side, and inflation on the other. The conventional definition of 'full employment' (1), referring to a state in the labour market where everyone was either in work or in a brief transition between jobs, might be higher that the other 'full employment' (2), defined as the point where aggregate money demand would not cause an increase in the price level. The macroeconomic problem became more difficult than balancing aggregate demand at a single point. Full employment and price stability were not mutually consistent.[20]

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 around the world, and Australia was no exception. But, almost uniquely, Australia already had a centralized system of wage determination in the Arbitration Courts. The frustration for policymakers, however, was that this did not seem to make a centralized wages policy any easier – in fact it made things worse.

[19] Karmel [1959: 350-51] writes: "Demand pressures and cost pressures are conceptually distinct, but they are likely to be interacting 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."

[20] The Phillips curve was only a formalisation of this point. As discussed by Weintraub [1971], the idea of a quantifiable relationship between inflation and unemployment that could inform policy was a significant departure from earlier social democratic beliefs, and from Keynes himself.

> 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 Arbitration system was a juridical institution, guided by norms of fairness, conflict resolution and legal precedence, as well as economic rationality.[21] Since 1921, the basic wage had been automatically adjusted to rise with a cost-of-living index, protecting wage decisions from increases in the price level between judgements. In the 1950s and 1960s, inflation, and its relationship with external balance, played major parts in arguments against basic wage increases. The economic arguments set out in arbitration judgements were often derided by academic economists.[22] 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]

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 money 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 economists: nominal wages and salaries should not rise faster than average labour productivity.[23] Elaborating discussion revolved around secondary issues, such as the impact of terms-of-trade shifts, and questions of the wage relativity structure.[24]

This was premised on the belief that nominal wage growth was the active element in price inflation. Profit margins were presumed to be passive. Inflation was not generally perceived to be a result 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 or the pricing power of firms) [Vernon et al, 1965:126-27][25], or if not stable, to be relatively independent of bargaining over the nominal wage [Whitehead and Cockburn, 1963].

---

[21] For historical overviews of the changing criteria by which arbitration judgements were made, see Hawke [1967 (1956)]; Laffer [1966]; Isaac and Ford [1967]; and Hancock [1975].

[22] "… 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]

[23] See, for example, Karmel [1959: 351]; Vernon et al [1965: 142-43].

[24] E.g., how to deal with wage rises beyond productivity gains in particular sectors of the economy – since abnormally high 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 difference between female and male wages.

[25] 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:

It was certainly true that conflict over income shares did not happen exclusively through bargaining over nominal wages (via arbitration or decentralised bargaining): income distribution is determined after the fact, given that the wage aggregate appears both as a cost and as demand permitting price increases. [Saad-Filho, 2000: 341] Of course rising real wages were workers' target. But labour's only leverage for attaining those higher real wages was over money wage rates – obviously price-setting was out of its control. So it is not surprising that exhortations such as Coombs' [1963 (1959): 149] "to trade unions and to 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 economic consensus broke down over how an ideal income policy should deal with shifts in export and import prices, and the broader issue of the relationship between the domestic sector (where firms are able to raise prices in response to cost increases) and the external sector (exporters and income-competing firms, who are 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 simply an academic question. 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, the increase in expenditure was enough to take consumer price inflation to an annual rate of around 20 per cent.

Of course, there had been no labour productivity growth to match. But had money wage growth therefore been ruled out, real wages would have seen a substantial decline. Instead, under normal arbitration practice, the basic wage and margins were 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 higher wages prevailed. As Rowan argued afterwards:

> 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 throughout the economy. Any attempt to prevent this process completely is likely to involve labour unrest [as it would drive up prices without allowing adjustment of nominal wages]. [Rowan, 1971 (1954): 130]

239] these figures were later revised, and in 1966 three members of the Vernon Committee subpoena'd to appear before the 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 conclusions in Department of Labour and Immigration [1975] and Catley and McFarlane [1983: 78-80].

But the following year, wool prices collapsed and the balance of payments followed, while the price adjustment process continued to echo, consumer price inflation remaining at an annual average of above 20 per cent. 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 Court judges. But almost immediately, this began to expose the limitations of attempts to use the arbitration system as a tool of wage restraint. The gap between the minimum Basic Wage set by the Court and the average wage – including margins for skill, overtime, and over-award payments bargained at an enterprise level – began to widen. (See Figure 2 below.) The arbitration system, after all, was not a wages policy – it set minimums, and bargaining at more decentralised levels was free to determine higher levels of pay, or more overtime[26]. 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, of course, 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.[27] Furthermore, the judges realised 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 was not an arm of policy, but reflected the relative industrial power of capital and labour – and full employment enhanced the latter. By the late 1950s, the Courts were granting basic wage increases alleged to be inflationary, and in 1961 the cost of living was restored as a baseline for adjustments.

This '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 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]

External viability and price stability

Having established that the goal of price stability clashed with the other goals of rapid development and full employment, it remains to explain why full employment and

[26] A further cause of 'wage drift' was a movement of workers into higher skill categories.
[27] Downing and Isaac [1967 (1961): 261-66] discuss the relationship between the awards and over-award payments.

growth declined as priorities. It is not necessary to my argument that greater price stability was actually *achieved* at the expense of unemployment and growth, though the signs do point in that direction until 1965. In fact, the unemployment rate does show a secular upwards trend between 1948 and 1961 (see Foster [1996: 202]). Inflation[28], if anything, trends downwards after the wool boom until 1965, while output growth fluctuates around a roughly stable trend. But these figures depend on a range of factors besides policy, and my point is only that among central bank and Treasury policymakers, as well as among economists more generally, price stability increased in priority.

Although inflation in itself carried costs (for an impassioned catalogue of its drawbacks, see Coombs [1959]), these were unlikely to outweigh the problems of unemployment unless it reached critical proportions, as it did in 1950/51. The main reason for the priority shift was the limit to domestic inflation set by external viability.

The collapse of wool prices in 1952 marked the onset of a period of "brooding pessimism" [Corden, 1968: 15] about the country's balance-of-payments situation. Though policymakers found expansion politically much easier than disinflation, and the wool bust was weathered without a major downturn, it ushered in a period of chronic balance-of-payments deficits.

The next serious inflationary episode, in 1956, was combined with a balance-of-payments crisis, and it was the imminent exhaustion of foreign exchange reserves that motivated demand restraint as much as domestic inflation (which was far below the rate during the wool boom). Likewise, in 1960, disinflationary action was lacklustre until an abrupt plunge in the trade balance called in the toughest macroeconomic squeeze yet. [Artis and Wallace, 1971 (1967) a: 398] The problem now was not external conditions sparking inflation in Australia, but internal inflation upsetting the external balance.[29]

Balance-of-payments problems had short-run and long-run implications for policy. In the short-run, a balance-of-payments crisis resulting from domestic inflation, where high domestic money demand spills over into imports, had to be countered with macroeconomic restraint and/or import restrictions. The latter was considered only a stop-gap solution, as they would redirect expenditure towards domestic goods, thus exacerbating the underlying inflationary tendencies. For this reason import restrictions were removed in 1960 and not reimposed during the crisis, with the consequence that macroeconomic policy had to be significantly tighter than in 1956. [Arndt and Harris, 1965: 171]

In the long run, most writers concluded that Australia's persistent tendency towards balance-of-payments deficits could only be overcome by controlling domestic costs,

[28] Both GDP deflators and the consumer price index show this trend. [Foster, 1996: 238-39]

[29] Treasurer Fadden proclaimed in the 1955/56 Budget: "Sometimes it is instability abroad that shakes our own stability. It is not so much that factor now, though it is not entirely absent. Our difficulties today are preponderantly of local origin and that is a vitally important fact." In its 1956 survey, Treasury reported that "it has repeatedly been emphasized that our troubles largely arise within Australia, from which it follows that they lie within the ambit of our own control." [Both quoted in Whitwell, 1986: 128]

which, according to Swan [1963 (1954): 391] meant "essentially adjustments of real wage rates". Even though on the export side Australia's misfortunes were a result of declining prices for its dominant rural exports, expanding manufacturing exports would require major improvements in competitiveness, and the burden would fall on labour. This was an even stronger proposition than that coming from the labour market economists: not only would nominal wages need to rise no faster than productivity growth, but foreign wage costs would need to rise faster for domestic capital to enjoy improvements in competitiveness. For the price level in Australia rose more rapidly than many of its trading partners, including the UK and US, while exchange rates remained fixed, as shown in Figure 3 below. Much of this gap developed during the wool boom inflation, but it continued to widen for the rest of the 1950s.

Despite this, a devaluation was not seriously considered, for three reasons. First, under the Bretton Woods agreements, an exchange rate adjustment was a drastic action not to be taken lightly, and not easily reversed, not to mention an affront to national pride and politically difficult. Secondly, it would create exchange rate uncertainty and discourage foreign investment, which was proving vital in plugging the current account gaps. [Corden, 1968: 17] Finally, most economists did not see devaluation as a real solution to trade imbalance if the underlying tendencies towards deficits remained – particularly while labour was in a strong position to maintain its real wage after the devaluation. There was a risk of a devaluation spiral, potentially exacerbated by speculators. [Meade, 1963 (1956): 413]

Conclusion: a taste of unemployment

The balance-of-payments experience of the 1950s forced price stability to the top of the policy agenda. The lesson taken from the three rounds of 'stop-go' macro-policy was that inflation should be targeted early: policy needed to take aim at 'inflationary pressures' even before the emergence of inflation itself, even if this meant a decline in the rate of investment and consequently growth. If inflation did develop and cause a balance-of-payments crisis, macroeconomic policy would need to be more forceful.

Talk of a 'trade-off' between inflation and unemployment increased in the late 1950s, before the development of the 'Phillips curve', and well before the visit of Phillips himself to Australia in 1959. The curve, and its later formalisation into models, merely tried to quantify a relationship between unemployment and wage increases that had long been noticed. Phillips' conclusion was that in Australia an unemployment rate of 3-4 per cent would be necessary to eliminate wage growth beyond productivity growth. This level of unemployment was unthinkable at the time. [Whitwell, 1986: 131]

Nevertheless, Australia soon had an experiment with the trade-off, deliberate or not. The response to the building inflation of 1959-60 was typical at first: a reluctance to use fiscal policy, a reliance on monetary policy, which in hindsight looks too weak for the task, then an abrupt plunge in the current account deficit and belated fiscal restraint. But the outcome was atypical in the strength of that late fiscal response, and the depth and length of the ensuing recession ("… the most prolonged recession since the 1930s…" [Artis and Wallace [1971 (1967) b: 439]). The pattern was also atypical

in that fiscal stimulus during that recession was at first especially weak. Rather than 'stop-go', this was 'stop-pause-go'.

The unemployment rate more than doubled between 1960 and 1961, averaging at 2.6 per cent in the latter year, and did not fall below 2 per cent until 1963. Though fiscal stimulus, when it came in the August 1961 Budget, was reasonably strong, there is a general consensus that its measures "came too late, or were too weak, to prevent a further rapid decline". [ibid: 460; see also Whitwell, 1986: 134-35] The government missed the opportunity to reverse its fiscal stance earlier, despite the depth of the recession, and when a further major package came in February 1962 (announced by Menzies himself) a recovery was already underway.

Although the government ferociously denied that it was deliberately trying to exploit an inflation-unemployment trade-off, there is some evidence that at least some of its advisers were recommending this course. Treasury practically argued as much openly in its 1961 and 1962 surveys, which focused on price stability despite the recession conditions. In the latter, it concluded that inflation

> is a grave social evil; it is also a pervasive economic malady and Australia has reached a point at which 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][30]

Even if the trade-off was not entirely deliberate, the outcome provided ammunition for those arguing for a downward redefinition of 'full employment'. The recession did bring price stability not seen since the war. But another lesson was delivered to the government in the 1961 election. Unemployment was the major campaign issue, and the rate of well-above 2 per cent meant the Coalition came within one seat of losing. The idea of a trade-off between unemployment and inflation was gaining acceptance among economists, but the prescription it led to was abhorrent to the public.

The impasse was among the questions addressed by the Vernon Committee of Economic Enquiry. Realising the political difficulties and social disaster of an end to full employment, the Committee pinned its hopes on an effective incomes policy. But, of course, this too presented seemingly intractable difficulties, and the Report was unconvincing:

> Post-war experience does not support the optimistic view that wages policy would alone be sufficient as a means of reconciling price stability and full employment. The problem of reconciling rapid economic growth and a high level of activity with price stability therefore remains, although an appropriate wages policy may make full employment without inflation more nearly attainable. [Vernon et al, 1965: 132]

So by the early 1960s, two opposing plans for dealing with price stability were laid out which would become more familiar in the coming decades. Incomes policy prescriptions foreshadowed those attempted in the 1970s, and the Accord of the 1980s. The experience of 1960-63, on the other hand, foreshadowed the monetarist 'natural rate of unemployment' and 'the recession we had to have' at the turn of the 1990s. In the mid-1960s the last phase of the post war boom developed steam, while

[30] See also the discussion of Treasury's reduced commitment to the rate of economic growth in Whitwell [1986: 166-68].

an improved trade position and a flood of foreign direct investment granted a reprieve on the balance-of-payments situation, so it would still be a few years before the choice was again clearly posed.

Bibliography

Artis and Wallace [1971 (1967) a]: “Assessing the fiscal impact”, in Neil Runcie (ed.) [1971], *Australian Monetary and Fiscal Policy: selected readings*, vol. 1, University of London Press, pp. 353-402.

Artis and Wallace [1971 (1967) b]: “A historical survey of Australian fiscal policy 1945-66”, in Neil Runcie (ed.) [1971], *Australian Monetary and Fiscal Policy: selected readings*, vol. 1, University of London Press, pp. 403-81.

H. W. Arndt and C. P. Harris [1965]: *The Australian Trading Banks*, 3 ed., F. W. Cheshire, Melbourne.

Australian Financial Review [2006]: “Complacency is alive and well”, editorial, November 3.

Michael Bleaney [1985]: *The Rise and Fall of Keynesian Economics: an investigation of its contribution to capitalist development*, Macmillan, London.

Samuel Brittan [2006]: “Milton Friedman, economist, dies aged 94”, *Financial Times*, November 16.

Martin Bronfenbrenner and Franklyn D. Holzman [1963]: “Survey of inflation theory”, *American Economic Review*, 58:4, 593-661.

Robert Catley and Bruce McFarlane [1983]: *Australian Capitalism: in boom and depression*, 2ed., Alternative Publishing Cooperative, Sydney.

H. C. Coombs [1948]: “Australia’s ability to avoid booms and depressions”, *Economic Papers*, 8, pp. 36-53.

H. C. Coombs [1959]: “A matter of prices”, *Economic Record*, December, pp. 337-48.

H. C. Coombs [1971 (1954)]: “The development of monetary policy in Australia”, in Neil Runcie (ed.) [1971], *Australian Monetary and Fiscal Policy: selected readings*, vol. 1, University of London Press, pp. 22-43, originally presented as the English, Scottish and Australian Bank Limited Research Lecture.

H. C. Coombs [1971 (1958)]: “Conditions of monetary policy in Australia”, in Neil Runcie (ed.) [1971], *Australian Monetary and Fiscal Policy: selected readings*, vol. 1, University of London Press, pp. 44-68, originally presented as the R. C. Mills Memorial Lecture at the University of Sydney.

W. M. Corden [1968]: *Australian Economic Policy Discussion: a survey*, Melbourne University Press.

Selwyn Cornish [1993]: "The Keynesian revolution in Australia: fact or fiction?", *Australian Economic History Review*, 60, pp. 43-69.

Department of Labour and Immigration [1975]: *Labour's Share of the National Product*, Canberra.

R. I. Downing and J. E. Isaac [1967 (1961)]: "The 1961 Basic Wage Judgement and wage policy", in J. E. Isaac and G. W. Ford (eds.), *Australian Labour Economics: readings*, Sun Books, Melbourne, pp. 255-71, originally published in *Economic Record*, 37:80, December 1961.

James Duesenberry [1950]: "Mechanics of inflation", *Review of Economic Statistics*, 32, May, pp. 144-49.

William Fellner [1959]: "Demand inflation, cost inflation and collective bargaining", in P. Bradley (ed.), *The Public Stake in Union Power*, University of Virginia Press, Charlottesville.

Gerald Firth [1945]: "The economics of full employment", *Economic Papers*, 5, pp. 5-19.

Rob Foster [1996]: *Australian Economic Statistics: 1949-50 to 1994-95*, Occasional Paper no. 8, Reserve Bank of Australia.

Helmut Frisch [1983]: *Theories of Inflation*, Cambridge University Press, Cambridge.

L. F. Giblin [1945]: "Financing full employment", *Economic Papers*, 5, pp. 59-67.

Chris Giles [2006]: "Phelps wins Nobel for exploding economic myths", *Financial Times*, October 10.

A. Hagger [1963]: "Some gaps in the theory of the inflationary process", *Economic Record*, June, pp. 166-86.

Hancock [1967 (1962)]: "The Basic Wage and the cost of living", in J. E. Isaac and G. W. Ford (eds.), *Australian Labour Economics: readings*, Sun Books, Melbourne, pp.132-49, originally published in *Australian Economic Papers*, 1:1, September 1962.

K. J. Hancock [1967]: "Earnings-drift in Australia", in J. E. Isaac and G. W. Ford (eds.), *Australian Labour Economics: readings*, Sun Books, Melbourne, pp. 222-54.

K. J. Hancock [1975]: "The wages of the workers", in J. R. Niland and J. E. Isaac, *Australian Labour Economics: Readings*, 2ed., Sun Books, Melbourne.

R. J. Hawke [1967 (1956)]: "The Commonwealth Arbitration Court – legal tribunal or economic legislature?", in J. E. Isaac and G. W. Ford (eds.), *Australian Labour*

Economics: readings, Sun Books, Melbourne, pp. 33-88, originally published in *Annual Law Review*, University of Western Australia, 3:3, November, 1956.

Franklyn D. Holzman [1950]: "Income determination in open inflation", *Review of Economic Statistics*, 32, May, 150-58.

J. E. Isaac [1967 (1954)]: "The function of the Court", in J. E. Isaac and G. W. Ford (eds.), *Australian Labour Economics: readings*, Sun Books, Melbourne, pp. 272-77, originally published as section within "The Basic Wage and Standard Hours Inquiry in Australia, 1952-53", *International Labour Review*, 64:6, June 1954.

J. E. Isaac and G. W. Ford [1967]: "Introduction", in J. E. Isaac and G. W. Ford (eds.), *Australian Labour Economics: readings*, Sun Books, Melbourne, pp. 3-32.

Evan Jones [1989]: "Was the post-war boom Keynesian?", *Working Papers in Economics*, 131, Department of Economics, University of Sydney.

P. H. Karmel [1959]: "Some reflections on inflation, productivity and growth", *Economic Record*, vol. 35, December.

Kingsley Laffer [1966]: "The present position of Commonwealth basic wage determination", *Journal of Industrial Relations*, 8, November, pp. 233-50.

John Maynard Keynes [1936]: *The General Theory of Employment Interest and Money*, Macmillan and Co., London.

John Maynard Keynes [1940]: *How to Pay for the War*, Macmillan and Co., London.

Ian Macfarlane [2006]: "The golden age", Boyer Lecture 1, ABC Radio National, transcript at www.abc.net.au/rn/boyerlectures/stories/2006/1769918.htm#transcript.

Rodney Maddock [1987]: "The long boom 1940-1970", in Rodney Maddock and Ian W. McLean (eds), *The Australian Economy in the Long Run*, Cambridge University Press, Melbourne, pp. 79-105.

Donald J. Markwell [2000 (1985)]: "Keynes and Australia", Research Discussion Paper 2000-04, Reserve Bank of Australia, originally presented at a Reserve Bank seminar on 18 September, 1985.

J. E. Meade [1963 (1956)]: "The price mechanism and the Australian balance of payments", in H. W. Arndt and W. M. Corden (eds.) *The Australian Economy: a volume of readings*, F. W. Cheshire, Melbourne, pp. 396-415, originally in *Economic Record*, November 1956.

Parliament of the Commonwealth of Australia [1945]: *Full Employment in Australia*, white paper presented 30 May, Canberra.

J. D. Pitchford [1957]: "Cost and demand elements in the inflationary process", *Review of Economic Studies*, 24, February, pp. 139-48.

D. C. Rowan [1963 (1956)]: “The problem of economic policy”, in H. W. Arndt and W. M. Corden (eds.) *The Australian Economy: a volume of readings*, F. W. Cheshire, Melbourne, pp. 31-35, originally in *Economic Record*, November 1956.

D. C. Rowan [1971 (1954)]: “Monetary problems of a dependent economy: the Australian experience 1948-52”, in Neil Runcie (ed.), *Australian Monetary and Fiscal Policy: selected readings*, v. 1, Hodder and Stoughton, Sydney, pp. 128-51, originally in *Banca Nazionale del Lavoro Quarterly Review*, December 1954.

Alfredo Saad-Filho [2000]: “Inflation theory: a critical literature review and a new research agenda”, *Research in Political Economy*, 18, pp. 335-62.

C. B. Schedvin [1992]: *In Reserve: central banking in Australia, 1945-75*, Allen & Unwin, St Leonards.

C. G. F. Simkin [1952]: “Notes on the theory of inflation”, *Review of Economic Studies*, 52, pp. 143-51.

T. W. Swan [1963 (1955)]: “Longer-run problems of the balance of payments”, in H. W. Arndt and W. M. Corden (eds.) *The Australian Economy: a volume of readings*, F. W. Cheshire, Melbourne, pp. 384-95, originally a paper presented to the Congress of the Australian and New Zealand Association for the Advancement of Science, Melbourne.

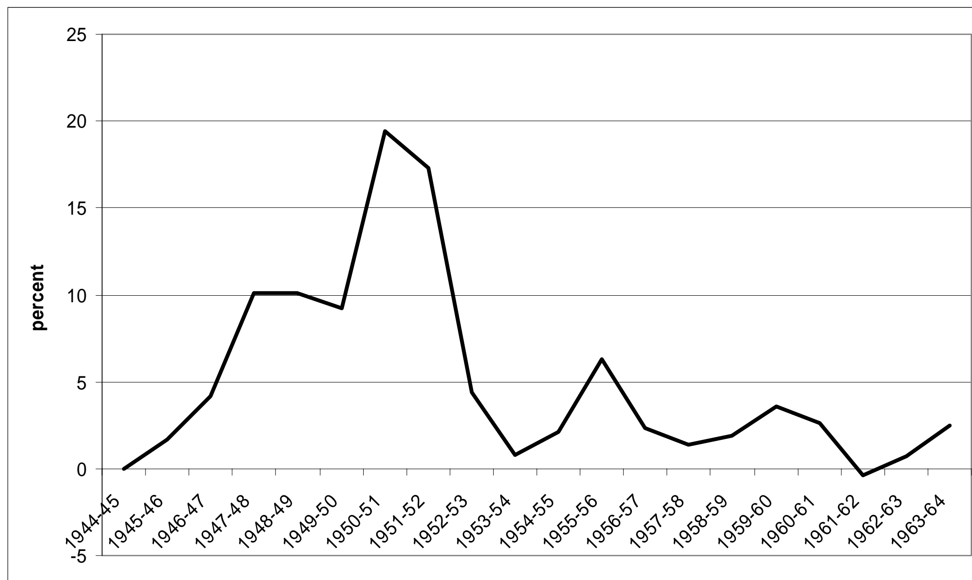
Willard Thorp and Richard Quandt [1959]: *The New Inflation*, McGraw Hill, New York.

J. Vernon, J. G. Crawford, P. H. Karmel, D. G. Molesworth and K. B. Myer [1965]: *Report of the Committee of Economic Enquiry*, Commonwealth of Australia, Canberra.

Sidney Weintraub [1971]: “Keynes and the Monetarists”, *Canadian Journal of Economics*, 4:1, pp. 37-49.

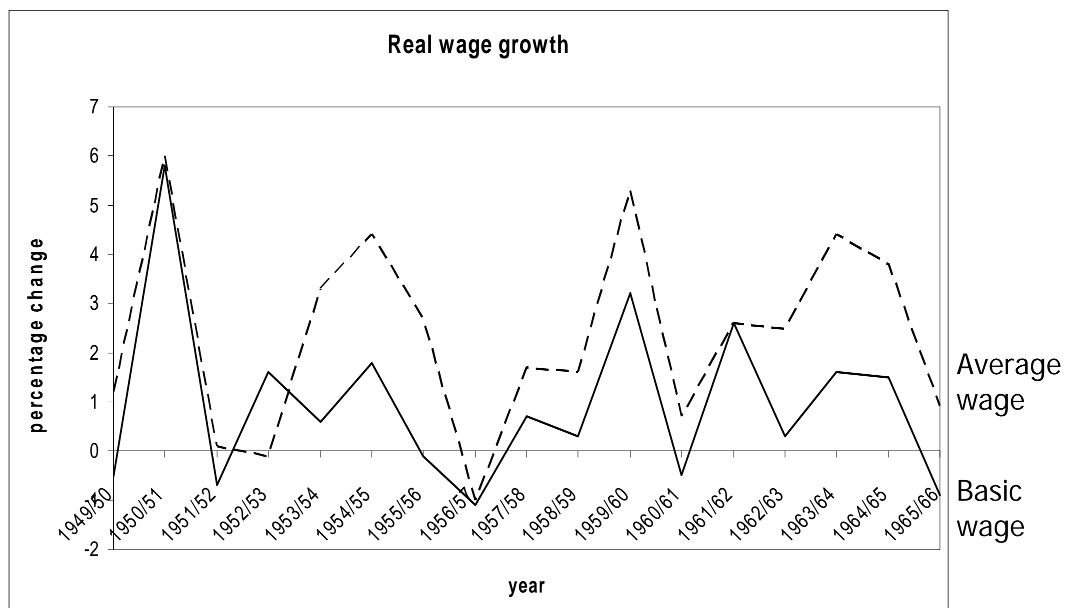
Greg Whitwell [1986]: *The Treasury Line*, Allen & Unwin, Sydney.

Figure 1: Retail price inflation



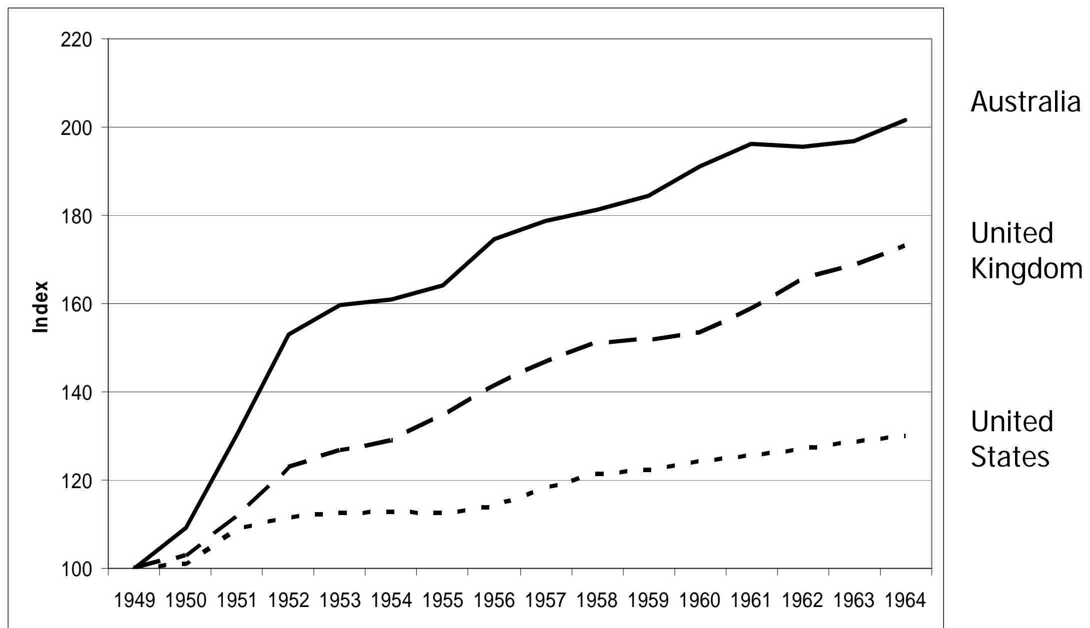
Source: Vernon et al [1965]

Figure 2: Wage drift



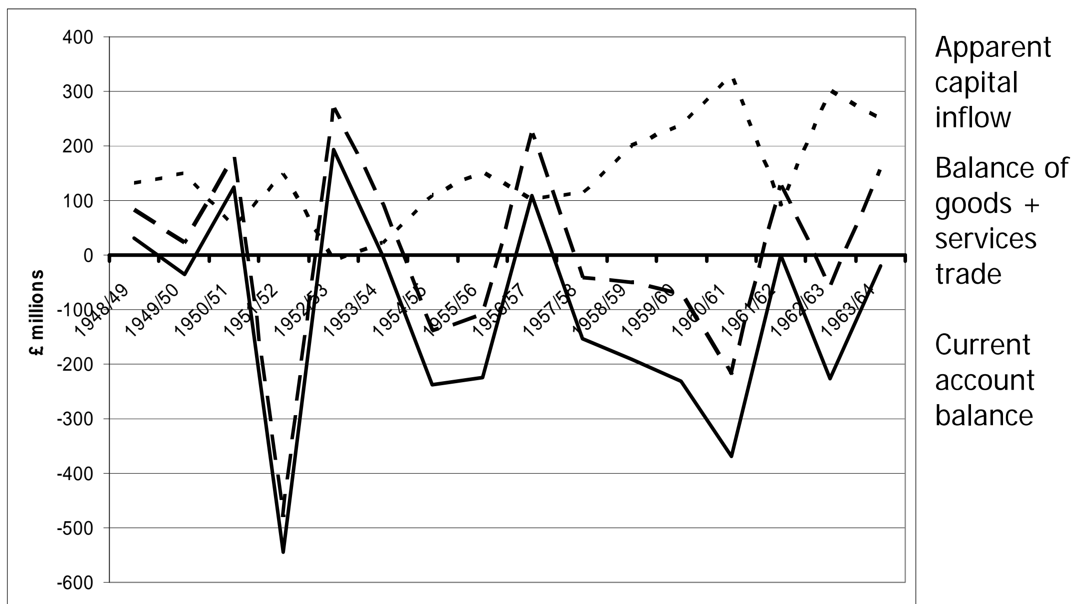
Source: Vernon et al [1965]

Figure 3: Consumer price indices compared



Source: Vernon et al [1965]

Figure 4: Trade and current account balance



Source: Vernon et al [1965]