



## BEFORE AND AFTER THE FALL: NEW ZEALAND ECONOMISTS ON THE POST-WAR UNEMPLOYMENT EXPERIENCE

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### Abstract

*What explanations did economists advance for New Zealand's remarkable experience of full employment between 1938 and 1980? What causes did they suggest for the breakdown and subsequent massive rise in unemployment? This paper categorises and critically surveys material on these questions as part of a wider project on New Zealand's post-war unemployment experience.*

This paper, part of a larger project on the creation and demise of full employment over the post-war period, examines what New Zealand economists have said about full employment in New Zealand, why full employment broke down and why unemployment rose so steeply afterwards.<sup>1</sup> Consideration of this literature aims to distil the collective wisdom of previous New Zealand researchers to enable a better story of our post-war unemployment experience to be told and to generate a set of hypotheses on full employment and its breakdown which can then be examined empirically in later work.

In terms of coverage, my survey is representative rather than comprehensive. Adopting a representative approach eliminates repetition.<sup>2</sup>

The following questions arise:

\* to what cause did economists attribute New Zealand's remarkably low unemployment over much of the post-war period?

\* to what did they attribute the breakdown and consequent rise in unemployment?

\* what, in a preliminary sense, are strengths and weaknesses of their explanations?

The underlying theoretical position from which I will consider the literature is the competing claims theory of unemployment developed over recent years by economists such as Layard, Nickell, Jackman, Bean and others.<sup>3</sup>

The competing claims theory of unemployment explains unemployment as the means of reconciling conflicting claims on output by workers (through their wage setting) and firms (through their price setting).

### Early analyses of full employment

The first serious attempt to address the issue of full employment can be found in a book containing proceedings from a convention of the New Zealand Institute of Public Administration (Parker, 1953). A common theme coming through the book is a perception by participants of public demand for what they frequently refer to as 'over-full employment' - vacancies in excess of the numbers registered as unemployed.

The most pertinent articles are from Treasury officials: Lang's 'Price and Wage Policy' and Schnitt's 'Economic Stability and the Balance of Payments'. The underlying economic theory used to explain full employment is the Keynesian income-expenditure model, supplemented by an external constraint, and with an inflationary gap theory of price level determination along the lines of that developed in Keynes's *How the Pay for the War*.

Lang considers interactions between employment, effective demand, import controls and price and wage regulations. At full employment, high aggregate demand creates an excess of imports over exports and balance of payments difficulties. Import controls are then used to ensure actual imports are in balance with foreign exchange earnings. Protection creates monopoly positions and places upward pressures on domestic prices which then need to be controlled to avoid a wage-price spiral. Essentially Lang sees controls - both of imports and in domestic factor and product markets - as a necessary factor in achieving and maintaining full employment. On the other hand Schnitt focuses attention solely on the external constraint with regard to stability. Schnitt's personal view is that full employment and balance of payments stability do not require import control. He favours expenditure switching policies changing relative prices (either devaluation or

tariffs) to raise returns on exporting and to reduce price elastic imports, thus easing the foreign exchange constraint and maintaining full employment.

The next serious analysis of full employment was Westrate's *Portrait of a Modern Mixed Economy*, published at the end of the 1950s. In 'The employment record for New Zealand during the post-war decade', Westrate (1959: 129) writes in recognising the unemployment miracle

is unique, not only in the history of N.Z., but probably also in the history of capitalist and mixed economies generally. There is probably no other instance of such a long period of uninterrupted full employment.

Full employment, argues Westrate, was built into the formal institutional structure of the economy and was accorded much weight by parliamentarians in speeches to the house (Westrate 1959: 125, n14). Thus Westrate also accords informal institutions an important role in creation and maintenance of full employment.<sup>4</sup> However, while he acknowledges that the idea of stability in wage earners' share of national income was built into the judgements of the Arbitration Court, unlike Lang he places little weight on formal institutions for wage setting in achievement or maintenance of full employment. Regarding the Arbitration system, Westrate (1959: 245) concludes "we can say that the Court's influence on the general level of wages has probably been only small, that of a temporary break, especially to falls in wages". And unlike Lang, Westrate is sceptical of the contribution of import controls to full employment.

Why then did labour demand exceed supply? Two possibilities are canvassed by Westrate. First, government fixed wages at a maximum below market clearing levels, as he argues that it did prior to 1950 under war-time controls. The second hypothesis is that wages lagged behind prices, which is what happened after 1950: '[t]his is the simple explanation of that fact that overfull employment [registered unemployment exceeded by vacancies] persisted after 1950' (Westrate 1959:133). Full employment, according to Westrate, was the unintentional by-product of rising prices and lagging wages.<sup>5</sup> From the point of view of modern theory on wage determination, this implies workers were being constantly fooled by rising prices. To maintain unemployment at a rate lower than equilibrium requires constantly rising inflation under adaptive expectations. With the advantage of hindsight, this does not appear to be an adequate description of the New Zealand economy during the 1950s and 1960s.

Over much of the post-war period, Wolfgang Rosenberg wrote on the importance of full employment as the institutional glue of the post-war economic structure of interlocking institutions. He has a coherent theory behind achievement of full employment system which is the development of a strand of insulationist thinking evident in the book edited by Parker. Rosenberg's basic model of the why's and how's of full employment is best articulated in *Full*

*Employment. Can the New Zealand Economic Miracle Last?*

Writing in 1960, Rosenberg views the New Zealand full employment experience as providing a unique model for eliminating unemployment in a predominantly capitalist economy. Seasonal unemployment and immobility of workers in New Zealand were argued to be low, but for Rosenberg a prime reason why full employment was possible was use of fiscal and monetary policy to maintain the level of aggregate demand at full employment.

The next question Rosenberg turns to is the conundrum which arises when full employment level of national income can only be achieved with a level of imports which exceeds exports. Since, Rosenberg argues, a laissez faire government is unwilling to impose controls on imports to maintain full employment, it has no choice but to reduce deflation to balance the external accounts. In addition, as long as free capital mobility is maintained, a trade deficit implies a drain on the domestic money supply, reducing lending for consumption and investment. Thus, even in absence of direct government deflationary policies, the system has a tendency to stabilise at a point where exports equal imports, rather than at full employment.

However, there is another innovative element in Rosenberg's theory. A country has to generate foreign exchange not just to cover imports but also to pay interest and capital payments on outstanding net external debt (Rosenberg 1960: 27-28). Thus running a current account deficit and low unemployment today, according to Rosenberg, implies an interesting inter-temporal trade-off requiring lower activity tomorrow to ensure that imports decline by an amount sufficient to ensure the current account balance.

The solution to leg-irons forged by foreign investment, capital mobility and the necessity to balance the supply of and demand for foreign exchange, Rosenberg (1960: 34-36) argues, is import controls, reducing the demand for foreign exchange to pay for inessential imports, allowing the government to maintain full employment levels of demand without running the current account into deficit.

## The mainstream economic histories

Consider the two major contributions to New Zealand's post-war economic history: John Gould's *The Rakes Progress* and Gary Hawke's *The Making of New Zealand*. Both these books were published on the cusp of change, before rapid liberalisation of the economy and the associated strong rises in unemployment, but certainly after breakdown in the full employment society had begun.

Gould provides two major explanations for New Zealand unemployment performance between 1945 and 1982. The first relates to expectations and labour hoarding. Under conditions of labour scarcity, a strong incentive exists in the private sector to hoard labour in times of slack demand.

When the good times again roll, as it was believed that they inevitably would, firms did not have to go to the expense of finding and re-hiring labour.

The second point made by Gould is that during this period the 'natural' rate of unemployment in New Zealand was very low. A number of reasons are offered for a low natural rate. First, Gould argues that regional unemployment in New Zealand in the early part of the post-war period was exceptionally low:

Aggregate population growth was so rapid that even those regions which were shrinking relatively were not shrinking absolutely; while the latter almost certainly implies job losses, the former does not. Moreover the industrial structure was relatively uncomplicated in comparison with those of advanced economies, with industries of relatively simple technology orientated almost exclusively to the domestic market, so that they were less likely to suffer either technological unemployment or deficiencies in demand induced by changes in export markets. Finally, the very tight labour market of the time minimised the time spent between jobs (Gould 1982:60).

To explain the rise in unemployment during the 1970s, Gould reverses all these advantages. Regional contributions to structural unemployment seem to have increased, evidenced by widening regional income disparities. Slower population growth caused some areas to experience falling rather than stagnating populations.<sup>6</sup> Industries began to cater to national and export markets, increasing linkages which created instability. Industrial concentration had also lead to regional concentration of industries in major centres. With growing technological change, the structure of labour demand began to change and a more specialised range of skills was demanded, leading to significant mismatch.<sup>7</sup> While no empirical evidence is drawn on at this stage of Gould's arguments, he later plots the ratio of registered unemployment and those on special work to registered vacancies. The ratio increases steadily from 1946 until 1980. This outward shift in the Beveridge curve could certainly be interpreted as evidence for growing structural unemployment.

A rather different set of explanations are offered by Hawke, who dates the breaching of full employment to the sharp recession of 1967-68 and the breakdown to the mid-1970s. Hawke places some emphasis on government policies providing a guarantee to the private sector that aggregate demand would grow at a sufficient rate to ratify investment decisions, generating stable expectations causing the economy to grow on the warranted growth path. However, little attention is paid to wage setting mechanisms in terms of full employment.

Regarding the breakdown, Hawke claims:

The supply of labour grew faster than before. Popula-

tion growth actually slowed down, but because of the lag between diminished fertility and retardation of entry into the labour force - the effect of childhood - the proportion of the population in the working age years (15-64) rose from about 1960 and accelerated in the 1970s. To this was added an increased participation rate. That is, more people within the relevant age group wanted a job. A major element in this was the increased tendency of married women to seek or remain in employment (which, of course, offers no judgement on the desirability of such a trend). (Hawke 1985: 324).

Thus Hawke claims that labour supply increased at a faster rate from the 1970s onwards.<sup>8</sup> The next part of his argument is that labour demand increased at a slower rate, partly as a result of puncturing expectations of continued low unemployment, resulting in lower labour hoarding by employers. Partly it was the result of rises in wage and other employment costs that caused substitution at the margin and longer run tendency towards technologies that embodied a higher capital-labour ratio. During the late 1970s the slowing in private sector demand for labour was also reflected in the public sector. In addition, Hawke (1984: 327-328) suggests that there was a structural worsening in the balance of payments constraint as a result of the oil crisis. Adjusting to this shift in the balance of payments led to contractionary fiscal and monetary policies.

In addition to economic changes there were also changes in informal institutions - particularly government commitment to full employment as a policy goal. Hawke argues that as the 1970s dawned there was a greater willingness by government to accept that there may be a trade-off between full employment and growth. Increasingly, it was suggested that the high pressure economy which full employment required reduced efficiency as increasingly lower productivity employees were hired and unemployment played a weaker disciplinary function. In addition, high aggregate demand generated a trade deficit and a need for import controls to maintain external balance. Controls then begat inefficiency and slower short term growth.

### Some semi-official explanations

With rising inflation, increasing industrial strife and a wage explosion, registered unemployment had begun to edge up over the 1970s. As a result of growing concerns about the breakdown of full employment, a debate amongst New Zealand economists developed regarding the relationship between real wages and unemployment.<sup>9</sup> In this section two semi-official explanations of the breakdown of full employment are considered, one from the Reserve Bank and the other from the 1988 Royal Commission on Social Policy.

In a series of articles and working papers under the auspices of the Reserve Bank, Arthur Grimes bought the issue of the relationship between real wages and unemployment

to the fore. In terms of this project, the most relevant papers are Grimes (1981C, 1982), since they outline the causes of the over-valued real wage which creates unemployment (Grimes 1982A: 51). Grimes's econometric work on wage formation builds the so-called 'two tier' approach, explaining award wages by consumer prices, productivity and prevailing wages by award wages and another set of factors. The long run coefficients on award wages and on taxes are set to unity in the prevailing wage equation, a restriction accepted by the data. No evidence is found for any influence of unemployment or excess demand on wage setting.

Grimes's conclusion is that prevailing wages are set exclusively by supply-side factors. Given that his research programme reveals that labour demand responds inversely to real wages (Grimes 1981A, B), a coherent explanation of unemployment emerges, backed up by a considerable degree of empirical work. The theory is simple. Essentially if taxes increase workers will raise their wages to endeavour to maintain after-tax income. While consumption wages remain constant, product wages or the real wage faced by producers rise. This creates an increasing gap between the full employment wage and the wage demand by workers. Unemployment results.

In terms of actually explaining unemployment, Grimes explains the importance of tax rates in wage determination as a function of 'the monopolistic power of labour' (Grimes 1982A: 51). Since the effective tax rate on wages and salaries rose from 13% to 26% between 1962 and 1979, Grimes's proximate explanation of the rise in unemployment immediately emerges.

If tax rates increase, wages will rise. If no monetary expansion eventuates, Grimes argues, unemployment will increase. If monetary expansion does occur 'real effects may be avoided but inflation will remain as long as neither the unions nor employers (nor government) are prepared to reduce their real claims on resources' (Grimes 1982A: 52). While similarities can be drawn between Grimes's work and the competing claims explanation of unemployment, the above quotation indicates some divergences. In the competing claims model, the rise in government claims causes inflation and consequently real exchange rate appreciation as the external sector is squeezed in real terms. The implications of this for longer term unemployment, and indeed the international context of the New Zealand economy, are comparatively neglected in Grimes's analysis.

External factors are however dealt with in considering the implications of terms of trade changes for unemployment in the face of complete indexation of consumer prices to inflation. If the terms of trade fall, labour demand in the export sector declines. Since wages in the exports sector, as elsewhere, are determined by consumer prices, employment in the exporting sector declines and with it unemployment grows.

Thus rising unemployment is put down to terms of trade declines and rising taxes. If one is to offer an proximate explanation of the rise in unemployment in terms of rising tax rates on wages and salaries, an ultimate explanation requires an analysis of forces pushing up tax rates but Grimes provides little on this.

Since the 1950s, New Zealand economists had recognised that full employment existed in a symbiotic relationship with the social welfare system. If full employment broke down, considerable fiscal pressures would be placed in the entire structure of social welfare. Therefore it is unsurprising that the Royal Commission on Social Policy addressed issues of the achievement and breakdown of full employment. An account of the rise and fall of full employment is developed by Mabbet (1988A, B) in work for the Royal Commission on Social Policy. The work is less detailed and empirical than Grimes's, but ranges more widely in search for explanation.

Full employment was based on what Mabbet calls 'the bread winner model' whereby the system generated a family wage which reproduced female dependence. The bread winner model was supported by high wage male jobs developed in the sheltered sector of the economy through protection (Mabbett 1988A: 567-8, 570). While border protection was initially used to maintain employment stability, increasingly the system of protection was seen as inefficient by Government. In addition, the margin for further extensions was rapidly disappearing. Thus by the 1970s employment protection increasingly came to involve industrial subsidies and direct public sector job creation, especially after the first oil shock. While most border protection was fiscally cheap, Mabbet points out that industrial subsidies and direct government job creation were not.

Mabbet locates the achievement of low unemployment firmly in the context of New Zealand wage determination system:

In the 1950s and 1960s the system was successful at maintaining a low rate of wage increase, despite low unemployment. In the 1970s it broke down, with local bargaining becoming widespread. The advantage of a 'second tier' of bargaining greatly increased the inflation generated by the system. The A[rbitration] C[ourt] and the central organisations of workers and employers were unable to control second tier bargaining, although the Government imposed wage controls at various times. (Mabbet 1988A: 539)

Systemic breakdown is located in the late sixties by Mabbet, since this was the point at which major changes in the principle of protection occurred in terms of reductions in protection, substitution of tariff for quantitative controls on imports and export diversification. Wage setting institutions had evolved for a protected economy and therefore it was difficult to adapt them to an export driven growth rather than import substitution. Furthermore by 1968 the

wage bargaining system had broken down and by the 1970s wage increases were beginning to squeeze the export sector. Thus devaluation and subsidies were used to help the export sector, leading to rising inflation and fiscal problems. These fiscal problems can provide an ultimate explanation of the rises in taxes that Grimes singles out as an explanation of increasing unemployment, although Mabbet does not draw this out.

As suggested in earlier studies, Mabbet points out supporting the wage determination system was government commitment to full employment, partly as a legacy of the depression in the minds of politicians and voters, and partly a result of new tools of economic management, influenced by new Keynesian theories and the Fabian socialism of Beveridge and others.

Issues of female labour force participation, raised by Hawke and others, are addressed in detail by Mabbet in the context of full employment. Strong pro-cyclical female participation is put down to limited supply of imported luxuries making it not worthwhile to work in downturns since goods could not be obtained. In export-led upturns import controls eased, raising effective female wages. Thus, Mabbet argues, there was inter-temporal substitution in female labour supply. By the 1970s this pattern had ceased to function and secular trends were taking over.

## Conclusion

This paper has illustrated a concern by New Zealand economists to address questions of why and how full employment was maintained and how it broke down.<sup>10</sup> Indeed, given the social importance of employment and the costs that unemployment places on ordinary people, it would be surprising if it were otherwise. Consideration of what New Zealand economists wrote provides a fertile array of hypotheses for examination, development, synthesis, and empirical testing.

The work examined above will be summarised within the framework of the competing claims model, first looking at wage- and price-setting, then considering the role of the external constraint and wrapping up by analysing aggregate demand issues.

Early explanations of full employment, couched explicitly or implicitly in terms of the Keynesian income and expenditure model and a simple inflationary gap model of price-determination, look unbalanced today in terms of a lack of systematic treatment of the supply-side of the economy. The question of how the economy could be run for so long at such high levels of demand without generating runaway inflation needs detailed explanation which was not provided in early studies of full employment.

Regarding wage-setting and labour market institutions, Rosenberg does not consider them important, while Lang, while considering full employment to be a child of controls, undertakes no detailed analysis of the role of the

Arbitration Court and other elements of the wage-fixing system. This tradition is carried on by the two economic historians, Gould and Hawke. Grimes and Mabbet pay more attention to the supply-side. Grimes's explanation of breakdown of full employment focuses on wage-setting institutions as being detrimental to full employment in the face of negative tax and terms of trade shocks. He does not set out to address why these institutions appear to have worked for such a long period prior to the late 1970s. Mabbet's analysis of the interaction between economic development and wage-setting institutions is the most detailed and offers a useful base for further development and refinement which can build on the work of Grimes, amongst others.

Growing structural unemployment is offered as a reason for the breakdown of full employment by Gould and to some extent by Mabbet. Rising mismatch, be it industrial, occupational or regional, will raise aggregate wage pressures at a given rate of unemployment, raising the equilibrium. The evidence for growing mismatch is mixed, and needs to be examined in more empirical detail.

With regard to price-setting behaviour, the early Keynesian-based analyses of Rosenberg and Lang, for example, suggests that price controls enabled effective demand to expand to high levels without creating inflationary pressures. In addition, they worked to mitigate potential monopoly positions created by import controls. Others, including Westrate and Mabbet, see import and price controls as promoting inefficiency and contributing to New Zealand's productivity decline. As such, they may have helped create full employment in the short run, but in the long run undermined the system. Grimes pays no attention to price-setting behaviour and Hawke and Gould also pay it little heed. In the competing claims model of unemployment, the level and flexibility of prices influences the equilibrium unemployment rate. How New Zealand's system of price controls impacted on the level and flexibility of prices needs further examination, preferably via a combination of inductive history and econometrics.

The external constraint is an important element of many analyses of full employment, including those of Rosenberg and Hawke. Rosenberg argues that import controls are the means of easing an external constraint. Hawke and others sees the external constraint as transmitting international shocks into New Zealand's unemployment rate and being a contributory factor behind the breakdown of full employment. Rosenberg is the only economist to pay attention to possibilities for inter-temporally transferring unemployment via the current account, which is a useful way of looking at developments in New Zealand's unemployment rate through the 1970s and 1980s. While considering the external sector, Grimes is more interested in interactions between the terms of trade, wage-setting and employment than to explicitly focus on external constraints.

As a final consideration in terms of the competing claims unemployment model, consider the role of aggregate de-

mand in the analyses of New Zealand's post-war unemployment experience. Clearly the early stories were based on Keynesian models which are very much demand-driven. Low unemployment to a large degree was seen as arising out of a combination of high private expenditures and fiscal and monetary policy, especially by Rosenberg. As fashions in economic theory changed, so explanations of New Zealand's unemployment experience become more supply-driven. Demand-side shocks still play a role in driving up unemployment in the work of Hawke and Mabbet for example, but little attention is placed on the role of hysteresis in unemployment in response to an aggregate demand shock.<sup>11</sup>

Lastly, it is always tempting to explain rising unemployment definitionally in terms of labour supply growing faster than labour demand. Hawke, Mabbet and others have tried to explain the breakdown of full employment in part in terms of higher labour force growth during the seventies. The problem with such an explanation is that it does not fit the empirical facts (see Chapple 1994C) and that it lacks a coherent theory of wage determination and unemployment. In the competing claims theory of unemployment, a higher labour force, *ceteris paribus*, puts downward pressure on real wages as unemployment rises. This causes inflation to decline and aggregate demand to rise until unemployment returns to its previous equilibrium level. Thus equilibrium unemployment is invariant to the labour force. Indeed, this is the only stylised fact consistent with the economic history of capitalism. Thus to explain rises in unemployment in terms of labour force growth requires an explanation of why a rising labour force causes wage- or price-setting to change or makes persistence drivers behind disequilibrium unemployment stronger.

### Future research

Further interesting work in this area would include a detailed economic history of the post-war wage fixing system and its implications for the macroeconomic behaviour. In addition, a history of post-war price control in New Zealand from a similar perspective would be invaluable.

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## Notes

<sup>1</sup> See Chapple (1994A, 1994B, 1994C) for some other early work resulting from this project. A much longer version of this paper is forthcoming under the same title as this paper in the new year as an NZIER Working Paper.

<sup>2</sup> A full bibliography will be included in the NZIER Working Paper.

<sup>3</sup> The best introduction is Layard (1986). For use of the model to explain Britain's low post-war unemployment see Broadberry (1994).