FARMING WITHOUT SUBSIDIES:
NEW ZEALAND'S EXPERIENCE IN THE 1980s

Ron A Sandrey and Russell G Reynolds

The objective of this paper is to reflect on the seed of change that lead to the reform programme; to document the major reforms carried out from 1984 to late 1989; to assess the consequences of these reforms for the agricultural sector; and to discuss key issues now facing policy makers. Primary emphasis is given to the pastoral livestock sector in New Zealand, reflecting both its predominance in agriculture and the availability of data.

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THE SETTING

Seeds of Change

Government intervention intensified in the New Zealand economy through the late 1970s and into the early 1980s, in an attempt to retain the prosperity of the 1950s and to insulate consumers and producers from negative external forces such as the 1970s oil price shocks. Agriculture in particular became the target of extensive production-promoting assistance, effectively obscuring both the declining terms of trade for agriculture and the rising real interest rates around the globe.

Between 1979/80 and 1982/83 support to agriculture increased from 15% to 33% of output (table 1), with consequent costs to the taxpayer in terms of income support, subsidies, and revenue forgone. Additionally, this switch to output assistance was more distorting in its impact on agriculture than previous agricultural subsidies. In 1984 the National government acknowledged this level of support was unsustainable, and announced a programme for the termination of the Supplementary Minimum Price (SMP) schemes and the Producer Boards' access to low cost funds for price support.

The general macroeconomic policy set was probably unsustainable as well. The fiscal deficit and overseas debt had climbed steeply, and New Zealand's relative standard of living continued to fall from its 1950s pinnacle. As the country's economic performance worsened, the impetus for change grew. A snap election in 1984 brought to power the Labour party, with a finance minister committed to a less interventionist approach. This apparent contradiction of a traditionally left-wing democratic party espousing free market economic policies indicates the degree to which previous governments had drifted into intervention, and the high level of disenchantment with such policies.

Trade and Competitiveness

Much of agriculture's production is exported to overseas markets, where New Zealand is a price taker. As a tradeable industry, agriculture's ability to compete for scarce resources with other non-tradeable sectors in New Zealand, and with producers in overseas countries, depends upon relative output and input prices. Domestic policies and responses influence, and can distort, both farm input and output prices. In the period before 1984 New Zealand had experienced sustained higher costs, and agriculture had lost competitiveness against both other sectors and overseas producers.

THE REFORMS

Macroeconomic

The exchange rate was immediately devalued by the Labour government and, in 4 March 1985, floated. Central objectives have been the control of the deficit and reduction in inflation. However, government expenditure actually increased in the first two years, and monetary policy was not tightened until 1987. Other policy initiatives were directed towards general market liberalisation, removal of export assistance, lowering of import protection, changes in the taxation system to more indirect taxation and a widening of the tax base, privatisation of government trading activities, and a greater emphasis on government efficiency.
Key indicators are shown in table 1, and reflect an appreciating real exchange rate between 1985-88, high short term real interest rates, declining growth, rising unemployment and an eventual fall in the inflation rate and improvement in the external account deficit.

Table 1: Selected Economic Indicators, New Zealand, 1980-90

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<tbody>
<tr>
<td>1 Total Ag Output ($ billion)</td>
<td>4.4</td>
<td>4.5</td>
<td>5.0</td>
<td>5.0</td>
<td>5.9</td>
<td>7.6</td>
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<td>6.9</td>
<td>7.6</td>
<td>8.3</td>
<td>9.9</td>
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<td>2 Agriculture as % of GDP</td>
<td>10.1</td>
<td>8.8</td>
<td>7.7</td>
<td>6.7</td>
<td>7.0</td>
<td>9.2</td>
<td>7.0</td>
<td>5.9</td>
<td>6.0</td>
<td>5.9</td>
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<tr>
<td>3 Total Assistance ($million) % of output</td>
<td>393</td>
<td>345</td>
<td>750</td>
<td>1179</td>
<td>1092</td>
<td>1060</td>
<td>874</td>
<td>525</td>
<td>558</td>
<td>287</td>
<td>209</td>
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<td>4 Consumer Price Index (1982=1000)</td>
<td>15</td>
<td>13</td>
<td>24</td>
<td>33</td>
<td>30</td>
<td>23</td>
<td>23</td>
<td>13</td>
<td>12</td>
<td>5</td>
<td>3</td>
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<tr>
<td>5 Real Trade Weighted Exchange Rate (1976=1000)</td>
<td>746</td>
<td>861</td>
<td>1000</td>
<td>1074</td>
<td>1139</td>
<td>1316</td>
<td>1490</td>
<td>1724</td>
<td>1834</td>
<td>1924</td>
<td>2039</td>
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<td>6 Real Net Farm Incomes</td>
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<tr>
<td>a. Sheep and Beef Farms 1066 (1976=1000)</td>
<td>807</td>
<td>696</td>
<td>663</td>
<td>503</td>
<td>832</td>
<td>329</td>
<td>475</td>
<td>459</td>
<td>446</td>
<td>506</td>
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<tr>
<td>b. Dairy Farms (1976=1000)</td>
<td>839</td>
<td>797</td>
<td>905</td>
<td>837</td>
<td>838</td>
<td>969</td>
<td>723</td>
<td>592</td>
<td>610</td>
<td>997</td>
<td>1308</td>
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<td>7 Real Farmland Values (1982=1000)</td>
<td>812</td>
<td>914</td>
<td>1000</td>
<td>908</td>
<td>818</td>
<td>702</td>
<td>556</td>
<td>462</td>
<td>424</td>
<td>445</td>
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<tr>
<td>8 Agricultural Debt ($ billion)</td>
<td>3.5</td>
<td>4.2</td>
<td>5.2</td>
<td>5.8</td>
<td>6.8</td>
<td>7.4</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
<td>7.8</td>
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<td>9 Terms of Exchange in Agriculture</td>
<td>960</td>
<td>880</td>
<td>940</td>
<td>900</td>
<td>980</td>
<td>1050</td>
<td>770</td>
<td>760</td>
<td>710</td>
<td>790</td>
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<td>10 Unemployment %</td>
<td>2.2</td>
<td>3.6</td>
<td>3.5</td>
<td>5.6</td>
<td>5.7</td>
<td>4.1</td>
<td>4.0</td>
<td>4.1</td>
<td>5.6</td>
<td>7.2</td>
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<tr>
<td>11 Terms of Trade</td>
<td>82</td>
<td>76</td>
<td>77</td>
<td>74</td>
<td>75</td>
<td>73</td>
<td>71</td>
<td>76</td>
<td>83</td>
<td>90</td>
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<tr>
<td>12 Current Account Balance (as a % of GDP)</td>
<td>-4.2</td>
<td>-3.6</td>
<td>-5.9</td>
<td>-6.3</td>
<td>-5.8</td>
<td>-9.4</td>
<td>-8.5</td>
<td>-4.7</td>
<td>-3.7</td>
<td>-1.6</td>
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</table>

Sources: Ministry of Agriculture and Fisheries; New Zealand Meat and Wool Boards' Economic Service; Department of Statistics. 1988-1990 figures range from provisional through to forecasts.

Note: There is some variability with the "years" in the above table, as different items have different reporting dates.
Commercial Policies

The new Labour government accelerated the withdrawal of agricultural supports: concessionary farm loans were progressively brought into line with market rates, cost-recovery plans were announced for product inspection and advisory services, and input subsidies were terminated. By 1989 assistance to agriculture had been reduced to very low levels (table 1). However, government did absorb the considerable overdrafts in the producer board stabilisation accounts, and a Rural Bank discounting scheme was introduced to restructure some farm loans.

The current industry support situation is uneven. Almost all assistance to agriculture has been removed and, although there have been tariff reductions, the remaining assistance to import-substitution manufacturing constitutes an implicit tax on agriculture which limits the sector’s growth.

Taxation Reform

Much reform of the New Zealand Income Tax Act 1976 was undertaken during the 1984-89 period, with many of the changes having a significant effect on business decision making in the primary sector. The objective of these changes was to achieve a simpler, broader-based, more 'investment-neutral' and efficient system. Major sector-specific reforms concentrated on the controversial livestock taxation; deductibility of development expenditure; and the tax-free status of producer boards and co-operatives. Many of these changes incorporated (generous) transition provisions, and took place in a generally lower income and lower tax-potential environment. The broad conclusion reached is that the total tax burden (including GST on disposable income) has increased with the 1989 regime, although tax liability on the final sale of livestock has been reduced.

Regulatory Reform

To understand how radical the shift in New Zealand’s economic philosophy has been, it is instructive to look at the regulatory changes resulting from the fundamental re-evaluations of the role of government. Some of these changes, such as product inspection fees, R&D expenditure and adverse events assistance, were part of the general reduction in assistance to agriculture. Other changes, such as local and regional government reform, resource law management reform, and community irrigation scheme ownership changes, although less direct, still have significant ramifications for the agricultural sector. Adverse events assistance further demonstrates the evolution in policy. Beginning as a series of ad hoc policies administered on a relatively regular basis, it is now recognised that adverse events assistance must be consistent with overall economic policy objectives.

The reform of domestic marketing regulations has resulted in complete deregulation of the wheat and egg industries and a partial deregulation of the town milk sector.
THE CONSEQUENCES

Farm (Input and Output) Prices

During 1984 and 1985 the devaluation of the New Zealand dollar benefited producers while assistance still supplemented output prices for pastoral commodities. Also, world prices for beef, wool and dairy were favourable. However, from late 1985 until 1988 the prevailing prices for meats in world markets failed to improve, the exchange rate appreciated, inflation remained high, and output assistance was removed. Generally, New Zealand farmers were disadvantaged compared to producers of non-tradeable commodities. The only gains to farmers were through reduced margins (processing costs) and farm costs, which increased at a slower rate than inflation. However, the input prices were still increasing faster than those of overseas competitors and damaging international competitiveness.

Only since late 1988 have prices turned to favour farmers. Farmers’ terms of exchange strengthened as a result of the long awaited gains from the reforms and the stronger world prices for pastoral commodities. World prices for dairy products and wool improved, followed by prices of meats during 1989. Some depreciation of the exchange rate occurred, together with significant reductions in inflation and farm costs. Farmers were more competitive against producers of non-tradeable commodities and in the international marketplace.

On-Farm Performance

During the assistance period, sheep numbers rose from their late 1960s and early 1970s level of around 60 million head to 70 million, with much of this expansion occurring at the expense of beef cattle numbers. Since 1984 numbers have dropped back to near the earlier levels. Dairy cow numbers, meanwhile, showed a slow but variable increase. Output levels largely mirrored these changes, although with the usual short term negative supply responses and biological lags associated with pastoral farming.

A model of farming responses clearly indicates that producers’ behaviour before and since liberalisation has not differed – all output and inventory changes can be explained as consistent, rational responses to prices, costs and seasonal conditions.

Farm incomes generally declined throughout the period to 1989, except for the upward surge in 1985 due to favourable exchange and climatic conditions (table 1), and improved dairy farm incomes in 1989. Farmers were caught in a classic cost-price squeeze as incomes declined and expenses increased. These expenses were dominated by debt servicing costs and the resultant crowding out of discretionary expenditure. Overall, the capital base of farming declined.

Land Markets and Rural Debt

The period 1972-82 was one of accelerated growth in nominal (and real) farmland values. The period 1982-88 was one of divergence between farmland values and inflation – the farmland value index fell while the CPI rose. By 1987 nominal farmland values had reduced to near 1981
levels, while in real values they had decreased to only about 40% of their 1982 peak values (table 1).

These declines, coupled with higher interest rates and lower incomes, reduced farmers’ security margins and led to concerns about debt levels. Rural debt appears to have peaked and may be moving downwards, a trend helped by a Rural Bank discounting scheme which saw a $229 million write-off of concessionary loans in exchange for market interest rates in 1987. Although relationships between farm incomes, expected future incomes and inflation are complex, the large increase early in the 1980s demonstrates the way in which agricultural supports became capitalised into land values. This accentuated the debt problem later in the decade. An analysis of sheep and beef farms reveals that financial leverage is excessive for current conditions.

Labour Market Adjustments

Relative employment changes were apparent from 1984 to 1988, as employment in agriculture, agricultural services, and processing fell both in numbers and in share of total employment. At a disaggregated level the meat processing industry (over half of processing sector employment) has seen reductions only in the last two years, despite being under pressure for a decade. The two main agricultural input industries – fertiliser and machinery – have both halved employment in the last four years.

Although it is obvious that farming and related industries have experienced declining employment and falling real and relative wages, it is less clear whether the speed and nature of adjustment differs from that of other sectors. Labour reform may have provided the mechanism for change, but most of the shocks have been related to product mar.

Responses in Agribusiness Firms

A survey of agribusiness firms indicated that only changes in the tax laws were judged to have had a significantly favourable effect on profits. On the other hand, increases in the cost of borrowed working capital, reduction in the profitability of exports (caused by changes in the New Zealand dollar), and reduced purchasing power of customers in the domestic market had important negative effects on profits. However, firms believed that the strategic adjustments they made in response to the changed environment contributed positively to profits, and about one-third of the agribusinesses believed that they had become more competitive in both New Zealand and foreign markets.

Marketing Boards

Compared with other sectors of the agricultural economy, the marketing channels for exporting have been relatively untouched by the liberalisation process. The legislative changes which have occurred to the existing marketing boards have increased their financial and decision making autonomy, and, it is to be hoped, their efficiency. In the case of kiwifruit marketing, producer autonomy has been further extended through the creation of a new single seller board.

While there is still considerable debate over the marketing advantages and economic efficiency of such institutions, little evidence was found
to support the notion that they have provided increased returns to New Zealand products. On the other hand trends in, and costs of, meat processing highlight the manner in which government policy and producer boards can influence the rationalisation process which would normally occur as a part of a liberalisation programme.

THE LESSONS

Macroeconomic Policies Revisited

The important lesson emerging from New Zealand’s experience has been the extent to which these broad policy changes interacted to adversely affect the agricultural sector. This arises because the agricultural sector consists largely of tradeable goods, and the macroeconomic policies greatly influence the structure of incentives facing the tradeable goods sector. Public sector deficits and the associated capital flows over the period prior to and immediately after liberalisation, the floating of the exchange rate, the liberalisation of capital markets and the tight monetary policy adopted to control inflation all led to an appreciation of the currency. This discouraged investment and output in the tradeable goods sector in general, and accentuated the effect of removing assistance to agriculture.

Whether or not the overall impact of these reforms could have been reduced by a different sequencing of policies is unclear. A more drawn-out programme may well have lacked the credibility necessary to sustain the impetus of reform which was a feature of the New Zealand experience. Even if a different sequencing might have been more desirable, this begs the question of its planning. However, it is clear that the attainment of a low rate of domestic inflation, the consequential adoption of a neutral monetary stance, and the elimination of the public sector deficit are necessary for growth in the tradeables sector.

Adjustment Lags and Rural Debt

The biological lags inherent in livestock systems mean that the full impact of the reforms undertaken has yet to be observed. The industry outlook will reflect reform implications for a number of years.

It was largely unanticipated that it would take so long for adjustments in rural capital markets and rural debt to take place. Efforts will be required from the financial sector to deal with this problem. An adjustment would involve debt repayments or private sector write-offs, a transfer of ownership to new entrants at lower debt levels, or better farming returns and lower interest rates. Combinations of all these are the most likely. The solution to the rural debt problem is clearly a private sector one - government must be careful to ensure that any intervention does not distort private sector decisions about debt resolution.

Unforeseen 'Buying Out' Costs

The extra 'buying out' element refers to indirect costs involved in withdrawing agricultural assistance - namely, the write-off of producer board debts. Although these debts were apportioned as assistance in the year in which the loans were initially delivered to farmers, they
nevertheless represented substantial transfers to the agricultural sector in order to 'clean the slate' for practical purposes. The experience of these debts highlights the need to ensure transparency and accountability in government fundings.

Unfinished Business

Agricultural support for the economic reform programme was based on the understanding that other sectors in the economy would also face adjustment pressures and a belief that the devaluation and subsequent floating of the New Zealand dollar would result in a favourable exchange rate. Neither of these came to pass in the short term - residual protection remains for areas of the manufacturing sector, and the exchange rate initially appreciated. Although the general policy direction is being maintained as of early 1990, continuing high unemployment levels are creating a major political issue and the agricultural sector will need to be vigilant to ensure these concerns do not stall the further reforms needed to enable the sector to reach its full potential.

Clearly, protection to import-substituting manufacturing cannot be accomplished without 'disprotection' to the agricultural sector. Although the government has been consistent in its general policy direction of reducing specific industry protection, it has not been neutral with the speed of adjustment. The symmetry between remaining manufacturing protection and the implicit tax on agricultural and other tradeables means that there are only two ways to alleviate the problem - by direct support measures to agriculture and other tradeables, or reduced protection elsewhere in the economy. Farming leaders, recognising the dangers of the 'second best' nature of support measures are stressing the need for a more rapid reduction of protection for a broad category of manufactured goods.

The same argument applies to improved labour market flexibility, which must be pursued. Other areas yet to be fully addressed include the appropriate structures for the marketing boards and the future role and functions of the Ministry of Agriculture.

The completion of economic reforms is given added importance and urgency by the Uruguay Round of GATT negotiations currently underway. A competitive agricultural sector is crucial if New Zealand is to take full advantage of any opportunities offered by a liberalisation of global agricultural trade.