Introduction

The historiography and popular discussion about the New Zealand’s response to the Great Depression of the 1930s focusses on the economic contraction. Between March ending 1929 and the nadir year of March ending 1933, estimates suggest a nominal reduction of about 29 percent. and a real fall of about 11 percent. Meanwhile population had risen 5 percent. Per capita production measures do not quite capture the fall in effective fall in income because the terms of trade fall fell about 36 percent, so that exports earned less relative to imports. The fall in per capita GNE seems to have been about a quarter (Easton 1996:61) Keith Rankin estimates that unemployment rose to about a third of the labour force. (Rankin 1990) consequence of the hardship that went with the contraction is that policy discussions on the period tend to focus on the inadequacy of the macroeconomic response.

We shall have a little more to say about this and to the related issue of whether the burden was shared equally, but the analysis fails to observe that there were severe economic and financial imbalances in the early stages of the contraction and that the focus of policy was on addressing the imbalances whose adjustment was inhibited by various market price rigidities, so that policy interventions were required. Without these measures, any subsequent expansion of the economy would not have been sustainable, even had there been appropriate policy instruments to stimulate it. (As we shall explain, there were not).

As well as correcting and expanding the historical record, this paper illustrates that on occasions analysis based on one commodity economies can be misleading. Towards its end the paper considers to what extent its conclusions are pertinent to the issues facing economic management during the current long recession.

Background: The New Zealand Economy in the 1920s and 1930s

In the 1920s the New Zealand economy had one of the highest per capita incomes in the world. The Maddison real GDP estimates bracket it with Australia, Belgium, Canada, Netherlands and the United Kingdom but behind Switzerland and the United States in 1928. To a degree the economy was different from these others. New Zealand’s was smaller;
Switzerland’s population, the next lowest among those mentioned, was 2.5 times bigger. Its structure was colonial. Some 80 percent of its exports were sold in the single market of the United Kingdom, and there were only four basic export commodities – butter, cheese, meat and wool – all sold in auction markets.

Monetary arrangements were equally as colonial – akin to the sterling balance arrangement which Keynes characterised the Indian economy. (Keynes 1924; Tocker 1924; Ashwin 1930). There was no independent national monetary authority but the local banking system was regulated by the London market. In practice the New Zealand government was the main net borrower of sterling funds on the London market, its spending in New Zealand providing the banks with the foreign exchange they required which they did not get from their exporters. There were local financial markets, but given the exchange rate arrangements as explained below, it was effectively a colonial outpost of the London market (perhaps in a similar manner to Scotland’s, except as we shall see, New Zealand had a little more flexibility in its exchange rate arrangements).

The 1920s

The New Zealand economy was subdued in the 1920s, probably because of its dependency upon the stagnant British economy. The available (annual) estimates tell slightly different stories, but collectively they suggest that output per capita hardly rose; one shows per capita GNP falling from 1924/5 (that is, for the year ending March 1925), for the other three the contraction into the Great Depression begins in 1928/9 or 1929/30. (Easton 2011)

A separate issue was land prices. I calculated that the average return for the 8 years to 1929/30, was 4.7 percent p.a. (after allowing a return for the self employed farmer’s labour). At the time mortgage interest rates were nearer 6.5 percent p.a while the value of all (not just farm) land was rising about 0.5 percent annually. The implication is that a farmer would do better to put the equity in the bank, and get a less stressful job. That was before the shattering impact of the depression on farm finances. Even more concerning was the debt to equity ratio. In 1929/30 and 1930/31 it averaged 60 percent. Some farmers would, of course, have debt well in excess of that ratio. (Easton 1980)

The Impact of the Great Depression

There is little quarterly data to track the New Zealand contraction. However the economy was in difficulty before the October 1929 Wall Street Crash. In the November 1928 General Election, the incoming government had been elected on a promise to borrow from the London money market an additional £7m a year – about 2 percent of GDP. (The actual promise was £70m in a year, but this was probably a misreading of speech notes – it won the opposition the
At the time Government overseas debt was close to 100 percent of GDP. The funds were to be used for capital works to develop the New Zealand economy (especially extending the railway system) but, of course, there was the short term benefit of jobs.

In the event the ambiguity did not matter. What the incoming government did not know was that the New Zealand economy was already having difficulty borrowing in London. The details are contested, but the outgoing Government appears to have known that its recent borrowing had been considered excessive and it may have given confidential assurances that it would borrow little extra on the London money market in the immediate future. In any case there was £24m of loans coming due for repayment. A planned loan of £5m was increased to £7m, ‘but hopes of a large infusion of capital were dashed.’ (McKinnon 2003; 104) Spending on capital works would have to be curtailed. These financial difficulties occurred before the Wall Street Crash although the spreading financial turmoil added to them.

Dramatic falls in external prices were more attributable to the Crash. At the end of 1929 export prices began falling. They had long been volatile but when they bottomed in mid-1932 the fall was close to half despite a devaluation at the end of 1931 (explained below). But wool does not stop growing, nor do cows not stop producing milk, just because prices fall. (Animals can be slaughtered, but in the short run that lowers meat prices as market supply increases.) In any case there was a three and more month gap between the product leaving the farm gate and the offshore auction which sets the return for farmers, connecting them to demand (now diminishing as Britain sank into depression), so production decisions could not be rapidly responsive.

Prices of New Zealand imports did not fall so precipitately – about 15 percent from peak to trough. Faced with falling prices, manufacturers cut production and laid off staff (animals cannot be treated this way) thereby reducing supply. That is why the medium term supply elasticities are higher for manufacturing ones than farm ones, and their prices do not fall so precipitously.

So soon after the Wall Street Crash – if we treat that as the defining moment for the beginning of the Great Depression – New Zealand faced increased difficulties with its already struggling offshore borrowing program, while the pastoral export sector which earned its international exchange faced severe reductions in demand and prices.

**Interlude: Sharing the Burden**

The New Zealand economy faced a substantial adjustment. A central issue for political and economic management is the sharing of the burden. Much of the legitimate criticism of the period could be around the fairness of the sharing. Some economists made the point even at
the time. (e.g. Fisher 1932) That belongs to another paper, although we shall return to it briefly at the end.

**The Imbalances**

So the New Zealand economy faced three major imbalances at the beginning of the Great Depression.

1. A fiscal imbalance arising from reduced revenue as the economy contracted, together with reduced offshore borrowing. There were no automatically compensating spending changes.

2. A commodity price imbalance arising from the fall in the price of exports on one hand, with also a lesser fall in the price of imports. That meant that the price on non-tradeables was too high. Note that if export and import prices fall by the same amount, non-tradeable prices might be expected to have to fall by roughly that amount. When there is a change in the terms of trade – a twist in the external price structure – it is less clear how far non-tradable prices should change.

3. Asset values, especially in the export sector – (i.e. land values) – were excessive.

The simple story of a contraction assumes that there will be smooth adjustment of prices and expenditures which would eliminate these imbalances. In practice many of the automatic market mechanisms did not come into operation because of various institutional arrangements, including:

1. Of course fiscal adjustment requires a conscious political decision, since public spending does not automatically contract in line with the fall-off in revenue and loan monies. Note that some spending is even less flexible; in particular unilateral repudiation of foreign debt obligations generates loss of reputation and future difficulties for offshore borrowing. It far easier to cut back domestic public expenditures.

2. In New Zealand there was considerable wage downward rigidity from:
   - public sector wages which, ultimately, were set politically;
   - private sector wages for the Court of Arbitration, in effect, established legal minima for nominal industrial wages.

3. As to be explained, the exchange rate was near fixed. A related consequence of the exchange arrangements, also discussed below, is that there was a floor on interest rates, and limitations of inflation as long as the arrangements were maintained.
While asset prices are in principle flexible – although individual asset holders may be reluctant to sell below some perceived value – many assets had a mortgage or some other contractual liability registered against them. If asset values fall below the value of the liability, the asset holder is bankrupt. The complexity will be further reinforced if the contractual interest rates are fixed, while nominal interest rates are falling.

These rigidities were addressed as follows:

**Fiscal Imbalances**

There were cuts in spending. The main expenditure adjustment was reduced public works. In 1928/29 it was £15.3m, in 1932/3 it was £3.5m. Across all current expenditure the nominal cut was 24 percent.

Land taxes and income tax rates were raised during the contraction. It is difficult to quantify precisely their effect given the complexity of the rates, and that incomes and prices were falling. There was also imposed an unemployment levy from 1930 on all males of 20 years and over, The funds from which were used for worker relief. It was partly a poll tax and partly in proportion to income.. Since many workers’ income had been too low to pay income tax, the levy might be thought of as the beginnings of a universal (at least on males) income tax.

Social security benefits were also cut in 1932 (and sometimes before), typically by 10 percent, with additional cuts in concessions and abatement exemptions, so the effective nominal cuts were greater.

In summary, desperate measures were taken to maintain fiscal balance. From a base of £264m in June 1929, gross central government debt peaked at £352m in 1934 or by a third. (Since nominal GDP had fallen the debt to GDP ratio had risen from 168 percent to 248 percent in 1933.) However by Keynesian standards it could not be said the fiscal stance was expansionary. What was restricting a more expansionary stance was overseas borrowing. Offshore net central government debt rose from £134m in June 1929, peaking at £156m in 1932, and was back to £137m in 1934. (In 1929 half of the public debt was offshore; by 1934 it was below 40 percent.)

**Wages**

Public sector labour costs were also addressed as a part of the fiscal restraint. Public servant wages were unilaterally reduced in early 1931 by 10 percent. In March 1932 there were further cuts varying between 5 and 12.5 percent.
Work scheme costs were addressed too in order to stay within budget as unemployment rose. In November 1930, the daily rate for those on relief was cut from 14s 0d to 12s 6d ((11 percent) for married men and 9s (36 percent for single men). Later the 9s 0d rate would be cut to 7s 6d for single men in the main towns, 6s 0d in the secondary towns, 5s 0d in the smaller towns and 3s 9d in the rural areas and Maori pa. Work was available for only 2 days a week. Rates were higher for married men and higher if they had children; they also could work more days a week. (Sutch 1966:131)

Nor were private sector wages immune, as employers felt the squeeze of falling prices while wages initially remained rigid. They had been set through a system of awards (legal documents) agreed between employers and workers under the umbrella of the Court of Arbitration. Following a change in legislation which altered its powers, the Court issued in May 1932 a general order reducing all rates in awards and agreements by 10 percent. In April 1932 an even more radical change to the Industrial Conciliation and Arbitration Act removed the general jurisdiction of the Court unless employers and workers jointly referred a dispute to it (there were exceptions, including for female workers). Employers could now make offers on a take-it-or-leave-it basis while workers had little redress. (Woods 1963:126-9)

The available wage data reports only the private sector awards but does not include pay rates for those not covered by them (their numbers probably increased under the new arrangements). They record a reduction in the nominal wage rate for adults of 17 percent between 1930 and 1934. While the cuts were long bitterly remembered there is rarely recall that consumer prices fell 21 percent over the same period, so that effective wages rose slightly. Keynes’ notion of a money illusion applied in practice in New Zealand.

The wages of the unemployed were generally reduced to zero, except for the little they got on work schemes.

**Monetary and Exchange Rate Management**

All monetary systems are the same, and all are different. In the 1930s there was a heated debate within the economics profession on the best monetary arrangements in New Zealand.

Earlier we drew an analogy of New Zealand’s monetary arrangements at the end of the 1920s with Scotland. We could have also drawn parallels with a state of the US such as Colorado or, in contemporary terms, with a small nation in the European Monetary Union. Scotland and Colorado are a useful reminder that a sovereign nation, which in effect New Zealand was (despite some formal connections which were not severed until 1948), does not necessarily have control over its economy (a point recently observed by some small nations in the EMU).
According to the law at the beginning of the Great Depression, a trading bank’s note issue was not to exceed three times its gold reserves, nor should its ‘debts, engagements and liabilities’ exceed three times its coin bullion and public securities in New Zealand. Neither provision had much effect. What regulated a bank’s behaviour was the funds held in London, which were, in effect, the settlement cash with other banks. It is perhaps a little more complicated than this, because four of the six trading banks were Australian owned and a fifth also operated in Australia, but the simplification will suffice here. (Hawke 1973:16)

What determined the additions to the London funds was the net surplus of exports over imports, less the net sterling debt servicing (interest), plus the new sterling loans (mainly by the government). While in most years of the 1920s, the value of exports exceeded imports, they did not return enough to also cover debt servicing, with the deficit in the current sterling account being offset by government borrowing. Without such borrowing there would be a reduction in the London funds which would compromise the soundness of the trading banks unless some action were taken (such as reducing advances in New Zealand) which typically would contract production. (Moore & Barton 1935:358)

Rather than a fixed exchange rate, the regime involved a floating one, although the fluctuations had been small with a small premium for the purchase of sterling (i.e. New Zealanders would pay more New Zealand currency for sterling). In the 1920s, up to October 1928, the telegraph exchange rate had been typically £100 British sterling costing about £100 15s 0d of New Zealand currency. It began inching up. By April 1930 the British sum cost £105, in January 1931 it cost £110. (Hawke 1973:19)

The rise in the premium meant that an exporter received more New Zealand currency from the London sale of their product; a small recompense for the sharp drop in their auction prices, but nonetheless some. In 1932 there developed a heated debate about the appropriate exchange rate, the details of which need not detain us, but which ended up with a change of Minister of Finance in January 1931 following a devaluation to £NZ125 to 100 sterling. .

This had the effect of transferring some of the burden of the fall in export prices to the domestic sector which now had to pay more for its exports. (It also gave some relief to businesses competing against imports.) The impact on debtors was more complicated. Any surplus from a new loan which was not being used to repay borrowing or service interest would be more valuable. However the cost of servicing debt from current domestic receipts would rise, as would the value of the debts in its balance sheet (foreshadowing this cost). But this was long before the New Zealand government had a useable published balance sheet.
Interest Rates

International interest rates were falling. In 1933 the lowest British interest rates were down to about 0.5 percent p.a., from above 3.5 percent p.a. in the late 1920s. (They had been higher in 1929.) New Zealand’s borrowing rate in London was higher (because of perceived ‘country risk’?). Even so interest rates fell. There is no ready measure to tell by how much but the indications are not by the full three percentage points. Certainly the fall in the nominal interest rates was markedly less than the fall in consumer prices. So real rates rose.

The only long term interest rate measure available is the nominal rate on new mortgages. In 1929 it averaged 6.46 percent p.a.; by 1934 it was down to only 5.56 percent p.a.. Given that it was a period of deflation, new debtors were facing double digit real borrowing rates, as indeed were those with long term mortgages locked into the old higher rates.

The 1931 Finance Act (there was subsequent legislation amending and enhancing the provisions’ scope) cut interest rates on (just about) all mortgages executed before April 1932 by 10 percent. (There were minimum floors of 6.5 percent for chattel-mortgages, 5 percent p.a for other mortgages, excepting the case of income-tax free company debentures where the minimum was 4.5 percent p.a.. There were provisions for appeal by a mortgagee for relief.)

This did not address the capital value of a mortgage. From early 1931 there were legal provisions culminating in the consolidating Mortgage and Tenants Relief Act of 1934 which allowed a distressed mortgagor to approach an Adjustment Commission (or a court if there was not a voluntary settlement) to limit a mortgagee’s power of foreclosure, to postpone the payment of interest or principal, to reduce the rate of interest to remit any arrears of interest and to extend the period of table mortgages. By July 1935 there had been almost 27,000 applications to the Commission of which almost 15,000 had been referred to the courts involving almost £33m of principle. (There are no estimates of the stock of mortgages, but in the 1928 to 1931 period the typical value of new mortgages registered was near £33m a year, a similar order of magnitude; in the following four years considerably fewer – say a quarter by value – mortgages were registered.) Just under a half of the applications were granted; a quarter of interest in arrears was remitted and around two fifths had their interest reduced. Fewer leases – just over 2000 – were dealt with, with similar success rates. (NZOYB 1936:567-571)

While the measures are typically recalled in equity terms, they were all efficient insofar as they probably maintained effective productive capital, which tends to deteriorate when the usual foreclosure processes occur. Bankruptcies were low – in the period less than 1000 a year – and their debts proved were low too – typically under £1m a year. They peaked in 1931. (NZOYB 1936:581)
The willingness for the state to revise private contracts – and that the intervention was broadly acceptable to the public – reflects a national pragmatism, although it is instructive that capital sums were not generally revised. (When a similar situation with returned soldiers settled on farms financed by with government debt occurred in the early 1920s, there had been a systematic writing down of their liabilities and interest commitments. This time the practice was applied to private contracts as well.)

Summary Review

The Great Depression was a learning experience for New Zealand policy makers. They were unprepared for it; there may have been only one economics graduate in the public service when it began (Bernard Ashwin in the Treasury). The professors of economics played a crucial role in the formation of policy advice, especially in their membership of the 1932 New Zealand Economic committee which recommended the exchange rate change. There was an increasing role of economists during the period (Dick Campbell joined the Minister of Finance’s office in 1933, as did two others – Bill Sutch and Horace Belshaw – shortly after). (Academics – notably Douglas Copeland of the University of Melbourne James Hight and Albert Tocker of Canterbury University College and Alan Fisher of the University of Otago, as well as Belshaw from the Auckland University College – also played an important advisory and public commentary role. (Economic Committee, 1932; Fisher, 1932)

Such policy advising economists as there were inevitably focused on righting the imbalances rather than addressing macroeconomic management as we know it today; there were simply not the policy instruments. Insofar as they had a macroeconomic policy, it was to develop the institutions which would improve management in a future downturns, most notably the establishment of a central bank which would give greater independence of monetary policy. The Reserve Bank of New Zealand was established in 1934, although it took time to phase in its effectiveness. (Hawke 1971)

The popular vision that the economic management could have done more to expand the economy fails to grasp that there were not the means to do so. Spending more (or taxing less) would have created a financial crisis because offshore lenders would have been unwilling to finance the required sterling borrowing to pay for the consequent imports. Instead policy addressed such imbalances they could, providing for the sustainable expansion from 1934 (although even the there was an exchange rate crisis in 1938 from over-stimulation).

It is more arguable that the impact of the measures was unfair. Was the balance between the sacrifices between town and country, between the tradeable and non-tradeable sectors, between capital and labour; between those with jobs and those without fair? Could wealth
owners have been given a ‘haircut’ by a wealth tax or by writing down some debt? That is a political judgement which economists need to approach cautiously; in any case there has been no close analysis of equity impacts.

What we can say with greater certainty, is that on the day the handful of economists acquitted themselves reasonably well in difficult and novel circumstances.

Conclusion

What can we learn here with relevance to the current long recession? Undoubtedly the fiscal lesson is understood well enough. A small country dependent on offshore funds may be very restricted over what it can do fiscally. (Today this may apply when the offshore borrowing is largely private rather than public.) But that lesson is well enough understood by Scotland, a state of the United States or a country on the margins of the European Monetary Union, all of which have less exchange rate flexibility.

Changes in external prices do not appear to be as great a problem in current circumstances. If anything there has been a tendency for commodity prices to rise. Thus New Zealand has not had to deal with a deterioration in its terms of trade, although net commodity importers may face difficulties. More complicated pressures from maintaining the balance between tradeable and non-tradeable prices may arise if there are medium term changes in the exchange rates; there may be lessons from the 1930s here. If there is world wide inflation, who knows?

What is useful to observe here is the amount of trouble that New Zealand went to to get its debt levels manageable, if necessary by over-ruling private contracts. It would be difficult to test rigorously the counterfactual proposition that had there been no direct intervention New Zealand’s recovery from the Great Depression would have been later and less sustained. (An alternative strategy might have been a conscious promotion of inflation which would have devalued the debt, as argued by Eggertsson and Krugman (2010). However, given its monetary arrangements, that was not a practical option for small economy like New Zealand – and probably is still not unless there is worldwide inflation.)

The success and speed of an economy (and the world) in addressing the imbalances, directly by market mechanisms or indirectly by government actions where there are rigidities), which a long recession/depression experience exposes or creates may be a principle determinant of its course and length. This is not to deny, say, the Schumpeterian analysis (or more colourfully that an economy is like a wobbly bicycle which needs to go forward to stay upright). But it is to argue that macroeconomic management – fiscal and monetary measures – by themselves may not be particularly effective unless the underlying structural imbalances are also addressed.
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Endnotes


2. The data is annual or biannual so quarterly turning points are difficult to identify.