FIVE GREAT STAGNATIONS

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Introduction

I am writing a history of New Zealand from an economic perspective. Thankyou for the opportunity to present some of its material; it may have a contemporary relevance. I want particularly to thank John Whitehead, who issued the invitation, but regrets he cannot be here.

I begin with Graph I of the GDP per capita for as far back as I dare – 150 years. It is spliced together from a variety of various official and unofficial sources – the further back in time, the less reliable it is and it does not always conform to the historical narrative. I have taken that narrative into account in interpreting the series.

It shows a flat GDP per capita from 1863 to about 1895, and then the economy moves into a long term growth phase, similar to that described in Walt Rostow's theory of 'Takeoff into Sustained Growth', consistent with the narrative about the impact of refrigeration, transforming the New Zealand economy and society.

Less easy to see, but statistically significant, is a point of inflexion in the 1960s, when the price of wool went into structural decline, and the pastoral boom precipitated by refrigeration ended. This sort of growth slowdown, where the underlying trend falls, is known in economic history as a climacteric; wonders of wonders, I have both a takeoff and a climacteric!

Nevertheless there are longtime deviations from this trend, much longer that can be explained by the business cycle with its length of about three years. It is these long deviations with which this paper is concerned. We tend to assume that the growth norm is exponential. The view developed in the 1950s from the work of economists like Robert Solow, Evsey Domar, Rostow and a pantheon of other economic saints. The assumption has become imbedded into the subconscious of subsequent generations; we assume – resource depletions aside – that the economy expands around a long term growth rate. Of course there is a business cycle which bubbles around it; the orthodoxy is that business cycles are damned nuisances in the short run but the economy returns to the medium run trend. The assumption does not envisage modern economies going through long periods without economic growth.

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However for at least a third of the last one hundred and fifty years there have been long periods of economic stagnation . There are at least five major periods when this has happened. Some may wonder whether we are in a sixth. That is the theme of today's lecture.

Definitions

Insofar as I can measure activity, I am using GDP per capita. The per person adjustment arises because I have been thinking about international comparisons ever since reliable data bases became available. Moreover, during the nineteenth century New Zealand experienced rapid population growth – in one five year period population doubled; a little later it doubled in a decade. Per capita measures clean that out.

So I am interested in longish periods, rather than the business cycle with a trough less than a year. I agonised over the period to define the phenomenon. I cant recall why I chose five years, except that it was much longer than the business cycle trough.

Third, what to call these periods of negligible economic growth? The literature used to talk about 'depressions', although after the 1930s the expression is usually confined to a deep plunge in activity rather than a long shallow trough. Another term is 'recession', although that term is also used for the contractionary period of the short business cycle, usually of about two quarters. Some describe the current state of the world as 'The Great Recession'.

Recently I have turned to the term 'stagnation', which is a good descriptor, providing it is not confused with the sort of stagnation that the Saints – Malthus, Ricardo, Marx, Keynes, Schumpeter – envisaged when the marginal efficiency of capital becomes zero, nor of that predicted if resource depletion is too severe. Humpty Dumpty said that naming of things was complicated; let me use 'stagnation' as the best term available. But sometimes I will call them 'depressions' and 'long recessions'.

So today's presentation is about 'stagnations' in which the economic activity measured by GDP stagnated in per capita terms for at least five years, and where we look through the wobbles of the business cycle.

Beginnings

I shall say little about the Maori economy, although the book pays considerable attention to it. Of course the longest stagnation of the New Zealand economy was for the five hundred years from when the proto-Maori arrived at the end of the thirteenth century, and the Europeans arrived at the end of the eighteenth century. Undoubtedly there were traumatic shocks – tsunamis, volcanoes, hurricanes and earthquakes – but there was no monetary system. There was some slow technological change such as the dispersal of kumara growing, and there was some resource depletion – best known are moa and seals. However there was probably not a lot of difference in material output between when the proto-Maori had settled in and when Cook landed in 1769.

The European brought markets, money and the possibility of economic fluctuations. Initially we have little quantitative data and the narrative is fragmentary, We know most of the planned settlements lapsed into a depression shortly after they were established, when the capital stimulation from borrowing and migrant funds ran out. We know the Maori provisioning ships ended up with no buyers in the late 1840s because a European financial downturn meant merchants did not have the means to send their ships out here.

The quantitative story starts in about 1860 when economic historians begin to construct statistical series, although I am uneasy about the first decade estimates. It was the period of the alluvial gold rushes and the New Zealand wars, both of which generated a lot of economic activity. Both were over by the end of the 1860s; the economy was lethargic.

Famously, Colonial Treasurer Julius Vogel embarked on offshore borrowing aiming to build the infrastructure and the population (by assisted immigration). That led to an economic expansion, but not in per capita terms, according to the available data.

Stagnation 1. The Long Depression (Graph 2)

The Vogel boom came to an end in 1878 when offshore government borrowing dried up. The City Bank of Glasgow failed – fraudulently, all the directors were jailed – which precipitated a systemic crisis in the London financial markets – then the financial capital of the world – which lasted through to the mid 1890s. It is called 'the Long Depression'. New Zealand had a similar period of depressed economic activity. It seems likely that per capita output levels in the mid-1890s were much the same level as in the late 1870s, which would make New Zealand's 'Long Depression' around 15 years long.

Different parts of the economy had different experiences. The south was based on wool which experienced falling prices, while public borrowing was limited. To the north, Auckland was dependent on hard-rock gold mining whose price did not fall (indeed its real prices rose as prices generally fell during the Long Depression), on kauri gum and on kauri timber exported to Sydney and Melbourne which were booming. Auckland business was also more successful at private borrowing in London. When the Australian economy busted in the late 1880s so did Auckland; now the entire country was in depression.

All three non-Australian New Zealand banks got into trouble. The National Bank bailed itself out, at some pain to its shareholders; the Colonial Bank and the Bank of New Zealand were bailed out by the government which amalgamated the two and took a minority shareholding. The Colonial Treasurer, Joseph Ward, was the Colonial Bank's biggest debtor, and had to resign.

When I was looking for parallels with the impact of the Global Financial Crisis in 2008, the Long Depression seemed the best fit. Such parallels are never perfect, but both involved an offshore financial crisis affecting a New Zealand economy which was already over-borrowed. One parallel I did not notice at first was the two-speed New Zealand economy, although this time it involves the dairy industry hooked into the China economy, rather than Auckland into Eastern Australia.

During the Long Depression the New Zealand economy underwent substantial structural change, as refrigeration created the modern pastoral industry. New Zealand's political and social structure was transformed too. As the world economy recovered, meat and dairy exports expanded and output per capita doubled in the decade after 1895.

Stagnation 2. The Interwar Recession (Graph 3)

In about 1908 the Liberal growth boom which had commenced in about 1895 came to an end. Per capita GDP had more than doubled, and the Liberals spent the fiscal proceeds, establishing the foundations of the welfare state. After 1908 they had neither the proceeds nor a borrowing inflow; with expenditure constrained they lost power at the next election.

In 1908 the London money market had a downturn, but it was not just a business cycle wobble for New Zealand. As best as I can judge, the rapid expansion in production came to an end. Partly it was that the depletables – native forests and gold – were exhausted. Despite more land being turned into pasture, farm output was not rising as fast as population, so that its productivity was falling for soil fertility was being depleted. A farmer would get four good years after burning off the bush; then soil productivity would fall. Artificial fertilisers would not be used extensively until the late 1920s.

What is surprising is how early this particular stagnation began. I knew there had been a long stagnation – business cycle wobbles aside – from the early 1920s, which had begun with a downturn so sharp that had it been longer, it would have been another great depression. One explains it by the lethargic British economy – still our main export market – which had come out of the First World War with its price level out of line with its exchange rate and with less gold than its aspirations required. The weight of world activity was shifting to America, to which New Zealand hardly sold anything. Britain had grown quite quickly in the decade to the end of the Great War, but hardly at all in the following decade. Nor were there favourable improvements in the terms of trade.

Interpreting the earlier data to the end of the First World War is more complicated. Conditions in the British economy and export prices do not seem as difficult as they were in the 1920s. The New Zealand data is problematic but as best as I can interpret, it would seem that the poor growth in the decade after 1908 was from poor productivity performance rather external circumstances.

The long recession in the 1920s ended in the crash of the Great Depression. When New Zealand came out of it in 1935, the economy had been in roughly the same per capita level of GDP for around 27 years. It has been the longest stagnation that the market economy has experienced.

The Great Depression

I treat the Great Depression as the fag end of the inter-war long recession, but it deserves attention in its own right. The New Zealand economy entered the Great Depression over-borrowed; its difficulties were compounded by a sharp fall in the terms of trade. It faced three major economic imbalances:

- a fiscal imbalance arising from reduced revenue as the economy contracted, together with reduced offshore borrowing, with no automatically compensating spending changes
- a commodity price imbalance arising from the fall in the price of exports with a lesser fall in the price of imports, so that the price of non-tradeables was too high.
- land values were excessive and farm balance sheets were over-leveraged.

There was no automatic, rapid market adjustment to these imbalances because of various rigidities in the fisc, wages, prices, the exchange rate, interest rates, the value of mortgages. Policy addressed them in turn, often using very direct interventions. The reasons for the interventions were often misunderstood. One might argue that there was inadequate attention to sharing the burden of adjustment fairly but the economic advisers – especially Bernard Ashwin and Dick Campbell – did their profession proud (although they were fortunate to have Minister of Finance Gordon Coates to harness their talents).

New Zealand came out of the Great Depression with most of the imbalances substantially reduced, so it was on a reasonably firm foundation for economic expansion. The just elected Labour Government expanded the economy very rapidly, and was only narrowly saved from a major borrowing crisis in 1939 by the impending war. (The Secretary of the Treasury said New Zealand was 'bankrupt'.) Economic management during the war was by current standards a tad unorthodox with detailed intervention and controls, but virtually every other government in the world did much the same thing; what is unusual is that we continued with the interventions longer than others.

Per capita output doubled in the decade to 1944 from the peacetime demand-driven expansion followed by the war effort which forced maximum production, partly by sucking female labour into the market labour force.

Stagnation 3: The Post-War Stagnation (Graph 4)

Post-war adjustment is always difficult – even for a country which has not been invaded – as troops redeploy into civvy street and the industrial effort is switched to civilian production. Much of the capital stock of the peacetime economy and the infrastructural deficit from the Great Depression had not been resolved by the time the war began. Nor was there the new capital for the growing population and to enable technological upgrading. There was also an international dollar shortage which restricted imports from America – a major source of capital goods.

I have long known that production peaked in 1944 to be followed by a stagnation, but it was only after Viv Hall and John McDermott provided their quarterly volume GDP series that I realised it lasted almost a decade if we look through the temporary production peak caused by the wool price boom.

That is not surprising. A conservative estimate is that the labour force of 1944 was 10 percent above civilian levels because women and the retired joined as part of their war effort. When they left it there would be a loss of production; ten years seems a not unreasonable time to adjust, particularly given the various shortages and other stresses.

There are two reasons why the third great stagnation is not recalled. First, there was little unemployment among men (among women it was disguised by a return to housework). Second, the favourable rise in the price of wool – higher terms of trade – meant that expenditure rose despite the production stagnation.

It was followed by a thirteen-year post-war boom based on rising productivity and expanding pastoral exports. It was funded from the proceeds of favourable terms of trade and offshore borrowing.

Stagnation 4: The Wool Price Crash (Graph 5)

In December 1966 the price of wool crashed as coarse wools were replaced by synthetics. There was a short-lived price recovery during the world commodity price boom of 1971-2 but it only temporarily obscured a structural fall in the price of wool of about 40 percent.

The economy did not simply stagnate but it ‘stepped down’ maintaining the growth track but at a lower level.

There is an interesting research finding here; it would appear the underlying rate of growth following each postwar stagnation is much the same as the growth rate before the stagnation. From this perspective a growth slowdown may be seen as a transition from a higher level growth track to a lower one. Once there, the economy begins expanding again parallelling the track it had been on before.

That expansion did not begin until 1979 which makes the stagnation over 12 years long. However it was interrupted by the world commodity price boom. Perhaps the Fourth Great Stagnation was a growth recession rather than a period of total stagnation. The new track was 20 percent lower than the track up to 1966.

Stagnation 5: The Rogernomics Recession (Graph 6)

The following expansion was characterised by double-digit inflation and an extraordinary external diversification which meant that within 15 years New Zealand changed from being an OECD outlier in export commodity and destination concentration, to near the middle. I argue that provides the driver for the economic liberalisation of the 1980s.

This liberalisation is associated with a ten year stagnation with – reminiscent of the interwar recession – a sharp downturn at its end, although in this case it was not one caused by an international downswing. By 1995 the economy was back at the same per capita level of output as it had been in 1985.

Despite this being the most controversial period of economic policy in living memory, much of the controversy ignores the stagnation, although it is evident enough in the Hall-McDermott series. It is certainly true that there was steady growth after the nadir in late 1992 (the Asian crisis of 1997-98 aside), but the growth rate is not markedly different from that in the preceding booms. Like its predecessor, the Rogernomics Recession might be thought of as a step down (again of about 20 percent). However unlike the growth recession following the wool price collapse, the economy flat-lined with a dip at the end.

Stagnation 6? The Great Recession

The boom of the last decade of the twentieth century and the first decade of the twenty-first came to a peak in September quarter 2007. The Treasury budget forecasts suggest that the level of that peak will be regained in late 2012, in which case the stagnation would be for at least five years. Others may be more pessimistic. Whether we are in a sixth stagnation will be best settled in about a decade. As I would tell my econometrics students, 'avoid making predictions – especially about the future'.

The first five great stagnations totalled at least 60 years of the last 150. For over a third of New Zealand's measurable economic history, production has stagnated for long periods. That proportion also applies to the post-war era. So we should not be surprised if there is a sixth great stagnation sometime in our lifetime.

Stagnation Lessons

Rather than further pursue the contemporary economy, consider the lessons to be learned from the past stagnations. There are no useful universal generalisations, for there are always exceptions. Here is a framework I have found useful when I am trying to assess a stagnation.

1. <u>What are the international conditions?</u>

Four of the five stagnations were clearly influenced by external events. In the first three – the Long Depression, the Interwar Recession and the Post War Recession – a depressed world economy hung over New Zealand; in the fourth it was a collapse of the price of a key export. I have argued that there were also international events that influenced the path of the Rogernomics Recession. Be very attentive to the world economic and financial situation. However the Long Depression reminds us that different parts of the world economy may behave differently, and different parts of New Zealand may be connected into the different parts.

2. <u>Pay attention to changing patterns of production in New Zealand</u>.

The early New Zealand market economy was dominated by unsustainable industries. Even the farm sector seems to have exhausted the fertility of the soil until the application of artificial fertilizers in the 1920s. There was also structural change: the Long Depression saw the rise of the pastoral family farm; the interwar recession saw the development of urban centres and industrialisation; the post-war recession was about moving out of the war economy; the wool price collapse led to the great external diversification; the Rogernomics Recession ended the importable sector.

3. <u>Try to Assess the Underlying Growth Track</u>

Macroeconomic forecasting tends to be underpinned by an assumed equilibrium growth track with a business cycle in which the economy moves back to the track. Get the wrong growth track and the forecast has to keep being revised for being too optimistic. Sound familiar? Perhaps the economy has gone through a climacteric – a fundamental change in the rate of growth – or perhaps a step down with a flattening out until the lower track is attained. Judging the underlying growth track is difficult; the only reason to insist that the task should be undertaken is that it is worse not to consider the possibility that there has been a change.

4. Think About the Government Sector

The crude Keynesian recipe of borrowing to ease an economy through a business cycle does not work during a long stagnation, because the rising debt is likely to get out of hand.

During a cyclical downturn there is a temporary fall in government revenue and possibly a rise in government spending; when there is a climacteric or step-down, the effect is more permanent. It is not only the forecasters who have an expectation of continued economic growth; so does the public who expect more public spending. The challenge we learn from the last three stagnations is it as much about how to manage the public's expectations as about managing the public sector.

Everyone expects their real income to rise even when average income is stagnant. Policy during the Rogernomics Recession simply ignored equity, introducing changes which favoured the rich, so the bottom four-fifths of households suffered substantial cuts in their incomes. The public responded by voting against the winner-takes-all political system. The new political regime will restrain neglecting equity. But if there is a stagnation there will still be no extra output to buy-off demands. Some people are going to suffer – who?

The Great Depression and the Recession following the wool price collapse both involved major changes to key product (commodity) prices which not only changed the entire price structure (including factor prices) but were disruptive to the income distribution. A common criticism of economic management during the Great Depression was that in protecting farmers and profits as best it could, the poor and unemployed suffered. Following the wool price collapse, groups contested for the smaller real income pool; governments concerned about equity resolved the contest by inflation, which hit those on fixed incomes.

Think too about the public balance sheet. The country entered the first two stagnations over-borrowed; it was even worse placed at the beginning of the Great Depression. There was not so much of a balance sheet problem in the post-war stagnation as getting hold of dollars. I dont think there was a major borrowing problem in 1966, but in the 1980s as the government tried to unscramble various guarantees, borrowing problems arose; they were a justification for the hasty privatisations. The lesson is one needs to think about the public balance sheet.

The way New Zealand has borrowed offshore has varied over the years so it is difficult to generalise to today's conditions. One thing which is clear is that an objective assessment of the adequacy of the government's balance sheet is not nearly as important as what the potential lenders think. That was equally true during other occasions when we had borrowing difficulties.

5. <u>Look for Imbalances in the Private Sector</u>

I have always found it useful to think in terms of balance sheets, even though we lack actual ones. Changes in external conditions or an internal contraction will impact on both asset prices and cash flow.

<u>Farms</u>: It is easiest to guestimate farm balance sheets. The record is that farmers tend to 'over-borrow' – the term I use in public discussion – or are 'over-leveraged' – as professionals might say. The excessive borrowing raises land prices. Of course many farmers retain robust balance sheets because their debt is low relative to realistic land prices, although they can be wrong-footed if product prices crash. An aggregate sector balance sheet will average sound and unsound enterprises; one needs farm balance sheets by deciles. The backup is to use changes in average levels through time, guessing that as the mean deteriorates, the exposed tail deteriorates even more.

<u>Banks and Other Financial Institutions</u>: I have puzzled why our trading banks have been sound through each stagnation, the end of the Long Depression excepted. The record of other finance institutions has been less auspicious. A number fell over in the 1970s; while this was usually attributed to the erratic impact of interest rate controls, some were fundamentally unsound. A good number of financial investment institutions collapsed during the Rogernomics Recession, because they were wildy speculative – and over-leveraged. One was not surprised by similar instances in recent years.

<u>Businesses</u>: As a general rule, when there is not violent industry restructuring, the businesses which fold are those that are poorly managed or in contracting industries. The longer the stagnation, the more likely we are to see businesses in difficulties.

<u>Housing</u>: Home ownership was not widespread during the earliest stagnations, although in the nineteenth century some wealthy businessmen were over-leveraged and had to sell their palatial homes. In the 1930s more people got into difficulties when they became unemployed, nicely illustrating that while a mortgage is secured against a property, the lenders really rely on the owners' earnings to service the debt. In April 2007 I estimated that house prices were perhaps 50 percent over-valued relative to long term trends. Presumably some home owners will be in difficulties if unemployment rises; some who brought investment housing may

already be.

Conclusion

In summary the intuition is that is until balance sheets are better balanced the economy will have difficulties recovering. Even more important may be the condition and the recovery of the world economy. However, I want to conclude a little more upbeat, so here is a sixth lesson.

6. <u>There are Positive Opportunities During a Stagnation</u>

It is easy to get despondent about being in a long stagnation or, even worse, to avoid despondency by pretending that the economy is only in a short term downturn. But the narrow view that 'only' economic growth matters may not be true.

Indeed, there was considerable progress during all the past stagnations, not only favourable structural change, but also social gains, for it is easy to cite instances of positive cultural, recreational and social change. My generation grew up under the shadow of the Great Depression, but we went to the art deco picture theatres that were built during it.

In order to maximise the opportunities we need to avoid high unemployment and gross inequality; in which case a long recession need not cause personal depression.

Are we in a long recession? A group of wise men asked to condense the wisdom of the world into a single word, chose 'perhaps'. Perhaps we are in a stagnation. The probability is higher than the conventional wisdom thinks. Even if we are not, careful consideration of the possibility is a lot more useful than blindly assuming nothing has really changed.