How Great was the Depression in New Zealand?
Neglected Estimates of Inter-war Aggregate Income: Comment.

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The Great Depression in New Zealand has played a pivotal role in our social history, but its economic significance has been somewhat downplayed.[1] For example, the implicitly accepted view has been that male employment in 1933 was an improbable 85% of the working age population (Macrae & Sinclair 1975; Hawke 1985 p.124) - compared to 70% in 1993 (Rankin 1993, p.223).[2] In retrospect, all of the statistics that we have used to understand the inter-war period require critical reassessment. A lack of time series data about gross product and employment has been no excuse for the complacency towards the Depression of our economists; we have failed to utilise many of the data sources that have been available. By reassessing the national income statistics of the late-1920s, Simon Chapple brings the issues of the severity and the duration of the Depression to the fore.

There has been little recognition that the timing of New Zealand's crisis varied from other countries. Indeed, one anecdote that I have heard is that few people were concerned about the impact of the Wall St. crash of 1929 because they thought New Zealand had just recovered from a depression. Sir Apirana Ngata's correspondence with Sir Peter Buck suggests that there was little real concern about the impact of the international depression until quite late into 1930.[3] Once the politicians caught onto the crisis, one of their first responses was to postpone the 1931 census until there was "an improvement in economic conditions" (NZPD 16 Oct. 1930, p.839).[4] They were reacting to a registered unemployment total of 6,000 men and to the sharp fall of New Zealand's pastoral export prices. We should not forget that, in those days, a depression was thought of as a period of falling prices, not falling incomes. Falling incomes and employment levels were seen as consequences of depression, not its defining characteristics.

In 1992, I published a series of GNP estimates that made use of neglected contemporary and semi-official data sources, and made use of relationships between monetary aggregates and gross product[5] as a means of filling the many gaps. Chapple is to be commended for keeping this project alive. By finding hitherto forgotten "semi-official" estimates for GNP in 1928/29 and 1931/32, and by re-evaluating past estimates for 1925/26, he paints a picture of greater decline from the 1920s to the trough of 1932/33 than does any other modern source.

To his credit, Chapple does not place too much reliance on just one new statistic. Realising

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1. Olssen (1990) asks "Why did the unemployment of [the 1930s], so low by international standards, have such an enormous impact"?

2. My Depression trough employment estimate is 70% of males aged 21-64 (Rankin, 1990, p.173), comparable with other nations and lower than Great Britain.

3. Ngata was a Cabinet Minister from 1928 to 1934.

4. Postponing the census was also a convenient device to retain electoral boundaries; there was an awareness that the drift to the towns in the late 1920s meant that new boundaries would favour urban interests.

5. Hawke (1975) introduced this technique to New Zealand.

that the 1929 datum from the *New Zealand Economic Survey* (Table 7, NZES 1952) was probably a forward projection, while the 1933 datum given in the same table was a backward projection, he has constructed a time sequence for the years 1925-29 which, averaged out, can be contrasted with the Depression trough of 1932/33. His key conclusion is that New Zealand's aggregate income was higher in the mid-late-1920s than alternative sources indicate.

Chapple's GNP/GDP estimates for 1929/30 to 1938/39 closely match my own. The area of contention is 1926/27 to 1928/29. This was a period in which there was a big worldwide decline in the terms of trade of primary products vis-a-vis manufactures. In 1927 New Zealand experienced an outflow of migrants unheard of since the 1880s. Debt-ridden farmers walked off their lands in possibly greater numbers than during the later slump. With farm profits being very low, there must have been a big decline in the output of the important rural services sector.

New Zealand was different to most other primary producers, in that Great Britain was by far the dominant market. The decline in New Zealand's fortune was interrupted in 1928/29 by the increased willingness of both Britain and New Zealand to run a current account deficit.[6] Both countries had significantly overvalued currencies.

In using factory statistics to interpolate GDP between 1925/26 and 1931/32, Chapple understates the extent of the 1927 crisis. Other indicators - monetary data and Trans-Tasman migration (Rankin 1992, p.64), marriage rates and school retention rates (Rankin 1990, pp.50,68-69), and rural-urban migration (Fisher 1929) - point to a more severe crisis. Indeed the National Industrial Conference of 1928 was called as a result of this crisis, and the farmers' own Reform Government was defeated in the 1928 election. In 1929 and 1930, there was an influx of Australian migrants, a marked reversal of the 1927/28 situation.

Table 1 **Historical Relationship between Earnings and GDP**

year to March	GDP [1]	GDP p.c. [2]	median income, fulltime wage/salary earners [3]	[3]/[2]	median income of all persons over 15 [4]	[4]/[2]
1926	$358m	$257	$339	132%	$179	70%
1936	$311m	$198	$223	112%	$87	44%
1945	$765m	$459	$523	114%	$256	56%
1951	$1,401m	$730	$810	111%	$379	52%
1956	$1,970m	$915	$1,201	131%	$570	62%
1961	$2,732m	$1,143	$1,554	136%	$774	68%
1966	$3,869m	$1,460	$1,860	127%	$1,000	69%
1971	$5,624m	$1,983	$2,588	131%	$1,398	71%
1976	$11,326m	$3,628	$4,930	136%	$2,764	76%
1981	$23,089m	$7,306	$10,338	142%	$5,743	79%
1986	$45,435m	$13,821	$16,295	118%	$10,615	77%
1991	$73,601m	$21,734	$24,885	115%	$14,040	65%

sources: GNP; 1926, 1936: S. Chapple "Appendix Three" (GNP as proxy for GDP).
GDP; other years: Statistics New Zealand, NZOYB 1990 (pp.679-80), 1994 (p.552).
(Latest years, from 1994; linked to earlier series in the 1990 Yearbook)
Income data is calculated from the Population Census, Statistics New Zealand.

6. It was the run-up to a general election in both countries.

Chapple's upward revisions of GDP for 1925/26-1927/28 highlight the structural nature of New Zealand's crisis, while downplaying its cyclical aspects. His benchmark datum for 1925/26 is probably closer to the true figure than mine. Table 1, above, of census incomes of fulltime wage/salary earners expressed as a percentage of GDP *per capita* can be used to illustrate the point. My GNP estimate for 1926 yields ratios of 138% and 73%, perhaps a bit high when seen in the context of later years. We would not expect the mid-1920s to have relatively higher median incomes than the egalitarian 1970s. While the drop from 1925/26 to 1935/36 remains severe using Chapple's data, there are clear parallels in the 1980s. Chapple's 1925/26 GDP estimate yields GDP *per capita* to median income ratios that are comfortably within the historical range.

Table 1 shows that the nominal incomes of ordinary people - the median rather than the mean - declined in 1935 by between 34% (for fulltime workers) and 51% (for the population) of their 1925/26 levels.[7] Yet GDP *per capita* declined by just 23% in that time. The divergence between typical and average experiences indicates rapidly growing inequality. Clearly the Great Depression was a time of very great hardship for ordinary working families. A combination of inadequate empirical analysis and the offsetting experiences of the better-heeled minority has acted to make the Depression seem less severe than it really was. Simon Chapple, in suggesting that incomes in the 1920s were greater than we had supposed, has added another piece to this historical jig-saw puzzle.

Given Chapple's upward revision of New Zealand's GDP in 1925/26 and the evidence of a recovery in 1929/30 (in rural servicing and public works more than in manufacturing), it seems probable that GDP in 1929/30 was closer to £180m (Lineham's 1929 estimate) than the £165m Chapple settles for, implying a fall in nominal GDP of 37% (40% *per capita*) from peak to trough. Headline inflation was *minus* 20% from 1929 to 1933 (-17% from 1925/26 to 1935),[8] suggesting a fall in real GDP per person of 25% (8% from 1925/26 to 1935). However, as a result of the changes in income distribution which caused median real incomes to fall by 40% from 1925/26 to 1935, median real incomes must have fallen by at least 50% from 1929/30 to 1932/33.

One useful task that could be conducted by a keen researcher would be to repeat Fisher's 1930 exercise[9] to estimate aggregate private income for the year 1935, using data from the 1936 census. This should give a more accurate comparison between average conditions in the mid-1920s and the mid-1930s than any GDP estimates to date.

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7. The 1936 census, unlike the 1926 census, covered incomes for the preceeding calendar year (ie 1935). Despite the population median income in 1935 being less than half of its 1925/26 level, a greater proportion of the working age population had some income in 1935. Labour force participation had risen as a result of the Depression.

8. Consumers Price Index, NZOYB 1990 p.614.

9. Fisher used census and tax returns to estimate aggregate private income for 1925/26.

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