
The New Zealand Population: Trends and Their Policy Implications, 1985

Population Monitoring Group

The New Zealand Population: Trends and Their Policy Implications, 1985

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This report, published by the New Zealand Planning Council, was prepared independently by the Population Monitoring Group. The views expressed are the sole responsibility of the Population Monitoring Group and are not necessarily endorsed by the Planning Council.

Foreword

This is the third report of the Population Monitoring Group.

The Monitoring Group is charged with the responsibility of integrating demographic considerations into the process of planning and policy formulation and keeping the Planning Council informed on demographic issues.

The report is divided into three sections. The first section summarises the main points which have emerged from the group's analysis. The second section outlines recent demographic trends, and section three examines the policy implications of these trends.

I would like to thank all members of the Population Monitoring Group and the Group's liaison officer, Philippa Miller Moore, for their contribution to this report. Finally, I would like to thank Alastair Dyer and the Department of Geography, University of Canterbury, for their work on the graphic material in the report.



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SUMMARY

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The New Zealand Population: trends and their policy implications, 1985 is the third report produced by the Population Monitoring Group. The format differs slightly from the Group's second report, *The New Zealand population: contemporary trends and issues*, which contained a substantive section on population issues of particular significance in the year under review. This report focuses firstly on trends in population growth, composition and distribution and then assesses the implications of these for policy debate and formulation. Two major population issues — trans-Tasman migration and Maori population growth — are the subjects of separate reports which the Population Monitoring Group intends publishing in 1986.

This report is divided into three sections. Section 1, an executive summary, highlights some of the trends and policy issues raised in the report. Section 2 reviews recent demographic trends with particular reference to developments between 1981, when the last population census was held, and 31 March 1985. An historical examination of population trends is contained in the Population Monitoring Group's first report, *The New Zealand population: patterns of change* which should be read in conjunction with this report.

Section 3 examines policy implications of trends discussed in the preceding section. Here attention is drawn in particular to the slow growth of New Zealand's population, fluctuations in birth rates, post-neonatal mortality, trans-Tasman and Polynesian migration, the refugee intake, ageing in the population structure, changes in the labour force and unemployment levels, the problem of assessing demographic trends for different ethnic groups, and some implications of slow overall population growth for regional demographic development.

Some of the main points which emerge from the report are as follows:

Population Growth

— Population increase in the year ended 31 March 1985 was substantially lower than it had been in the previous year. Although there was a slight increase in the balance of births over deaths, the contribution of international migration to population growth was much smaller than during 1982-83 and 1983-84. While the total flow of arrivals in New Zealand exceeded the number of departures, there was a return to the situation common in the late 1970s and early 1980s when

more people intending long-term or permanent residence overseas left New Zealand than entered from other countries.

— Population growth will continue to be slow for the foreseeable future and the major concerns of population policy will be changes in the age and cohort composition. These will be more important than is often realised.

— It seems unlikely that the total population will reach 4 million by the turn of the century and even less likely that it will reach the 5 million some observers have been calling for. Fertility levels among the non-Maori population are currently at sub-replacement levels, and Maori fertility has declined very rapidly since the early 1970s. Unless there is a return to fertility levels common in the 1950s or the net immigration rates of the early 1970s, New Zealand's population is likely to stay below 4 million until well into the twenty-first century.

— While natural increase is higher among Maoris than non-Maoris, falling birth rates and net emigration are reducing the overall growth rate for the Maori population. These trends suggest that not only will there be a lower proportion of the total population that is Maori by the turn of the century than is forecast in some public statements, but there will also be a continuation of the decrease in the proportion of Maoris at young ages.

Fertility

— Fertility is at low levels in New Zealand as in other developed countries. Non-Maori fertility is below replacement level and Maori fertility is just above this level.

— Minor changes in fertility can have important effects on birth cohort sizes which, in time, impact upon many policy areas (health, education, labour force, social welfare). When rates of population growth are low, changes in fertility levels and patterns need to be monitored very closely. Policy makers need to be well aware of the long-term implications for population structure of fluctuations in fertility.

— Several measures of fertility among the non-Maori and Maori populations indicate a high level of contraceptive efficacy, resulting mainly from use of oral and injectable hormonal contraception. There are also high levels of sterilisa-

tion in New Zealand which rival those recorded in Canada and the United States.

- In contrast, however, abortion levels are low and have not played a significant role in the fertility declines since the 1960s in either the non-Maori or Maori populations. However Maori abortion rates are around 25 percent higher than those for Europeans, while rates for Pacific Island Polynesian women are double those for Maoris. These differentials, together with possible regional variations in access to abortion services, are issues of concern in abortion policy formulation.
- Teenage pregnancy and abortion are matters of concern because recent research suggests that abortion plays an important role in reducing the number of live births to the high risk group between 14 and 17 years. Appropriate policy responses are in the fields of health and contraceptive education.

Mortality

- There has been a continued reduction in levels of mortality, especially at older ages, since the mid-70s. The rate of improvement in female life expectancy at birth has accelerated significantly over the past decade and in 1984 was 77.7 years compared with 71.2 years for males.
- A major policy issue relating to mortality concerns the failure to reduce deaths among infants aged between 1 month and 11 months (post-neonatal mortality). The post-neonatal death rate (per 1000 live births) actually increased from 6.0 in 1981 to 7.1 in 1984. The non-Maori rate (5.7 per 1000 in 1982) is twice as high as that found in northwestern European countries in the 1980s, despite the fact that in the 1950s rates were roughly the same. The Maori rate (11.7 per 1000 in 1982) is twice that of the non-Maori one. In this regard it must be borne in mind that post-neonatal infant mortality is a sensitive index not only of health administration and the efficacy of health care delivery, but also of social equity and the adequacy of social welfare programmes.

International Migration

- After two years when the number of people arriving in New Zealand exceeded those departing, the trend in international migration in 1985 is towards net emigration. The trans-Tasman flow has a major impact on gains and losses to New Zealand's population through international migration and there is considerable interest among policy makers in the implications of this movement for economic and social development in New Zealand. Trans-Tasman migration is the subject of a separate report by the Population Monitoring Group to be published early in 1986.

- Net immigration to New Zealand from countries in Polynesia continues with most of the gain coming from a surplus of short-term arrivals over departures. While the great majority of people born in Polynesia who enter and leave New Zealand have island countries or New Zealand as their places of last or next permanent residence, increasing numbers and proportions have Australia as their permanent residence. A trans-Tasman dimension should be taken into consideration in any analysis of the migration to New Zealand of people born in the Pacific Islands.
- Two issues with migration policy implications for New Zealand and certain Pacific Island Governments are the portability of New Zealand superannuation entitlement (Niue, Cook Islands, Western Samoa) and the socio-economic implications of rapid growth in the economically active population in countries with a limited potential to provide paid work (Kiribati, Tuvalu and possibly Vanuatu and Solomons). In the context of the Labour Government's current review of international migration policy, it is important to keep New Zealand's "special relationship" with small countries in the Pacific firmly in view. In the second half of the 1980s less restrictive controls over entry of Pacific Islanders from certain countries without privileged access to metropolitan nations may be necessary for humanitarian reasons as well as for serving New Zealand's strategic and trading interests.
- Refugee immigration is increasing the ethnic diversity of New Zealand's population. Ninety percent of the 6,390 refugees settled in New Zealand between April 1979 and March 1985 came from Vietnam, Kampuchea and Laos. In 1985 a new group of about 100 Assyrian Christian refugees have been allowed to settle in New Zealand.
- New Zealand's refugee resettlement contribution needs to be as effective as possible as there is increasing pressure for a larger share of the global aid for refugees to be spent in the countries of asylum. Flexible entry criteria are required that take account of the needs of all categories of refugees. New Zealand's absorptive capacity for refugees has been judged in terms of one resettlement mode. As compassion fatigue is making it difficult to maintain the established congregational sponsorship arrangements other approaches to resettling refugees need to be considered.

Age-Sex Structure

- The age-sex structure of the Maori population has changed dramatically over the past decade, and the proportion of people in the working age groups is increasing as the proportions of young

children get smaller. Important policy issues into the 1990s will be providing satisfying work and recreation opportunities for teenagers and young adults.

- All elements of social, economic and cultural planning for the private and public sectors are affected by the passage of cohorts of different sizes through key age-groups. At present there is a significant and rapid increase in numbers in the early middle ages followed by even larger cohorts in their thirties. The latter are being followed by the largest birth cohorts in New Zealand's history, those currently aged 15-29 years. Below these ages cohort sizes are much smaller. For both public and private sector planning changes in cohort composition pose serious problems because the youngest birth cohorts are smaller than their immediate predecessors, and thus will generate less demand for the services created to meet the peak demands a few years earlier.
- Numbers aged over 70 years in particular have increased much more rapidly in recent years than the population as a whole. Given that the very old usually require considerable medical and welfare assistance, this process of ageing has very important policy implications. The Social Monitoring Group, in its report *From Birth to Death*, has dealt with this issue in some detail.

The Labour Force

- The current ageing of New Zealand's population will result, ultimately, in inflexibility in the supply of labour with respect to required adjustments to changing needs in the economy. One reason for this is that occupational, industrial and geographical mobility are all inversely related to age. Formal and on-the-job training are most effective at younger ages, yet through the late 1980s and 1990s the number of workers in these age groups will be declining both absolutely and relatively in the New Zealand workforce. Moreover, the impact of ageing of the labour force is not identical across industries.
- Substantial economic growth during the year ended 31 March 1985 had a favourable impact on the labour market, resultant in a net increase in employment of about 40,000 jobs, while the level of total unemployment decreased by about 20,000 and the number of long term unemployed almost halved. Economic prospects for the next 12 months are less favourable and, despite extensive trans-Tasman migration and the existence of labour shortages in many industries, it is likely that unemployment will rise again by about 5000 in the year ended March 1986. In the medium term, further increases in unemployment seem inevitable

unless the economy could generate a consistent growth in employment of about 1.5 percent per annum.

- It is well known that both Maoris and Pacific Island Polynesians are in a disadvantaged labour market position in the New Zealand economy and have, consequently, a higher propensity to unemployment. Unfortunately there are no data presently available to assess whether men and women in these ethnic groups have benefitted much from the recent increase in levels of employment. An equitable sharing of the benefits of economic growth is unlikely, especially when much of the increase in demand for labour has been in skilled occupation categories. Since the Maori and Pacific Island Polynesian cohorts entering the workforce are still relatively young, and there is a high propensity for teenagers in these groups to be unemployed, there is unlikely to be any decline in levels of Polynesian unemployment in the short-run.

Ethnicity

- The ethnic diversity of New Zealand's population is being increased through international migration. In addition to net gains to New Zealand's population from the Pacific Islands, which have continued through the 1980s, refugee immigration, especially from Southeast Asia, is contributing to ethnic diversification.
- The definition of ethnicity is problematic in a multicultural society such as that in New Zealand and the production of continuous statistical series for population subgroups defined on this basis is becoming increasingly difficult. The removal of the question seeking identification of Maoris and non-Maoris on international arrival and departure cards will have important implications for the preparation of population estimates for the Maori population in particular, and for demographic and social analysis in New Zealand.
- In the absence of reasonably reliable continuous data on demographic events, intercensal estimates of ethnic component populations will have to be based, increasingly, on data collected in the quinquennial census. The initiative taken by the Department of Statistics to publish a separate volume of census tables on Pacific Island Polynesians after the 1981 enumeration is commendable in this regard, and should be repeated as part of the reporting programme for the 1986 census.

Population Distribution

- The pattern of concentration of growth in the northern North Island particularly Auckland, Northland and the Bay of Plenty continues, as does the very slow growth or decreases in the

remainder of the regions. The recent economic upturn affected employment growth mostly in the regions that were already growing. Several regions did not share in it significantly at all, particularly the southern South Island.

— Recent projections of regional population change, incorporating historical patterns of net internal migration, imply further concentration of growth in the northern North Island, very little in metropolitan Wellington, Canterbury,

and the South Island generally, especially the southern South Island. Unless there are changes in the regional pattern of economic growth there is likely to be a situation of slow growth or population decrease more or less permanently over a large part of the country. This will accentuate regional differences in the proportions of the population that are elderly at a time when the elderly are becoming a much larger proportion of the population in all regions.

Mortality

The ethnic pattern of New Zealand's population is becoming increasingly diverse. This is due to a combination of factors, including immigration, especially from South America, and a decline in the death rate of the non-Maori population. The ethnic pattern of mortality is also becoming more diverse. The death rate of the non-Maori population is declining, while the death rate of the Maori population is rising. This is due to a combination of factors, including differences in lifestyle, access to health care, and genetic factors.

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Section 2

POPULATION TRENDS

Population Growth

At 31 March 1985 New Zealand's population was estimated to be 3,291,300 (Department of Statistics, 1985a). The New Zealand Maori population comprised 294,000 or 8.9 per cent of this total. Average annual rates of growth in both the Maori and non-Maori populations were higher between 1981 and 1985 than over the preceding intercensal period (1976-1981) (Table 1). Current growth rates remain much lower than those characteristic of the 1960s and early 1970s. This is due, in part to a substantial decline in the numerical contribution of natural increase (the balance of births over deaths) to population growth from over 40,000 per year in the early 1960s to under 26,000 per annum since 1981. A more significant factor influencing short-term fluctuations in growth rates has been radical changes in net international migration (the balance of arrivals over departures). The relative contributions of net migration and natural increase to

population growth are illustrated graphically in Figure 1 (total population) and Figure 2 (Maori and non-Maori populations). These components of growth are discussed briefly below.

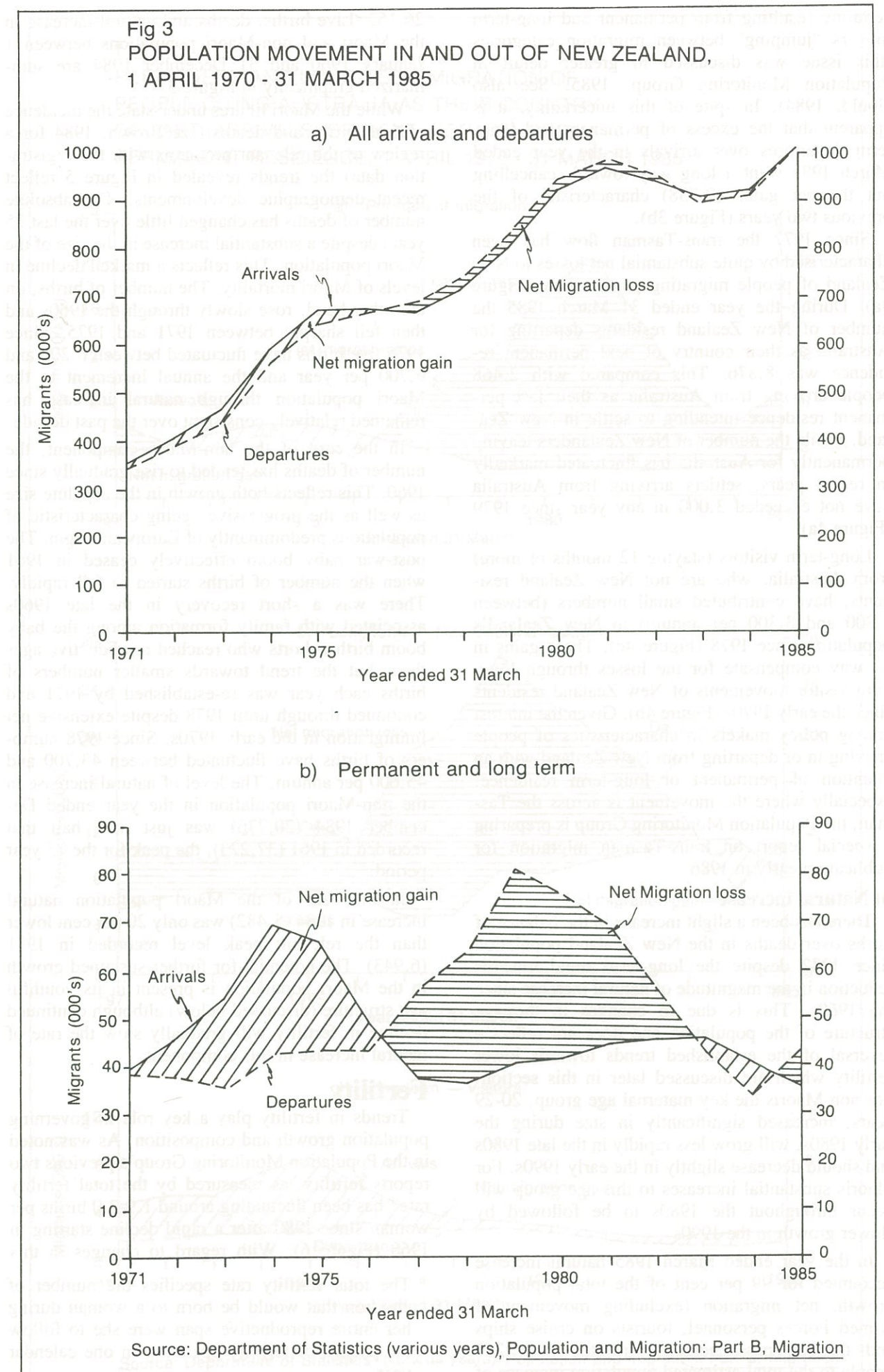
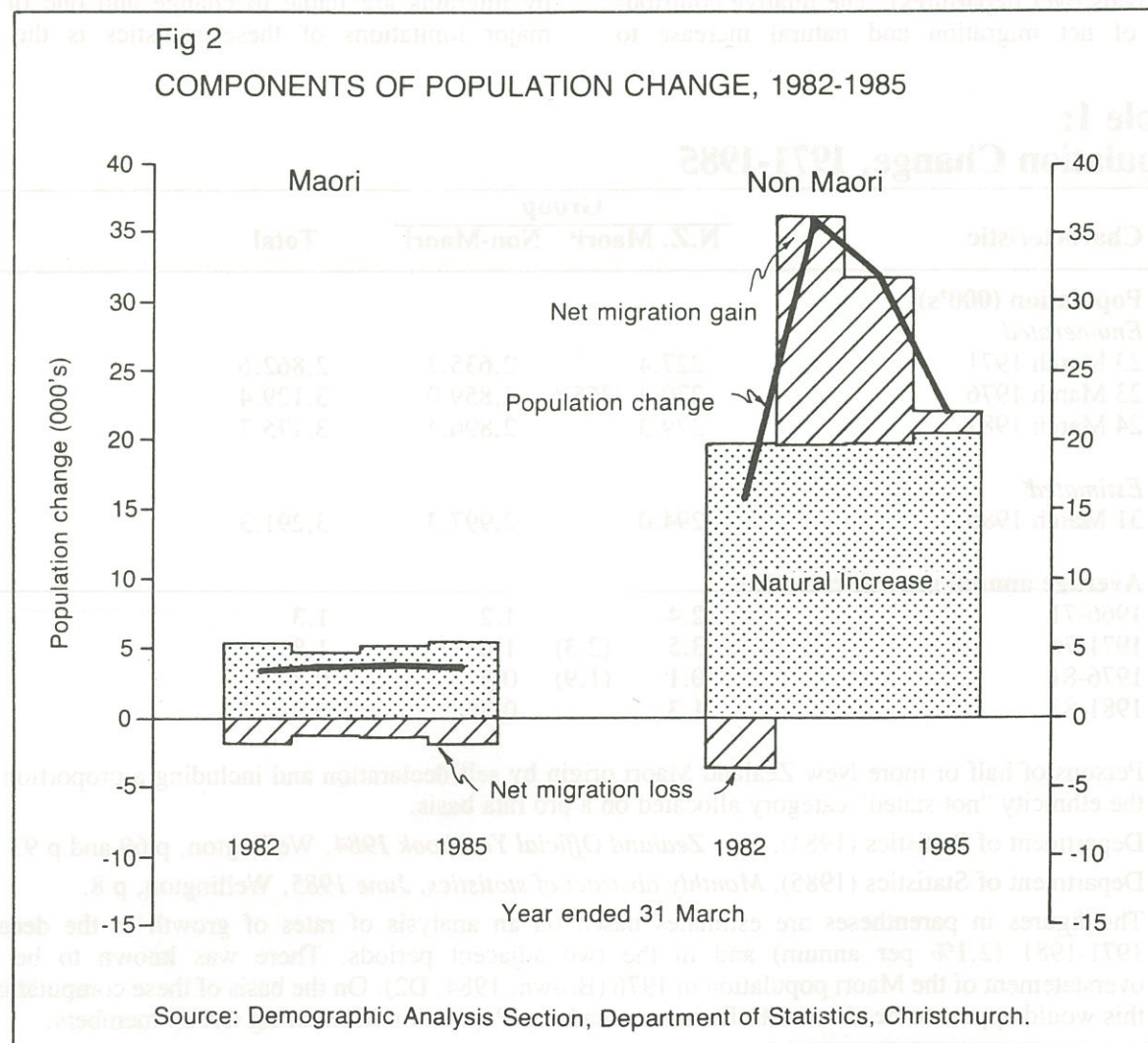
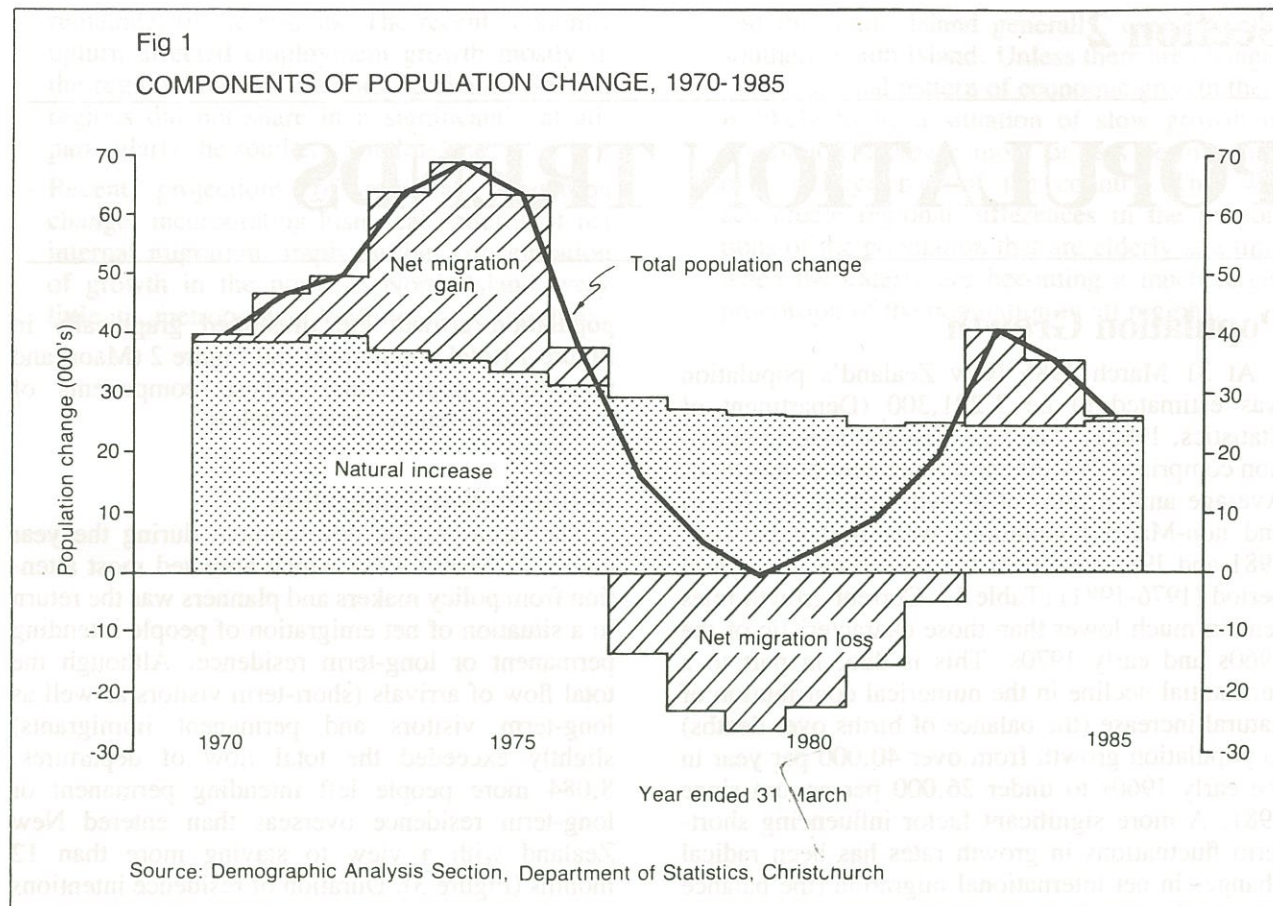
a) International migration

The demographic development during the year ended 31 March 1985 which attracted most attention from policy makers and planners was the return to a situation of net emigration of people intending permanent or long-term residence. Although the total flow of arrivals (short-term visitors as well as long-term visitors and permanent immigrants) slightly exceeded the total flow of departures, 8,084 more people left intending permanent or long-term residence overseas than entered New Zealand with a view to staying more than 12 months (Figure 3). Duration of residence intentions by migrants are liable to change and one of the major limitations of these statistics is the un-

Table 1:
Population Change, 1971-1985

Characteristic	Group		Total
	N.Z. Maori ^a	Non-Maori	
a) Population (000's)			
Enumerated ^b			
23 March 1971	227.4	2,635.2	2,862.6
23 March 1976	270.4 (255) ^d	2,859.0	3,129.4
24 March 1981	279.3	2,896.4	3,175.7
Estimated ^c			
31 March 1985	294.0	2,997.3	3,291.3
b) Average annual growth rate (%)			
1966-71	2.4	1.2	1.3
1971-76	3.5	(2.3)	1.8
1976-81	0.1	(1.9)	0.3
1981-85	1.3	0.7	0.9

- a Persons of half or more New Zealand Maori origin by self declaration and including a proportion of the ethnicity "not stated" category allocated on a pro rata basis.
- b Department of Statistics (1984), *New Zealand Official Yearbook 1984*, Wellington, p 69 and p 93.
- c Department of Statistics (1985), *Monthly abstract of statistics, June 1985*, Wellington, p 8.
- d The figures in parentheses are estimates based on an analysis of rates of growth in the decade 1971-1981 (2.1% per annum) and in the two adjacent periods. There was known to be an overstatement of the Maori population in 1976 (Brown, 1984, D2). On the basis of these computations this would appear to be about 6%. Estimates made by Population Monitoring Group members.



certainty resulting from permanent and long-term movers "jumping" between migration categories (this issue was discussed in greater detail in Population Monitoring Group, 1985. See also Gould, 1984). In spite of this uncertainty, it is apparent that the excess of permanent and long-term departures over arrivals in the year ended March 1985 went a long way towards cancelling out the net gains (9,738) characteristic of the previous two years (Figure 3b).

Since 1977 the trans-Tasman flow has been characterised by quite substantial net losses to New Zealand of people migrating permanently (Figure 4a). During the year ended 31 March 1985 the number of New Zealand residents departing for Australia as their country of next permanent residence was 8,876. This compared with 2,468 people arriving from Australia as their last permanent residence intending to settle in New Zealand. While the number of New Zealanders leaving permanently for Australia has fluctuated markedly in recent years, settlers arriving from Australia have not exceeded 3,000 in any year since 1979 (Figure 4a).

Long-term visitors (staying 12 months or more) from Australia, who are not New Zealand residents, have contributed small numbers (between 1,800 and 3,300 per annum) to New Zealand's population since 1978 (Figure 4c). These gains in no way compensate for the losses through long-term visitor movements of New Zealand residents since the early 1970s (Figure 4b). Given the interest among policy makers in characteristics of people arriving in or departing from New Zealand with an intention of permanent or long-term residence, especially where the movement is across the Tasman, the Population Monitoring Group is preparing a special report on trans-Tasman migration for publication early in 1986.

b) Natural increase

There has been a slight increase in the balance of births over deaths in the New Zealand population since 1982 despite the long-term trend towards reduction in the magnitude of natural increase since the 1960s. This is due to changes in the age structure of the population and does not reflect a reversal of the established trends towards lower fertility which are discussed later in this section. For non-Maoris the key maternal age group, 20-29 years, increased significantly in size during the early 1980s, will grow less rapidly in the late 1980s and should decrease slightly in the early 1990s. For Maoris substantial increases to this age group will occur throughout the 1980s to be followed by slower growth in the 1990s.

In the year ended March 1985 natural increase accounted for 99 per cent of the total population growth; net migration (excluding movement of Armed Forces personnel, tourists on cruise ships and through passengers) contributed only 217 people to the total estimated population increase of

26,152. Live births, deaths and natural increase in the Maori and non-Maori populations between 1 January 1960 and 31 December 1984 are summarized graphically in Figure 5.

While the Maori figures under-state the incidence of both births and deaths (see Brown, 1984 for a review of the relevant problems with the registration data) the trends revealed in Figure 5 reflect recent demographic developments. The absolute number of deaths has changed little over the last 25 years despite a substantial increase in the size of the Maori population. This reflects a marked decline in levels of Maori mortality. The number of births, on the other hand, rose slowly through the 1960s and then fell sharply between 1971 and 1975. Since 1975 live births have fluctuated between 6,200 and 6,700 per year and the annual increment to the Maori population through natural increase has remained relatively consistent over the past decade.

In the case of the non-Maori component, the number of deaths has tended to rise gradually since 1960. This reflects both growth in the absolute size as well as the progressive ageing characteristic of populations predominantly of European origin. The post-war baby boom effectively ceased in 1961 when the number of births started to fall rapidly. There was a short recovery in the late 1960s associated with family formation among the baby boom birth cohorts who reached reproductive ages then, but the trend towards smaller numbers of births each year was re-established by 1971 and continued through until 1978 despite extensive net immigration in the early 1970s. Since 1978 numbers of births have fluctuated between 43,700 and 45,600 per annum. The level of natural increase in the non-Maori population in the year ended December 1984 (20,776) was just over half that recorded in 1961 (37,223), the peak for the 25 year period.

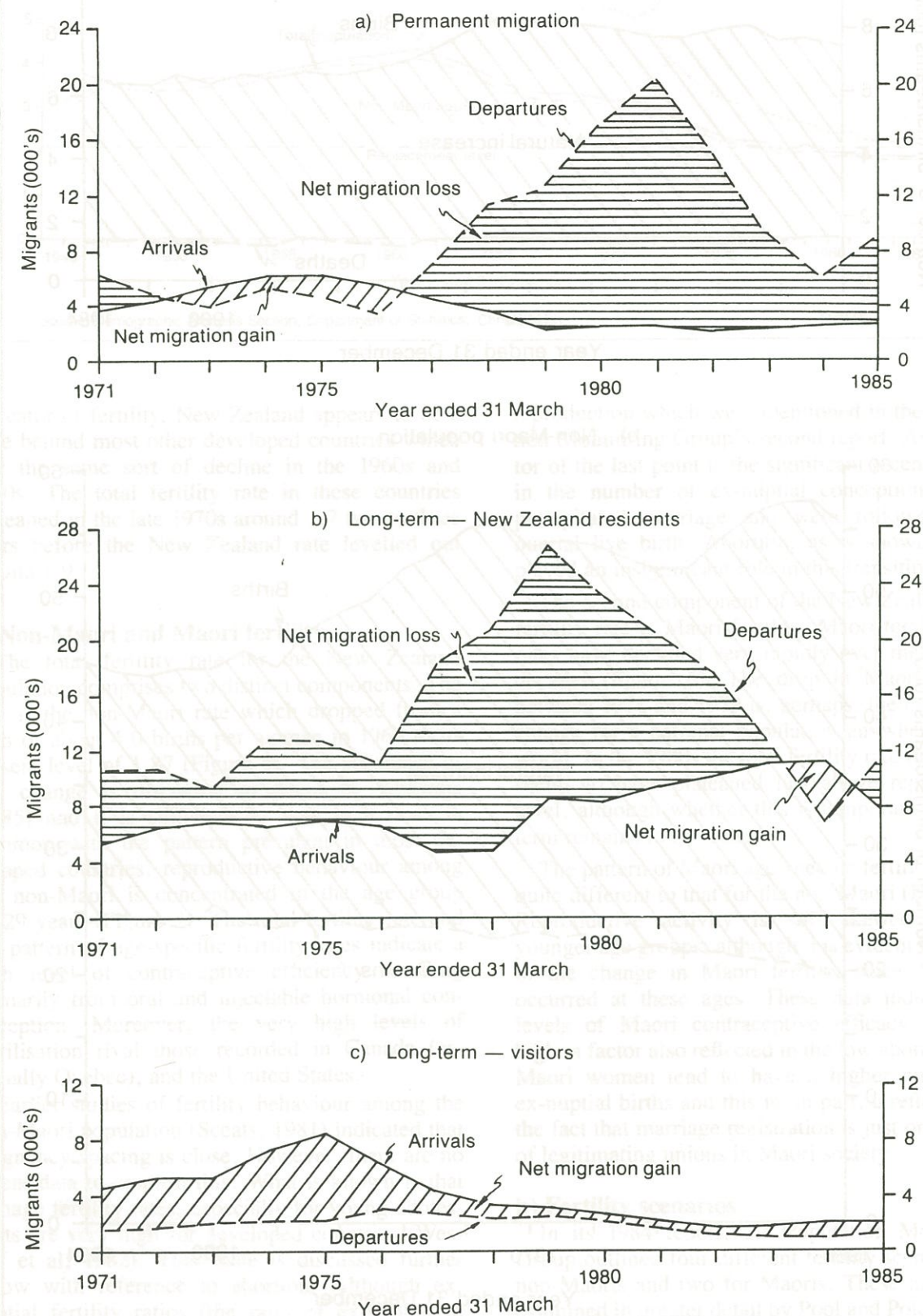
In the case of the Maori population natural increase in 1984 (5,482) was only 20 per cent lower than the relevant peak level recorded in 1971 (6,943). The potential for further sustained growth in the Maori population is present in its youthful age structure (discussed below) although continued decline in fertility will gradually slow the rate of natural increase in this component.

Fertility

Trends in fertility play a key role in governing population growth and composition. As was noted in the Population Monitoring Group's previous two reports fertility, as measured by the total fertility rate* has been fluctuating around 1.9-2.0 births per woman since 1980 after a rapid decline starting in 1960 (Figure 6). With regard to changes in this

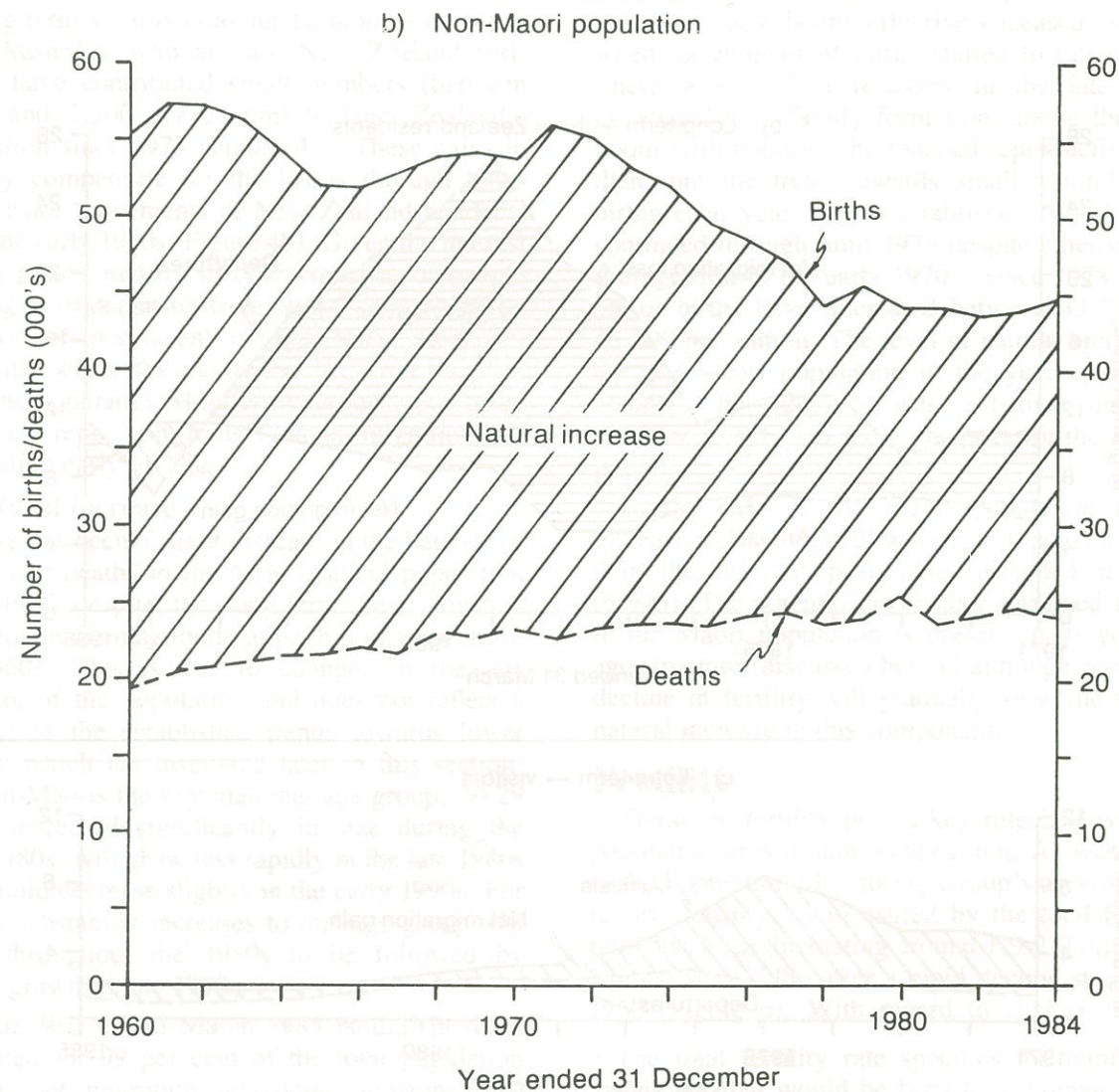
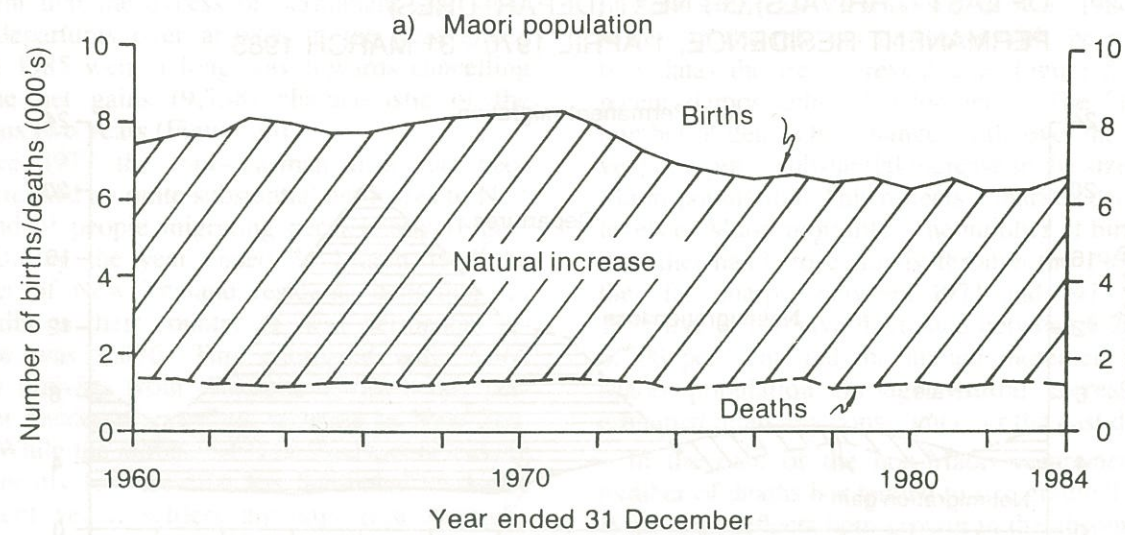
* The total fertility rate specifies the number of children that would be born to a woman during her entire reproductive span were she to follow the pattern of fertility operating in one calendar year.

Fig 4
PERMANENT AND LONG-TERM MIGRATION OF PEOPLE CITING AUSTRALIA AS THEIR COUNTRY OF LAST (ARRIVALS) OR NEXT (DEPARTURES) PERMANENT RESIDENCE, 1 APRIL 1970 - 31 MARCH 1985



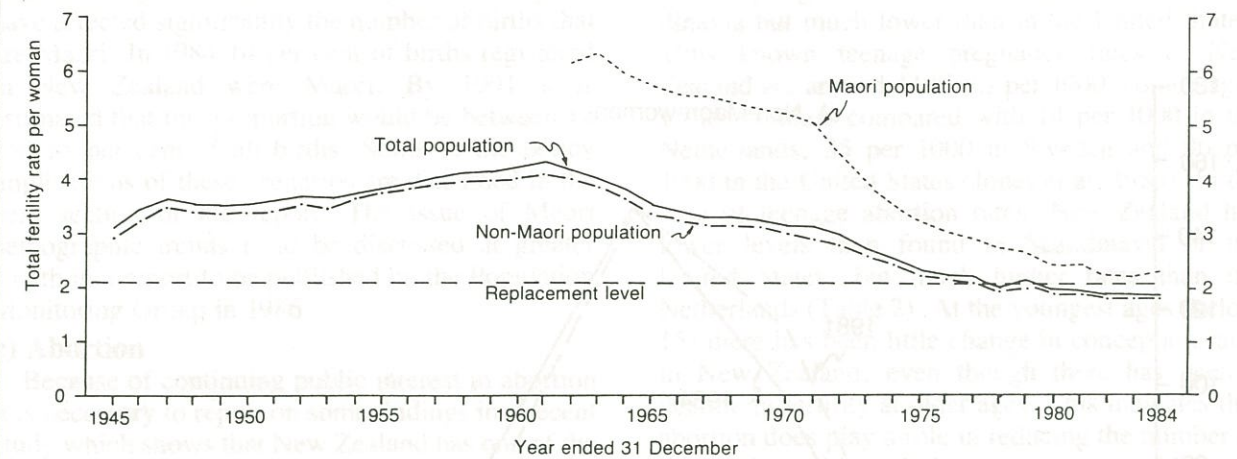
Source: Department of Statistics (various years), Population and migration: Part B, Migration

Fig 5
BIRTHS, DEATHS AND NATURAL INCREASE, 1960 -1984



Source: Department of Statistics (various years), Vital Statistics

Fig 6
TOTAL FERTILITY RATES, 1945-1984



Source: Demographic Analysis Section, Department of Statistics, Christchurch

indicator of fertility, New Zealand appears to be a little behind most other developed countries which saw the same sort of decline in the 1960s and 1970s. The total fertility rate in these countries plateaued in the late 1970s around 1.7 two to three years before the New Zealand rate levelled out around 1.9.

a) Non-Maori and Maori fertility

The total fertility rate for the New Zealand population comprises two distinct components. The first is the non-Maori rate which dropped from a high of about 4.0 births per woman in 1960 to its present level of 1.87 (Figure 6). The substance of this change is discussed in detail by Khawaja (1985) and it is sufficient to note here that, in common with the pattern prevalent in most developed countries, reproductive behaviour among the non-Maori is concentrated in the age group 25-29 years (Figure 7). The total fertility rate and the pattern of age-specific fertility rates indicate a high level of contraceptive efficiency resulting primarily from oral and injectable hormonal contraception. Moreover, the very high levels of sterilisation rival those recorded in Canada (especially Quebec), and the United States.

Earlier studies of fertility behaviour among the non-Maori population (Sceats, 1981) indicated that pregnancy spacing is close. However, there are no recent data to confirm this. What is known is that teenage fertility rates, especially for young adolescents are very high for developed countries (Westoff et al, 1982). This issue is discussed further below with reference to abortion. Although ex-nuptial fertility ratios (the ratio of ex-nuptial to nuptial births) are high, this is in part an artefact of the decline in overall fertility, and in part the result of a shift in societal values relating to marriage and

reproduction which were mentioned in the Population Monitoring Group's second report. An indicator of the last point is the significant recent decline in the number of ex-nuptial conceptions which precipitated marriage and were followed by a nuptial live birth. Abortion, as is shown below, played an insignificant role in this transition.

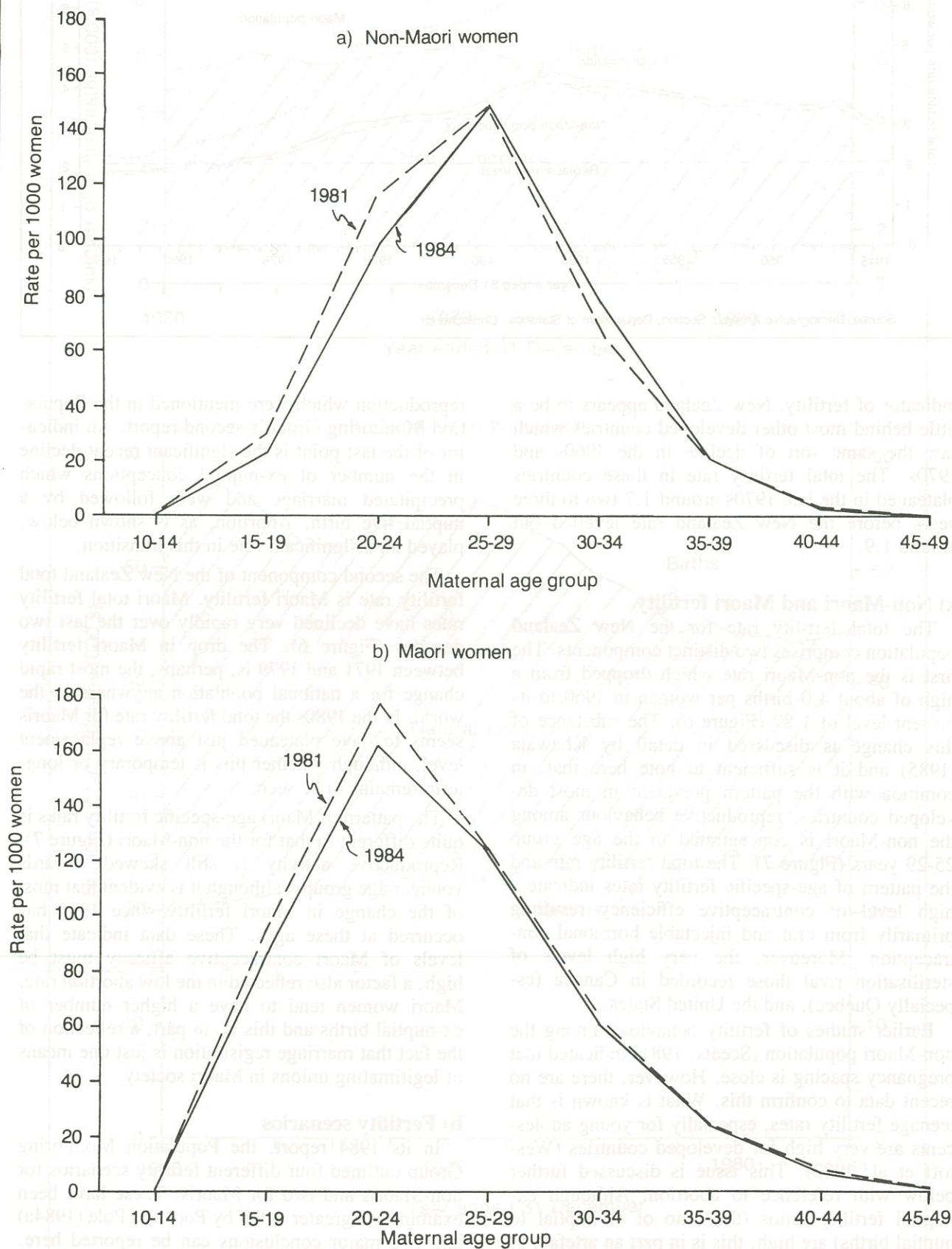
The second component of the New Zealand total fertility rate is Maori fertility. Maori total fertility rates have declined very rapidly over the last two decades (Figure 6). The drop in Maori fertility between 1971 and 1979 is, perhaps, the most rapid change for a national population anywhere in the world. In the 1980s the total fertility rate for Maoris seems to have plateaued just above replacement level, although whether this is temporary or long-term remains to be seen.

The pattern of Maori age-specific fertility rates is quite different to that for the non-Maori (Figure 7). Reproductive activity is still skewed towards younger age groups, although it is evident that most of the change in Maori fertility since 1981 has occurred at these ages. These data indicate that levels of Maori contraceptive efficacy must be high, a factor also reflected in the low abortion rate. Maori women tend to have a higher number of ex-nuptial births and this is, in part, a reflection of the fact that marriage registration is just one means of legitimating unions in Maori society.

b) Fertility scenarios

In its 1984 report, the Population Monitoring Group outlined four different fertility scenarios for non-Maoris and two for Maoris. These have been examined in greater detail by Pool and Pole (1984a) and two major conclusions can be reported here. Firstly population replacement (the situation when each couple exactly replaces itself) which in the

Fig 7
AGE SPECIFIC FERTILITY RATES, 1981 AND 1984



Source: Demographic Analysis Section, Department of Statistics, Christchurch.

longer run would produce zero growth, could be reached with only minor changes in reproductive patterns affecting the key ages for non-Maoris (25-29 years and 30-34 years). Secondly, the radical changes in Maori fertility in recent years have affected significantly the number of births that are Maori. In 1984 14 per cent of births registered in New Zealand were Maori. By 1991 it is estimated that this proportion would be between 12 and 15 per cent of all births. Some of the policy implications of these scenarios are discussed in the next section of the report. The issue of Maori demographic trends is to be discussed at greater length in a report to be published by the Population Monitoring Group in 1986.

c) Abortion

Because of continuing public interest in abortion it is necessary to report on some findings in a recent study which shows that New Zealand has one of the lowest levels of legal abortion among those countries with adequate data (Sceats, 1985). Given that rates are currently so low (a total abortion rate of 0.26 abortions per woman compared to a total fertility rate of 1.93), it can be stated that abortion has very little demographic impact in New Zealand. Moreover, by indirect estimation it has been demonstrated by Sceats (1985) that abortion has played an insignificant role in changes in ex-nuptial conception patterns, adoption levels and the general decline in fertility over the past decade.

Sceats has also reviewed crime, hospital, health and mortality data in New Zealand and she finds no evidence for any significant number of abortions occurring outside the legal abortion services. Analysis of the international migration data revealed that the movement to Australia to have an abortion, which was common in 1978 and 1979, has virtually stopped. Notification data and a national survey of abortion patients reveal no marked socio-economic differentials in access to or progress through to an abortion. All the evidence points to a high level of contraceptive efficacy.

Nevertheless, the Sceats report does identify a number of unsatisfactory aspects of the present situation with regard to abortion. In the first place, teenage fertility levels in New Zealand are considerably higher than in the Netherlands and Scandinavia but much lower than in the United States. Thus known teenage pregnancy rates in New Zealand are around 44 births per 1000 women aged 15 to 19 years compared with 14 per 1000 in the Netherlands, 35 per 1000 in Sweden and 96 per 1000 in the United States (Jones et al, 1985). In the case of teenage abortion rates, New Zealand has lower levels than found in Scandinavia or the United States, but much higher rates than the Netherlands (Table 2). At the youngest ages (below 15) there has been little change in conception rates in New Zealand, even though there has been a decline in fertility at older ages. This indicates that abortion does play a role in reducing the number of live births to this high risk age group. At older ages among teenagers in New Zealand, known conception rates have declined markedly.

A second finding is that Maori total abortion rates at all ages are 24 per cent higher than those for Europeans, while rates for the Pacific Island Polynesians are double those for Maori women. The relevant rates for the year ended December 1983 were: European 0.25; Maori 0.33 and Pacific Island Polynesian 0.65. These are all below the level (0.78) reported for the United States in 1980.

Finally, from indirect estimates it can be inferred that there may be regional differences in access to abortion services, with some South Island regions and the East Coast perhaps being less well served than other areas. On the other hand there is no evidence from these estimates of excessive use of facilities in Auckland and Wellington, the areas with the only out-patient clinics, and the ethnic differences in total abortion rates are not explained by differential access to or progress through abortion services (Sceats, 1985).

**Table 2:
Teenage Abortion and Fertility Rates
New Zealand and Other Developed Countries Around 1980**

Country	Abortion rate ^a	Total Fertility Rate	
		Early Teenage 14-17 years	Total Teenage 14-19 years
New Zealand (1980)	12.1	0.063	0.192
Denmark (1980)	20.9	0.016	0.084
Netherlands (1979)	4.6	0.010	0.046
Norway (1980/81)	23.3	0.029	0.128
Sweden (1980/81)	20.9	0.015	0.083
USA (1980)	44.4	0.101	0.266

a Age specific abortion rates per 1000 female population, from Sceats (1985) and Tietze (1983). Early teenage and teenage total fertility rates per woman, from Sceats (1985) and Westoff (1982).

Mortality

a) Life expectancy trends

There has been a continued reduction in levels of mortality in New Zealand since the mid-1970s. This is reflected in the life expectancy values for both males and females contained in Table 3. Between 1975-77 and 1984 the male expectation of life increased by 2.2 years compared with an increase of only 0.8 years between 1965-67 and 1975-77, and no improvement between 1955-57 and 1965-67. The rate of improvement in female life expectancy has also accelerated significantly over the past 10 years.

A major part (roughly three-fifths) of this mortality decline has occurred at the retirement ages. For example, between 1975-77 and 1984 the female life expectancy at birth increased by 2.22 years. Of this 1.43 years were gained through a decline in mortality at ages 55 years and over. On the other hand, whereas the reduction in child mortality (below 5 years) contributed 0.5 years or more to the overall increase in life expectancy at birth between 1955-57 and 1965-67, this has dropped to 0.3 years in the latest interval.

Table 3 also indicates a widening of the male-female differential in mortality between the mid-1950s and the mid-1970s. This was largely because of a deterioration in male survivorship between 1955-57 and 1965-67, and the greater improvement in female survivorship in the subsequent decade. The difference between the male and female expectation of life at birth increased from 4.80 years in 1955-57 to 6.11 years in 1965-67 and to 6.44 years in 1975-77. It has varied little in recent years.

The overall improvements in life expectancy discussed above are gratifying. But it must be borne in mind that New Zealand, once a leader among countries in terms of its non-Maori patterns of life expectancy, has lost this position by deviating from international trends. Thus, the recent improvements in adult survivorship have come later than they did in northwestern Europe. The experience there suggests that after a period of accelerated improvement there could be a deceleration.

b) Infant mortality

Above all else, New Zealand has failed to maintain the position it formerly held as the country

with the lowest infant mortality (at least for non-Maoris), although the patterns at this age are complex. While decreases in perinatal (around birth) and neonatal (new birth) mortality in recent years in New Zealand have been encouraging, the record in post-neonatal mortality (deaths to infants aged 1 to 11 months) can only be termed abysmal. The rate (per 1,000 live births) has actually increased from 6.0 in 1981 to 7.1 in 1984.

The situation is, however, worse than these rates might imply. In the first place they are for the total population and the Maori rate (11.7 in 1982) is more than twice as high as that for the non-Maori (5.7 in 1982). Secondly, even the non-Maori rate is twice that found in northwestern European countries in the 1980s despite the fact that in the 1950s the rates were roughly the same (around 6.0 deaths per 1,000 live births). Whereas the Scandinavians and the Dutch have halved their post-neonatal mortality rates, the non-Maori rate has remained at almost the same level for 30 years. Even though Maori post-neonatal rates decreased dramatically from the mid 1950s, over the past few years there has been a tendency for the rate to start rising again.

These issues have been highlighted in a recent detailed age-specific analysis of ethnic differentials in post-neonatal mortality using life table techniques (Sceats, 1984). Here causes of infant mortality were divided into two categories: those which are endogenous to conception, gestation and maternal health, and those which are exogenous. The results show:

Most notably that there has been a shifting of the force of mortality away from the perinatal and neonatal ages and into the post-neonatal period ... For non-Maori infants ... there has been a steady increase in the probabilities of dying during the early to mid post-neonatal ages ... Moreover, for non-Maoris post-neonatal endogenous mortality decreased in significance between 1963 and 1978, and a similar but less pronounced trend was apparent for Maori infants. Thus, the shift in the force of mortality into the post-neonatal period appears to be associated with increased risk of death from exogenous causes, particularly in the early to mid post-neonatal ages (Sceats, 1984, 16).

Age-Sex Structure

The age-sex structure of a population is determined by the interaction of the three demographic processes: fertility, mortality and migration. In Figure 8, which shows the proportions of the Maori and non-Maori populations in each five year age group in 1981 and 1985, the effects of recent declines in fertility are most noticeable. This is because any change in birth rates has a direct immediate impact only on numbers at age zero in the population pyramid. Changes in mortality and migration are spread over all age groups and their

impact on population structure is not so evident in the shape of the pyramid.

a) Maori population structure

The age-sex structure of the Maori population has changed dramatically (Figure 8a). The base of the pyramid is contracting rapidly as a result of declining fertility, and the proportion of people in the working age groups is increasing as the proportions of young children get smaller. In most age groups where a decline in the proportion of the total between the census in 1981 and the Department of Statistics' estimate in 1985 is shown there were actually fewer people present in March 1985. Similarly where proportions of the total in particular age groups had increased by 1985 the converse was true — there were more people than in 1981. The relationship between changes in actual numbers and proportions in particular age groups in a population is not necessarily a direct one. In the case of Maoris aged 15-19 years, for example, there were more males and females in the estimated age-sex distribution for March 1985 than were present in 1981 despite the small decline in proportions at this age in 1985.

The evolving age-sex structure for the Maori population suggests that important policy issues into the 1990s will be providing satisfying work and recreation opportunities for teenagers and young adults. The proportion of the total Maori population aged between 10 and 29 years (45 per cent) is very high. This "bulge" in the pyramid will move progressively up through the age groups causing unusually heavy short-term economic and social demands among this population subgroup if fertility continues to decline or remains at a much lower level than it was in the past.

Questions of Maori population growth, the proportion of the total population which is Maori, and the age-sex structure of this component population are being analysed by the Population Monitoring Group as part of its reporting programme for 1986. As was noted by the Population Monitoring Group (1984, 44): "If the Maori birth rate continues to decline gradually, Maoris will constitute 10.8 per cent of the population in 1996, as opposed to 8.8 per cent in 1981. If present Maori fertility patterns are maintained, the proportion will be marginally higher in 1996, say 11.3 per cent". These are much smaller proportions than those sometimes suggested publicly. Against this, of course, other factors must be recognised. In the first place, the proportion of the population which is Maori will be much higher in certain parts of the country compared with others. Secondly, the proportion that is Polynesian (Maori plus Pacific Island Polynesian) will also be higher, especially in parts of the North Island. Thirdly, the estimates above do not take into account the Maori descent population (see discussion of ethnicity below), but even when this more general definition is adopted, the proportion of the

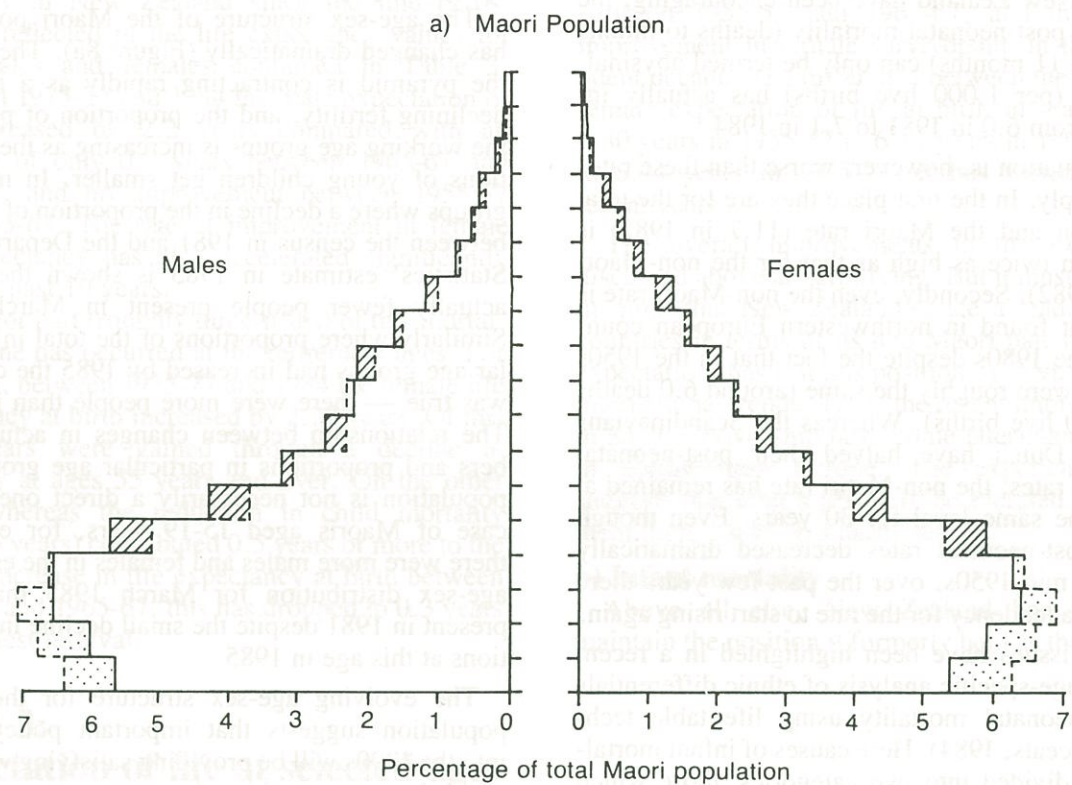
Table 3:
Expectation of life at selected ages
New Zealand Males and Females, 1955-1984

Exact Age (in yrs)	Life Expectancy				Change in Life Expectancy ^a		
	1955-57	1965-67	1975-77	1984	1955-57	1965-67	1975-77
Males							
0	68.20	68.19	69.01	71.19	-0.01	0.82	2.18
5	65.56	64.97	65.45	67.37	-0.59	0.48	1.92
15	55.95	55.28	55.73	57.58	-0.67	0.45	1.85
25	46.74	46.01	46.63	48.33	-0.73	0.62	1.70
35	37.45	36.66	37.21	38.93	-0.79	0.55	1.72
45	28.29	27.55	28.05	29.64	-0.74	0.50	1.59
55	19.93	19.31	19.77	21.06	-0.62	0.46	1.29
65	12.87	12.56	12.83	13.83	-0.31	0.27	1.00
75	7.67	7.48	7.63	8.30	-0.19	0.15	0.67
85	4.12	4.15	3.93	4.58	0.03	-0.22	0.65
Females							
0	73.00	74.30	75.45	77.67	1.30	1.15	2.22
5	69.96	70.76	71.62	73.54	0.80	0.86	1.92
15	60.24	60.96	61.83	63.69	0.72	0.87	1.86
25	50.60	51.24	52.18	54.02	0.64	0.94	1.84
35	41.02	41.62	42.55	44.34	0.60	0.93	1.79
45	31.76	32.31	33.24	34.83	0.55	0.93	1.59
55	23.12	23.63	24.51	25.94	0.51	0.88	1.43
65	15.30	15.81	16.60	17.86	0.51	0.79	1.26
75	8.91	9.28	9.94	11.08	0.37	0.66	1.14
85	4.56	4.69	5.04	6.17	0.13	0.35	1.13

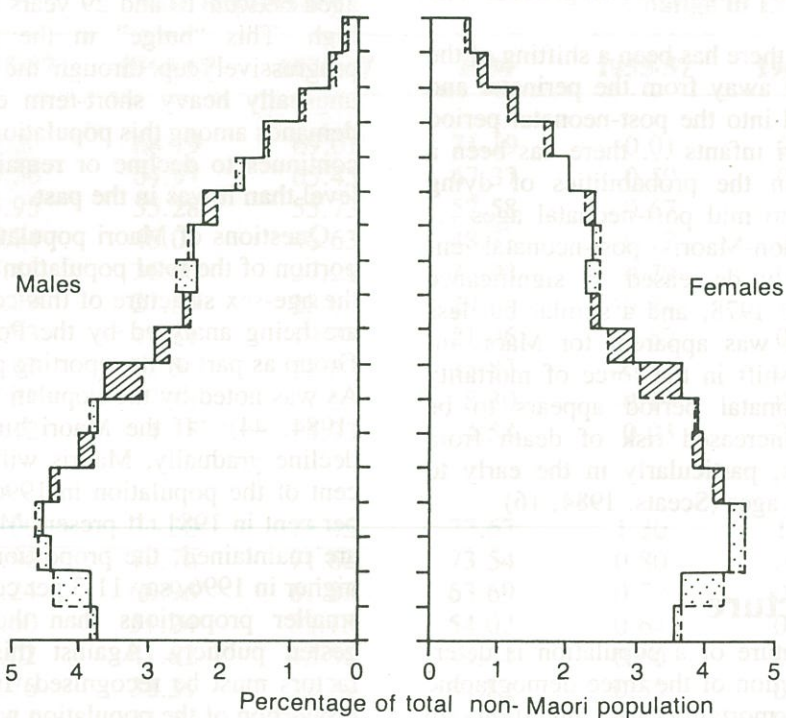
a A Minus (-) sign indicates a decrease in life expectancy.

Source: Demographic Analysis Section, Department of Statistics, Christchurch.

Fig 8
AGE-SEX STRUCTURE, 1981 AND 1985



b) Non-Maori Population



— Estimated de facto population, 31 March 1985
 - - - Enumerated de facto population, 24 March 1981

▤ Decline in proportion of population 1981-85

▨ Increase in proportion of population 1981-85

Source: Demographic Analysis Section, Department of Statistics, Christchurch.

total population that is likely to be Maori in 1996 will be in the region of 12 to 15 per cent.

b) Non-Maori population structure

The non-Maori population has a structure different from that of the Maori (Figure 8b). In this case the major changes since 1981 have been in the proportions aged 5-9 years and those aged between 35 and 44 years. The former is partly a function of the much smaller proportional decline in the youngest age group (0-4 years) since 1981 than occurred between 1976 and 1981. In fact, according to the estimates of age structure for March 1985, there are larger numbers of non-Maori boys and girls aged 0-4 years (220,390) than were enumerated in the 1981 census (217,338). In contrast in 1985 the numbers aged 5-9, 10-14 and 15-19 were all less than those enumerated in 1981.

The significantly larger proportions aged 35-39 and 40-44 in March 1985 represent the survivors of those born between 1941 and 1951, a period which spans the early years of the post-war baby boom. This "bulge" is causing, amongst other things, a host of employment-related problems, both for the middle aged and for their younger colleagues in the workplace. Harris (1982, 11) a former Government Statistician, captured the essence of these when he wrote:

Particularly up to the beginning of the 21st century all age groups up to the late 50s will be filled by survivors from previously high birth numbers. Industry and the Government will have a particularly hard problem to solve in the context of the changing proportions in the labour

force ages after the many years when the young ages predominated, and surpluses in these young age groups migrated to Australia and elsewhere, depending on relative economic conditions. Future years may well see shortages in the ranks of beginners and intermediate levels of employment, over-supply of middle management, and adequate senior and top management personnel.

c) The elderly

A development which is evident in pyramids for both Maori and non-Maori populations is the gradual increase in proportions aged 60 years and over, especially of women (Figure 8). The numerical significance of this process of ageing, which is discussed in Population Monitoring Group (1984, 22-25), is disguised in pyramids which represent the population structure in proportional terms and have pronounced bulges at younger ages. Even though the absolute numbers of elderly people remain small in relation to the total population (less than 10 per cent of the New Zealand population is 60 years or older), certain age groups have increased substantially in size in recent years (Table 4). Since 1976 the population aged between 70 and 89 years has increased by 30 per cent, while the number of females aged 90 and over has risen by more than 50 per cent. Given that the very old usually require considerable medical and welfare assistance, these demographic developments have important policy implications. The Social Monitoring Group, in its report *From Birth to Death*, has discussed this matter at some length.

Table 4:
Changes in the Elderly Population, 1976-1985

Age Group	1976	1981	1985	Percentage Change	
				1976-85	1981-85
Males					
60-69	110729	114366	120770	9.1	5.6
70-79	53768	63063	69910	30.0	10.9
80-89	13858	15504	18240	31.6	17.7
90+	1561	1650	1650	5.7	0.0
Total 60+	179916	194583	210570	17.0	8.2
Females					
60-69	122947	130533	135630	10.3	3.9
70-79	72165	83943	93440	29.5	11.3
80-89	27916	31863	36760	31.7	15.4
90+	3736	4872	5670	51.8	16.4
Total 60+	226764	251211	271500	19.7	8.1

Sources: Department of Statistics, *New Zealand Census of Population and Dwellings*, 1976 and 1981, Vol. 2.

Department of Statistics, estimated age distribution of New Zealand population as at 31/03/85. Forthcoming in the Monthly Abstract of Statistics.

The Labour Force

Due to conceptual and statistical problems it is difficult to monitor closely short-term changes in the size and composition of the labour force. The problems, elaborated in previous Population Monitoring Group reports, include choice of a definition of work, the distinction between part-time and full-time work and measurement of unemployment. In addition there is no adequate continuous data series which provides information on the supply side of the labour market. The quarterly labour force survey, which commenced in October 1985, will provide useful up-to-date information, but until the results become available the labour force can only be monitored indirectly. This is achieved by using estimates produced by the Department of Labour which are derived from monthly records of registered unemployment and assisted employment, and from the Quarterly Employment Survey. While the translation of the information from these sources into labour force estimates involves some strong assumptions, the resulting data are useful for assessing broad quantitative and qualitative changes in the supply of labour in the economy.

a) Labour force dynamics

Estimates of the size of the labour force or the level of unemployment at a particular time do not capture the intricate dynamics of the labour market. The stock of workers is being continually adjusted

by flows in and out of the labour force and research suggests that the number of persons working at some time during a given year may be 25 per cent higher than a count of the labour force on a particular day. Flows in and out of unemployment are also important and the proportion of the labour force that is out of work can reflect both changes in the duration of unemployment as well as in the number of persons experiencing unemployment.

During the year ended March 1985 the New Zealand economy experienced substantial economic growth. Real Gross Domestic Product grew by about 7 per cent over the twelve months, and this was reflected in considerable growth in employment opportunities and a decline in the level of unemployment (Table 5). Approximately 39,700 jobs were created and this was almost twice the growth in employment during the brief economic upturn in the year ended March 1982. Assuming that 84 per cent of the unemployed register as such (the penetration or coverage rate used by the Department of Labour) the decline in levels of registered and unregistered unemployment may have been as high as 20,200 between 1 April 1984 and 31 March 1985. It should be noted, however, that the penetration rate has a cyclical component since it is likely that in buoyant economic conditions fewer job seekers register as unemployed. This implies that the decline in total unemployment may have been lower than that indicated in Table 5.

The increase in employment and the decrease in

unemployment resulted in growth in the labour force (all people working and seeking work) by 19,500 in the year ended March 1985. This rise in the supply of labour can be decomposed into three types of flow. The first of these is natural increase, the result of growth in the population of working age whereby the numbers entering the labour force exceed those retiring from it. In 1985 there was a net gain of 21,300 to the labour force due to natural increase, an increment which has been relatively stable since 1977 (Table 5).

The second cause of labour force change, external migration, has been very volatile in recent years. Substantial net losses of economically active migrants during the late 1970s were followed by some net gains during the early 1980s. Since the middle of 1984 the migration balance turned negative yet again resulting in a net loss to the New Zealand labour force of 5,500 workers. Trans-Tasman flows account for approximately half of New Zealand's external migration and are consequently a significant contributor to fluctuations in the New Zealand labour force caused by net migration.

The third component of labour supply is participation rate changes. These are estimated as a residual such that the total change in labour supply equals the sum of changes in employment and unemployment (Table 5). Participation rate

changes have fluctuated markedly since 1977 and in 1985 the residual was 3,700 after accounting for natural increase and external migration. Explanations for this increase in participation rates are that the previously discouraged workers have been able to obtain jobs in the more buoyant economic climate and that the female labour force has increased. A further possibility is that there has been some delayed retirement from the work force. Hence growth in the demand for labour is only partly met by unemployed workers filling vacancies.

b) Unemployment

Reports of persistent skills shortages in the workforce are further evidence that the core of the unemployment problem in New Zealand is structural rather than due to demand deficiency in the economy. There is little doubt, however, that economic growth during the year ended March 1985 had a major impact on unemployment levels. The number of long-term registered unemployed (registered from 26 weeks or more) declined markedly in comparison with the situation in the year ended March 1984 (Table 6). In June 1984 11,260 persons (17.3 per cent of the total on the register) were long-term unemployed. By June 1985 this number had fallen to 6,504 or 13.5 per cent of the registered unemployed. The proportion of unemployed registered for four weeks or less

Table 5:
Changes in the Labour Force Employment and Unemployment (000's)

Components of Change	Year ended 31 March									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 ^a
a) Changes in people seeking work										
Natural increase	23.4	23.1	22.6	21.0	19.6	21.1	21.2	21.6	21.3	20.1
Net migration ^b	-10.9	-12.8	-14.8	-13.2	0.2	-3.6	9.8	4.3	-5.5	-15.0
Participation change	2.8	-6.5	10.8	14.1	-6.0	2.1	-18.2	-15.0	3.7	9.8
Total	15.3	3.8	18.6	21.9	13.8	19.6	12.8	10.9	19.5	14.9
b) Changes in available work and unemployment										
Employment	14.3	-3.0	13.2	16.8	-2.5	21.0	-14.9	15.3	39.7	10.0
Registered unemployment	-0.9	15.7	3.9	5.3	18.5	-0.5	25.8	-4.5	-17.4	4.0
Unregistered unemployment	1.9	-8.9	1.5	-0.2	-2.2	-0.9	1.9	0.1	-2.8	0.9
Total	15.3	3.8	18.6	21.9	13.8	19.6	12.8	10.9	19.5	14.9

a Forecast

b Net migration of actively engaged.

Source: Department of Labour

Table 6:
Size and Composition of Registered Unemployment by Age Group and Duration, 1984-85

	June 1984		June 1985		Percent Change in number unemployed 1984-85
	Number unemployed	Percent females	Number unemployed	Percent females	
Age group					
School leavers	5,395	56.9	3,319	55.0	-38.5
15-19	15,103	48.6	11,202	49.4	-25.8
20-24	17,482	36.0	13,130	36.2	-24.9
25-29	9,282	26.1	7,119	27.4	-23.3
30-39	9,211	26.5	6,925	28.3	-24.8
40-59	8,400	29.7	6,363	32.0	-24.3
60+	182	17.0	81	13.6	-55.5
Total	65,055	37.0	48,139	37.5	-26.0
Duration (weeks)		Percent of total		Percent of total	
4 or less	19,592	30.1	15,343	31.9	-21.7
5-8	12,929	19.9	9,683	20.1	-25.1
9-13	8,712	13.4	7,258	15.1	-16.7
14-26	12,562	19.3	9,351	19.4	-25.6
Over 26	11,260	17.3	6,504	13.5	-42.2
Total	65,055	100.0	48,139	100.0	-26.0

Source: Department of Labour

increased somewhat to 31.9 per cent of the register, largely as a result of an increase in job turnover resulting from the upswing in the economy. It is also evident from Table 6 that the fall in levels of unemployment during the past year has been spread fairly evenly over all age groups with somewhat larger declines in unemployed school leavers and the small number of registered unemployed aged 60 years and over. The decline in number of unemployed school leavers is particularly encouraging. Several recent reports have alerted policy makers to the need for innovative strategies to assist the transition of young people from school to working life (see, for example, Catherwood, 1985 and Social Monitoring Group, 1985).

With respect to the ethnic dimension to unemployment, it is well known that both Maoris and Pacific Island Polynesians are in a disadvantaged labour market position in the New Zealand economy and have, consequently, a higher propensity to unemployment. At the time of the 1981 census, for example, the Maori female unemployment rate was four times that for non-Maori females. The Pacific Island Polynesian female unemployment rate was twice that for non-Polynesian females in the same year. Hardest hit by unemployment in the early 1980s were Maori teenagers aged 15-19. Their unemployment rate was 41.3 per cent in 1981. Unfortunately there are no data available to assess whether Maoris or Pacific Island Polynesians have benefitted much from the recent increase in employment. Given the structural conditions influencing their role in the labour market an equitable sharing of benefits is highly unlikely, especially when much of the increase in demand for labour has been in skilled occupation categories.

c) Future prospects

A detailed discussion of factors likely to affect changes in the size of the labour market and the composition of employment is beyond the scope of this report, but a forecast of changes in the labour market during the year ended March 1986 is contained in Table 5. It is generally expected that economic growth will not be as rapid as it was in the previous year. One effect of these developments is expected to be a reduction in the growth of new jobs to around 10,000. The extent to which this translates into increased levels of unemployment depends in particular on further changes in labour force participation and trends in external migration.

The rate of decline in levels of unemployment has slowed since March 1985 and the Labour Department's forecast for the year ended March 1986 includes an increase in the number of registered unemployed by 4,000 and unregistered unemployed by 900. The impact of international migration on these estimates is difficult to forecast especially since the volume and duration of recent net emigration is heavily influenced by comparative

economic advantages of workers in the New Zealand and Australian labour markets. Of considerable significance in this regard in the next 12 months is whether the combination of income tax cuts and the Goods and Services Tax will permit sizeable increases in disposable real income in New Zealand relative to Australia. In the estimates used in Table 5 net emigration of 15,000 is forecast for the year ended March 1986. This, together with an increase in the workforce of 20,100 due to natural increase, and another 9,800 as a result of further changes in participation, would lead to growth in the labour force of 14,900.

Ethnic Composition

Maori and non-Maori population trends have been discussed earlier in this section. New Zealand is, however, more varied culturally than this broad division into two sub-groups would suggest. Of the 3,175,737 people enumerated in New Zealand in 1981, 86 per cent were of European ethnic origin, 9 per cent were Maori, 3 per cent were Pacific Island Polynesian, 1 per cent were other non-Europeans (mainly Asians and Melanesians) and 1 per cent did not specify their ethnicity. Since 1979 the refugee intake has been considerable by New Zealand, and, in relative terms, by overseas standards.

a) Europeans and Maoris

Non-Maori population trends are dominated by patterns characteristic of the European majority. The European population remains mainly composed of people from or with ancestors from the British Isles. Other significant groups are the Dutch and Yugoslavs. There are no data available in New Zealand, however, to assess the relative significance of different ethnic groups among the Europeans. It is only on the basis of birthplace that some information on the ethnic composition of this population component can be obtained. At the time of the 1981 census 250,644 people born in the United Kingdom (9.3 per cent of all Europeans) were usually resident in New Zealand compared with 21,024 born in the Netherlands, 6,954 born in Ireland and 3,054 born in Yugoslavia.

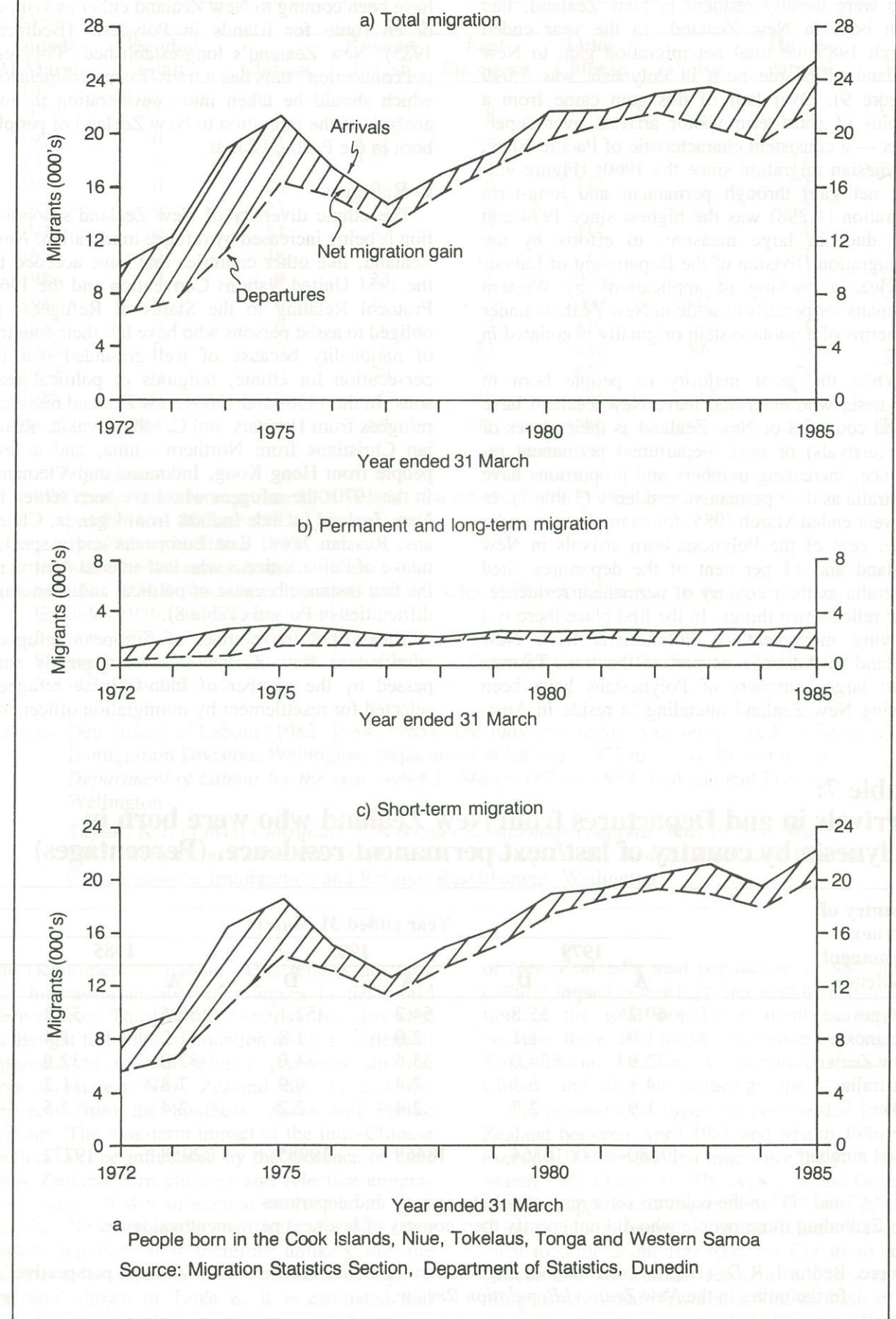
The population defined as "half or more" New Zealand Maori was estimated by the Department of Statistics to comprise around 9 per cent of the national total in March 1985, although it is widely acknowledged that the population identifying itself as "Maori" by cultural and ancestral affiliations is much larger. At the time of the census in 1981 279,252 Maoris were identified using the "half or more" criterion while 385,524 declared they were of Maori descent.

b) Pacific Island Polynesians

The Pacific Island Polynesian population continues to increase as a result of net immigration, although natural increase in New Zealand among the resident Cook Island Maoris, Niueans, Tokelau-

Fig 9

ARRIVALS, DEPARTURES AND NET MIGRATION OF PEOPLE BORN IN POLYNESIA^a: 1 APRIL 1971- 31 MARCH 1985



ans, Tongans and Samoans currently contributes most of the annual growth. At the time of the census in 1981, 45 per cent of the 88,824 people who classed themselves as being Pacific Island Polynesian (including those of mixed race), and who were usually resident in New Zealand, had been born in New Zealand. In the year ended March 1985 the total net migration gain to New Zealand of people born in Polynesia was 3,099 (Figure 9). Over half of this gain came from a surplus of short-term visitor arrivals over departures — a consistent characteristic of Pacific Island Polynesian migration since the 1960s (Figure 9c). The net gain through permanent and long-term migration (1,298) was the highest since 1974 and was due, in large measure, to efforts by the Immigration Division of the Department of Labour to clear a backlog of applications by Western Samoans for permits to settle in New Zealand under the terms of a quota system originally negotiated in 1962.

While the great majority of people born in Polynesia who enter and leave New Zealand have island countries or New Zealand as their places of last (arrivals) or next (departures) permanent residence, increasing numbers and proportions have Australia as their permanent residence (Table 7). In the year ended March 1985, for example, just under 8 per cent of the Polynesia-born arrivals in New Zealand and 11 per cent of the departures cited Australia as their country of permanent residence. This reflects two things. In the first place there is a growing movement of Polynesians from New Zealand to Australia as part of the trans-Tasman flow; larger numbers of Polynesians have been leaving New Zealand intending to reside in Aust-

ralia than arriving from Australia to settle in New Zealand (Table 7). Secondly there is movement into New Zealand of Polynesians (especially Tongans and Western Samoans) who had moved directly from the islands to Australia. Most of these people have been coming to New Zealand either as visitors or en route for islands in Polynesia (Bedford, 1985). New Zealand's long-established "Polynesian connection" thus has a trans-Tasman dimension which should be taken into consideration in any analysis of the migration to New Zealand of people born in the Pacific Islands.

c) Refugees

The ethnic diversity of New Zealand's population is being increased by refugee immigration. New Zealand, like other countries that have acceded to the 1951 United Nations Convention and the 1967 Protocol Relating to the Status of Refugees, is obliged to assist persons who have left their country of nationality because of well-grounded fear of persecution for ethnic, religious or political reasons. In the 1950s and 1960s New Zealand resettled refugees from Hungary and Czechoslovakia, Russian Christians from Northern China, and a few people from Hong Kong, Indonesia and Vietnam. In the 1970s the refugees who have been settled in New Zealand include Indians from Uganda, Chileans, Russian Jews, East Europeans and a special intake of Polish citizens who had entered Austria in the first instance because of political and economic difficulties in Poland (Table 8).

Since 1978 the number of European refugees admitted to New Zealand has been greatly surpassed by the number of Indo-Chinese refugees selected for resettlement by immigration officers of

Table 7:
Arrivals in and Departures from New Zealand who were born in Polynesia by country of last/next permanent residence. (Percentages)

Country of last/next permanent residence	Year ended 31 March ^a					
	1979		1982		1985	
	A	D	A	D	A	D
Polynesia	60.2	55.8	54.7	52.1	56.5	52.2
Melanesia	1.0	1.1	2.0	1.8	1.2	1.4
New Zealand	32.9	34.0	33.6	34.0	32.0	32.8
Australia	4.1	6.4	7.4	9.9	7.8	11.2
Other	1.9	2.7	2.4	2.2	2.4	2.5
Total number ^b	17580	16364	18468	19985	22058	19772

a "A" and "D" in the columns refer respectively to arrivals and departures

b Excluding those people who did not specify their country of last/next permanent residence

Source: Bedford, R.D. (1985), "International migration in the South Pacific: a New Zealand perspective", forthcoming in the *New Zealand Population Review*.

Table 8:
Refugee Immigration by Current Programme and Special Intake, 1972-1985

Year ended 31 March	Number resettled							Total
	Group							
	Ugandan Asian	Chilean	Russian Jewish	East European	Indo-Chinese	Polish	Handi-capped	
1972	{ 244							{ 252
1973					8			
1974	0	51	{ 25	18				69 ^c
1975	0	52		14				11
1976	0	26	62	9	{ 112		2	99 ^g
1977	0	123	15	4				12
1978	0	54	37	2	412		4	509
1979	0	48	70	17	11		7	153
1980	0	0	32	1	1056 ^a		0	1089 ⁱ
1981	0	0	17	2	2000 ^b	102	2	2123 ⁱ
1982	0	0	0	33	810 ^c	94	4	941 ⁱ
1983	0	0	0	53	481 ^d	96	0	630 ⁱ
1984	0	0	29	74	677	0	25	805
1985	0	0	0	56	721	0	25	802
Total	244	354	287	291	6280	292	92	7840

a 1979 programme

b 1980 programme (comprising 1801 people) and arrivals up to 31 March 1981 (199)

c 1 April 1981 — 30 June 1982

d 1 July 1982 — 31 March 1983

e Excludes 1974 Russian-Jewish arrivals

f Includes 1974 Russian-Jewish arrivals and excludes 1975 Indo-Chinese arrivals

g Excludes 1976 Indo-Chinese arrivals

h Includes 1975 and 1976 Indo-Chinese arrivals

i See the footnote referred to in the Indo-Chinese column for the migration interval used for the Indo-Chinese arrivals.

Sources: Department of Labour (1982, 1984, 1985), *Acceptance of refugees as settlers in New Zealand*, Immigration Division, Wellington; Department of Labour (1972 to 1984), *Report of the Department of Labour for the year ended 31 March 1972 to 1984*, Government Printer, Wellington.

Taylor, K.J. (1981), *Consultation on refugee resettlement concerns, May 8, 1981-May 11, 1981*, Stony Point Centre, New York, U.S.A., *Country Profile, New Zealand*, Inter-Church Commission on Immigration and Refugee Resettlement, Wellington.

the Department of Labour. This reflects not only the increasing number of refugees in the world derived from Third World countries, but also what is thought to be the culmination of the resettlement approach to solving refugee problems and the special interest New Zealand has in assisting refugees from the Southeast Asian and Pacific regions. The long-term impact of the Indo-Chinese settlers will be influenced by the presence of their New Zealand born children and selective emigration. Since 1984 a substantial movement of Vietnamese New Zealanders to Australia has been widely reported. It is therefore unlikely that the number still resident in New Zealand is as high as the total shown in Table 8. It is estimated that Indo-Chinese people comprise around 0.2 per cent

of New Zealand's total population in 1985. Their cultural impact is much greater than their contribution to the total population numbers suggests because there are major differences among the Kampuchean, Laotian, Vietnamese, Vietnamese Chinese and other mixed race groups.

The number of refugees to be resettled in New Zealand between April 1985 and March 1986 will exceed 1,000 for the first time since the year ended March 1981 (Table 8). The New Zealand Government has approved a request from the Inter-Church Commission on Immigration and Refugee Resettlement to settle about 100 Assyrian Christians from Greece and 55 Russian Jews, in addition to the refugees who enter New Zealand on the basis of the on-going programmes for Indo-Chinese, Eastern

European and handicapped refugees. The Assyrian Christians are descendants of people who fled from the Ancient Assyrian Empire and settled in the mountains of what are today Iraq, Iran and Turkey.

More recently they have felt the pressures of a renascent Islam and have moved to countries like Greece and Italy to seek resettlement in places where they can maintain their religion, identity and

integrity. The Assyrian Christians who have been selected for resettlement in New Zealand have survived in Athens for as long as seven or eight years without financial assistance or political asylum. Like the Russian Jews, they have received travel loans from the Intergovernmental Committee for Migration which they are required to repay once they have obtained employment and accommodation in New Zealand.

tinued to have large shares of total growth, although these shares have decreased in comparison with the situation in the latter half of the 1970s (Table 9 and Figure 10). The sub-national population estimates by the Department of Statistics for the year ended March 1985 also indicate further absolute population decline in two metropolitan regions: Wellington and Coastal-North Otago. In Canterbury the decrease in numbers during the late 1970s seems to have been offset by a small increase between March 1981 and 1985 (Table 9). The rate of population change over this period in Canterbury is, however, well below the national average.

The sub-national estimates also indicate that there are important differences between non-metropolitan regions in rates and shares of popula-

Spatial Distribution

Population estimates since 1981 suggest that there has been a continuation of relatively rapid population growth in the Auckland, Northland and Bay of Plenty regions. These regions also con-

Table 9:
Regional Population Change, 1976-1985

Local Government Council Region	Population at 31 March 1985	Population change 1984-85	Percentage change		Share of change (%)	
			1976-81	1981-85	1976-81	1981-85
Northland	124100	2800	6.69	8.87	15.64	8.75
Auckland	892500	12000	3.95	7.79	67.90	55.78
Thames Valley	57300	900	3.06	5.44	3.48	2.56
Waikato	232300	2700	1.65	4.71	7.77	9.03
Bay of Plenty	189800	3600	7.56	10.04	26.16	14.97
Tongariro	40100	-400	2.07	0.03	1.76	0.01
East Cape	54500	300	1.57	2.26	1.78	1.04
Hawke's Bay	142900	1100	2.33	3.67	6.77	4.37
Taranaki	106700	700	-1.48	2.80	-3.37	2.51
Wanganui	68400	0	-1.38	-0.44	-2.08	-0.26
Manawatu	117100	800	2.39	3.41	5.69	3.34
Horowhenua	50900	700	2.06	3.25	2.15	1.39
Wairarapa	39000	-100	-3.22	-1.74	-2.85	-0.60
Wellington	320300	-400	-1.88	-0.89	-13.38	-2.47
North Island	2435900	24700	2.40	5.01	117.41	100.42
Marlborough ^a	37400	300	2.70	3.39	2.05	1.06
Nelson Bays	68100	600	2.46	3.29	3.41	1.87
West Coast	33800	0	-1.84	-1.11	-1.38	-0.33
Canterbury ^b	339300	900	-0.88	0.73	-6.44	2.12
Aorangi	81600	-700	-2.94	-3.74	-5.55	-2.74
Coastal N. Otago	134800	-600	-4.94	-2.43	-15.50	-2.91
Clutha-C. Otago	47800	1100	4.28	5.28	4.02	2.07
Southland	107900	0	-0.67	0.00	-1.57	0.00
South Island ^b	850200	1080	-0.97	-0.07	-17.96	-0.48
New Zealand ^c	3291300	25900	1.48	3.64	100.00	100.00

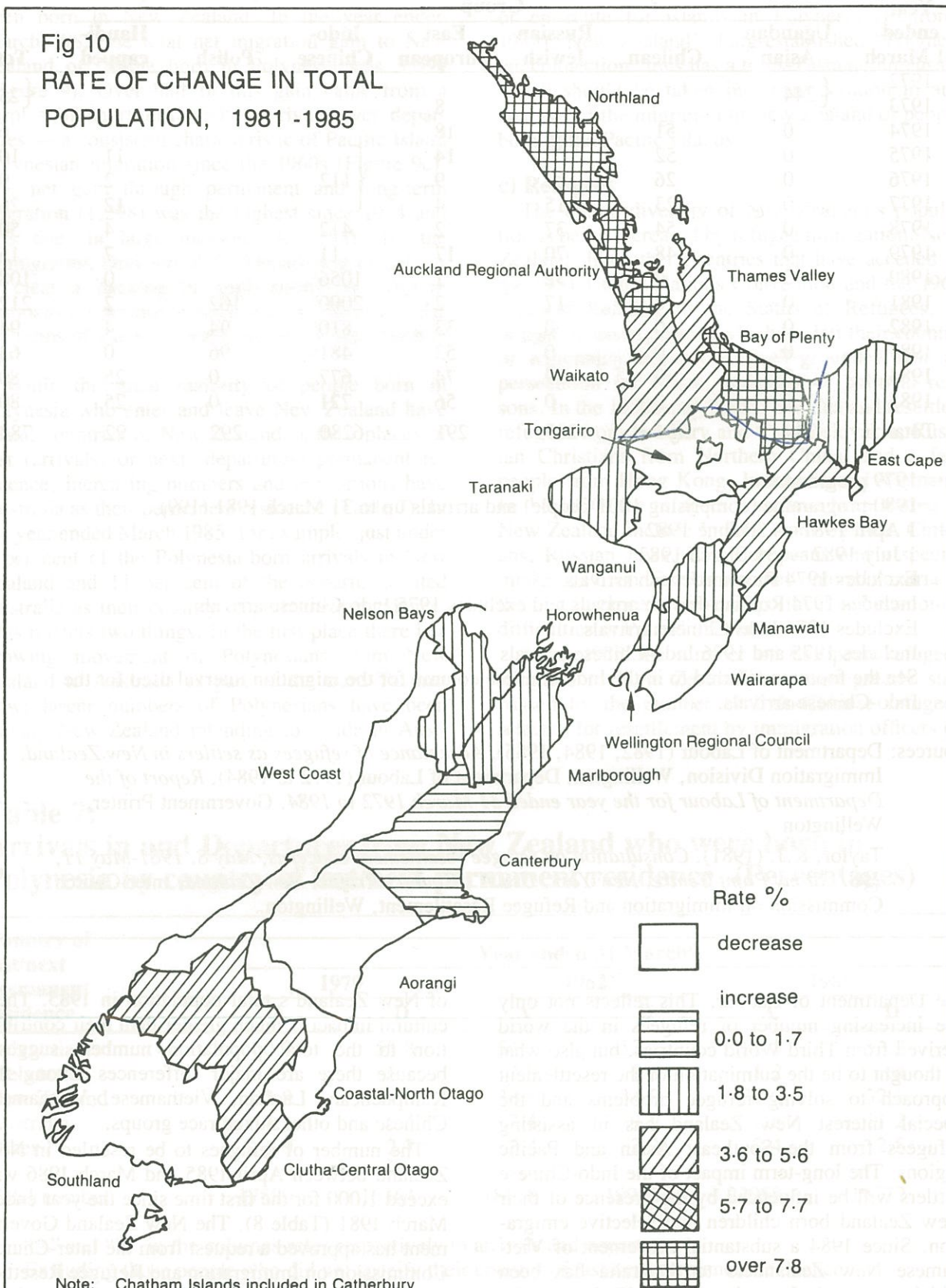
a The Marlborough population in 1981 has been adjusted to allow for movements of military personnel.

b Excluding Chatham Islands.

c The New Zealand total includes population on board ships and off-shore islands.

Source: Lowe, R.J. (1985), *Regional population and labour force change, 1981-85*, Technical Report No. 26, Town and Country Planning Directorate, Ministry of Works and Development, Wellington.

Fig 10
RATE OF CHANGE IN TOTAL POPULATION, 1981-1985



Note: Chatham Islands included in Catherbury

Source: Lowe, R. J. (1985) *Regional population, housing and labour force change, 1981-85*, Technical Report No. 26, Town and Country Planning Directorate, Ministry of Works and Development, Wellington.

tion growth. In addition to Northland and Bay of Plenty, Thames Valley, Waikato and Clutha-Central Otago have experienced above average population growth. Even though the Waikato region's rate of growth is slower, its numerical growth, and thus its share of the national total increase, is comparable to that in Northland and not far behind that in the Bay of Plenty (Table 9).

Despite the trend towards more rapid growth in the national population since 1981 compared with the situation in the previous five years, several non-metropolitan regions are estimated to have lower populations in 1985 than at the time of the last census. Tongariro, Wanganui, Wairarapa, West Coast, Aorangi and Southland regions fall into this category (Table 9). In the South Island this

leaves Clutha-Central Otago as the only region with relatively rapid population growth south of Nelson Bays and Marlborough. The largest and most rapid population decline of any of the non-metropolitan regions was in Aorangi and this reflected further reduction in the construction workforce housed at Twizel.

Estimates for March 1985 suggest that the proportion of the total population living in urban settlements of 1,000 or more people (84 per cent) has remained relatively constant since the mid 1970s. There are substantial differences in rates of rural and urban population change at the sub-national level, but for the nation as a whole the trend towards higher levels of urbanisation seems to have stopped.

Section 3

POLICY IMPLICATIONS

This section identifies some implications for policy formulation of the population trends and issues discussed in the first part of the report. It should not be assumed that the Population Monitoring Group considers that some form of direct intervention by policy makers to redirect demographic trends is necessary or desirable just because a particular trend or issue is raised here. In drawing attention to demographic implications in a policy-related context, the major objective is to encourage more informed discussion about the development of New Zealand society.

Growth

For the foreseeable future it is almost certain that New Zealand's population growth will be slow. If present trends continue the total population will not reach 4 million by the turn of the century, let alone the 5 million which has been suggested publicly at times recently. Even with net immigration of 5,000 people per year, a population of 3.75 million in 2000 will not be achieved. This projection could be invalidated by changes in fertility rates, and net immigration such as a return to the patterns of the early 1970s. For reasons referred to earlier in this report and elsewhere this is neither likely, nor particularly desirable from a planning standpoint. Even with such a change, New Zealand's total population would still be just over 4 million people.

These comments on the size of the total population obscure important compositional differences. In the first place, cohorts vary in growth rates and patterns. Overall, low growth in itself will not require policy responses which New Zealanders came to accept during the rapid growth decades from 1945 to 1975. Against this is the fact that major age-composition changes will require new and innovative policy responses. All areas of policy formulation — economic, social, cultural, public sector and private sector — will need to take cognisance of this fact over the next few years. The Department of Statistics is already preparing for this development by shifting to sophisticated cohort-component projection techniques.

A second factor is that Maori rates of population growth are higher than non-Maori growth rates. Until recently this has been almost entirely caused by natural increase. There is also a Maori net migration loss of about 0.7 per cent per annum, and this greatly reduces the overall growth rate for this component of the population from about 1.7 per cent to just over 1.0 per cent. Since the impact of

this migration loss on the Maori population needs to be monitored closely, the decision to eliminate the question on Maori/non-Maori from the international arrival and departure cards seems misplaced.

Thirdly, growth rates for Pacific Island Polynesians are still high. As noted in the previous section, natural increase is now the prime component of this growth. Net immigration to New Zealand from the Pacific Islands continues, and may become more substantial with the adoption of policies to assist nations facing serious problems in human resource planning. This matter is discussed below in the context of migration policy.

Finally, there are changes in the geographical distribution of the population. Some policy implications of these changes are discussed later in this section.

In this year's report two growth issues are addressed in greater detail. The first concerns the feasibility of achieving a substantially larger population early in the twenty-first century, while the second deals with the place of immigration policy in the wider context of population policy.

a) Towards 5 million?

As has been implied above, in order to achieve a population of 4 million by the year 2000 two growth factors (or a combination of these) would require change. Either fertility would need to increase or net immigration would have to be at much higher levels than was common through the 1960s and early 1970s. In a democratic society government intervention to influence migration trends can have limited success; interventions in the domain of reproduction, through special incentives to either increase or decrease fertility, generally have been unsuccessful whether in New Zealand or in other countries.

There would need to be radical changes in social and economic policy if fertility increased sufficiently to make a significant impact on population growth. In the first place, New Zealand would be forced to consider returning to the education work force and class size policies of the late 1960s and early 1970s. To take one example, there would be a need to recruit around 1000 teachers each year merely to cater for the primary school entrant class given a teacher/pupil ratio of 1:20. Such a process requires at least 3 to 5 years lead time for recruitment and training. Secondly, other sectors such as health (eg. maternity services) and construction

would be under severe pressure as they were during the baby boom. This would be at a time when social and economic planners are forced to give increasing recognition to problems associated with ageing and other cohort-compositional changes.

Increased net immigration as a strategy has costs as well as benefits. The benefits may come from the importation of skilled labour and "rejuvenation" of the workforce. Against this must be set costs associated with accommodating and settling spouses, children and elderly dependants. There would also be difficulties associated with assimilating migrants if significant communities of their national origin population do not already exist in New Zealand.

Further alteration in the ethnic balance between Maoris and non-Maoris would be another consequence of expanded net immigration. The Maori population can recruit only by natural increase or the return migration of Maoris overseas. Non-Maoris are recruited both by natural increase and immigration. A massive boost to the non-Maori population through immigration would inevitably reduce the proportion of the total population that is Maori.

If the attainment of a population of 4 million by the year 2000 seems unlikely, it follows that more ambitious targets such as 5 million are even more unrealistic. The achievement of a 5 million goal by the year 2000 implies a rate of growth of 2.8 per cent per annum. This annual rate is far in excess of that for more developed countries as a whole (0.6 per cent currently), the world as a whole (1.7 per cent), and any region of developing countries except Africa (3.0 per cent). The less developed countries as a whole are currently growing at 2.0 per cent per annum.

To achieve this hypothetical target net immigration might have to be as high as 100,000 per year. This can be compared with the target set in 1984 in Australia (with a population roughly five times that in New Zealand) of 84,000 net immigration a year. Even with very much higher fertility in New Zealand the level of net immigration would have to be well in excess of 60,000 per annum.

The most recent peak of arrivals in New Zealand of people intending permanent and long-term residence was in 1974 when just over 70,000 arrived. This influx produced a total net migration gain (all arrivals minus all departures) of 33,167 people. The outcry over that year's problems, when there was just over half the net migration needed to achieve a gain of over 60,000 per year, provides vivid evidence of the likely impact of migration on the host population if a 5 million goal were to be considered seriously.

b) Immigration and population policy

Immigration is obviously an important element in the consideration of population policy, but it is merely one major demographic element among a

number. There is a risk that the role it plays may be misinterpreted so that it is seen as the key determinant of population composition and dynamics. This risk is enhanced by several other factors. In the first place, in a democracy, immigration of non-citizens is really the only population process which can be altered rapidly and directly by government intervention. Obviously, health policies affect mortality but the relationships are generally less direct and changes less rapid. Immigration is also the only demographic dynamic monitored specifically by a department with the experience and infrastructure to formulate and implement policy.

In the second place, there has been a long tradition in New Zealand (as for example in Australia and Canada) of immigration policy formulation. Generally this has been to achieve essentially non-demographic goals such as providing particular skills in the workforce or "fine-tuning" of the economy. The recognition in any refined way that the structure and characteristics of migrant flows are as important as the net volume has been slow in coming in New Zealand (Farmer, 1985).

Thirdly, there is no executive central planning unit in New Zealand with the capacity or the power to integrate population into sectoral and central planning. Population issues are being recognised increasingly in sectoral planning such as energy, housing and hospital funding, but the integration of population considerations into planning is still piecemeal.

Given these considerations, there is a serious risk that population policy will not be developed in any comprehensive way in New Zealand. Instead, it is likely and natural that in the existing government structure formulation of immigration policy will tend to pre-empt the objectives of a broader population policy. In the longer term other demographic issues, such as ageing and other compositional changes, could be more critical than migration.

In the absence of a general population policy there is a risk either that immigration policy comes to be seen as population policy in itself, or that population policy is determined by migration policy. The logical sequence is that immigration policy should be a tool of economic, social, cultural and population policy; in short, migration should be seen as merely a strategy by which to achieve certain population targets, which, in turn, have been determined by the objectives of social and economic planning. The Population Monitoring Group has placed further consideration of population policy in New Zealand on its work agenda.

International Migration

The Labour Government is reviewing policy relating to all aspects of international migration, and early in 1986 a White Paper on this subject is scheduled to be released. The remarks made above

about population growth and population policy are pertinent to this review. As far as immigration policy is concerned it is likely that New Zealand's long-standing "special relationships" with Australia and selected Pacific Island countries will be preserved in any new policy statement.

a) Trans-Tasman migration

There is no reason to expect that the long-term outflow of population from New Zealand to Australia will cease in the near future. In their analysis of the pattern of net population flows between the two countries between 1947 and 1985, Brosnan and Poot (1985) demonstrated that net migration follows a cyclical pattern and that in only 5 of the 38 years did peaks of the cycles produce a positive balance in New Zealand's favour. New Zealand's total net outflow through trans-Tasman migration since 1947 is around 300,000. These losses were compensated for by population exchanges with other countries, especially in the 1950s and early 1970s. However, without a policy encouraging immigration on a large scale, this compensating effect is unlikely to be present in the future. Population projections for the next decade at least, which assume a net migration loss would appear more plausible than those that are based on the assumption of zero net migration.

While CER may have a long-term impact on economic growth in both countries, a reduction in the net transfer of population to Australia is only likely when the economic position in New Zealand is seen to be improving relative to Australia. A "freeing up" of the process of wage determination may restore some of the imbalance, but there is no strong statistical evidence that migration itself is an effective equilibrating mechanism for overcoming earnings differentials between regions or countries.

Trans-Tasman migration needs to be considered in the context of population policy in general. A first requirement is to check the causes and implications of trans-Tasman migration against specific policy objectives, and to formulate means through which these objectives can be met. The question is often asked whether immigration enhances or deters economic growth. There has been little research on this in New Zealand, but the results of a major Australian study have become available recently (Committee for Economic Development of Australia, 1985). This study concluded that an increase in the net inflow of immigrants would increase the rate of economic growth in Australia and would not exacerbate unemployment.

From the point of view of New Zealand's population growth, the model developed by Brosnan and Poot (1985) suggests at least three variables which affect migration that are amenable to policy influence. These are New Zealand's inflation rate, the rate of employment growth, and the exchange rate. It is likely that a drop in the inflation rate would reduce the outflow from New Zealand while

improving the rate of employment growth relative to Australia. An increase in the value of the New Zealand dollar (relative to the Australian dollar) would also attract more of Australia's emigrants.

b) The Pacific Islands

It is important to appreciate that policies designed to regulate the flow of people into a country from other parts of the world have implications for the migrant source areas as well as the destination. This discussion of migrant policy in relation to the Pacific Islands is biased towards consideration of the issues relevant to people resident in New Zealand, but it is recognised that international migration has profound implications for the small populations resident in the islands.

New Zealand's "special relationships" with island countries in the Pacific in so far as migration policy is concerned are well known (Bedford, 1984). Cook Islanders, Niueans and Tokelauans, as New Zealand citizens, can enter (and leave) New Zealand without restriction. A certain number of Western Samoans can settle in New Zealand under the terms of an agreement negotiated on the Independence of Western Samoa in 1962 and recently re-validated after the citizenship issue in 1982. Small numbers of Tongans and Fijians can enter under the terms of specified work permit schemes and student education programmes. A pilot work permit scheme for Tuvaluans was also initiated in the late 1970s, but, for various reasons, this has not led to a steady flow of labour from this country to New Zealand.

In the 1980s the nature of New Zealand's relations with Pacific Island countries is being debated more in the contexts of trade and national security than immigration policy. Two issues with migration policy implications that are likely to become more significant to certain Pacific Island governments are the portability of New Zealand superannuation entitlement (Niue, Cook Islands, and Western Samoa especially) and the socio-economic implications of rapid growth in the economically active population in countries with limited potential to provide paid work (Kiribati, Tuvalu and possibly Vanuatu and the Solomons).

Pacific Islanders who have worked for most of their adult lives in New Zealand with a view to retiring eventually in their island communities are not eligible to receive their superannuation entitlement unless they remain in New Zealand. To many Cook Islanders and Niueans in particular, the inability to receive their superannuation "at home" in the islands is an injustice. In the case of Niue, which has been experiencing steady absolute depopulation as a result of migration to New Zealand, any policy initiative which would make it easier for Niueans to choose to return to their island would be welcome to the island government. One such initiative by the New Zealand government would be to permit citizens to receive their superannuation in

Niue, the Cook Islands and Tokelau. Such a move would certainly strengthen the existing "special relationships" with those Pacific countries whose populations are also New Zealand citizens.

In the longer term it is likely that the New Zealand government will have to consider extending special entry provisions to the inhabitants of other Pacific Island countries. As mentioned above, this has already occurred in the case of a work permit scheme for Tuvaluans. However the provision that a guarantee of employment and accommodation has to be obtained before entry (and the job in New Zealand should have been offered to those seeking work in New Zealand in the first instance) does not assist new migration chains to develop. In the case of the Tuvaluans, there is no local community resident in New Zealand which can seek out the necessary work, or guarantee the necessary accommodation. More liberal provisions for sponsoring migration from new Pacific sources may have to be adopted in order to establish a meaningful outlet for labour.

In both Tuvalu and Kiribati the export of labour has long been one of the few options available for earning a cash income. In both countries the options for labour migration have been diminishing rather than increasing in recent years. At the same time, populations (especially the cohorts of working age) have been growing rapidly. In the second half of the 1980s less restrictive controls over entry of Pacific Islanders from certain countries without privileged access to metropolitan nations may be necessary for humanitarian reasons as well as for serving New Zealand's strategic and trading interests.

c) Refugees

New Zealand is almost unique in the international community of nations in that it can virtually plan its refugee resettlement contribution without the difficulties of coping with great numbers of people arriving at its borders applying for refugee status. Its refugee policy makers none the less face complex issues. The increasing number of refugees coming from and remaining long term in Third World countries calls for a reorientation of refugee assistance funding. Within New Zealand compassion fatigue raises questions about the role of the government and the non-governmental organisations in resettling refugees. There is an absence of research on the special problems of refugees adjusting to a new country. Policy options need to be discussed in public and the rationale underlying their selection made clear.

New Zealand has ratified the 1951 United Nations Convention and the 1967 Protocol Relating to the Status of Refugees but the Immigration Bill, which lapsed when Parliament was prorogued on 14 June 1984, had no special provisions to safeguard the rights of refugees. Serious consideration should be given to incorporating formally the international legal instruments governing the rights

of refugees and asylum-seekers into New Zealand domestic law. It seems that New Zealand's refugee status determination procedure fully complies with only one of seven minimum procedures recommended by the Executive Committee of the United Nations High Commissioner for Refugees. This needs to be remedied and information should be readily available on how an individual is recognised as a refugee. The White Paper on Immigration to be tabled in Parliament early in 1986 should enlighten the public about the government's current thinking about all aspects of immigration policy, including refugee resettlement.

The size of New Zealand's refugee resettlement programme depends on how policy makers balance humanitarian concerns and foreign policy interests with the local demands for New Zealand's public and private sector resources. A new consideration is the recommendation of refugee analysts that a larger share of the global aid for refugees be spent on promoting economic development in many countries of asylum rather than on resettlement in third countries. New Zealand's resettlement programmes will almost certainly continue to be more effective than its necessarily small contributions to refugee-related development assistance. There will always be some refugees needing resettlement in the few countries that accept refugees for permanent settlement.

The size of the intake should not be based on political considerations but on the needs of the refugees, the situation in the countries of asylum and New Zealand's capacity to provide the refugees with new life chances. It is most convenient for the reception procedures if the refugee intake is regular in size but this may not be desirable in terms of the international community's responsibility to respond quickly to refugee crises. In practice a key factor in New Zealand is the availability of sponsors who are willing to find the refugees accommodation and jobs. Consultation with all interested parties is essential when the government assesses New Zealand's absorptive capacity for refugees.

When refugee entry criteria are being considered, particular attention should be paid to the refugees whose lives are most in danger. It is often difficult to obtain reliable information on what is happening in refugee-creating states, and the emerging principles of international solidarity and equitable burden-sharing variously influence which groups of refugees are offered opportunities for resettlement. The constant need for haste in refugee decision-making extends to requests to accept neglected categories of refugees such as single people. Steps could be taken to admit student refugees under the refugee programmes of the World University Service. The special needs of refugees will be better understood if the public is well informed about new concepts such as temporary refugee status which is advanced as a means of

helping emergency situations in which large numbers of people need short term asylum.

In specifying its refugee resettlement policy, the New Zealand government ought to be seen to be fair to refugees of all origin groups. Questions such as why the government pays the travel costs of Indo-Chinese refugees while travel loan arrangements are made for most other refugees need examination and a public explanation. The humanitarian objectives of refugee resettlement require that the real implications be addressed of admitting handicapped refugees and refugees who will be incapable of adjusting to life in New Zealand quickly.

A key issue needing review is the dependence of New Zealand's refugee resettlement programme on the sponsorship arrangements made by the Inter-Church Commission on Immigration and Refugee Resettlement. In countries influenced by the British tradition of community response to community needs, voluntary agencies for a long time did everything associated with refugee resettlement. It is now often argued that the legal obligations of contracting states to the United Nations Convention and Protocol Relating to the Status of Refugees go beyond admitting people whose life and liberty are in danger. All taxpayers are seen to share the responsibility of refugee resettlement and in most Western countries such as Denmark, France, Germany, Greece and Sweden most of the money for refugee resettlement comes from the government.

In New Zealand, the influx of Indo-Chinese refugees caused the government to increase substantially its expenditure on refugee resettlement work. But the major role played by sponsors in assisting virtually all New Zealand's refugees is largely paid for by the sponsoring churches. In the mid-1980s, compassion fatigue calls for serious consideration to be given to encouraging more people to come forward as sponsors or the use of a wider range of resettlement models.

Refugee policy makers in New Zealand are greatly handicapped by the absence of research evidence for informed decision-making and resource allocation. High priority must be given to supporting research on a regular basis by independent research workers and to ensuring that its results are used effectively.

Fertility

a) Monitoring fertility trends

Fertility needs to be monitored closely for early warning signs of changing fertility levels. Even minor shifts in fertility have a considerable impact on cohort size and this affects social and educational services. Cohort-component projection techniques are used internationally as a basis for all social planning and related to this is the fact that New Zealand contributes to an international mon-

itoring study co-ordinated by the Institut National d'Etudes Demographiques in Paris.

In some European countries, such as France, sub-replacement fertility is causing popular concern and there is a demand that governments intervene to encourage higher levels. This is not an issue in New Zealand at present, but sensitive monitoring of fertility patterns and differentials is an essential ingredient of social policy analysis and formulation.

To take one case in the New Zealand context, projections refining fertility scenarios outlined in the Population Monitoring Group's 1984 report were applied to an analysis of future primary school entrants' classes (Pool and Pole, 1984b). By 1996 the difference in size of school entrant cohorts that could be produced on the one hand by an assumption that fertility continues at present levels and, on the other by an assumption that fertility recovers to replacement level, is in the order of 4000 to 6000 pupils. Assuming the teacher/pupil ratio of 1:20, which is currently advocated for new entrants classes, 200 to 300 extra teachers a year would be required (allowing for no attrition from the profession).

b) Abortion

Although abortion levels in New Zealand are very low by international standards, there is evidence that abortion patients have lower levels of contraceptive efficacy than the population as a whole (Sceats, 1985). Overseas studies especially in the Netherlands, show that the only way to reduce abortion, particularly among the young, is by improving access to and knowledge of contraception (Ketting and van Praag, 1983).

Reporting on a study by the Alan Guttmacher Institute in New York, the International Herald Tribune recently observed that "teenagers need help to avoid pregnancy and to avoid abortion. That is exactly why France, the Netherlands and Sweden have committed themselves to providing contraception services for young people". (Editorial, "Those pregnant children", International Herald Tribune, 16 March 1985).

The unacceptably high level of conception among teenagers under the age of 18 years in New Zealand, whether leading to abortion or a live birth (which is the more common outcome), is a matter of social concern for several reasons. In the first place, there are questions of health, for conception at young ages is related to high risk pregnancies and perinatal, infant and maternal health problems. Secondly, the education and welfare of these pregnant children, as well as the welfare of their babies, is an issue having profound policy implications. Thirdly, higher levels of abortion among minority women, especially Pacific Islanders as well as possible regional differentials in access to abortion services are issues of concern in abortion policy formulation.

Infant Mortality

The major policy issue relating to mortality concerns the failure to reduce post-neonatal infant mortality. Associated with this is the fact that death rates from causes which might be prevented by medical and social intervention programmes (exogenous causes) have actually increased. In this regard it must be recalled that post-neonatal infant mortality is a sensitive index not only of health administration and the efficacy of health care delivery, but also of social equity and the adequacy of social welfare programmes.

There are two possible factors producing New Zealand's high post-neonatal infant mortality. Firstly, New Zealand may be a victim of its own success in ensuring survival of premature babies. As Sceats (1984, 16) argued:

post-neonatal rates may include deaths which formerly occurred at earlier ages. In part this may be an artefact of the success of programmes of perinatal health care as a result of which infants who, in terms of duration from conception are still aged less than 40 weeks, survive into post-neonatal ages... High risk babies who live through the hazards of the perinatal period may also be more susceptible to the risks of exogenous mortality post-neonally...

Other countries have been able to reduce both perinatal and post-neonatal mortality rates. In New Zealand this will require not only better surveillance of high risk infants but the addressing of fundamental issues underlying exogenous mortality such as poor living conditions, inability to obtain appropriate medical care and inadequate parent education.

The most successful interventions to reduce Maori and non-Maori mortality this century were the primary health care campaigns of the Maori Health Division in the early 1900s and the general health programmes from 1938 to the early 1950s. In the latter case, the accent was laid on the efficient administration of early diagnosis and health care delivery, placing these processes within broader programmes of social welfare affecting housing, income and similar concerns, rather than emphasising high cost medical technology. In these community-oriented programmes key diseases such as tuberculosis were targeted (Pool, 1982). Given the significance of exogenous post-neonatal infant mortality it might be appropriate to review such a health programme embedded within broader social policy.

Age-Sex Structure

All elements of social, economic and cultural planning for the private and the public sector are affected by the passage of cohorts of different sizes through key age-groups. This issue cannot be developed fully in this report but is being looked at both at the sectoral level and more generally by the

Population Monitoring Group and by some other policy agencies (eg. the National Housing Commission; the Social Welfare Department; the Social Monitoring Group).

a) Peristalsis

The key issue is that the age-sex composition of New Zealand's population is changing through what has been termed "peristalsis", the demographic phenomenon when large and small birth cohorts successively follow one another resulting, over time, in the distending and then shrinking of particular age groups. In general the population is ageing and, as noted earlier, the number at older ages is increasing more rapidly than is the population as a whole. This issue has been highlighted not only by the Population Monitoring Group but also in the Social Monitoring Group's first report *From Birth to Death*.

There is a significant and rapid increase in numbers in the early middle ages as a result of the passage of cohorts which, in turn are followed by even larger cohorts in their thirties. The latter are being followed by the largest birth cohorts in our history, those currently 15-29 years. But below these ages cohort sizes are much smaller. For Maoris each of these trends is exaggerated and the peristalsis effect has been delayed.

For both Maoris and non-Maoris the peak-sized adolescent and young adult cohorts are currently exerting a tremendous pressure not only on services directed at these ages, but in all areas of demand (eg. for employment, tertiary education and housing for single adults), consumption patterns and tastes (eg. popular music, clothing tastes, recreation patterns) and behaviour (eg. certain categories of crime and motor accidents). This peak wave is pushing ahead of it a swell exerting significant pressures, albeit not as heavy, on services, demand, consumption and behaviour for immediately older age-groups.

b) Cohort composition

The histories of various older cohorts, particularly in the area of reproduction, have differed significantly. There is a notable difference in this regard between cohorts presently aged above or below 35-39 years which is affecting both demand and consumption. The rapid increase in the number of middle-aged couples who commenced child-bearing at young ages (early 20s) in the early 1960s, whose children are leaving home and yet who are still healthy and with adequate incomes (often dual), is such a case. In contrast, it is likely that when today's 20-29 year olds reach their "forties" far fewer proportionately will have reached the "empty-nest" phase as their child-bearing, on the average, has been at an older age (late 20s).

For both public sector and private sector planning, changes in cohort composition have serious

implications. The youngest birth cohorts are smaller than their immediate predecessors and thus will have less demand for the services created to meet the peak demands.

The Labour Force

a) Employment and unemployment

One of the major goals of economic policy is to steer the economy towards full employment. New Zealand's recent experience demonstrates that short-term upswings in the economy can generate sufficient jobs to allow a substantial drop in unemployment, but the medium and long-term prospects are unfortunately not so clear. Labour force projections published by the Department of Statistics show that, assuming medium fertility and long-term annual zero net migration, the total labour force (i.e. full-time plus part-time) may grow by as much as 250,000 people over the next ten years. This growth can be attributed largely to natural increase in the population of working ages and further increases in female full-time and part-time labour force participation.

The counteracting effect of the current levels of sub-replacement fertility may not be felt until the turn of the century, after which time little labour supply growth is expected. Hence, further increases in unemployment would seem inevitable at least in the medium term unless the economy would be able to generate a consistent growth in employment of about 1.5 per cent per annum. As was discussed in the previous Population Monitoring Group report, the feasibility of such employment growth depends largely on trends in the world economy, the effectiveness of restructuring the domestic economy and the implications of the technological revolution.

Projections of labour supply are particularly sensitive to assumptions about external migration. If external migration acts as a labour market buffer, the impact of labour supply growth on employment may be less than suggested by "supply side" projections. However, it appears that it is not the unemployed who migrate but rather that the emigration of workers who voluntarily quit their jobs feeds through the labour market.

b) Ageing

While demographic factors strongly influence the size of the labour force, the impact of such factors on the composition of the labour force, in particular with respect to age, should not be overlooked. An effective employment policy would need to take into account the impact of a changing age-distribution of the population on the composition of the labour force. The current ageing of the New Zealand population will result ultimately in inflexibility in the supply of labour with respect to required adjustments to changing needs in the economy. One reason for this is that occupational, industrial and geographic mobility are all inversely

related to age. Moreover, formal and on-the-job training take place, and appear to be most effective, at younger ages, while the number of workers in these age groups will be declining both absolutely and relatively.

A positive implication of ageing is that it may alleviate the problem of youth unemployment. However, as noted earlier in the report, unemployment is highly selective with respect to ethnic origin with Maori teenagers having a high propensity to be unemployed. Since the Maori cohorts entering labour force ages are still relatively large, the age-effect, in the short-run, cannot contribute to a decline in Maori unemployment.

It should be noted that the age distribution of the labour force is by no means identical across industries since the current age distribution of an industry's labour force is the result of the cumulative effect of expansion and contraction of the industry in the past. For example, the age group 40-55 may be overrepresented in some manufacturing industries when compared with the youthfulness of the financial and information sectors. The peristalsis effect implies that ageing of the labour force has a wider implication than an increase in the proportion of workers of, say, ages 50 and over. At the level of the individual worker, the disproportionately large number of people competing for senior positions may inhibit progress in the course of a career.

It is obvious that the changing age distribution of employment needs to be taken into account in the formulation of labour market policies, especially those relating to training. This is necessary to encourage an industry-specific age-distribution of employment which is appropriate to meet the demands in the economy for the output of the individual industries.

Ethnicity

The definition of ethnicity is problematic in a multicultural society such as that in New Zealand and the production of continuous statistical series for population sub-groups defined on this basis is becoming increasingly difficult. Early in 1986, for example, the question seeking identification of Maoris and non-Maoris on international arrival and departure cards will be removed. This will have important implications for the preparation of population estimates for the Maori population in particular, and for demographic and social analysis in New Zealand. International migration trends among the Maori population will have to be estimated in future if annual Maori figures are to be provided by the Department of Statistics.

In this context it is appropriate to refer to the *Report of the Review Committee on Fertility and Related Statistics* where it was stressed that "subject to feasibility in terms of data availability and resources, the Department of Statistics produce

national population projections for the total, Maori and Pacific Island populations" (Department of Statistics, 1985, v). Ethnic population projections were especially required in the policy formulation area, and the Review Committee believed that as much as possible should be done to satisfy requirements in this regard. In the absence of reasonably reliable continuous data on demographic events, intercensal estimates of ethnic component populations will have to be based, increasingly, on data collected in the quinquennial census.

Spatial Distribution

a) Projected regional population growth

Regional population projections covering the next 30 years, recently released by the Department of Statistics, point to a concentration of growth in the northern North Island, with relatively little growth in metropolitan Wellington and Canterbury, and very little at all in the South Island in general and the southern South Island in particular. Several regions are projected to have very little population growth in either the short-term or the long-term. They may even have less population in 30 years' time than now. Employment growth rate differences are not the sole factor in regional differences in population growth rates, but analysis of the projections indicates that they do imply markedly different regional economic growth rates roughly matching the geographic pattern of population growth rates.

These particular projections have built into them major differences in regional migration rates with high rates of net outward migration in several cases. These were incorporated principally because of the experience of the 1970s reflecting the major regional differences in economic growth rates at the time. The projection outcomes are therefore not inevitable if the factors in the changes operate differently in practice. Recent history and current trends are not necessarily reliable guides to the longer-term future.

Recent trends in sub-national economic growth indicate continuing regional differences of the order of those implicitly assumed in the Department of Statistics' projections. Nationally there has been a substantial growth of employment and reduction in unemployment after several years of slow growth or decrease in employment and the biggest and most sustained increase in unemployment for decades. Regional shares in this improvement have varied very markedly, however. All regions have had some degree of decrease in unemployment but in several there have also been decreases in employment despite the national upturn.

b) Community adjustment to slow growth

There is a need to consider the extent to which

continuing slow growth or long-term decreases in community size are a matter for public policy concern. From the point of view of equity this means that qualitative aspects of the effects of slow growth and small size on individuals and groups of people need to be considered as size and rate of change per se are not intrinsically important. At all stages of New Zealand's history an inevitable consequence of structural changes and economic growth has been communities with either relatively static populations through time or with slowly decreasing numbers.

It is highly likely that there will be much less and much slower national population growth over the next 25 years compared with the years since World War II, with a definite probability of something approaching a zero population growth state beyond that. Realistic projections suggest that regions with half or more of New Zealand's population may fall in this category more or less permanently. One consequence of such an outcome would be an accentuation of regional differences in the proportions of elderly people in the population, at a time when the elderly will be a growing proportion of the total, particularly after the turn of the century. It is not difficult to envisage ways in which this would accentuate pressures on communities. To counter-balance disadvantageous age structures it would be necessary to reduce the net out-migration of young adults from the more severely affected regions. This, in turn, implies an increase in employment growth rates in these regions.

c) Regional population policy

Dealing with issues such as those raised above requires regional policy to distinguish population and social policy and planning from economic development and economic planning, even though they are closely interconnected. To date regional policy has been treated as more or less synonymous with regional economic policy and in practice with regional development assistance even though the motives have obviously been as much social as economic. A distinctly demographic element of regional policy will need to deal with the implications of changing regional population distribution. In other words, it will comprise the regional element of national population policy rather than independent population policies for each region.

It is important to recognise that regional population and social policies may require steps in their implementation that seem to run counter to national economic policy, even though they will not necessarily involve a commitment of resources that is very significant in national economic terms. If, in this situation, national economic criteria are rigidly applied then the social element of regional policy will be pre-empted.

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