

Title	Economic planning in Australia and New Zealand
Sub Title	
Author	Suzuki, Ryoichi
Publisher	
Publication year	1969
Jtitle	Keio business review Vol.8, (1969. ) ,p.1- 14
JaLC DOI	
Abstract	
Notes	
Genre	Journal Article
URL	<a href="https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AA00260481-19690000-03919667">https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AA00260481-19690000-03919667</a>

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# ECONOMIC PLANNING IN AUSTRALIA AND NEW ZEALAND

by

*Ryōichi Suzuki*

## 1

It is a well-known fact that the capitalistic economy of today has already passed over the *laissez faire* stage and reformed itself into an "intentional economy" in the sense that it intends to achieve smooth development evading furious business fluctuations under the supporting policies by government. Indirect controls are usable for governments to perform such a task while economic "projections" are set forth, as a subsidiary or alternative means, whose primary aim is to indicate people future courses of economy and to give guide lines for long-range planning. That is to say, by the existence of such planning governments can set up consistent long-run policies in contrast to claptrap measures for each phase, while enterprises and consumers are able to know the directions of policies to be taken and hence can get clear and firm ideas on production, investment, consumption as well as saving.

Beginning with the instance of the postwar America this political means has been popularized in West-European countries, and also in Japan, as is well known, many plans have been built since the Five-Year Economic Reconstruction Program of 1948, principally by the hand of the Economic Planning Board. With these moves in view, in this paper we should like to examine first the planning in Australia and next in New Zealand.

Frankly speaking Australia has been behind other nations in erecting economic planning of this sort. The following reasons are conceivable for this lag.

(1) Due to its small-population pattern —with an area 25 times as large as Japan and inhabitants of only 11 millions— the heavy and chemical industries, in which the advantage of mass production should effectively work, has lagged in development, resulting in a high degree of dependency on foreign trade.

(2) Again in the primary industry, wool production has constituted its major portion, and wool exports have been the resources to finance the balance of international payments, although recently there are seen some increases of iron and copper production.

(3) Due to the tight economic link with Great Britain the country has been under its strong influences, resulting in poor subjectiveness.

These were the underlying conditions. But the postures in the past have recently come about to show a change in accompany with the deterioration of Britain's balance of payments and her approach to EEC, awakening Australians to the need of economic policies featured with subjectiveness. The said development of mining makes an expression of such move. Now doubtlessly the country is being oriented toward stable growth by way of improving its industrial structure.

By the by, a concrete long-run plan was first set forth by the Report of the Vernon Committee, prepared in a rather long time February 1963 to September 1965. Although this Report was not sanctioned by the government on account of its too large target of immigration, excessively high estimate of growth rate and so forth, we wish to try some criticism on its contents as a means of grasping the real state of Australia economy. The *Current Affairs Bulletin*—an organ of Sydney University—says the contents are grounded on the method of econometrics. Is it really so?

## 2

The Vernon Report consists of the report proper, comprising 17 chapters, and 18 Appendices. Since the Appendices mainly concern the method of estimation, our examination will be focused on the report proper. As regards the determination of the rate of economic growth, which should constitute the axis of planning, we can find the following words on page 29 ff. "Aggregate production is determined by man-power, natural resources, capital equipment, and the efficiency with which these factors are organized. As the factors determining population, one can mention its natural growth and immigration, and its qualitative improvement is achieved by education and training... If the growth rate is to be raised beyond the level these factors should allow, economic policies must be taken to stabilize production costs and prices." Following such exposition of the definition of growth, the Report refers the improvement of productivity and better-off of standard of living as the factors to accelerate growth. As the economic variables to make the keys to such factors there are enumerated consumption level, wage level, correlation between international and domestic prices, capital accumulation, immigration and structural balance. The force of market in resource allocation should be limited from the standpoint of "mixed economy," that is, an economy in which economic activities are performed being divided into two sectors,

public and private. A precise estimation of the proportion in such mixture is difficult to make, yet roughly speaking the private sector accounts for three-fourths. Under such structure of economy there are seven target variables as above. The problem would be simple if these variables could be set up separately without taking their inter-effects into consideration, but in reality the matter cannot be so dealt with. So first such variables that have no direct relation with economic growth (i.e. population and productivity) are considered including full employment, stabilization of production costs and prices, and external viability; next population, productivity, and the level-up of standard of living; and lastly unitary relations over the two sets of considerations (p. 42).

In the Australian economy since 1948/49 persistently there have been emerging contradictions between full employment and price stabilization. Fluctuations of international prices and the award wages, though independent of the demand for labor, have worked influences on the general level of prices. Changes in man-power and those in population have broadly been parallel. Between the increase in population and that in the national productive capacity in principle there exist two major relations. The one is a complementary relation, that is to say, a population increase enables an economy to bring into effect the advantage of mass production. The second relation is that, if the national productive capacity should not be lowered by a population increase, the level of per-capita capital equipment must be maintained at a constant level. This applies also to the equipment for dwelling, education and health. So capital accumulation becomes necessary (p. 44). Standard of living has a close relation with national-economic productivity. The gap between the two is caused by the balance of international payments. Anyhow a rapid growth, whether by population increase or by productivity rise, results in a lower level of consumption because a larger part of produce must be allocated to capital goods.

Among the factors that restrain growth, the first one is physical limitation. This involves basic materials, productive capacity of capital-goods industries, and supply of skilled labor. The second is instability of prices; a high-rate growth tends to boost production costs and prices since it is correlated with full employment.

On these considerations the Report puts analyses on the above-said factors. But, we wish to question, how is it about the method of analysis? As an example, let's introduce here the analysis and prediction about the balance of payments (p. 413 ff). The Report, after clarifying the actual positions of the balance of payments in Britain, New Zealand, other sterling area countries, America, EEC, EFTA, the Soviet area, Japan, Indonesia, etc. for the data of 1953/54, 58/59, 61/62 and 63/64, proceeds to forecast for 1974/75. (Figures for the in-between years are not shown.) For the means of prediction the following problems are put forward.

- (a) What will be the pace of import expansion?
- (b) What will be the pace of expansion of invisible payments other than imports?
- (c) Will the amount of exports be adequate to finance (a) and (b)?
- (d) To what an extent can the capital account receivable be expected?

To our regret no fundamental answers can be found to these questions in the Report. The grounds for the estimation of 1974/75 figures are presented in Appendix N (p. 1098 ff) as follows.

First, yearly immigration of 100 thousand persons is assumed for every year after September 1962. Next, on the assumption of certain rises of productivity in industries (by major grouping) GNP is calculated. Here, let's note, it makes an essential point how the changes in industrial structure should be appreciated, and what a rate should be presumed on productivity rise. Yet the descriptions in the Report (p. 551 ff) are deeply colored with trend calculation; in particular the item of "other industry" gives an impression of random insertion from among alternative figures. On the basis of this GNP, the necessary amount of private capital formation (not for each industry but as an aggregate) is estimated as follows. Assuming a constant price level, the ratio of gross capital formation for the period 1962/63 to 1964/65 and that for the period 1953/54 to 1962/63 are compared, and this ratio is taken to be equivalent to the ratio of GNP between the two periods (on a constant capital coefficient).

For the prediction of imports, basic data are afforded by the rates of imports (by industries) for 1958/59 and 1962/63. Since the former is a period under import licensing, its data must be adjusted for the same condition as the latter period. Thus the rate of imports to GNP is calculated as 18.4%. Since the rise in productivity and the change in employment structure affect to decrease imports, adjustment is put on the calculated rate for this effect on the basis of trend, that is to say, a 2~3% decline in the rate is assumed, to reach a first estimate of imports. A second method of estimation is based on the components of final expenditures, utilizing the tables of input-output transactions between industries. Thus, the average of the values by two methods is adopted. The exports estimated, however, cannot catch up the imports estimated (p. 1101). So measures for the balance are necessary, whose fundamentals consist of course in increase in exports, in particular those of manufacturing products. Simple reliance on the import license system may derive rises in domestic prices. For these reasons the target of export industries has been revised, resulting in a lower standard of living that was first considered.

### 3

Since the Vernon Report is a voluminous work (the report proper of 455

pages plus appendices, totalling in 1140 pages), it is impossible to review its whole aspect here. Yet as to its method the above quotations will suffice to see it. What deserves to be called the econometric method is simply the use of input-output tables. The necessary amount of capital formation has simply been calculated from the capital coefficients, while the productivity rise has been estimated from trend estimation; all resembles the Incomes Doubling Plan of Japan established in 1960. So to speak, it is a Colm system, not a macro-dynamic model. Of course the writer is not intending here to advocate the allmightiness of the macro-dynamic model but it would not be meaningless to examine how the model analysis can apply to the Australian economy. In this case of Australia, however, specification of model involves a toilsome problem. For therein exists something that cannot wholly be dealt with by the theory of effective demand alone, that is, by the Keynesian formula. As a behavior among Australian businesses investments preceding demands are rare; they are made, it is said, after demands have increased and such increases have proved to be permanent. Hence there lies the ground for the law of market to establish itself (at least in the macro-sense), which seems to constitute the reason for "slow inflation." Under such a condition a Keynesian-type model, formulated from demand side alone, cannot be applied as it is. What is needed is a model in which analysis is made from both the sides of demand and supply, and the intervening gap can explain price fluctuations.

## 4

Let's consider as a simple model. We took 1957-1965 for the period of experiment. First as to the analysis of demand we used consumption and investment functions, as is usually the way. For the consumption function, as a first approach, the Keynesian type was adopted, that is, consumption is a linear function of national income. In the equations concerning the demand side nominal values were taken. Equation 1 is the result thus obtained. This has fairly good fitness. Next, the investment function is not so easy to formulate as is the consumption function. We examined whether the so-called acceleration principle does apply. In this examination we counted both equipment and inventory investments inclusively into  $I$  (investment), as was shown by Klein in his *An Economic Model in U.S.A.* If the acceleration principle applies, a high correlation should be observed between  $Y$  or  $C$  and  $I$ , but the figures in Table 2 cannot be taken to present any high correlation. Again, between  $Y$  and  $I$  no high correlation seems to exist directly. Then the above-mentioned "adaptation lag"—Australian business's behavior to withhold investment until they can have firm outlook on the permanence of a demand increase—can come into the problem. In order to introduce this behavior, we took 3-year moving averages of investment series and constituted a regression equation of the averages and  $Y$ , Equation 2.

Equation 3 regards the supply side. It has been already observed that one of the bottlenecks to the growth of this country's economy lies in population. Taking population as the source of man-power and assuming a constant long-run rate of unemployment, Equation 3 was obtained. Equation 4 is the production function. In a strict sense  $Q$  is a function not only of  $L$  but also of capital stock, but where  $L$  is relatively small as against capital it may be tenable to take explicitly  $Q$  as the function of  $L$  alone. Here  $Q$  presents a problem of definition. It ought to be not merely manufacturing production but an aggregate of activities including the primary and tertiary industries too. So real national income may appropriately be employed for the indicator, which however, involves a problem of the deflator to be used. Wholesale-price index does not cover the tertiary industry. Primarily the aggregate of incomes by individual industries, after deflating with corresponding price indices of each, should be taken. But, for our simple model, we used a first approach of deflating  $Y$  by consumer-price index to obtain  $Q$ . Equation 5 is the definitional equation to show this relation.

Also Equation 6 is a definitional equation. Here for the sake of strictness  $E$  and  $J$  should include also invisible current receipts and outlays respectively, yet they were confined to exports and imports in the narrow sense for the first approach. Here it is desirable, if possible, to treat exports as an endogenous variable. For this aim, as a supply function it will be conceivable to take the correlation of  $E$  with  $Y$ , but since this correlation was not so high we had to deal exports as an exogenous variable.  $J$  is obviously a function of  $Y$ . The fitness of Equation 7, however, is somewhat worse than in other equations, suggesting existence of room for introducing the relative ratio of prices between export and import as an explanatory variable.

Now we have specified the economic model, if imperfect. It has seven endogenous variables and seven equations, a complete system (parameters were estimated by simple least squares method). Let's re-arrange this model into equations of demand, supply and price fluctuation. By inserting Equations 1,2 and 7 into 6, we have Equation 8. The result shows an appreciably high degree of multiplier effect, which may possibly work an inflationary effect where a bottleneck to production exists due to man-power shortage as in Australia. Next by eliminating  $L$  from 3 and 4, we obtain 9. This exhibits the increase in productive capacity due to population increase. And if the primary aim of planning lies in price stabilization, we have Equation 10 for such a purpose. In this equation,  $(G+E)$  represents the source of demand created anew, and the right-hand side shows the increase in productive capacity to correspond with the demand increase. If the left-hand side has a larger value, an inflationary gap will occur; if the right-hand side is larger, a surplus of production. (For actual comparison the units must be made uniform by inserting the relation of  $G$  and  $N$  during the experiment period.)

Next let's examine the conditions under which a 5% growth, the primary

Table 1

Endogenous variables	Exogenous variables
<i>Y</i> national income	<i>G</i> public investment
<i>C</i> personal consumption+public consumption expenditure	<i>N</i> total population
<i>I</i> private capital formation	<i>E</i> exports
<i>Q</i> gross product (real gross national expenditure)	
<i>P</i> consumer prices	
( $\pi$ wholesale prices)	
<i>L</i> employment	
<i>J</i> imports	

Table 2

year	<i>Y</i>	<i>C</i> <sub>1</sub> (personal consumption)	<i>I</i>			$\Delta Y$	<i>I</i> (3-year average)	$\Delta C$	<i>N</i>	<i>L</i> (non-agriculture)
			Equip-ment	Inven-tory	Total					
1956-57	932	725	169	5	174	—	—	—	—	—
57-58	919	761	184	0	184	13	194	36	984	292
58-59	990	801	190	33	223	71	215	40	1006	298
59-60	1099	877	216	23	239	109	251	76	1028	310
60-61	1163	930	238	52	290	64	246	53	1051	313
61-62	1199	959	230	-20	210	36	261	29	1071	321
62-63	1298	1027	253	31	284	99	265	68	1092	331
63-64	1446	1105	288	14	302	128	328	78	1123	346
64-65	1581	1190	334	63	397	135	361	85	1145	360
65-66	1643	1253	364	19	383	62	—	63	1154	370

(Values in 10 million dollars, *N* in 10 thousand persons)

Year	<i>P</i>	<i>Q</i>	<i>J</i>	<i>E</i>
1956	107	—	—	—
57	113	825	1438	1986
58	114	806	1584	1636
59	116	853	1593	1623
60	119	924	1854	1875
61	124	938	2176	1938
62	124	967	1769	2155
63	125	1038	2163	2152
64	126	1148	2373	2782
65	130	1216	2905	2652
66	135	1217	2939	2721

(Values in million dollars)

$$C = -\$750 \text{ m.} + 0.932 Y, \quad (r=0.979) \quad (1)$$

$$\frac{1}{3} (I_{t+1} + I_t + I_{t-1}) = -\$167.7 + 0.237 Y, \quad (r=0.980) \quad (2)$$

$$L = -1.4957 \text{ m. persons} + 0.449 N, \quad (r=0.977) \quad (3)$$

$$Q = -\$7660.6 \text{ m.} + 5.382 L, \quad (r=0.983) \quad (4)$$



$$Y=PQ \quad (5)$$

$$Y=C+I+G+E-J \quad (6)$$

$$J=-\$104 \text{ m.} + 0.190 Y, \quad (r=0.983) \quad (7)$$

$$Y=\frac{G+E}{0.021}-\$34461.9 \text{ m.} \quad (8)$$

$$Q=2.416518 N-\$7660.6 \text{ m.}-0.8049857 \text{ m. persons} \quad (9)$$

if  $P=\text{const}=1$ ,  $Y=Q$ ,

$$G+E=0.050746878 N+\$562.8273 \text{ m.}-16905 \text{ persons} \quad (10)$$

if  $\frac{\Delta Y}{Y}$ ,

$$\begin{aligned} \Delta G+\Delta E &=0.05(G+E)-\$36.185 \text{ m.} \\ &=0.002537 N-845 \text{ persons}-\$8.044 \text{ m.} \end{aligned} \quad (11)$$

(unit of  $N$  is 10 millions)

$$\begin{aligned} \Delta N &=0.05 N-40249 \text{ persons}-\$38.303 \text{ m.} \\ &=0.05 N-469849 \text{ persons.} \end{aligned} \quad (12)$$

target of the Vernon Report, can be achieved. Putting the growth rate of both  $Y$  and  $Q$  at 5% and substituting into this the relations of 8 and 9, we obtain 11 and 12. Equation 11 is the relation to control the growths of  $G$  and  $E$ ; alike with Equation 10, a larger left-hand side will cause an inflationary gap. In this equation figures of money-value calculation must be converted into those of personal numeration. This conversion produces the second expression of 12, by which it is known that, for example, as against 11.54 million persons of 1968 the  $\Delta N$  for the next year comes to about 107 thousand. This is the necessary increase of population for a 5% growth, with  $(G+E)$  being 138 million dollars. (For the entire period  $\sum N=96.5$  millions,  $\sum Q=\$86070$  million,  $\sum N/\sum Q=1.12164$ .) In this way basic figures in the macro-sense for the Australian economic planning can be found. Given a  $(\Delta G+\Delta E)$ ,  $\Delta Y$ , hence  $\Delta C$  and  $\Delta I$  can be sought, and further the production increases for consumption-goods as well as producer's-goods industries. And if  $E=J$  is to be required, other conditions of control will be found. That is to say, since  $E=-\$194 \text{ million}+0.190Y$ , the growth of  $E$  corresponding to the growth of  $Y$ , and hence production and employment in export industries may be obtained. (In deriving the reduced formula we ignored the said "adaptation lag," identifying the unadjusted figures of  $I$  with the moving-average values. This was for the sake of simplification, which inevitably may involve errors. Again the changes in the price system and their effects on export-import prices, as well as repercussions by these, are not interwoven, and hence probable errors due to adaptation processes in these aspects are neglected. These may be problems to be considered in the second stage of study.)

## 5

The economic model of New Zealand may be explained as a system of equations similar with the Australian model. Again in this country popula-

tion shortage is making an obstacle to economic development from both the sides of man-power and effective demand, and the economy is also of capital-shortage type. We will use symbols similarly with the case of Australia and take data from *New Zealand Pocket Digest of Statistics* (by the New Zealand Statistics Bureau), 1967. Alike with the Australian case,  $C$  is defined to include both personal and public current consumption. Taking eleven years 1956–1966 for the experiment period, we obtained the consumption function as Equation 13. The marginal propensity to consume is considerably low compared with the case of Australia. Again as to the investment function, both equipment and inventory investments were treated inclusively. Similarly as for Australia, moving averages had to be taken to make fitness good. The coefficient of  $Y$  is little different from that of Australia. Thirdly as for the import function, while for Australia a high correlation can be seen in the actual (unadjusted) values of  $J$  and  $Y$ , in the case of New Zealand it can be obtained only by taking 3-year moving averages of  $J$ . Supposedly hereabout lies a difference of constitution between the two countries. The relation is shown as Equation 15, which, however, has low correlation coefficients compared with other equations—maybe the ratio of import and domestic prices must be introduced as an explanatory variable. The marginal propensity to import is lower than in Australia, although there lies a difference of  $J$ 's value, i.e., actual figures or moving averages. ( $I'$  and  $J'$  in Table 3 denote 3-year moving averages respectively.) Equations 16 and 17 are definitional equations. Equation 18 is the production function, where the regression is taken with respect to total population and real national income, a method which may be permissible where unemployment rate is low due to labor shortage and a constant ratio of work force to total population is presumable. This equation has rather good fitness. Thus we can have six equations to determine six endogenous variables, namely  $Y$ ,  $C$ ,  $I$ ,  $J$ ,  $Q$  and  $P$ . (To make  $E$  an endogenous variable appears to be still more difficult than in the case of Australia because in the earlier part of the period there are observed decreases in  $E$  despite increases in  $Y$ .) From these equations the relation of  $Y$  to exogenous variables can be derived as Equation 19.

The necessity of price stabilization is not so impressive on the consciousness of people as in Australia. New Zealanders are feeling that prices are relatively stable and in fact the level of consumer prices seems to be low compared with other countries. However,  $P$  has been on the rise in reality. So, if price stabilization is to be desired as an objective of economic policy,  $(E+G)$  must be limited to the extent as shown in Equation 20. But, if we adapt the equation to 1965, it is found that  $(E+G)$  amounts to 623.6 million dollars, an amount appreciably smaller than actual  $E$ . This is caused by the fact that in the experimental period  $E$  and  $Y$  do not exhibit parallel moves, and in addition the correlation between  $J$  and  $Y$  is not so high. For the New Zealand's economy  $E=J$  seems to make a more important target than  $P=\text{const}$  is, but to express it in this model seems too unrealistic. So we withhold solution on this point.

Table 3

year	Y	C			P	Q
		Personal	Public	Total		
1956	1833	1279	249	1478	78.6	2332
57	1915	1329	274	1603	80.3	2385
58	2026	1447	287	1734	83.9	2415
59	2104	1463	302	1765	87.1	2416
60	2266	1477	324	1801	87.7	2584
61	2438	1721	346	2067	89.3	2730
62	2517	1798	363	2161	91.6	2748
63	2704	1887	395	2282	93.5	2892
64	2968	2028	416	2444	96.7	3069
65	3239	2167	459	2626	100.0	3239
66	3493	2391	494	2885	102.8	3398
57-65Σ	22178					30208

(Values in million dollars)

year	I			E	J	N	L
	Equipment	Inventory	Total				
						10000 persons 213	10000 persons 79.0
1956	453	38	491	565	602	218	80.4
57	459	20	479	595	596	222	82.0
58	501	32	539	593	657	228	83.8
59	504	31	535	576	578	233	85.1
60	522	12	534	671	549	237	86.4
61	600	49	649	630	683	241	88.5
62	633	23	656	633	694	248	90.0
63	645	29	674	669	651	253	91.9
64	716	60	776	788	761	259	94.5
65	809	88	897	829	798	264	97.7
66	903	133	1036	827	930	267	101.0
						Σ 2670	

year	I'	J'	Projection			
			year	N*	E+G	Q
1957	503	618				
58	518	610				
59	536	595	1965	(10000 persons) 264.0	623.6	3198
60	573	595	70	292.7	770.6	3882
61	613	603	75	324.4	830.6	4635
62	665	642	80	360.8	900.0	5501
63	702	702	85	401.6	977.7	6471
64	782	737	90	445.2	1060.5	7508
65	903	830				
Σ	5790	5932				

\* Published by the government.

$$C = \$125 \text{ m.} + 0.790 Y, \quad (r=0.988) \quad (13)$$

$$\frac{1}{3}(I_{t+1} + I_t + I_{t-1}) = -\$87.50 \text{ m.} + 0.291 Y, \quad (r=0.979) \quad (14)$$

$$\frac{1}{3}(J_{t+1} + J_t + J_{t-1}) = \$162.4 \text{ m.} + 0.161 Y, \quad (r=0.896) \quad (15)$$

$$Y = C + I + G + E - J \quad (16)$$

$$Y = PQ \quad (17)$$

$$Q = -\$3080.8 \text{ m.} + 2.103 N, \quad (r=0.964) \quad (18)$$

$$Y = 12.5(E + G) - \$574.8 \text{ m.} \quad (19)$$

$$\text{if } P = \text{const} = 1, \quad Y = Q,$$

$$E + G = 0.168 N + \$122.0 \text{ m.} \quad (20)$$

(to the average value,  $E + G = \$581.6 \text{ m.}$ )

As the long-run projection of the New Zealand Government figures of population increase are published. On this basis  $Q$  was calculated from Equation 18 as shown in Table 2, Projection. By 1985 its real national income is expected to reach a level twice the present one.

## 6

Let's turn to the examination of the macro-planning of New Zealand. Its details are described in a book titled *Planning and Forecasting in New Zealand* (pp. 125 VII, Oxford University Press, 1965) comprising seven chapters of general remarks, planning and peace, planning and man-power, economic planning, planning and forecast for railway, role of local governments, and policies and planning. In this paper Chapters 3, Man-power, and 4, Economic Planning will be examined. In this country few discussions have been made on the population problem despite the elapse of as long as fifty years since the foundation of the Public Service Commission. However, any shift of capital, resources or man-power must be preceded by economic planning. Generally speaking New Zealanders have an inclination to sneer at economic planning as bureaucratic. The man-power problem of the country may be summarized into the following points.

- (1) Shortage of skilled as well as unskilled laborers and countermeasures to it.
- (2) Overcoming of labor shortage by immigration.
- (3) Effects of education systems on younger people, the object of employment.
- (4) Shortage of labor force suitable, for example, to mechanization and automatization.

In short, man-power must be increased to solve these problems. A long-run forecast of man-power has been provided by the Labour Ministry. The method is aggregation of forecasts broken up by industries, as are shown in Table 4. Column A presupposes 5,000 immigrants per annum, column B 10,000.

To this projection Mr. Atkinson has suggested the following problems in reference with the actual situations in the Soviet, France, etc.

- (1) Better utilization of man-power to raise productivity.
- (2) Qualitative improvement of labor force through occupational education and training.
- (3) Government's support to the development of social groups and encouragement to joining them.

Table 4

(Break-up of industry—primary industry, manufacturing, electric power-water-sanitation facilities, transport-communication, wholesale-retail trade, householding-services, executives & professionals, armed forces, unemployment)

		Forecast of Man-power	
		A	B
March	1968	1,034 thousand	1,045 thousand
"	1973	1,127 "	1,155 "
"	1978	1,229 "	1,270 "

Although the man-power problem was rather minor in New Zealand than in other countries, her past planning on public services has been inadequate, leaving much room for improvement. In the planning this time there are seen some improvements—forecast being made on the man-power demand in various professions five and ten years in future, and prediction being given about the output of each profession provided the present trends are maintained. On these bases the man-power shortage is estimated and plans of enlarged man-power availability are erected, in which full availability of some specified technicians is considered. As the measures to attain the aims there is the need of (a) immigration, (b) in-service training, (c) consultation activities by educational authorities, (d) increased supply of college graduates, (e) devices on wage policy to encourage younger people and (f) maintenance of staff already trained. (Thus Mr. Atkinson asserts.) We won't negate the necessity of these measures, yet it seems too primitive to forecast man-power demand for ten years in future simply by extending past trends. Such a method would be tenable in peace and quiet times but today—a period when Britain's approach to EEC is giving birth to the need of structural transformation of this country's economy, industrialization is "just beginning," and the problem of product conversion of primary industry is rising to the surface—isn't it necessary to found predictions on an accurate grasp on the relations between effective demands and production costs, and on the ground of economic theory?

Chapter 4, Economic Planning, is charged by Mr. Holmes, who comments that he has no intention of advocating the necessity of more formal programs for the New Zealand's economic planning or projection. At the outset the

characters of economic plannings of capitalist countries are discussed, referring to the examples of France, Holland, Sweden and Great Britain. The author says the plannings of these relatively advanced European countries make a good reference for New Zealand on the following aspects.

- (1) Problems of prediction and their significance.
- (2) The problem of suitable type of planning agency to each country.
- (3) Relations between policy and planning.

The primary problem in the planning for New Zealand lies, according to Mr. Holmes, in the stabilization of exporters' incomes. If efforts for this end by the government and farmers are lacking, harms will be worked not only on the problem of projection but also on the stable expansion of economy; income fluctuations will affect production costs and prices through drastic changes of import ability. Of course some fluctuations in the export receipts, and consequently the rate of economic growth, are to be expected, but their impacts may be made moderate by adequate policies. A second problem is that insufficient information and investigation will result in crude estimates of available resources and patterns of demands and production. Information to the government will increase accuracy with the passage of time, and when actual development shows any deviation from projected course adequate changes of policy will be required. In this sense the planning in New Zealand should be flexible, not too detailed, and the period be confined to a short span of time, say, three to five years. For the private sector meaningful projection is difficult to build since information is deficient on the structure of household consumption as well as demand analysis. (Here Mr. Holmes points out shortage of statistical data compared with America and European countries.) Lastly as regards the problem of desirable type of planning agency the author takes that Swedish type is preferable to French type comprising a large number of members, although an independent committee or council selected from all sections of society including the government was recommended by the Monetary and Economic Council in 1962 when this problem was discussed. And he thinks it desirable to set up such agency in the Finance Ministry.

The above is the outline of Mr. Holmes's views on economic planning. They are arguments on economic systems. Of course they may be necessary for an actual building of planning yet such a discussion itself might be a proof of the fact that any realistic attempts have not been made sufficiently. True there may exist a weakpoint of the said lack of statistical data but it seems strange that, while noteworthy performances are found on micro-scope market research by method of econometric analysis or LP analysis utilizing input-output tables, there are few macro-dynamic analyses. Of course macro-dynamic analysis is not limited to the Keynesian theory, and the theory of effective demand does not always conform to the New Zealand's economy. There may be involved various problems in an economy with a bottleneck of labor shortage and a high degree of dependency on foreign trade. Neverthe-

less model analysis cannot be supposed impossible if we think of the conditions under which Klein has considered the economic model of Britain. We think full utilization should be made of the fact that excellent micro-analyses have been made already. At the present state of the matter only separate "plannings" of individual sectors are being built, and if there is nothing but population that could serve as the bridge to connect them, we must wonder, wouldn't be born some unexpected errors in the analysis of demand-supply balance?