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LONG-TERM ASPECTS OF NEW ZEALAND'S EXTERNAL DEFICITS

by

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1. General Perspective

New Zealand had acquired, during the Second World War, comfortable reserves of foreign exchange even after redeeming much external public debt. There had been guaranteed purchases of major exports and wartime difficulties in obtaining imports. These difficulties soon greatly eased and a temporary abolition of import controls coincided with an extravagant expansion of bank credit with the result that, despite the marked rise of export receipts during the Korean War boom, New Zealand had a current external deficit of $NZ 62 million in 1951, equal to one-eighth of export receipts from goods and services. This deficit was greatly reduced in 1952 and gave way to a surplus of $NZ 75 million in 1953. During the next 28 years, however, there were current external deficits in 23 of them, averaging about 2 per cent of GDP or one-eighth of exports of goods and services. The result was that imports of goods and services exceeded corresponding export receipts by 3 per cent although an average excess of 13 per cent would have been required to cover external payments of interest, other net factor rewards and net transfers.

Exports and imports of goods and services thus had about the same period average from 1952 to 1981, and also about the same variability (standard deviation as a percentage of average) as well as a high degree of correlation;

$$p^m M = 24.5 + 1.079\ p^x X \qquad (1)$$

$$N = 30,\ R^2 = .985,\ F = 1,839$$

where

p^m, p^x = unit values of imports and exports

M, X = quantity indexes of imports and exports.

Such coincidence, no doubt owed something to the variable system of import licensing which was so durable a feature of the economy, but this obviously did not prevent imports from running ahead of exports.

The result was a worsening current balance of payments, denoted here by B and measured, for statistical reasons, net of transfer payments. It is shown in Table 1 together with B*, its real value in terms of imports. The worsening tendency is shown by a trend equation

$$B = -128.0 + 41.9t - 2.576t^2 \qquad (2a)$$

$$N = 30,\ R^2 = .661,\ F = 55$$

where t denotes time, measured from 1952. The F test is met and the coefficient of determination might be higher but for a large random component from the residual nature of B . (Kendall's coefficient of rank correlation for B is -.338.)

There is no doubt that New Zealand's current balance did greatly worsen. In the 1950s and 1960s there was recurrent anxiety about this balance and attempts to improve it by exchange and import controls, sometimes supplemented by monetary and fiscal measures. Reserves of foreign exchange rose from $US 150 million in 1952 to $US 257 million in 1970, this increase corresponding to one of $US 111 million in net external public debt. This indicates that private capital inflows were then sufficient to cover net external deficits.

TABLE 1

New Zealand's Current Balance of Payments 1952-1981.

(Values in NZ$ million)

	B	B/P^m = B*	B/PY per cent	P^xX	P^mM	P^xX / P^mM per cent
1952	- 8	- 20	- .5	516	513	101
53	75	202	4.5	525	441	119
54	-67	-183	-3.6	507	557	91
55	-57	-152	-2.9	563	606	93
56	-24	- 63	-1.2	595	602	99
57	-86	-217	-3.9	593	662	90
58	-32	- 81	-1.4	576	584	99
59	89	231	3.6	670	562	119
1960	-98	-251	-3.7	628	689	91
61	-98	-250	-3.6	634	701	90
62	-33	- 86	-1.1	672	659	102
63	-19	- 50	- .6	791	768	103
64	-23	- 59	- .7	840	804	104
65	-158	-405	-4.1	839	943	89
66	-138	-354	-3.5	893	965	93
67	-65	-164	-1.6	867	877	99
68	62	133	1.4	1123	980	115
69	45	93	.9	1273	1130	113
1970	-184	-357	-3.3	1296	1405	92
71	6	11	.1	1556	1512	103
72	166	293	2.1	1940	1720	113
73	-32	- 54	.4	2254	2260	100
74	-1342	-1782	-13.5	2142	3403	63
75	-959	-959	-8.5	2692	3486	77
76	-687	-558	5.1	3824	4248	90
77	-607	-448	-4.1	4197	4467	94
78	-276	-197	-1.6	4788	4644	103
79	-811	-512	-4.0	6051	6409	94
1980	-794	-387	-3.4	7001	7283	96
81	-1515	-647	-5.4	8231	9101	90
Mean	-248	-242	-2.3	1969	2099	98
Standard Deviation	434	399	3.5	2095	2277	12
Variability	175	164	151	106	108	12

Notes: B = current balance net of transfers.
PY = GNP in current prices, P.
P^mP^x = unit values of imports and exports.
M , X = real values of imports and exports of goods and services.

Source: IMF, International Financial Statistics.

A world boom for primary commodities led to a current surplus equal to 2.1 per cent of GNP in 1972,but the boom collapsed when OPEC quadrupled oil prices and in 1973 and 1974 New Zealand's current deficit was 11 per cent of its GNP. During the next three years this ratio declined but a second oil shock, and the onset of another world recession led to the deficit becoming 5.4 per cent of GNP in 1981.

Reserves of foreign exchange fell from a record height of $US892 million in 1973 to $US 636 million in 1982, in spite of a large increase of net external public debt from $US 470 million in 1972/73 to $US 5,896 million in 1981/82, and then to $US 6,939 million in 1982/83. This borrowing covered four-fifths of the cumulative deficit for 1973-81, but lifted public interest payments abroad from 6 to 23 per cent of commodity exports. Not surprisingly, devaluation became a feature of policy. In 1974 the New Zealand dollar exchanged for 140 US cents but by 1976 for 100 and in 1982 for only 75.

There were, then, differences between the current external deficits of the 1970s from those of the 1950s or 1960s. They should not, however, obscure adverse tendencies, internal and external, which operated over the three decades. The trend for B*, the real balance, is far from being well determined ,

$$B^* = -33.6 - 1.054t - .679t^2 \qquad (2b)$$

$$N = 30,\ R^2 = .223,\ F = 3.1$$

and that for the ratio of B to GNP even less so;

$$B/PY = .746 - .018t - .005t^2 \qquad (2c)$$

$$N = 30,\ R^2 = .152,\ F = 2.4$$

These results suggest that the adverse trend of B, shown by (2a), owed much to rising import prices due to world inflation and local devaluations. They also point to a persistence of current external deficits, which it should have been the aim of policy to correct or reduce.

2. The Real Current Deficit

It seems plausible that B*, the import value of the current external deficit, should vary with $\tilde{y}$, percengage deviations from trend of real GDP, and the terms of trade, T. The trend chosen for real GDP was a parabolic exponential one,

$$Y(t) = 4{,}950 \exp [0.5242t - .0071t^2] \qquad (3)$$

$$N = 28,\ R^2 = .989,\ F = 1{,}248$$

which is clearly well-defined. A significant regression was obtained;

$$B^* = 1{,}200 - 86.6\ \tilde{y} + 6.766\ T \qquad (4a)$$

$$(2.939)\ \ (4.212)\ \ (2.218)$$

$$N = 28,\ R^2 = .486,\ F = 11.8,\ D\text{-}W = 1.813.$$

The coefficients have plausible signs and satisfactory t-values, the F test is passed at the 5 per cent level and the Durbin-Watson test at the 1 per cent level.

Yet (4a) explains less than half the variance of B*. An attempt was made to improve it by including P^C, the ratio of the domestic level of consumer prices to that of what the IMF designates as Industrial Countries. For if $\tilde{y}$ indicates excess demand, one cause of domestic inflation, P^C indicates relative inflation. The result became

$$B^* = -806 - 85.6\ \tilde{y} + 5.589\ T - 2.438\ P^C \qquad (4b)$$

$$(.747)\ \ (3.488)\ \ (1.211)\ \ \ (.409)$$

$$N = 28,\ R^2 = .491,\ F = 7.7,\ D\text{-}W = 2.364.$$

The overall regression again passes the F and D-W tests, the coefficients have plausible signs, the significance of $\dot{y}$ is confirmed but the t-value for T's coefficient is now not significant,at even the 10 per cent level,and the coefficient for P^c is quite unreliable.

An alternative is to use E , the exchange rate, instead of P^c, for it should reflect relative inflation and also have a direct influence on real imports or exports. (The correlation coefficient between E and P^c is r = .723). This changed the regression equation to

$$B^* = -987 - 84.9\,\dot{y} + 11.7\,T - 7.0E \qquad (4c)$$
$$(2.329)\ (4.244)\quad (.830)\quad (1.482)$$

$$N = 28,\ R^2 = .529,\ F = 7.0,\ D\text{-}W = 1.923.$$

The overall regression is a little better and all coefficients have the expected signs, but that for T has become unreliable and that for E just misses significance at the 5 per cent level.

The most robust result from equations (4) is the <u>negative</u> influence upon B* of changes in real income. Negativity may seem easy to understand if derivations of income from its trend can be interpreted as indicating conditions of excess demand for domestic output because such conditions would stimulate imports and so worsen the balance. There is, however, the complication that excess demand could come from increased exports which, of course, tend to improve the balance. Negativity then requires sufficiently large increases of autonomous spending to offset this tendency.[1] Such increases, of course, could come from government spending on goods and services or from private investment spending,both of which could involve capital inflows.

TABLE 2

Real Current Balance and Related Series, 1952-1981

	B*	$\hat{y}$	T	P^C	E
1952	- 20	...	129	78	138
1953	202	...	153	81	139
1954	-183	3.95	157	84	139
1955	-152	2.53	158	86	138
1956	- 63	- .67	150	87	138
1957	-217	.54	143	88	139
1958	- 81	-2.43	122	86	139
1959	-231	-3.15	144	88	139
1960	-251	-1.77	136	88	139
1961	-250	-2.81	128	87	139
1962	- 86	-3.92	134	88	139
1963	- 50	-2.10	149	87	138
1964	- 59	0.00	157	88	138
1965	-405	2.13	153	91	138
1966	-354	2.23	151	89	138
1967	-164	-2.11	134	91	135
1968	133	-3.29	124	91	111
1969	93	-1.61	127	91	111
1970	-357	-1.01	120	92	111
1971	11	-1.41	123	96	114
1972	293	.14	142	98	120
1973	- 54	-2.46	173	99	136
1974	-1782	6.10	134	97	140
1975	-959	5.38	100	100	121
1976	-558	3.24	112	108	100
1977	-448	-1.64	115	114	97
1978	-197	- .94	124	119	104
1979	-512	-1.77	110	124	102
1980	-387	3.47	108	130	97
1981	-647	-1.40	108	136	87
Mean	-242	- .21	134	96	126
Std.devn.	399	2.74	18	15	17
Variability	164	1307	14	15	14

Source: As for Table 1.

Notes:
B* = import value of current balance net of transfers.
$\hat{y}$ = percentage deviation from trend of real GDP
T = terms of trade
P^C = ratio of consumer price index to that for Industrial Countries
E = US cents per NZ $.

3. Exports and Imports

The residual character of B*, as was noted above, can make errors of measurement relatively large and so handicap statistical analysis of this variable. Firmer results than those yielded by equations (4) have thus been sought for the two main components of B*, real merchandise exports and imports, now denoted by X and M. These are shown in Table 3 together with real GDP, Y, the terms of trade, T, relative consumer prices, P^C, and the exchange rate, E.

X, M and Y have well-defined parabolic exponential trends from which growth rates, denoted by lower case letters, can be readily derived.

$$X(t) = 51.3 \exp [.03058t + .00016t^2] \quad (5)$$

$$N = 31, \; R^2 = .971, \; F = 466$$

$$\therefore \; x(t) = 3.058 + .032t \quad (5a)$$

$$M(t) = 45.0 \exp [.03198t + .00003t^2] \quad (6)$$

$$N = 30, \; R^2 = .896, \; F = 117$$

$$\therefore \; m(t) \quad 3.198 + .006t \quad (6a)$$

$$Y(t) = 4,950 \exp [.05242t - .00071t^2] \quad (7)$$

$$N = 28, \; R^2 = .989, \; F = 1,248$$

$$\therefore \; y(t) = 5.242 - .014t \quad (7a)$$

Equation (6) was obtained by omitting 1974, the year of the steep rise of oil prices which had an exceptional effect on imports. If this year is included, the regression becomes

$$M(t) = 44.3 \exp [.03603t - .00011t^2]$$

$$N = 31, \; R^2 = .871, \; F = 95$$

giving a decelerating instead for an accelerating growth for M.

It appears from (5a) and (6a) that the trend growth rate for the real balance of trade was

$$x(t) - m(t) = - .140 + .026t \qquad (8)$$

one that became increasingly favourable and, after 1958, also positive. That is in contrast to the worsening tendency for B* so that this tendency arose from "invisible" items in the current balance - transport costs and interest payments in particular.

Growth of real income, on the other hand, tended to slow down if but gradually. Dividing this growth rate into that for exports yields

$$y(t)/x(t) = [1.679 - .004t]/[1 + .010t] \qquad (9)$$

a crude expression for the elasticity of real GDP with respect to real commodity exports. It suggests that this elasticity could have declined from about 1.7 in 1954 to about 1.2 in 1981, a suggestion which is compatible with the preceding discussion of a negative relation between B* and $\dot{y}$, although the effect would be minor.

Dividing (7a) into (6a) yields a corresponding crude measure of the income-elasticity of demand for commodity imports;

$$m(t)/y(t) = [.610 + .001t]/[1 - .003t] \qquad (10a)$$

It suggests that this could have risen from about .6 in 1954 to about .8 in 1981, and this is also compatible with a negative relation between B* and $\dot{y}$. Two simple direct regressions

$$1954\text{-}67 \quad M = 1.075\ Y^{.762} \qquad (10b)$$

$$1968\text{-}81 \quad M = 1.000Y^{1.365} \qquad (10c)$$

TABLE 3

Selected Series for External Trade, 1952-1982

	Export Quantity	Import Quantity	GDP NZ$ 1975 Million	Terms of Trade	Relative Inflation	US Cents per NZ$
1952	58	52	-	129	78	138
53	52	39	-	153	81	139
54	52	46	5146	157	84	139
55	54	48	5345	158	86	138
56	58	49	5445	150	87	138
57	57	52	5726	143	88	139
58	61	53	5890	122	86	139
59	67	55	6122	144	88	139
1960	65	59	6493	136	88	139
61	67	60	6708	128	87	139
62	69	62	6915	134	88	138
63	73	65	7337	149	87	138
64	76	69	7791	157	86	138
65	74	74	8262	153	91	138
66	78	76	8575	151	89	138
67	81	76	8501	134	91	135
68	94	72	8664	124	91	111
69	103	76	9121	127	91	111
1970	99	79	9460	120	92	111
71	103	83	9700	121	96	114
72	107	88	10129	142	98	120
73	106	98	10855	173	99	136
74	97	133	11294	134	97	140
75	100	100	11484	100	100	121
76	118	98	11501	107	108	100
77	122	97	11186	112	114	97
78	124	102	11484	115	119	104
79	133	105	11591	124	130	102
1980	139	106	11584	110	136	97
81	143	110	12004	108	147	87
82	148	113	-	108	154	75
Mean	90	77	8737	133	99	124
Standard deviation	29	24	2303	19	19	19
Variability	33	31	61	14	19	15

Source: As for Table 1.

support this idea of a rise in the elasticity but indicate higher values for it. A less crude estimate of the elasticity, but one that assumed its constancy, comes from a regression (which also omits 1974),

$$\text{Ln } M = -6.238 + .881 \text{ Ln } Y + .234 \text{ Ln } T + .324 \text{ Ln } P^C \qquad \text{(10d)}$$
$$(17.2) \qquad (15.1) \qquad (6.3) \qquad (6.5)$$
$$N = 27,\ R^2 = .925,\ F = 95,\ D\text{-}W = 1.648$$

Its estimate for the elasticity, .881, is closer to the result for (10a) than to those for (10b-c), and compatible with a Reserve Bank estimate of 1.174 for a shorter period, 1961-73. Equation (10d) is such a good fit as to leave little independent influence from import controls, although the rising trend of the elasticity suggested by the other import equations may have owed something to progressive, if irregular, relaxation of the controls.

The positive influence on M by T indicates, as theory holds, a role for relative prices, although no doubt a complex one as the great bulk of New Zealand's imports are producers' goods. There is no very well defined trend for the terms of trade as two of their regressions on time are

$$T(t) = 153 \exp [.00006t - .01107t^2] \qquad \text{(11a)}$$
$$N = 31,\ R^2 = .452,\ F = 11.5$$

$$T(t) = 155 \exp [-.001t] \qquad \text{(11b)}$$
$$N = 31,\ R^2 = .446,\ F = 23.3$$

but they suggest deterioration by 1-2 per cent a year.

The relative level of consumer prices also has had a significant influence on real imports, in understandable contrast to its doubtful connection with B*, and a stronger influence than the terms of trade had.

These relative prices, moreover, did have a well defined trend,

$$P^C(t) = 91.0 \exp [-.01693t + .00116t] \qquad (12)$$

$$N = 30,\ R^2 = .972,\ F = 451$$

$$\therefore\ P^C(t) = -1.693 + .232t.$$

This result indicates an increasing growth rate, from an initially negative level; the growth rate in 1967 would have been 1.8 per cent and in 1982 it would have been 5.0 per cent. New Zealand's inflation rate tended to be below the average rate for Industrial Countries in the 1950s but thereafter was well above it. The positive influence of P^C on M came, presumably, from the mixed effects of relative price levels and inflationary expectations.

The influence of the exchange rate should also be considered, and here we use it in place of T for an import regression (which also excludes 1974);

$$M = -47.5 + .008Y + .264P^C + .200\ E \qquad (10d)$$
$$(1.791)\ (9.484)\ (2.205)\ (1.577)$$

$$N = 31,\ R^2 = .945,\ F = 132,\ D\text{-}W = 1.736.$$

The overall result is as good as that for (10c), and gives confirmation that Y and P^C have significant, positive influences on M. But (10d) also shows E as having a positive influence on M, contrary to expectations that devaluations would curb demands for imports. The coefficient for E, however, does not quite reach significance at the 5 per cent level, perhaps because a strong negative correlation ($r = -.877$) between P^C and E, one which does accord with economic theory. A devaluation that led to relative increases of domestic prices,or expectations of such rises, could stimulate, rather than curb, demands for imports.

4. New Zealand and World Exports

Attention is next paid to connections between New Zealand's exports and those of the world, data for which are given in Table 4.

For world exports the following trends were obtained, V denoting value.

$$V^W(t) = 757 \exp [.02348t + .00309t^2] \quad (13a)$$

$$N = 30,\ R^2 = .987,\ F = 1,084$$

$$\therefore\ v^W(t) = 2.348 + .618t$$

$$X^W(t) = 22.3 \exp [.08461t] \quad (13b)$$

$$N = 30,\ R^2 = .972,\ F = 9.8$$

$$\therefore\ X^W = 8.461$$

$$P^{WX}(t) = 44.2 \exp [-.04710t + .00347t^2] \quad (13c)$$

$$N = 30,\ R^2 = .964,\ F = 365$$

$$\therefore\ P^{WX}(t) = -4.710 + .694t$$

They tended to grow in volume at a constant rate, but their price rose at an increasing rate and so did their nominal value in US $.

Corresponding regressions for New Zealand are:

$$V(t) = 717.7 \exp [-.01383t + .00293t^2] \quad (14a)$$

$$N = 30,\ R^2 = .997,\ F = 9,638$$

$$\therefore\ v(t) = -1.383 + .586t$$

TABLE 4

World and New Zealand Exports, 1952-1982

	World			New Zealand		
	Value US$ 10^8	Quantity	Price	Value US$ 10^6	Quantity	Price
1952	750	-	-	674	58	-
53	759	24	40	660	52	59
54	785	25	39	685	52	61
55	855	26	40	726	54	62
56	955	29	41	777	58	62
57	1025	30	42	773	57	63
58	973	30	40	700	61	53
59	1032	33	40	822	67	57
1960	1155	36	40	847	65	60
61	1207	36	41	793	67	55
62	1262	40	40	798	69	54
63	1386	43	41	910	73	58
64	1548	46	42	1074	76	65
65	1680	50	42	1007	74	63
66	1846	54	43	1076	78	64
67	1937	56	43	993	81	57
68	2162	63	43	1010	94	50
69	2478	66	44	1211	103	54
1970	2848	76	47	1223	99	57
71	3197	81	49	1361	103	61
72	3788	88	54	1792	107	78
73	5274	100	66	2599	106	114
74	7794	106	92	2434	97	116
75	8031	100	100	2160	100	100
76	9150	113	102	2795	118	110
77	10415	118	111	3196	122	121
78	11977	123	122	3738	124	140
79	15239	130	146	4706	133	164
1980	18691	130	179	5421	139	181
81	18370	130	179	5618	143	182
82	16945	125	170	5511	148	172

Source: As for Table 1.

$$X(t) = 51.3 \exp [\ .03058t + .00036t^2] \qquad (14b)$$

$$N = 30,\ R^2 = .971,\ F = 466$$

$$\therefore\ x(t) = 3.058 + .032t \qquad (14b)$$

$$P^X(t) = 65.8 \exp [\ -.04604t + .00313t^2] \qquad (14c)$$

$$N = 30,\ R^2 = .910,\ F = 137$$

$$\therefore\ P^X(t) = -4.604 + .620t$$

From these results for trend it appears that New Zealand's exports grew in volume at less than half the rate for world exports - by 3.1 per cent in 1952 rising to 4.1 per cent in 1982 as against a constant rate of 8.5 per cent for world exports. That was mainly responsible for a decline in New Zealand's share in the US$ value of world exports from .88 per cent in 1952-54 to .56 per cent in 1966-68 and then to only .31 per cent in 1980-82. Some of the decline may also have come from a worsening in the terms of trade as (13c) and (14c) yield

$$\tau = .106 - .074t \qquad (14d)$$

for the growth rate of the terms of trade, and this would have become negative after 1955. That agrees with the conclusion from (11).

Direct relations between the two sets of export variables were found to be:

$$V = 8.429\ V^W \exp [.647] \qquad (15a)$$

$$N = 30,\ R^2 = .975,\ F = 1,131$$

$$X = 9.355\ X^W \exp (.542) \qquad (15b)$$

$$N = 30,\ r^2 = .958,\ F = 639$$

$$p^{x} = 3.321\ p^{xw}\ \exp\ (.772) \qquad (15c)$$

$$N = 30,\ R^2 = .949,\ F = 521$$

These indicate that a 10 per cent increase in the US$ value of world trade tended to increase the corresponding value of New Zealand exports by 6.5 per cent, and that a 10 per cent increase in the volume of world exports tended to raise that of New Zealand exports by 5.4 per cent. This, of course, confirms the slower growth of New Zealand exports in value and still more in volume. Equation (15c) provides more solid evidence than (10) or (14d) for a decline in New Zealand's terms of trade, although this was less important in reducing its share of world trade than the volume decline.

Altogether the results of this section confirm the heavy dependence of New Zealand trade upon world trade in regard to volume, price and hence value. They show, however, that quantitative growth of New Zealand's exports lagged much behind that of world trade, and that its terms of trade had a declining trend. The conclusion must be that New Zealand has been producing exports which have grown too slowly and whose real price has been falling. A need for further structural adjustment is strongly indicated.

Considerable structural adjustment has been going on. Official classifications of exports show that, between 1955 and 1980, the share of forest products rose from 1 to 9 per cent and that of other manufactures from 5 to 26 per cent, relative declines occurring for dairy produce and wool. This represents considerable change yet not enough to prevent New Zealand's share of total exports from Industrial Countries falling from 1.24 to .44 per cent. Other small countries with substantial primary exports did considerably better; for Denmark the change was from

1.80 to 1.37 per cent, for the Netherlands it was from 1.50 to 5.96 per cent, and for Australia from 2.00 to 1.18 per cent. Comparison with small, newly industrializing countries - Taiwan, South Korea, Hong Kong and Singapore - would be still more invidious.

5. Conclusions

The relatively slow growth of commodity exports does not mean that the balance of merchandise trade was declining; from 1955 to 1970 it averaged $US 367 million a year and from 1971 to 1982 $US 246 million a year (even including 1974). It has been shown to mean that this balance did not grow rapidly enough to cover that of invisible items in the current balance of external payments in which Government interest payments became a substantial and rapidly growing item after 1970. That is set out in Table 5.

The two oil shocks were associated with adverse balances of merchandise trade and, over the 12 years covered in the table, merchandise balances averaged only 1.2 per cent of GDP. But the current balance of payments was positive only in 1972/73 and averaged - 4.5 per cent of GDP. About half of this negative average represented net external payments of interest, dividends and profits, plus small grants of aid, and about half of that, in turn, represented government payments of interest on external public debt. These interest payments plus repayments of the debt averaged nearly 5 per cent of GDP rising from 1.8 per cent in 1971/72 to 9.5 per cent in 1982/83. The rise corresponded to a growth of net external government debt from 9.5 per cent in 1971/72 to 29.0 per cent in 1982/83, much of it incurred to meet the current deficits rather than to promote capital formation.

TABLE 5

External Balances and Government External Debt,

1971/72-1982/83

(percentages of GDP)

	Balances			Government		
	Goods	Goods and services	Current Account	Interest payments	Net Debt service	Net external debt
1971/72	3.7	.6	- .2	.5	1.3	9.5
1972/73	4.6	-2.8	2.0	.5	1.1	7.1
1973/74	4.6	- .1	-1.0	.4	1.6	5.1
1974/75	-3.5	-12.6	-13.6	.5	.9	10.8
1975/76	-5.5	-6.9	-8.8	.9	3.3	17.3
1976/77	- .3	-3.0	-6.0	1.2	3.9	18.6
1977/78	1.9	-1.8	-4.7	1.3	4.1	21.4
1978/79	3.4	.8	-2.7	1.4	3.8	21.0
1979/80	3.5	-1.7	-3.0	1.4	4.1	20.5
1980/81	3.3	-1.2	-3.4	1.3	6.1	19.9
1981/82	-1.0	-3.0	-5.8	1.6	7.1	23.7
1982/83	- .9	-	-6.4	1.9	7.6	29.0
Mean	1.2	-2.4	-4.5	1.1	3.8	17.0
Std.devn.	3.3	4.2	4.1	.5	2.3	7.3
Variability	29.1	179	93	47	60	43

Sources: As for Table 1; and Foreign Exchange Constraints, Export Growth and Overseas Debt, New Zealand Planning Council Monitoring Report, Dec. 1983.

If these trends were to continue, New Zealand's foreign exchange problem might become unmanageable, especially as devaluations have been ineffective. Besides further restructuring of exports, and hence of the economy, to improve export growth it seems necessary to curb growth of imports and of such external debt as is not associated with better export growth.

A prime requisite here is to stop the relative inflation which has grown, at an accelerating rate, during the postwar period. For P^C, the level of consumer prices relative to that of Industrial Countries had a strongly defined trend between 1952 and 1982;

$$P^C = 89.6 - 1.861t + .121t^2 \qquad (16)$$

$$N = 31,\ R^2 = .912,\ F = 145$$

$$\therefore\ p^C = -1.861 + .242t$$

That, fortunately, has come to be appreciated and a comprehensive incomes policy has succeeded, at least temporarily, in reducing the rate of inflation for consumer prices from an annual rate of 17.2 per cent in 1980 to 5.4 per cent in September,1983.

Permanent success, however, would require restructuring of the system of wage determination to combat cost inflation, and of the fiscal system to combat demand inflation. In these connections it may be noted that nominal weekly wages quintrupled between 1970 and 1982, and the Government's fiscal deficit rose from 1.4 per cent of GDP in 1971/72 to 6.3 per cent in 1981/82. The rise in the deficit, moreover, was associated with a mean annual growth in the money supply (M1) of 11.3 per cent a year as compared with one of 9.1 per cent for Industrial Countries; quasi-money (M3-M1), moreover, grew at a mean annual rate of 21.5

per cent. Reduction of government spending and the fiscal deficit should obviously be linked with stricter control of monetary expansion.

In 1935 a distinguished New Zealand economist published a book called The Clash of Progress and Security. It received little attention in his own country, as governments there elaborated measures to "protect" major economic sectors and to provide citizens with "social security". In that process progress suffered, at least relatively to real income growth in other countries, as A.G.B. Fisher had warned that it would. Security may also suffer, in various ways, unless New Zealand can solve a foreign exchange problem which has been chronic and is now quite formidable.

Footnotes

1. If

Y = real GDP = aggregate demand

Z = trend value of Y = aggregate supply

$\tilde{y} = \frac{Y - Z}{Z}$

A = autonomous spending

C = induced spending from Z

$S = Z - C$

Then

$$\tilde{y} = \frac{B^* + A + C - Z}{Z} = \frac{B^* + A - S}{Z}$$

$$B^* = \tilde{y}Z + S - A$$

$$\frac{db^*}{d\tilde{y}} < 0 \Rightarrow dA > Zd\tilde{y}$$

assuming Z and S are not affected by changes in $\tilde{y}$.

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