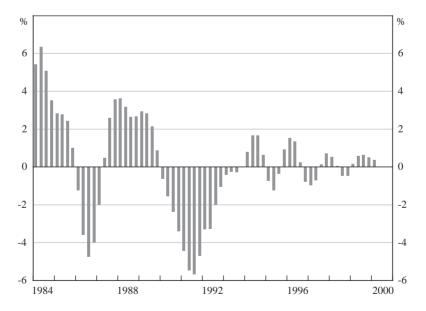
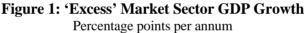
1. Barry Hughes¹

An Okun-accounting approach

Peter Dawkins is one of many expressing surprise that unemployment remains the wrong side of $6\frac{1}{2}$ per cent 'after eight years of sustained strong growth'. An Okun-accounting approach might help. Albeit very crudely applied here, the Okun concentration is on GDP, labour productivity and labour force growth rates *rather than* elapsed recovery time alone. When the 1990s expansion is viewed through Okun spectacles the surprise from the standpoint of prior expectations is how low, not how high unemployment is today.

Figure 1 displays a very crude measure of 'excess GDP growth' over an unemployment stabilisation benchmark. It is formed by deducting from (market sector) GDP growth both the trend labour productivity growth estimates used by Gruen and Stevens (this volume) *and* the actual growth of the civilian population of working age. The sense is to see what is left over to reduce unemployment after





^{1.} Following criticism from David Gruen, this is a revised and extended version of the comments delivered to the Conference.

productivity has eroded demand and the market sector's share of growing supply has been met. Obviously the cyclical stress in the original Okun's law is neglected, as initially are structural movements in participation, hours of work and other variables. Moreover, the use of a single average productivity trend for each of the two long recoveries (1.4 per cent and 2.9 per cent) is also debatable for study of any shorter sub-period.

The results are interesting. The fact that excess growth in the 1990s is relatively minor is, of course, simply another way of saying that stronger productivity gains have eaten into the employment-creating potential of demand. This has been partly offset by just over half a percentage point slower annual average growth of the working age population (around 1.4 per cent compared with nearly 2 per cent in the 1980s expansion). The cumulative GDP growth excesses over the recovery phases are strikingly different between the two periods. The 1980s recovery (the $7\frac{1}{4}$ years from March 1983) yielded 10.5 percentage points of 'excess' GDP growth. By contrast the $8\frac{1}{4}$ years of 1990s recovery (from June 1991) did not contribute any 'excess' market sector GDP growth (negative 1.6 percentage points), thanks to a poor experience in the first two years and sporadic, but lacklustre movements thereafter. Yet the reduction in overall unemployment has been essentially the same in both recoveries (about $4\frac{1}{2}$ percentage points). Unlike the 1980s, demand-side movements in the market sector (strictly, the sectors where outputs and inputs are measured independently) appear to have done nothing for unemployment in the 1990s expansion.

Demand-side movements in the non-market sector might have contributed to the 1990s unemployment reduction, but, of course, it is not possible to repeat the earlier exercise since productivity is not measured independently in this area. However, David Gruen has supplied me with his (trough to peak) trend estimates of labour productivity growth in the broader non-farm sector (0.8 per cent in the 1980s recovery and 2.2 per cent in the unfinished expansion to March 2000). Note that the productivity growth step-up between the two expansions is similar to that in the market sector (1.4 versus 1.5), but the growth levels are lower due to the inevitable dilution from including the non-market sector. Since the GDP expansion in the recovery to date has been very similar (41.7 per cent non-farm overall versus 42.2 per cent in the market sector), a focus on the non-farm sector does yield 'excess' growth points in the 1990s. But the excess remains very much lower in the 1990s recovery (a cumulative 4.1 points) than in the 1980s equivalent (11.9 points). Assuming the correctness of the data, what this suggests is that all the demand-side contribution to unemployment reduction in the 1990s came from the motley collection of public and private services in the non-market sector.

Two sets of broad influences might have contributed to the superior non-demand effects on unemployment in the 1990s:

- neglected labour variables, such as participation or the hours-employment split, might have influenced the output-unemployment relationship; and
- non-GDP influences, such as those from policy or relative wages, might have been kinder to unemployment in the 1990s than in the preceding decade.

The first influence has clearly been in play. As Peter Dawkins illustrates, the participation record has been quite different in the two expansions. That in the 1980s was accompanied by strong (female) increases, only the mutest reflection of which was apparent in the second half of the 1990s, and then only quite recently. In arithmetic terms the expansion in the trend participation rate during the 1980s recovery was 3.1 percentage points of the working age population (equivalent to nearly 5 percentage points of the labour force). By contrast, the 1990s expansion witnessed (to March quarter 2000) a virtually unchanged participation rate (contributing a minor 0.2 percentage point fall in unemployment as a percentage of the labour force). Supply-side differences between the two expansions thus offset the demand-side gap. As far as unemployment is concerned, the two recovery cycles, though similar in net effect, have quite different explanations. The strong demand-side contributions of the 1980s were blunted by surging participation. By contrast, the weak demand-side contributions of the 1990s (exclusively from the non-market sectors) were unhindered by supply offsets.

The obvious lack of a 1990s encouraged worker effect can be explained by the weakness of the demand-side aggregates, but the surprisingly weak participation record of recent years might also have occurred because the 1990s recovery was less kind relatively for females than the 1980s version. The relative unemployment gains made by females over males in the 1980s were not replicated in the 1990s. Indeed, they were reversed partially from the mid 1990s onwards (Figure 2). On the other hand similar stagnation in participation has occurred in the US, where aggregate labour demand weakness has not been evident.

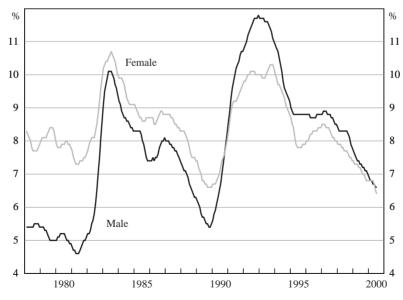


Figure 2: Trend Unemployment Rates

Source: ABS Cat No 6202.0

Nevertheless, in some, but not all, important respects the secular supply differences have offset those from demand and productivity. Figure 3 looks directly to the question posed at the outset with a plot of the (standard Okun) relationship between annual non-farm GDP growth (led one quarter) and the corresponding change in unemployment percentage points. Apart from a period in 1998 when unemployment reductions were low relative to recorded GDP growth (to be explained either by business fear of Asian-crisis effects or residual scepticism over the accuracy of the GDP results posted for this period), the scatter provides quite a close fit. The unemployment rate has been responding to GDP growth.

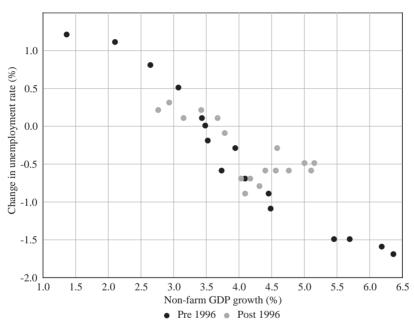


Figure 3: Non-farm GDP Growth and Unemployment Rate Differences in the 1990s Expansion

Note: The annual percentage points change in the (trend) unemployment rate is plotted against the annual non-farm GDP growth rate (led one quarter) over the period from June 1992 to June 2000.

For the decade as a whole the unemployment stabilisation rate of non-farm GDP growth appears to be just over 3.5 per cent. This benchmark is little different to the 3.69 per cent I calculated six years ago using the vintage of data then available for the years 1975/76 to 1993/94.² As Gruen noted, in this respect the varying labour supply and productivity parameters seem to have offset each other. What differentiates the 1990s from earlier periods is the much steeper slope around which the Okun relationship now revolves. For the earlier period I calculated an Okun coefficient of

2. INDECS (1995).

2.15. In the 1990s as a whole the corresponding number would have been closer to unity, though there is some suggestion of a partial reversion to earlier shallow patterns in the second half of the decade.

The cyclical aspects of Okun's Law clearly changed between the decades. Previously strong cyclical relationships between GDP growth and *both* productivity growth and labour force participation attenuated or disappeared in the 1990s. These changes have allowed unemployment to fall very much further than anyone armed with foreknowledge of subsequent growth rates would have predicted at the start of the 1990s recovery. In this sense, despite the longevity of the upswing, current unemployment is surprisingly *low*, not *high*. In another sense, however, given the changed cyclical dynamics of the 1990s, unemployment has been moving down steadily according to the growth pattern of the decade. From this perspective there is nothing abnormal about current unemployment rates. What is needed is a further period of GDP growth above the Okun benchmark.

The remaining thought, of course, is the second possible explanation. It is not at all obvious from this superficial overview that the various non-growth measures applied in the 1990s have not worked to reduce unemployment. From the standpoint of 1990, unemployment has recovered very well relative to the GDP growth pattern. That appears to be because the cyclical tendencies of participation and productivity growth have attenuated. It is extremely unlikely that the proponents of either the mid 1990s active labour market policies or of the various attempts at improving wage and other flexibility envisaged unemployment reduction operating through the transmission mechanisms of a taming of either cyclical tendency. Nevertheless, there is at least a *prima facie* case for further investigation of the contribution of the non-growth policies.

Longevity, steadiness and the natural rate

Ever since Peter Sheehan and his Victorian colleagues were banished from the technical preparations for the 1983 National Economic Summit, expansionist policy has been based around a 'slow ahead' prescription. Nowadays the same thoughts are more often referred to in terms of 'sustainability'. Either way the prescription inevitably requires policy to be sustained for very long intervals if large amounts of unemployment are to be removed. As I understand RBA explanations, that in substantial part is the way monetary policy is to contribute to the employment/growth objectives. Though clearly delivered through different variables, the present experience has had remarkably similar outcomes to what for a long time was thought to be a successful 1980s experiment.

The current experiment is unfinished. What frightens people about its continuation is the natural rate bogey. Peter Dawkins is suitably circumspect about the fuzzy nature of natural rate estimates. And, without explicitly saying so, he, like the rest of us, would have been chastened by recent US experience. But when it comes to policy prescriptions, the natural rate (or the NAIRU) appears to be resurrected to support the view of the five economists that something else beyond promotion of output growth is needed. This is not an argument about whether growth alone is sufficient to reduce unemployment, nor about the ultimate existence of a NAIRU at any point in time. It is about whether any binding constraint on growth is imminent.

Frankly, I have no idea what number to put on the current NAIRU. Where the structural level of labour productivity growth might now be located is shrouded in the same mysteries as the attenuation of its cyclical characteristics. We also have little idea of whether the great tide of rising female participation has exhausted itself, or whether there is an unusually large reserve army of hidden unemployed out there at this level of measured unemployment. This is but one aspect of the 'augmented unemployment rate', about which both Dawkins and Dr Greenspan are rightly concerned. Nor do I detect any labour-market-induced signs of rising wage settlements at present in Australia, which is what the natural rate concept refers to.

It is true that the 1980s recovery ended in an unemployment rate not far beneath the present level. But, without wishing to stir up argument, the proximate cause of that episode was that policy lost control of the growth rate of domestic demand. And in the ensuing scramble it is not obvious that labour markets took the lead. Thus the issue of recent precedent is extremely dubious, at least insofar as what is contemplated is continued 'slow ahead' or steady expansion.

In these foggy circumstances econometric estimates of the NAIRU are ephemeral reeds on which to base the whole of macroeconomic policy. The sensible course seems to push ahead slowly, allowing as far as possible a growth rate that would continue to bring down unemployment, all the time looking for signs of wage acceleration. In simple terms, that is what I understand Dr Greenspan to be saying in response to Dr Meyer's econometrics.

The five economists' plan

It is no part of my views, or my record, to suggest that growth alone should be relied upon to fix unemployment. Nor do I oppose a negative income tax. But it would have to be a compelling plan for the electorate to support yet another major upheaval of personal taxation (not to mention social security) anytime soon. That evidence has not been provided. One reason is that, as suggested earlier, unemployment seems to be coming down at least as fast, if not faster, than might have been expected given 'excess growth'. A second is that estimates of how much further relative wages would have to be widened to achieve meaningful unemployment reduction are even fuzzier than those about the natural rate. Dawkins' Figure 15 shows a quite substantial fall in the real minimum wage over the past two decades. The obvious questions are why this reduction was not enough, and how much more will be required? To be pointed, would typing pools be in existence today if they had taken a 10 per cent, or even a 20 per cent pay cut? It is noticeable that all Dawkins' references to the minimum wage are about the employment consequences of increasing it. Whatever the merits of these claims, what is at issue here is the matter of pricing in, not out. Symmetry of the response is not obvious.

It might be that widening wage inequality has been part of the explanation of the surprisingly good recent GDP-unemployment experience noted earlier, though the proximate transmission mechanisms do not appear especially conducive to the

explanation. But until such time as this connection is demonstrated to have powerful legs, I would use my own sticks to run as far as possible from those who wish to use yet another grand economic theory to impose another upheaval on a cynical populace.

References

INDECS (1995), State of Play 8: the Australian economic policy debate, Allen and Unwin Australia, Sydney.

2. General Discussion

Participants had mixed views about labour market outcomes in Australia in the 1990s. Many felt that outcomes had been positive – unemployment had declined to within sight of previous cyclical lows, following eight years of strong economic growth, and labour productivity and real wages had increased strongly. Others, however, were concerned that the benefits of economic growth and reform had been unevenly distributed. Some also felt that despite recent declines, unemployment remained at a high level, and were especially concerned about the recent upward trend in underemployment.

Many participants drew attention to the widening of the employment and earnings distributions that were highlighted in Dawkins' paper. In exploring possible causes for this, some wondered whether the increase in the importance of international trade played a role. It was remarked that the outcomes for Australia could be consistent with the Stolper-Samuelson theorem which implies that international trade benefits relatively abundant factors, which are skilled labour and capital in the case of Australia. Another explanation might be technological change, which was complementary to high-skilled labour, but a substitute for low-skilled workers. A few participants, however, pointed out that the evidence for these effects in Australia had been inconclusive and that further study was warranted.

Many agreed with Dawkins' view that achieving further significant falls in the unemployment rate without generating inflation was a major challenge that might require further labour market reform. In this context, there was some questioning of the usefulness of the concept of the non-accelerating inflation rate of unemployment or NAIRU. It was acknowledged that the NAIRU provided a valuable conceptual framework with which to examine the inflationary process. Furthermore, it might be possible to have a good idea of the current level of the NAIRU some years from now. Nevertheless, it might not be possible to determine the current level of the NAIRU with sufficient precision to make it a useful construct for current policy. It was also pointed out that even in the US, where the NAIRU had worked well up until the early 1990s, the concept had recently become less useful.

There was considerable debate about the appropriate role of government social policies in addressing distributional issues. Many participants expressed the view that the government needs to reform the welfare system by expanding wage safety nets. It was also pointed out that these policies involve significant short-run costs and it was unclear whether the community was prepared to incur these costs. On a similar note, the point was made that such measures could increase welfare dependency and reduce incentives to work, and that a better alternative might be for the government to invest in education and job training programs.

On the supply side, there was some discussion of recent trends in the labour force participation rate. It was noted that the recovery in the participation rate since the last recession had not been as strong as in the 1980s, and participants agreed that at least some of the recent decline in unemployment had resulted from this relatively weak performance of the participation rate. It was argued that a lower participation rate need not necessarily be a cause for concern as it may simply reflect a change in people's preferences. There was, however, not much support for this position, with the alternative view being put that the decline in the participation rate was due to an increase in the number of discouraged workers.

Another supply-side factor that was touched upon was demographic change. Several participants argued that demographic change would have important implications for the labour market over the next few decades, and that there needed to be more analysis of these trends.