INTERNATIONAL MIGRATION AND POPULATION CHANGE IN THE 1990s: A NEW REGIME?

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Abstract

Late in 1994 the Government announced a review of immigration policy, especially the operation of the points system which was introduced in November 1991. International migration has increased rapidly since the Immigration Policy Review *in 1986, and there have been net migration gains to New Zealand's population in every year since 31 March 1990. During 1994 numbers of prospective immigrants admitted under the points system exceeded 40,000. There is an expectation that the net migration gain for the year ending 31 March 1995 could reach 30,000. This is approaching the peak annual net gains of the early 1990s. Given that there will be considerable debate about immigration if such a high net gain is recorded, it seemed appropriate to assess more closely the impact which international migration in the 1990s has had on the size and age composition of New Zealand's population. This paper presents some summary findings from this analysis with particular reference to the period 1 April 1990 and 31 March 1994.*

In November 1991 the Immigration Service of New Zealand introduced a points system as a basis for selecting immigrants. This was a significant shift in policy and it accompanied an expressed intention of the Government to increase the level of immigration. The Minister of Immigration at the time, the Hon. Bill Birch, accepted a basic premise of the Business Round Table that economic growth would be fostered by higher levels of immigration, especially immigration of people with tertiary education and/or substantial sums of money for investment in business activity.

The points system was established to select migrants with the appropriate mix of characteristics, and a target of 20,000 new immigrants per year was set. This target was sometimes referred to in terms of a net gain to the New Zealand population of 20,000 people through international migration. This is a very different sort of target, and not one which the New Zealand Immigration Service has been attempting to meet consciously. However, in the year ended March 1995 New Zealand may well have a net migration gain in excess of 20,000 for the first time since the early 1970s. During 1994 over 40,000 prospective immigrants gained sufficient points to qualify for residence in New Zealand (Labour Market Analysis Unit, Department of Labour, February 1995).

Late in 1994 the Government announced a review of immigration policy. Essentially this was to be a review of the operation of the points system with a view to fine-tuning the present policy. One of the dilemmas facing the New Zealand Immigration Service is that they have difficulty evaluating the impact which immigration under the points system has had on the size and composition of New Zealand's population, especially the labour force. Although much more information on applicants for residence in New Zealand is now captured electronically through the Resident Information Management System (RIMS), there is currently no way of monitoring when applicants actually arrive in New Zealand, or in tracking their participation in the labour market.

A new data base, Applicant Management System (AMS), is currently being developed which will enable the Service to establish when successful applicants for residence visas actually arrive in New Zealand. A considerable amount of information on migrants will be available on AMS, especially on those characteristics which are subjected to evaluation through the points system. With some judicious planning at the outset it will be possible to indirectly link aggregate data from AMS to data collected in the quinquennial census of population and dwellings. Inclusion of information on birthplace in the AMS data base would enable comparison of birthplace populations defined in both the international migration and the census data bases. This linkage was possible with the arrival and departure card data before the question on birthplace was removed from the cards in 1987 (Bedford, 1987). It is essential to plan for linkage between AMS and census data, especially if the Immigration Service and Government wish to have better information for assessing the impact which immigration policy is having on New Zealand's population.

There is a need to assess the contribution which international migration has made to population change during the 1990s, firstly, because the Government is seeking some evaluation of the points system after three years in operation and, secondly, because the points system has had the effect of changing the basis by which immigrants are

selected for residence in New Zealand. We suspect that the contribution which international migration makes to population change has shifted, partly because of the way the points system has affected patterns of immigration.

In order to assess the contribution international migration makes to population change it is necessary to use a data base which records actual arrivals and departures of both permanent migrants and short-term visitors, including New Zealanders. This is because net gains and losses through movement in and out of New Zealand have to be calculated. For this reason arrival and departure data have been used, not the information collected in the Resident Information Management System (RIMS). The RIMS data base contains information on applications for residence visas. It does not document visas for short-term stays or the movements of people who are entitled to reside in New Zealand. The movements of New Zealanders, Australians, Cook Islanders, Niueans, and Tokelauans, along with all movements of tourists, temporary work permit holders and visitors are excluded from RIMS.

The information on which this discussion is based has been drawn from a much larger data base compiled for the FRST-funded 'Demographic Crossroads Programme' which is being carried out by staff and associates of the Population Studies Centre of the University of Waikato. A description of the project and the data base can be found in Bedford, Lidgard and Young (1995). Unless otherwise stated, the figures cited below come from special tables drawn from arrival and departure data, or from annual population estimates prepared by the Population and Demography Division of the Department of Statistics. The strengths and weaknesses of these data are discussed in Bedford et al. (1995).

International migration in the 1990s

Between 1 April 1990 and 31 March 1994 approximately 7.54 million people entered New Zealand. Just under 7.50 million left during the same period giving an overall net gain for the four years of around 41,400. This is the largest net migration gain for any consecutive four years since the boom years of the early 1970s. The annual arrivals, departures and net gains since April 1990 are given in Table 1.

Table 1. International migration, 1990-1994 (000s)

Year ended 31 March	Arrivals	Departures	Net gain
1991	1772.5	1757.9	14.6
1992	1809.9	1807.0	2.9
1993	1898.8	1890.7	8.1
1994	2057.0	2041.2	15.8
Total	7538.2	7496.8	41.4

Source: Population and Demography Division, Department of Statistics

It can be seen from Table 1 that most of the net gain came in the first and last years of the period. The year ended March 1991 had the largest net migration gains of New Zealand citizens of any year since the end of the Second World War, and this contributed significantly to the overall net gain in that year (Lowe, 1991; Lidgard, 1992).

During the year ended March 1994 there was a very different situation (Table 2). There was quite extensive net emigration of New Zealanders, but this had been more than compensated for by the immigration of citizens of other countries. Indeed, the net migration gain of almost 30,000 people of other nationalities in 1993/94 was the largest in twenty years. During the four years the overall net loss of New Zealanders was just over 19,000 — less than a third of the net gain of citizens of other countries (60,700)(Table 2). This was the smallest net loss of New Zealanders for any consecutive four years since the early 1970s.

Table 2. Net migration of New Zealand citizens and others, 1990-1994 (000s)

Year ended 31 March	NZ citizens	Others	Total
1991	6.9	7.7	14.6
1992	-4.4	7.3	2.9
1993	-7.9	16.0	8.1
1994	-13.9	29.7	15.8
Total	-19.3	60.7	41.4

Source: As for Table 1

An initial distinction between New Zealand citizens and the citizens of other countries is made because net migration in most years since the early 1970s has been dominated by emigration of New Zealanders. In only 4 of the March years between 1975 and 1990 has the net gain of non-citizens more than compensated for the losses of New Zealanders (1983, 1984, 1985, and 1987). During the 1990s a combination of significant return migration of New Zealanders during the first year of the decade, low levels of net emigration of New Zealanders in the March years 1992 and 1993, and rising levels of net immigration of non-citizens, especially from 1992, produced the four consecutive years of net migration gains. In all years the net gain of non-citizens was larger than the gain or loss of New Zealand citizens (Table 2).

A second distinctive feature of international migration to and from New Zealand during the early 1990s has been the shift from non-citizen net migration gains dominated by Asian and Pacific Island nationals to gains dominated by Asian, European, Australian and African nationalities (Table 3). Indeed, there has been a net loss to New Zealand of citizens of Pacific Island countries, the first ever recorded for any four year period since immigration from the Pacific accelerated in the 1960s (Bedford, 1994).

The net gains of citizens of countries in Africa (predominantly South Africa) were the largest ever recorded, while

those from Australia and Europe were the largest for a four year period since the 1970s. As table 3 shows, the net migration gain from Asia between 1 April 1990 and 31 March 1994 (32,500) was slightly less than that for the previous four years (36,700). This is perhaps a surprising finding given the media attention to Asian immigration in recent years. The net gain of Asians in the year ended March 1994 (11,600) was virtually equalled in the year before the points system was introduced (11,500 in the year ended March 1990). A much larger net gain is, however, likely to be recorded for the 1995 March year.

Table 3. Net migration gains and losses by nationality, 1986-1994 (000s)

Nationality	1986-90	1990-94
Australia	-0.9	8.6
Pacific Islands	29.6	-2.1
Asia	36.7	32.5
Americas	-0.1	2.8
Africa/Middle East	-3.6	6.4
Europe	-8.3	12.5
Other	-5.1	0.1
Sub-total	55.7	60.7
New Zealand	-72.2	-19.3
Total	-16.5	41.4

Source: As for Table 1

A combination of the points system, the effects of economic restructuring on job opportunities for Pacific Islanders in the New Zealand economy, much lower net emigration of New Zealanders, and a rate of growth in the New Zealand economy which has exceeded that for most of the OECD countries through the first four years of the 1990s, has created a new international migration regime for New Zealand. The main sources of immigrants are different; the particular combinations of skills, qualifications and capital are different, the age and gender compositions of the migrant flows are different. It is these qualities of the contemporary international migration system which the 'Demographic Crossroads Programme' is attempting to document for New Zealand.

International migration and population change

It is well known that the New Zealand population is experiencing substantial structural change, mainly as a result of radical changes in fertility during the 1970s and the 1980s. When the gains and losses of population to particular age groups are examined using the annual estimates of total population at 31 March each year from 1990 to 1994 a 'wave' effect in the ageing of birth cohorts of varying sizes can be traced. Appreciating this ageing process in a population with a highly unstable age structure is essential when attempting to assess the impact of international migration on different age groups.

Between 1 April 1990 and 31 March 1994 the total population of New Zealand is estimated to have increased by 168,200 (Table 4). As noted earlier, the net gain from international migration during these years was 41,400 — the equivalent of around one quarter of the total population increase. The balance of 126,800 came from natural increase (including the balance of births over deaths in the immigrant population). For the first time since the early 1970s there were four consecutive years where net immigration made a positive contribution to growth, and where the rate of population growth exceeded 1.0 per cent per annum (Table 4).

Table 4. Aspects of population change, 1990-1994

Period	Population change	Net migration No.	Net migration %[a]	Rate of growth[b]
1990-91	44890	14576	32.5	1.33
1991-92	36600	2938	8.0	1.07
1992-93	39400	8080	20.5	1.14
1993-94	47320	15793	33.4	1.35
1990-94	168210	41387	24.6	1.22

[a] Percentage of population change due to net migration
[b] Annual rate of population growth (percent)

Source: As for Table 1

The contribution which international migration made to growth (or decline) in particular age groups varied markedly. A detailed analysis of the figures can be found in Bedford et al. (1995). The main trends can be summarised as follows:

i) net migration enhanced growth in the age groups 0-9, 30-39, 50-59, 65 and over;
ii) net migration dampened growth in the age groups 20-24, and 40-49;
iii) net migration dampened decline in the age groups 15-19, 25-29 and 60-64;
iv) net migration reversed a trend towards decline in the age group 10-14.

The respective numerical contributions made by population change and net migration to each five year age group are shown in Table 5. International migration added people to all age groups except the 20-24 year olds and those in their 40s. The biggest contribution by far was to the 30-34 year age group (13,300), and the second largest was to the 35-39 year population. The other substantial gains were to the children and adolescents aged between 5 and 19 years (in aggregate the 17,500 added to these age groups more than offset the overall aggregate decline in this population of -6450), and to the population aged between 60 and 69 years (Table 5).

Net migration gains were not confined mainly to the

Table 5. Population change and net migration by 5 year age groups, 1990-1994

Age group	Population change	Net migration	Effect of migration
0-4	20590	941	enhanced growth
5-9	20820	4567	enhanced growth
10-14	410	6806	reversed trend
15-19	-27680	6100	dampened decline
20-24	15570	-9339	dampened growth
25-29	-18200	4742	dampened decline
30-34	23400	13335	enhanced growth
35-39	31090	7498	enhanced growth
40-44	6780	-378	dampened growth
45-49	31630	-7162	dampened growth
50-54	24270	2067	enhanced growth
55-59	2450	404	enhanced growth
60-64	-2530	5315	dampened decline
65-69	9250	4409	enhanced growth
70-74	14030	2040	enhanced growth
75+	16330	42	enhanced growth
Total	168210	41387	enhanced growth

Source: As for Table 1

working age groups; indeed the 'core' working population aged between 20 and 49 years only grew by 8,700 as a result of international migration between 1990 and 1994 , the equivalent of 21 percent of the total net gain during the period. There were much larger gains to the youthful population (18,414 to the 0-19 year age group, or 44 percent of the total gain) and the older workforce and retired population (14,277 to the 50+ population, 34 percent of the total).

There are some interesting differences in the patterns of population change and net migration for males and females by age during the early 1990s. These are summarised in Table 6. The net migration gain of just over 24,500 males was equivalent to 28 percent of the male population change of 87,100. In the case of females, net immigration of 16,870 accounted for 21 percent of the 81,100 increase in the female population. At the younger ages (0-19) there were few differences in either the levels or directions of population change for males and females, although the magnitude of net immigration of children was higher for females. In the core workforce ages there were more substantial declines and net losses of males aged 20-29 years and increases (both in population change and net immigration) for females aged 30-39 years. In the 40s the level of population change and the net migration loss were both higher for females than for males. However, it was in the older workforce ages, 50-64 years, that the greatest differences in both levels of population change and net migration were found between males and females. There was a substantial net migration gain of 10,400 males in this broad age group, while females in the equivalent group experienced a net loss of 2,600. Not surprisingly, the overall figures for population change reflected these differences in net migration (Table 6).

Explanation for the significant differences in net migration gains and losses of males and females at older age groups is found in a combination of two factors: significant return migration of older New Zealand men in the early 1990s

Table 6. Population change and net migration by sex and broad age group, 1990-1994

Age group	Males		Females	
	Pop. change	Net migration	Pop. change	Net migration
0-9	21000	2052	20410	3456
10-19	-13540	5298	-13730	7608
20-29	-2120	-4683	-510	86
30-39	26190	9724	28300	11109
40-49	15250	-2154	23160	-5386
50-64	19540	10399	4650	-2613
65+	20780	3881	18830	2610
Total	87100	24517	81110	16870

Source: As for Table 1

Table 7. Net migration of New Zealand citizens and non-citizens, by sex and broad age group, 1990-1994

Age group	Males			Females		
	NZ citizens	Non-citizens	Total	NZ citizens	Non-citizens	Total
0-9	-2523	4575	2052	-771	4227	3456
10-19	-3330	8628	5298	-1868	9476	7608
20-29	-6937	2254	-4683	-4718	4804	86
30-39	1114	8610	9724	1652	9457	11109
40-49	-7883	5729	-2154	-3274	-2112	-5386
50-64	3825	6574	10399	683	-3296	-2613
65+	1524	2357	3881	3165	-555	2610
Total	-14210	38727	24517	-5131	22001	16870

Source: As for Table 1

while New Zealand women aged between 50 and 64 continued to experience net losses, and substantial net immigration of male non-New Zealanders in this age group while there were net losses of females (Table 7). In other words, while males in the older workforce ages experienced net gains of both citizens and non-citizens between 1990 and 1994, females experienced net losses of both of these groups. Over all ages, however, there was a much higher net loss of male New Zealanders (14,210) than female citizens (5,130) during the four years, especially those aged 20-29 years and 40-49 years (Table 7). These net losses of citizens were more than compensated for by immigration of non-New Zealanders, although the latter did not always replace the former in terms of their age composition.

The extent to which net immigration in the early 1990s has compensated for the emigration of New Zealanders is shown in Table 7. At younger ages, immigration of children greatly exceeded the emigration of youthful New Zealanders. A total net loss of 8,500 New Zealanders (both sexes) aged between 0 and 19 years was replaced by a net gain of 26,900 non-citizens (Table 7). In the core working age group (20-49 years) the net loss of 20,000 New Zealand males and females was replaced by 28,740 non-citizens — a much closer match in aggregate terms, although not necessarily in terms of more refined age groups. In essence, people aged 30-39 years replaced departing New Zealanders in their 20s and in their 40s (Table 7). Finally, at the older age groups, the net gains of returning male New Zealand citizens (5,350 aged 50 years and over) were augmented significantly by non-citizen immigrants (8,930), while for females net emigration of non-citizens (3,851) cancelled out completely the returning New Zealand women (3,848) (Table 7).

The obvious message from this simple analysis of the relationship between net migration and population change is that international migration is making positive contributions to growth in a wide range of age groups, especially the younger and older ones, and for most broad age groups, net losses of New Zealanders are being replaced by much larger new immigrant populations. These replacements are not evenly spread through the age structure, however. There tends to be more substantial gains to younger and older age groups, rather than the core working age population.

The contribution of Asian immigration

At the time of the LEW6 Conference in November 1994 a major controversy over who should bear the costs of English language teaching for the children of new immigrants was brewing. By February 1995 the debate had become very lively as some Auckland schools endeavoured to limit the numbers of children who required extra language instruction to cope with the New Zealand school syllabus. Much of the debate focussed around children of Chinese descent, children whose parents had migrated to New Zealand under the points system between 1992 and 1994.

It is interesting to assess the extent to which immigrants from countries in Asia dominate the net migration gains of non-citizens between 1990 and 1994. Table 8 shows the Asian component of the non-citizen net migration gains by broad age groups. It should be noted that not all Asian countries have been included in this analysis, although all of the major sources of immigrants are covered. The total net gain of 30,350 citizens of countries in North Asia, Southeast Asia and South Asia shown in Table 8 captures 93 percent of the 32,500 Asian nationals mentioned in Table 3.

It is clear from Table 8 that Asian immigrants are over-represented in the 10-19, 20-29, 40-49 and 50-64 year age groups. In these age groups the net migration gain of Asian nationals exceeded 50 percent of the total non-citizen net gain. Over all age groups, Asian citizens comprised 50 percent of the total net gain of new immigrants. By far the biggest group of immigrants is children aged between 10 and 19 years (11,343 or 37 percent of total Asian net immigration). The total net migration gain for the population aged 20-49 years was only marginally greater (12,460

Table 8. The contribution of Asian immigration to the non-citizen net gains, 1990-1994

Age group	All non-citizens	Asian nationals	% of non-citizens
0-9	8802	1983	22.5
10-19	18104	11343	62.7
20-29	7058	4241	60.1
30-39	18067	4901	27.1
40-49	3617	3318	91.7
50-64	3278	4170	127.2
65+	1802	394	21.9
Total	60728	30350	50.0

Source: As for Table 1

or 41 percent) than the influx of children. In the non-citizen population as a whole, the 10-19 year olds comprised 30 percent of the total, while the core working age population comprised 47 percent of the net migration gain (Table 8). Friesen (1995) presented an assessment of the employment of Asians in Auckland at the LEW5 Conference.

The figures on the net migration gains of Asian citizens over the past four years lend some support to the media stereotype of an influx of children seeking secondary and tertiary education. Whereas non-citizen immigration made contributions of similar size to the age groups 10-19 and 30-39 (around 18,100), Asian immigration made a much larger contribution to the younger age group than to the population aged 30-39. It is hardly surprising that immigrant children from Asian countries have surfaced as a more 'visible' group than their parents; competition from Asian adults in the labour market is much less evident to New Zealanders than competition for places in schools in Auckland's more 'desirable' neighbourhoods. Contemporary perspectives on the educational and occupational aspirations of Chinese and Korean children in Auckland's secondary schools will be available following a survey in March 1995, which is being conducted as part of the Demographic Crossroads Programme (Ho, 1995). This survey is designed to provide some insights into the educational and labour market experiences of recent immigrants in Auckland.

Conclusion

International migration is surfacing once again as an issue for public debate. Indeed, the Minister of Immigration, Mr Maxwell, has recently invited comment on this topic, particularly with reference to the role of international migration in the growth of New Zealand's population into the next century (New Zealand Herald, 24 February 1995:8). It is clear from the foregoing analysis that the contribution made to population change in the 1990s by international migration is quite complex, especially with regard to growth by age group, gender and two main components of the flows in and out of New Zealand: citizens and new immigrants. Debate about immigration needs to take account of this complexity, especially if there is to be an informed assessment of international migration and the changing size and composition of New Zealand's population as we head into the next millenium.

Future research

There is scope for considerable research on international migration using the unusually wide range of data sources which are available in New Zealand: arrival and departure information, census data, and information collected by the New Zealand Immigration Service on applicants seeking to enter under the points system. One of the major gaps in the research literature is a comprehensive assessment of the impact which immigration from different parts of the world in recent years has had on New Zealand's labour force. Unfortunately research on this topic is hampered by an inability to compare information on migrants groups identified in the data bases compiled by the New Zealand Immigration Service, with information on similar groups which can be identified in the quinquennial census data.

Until the Department of Labour includes a question on birthplace in the data collecting instruments over which it has administrative control (the arrival and departure cards and the immigrant application files), and comparisons can be made with the census data, comprehensive impact assessments of immigration will remain difficult and costly. Yet such assessments are likely to become increasingly important as the role of international migration in population change becomes more prominent.

There is also a need for a more fine-grained analysis of the contribution which international migration is making to growth in the size of the school-age population. This analysis needs to be conducted for single years of age, separately for males and females. Unfortunately the Resident Information Management System (RIMS) data base does not include a gender variable. However, it is possible to get special tabulations of arrival and departure card data by single years of age and sex.

Given the increasing contribution which international migration is making to population change (and is likely to continue to make to this change during the rest of the 1990s), it is important to appreciate the spatial variability in this contribution. Net migration gains tend to be concentrated in Auckland. There is certainly scope for much more research on the impact on Auckland's population of particular migrants groups. This is best achieved using census data. The forthcoming enumeration in March 1996 will provide a wealth of data for research on the impact of international migration on particular places, as well as on the school-age population, and the labour force.

In the interests of promoting more effective research on international migration, the New Zealand Immigration Service could make a major contribution by ensuring that birthplace and gender of all persons approved for entry as immigrants are included as profile variables in the new AMS data base. If this is done from March 1996 it will be possible to assess more comprehensively what has happened to those immigrants who enter and stay in New Zealand through the late 1990s into the next century.

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