

# NEW ZEALAND POPULATION REVIEW

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Editors

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## *New Zealand Population Review*

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The Population Association of New Zealand publishes two issues of the *New Zealand Population Review* and two Newsletters each year. Substantive articles (5,000-8,000 words) dealing with aspects of the demography of New Zealand and the South Pacific, together with short research notes and commentaries, will be considered for publication. All articles are refereed. Longer manuscripts might be considered for publication in the Association's monograph series.

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## Searching for Demography's Missing Link: Momentum

IAN POOL\*

### Abstract

This paper is both more theoretical and highly applied; both methodological and policy-oriented. Empirically until recently there has been little work on momentum effects. By way of case-studies on momentum effects, the paper reviews published policy-oriented work on New Zealand on national growth and age-structural transitions; on fertility patterns in New Zealand; and on survivorship and longevity, and the more local discussion of Maori-Pakeha differentials. The conclusion is that more attention must be paid to momentum. It calls for the demographic community to lead in moving policy analyses away from demography as a naive art form to one that is more multi-dimensional and sophisticated.

### Stories that Demography Tells

Demography deals with the most central and intimate parts of the human experience: sex, conception and birth, socialization, marriage and family, work and changing places, and, finally, death, whether this occurs in bed or is due to violence, the external causes as violence is so cutely called. This is inherently interesting for it is the stuff of Soap Opera, but by presenting this in a very technical way some in our community manage successfully to make demography's soap opera boring.

So what, then, could be more exciting than the subject of my paper, momentum? I can see you waiting in anticipation as the very word grabs you and sends chills up and down your spine. But perhaps instead, you are wondering what in the heck is momentum, and what on earth has it got to do with all those saucy, vital subjects that I have just outlined. Well rather a lot as it happens, but in discussing this we have to go back to technical

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demography and even further back than that into theoretical mathematical demography.

Before I do so I have a few other introductory comments. Beyond covering the sauciest aspects of life, demography deals with phenomena that have another appealing feature, in this case, however, statistically appealing. It is a truism, but one that certainly makes the life of the analyst, particularly the modeler, somewhat easier, that many demographic factors follow highly deterministic trajectories over time. No matter how hard you try as a parent you cannot have birth two before birth one; you cannot get divorced before you get married, or leave a job before you start it. The most deterministic paths are followed by birth and death, of course, while labour force participation, migration and nuptiality all involve comings and goings, traced by movement through multi-state models.

To add to this, some key demographic variables are self-defined. Not only that but they mean the same in most languages. For example, look up the definition of live-birth or of death in the *United Nations Multi-lingual Demographic Dictionary*. Of course, statistical precision may not accord with social construction: in Ghana, the infant out-dooring ceremony at about seven days – that is when the child has survived the highest risk neonatal period – is an example of the difference between statistical purity and social usage. Moreover, a false sense of precision may be imposed on some data collection processes: registered marriage is extremely neat and precise, but was imposed on existing Maori customary marriage patterns, and even the conjugal patterns of some Pakeha. Whether census-based or survey-based, labour force statistics are full of false precisions: unemployment rates, hours worked or income to take three examples. The rule is that the further you go from the certainties of birth or death, or perhaps crossing a border, the less precise become the definitional tools.

Another endearing feature of demographic change is that it is often inexorable, and this is the fact that underpins analyses of momentum. Once you are born into a cohort only “death may do you part”, to misquote the Anglican marriage ceremony. In this day and age you can report your ethnicity in different ways at different times; you can seek an operation to change your gender; but you can never leave the cohort into which you are born. We have you in our clutches!

Unless a population is exposed to extremely high levels of migration, moreover, cohort size is set down at birth – even in New Zealand cohort size

changes due to migration are at the margins of significance. Old age and death of course eventually wipe the cohort out – inexorability could be avoided only if oldies were popped out on ice-flows, or if some highly-age specific calamitous epidemic were to occur.

In this paper I want to look firstly at the theoretical underpinnings of the analysis of momentum, and along with this cohort studies, for momentum is primarily a phenomenon that occurs to cohorts. Then to illustrate this I want to take some case studies relating to some substantive issues, some very much in the news.

## **Mathematical Demography**

Let's start by going back momentarily to the 17<sup>th</sup> century, to the Royal Society of London, to the discipline they called “political arithmetick”, and to the days of the founders of demography, people like Graunt or Halley – the latter of whom, as we well know, also moonlighted a bit as an astronomer. Their life-table work laid down the importance of the cohort as a unit of analysis, and inherent in that was the notion of momentum. I also note this because demography is a very old academic discipline, not some Johnny come lately – most social sciences date from the breakup of philosophy and theology in the 19<sup>th</sup> century whereas demography dates from the 17<sup>th</sup> Century. From those days down to the present mathematical demography has contributed enormously to our field in three major ways.

Firstly, it has established the rules about commonalities in human behaviour, especially on the bio-social side: how we survive parturition and infancy, when we become parents, and when we die. It has been very successful in this, developing its own corpus of theory. On the more social demographic side of course it must draw on theory from across the social and medical sciences.

Secondly, mathematical demography helps us establish rules about populations as collectivities, and this will be the area of focus of my paper. This part of mathematical demography, reflected for example in stable theory, has evolved far from its common origins with biometric and actuarial theory. Through elaborate explorations around the conditions of quasi-stability, and a huge volume of empirical studies across almost every population on the planet, mathematical demography has developed the tools that have allowed demographer-practitioners across the Third World to apply models drawn from stable theory in order to estimate vital rates in the

absence of adequate registration data. In historical demography we often do the same thing.

Two closely interrelated phenomena about collectivities, coming down to us from the founders of the discipline, are central to this paper: cohorts, and momentum. A true cohort is followed over time and relates to an entity with a common statistical quality at a common starting point, normally birth (*OED, New Shorter* 1993). The members of the cohort are identified by this as they are followed over time either to death, or to some other so-called “death state” when they leave the status on which the research is focused. For mortality studies this would normally be at death *per se*; in fertility studies it could be menopause; in labour studies it could be retirement. The term cohort as adopted, say, by bio-medical science and economics really relates to a panel of individuals followed over a short period of time, say five years, although the Christchurch and Dunedin longitudinal panel studies and a few of their ilk stand apart as they have been running a very long time.

Surveys such as the NZW:FEE (1995) collect such data retrospectively on individuals, a sort of retrospective panel. They have disadvantages because they depend on recall, the quality of which varies between different variables; but they have distinct advantages relating to cost, to avoidance of loss to follow-up problems and because they can cover a much wider range of real cohorts over very long time spans. In the NZW:FEE we have data on women born between 1936 and 1975.

The great value of a population cohort study, as against a panel study, is that the size of the unit being studied, and its current needs and impacts are a function of the events and experiences they have been exposed to earlier in life, and about which, if one is fortunate, there are data, both on members of the cohort themselves, or on co-variates. In this regard the experiences of a cohort should be seen as an analogue of the sorts of experiences to which individuals in a panel study might be exposed. I return to this point later as it is extremely important, as, for example, when we come to the study of population mortality as against individual mortality.

Momentum is most easily conceptualised as a demographic behavioural pattern followed by cohorts: most commonly it is the impetus built up by a cohort for some phenomenon. This allows one to study purely demographic impacts on the population (eg. age-momentum as analysed by Rowland 1996; or deterioration in cohort survival, as studied by Bourbeau and Legare 1981,

on Norway). By following the momentum built up by cohorts it also is possible to look at the effects of non-demographic factors. The actuary Willets has argued that in health, for example, “the experience of different generations – before birth, in childhood and in adulthood – is a powerful determinant of experience in later life and has predictive possibilities” (Willets 2004:39). Norman Ryder (1965) took this further by looking at social applications of cohort analysis.

If we turn to the literature there are precious few studies on momentum. Most outstanding was that of leading methodologists, Andrei Rogers and J Woodward, who were looking at “ageing in place” as against inflows of migrating retirees (1988). Their conclusion was that momentum was a major factor in the growth of elderly populations in the United States except in those regions that were significant retirement zones. Rowland (1996) has applied the concept to national ageing.

The third contribution of mathematical demography is that it has taken its knowledge of population behaviour and translated this across to applied areas and developed measuring tools. These relate firstly to statistical reporting *per se*: that is, to the conventional techniques of demography that typically come down to us from Farr, who was also a founding father of epidemiology; to the intrinsic indices; and to the non-conventional indirect estimation techniques that are most commonly based on stable population theory. But secondly the development of these tools also relate to their application to interpretations. For the major demographic variables there are thus real international benchmarks against which trends in New Zealand can be compared. We really do know what is a very high birth rate, or a high growth rate, and whatever. In part this is a result of the availability of data collected in standardized ways, with built-in quality controls, covering a very wide range of historical, even paleo-historical, and contemporary populations.

### **Some Case Studies**

In an earlier national-level paper on New Zealand I showed how the inexorable forces of momentum were derived essentially from birth cohort sizes. In New Zealand's case, by comparison with most other Western Developed Countries, because birth cohort sizes have varied very significantly momenta produce highly disordered cohort flows – more severe disorder is observed in some former Soviet bloc countries, notably

Russia and Romania. Momentum in general has major implications for all social and economic development, whether in the market or the policy sectors; when it is disordered, as in New Zealand's case, this makes policy and market analysis even more complex (Pool 2003).

The differing patterns of momentum and associated age-structural transitions have come under the spotlight internationally over the last few years (Tuljapurkar *et al.* 2005; Pool 2005; Pool *et al.* in press). The resultant literature shows that ageing is only one aspect of age-structural transition, and that it is at the end of such transitions, a relatively long way off in New Zealand's case. But before this disordered cohort flows will pass across the age-pyramid, and this is the key factor of population and development in many countries, including New Zealand. In some countries, and New Zealand is a good example, when ageing does occur, momentum effects assure that disordered cohort flows occur at old ages, producing fluctuations between when the elderly population is weighted towards the younger elderly and when it is dominated by the older elderly (Pool 2003). This is the context for what we are observing in New Zealand.

But let us move beyond national populations. Let us see the effects on particular demographic factors: the sex ratio, mortality, fertility.

### ***Sex Ratio at 30-34 Years***

When I was a member of the cast of a student revue back in the 1950s we had a song about "Sweet Little Fresherettes, sheltered from all forms of vice...". It ended "They'll just have to save their tender young hearts to the next boat of immigrants lands", the implications being this is how a shortfall of men would be made up. Of course, in those days the immigrants were often likely to be young British or Dutch males, rather than Asian females. I was reminded of this when I read all sorts of articles in the weekend papers about the sex ratio at, for example, 30-34 years. The conclusion seemed to be that the imbalance should be blamed on migrants, in this case Asian women migrants. Migrants have always been the scapegoats for all our ills, yet paradoxically they are also seen as the saviours of our economy. So I asked myself, were they being unfairly blamed, was that the only or real explanation for the shortage of men, or conversely the excess of women at these ages? A cross-sectional analysis might suggest this, but would taking a cohort momentum view suggest alternative explanations that would require the question to be asked again?

Let's look by gender and ethnicity at the history of the people aged 30-34 years in 2001, who were born in 1966-71. Data on them are presented in Table 1. In reviewing these data, for Non Maori most loss is by attrition, death or migration, and at these ages mortality will be a very minor factor. For Maori there is the added problem of inter-ethnic mobility. We can overcome this factor by citing figures for the total population. That said, buttressed by the sure knowledge that the Maori figures are not affected to any degree by Asian migration, or indeed by any other inflows except those of returning New Zealanders, the Maori data give us an idea of what would have happened to Pakeha if it had approximated a semi-closed population, or of what would have happened to Pakeha if replacement migration had not occurred. What shows up is that, not having compensating flows, Maori sex ratios are heavily affected by emigration; for Pakeha the effect is muted by gender differentials in inflows from other sources that are not composed of returning New Zealander.

We can look only at net effects – we do not know the composition of the various inflows and outflows. Nevertheless, the results are fascinating. Sex ratio changes are miniscule until 1986. Assuming that change in cohort size comes overwhelmingly from migration, then first emigration and then immigration play a role in shaping the sex ratio. It is the massive outflows of both sexes, but particularly males, in the periods of restructuring, and to a lesser degree the late 1990s that are the prime cause of the male deficit, or the surplus of females. This has been but partly compensated by inflows recently of non Maori females. For women, there is actually a net outflow over the period 1986 to 2001. A total of 13,800 went and 13,713 arrived. But for men the net figure was far higher: the net outflow was 22,623 but they were replaced by a mere 1,893 net inflow.

In sum a cohort analysis confirms that Asian migration may have played a role in distorting the sex-ratio. But its role was merely to counterbalance huge outflows of the resident population. And in this it was far from successful – barely so for females, not at all for males. If there is culpability for the deficit of males it rests more with radical restructuring either side of 1990 than with Asian females.

**Table One: New Zealand Cohort Born 1966-71, Maori and Non-Maori by Gender**

Date	Age	Maori		Non-Maori	
		Males	Females	Males	Females
1971	0-4	**	**	132,424	127,036
1976	5-9	**	**	138,414	132,355
1981	10-14	27,561	26,865	128,289	122,637
1986	15-19	24,847	24,555	128,061	122,613
1991	20-24	20,796	22,059	115,182	113,058
Difference 86-91		-4,071	-2,496	-12,879	-12,879
1996	25-29	20,343	22,809	112,110	118,041
Difference 91-96		-453	+750	-3,072	+4,983
2001	30-34	18,195	21,060	114,003	126,021
Difference 96-01		-2,148	-1,749	+1,893	+7,980

**Sex Ratios**

1971	0-4	**	104
1976	5-9	**	105
1981	10-14	103	105
1986	15-19	101	104
1991	20-24	94	102
1996	25-29	89	95
2001	30-34	86	90

**Interpretation**

- 1971-76:** Approximates normal sex ratio at birth. Non Maori of both genders grow *pro rata* through passive migration.
- 1976-81:** Non Maori of both genders decrease *pro rata* by passive emigration.
- 1981-86:** Nothing very much happens.
- 1986-91:** An interesting control is that by definition Maori are not Non-Maori and few Asians are counted as Maori. Net loss of Maori males of 1,575. Net loss of Non Maori males of 3,324. Loss of all males of 4,899.
- 1991-96:** Loss of a further 3525 males, but offset by a gain of 5,733 females. Of these, though, 750 (13 per cent) Maori, and assuming that that is some indication of a return migration, not all of the 4,983 would have been Asian.
- 1996-2001:** Loss of large numbers of Maori, and a net loss of a further 255 males. Gain of 6,231 females. Gain of 1,893 Non Maori males none of whom, by definition, could have been Asian females.

Restructuring (1986-1991) drove 16,950 males of this cohort out of New Zealand, plus 12,051 females, a surplus of 4,899 males. Changes in the early 1990s drove out a further 3,525 males, recalling that this was also the era in which both Asian males and females arrived. This was counterbalanced by the inflow of Maori and Non Maori women. Even at the end of the 1990s there was a net loss of males, driven by Maori trends.

Thus restructuring pushed out 20,475 men from this cohort, and the late 1990s saw another 2,148 go, a total loss, mainly in the period 1986-96 of 22,623, replaced by 1,893 men.

Restructuring also drove out 12,051 women, and another 1,749 went at the end of the 1990s, a total of 13,800, who were replaced by 13,713 immigrants or returning New Zealanders.

In sum, for the production of the imbalanced sex ratio top marks go to the outflows accompanying radical restructuring, and only a very distant second rank to an inflow of young women, Asian or other.

- \*\* The definitional changes in the 1970s produce inexplicable shifts in the size of this Maori cohort, whereas from 1981 the baseline seems to carry across to other censuses and the changes are much more explicable.

### *Cohort Effects in Mortality*

In a paper that Jit Cheung and I have in the press (in *Genus*) at present we looked at Pakeha patterns of mortality around the dawn of the 20th century. In a paper published in the *New Zealand Population Review* we extended this analysis to the early 21<sup>st</sup> century for both Maori and Pakeha. The results were very interesting in both instances. As they are published there is no need to document them here. The analysis can be divided into two: the earlier period and the more recent.

In the earlier period Pakeha rates of infant and childhood survivorship improved dramatically between the 1870s and the early 1900s. In the cohort of 1871-76, 82 per cent of boys would reach age 10; by 1891-96, this had jumped to 88 per cent, but by 1911-16, this had climbed more gradually to 91 per cent. For girls the comparable cohort figures were 84 per cent, 89 per cent and 93 per cent. Age 10 is the crucial age to which to survive – the chances then of reaching age 50, even in a higher mortality population such as Pakeha were in the early 20<sup>th</sup> century, are reasonably high.

A feature of life-tables is that they capture the effects of differentials in the force of mortality across the life cycle. Even in higher mortality populations the force is concentrated at young and old ages, with much less impact between childhood and the late middle ages. As mortality declines, the force shifts to older ages. Even in high mortality populations a small minority reach old age and go on to very old age – the secret is getting to, say, 65 years. For Maori cohorts born at the end of the 19<sup>th</sup> century 25 per cent would have died before their first birthday; 50 per cent before the end of childhood; obviously very few were left to get to age 65 years. The very small minority who did might have included among them the odd person who reach the “oldest of the old ages” – we know one of them, Dame Whina Cooper. If we go to the opposite extreme 90 per cent of Pakeha born in 2001 can expect to reach retirement ages.

The rapid decline in the in the force of mortality at younger ages among Pakeha cohorts in the late 19<sup>th</sup> century gathered a momentum that pushed more and more people not only across into adulthood, but also to survive to reach 50 years of age. This is shown in Table 2 which relates to the probabilities of survival for cohorts across wider age ranges – from birth to age 10 years; from 10 to age 50. Gains in survival to age 10 had been through their most rapid period of change by 1896 and then slowed thereafter. The effects of gains at childhood then flowed into older ages.



This was because cohorts with more favourable experiences in terms of exposure to risk factors, and to mortality and morbidity were reaching older life-cycle stages. The underlined values show the shifts in relative force between life-cycle phases.

**Table 2: Inter-cohort differences (absolute) in survivorship at childhood (0-9 years) ( $_{10}p_0$ ) and between ages 10 and 50 years ( $_{40}p_{10}$ ), Pakeha cohorts 1871-76 to 1931-36**

Difference between the cohorts of	Males		Females	
	$_{10}p_0$	$_{40}p_{10}$	$_{10}p_0$	$_{40}p_{10}$
(1891-96) - (1871-76)	<u>0.05871</u>	0.03845	<u>0.05374</u>	0.04352
(1911-16) - (1891-96)	0.03471	<u>0.04624</u>	0.03326	<u>0.05286</u>
(1931-36) - (1911-16)	0.03968	0.02039	0.03159	0.02525

Note: greatest change per cohort underlined. There are differences in the two spans – 10 years for  $_{10}p_0$  and 40 years for  $_{40}p_{10}$ .

This table shows that there was another factor starting to appear. The differences between the cohort of 1911-16 and that of 1931-36 had dropped off by comparison with those ahead of them, especially at ages 10 to 50 years. This signals the onset of cohort deterioration to which I will now turn my attention. In passing, one of the bitternesses my cohort can carry into old age is that we were one of the first Pakeha cohorts to suffer deterioration, and ours was one of the worst. This cohort of overfed Plunket babies suffered relatively higher levels of ill-health when we became adults.

Cohort deterioration occurs when the survivorship of a given cohort at any life-cycle phase is lower than that of its predecessor. From the Pakeha birth cohorts of the 1920s this was evident across a wide range of adult ages, particularly for males. Explanations for deterioration revolve around two alternative postulates. It could have been due to the effects of improved regimes of maternal and infant care introduced in the inter-war decades of the 20<sup>th</sup> century, regimes that permitted high-risk babies to survive to become “frail” adults; or it could have been the lifestyles adopted by the same cohorts later in life – in this case we are talking about the behaviours and environments in the 1950s and 1960s to which were exposed cohorts born in the interwar years.

Coming forward to the 1990s, a cohort view throws into question cross-sectional analyses relating to Maori health. The arguments by Blakely and his colleagues in their highly publicized work on the theme of decades of

disparities, is that the economic and social climate of the late 1980s and 1990s was such that it had direct impact on Maori-Pakeha health differentials. Our data do not lead us to reject outright this view, but instead to argue that it is simplistic. Before we hear the standard explanation, that it will all be due to ethnic definitional problems, I must add one further qualification: as Jit Cheung and I point out the deterioration was not due to changes in ethnic reporting such as a postulated over-enumeration of Maori in 1996, which, if it were true, would see denominators inflated and death rates reduced, rather the contrary to what we found. To add to problems there is the strong possibility that in the early 1990s Pacific Island deaths were misreported as Maori. If anything our results veer towards being overly conservative.

Cohort analyses show that deterioration set in as early as 1981 for some cohorts, and occurred systematically across cohorts at adult ages over the early 1990s. If Pacific Island deaths that had previously been recorded as Maori were being more carefully assigned by the end of the decade, then Maori survivorship around 1991 would have been higher than is often argued, and levels of survivorship in 2001 would have been lower than they had been in 1991. In short, there was deterioration through the decade, but a pattern foreshadowed by deterioration much earlier. We concluded "That the deterioration in 1991-96 was a residual effect of a long history of cycles of cohort gain and deterioration reinforced by period effects coming from restructuring" (Pool and Cheung 2003:123). The period effects cited by Blakely *et al.* had an impact on what was already a bio-medically vulnerable population with health needs often determined by experiences sustained many years before when these cohorts were at childhood ages.

The cohort approach that recognizes momentum effects makes a nonsense of the Wellington policy/political orthodoxy that would wish away ethnic differences in health and other factors. Socio-economic differences are very important, make no mistake, but each ethnic group also has a totally different cohort history and no amount of spurious policy analysis can eliminate the differential burden of risk that ethnic cohorts carry with them. Just take one fact: Maori women at older ages (any one childbearing before about 1975) will have had on average twice the number of children of their Pakeha peers, and thus, assuming that the physiological burden of childbearing is spread equally by parity, and that Maori women on average had access to exactly the same quality of gynaecological care as

their Pakeha peers, then the health risks associated with this, including diabetes, will be twice as high. Of course the reality is that their risks will have been greater.

### *Momentum Coming from Fertility Timing Changes*

When a shift upwards in fertility by age occurs, there is often a hiatus as those who normally would have had their babies at young ages postpone them. This will be followed by a flush of births as women who were postponing their births then decide to have them. This was exactly the mechanism that produced the Baby Blip, a phenomenon we normally associate with Pakeha.

**Table 3: Maori Age-Specific Fertility Rates (per 1000 women), 1991 and 2002**

<b>Age group</b>	<b>1991</b>	<b>2002</b>	<b>Difference</b>
Less than 20 years	74	63	- 11
20-24 years	141	140	- 1
25-29 years	118	128	+ 10
30-34 years	70	98	+ 28
35-39 years	30	49	+ 19
40-44 years	7	13	+ 6

In contrast, for Maori the force of fertility has notably been towards younger ages. Yet if a longer perspective is taken, between 1991 and 2001, a gradual shift is seen to be taking place, as is shown in Table 3. These data suggest that Maori may be embarking on a new phase in their family transition, the first being the radical decline in family sizes in the 1970s, and the present one a move upwards in the patterns of family building. The net result of this shift-share amounts to an increase in fertility, the equivalent of 0.25 live births per woman. This is, in fact, most of the difference between the TFRs of 1991 (2.19) and those of 2002 (2.47). The question arises, then, whether the increases in Maori fertility in the late 1990s, normally attributed to definitional changes, were not due in part, or even instead, to changes in the rhythm of Maori childbearing, and the momentum this has introduced.

The year 1991 saw the ending of the old pattern of very early childbearing, which came about by very rapid decreases in fertility at older maternal ages, a typical stage in a rapid fertility transition (see Pool 1991). Let us not forget that Maori went through a very rapid Baby Bust in the 1970s and 1980s. In contrast, by 2001 the onset of the new pattern had occurred. If the growth in the TFR had been purely through definitional change, as is frequently argued, then we would not have seen such a systematic shift from early to late childbearing.

## Conclusion

Cross-sectional analyses often produce misleading results. This is particularly true of demography which by its nature is a diachronic science, not a synchronic one. We are interested in changes over time, and thus varying period effects. But we are a life science also interested in changes over the life cycle. And we are interested in the intersection of these.

As individuals carry their earlier experiences with them, so too do generations. This produces an impetus in the behaviour of cohorts, an impetus we call momentum. Often in fact this momentum will be driven by inexorable forces.

I have shown here through case studies that momentum effects are very real, and that by ensuring that they are taken into consideration a much more valid picture can be gained of demographic patterns and trends. My argument is that we must put the analysis of momentum into all serious demographic research – synchronic analyses may suffice for the “lesser breeds” of disciplines, but not for one that traces its genesis to the very foundations of modern science.

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# A Paradigm of Transnationalism for Migration Studies

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## Abstract

This paper sets out a case for the adoption of a transnationalism paradigm for population, specifically for the study of migration. The canon of transnationalism research is reviewed, along with key discontents, and recent trends in the field. Four definitions of transnationalism are introduced: activities, relations, social fields and subjectivity. Three sets of categorizations of the field are also identified. Five identifiable critiques of the transnationalism concept are explored. These critiques involve some very sound definitional observations on how transnational activities and relations are not so novel. Transnationalism retains its greatest possibility as a new conceptual approach, which can trouble traditional understandings of unidirectional movement and the expectation of assimilation. As a paradigm, transnationalism facilitates a holistic examination of the forms of mobility and communication. It also facilitates stronger theoretical attention to the relation between movement and identity. Some of the gaps of the emergent field are identified, and ways forward suggested.

In this paper, I advocate the utility of a transnationalism paradigm for population studies. In making this case, I reflect from my on-going work on the topic of transnationalism in Australia, with my colleagues David Ip (University of Queensland) (1992), Christine Inglis (University of Sydney), and Susan Thompson (University of NSW). These reflections fundamentally spring from a reading of the extant literature on transnationalism. This literature includes what we might call the “transnationalism canon” that has emerged in the work of Portes and his collaborators (1999; 2001), notably Guarnizo, but also from Ong (1999), Pries (2001), Glick Schiller (1992), and Basch (1994). I also pay attention to the observations of some important “transnationalism discontents”, notably

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Waldinger and Fitzgerald (2004), and also Foner (1997). The incisive work emerging from Canada, and especially the Vancouver Metropolis Centre (Ley 2003; Kobayashi 2003; Hiebert 2003; and Waters 2003; Walton-Roberts 2005), is also important. The Vancouver school of transnationalism research, with its empirical depth and breadth, continues to check and temper some of the more extreme assumptions of the “transnational advocates”. Finally, I look to two very interesting sets of literature, that have demonstrated a nascent and interesting antipodean emphasis to this research field. These include some recent Australian doctoral projects (O’Connor 2005; McAuliffe 2005; Voigt-Graf 2002), and some recent articles from early career researchers whom humbly recommend certain trajectories for transnationalism research (Conradson and Latham 2005; Velayutham and Wise 2005; Yeoh 2005). This review of the field strongly affirms the intellectual basis, and strategic advantage, in thinking about a transnational paradigm for the study of population movement. But before progressing to the abovementioned literature, and my substantive argument, I should define and introduce the concept of transnationalism.

### **Identifying the Field of Transnationalism**

Transnationalism is often used to describe and categorise certain activities, some of which are familiar to us as the “normal” activities of immigrants. These include the sending of remittances, gifts, correspondence (e- and snail-mail), telephone contact, immigrant property ownership in countries of origin, political activity, and various forms of care and emotional networking (Basch *et al.* 1994). Transnationalism has been defined as the “multiple ties and interactions linking people or institutions across the borders of nation-states” (Vertovec 1999:447). Through transnational activities, immigrants become transmigrants able to “maintain, build, and reinforce multiple linkages with their countries of origin” (Glick Schiller *et al.* 1992:2). Glick Schiller *et al.* (1992; Glick Schiller and Fouron 1999) and Pries (1999) referred to the “transnational social fields” that migrants now lived in. More radically, there has been reference to a de-territorialised world, in which the power of the nation-state to control population movement, and other forms of circulation, has been increasingly weakened.

The cultural and political specificities of national societies (host and home) are combined with emerging multilevel and multinational activities in a

new space beyond territorially delimited nation-states, inevitably questioning the link between territory and nation-state (Kastoryano, 2000:307).

This view of a de-territorialised world, and of empowered mobile citizens, was explored most fully in Ong's analysis of Chinese immigrants in the USA (1999; Ong and Nonini 1997). There has also been discussion of transnational subjectivity. This refers to people who have dual or multiple national loyalties, all of which may be primary. Many people today do advance global views or perspectives, they see themselves as world citizens (Hannerz 1992). Interestingly, this is a value that we inculcate in high school geography. In broad then, transnationalism has been used in four general senses: to refer to specific activities, a set of relations, to a new social field or context, and to a subjectivity or perspective.

In response to the exploding scholarship on transnationalism (see Waldinger and Fitzgerald 2004:1181), attempts have been made by some of the canonical contributors to define and reign-in the field. This focusing of the field was also in response to a series of criticisms that transnationalism was not a new phenomena (see next section). Portes *et al.* (1999) identified a series of conditions which needed to be met for an activity, or a relation, to be considered transnational. The specific criteria for transnationalism were: new types of linkage or movement (an example would include email-based communication); a massness of the activity (a quantitative measure of transnationalism); frequency; continuity (not ephemeral or a once-off movement or contact); which together make the activity routine and normative (Portes *et al.* 1999:217-9,225-7).

Portes and others also outlined two necessary conditions for transnationalism to emerge. These were technological advances in transport and communications, and the presence of networks through which transnational movement of, and communication by, ordinary people could flow (Portes *et al.* 1999:223-4; see also Pries 1999:13). Even the transnational discontents, Waldinger and Fitzgerald (2004:1179,1183), accepted that the former is correct, they observed that the latter have existed for some time, and that this has given rise to new relations between migrants and nation-states and civil society. Kastoryano (2000:308-9) usefully pointed to other important conditions that have aided transnationalism, namely neo-liberalism (such as through the expansion of world trade / exchange, as well as the ideological affirmation it generated



for autonomous and hypermobile subjects), multiculturalism (which facilitates cultural hybridity and multiple identities), as well as international NGOs. She also pointed to the important role of emotional ties and political convictions in driving transnationalism (2000:309). Indeed, Portes *et al.*'s two-part set of conditions says too little about the affective conditions necessary to sustain a transnational field or a network, including obligations, nostalgia, patriotism and the like.

### **Categorising Transnationalism**

As part of the attempts to provide direction to the field of transnationalism research a number of authors have attempted to categorise forms of transnationalism (Portes *et al.* 1999; Ip *et al.* 1997; and Vertovec 1999). Each of these is worthy of review.

Portes *et al.* (1999) identified three main forms of transnationalism: economic, political and socio-cultural. They also mapped those forms across a binary: transnationalism from below (the routine activities of ordinary people), and from above (the organizing and strategic actions of powerful agencies and corporations). The matrix that they developed was a very useful categorical device. Economic transnationalism included both the actions of transnational corporations, and the globe-trotting of elites, but also the cross-border economic activity of smaller sized businesses, and remittances. Political transnationalism included the work of expatriates militating against political regimes "at home", as well as bilateral agreements between nations and the emerging influence of international NGOs. Instructive examples came from Guarnizo's (Portes *et al.* 1999:231) work on the actions and influence of Dominican activists in the USA. Thirdly, all other forms of transnationalism were deposited within the "socio-cultural" category. Naming this residual and catch-all category as socio-cultural betrayed the epistemological emphases of those authors, and also, the nature of the transnational links they had studied. It revealed a strong political-economy emphasis. Even political transnationalism was identified as dependant upon labour migration (itself a form of economic transnationalism). They were quite clear in foregrounding economic matters, such as the development of capitalism, as key to the emergence of transnationalism (Portes *et al.* 1999:226-8). Moreover, the socio-cultural

examples provided by Portes *et al.* spoke quite weakly to issues of identity, belonging, attachment, and to cultural change more broadly.

Ip *et al.* (1997) also conceived of a three-way division: relational, experiential, and legal. This categorization suggested a much stronger interest in matters of identity and citizenship. Relational transnationalism involved individual movements between two or more countries, whether to visit relatives, holidaying or to conduct business. It also included communications. Experiential transnationalism referred to sense of identity and belonging. This had important implications for the manner in which immigrants are incorporated into national spaces, and the new fields and forms of social relations and experiences that are in turn produced (see Soysal 2000). Another important component of experiential transnationalism is the way immigrants imagine “home”, the way they “remember” their homelands, and perceive their new “home” both nationally and locally (Westwood and Phizacklea 2001). Another question is how identity and belonging are affected by the experience of racism and intolerance (Dunn and McDonald 2001; Vasta and Castles 1996:14)? A number of researchers have begun to pose questions about the emerging complexity of citizenship, in an era where individuals live in a transnational field (Castles and Davidson 2000; Faist 2000; Ip *et al.* 1997; Soysal 2000).

Ip *et al.*'s (1997) third category of legal transnationalism referred overtly to the formal attachments that transmigrants have in different countries, including issues such as dual citizenship. Ip *et al.* (1997) referred to the notion of “instrumental citizenship” to describe a process elsewhere referred to as the “commodification of citizenship”. Researchers have speculated on how migrants obtain passports and citizenship for strategic reasons. These reasons could include the construction of escape routes to a safe haven, perhaps to avoid sovereign shock in a country of origin. The Vancouver school of researchers have examined this in regard to Hong Kong emigrants to Canada ahead of the “hand-over” of the territory to the Peoples Republic of China (Ley and Kobayashi 2003). Strategic citizenship could also be driven by a desire to access better or different standards of education for children. This form of citizenship is seen as problematic insofar as the migrants do not develop a strong symbolic attachment or nationalist loyalty. Citizenship can thus become a commodity: “a marketable item with price tags” (Ip *et al.* 1997:363), and Ley's (2003:428) critical examination of the Business Migration schemes in Canada provides

compelling evidence for that. Other evolving terms used to describe the attachments of legal transnationals have included: strategic citizenship, strategic transnationalism, and “flexible citizens”, the latter drawing on Ong’s foundational use of that term to describe Chinese “migrants” in the USA (Ong 1999:3):

transnational Chinese subjects, those most able to benefit from their participation in global capitalism celebrate flexibility and mobility ... such figures as the multiple passport holder ... the “astronaut”, shuttling across borders on business; “parachute kids”, who can be dropped off in another country by parents on the trans-Pacific business commute ... flexibility, migration and relocations ... have become practices to strive for, rather than stability (Ong 1999:19).

This of course has far reaching implications for the concept of citizenship itself, which historically was tied to a single national affiliation. However, other research has indicated that the notion of instrumentality has become somewhat exaggerated, and that transmigrants continue to be involved in local (and national) participation, loyalty and attachments (Foner 2001; Waters 2003). Nonetheless, Ip *et al.*'s (1997) three-part categorization facilitated a much more fulsome focus on matters of identity and culture than did that by Portes *et al.* (1999).

Vertovec’s categorization identified six research themes for transnational research. These included: global or cross-national networks (diasporas, networks); global subjectivities, consciousness and perspectives (world citizens); hybrid styles and fashions and global media (especially youth sub-cultures); economic interactions (transnational corporations, remittances, small yet global family businesses); political transnationalism (international NGOs, diaspora politics), and; the emergence of new spaces of migration – transnational social fields (with an interest in the new nodes and localities within such fields). The latter picked up on the work of Pries (1999; 2001) and Glick Schiller *et al.* (1992:1; 1999) who referred to new social fields, or social spaces, of transmigrants that were cross-border and multi-national.

Transmigrants ... move back and forth between different places and develop their social space and everyday life, their work trajectories and biographical projects in this new and emerging configuration of social practices, symbols and artefacts that span different places (Pries 2001:21).

Vertovec's broader encapsulation of the field reads like a response to those attempts to narrow the field of transnationalism. Here I am thinking of Portes *et al.*, whom Vertovec (1999:448) identified as having an economic emphasis. Crang *et al.* (2003) were more overt in their judgement, worrying about Portes *et al.*'s attempt to "discipline" the field. There is an undercurrent, within the work of Portes *et al.* (1999:218,233), of cynicism towards the work of cultural studies, and poststructuralist theory.

Crang *et al.* (2003:440) pointed to a contradictory tendency within the programmatic statements on transnationalism. On the one hand there is broad recognition that the work undertaken in the field has been extremely good, including rich ethnographic work, and investigative political economies of considerable depth. At the same time, there have been constant calls for grounding of research, and for the gathering of (certain) empirical data. These betray disciplinary prejudices for certain types of work. Nonetheless the field has developed some trajectories and absences that are briefly reviewed towards the end of this paper.

## **A Transnationalism Paradigm**

The reference to world citizens, to new forms of movement and communication (or at least old movements at higher rates), and to transnational fields, has certain appeal. Mitchell (1997:101) observed that the term possesses a transgressive quality associated with the illicit sense of (less mediated) border crossings. Others in the field have described it as a new imaginary, superior to the term "migration studies" (Crang *et al.* 2003:439) or even globalization (Conradson and Latham 2005:227). Transnationalism and international migration have "troubling effects" on both sending and receiving societies (Castles 2000:271,279). Vertovec (1999:459) concluded that transnationalism had its greatest utility as an umbrella concept, not necessarily a narrow descriptor of certain activities, or even certain social fields, or perspectives. Indeed, this is closest to the argument that I want to articulate: transnationalism as paradigm.

### ***Exorcising the Ghost of Assimilation***

One of the areas where the paradigmatic strength of transnationalism is most obvious, and where it has been oft-mentioned, is its strong concordance with the dual and multiple attachments of migrants. Earlier

thinking, and policy-making, on immigrant settlement and incorporation followed a long-established Chicago School tradition of assuming that immigrants would over time gradually adopt the dominant culture of the society where they had settled, and that the culture of the origin would dissipate. Mitchell summarised the assumption well: “In this view, migrants bring their culture with them and, after their arrival, become relatively less or more assimilated to the prevailing cultural norms of the new national territory” (Mitchell 1997:103).

In part this was premised on a circumstance in which international emigrants rarely tended to return. In the context of Irish emigration to North America, Australia and New Zealand this was referred to in shorthand as “gone for good” (Handlin 1973). As Pries (1999:3) noted, the movements were overwhelmingly unidirectional. The scope for return migration was influenced by economic fortunes, proximity and geopolitics, and the stronger its potential (or even its myth) the more inhibited was assimilation (Cohen and Gold 1997:376). Early commentators on transnationalism noted how the Chicago School assimilation theory was increasingly hard to apply in contemporary times (Glick Schiller *et al.* 1992:1): “theories of assimilation and ethnic pluralism are insufficient because they espouse a container concept of space – adaptation of immigrants within nation-states” (Faist 2000:200). The limits of Chicago School concepts included the inability to reconcile cultural maintenance by immigrants as anything other than a short-term evil or an enduring pathology (Dunn 1998).

Assimilation theory became even further complicated by the emergence and/or expansion of the transnational activities introduced earlier. Routine communication and return visitation to a country of origin are likely to retard assimilation. A series of researchers have commented on the multiple memberships and loyalties that transnationalism gives rise to (see Kastoryano 2000:308). Even the “transnational discontents” recognised the problems with the assimilation model (Waldinger and Fitzgerald 2004:1180,1186, 1193). Portes *et al.* (1999:227-9) referred to this as one of the key theoretical challenges posed by transnationalism. I would turn that around slightly, and argue that the notion of “transnationals” dispenses fundamentally with assimilation, defeating a problematic assumption that has currency in most settler societies. Friesen *et al.* (2005:391) referred to the local New Zealand impacts of a New Delhi announcement by the Indian

Government in 2003 that dual citizenship would become available. Interestingly, the statement revealed how the aim was to encourage a broad Indian identity and attachment, but the government also insisted that those in the diaspora must maintain their loyalties to the nations where they were resident. This transnational legal pronouncement can not be adequately theorised within the traditional and unidirectional understanding of migration and assimilation. The idea of assimilation has been a long-time shadow upon population geography and migration studies. In most settler societies assimilation remains a dominant philosophy (Kymlicka and Norman, 2000:16), and it is strongly manifest in public opinion (Dunn *et al.* 2004:416-8). A transnationalism paradigm thus exorcises a ghost that continues to haunt immigration theory, policy and politics.

### ***Theorising the Relation Between Movement and Identity***

The other interesting aspect of transnationalism is the way that it fundamentally embraces movement and identity. Migration researchers have known for some time that movement and identity are fundamentally linked. Of course, place (especially sedentariness) and identity are also linked. But movement, and especially migration, has a fundamentally important relation with cultural change (Baldassar 2001). O'Connor's (2005) work on Irish-Australians in Melbourne has revealed the fundamental cultural roles of migration, providing new senses of the Other and the primary recognition of the Self (their own culture hitherto not "seen" before their own migrancy (see also Struver 2005). Shia Iranians in Sydney, Vancouver and London talked to McAuliffe (2005) about visiting Iran to "discover their identity" or "roots". Movement is important to culture. The Vancouver based geographer, Dan Hiebert stated that in a transnational age: "Identities are formed by movements as much as they are by the long-term relationship between people and place that is usually celebrated by geographers" (Hiebert 2000:39).

The relation between movement and identity has been poorly conceptualized, with the exception perhaps being the Chicago School. A transnationalism paradigm opens up new opportunities to theorise more deeply on the relation between movement and identity. Of course, in all of this, a focus on communication must come to rival our interest in movement.

### *Holistic Theorising of Movement*

Transnationalism offers renewed holistic vistas for migration and population studies. One could advance an argument that within population studies there has been a creeping compartmentalization of the study of movement. Research on immigration has become detached from emigration, and certainly from internal migration and mobility. Return migration has become a separated field of inquiry. There was no sense of such separation within Zelinsky's (1971) mobility transition, which embraced seven key forms of movement. What is more, Zelinsky engaged with the prospects of communication, and how that would effect movement. Indeed, there is a sense that some migration theorists have embraced transnationalism in part to assuage the intellectual separation of international emigration and circular forms of movement (see Vertovec and Cohen 1999). For example, Ley and Kobayashi's (2003) work on return migrants from Canada to Hong Kong overtly discussed these movements as occurring within a transnational field, as did Waters' (2003) work on the so-called astronaut movements. In other words, transnationalism has been seen as a paradigm in which different forms of mobility can again be addressed holistically.

It is also the case that in settler societies like Australia the focus of migration research in the last few decades has been overwhelmingly upon immigration. This has come at the expense of interest in internal movement (permanent and not), and also return migration. Exceptions to this have been the work of Burnley, Hugo and Bell. In New Zealand, the work of Lidgard, Ho, and Bedford also bucks that master trend. Of course, the research emphasis upon permanent immigration in Australia and New Zealand and other countries was undertaken for entirely an understandable reason – the massive settler immigration programs from the 1950s to the 1980s (although migration forms and research emphases in Western Europe were quite different, see Castles and Kozack 1973). However, this research emphasis neglects increasingly important forms of movement, including temporary migration: “there has been a massive increase in global population movement and an increase in the complexity of the types of movement – permanent and temporary, legal and undocumented, forced and voluntary, work and non-work related, etc. In Australia much thinking about international migration remains anchored in a paradigm of

movement that applied in the four decades following the Second World War, which focused almost entirely on permanent settlement” (Hugo 2004:i).

A transnational paradigm would re-integrate the research trajectories of emigration, immigration, temporary movement and visitation. It could also, Zelinsky-like, reintegrate movement and communication.

### **Critiques of the Transnationalism Paradigm**

Some of the critics of the emergent field of transnationalism have already been mentioned (Foner 1997; Waldinger and Fitzgerald 2004; Walton-Roberts 2005). In broad, five identifiable arguments have been advanced. Firstly, it has been pointed out that many of the activities that have been cast as transnational have been in operation for a long time, many for centuries. Foner (1997; see also Smith 2001) outlined how the contemporary migration, settlement and communication of certain cultural groups was strongly similar to that of decades before, and even previous centuries: “Transnationalism is not new, even though it often seems as if it were invented yesterday” (Foner 1997:355).

Portes *et al.* (1999:219) therefore posed the question of whether there was any point in coining new terms for analysing old movements, hence their aforementioned attempt to limit the definition of transnationalism. However, the above criticism pre-supposes that the extant theory and policy frameworks for analyzing immigrant movement, settlement and identity were satisfactory. As I outlined earlier, regarding the assumptions of unidirectional movement and assimilation, I am not convinced that the extant paradigm was satisfactory.

A second critique of transnationalism concerns the nature of the movements that are usually studied, and whether they are more appropriately referred to as inter-national movements. Waldinger and Fitzgerald’s (2004) argument is that most of the subject matter of transnational research concerns dual identities, and communication and movement between two countries. They have argued that the term transnationalism should be reserved for discussions of identity and movements that are above or beyond nations (Waldinger and Fitzgerald 2004:1178, 1181). A third criticism is the observation that much of the activities studied are actually translocal, between a village in one place and



a suburb in another, and not transnational (Waldinger and Fitzgerald 2004:1182). For example, Velayutham and Wise (2005) refer to the strong ties between Tamil Indians in Singapore and the specific villages where they or their families originated. The attachment to Indian-ness, and even Tamil, was an inferior consideration to village and caste identity. However, these movements and attachments nonetheless involve movements across borders, and in conceptual terms it matters little whether the attachments and movements involve only two or multiple nation-states.

A fourth criticism, from Waldinger and Fitzgerald (2004:1188-90,1191-2), was their observation that the current level of transnationalism is highly dependant upon the tolerance of nation-states and civil societies. They point to the restrictions on movement and communications that can quickly be generated in times of international conflict and tension. Moreover international movements are highly influenced by geopolitical relations. Finally, Waldinger and Fitzgerald (2004) expressed concern at the public consumption of transnationalism, and especially the political effects from normalising multiple national loyalties. Dual or multiple loyalties are still received suspiciously in most countries and by most people: "In a world of mutually exclusive nation-states ... persons with foreign attachments are open to question, and all the more so when the relevant nation-states coexist on less than friendly terms" (Waldinger and Fitzgerald 2004:1192).

Transnationals can easily become the despised "enemies within" or the "traitors abroad". A current example is the circumstance of Arab and Muslim-Australians, who perceive themselves the brunt of new terror laws and police actions, and are disparaged in media and in government rhetoric (Islamic Council of New South Wales 2004; Klocker and Dunn 2003). However, it is not at all clear that the myths of assimilation did much to confront this sort of nationalist-based political intolerance. Indeed, a transnational paradigm – in which dual and multiple national loyalties are normalized – may be a long-term remedy.

The carefully considered critiques of transnationalism, by the abovementioned discontents, were important reminders of the similarities between immigrants and transmigrants. The discontents justifiably took issue with the definitional distinctiveness, or lack thereof, between previous and contemporary movement and communication, and the state reactions to it. However, none of this definitional correctness assuages the extant

limitations in traditional migration theory, policy and politics. Transnationalism retains its greatest merit as a troubling concept, and as a paradigm.

### **Population Studies and Transnationalism: Ways Forward**

Work in the mould of transnationalism has not been without faults and pre-occupations. It is important to briefly recount these here, ahead of a final advocacy on the virtue of the concept as a paradigmatic device (see Dunn 2005 for a detailed examination of these concerns). Four sets of gaps and pre-occupations can be identified. Firstly, there is a concern that transnationalism research has exaggerated the degree of mobility and agency in contemporary population movement. There remain a series of costs on mobility, and this continues to make access to international movement highly uneven. Moving is expensive and troubling, and it is still difficult to get bodies across national borders. Again, the crossing of borders is easier for some bodies than others. Nation-states have clung on to their powers over borders, and they remain important to assisting with migrant settlement. And peoples' mobility continues to be embedded within places and networks. Secondly, work on transnationalism has tended not to engage with the darker sides of contemporary movement. A pre-occupation with agency and mobility, as just reviewed, has been linked to a celebratory emphasis. Yet transmigrants are still migrants, and most require settlement assistance of some sort, and many face racialised barriers, discrimination, and cultural hierarchies of privilege, as many migrants before them have. These experiences are likely to be an important influence on belonging (experiential transnationalism, and legal) and on movement and communication (relational transnationalism). Thirdly, during the first ten years of this emergent field of transnationalism there was an understandable emphasis on the technological developments that have enabled or facilitated new and more frequent international movement and communication. However, these technologies do not explain why transnationalism occurs. Most of the discussion of the drivers of transnationalism has focused on economic maximization. Yet, there are a host of affective drivers of transnationalism that also require examination. Nostalgia, patriotism and political conviction are important drivers of political transnationalism. Other important drivers of return migration

(retirement, burial), and of visitation and communication include obligation, guilt, love and other emotions. These drivers of transnationalism are deserving of further research. Finally, a recognized emphasis within the field has been the grounded and everyday examination of transnationalism. However, while the work has been well grounded, including excellent ethnographies and political economies, there has been a tendency to study migrant groups, and those known to be transnational. This has meant that there has been a research emphasis on ethnic minorities within settler societies. There has been a corresponding lack of work on transnationalism among non-minorities and on “ordinary” spaces. One way forward is to include grounded analyses of transnationalism among longer resident migrant groups, the so-called invisible migrant groups, and also non-migrants. Similarly, there has been scant work at all on the links between transnationalism, however defined, and indigenous people, their cultures and their specific claims to citizenship.

My presumption is that the geographical and population studies impulse is to accept much of what I have outlined above, I think. My observations regarding the continued friction of distance, the potency of nation-states, and the need for grounded observations and empirical data, will be received with little opposition. My more radical suggestion is that population and migration studies should adopt the transnationalism paradigm as their own. Other disciplines have passing interests in the matters discussed above, including sociology, cultural studies, anthropology as well as globalization studies. However, it is in population and migration studies that the paradigm has the most to offer, particularly in the holism it offers. Bearing in mind the limitations of the field to date, and thinking through the ways forward that assuage those, the transnational paradigm promises to enliven population studies.

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## The Residential Segregation of New Zealand Maori in Comparative Perspective: An “Ecology of Social Inequality”?

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### Abstract

Very little work has been done in recent years on the residential segregation of New Zealand Maori in the country’s urban areas, let alone on the link between this and socio-economic disadvantage. Analysis of segregation levels in fourteen urban areas – using small-area data from the 2000 New Zealand Census. This shows that – as in the USA – the level of segregation is related to the group’s size: the larger the Maori component of an urban’ area’s population, the greater its segregation – but not at levels comparable to those for African-Americans in US cities. The implications of these segregation levels for the New Zealand government’s “closing the gaps” policies are discussed.

As New Zealand has moved rapidly from a bi-cultural to a multi-cultural society in recent decades, much has been written about both the experiences of recent immigrants (Friesen *et al.* 2005) and the situation of the indigenous Maori. However, there has been little within this literature on one aspect of the situations in which they live – their residential segregation.<sup>1</sup> This paper remedies that absence with a discussion of Maori residential segregation in the country’s urban areas, compared to that of African-Americans in similar urban settings in the United States. It thus provides a foundation to exploring and appreciating the role of spatial segregation in the creation and maintenance of socio-economic disadvantage

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among ethnic groups and the necessity for spatially-targeted policies aimed at its reduction.

Much research on residential segregation in multi-ethnic English-speaking cities around the world, both its measurement and its explanation, is strongly derivative of the work of the early twentieth-century Chicago School of sociologists. This suggested that immigrants from cultural backgrounds different from those of other members of society and who suffered disadvantage, if not discrimination, in a city's labour and housing markets would concentrate (through a combination of pressure and choice, the latter reflecting a group members' desire for cultural, social and, even, physical security) in relatively old, poor-quality, high density housing in inner city areas, where they would have relatively little contact with people from other ethnic groups. This situation was exacerbated (at least in the American context) by "white flight" from those areas and the consequent high levels of ethnic segregation in the public school system. Methods of measuring the extent of this segregation were pioneered and deployed to show the extent of spatial separation of the country's urban black and white populations, termed "American apartheid" by two analysts (Massey and Denton 1993).

This "model" and its associated methods were translated around the world and used both to depict and account for residential segregation elsewhere -- including in New Zealand (Johnston 1973). The methods have fallen out of use, however, having been applied only once in recent years -- in a study of Auckland (Friesen *et al.* 2000). Little is known, therefore, about the contemporary situation, despite 21, 39, and 142 per cent increases in the Maori, Pacific People and Asian populations over the decade 1991-2001 (Johnston *et al.* 2003). How segregated are New Zealand's ethnic minorities? Is this level of segregation as great as it is in what is often presented as the theoretical "comparator group" -- African-Americans in the United States? And if so, what are the implications for public policy?

### **Segregation, Poverty and "Closing the Gap"**

The importance of segregation to the appreciation of problems within multi-cultural societies has been stressed by many American writers, such as Wilson (1987), who portrayed residential segregation as "instrumental in creating a structural niche within which a deleterious set of attitudes and

behaviours – a culture of segregation – has arisen and flourished. ... racial segregation – and its characteristic institutional form, the black ghetto – are the key structural factors responsible for the perpetuation of black poverty in the United States” (Massey and Denton 1993:8-9; for a recent review of literature on this subject, see Squires and Kubrin 2005). According to such arguments, public policies aimed at tackling problems of inequality within a multi-cultural society (including, in the United States, the creation and maintenance of ethnic underclasses) must take account of the role of spatial segregation in sustaining those problems.

In New Zealand “it is clear that Maori are economically disadvantaged” (Alexander *et al.* 2004:2). Analyses of income differentials between Maori, Pacific Island and other non-European ethnic groups, on the one hand, and Pakeha, on the other, suggest discrimination towards the former within the labour market. This is partly because Maori are segregated into lower occupational sectors, even after taking into account their age and qualification profiles (Sutherland and Alexander 2002). According to Maani (2004), this discrimination is exacerbated by differential Maori-Pakeha participation in post-compulsory and higher education. Returns on such qualifications are substantial, but recent Maori increases in participation rates for post-compulsory education have been lower than those for other groups within society, hence the growing income differential which sees Maori increasingly disadvantaged.

These differences have been the subject of public policy debates and initiatives aimed at “closing the gaps” (Ministry of Maori Development, 1998). As Alexander and Williams (2001) point out, arguments that the gaps identified in descriptive analyses disappear when other socio-economic and demographic characteristics are taken into account (as in Chapple 2000) are not sustained by more sophisticated analyses. (See also the debate on statistical methodologies between Gould (2000, 2001), Alexander (2001) and Williams and Alexander (2002).) Whatever the rates of change in the relative situations, the gaps remain wide.

An aspect of those gaps which has received very little attention – despite the American evidence discussed above – is the role of spatial separation, or residential segregation, in the generation and maintenance of inter-ethnic differences. If there are different geographies of opportunity which favour one group over another, then part of any policy aimed at closing the gaps must involve a combination of either spatially-selective allocation of

resources and other programme initiatives or projects aimed at reducing the spatial separation. Some studies contrasting Maori and non-Maori labour market experiences have looked at regional variations suggesting, for example, that local unemployment rates (at a regional scale) differentially influence the probabilities of individuals finding jobs (cf. Winkelmann and Winkelmann 1997; see also Chapple 1999; Humphris and Chapple 2000). But only one study has begun to explore differentials at a much finer spatial scale, building on earlier research into work-poor and work-rich households (Callister 1998a, 1998b). As Callister *et al.* (2002:7) put it, most writing on social capital and related issues in New Zealand “is essentially spaceless and quite abstracted from the characteristics of the places where events actually take place”: mapping poverty and deprivation (Crampton *et al.* 2000) reveals little about the processes producing geographic differentiation and whether local context is important in producing the observed outcomes. Their own research – using areal units within the Wellington urban region – did not focus specifically on Maori–non-Maori differentials, but rather on the relationship between household inequality and the spatial segregation of single-adult households. They found a positive relationship between the two suggesting what they term an “ecology of social inequality”.

Such an ecology of social inequality has been identified in a large number of studies in the United States and elsewhere: basically, the greater the spatial segregation of members of a disadvantaged group, the greater their disadvantage. If the degree of segregation were the same everywhere, then public policy directed at reducing or eliminating the disadvantage would not need to be spatially specific. If, on the other hand, they were more segregated in some places than others, the policy would need to vary spatially in order to focus on where the problems were most severe.

Why should the degree of spatial segregation of a disadvantaged minority group vary across urban areas? As most studies of segregation have stressed, it results from the operation of three spatially-structured, inter-linked processes: the labour market, the housing market, and school catchment areas (for a recent statement, see Goldberg 1998). Restriction to certain sectors of the labour market will result in relatively poor rewards to a group’s members, which in turn may restrict them to certain parts of the housing market – in terms of not only price and quality but also location. This spatial confinement in turn may hamper efforts to prosper in the labour market, because of limited local opportunities, thereby exacerbating a

cumulative cycle of disadvantage and further concentrating the group's members into certain parts of the urban area. This is also likely to have an impact on their children's educational opportunities and outcomes. Most school systems operate territorially-defined catchment areas for individual schools, to a greater or lesser extent. It may be, therefore, that the children of members of a minority group concentrated into certain parts of an urban area attend relatively low-quality schools (poorly-resourced and attracting below-average quality staff, for example) which, together with peer influences, means that they under-perform relative to students at other institutions (Forrest 1981). This, in turn, will impact upon their labour-market opportunities, and further exacerbate the concentrated cycle of disadvantage.

Recent studies have suggested that the larger an ethnic minority's percentage of the urban population, the greater its spatial segregation: the cumulative cycle of disadvantage is more intense in some places than others (Johnston *et al.* 2004). Where a group is a relatively small component of the urban population it may be less visible and thus potentially less susceptible to disadvantage and discrimination in the labour and housing markets than in places where it forms a substantial competitor for scarce resources. In addition, a relatively small ethnic minority (or at least substantial parts of it) may be quite readily assimilated into those markets; a larger one may be more distinct, more disadvantaged in the labour market (especially if its skills base is poor and there are limited opportunities for it there), and therefore more likely to feel the need for concentration into certain segments of the residential space in order to sustain its cultural identity and promote its economic and social welfare. Further, the larger the urban centre, the greater the potential for labour and housing market spatial segmentation, and for segregated schools. Thus, we hypothesise that the larger the group as a percentage of the urban area total, the more residentially segregated it will be, especially in larger places.

If the arguments that residential segregation enhances the problems of disadvantage for members of an ethnic minority group are valid, then it is important to appreciate how segregated the group's members are. Further, if it is the case that the degree of segregation varies systematically from place to place, then the nature of that variation needs to be appreciated so that proposed remedial action can be focused on places where segregation and the associated problems are most severe. For New Zealand, in absolute

terms this means exploring the degree of segregation of its major disadvantaged minority – the Maori. In relative terms – since the degree of spatial targeting of social policy should reflect the degree of spatial concentration of the problems – this should be undertaken in comparative perspective. Since the American position – especially that of African-Americans there – is very often taken as the paradigm against which the situation elsewhere is assessed, and where spatially-targeted policies have been frequently experimented with, in this paper we report on such a comparative exploration between the New Zealand and United States' situations.

Introducing a spatial component to analysis and policy-formulation research programmes is a major task, involving detailed exploration of the relationship between segregation and socio-economic disadvantage. This paper is an initial stage in that process, establishing the extent of residential segregation of New Zealand Maori across the country's urban system, as a foundation for further exploration of its implications.

### **The Maori in Urban New Zealand**

Two of New Zealand's three main ethnic minority groups, Pacific Peoples and Asians, are concentrated in the Auckland metropolitan area, with much smaller communities in the country's other two main population centres (Wellington-Hutt and Christchurch).<sup>2</sup> New Zealand Maori, on the other hand, are much more widely distributed. In 2001, only 12.1 per cent of them lived in Auckland, with a further 9.1 per cent in Wellington-Hutt and Christchurch combined; 47.1 per cent lived in smaller urban areas, and 18.5 per cent in rural areas, including settlements with fewer than 1000 residents (Johnston *et al.* 2003). Furthermore, those smaller towns contained relatively few people of either Pacific or Asian ethnicity.

Fourteen urban areas had populations of between 30,000 and 150,000 according to the 2001 census; their Maori percentage ranged from 5.6 to 39.9, with a mean of 18.2 and a standard deviation of 10.2 (Table 1). How segregated were the Maori from the NZ Europeans who predominated in the remainder of the population in those places? And was the level of segregation related to the size of the urban area and the relative size of its Maori population, as suggested above?

To address these questions, we deploy a scheme which classifies each of the small areas with which the census authorities divide up the country for

administrative purposes: the smallest available for New Zealand are the meshblocks, which had an average population in 2001 of 107. This scheme was created (Poulsen *et al.* 2001) as a means of implementing a definition of segregation which incorporates three components:

- *The degree of residential concentration*, or the extent to which the ethnic group being studied dominates areas;
- *The degree of assimilation*, or the extent to which the ethnic group shares residential space with the dominant group within society;<sup>3</sup> and
- *The degree of encapsulation*, that is, the extent to which any one ethnic group is isolated residentially from both the dominant group in society and also other ethnic groups.

**Table 1: The urban area populations and their Maori components, 2001**

Urban Area	Population	Percentage Maori
Dunedin	108,168	5.6
Gisborne	31,563	39.9
Hamilton	138,516	19.3
Hastings	59,400	23.8
Invercargill	46,041	11.9
Kapiti	33,081	8.8
Napier	54,957	16.8
Nelson	53,889	7.0
New Plymouth	47,349	11.3
Palmerston North	73,011	13.0
Rotorua	53,046	35.2
Tauranga	94,806	15.6
Wanganui	39,360	20.1
Whangarei	45,486	26.4

Source: New Zealand Census

The classification scheme in Figure 1 operationalizes that definition.

The scheme comprises six type areas. Areas with a majority drawn from the dominant ethnic group (New Zealand European in New Zealand; white in the USA) are termed “NZ European communities” (the left-hand side of Figure 1) and are subdivided into:

- i. *Isolated dominant communities* where (in New Zealand) NZ Europeans form at least 80 per cent of the population, and they are substantially isolated from ethnic groups occupying other parts of the city.
- ii. *The non-isolated dominant communities* with NZ Europeans forming 50-80 per cent of the population; they are not as isolated from other ethnic groups as in the first type.

Areas with members of the dominant ethnic group in a minority form the second group, on the right-hand side of Figure 1. They are divided into four types according to not only the percentage of their populations who are NZ Europeans but also the relative size of various ethnic minority groups.

- iii. *The assimilation-pluralism enclaves* have the greatest ethnic mix, with NZ Europeans in a substantial minority (30-50 per cent). These areas have substantial components from both NZ Europeans and two or more minority groups, a situation consistent with the hypothesized process of spatial assimilation.

The other three types not only have small populations drawn from the dominant ethnic group (30 per cent or less of the total) but also in two cases (types 5 and 6) are dominated by one of the minority ethnic groups only. That degree of dominance forms the vertical axis on the right-hand side of Figure 1.

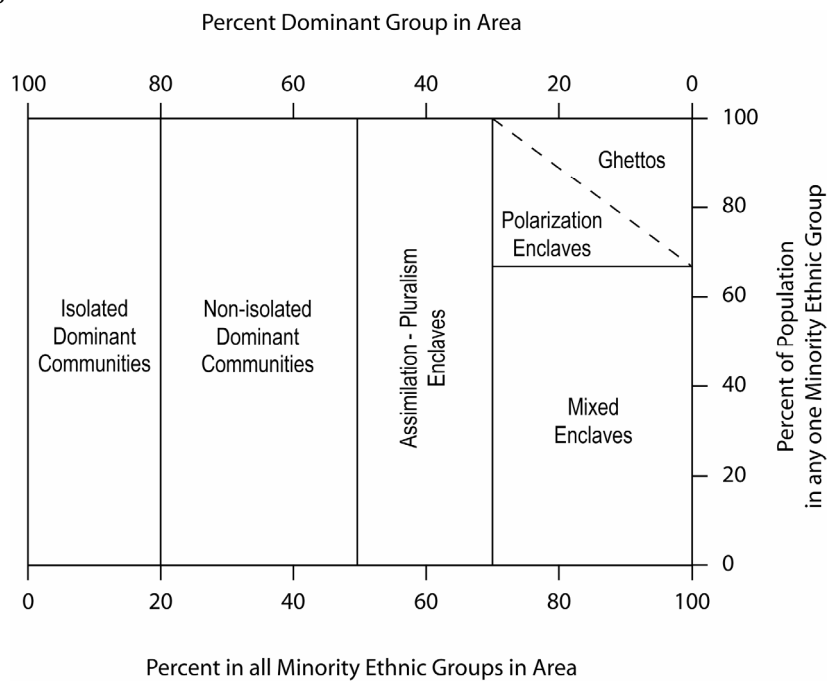
- i. *The mixed-minority enclaves* have 70 per cent or more of their population drawn from the minority groups, but no one group is more than twice the size of all other minority groups. These are areas of high relative minority group mixture (typically with each of two minority groups comprising more than 20 per cent of the population), relatively isolated from NZ Europeans.
- ii. In *polarized enclaves* one minority group is at least twice as large as all of the remaining minority population, accounting for 46-100 per cent of the total population. These are areas dominated by one minority group; there can be as many different polarized enclave types as there are minority groups.
- iii. *The ghettos* display the most extreme forms of spatial segregation. Not only do they meet the criteria for polarized enclaves but in addition one minority group forms at least 60 per cent of the area's population and 30 per cent or more of the relevant group in the entire city lives in such areas (ie. in New Zealand there is a Maori ghetto in a city if (a) it

has areas where Maori form at least 60 per cent of the local population and (b) at least 30 per cent of the city's Maori live in those areas. As with the polarized enclaves there can be as many ghettos as there are minorities in a city.

Because this procedure is based on absolute levels of concentration, the outcome is not a function of the relative size of any one group, thus making it well-suited for comparative (including international) studies over time and place (Poulsen *et al.* 2001).

In the current study, in which NZ Europeans and Maori together comprise virtually all of the population of the 14 urban areas, the differences between types 4 and 5 are of little importance: almost all meshblocks where NZ Europeans are less than 30 per cent of the population have Maori majorities. The issue of ghettoisation is also not considered here and we have not identified separate type 6 areas according to the above scheme (see Johnston *et al.* 2002). We concentrate on the “dominant communities”, where NZ Europeans are in the majority, and the ethnic minority enclaves, where Maori are the majority group, and on the main divisions within these two types.

**Figure 1: The classification scheme**





## Maori Residential Segregation

The distribution of Maori across the five type areas in 2001 is shown in Tables 2-3, with the urban areas organized by the percentage Maori in their populations. Table 2 shows the percentages living in NZ European majority areas, which averaged 78.1 over the two categories combined. Only two places – Gisborne and Rotorua – had less than half of all Maori living in meshblocks where Maori were in a minority. These two cities also had the smallest proportions of their Maori residents living in areas with NZ European populations exceeding 80 per cent of the total (the isolated dominant communities). At the other extreme, three places had more than half of all their Maori living in such unsegregated situations.

**Table 2: The percentage of Maori living in areas with European majorities.**

Urban Area	Area Types		
	1	2	1+2
Gisborne	4.7	36.5	41.2
Rotorua	4.7	41.2	45.9
Whangarei	9.4	57.0	66.4
Hastings	10.9	30.2	41.1
Wanganui	19.6	59.2	78.8
Hamilton	12.4	58.1	70.5
Napier	25.0	52.1	77.1
Tauranga	28.6	54.1	82.7
Palmerston North	25.2	67.6	92.8
Invercargill	49.5	50.4	99.9
New Plymouth	42.7	55.1	97.8
Kapiti	70.3	29.6	99.9
Nelson	69.5	30.2	99.7
Dunedin	66.1	33.6	99.7

Key to area types:

1. Isolated dominant communities;
2. Non-isolated dominant communities (see Figure 1).

Whereas Table 2 looks at Maori living in NZ European-majority areas, Table 3 focuses on those living in areas with Maori majorities. To a

considerable extent, therefore, it is a mirror-image of Table 2, and the important data are not the totals in the final columns but the distribution across the three categories which involve an increase in Maori dominance within the neighbourhood. Only Gisborne has more than 10 per cent of its Maori living in type 5 areas (the polarized enclaves), where NZ Europeans form less than 30 per cent of the total and Maori form a majority of the non-NZ European population. Further, only four places – Gisborne plus Rotorua, Whangarei and Hastings – have more than 10 per cent of their Maori living in type 4 and 5 areas combined (the mixed-minority and polarized enclaves), where NZ Europeans form less than 30 per cent of the total population: Hastings has almost the same percentage as Gisborne. In all 14 urban areas, however, there were considerably more Maori living in the blocks where NZ Europeans formed a substantial minority of the population (30-50 per cent) than in those where Maori predominate.

**Table 3: The percentage of Maori living in areas with non-European majorities**

	Area Types			
	3	4	5	3-5
Gisborne	34.5	1.5	22.8	58.8
Rotorua	39.2	5.4	9.5	54.2
Whangarei	22.6	5.1	5.9	33.6
Hastings	36.6	17.3	4.9	58.8
Wanganui	19.5	0.2	1.4	21.2
Hamilton	22.8	2.2	4.5	29.5
Napier	15.0	4.6	3.3	22.9
Tauranga	9.1	0.7	7.6	17.3
Palmerston North	6.2	1.0	0.0	7.2
Invercargill	0.0	0.0	0.1	0.1
New Plymouth	2.2	0.0	0.0	2.2
Kapiti	0.0	0.1	0.0	0.1
Nelson	0.0	0.1	0.2	0.3
Dunedin	0.4	0.0	0.0	0.4

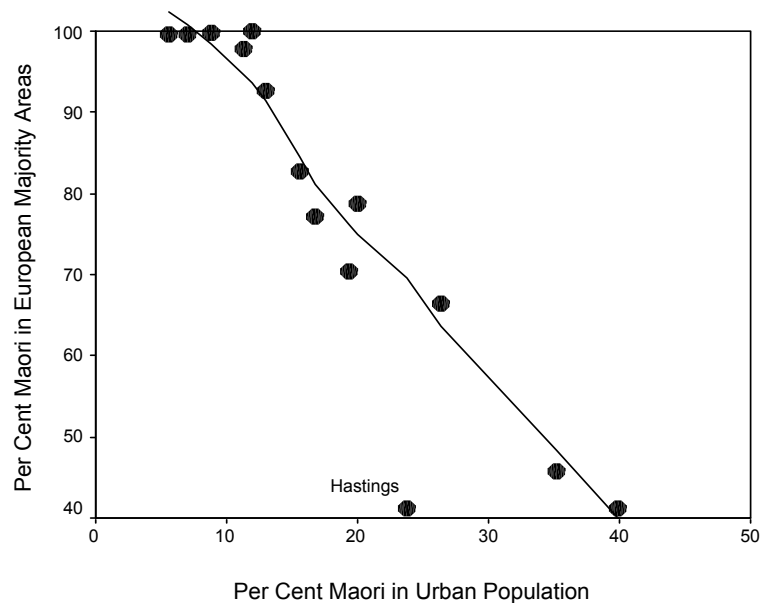
Key to area types: 3. Assimilation-pluralism enclaves; 4. Mixed-minority enclaves; 5. Polarized enclaves (see Figure 1).

A final feature of Tables 2 and 3 is the clear relationship between the degree of segregation and the relative size of the Maori population. The larger the Maori component, the greater its spatial segregation. Figure 2

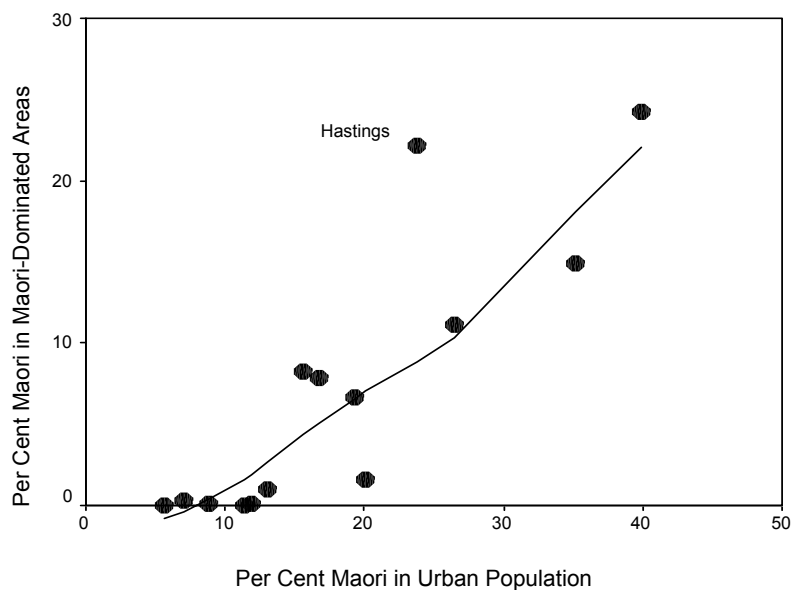
shows a very strong negative relationship (according to the best-fit lowess line) between the relative size of the Maori population and the percentage of that population living in areas with a NZ European majority, with one major outlier – Hastings has fewer Maori in NZ European-majority areas than the overall trend suggests. Figure 3 shows the percentages of Maori living in Maori-dominated areas (ie. the type 4 and 5 mixed-minority and polarized enclaves: Figure 1). Again, there is a very clear trend – the larger the Maori population, the larger the percentage of that population living in areas where NZ Europeans formed no more than 30 per cent of the population, with Hastings again a substantial outlier.

These interpretations are confirmed by regression analyses reported in Table 4. In each of these, the dependent variable is the percentage of the Maori population living in one or more of the segregation types identified in Figure 1 and the independent variables are the size of the urban area and its percentage Maori. In none of the eight regressions is the former statistically significant: Maori segregation is not linked to urban size. In six of the eight, on the other hand, there is a significant relationship with the Maori percentage: in general, the larger the Maori component of the urban population, the greater the segregation of Maori there.

**Figure 2: The relationship between the percentage of Maori in an urban area's population and the percentage of those Maori living in mesh blocks with a European majority**



**Figure 3: The relationship between the percentage of Maori in an urban area's population and the percentage of those Maori living in meshblocks with a Maori-dominated population**



The regressions are in two groups. The first three look at the percentage of Maori living in communities with NZ European majorities. There is a strong negative relationship between the two variables in the case of the isolated NZ Europeans communities – those in which NZ Europeans form at least 80 per cent of the total: the smaller the Maori population, the larger the percentage of Maori who live in such areas. There is no relationship in the case of the non-isolated dominant communities – where NZ Europeans form 50-80 per cent of the total – but a further strong link when the two types (1-2) of community are combined into all NZ European-majority areas.

The second group of regressions looks at the relationships for the percentage of Maori living in area-types where NZ Europeans are in a minority. There are strong, positive relationships between the percentage Maori in a town and the percentages of Maori living in the most mixed areas (type 3 in the scheme, with 30-50 per cent NZ Europeans) and in type 5 areas (the polarized enclaves), and also with the percentages living in the type 4 and 5 areas combined (ie. those where NZ Europeans form less than 30 per cent of the total). Finally, as the mirror image of the third regression,

there is a positive relationship between the size of a town's Maori community and its percentage living in NZ European-minority areas.

**Table 4: Regressions of segregation against urban size and Maori percentage**

	b	SE	t	R <sup>2</sup>
<b>Per cent Maori in NZ European-majority areas</b>				
Isolated dominant communities				
Constant	<u>83.31</u>	10.78	7.73	
Urban size ('000s)	-0.20	0.11	1.79	
Maori %	<u>-2.18</u>	0.33	6.54	0.76
Non-isolated dominant communities				
Constant	<u>39.35</u>	12.39	3.18	
Urban size ('000s)	0.10	0.13	0.75	
Maori %	0.10	0.38	0.21	0.05
All NZ European-majority areas				
Constant	<u>122.66</u>	7.94	15.46	
Urban size ('000s)	-0.10	0.08	1.26	
Maori %	<u>-2.10</u>	0.25	8.56	0.85
<b>Per cent Maori in NZ European-minority areas</b>				
Assimilation-pluralism enclaves				
Constant	<u>-14.97</u>	5.18	2.89	
Urban size ('000s)	0.01	0.05	1.49	
Maori %	<u>1.37</u>	0.16	8.56	0.85
Mixed-minority enclaves				
Constant	-1.35	4.19	0.32	
Urban size ('000s)	0.01	0.04	0.22	
Maori %	0.19	0.13	1.49	0.02
Polarized enclaves				
Constant	<u>-6.30</u>	3.06	2.06	
Urban size ('000s)	0.00	0.03	0.44	
Maori %	<u>0.54</u>	0.09	5.67	0.71
Mixed-minority and polarized enclaves				
Constant	-7.66	4.11	1.86	
Urban size ('000s)	0.00	0.04	0.55	
Maori %	<u>0.73</u>	0.13	5.74	0.71
All NZ European-minority areas				
Constant	<u>-22.62</u>	7.94	2.85	
Urban size ('000s)	0.10	0.08	1.26	
Maori %	<u>2.10</u>	0.25	8.56	0.85

Significant regression coefficients at the 0.05 level or better are underlined

## Maori Segregation in Comparative Perspective

The analyses reported above provide clear evidence of considerable variation in the levels of Maori residential segregation across New Zealand's urban areas, which are linked to the relative size of the Maori population in the urban areas. The larger the Maori component to the population, the larger the percentage of Maori living in residential areas where they are segregated from members of the NZ European community.

Is this situation typical of that experienced by similar minorities elsewhere? Each country's cultural situation is unique, but comparative investigations can give useful insights. To that end, this section reports on a comparative study of levels of segregation of Maori in New Zealand's towns and cities with those of African-Americans in comparable urban places in the United States. For this, we have taken all US metropolitan areas as defined for the 2000 US Census with populations less than 150,000, excluding those with Asian and/or Hispanic populations exceeding five per cent of the total. This gave a total of 62 places, whose African-American percentages ranged from 0.2 to 50.8, with a mean of 11.8 and a standard deviation of 14.3. The classification into the area types (Figure 1) was applied to data on the ethnic composition of the census blocks, which had an average population of around 400.

Table 5 reports comparable regressions on African-American residential segregation across those 62 MAs to those for Maori segregation in Table 4. They show the same general story: the larger the African-American component of the urban population, the smaller the percentage of African-Americans living in white majority areas and the larger the percentage living in relative isolation from whites in type 5 areas (the polarized enclaves). Unlike New Zealand, however, there is also a significant urban size effect in some of the regressions: in general, the larger the place (whatever its African-American population), the greater the spatial separation of the two ethnic groups.

The general patterns of segregation are the same in the two countries, therefore, but are the levels of segregation the same too? Figures 4-6 suggest not. Figure 4 shows that in both countries the larger the minority population in an urban area (Maori in New Zealand; African-American in the United States), the smaller the proportion of that minority living in white/NZ European-majority areas. However, the best-fit (lowess) lines indicate – with one exception (Hastings: see above) – that the percentage of

**Table 5: Regressions of segregation against urban size and African-American percentage**

	B	SE	t	R <sup>2</sup>
<b>Per cent African-American in white-majority areas</b>				
Isolated dominant communities				
Constant	<u>78.74</u>	11.29	6.98	
Urban size ('000s)	<u>-0.25</u>	0.10	2.54	
African-American %	<u>-1.29</u>	0.16	8.27	0.58
Non-isolated dominant communities				
Constant	<u>35.57</u>	7.50	4.74	
Urban size ('000s)	0.01	0.07	0.46	
African-American %	<u>-0.31</u>	0.10	2.96	0.12
All white-majority areas				
Constant	<u>114.31</u>	10.53	10.86	
Urban size ('000s)	<u>-0.28</u>	0.09	3.04	
African-American %	<u>-1.59</u>	0.15	10.97	0.72
<b>Per cent African-American in white-minority areas</b>				
Assimilation-pluralism enclaves				
Constant	-3.92	5.51	0.70	
Urban size ('000s)	<u>0.11</u>	0.05	2.33	
African-American %	-0.01	0.08	0.18	0.06
Mixed-minority enclaves				
Constant	-4.35	6.54	0.66	
Urban size ('000s)	0.10	0.06	1.14	
African-American %	-0.09	0.09	1.01	0.01
Polarized enclaves				
Constant	-6.05	7.78	0.78	
Urban size ('000s)	0.10	0.07	1.51	
African-American %	<u>1.67</u>	0.11	15.83	0.81
Mixed-minority and polarized enclaves				
Constant	-10.39	9.67	1.07	
Urban size ('000s)	<u>0.17</u>	0.09	1.99	
African-American %	<u>1.61</u>	0.13	12.04	0.73
All white-minority areas				
Constant	-14.31	10.53	1.36	
Urban size ('000s)	<u>0.28</u>	0.09	3.05	
African-American %	<u>1.59</u>	0.15	10.97	0.71

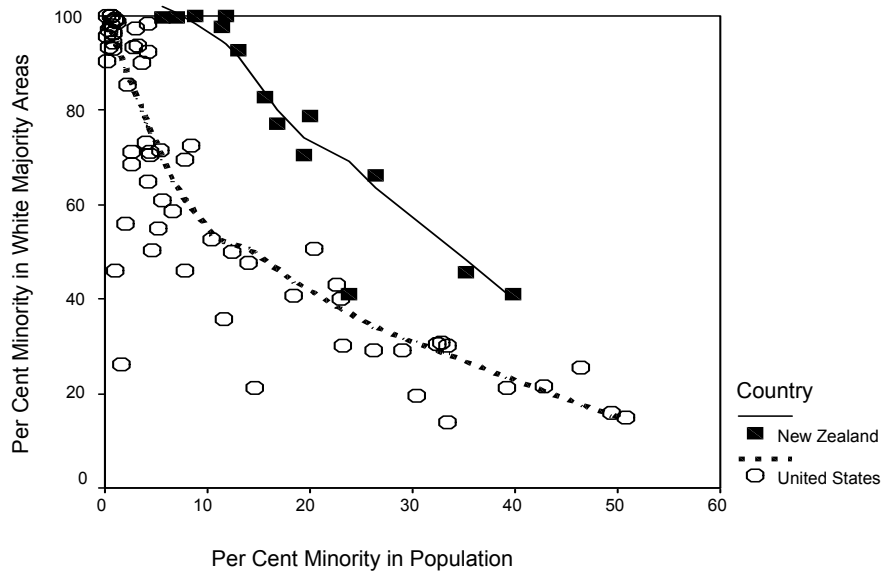
Significant regression coefficients at the 0.05 level or better are underlined

Maori living in such areas is much greater than that of African-Americans. Similarly, Figure 5 shows that whereas the percentage of Maori or African-Americans living in white/NZ European-minority areas increases in both

countries the larger the minority ethnic group's relative size, substantially fewer Maori do so in New Zealand than do African-Americans in the United States. Finally, the gap between the two countries is even wider when the variable of interest is the percentage of the minority group living in areas where whites/NZ Europeans form less than 30 per cent of the total population.

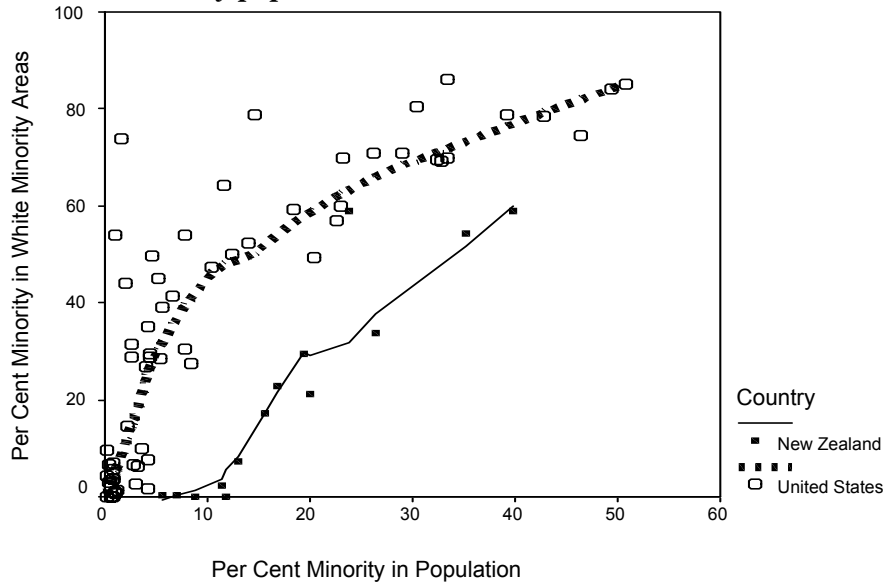
As a formal test of the inter-country differences shown in Figures 4-6, the regressions of Tables 4-5 were re-run including all of the urban areas in both countries and with an additional independent variable – a dummy, coded 1 if the urban area was in New Zealand and 0 if it was in the United States. The expectation was that this would show a significant difference between the two countries in the levels of segregation, holding constant both urban population size and the minority percentage of the urban population: the coefficients should be positive in the first three regressions (of the percentage of the minority living in white/NZ European-majority areas), and negative in the other five. Those expectations are confirmed in five of the eight regressions. In two of the others the regression coefficient is statistically insignificant at the 0.05 level; in the other, the coefficient is significant, but has the opposite sign from that expected.

**Figure 4: The relationship between the percentage of the ethnic minority group (Maori in New Zealand; African-American in the USA) in an urban area's population and the percentage of that group living in areas with a white-majority population**

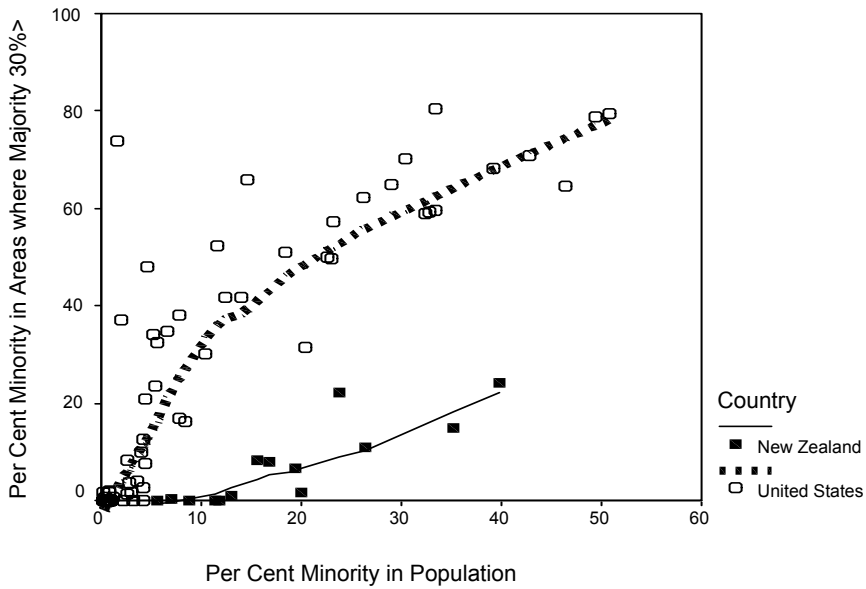




**Figure 5:** The relationship between the percentage of the ethnic minority group (Maori in New Zealand; African-American in the USA) in an urban area's population and the percentage of that group living in areas with a white-minority population



**Figure 6:** The relationship between the percentage of the ethnic minority group (Maori in New Zealand; African-American in the USA) in an urban area's population and the percentage of that group living in areas where whites are less than 30 per cent of the population



**Table 6: Regressions of segregation against urban size and minority percentage: New Zealand and the USA**

	b	SE	t	R <sup>2</sup>
<b>Per cent minority in white(NZ European)-majority areas</b>				
Isolated dominant communities				
Constant	<u>74.76</u>	9.31	8.03	
Urban size ('000s)	<u>-0.21</u>	0.08	2.58	
Minority %	<u>-1.39</u>	0.11	9.82	
New Zealand	-5.13	6.50	0.79	0.59
Non-isolated dominant communities				
Constant	<u>32.46</u>	6.59	4.93	
Urban size ('000s)	0.01	0.06	0.09	
Minority %	<u>-0.28</u>	0.10	2.83	
New Zealand	<u>19.80</u>	4.60	4.31	0.31
All white(NZ European)-majority areas				
Constant	<u>107.22</u>	8.50	12.61	
Urban size ('000s)	<u>-0.21</u>	0.07	2.90	
Minority %	<u>-1.67</u>	0.13	12.95	
New Zealand	<u>14.67</u>	5.93	2.47	0.73
<b>Per cent minority in white(NZ European)-minority areas</b>				
Assimilation-pluralism enclaves				
Constant	0.59	5.45	0.11	
Urban size ('000s)	0.05	0.05	1.24	
Minority %	0.14	0.08	1.65	
New Zealand	<u>8.12</u>	3.81	2.13	0.08
Mixed-minority enclaves				
Constant	-1.81	5.19	0.35	
Urban size ('000s)	0.04	0.05	0.89	
Minority %	-0.01	0.08	0.68	
New Zealand	3.02	3.62	0.83	0.03
Polarized enclaves				
Constant	-5.98	6.57	0.91	
Urban size ('000s)	<u>0.11</u>	0.06	2.02	
Minority %	<u>1.59</u>	0.10	15.92	
New Zealand	<u>-25.82</u>	4.59	5.63	0.80
Mixed-minority and polarized enclaves				
Constant	-7.79	7.78	1.00	
Urban size ('000s)	<u>0.15</u>	0.07	2.30	
Minority %	<u>1.54</u>	0.12	12.99	
New Zealand	<u>-22.80</u>	5.43	4.20	0.73
All white(NZ European)-minority areas				
Constant	-7.20	8.50	0.85	
Urban size ('000s)	<u>0.21</u>	0.07	2.90	
Minority %	<u>1.67</u>	0.13	12.95	
New Zealand	<u>-14.69</u>	5.94	2.47	0.72

Significant regression coefficients at the 0.05 level or better are underlined

Looking at the findings in more detail, two of the three regressions in the first block of Table 6 have large, significant positive coefficients for the New Zealand variable: relative to the situation in the USA, many more Maori in New Zealand towns live in both non-isolated dominant communities (where NZ Europeans form 50-80 per cent of the population) and all white/NZ European-majority areas. However, there is no significant difference between New Zealand and US urban areas in the percentages of members of their minority group living in communities where the white/NZ European population forms at least 80 per cent of the total.

Turning to the percentages of the minority populations living in white/NZ European-minority areas of various types and combinations, the last three regressions show very clear differences between the two countries. Many fewer Maori live in relative isolation (ie. in the type 4 areas – the polarized enclaves – where they form at least 70 per cent of the population) than is the case for African-Americans in comparable US urban areas, and this difference is reflected in the regression coefficients for the combinations of type 4 and 5 areas and for all white/NZ European-minority areas (types 3-5 inclusive). However, the first regression in that block shows a significant positive difference between the two countries in the percentages living in the type 3 areas: whereas in New Zealand urban areas with large Maori populations many of the Maori live in relatively mixed residential neighbourhoods, albeit with NZ European minorities, this is not the case in the US, where only small percentages of African-Americans live in such areas, irrespective of the local context.

## **Conclusion**

Little has been written in recent decades regarding the residential milieu of New Zealand's urban Maori and the extent to which they are spatially segregated from NZ Europeans. Using small-area data from the 2001 Census, we have shown considerable segregation of Maori in the 14 urban areas with populations between 30,000 and 150,000, thus excluding the three main metropolitan areas which have substantial Pacific People and Asian populations as well as Maori. The degree of segregation varies across the 14 places, however: the larger the Maori component as a percentage of the urban total, the greater the spatial separation of NZ Europeans and Maori.

This pattern is consistent with studies of segregation levels in the United States (on which see Johnston *et al.* 2004), where it is also the case that the larger the minority group the greater its spatial separation from both the dominant group within society and other ethnic groups. But although the pattern is the same in both countries, the level of segregation is not: New Zealand Maori are less segregated from NZ Europeans than are African-Americans from white Americans.

Establishing the degree of segregation of Maori in urban New Zealand outside the three main centres, and the variation in that degree across the fourteen places studied, has been presented here not only as an exercise in social geography – valuable though that is given the absence of similar studies using recent census data – but also as a basis for debate regarding the problems of Maori-Pakeha differentials and policies for “closing the gaps”. Studies elsewhere, notably in the USA, have shown that segregation is linked to socio-economic disadvantage in a variety of arena: the differentials between a disadvantaged minority and the dominant group in a society are exacerbated where the former are substantially segregated from the latter. Evidence whether that is the case within New Zealand is very largely lacking. If it is – and there is no reason to suspect that it is not, since the existence of segregation suggests inter-linked labour and housing market disadvantage compounded by concentration of students into segregated schools – then “closing the gaps” policies will need to take this segregation into account.

Furthermore, we have shown that residential segregation of Maori is particularly intense in those urban areas where they form a substantial proportion of the population. It is not necessarily the larger urban places where segregation is greatest, but rather those where Maori are relatively more numerous. Following the argument being developed here, it may well be that Maori-Pakeha socio-economic differentials are greater in those places as a consequence – a clear subject for future research. Nevertheless, this study has also found that the segregation of Maori from NZ Europeans is significantly less than that experienced by African-Americans from whites in comparable US urban areas. The extremes of disadvantage generated by spatial segregation there are unlikely to be repeated in New Zealand. On the other hand, the geography of where Maori live in urban New Zealand is strongly suggestive of an “ecology of social inequality” which needs to be

explored further and, if identified, incorporated within “closing the gap” policies.

## Notes

- 1 Morrison *et al.* (2002), for example, note that a bibliography on poverty in New Zealand (Peace *et al.* 2000) identified no studies relating to residential segregation.
- 2 In 2001, 65.8 per cent of all Pacific peoples were living in Auckland and a further 16.5 and 18.5 per cent in Christchurch and Wellington-Hutt respectively.
- 3 This dominant group – economically, socially, culturally and politically – is generally referred to as the “host society” as a shorthand for the dominant group in the relevant urban society – whether or not it is a majority or even (as in the case of all three cities discussed here) the original settlers. An alternative term for the dominant group within a society, employed in Canadian studies but not widely elsewhere, is “charter group”. In the New Zealand case use of the term “host society” raises substantial difficulties because of the country’s prior occupation by Maori, so we use the term “NZ European” (the term used in official statistics) to refer to the dominant group throughout the paper when specifically referring to New Zealand.

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## **New Zealand's Diaspora and Overseas-born Population**

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DAVID LAW

### **Abstract**

Many New Zealand-born people migrate overseas, creating a diaspora, and many overseas-born people migrate to New Zealand. Both the diaspora and the overseas-born population in New Zealand may facilitate the international exchange of goods and ideas. Much discussion of international linkages has, however, been limited by a lack of data on numbers of people involved. Based mainly on place-of-birth data from national censuses, this paper provides estimates of the size and structure of New Zealand's diaspora and overseas-born population, as well as comparisons with selected OECD countries such as Australia. A tentative conclusion is that New Zealand's diaspora may offer less scope to link New Zealand with the rest of the world than is often assumed, while New Zealand's overseas-born population may offer more scope.

**M**any government agencies and social commentators argue that, by linking New Zealand into the rest of the world, migrants can stimulate the exchange of goods and ideas, and hence improve economic performance. Migrants are seen as potential intermediaries, facilitating international flows of information. One of the official motivations for New Zealand's business visa scheme, for instance, is that "international trade and investment are facilitated through the knowledge of international markets, contacts and languages of business migrants and visitors" (New Zealand Immigration Service 2002). In the same vein, Deutsche Bank's analysis of the New Zealand economy, prepared for the 2003 Knowledge Wave Conference, suggests "targeted immigration" and "diaspora policy" as ways of increasing New Zealand's "global connectedness" and economic

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growth (Deutsche Bank 2003). Recent econometric estimates suggest that migrants do in fact boost trade: all else equal, the more migrants New Zealand receives from a particular country, the more New Zealand tends to trade with that country (Bryant, Genç and Law 2004).

Discussions of the contributions of migrants and global connections are often hampered, however, by a lack of information about basic numbers. Estimates of the size of the New Zealand diaspora, for instance, vary by a factor of two.<sup>1</sup> Many people seem to underestimate the size of the “reverse diaspora” – the stock of immigrants in New Zealand. There are also few systematic comparisons between New Zealand’s migration numbers and those of similar countries.

This paper aims to supply some of the missing numbers. It presents some basic data on the size and structure of New Zealand’s diaspora and immigrant population. Most of the data are derived from the “place of birth” question from New Zealand and overseas censuses. The paper provides numerous international comparisons. The conclusion of the paper compares the diaspora and reverse diaspora, and comments briefly on implications.

## **The Diaspora**

This section gives estimates of the size and geographical distribution of the New Zealand diaspora. The principal source of data is the “place of birth” question in national censuses. We treat a person as belonging to the New Zealand diaspora if the person was born in New Zealand but is resident in another country at the time of the other country’s census. This means defining a person as a “New Zealander” if, and only if, that person was born in New Zealand. We assemble statistics on the diasporas of eight comparator countries using the same approach.

Some previous research has used essentially the same methods. An unpublished study by Statistics New Zealand, for instance, used overseas data on numbers of resident New Zealanders to estimate the size of the New Zealand diaspora. A report on the Australian diaspora relies on estimates derived from consular activity to calculate numbers of Australians overseas, but uses census data to estimate numbers of New Zealanders overseas (Hugo, Rudd and Harris 2003:Table 2.5). We have, however, obtained data from a much larger number of destination countries than these earlier

studies, aided by the increasing tendency for statistical agencies to place census results on their internet sites.

Although our definition captures one important aspect of the everyday concept of “New Zealander”, “Australian”, and so on, it does lead to some anomalies. For instance, it excludes some people who might ordinarily be included, such as those who moved to New Zealand as young children. It also includes people who might ordinarily be excluded, such as those who moved overseas as young children. These somewhat artificial exclusions and inclusions should, to some unknown extent, offset one another. The birthplace definition also has some important technical advantages. First, data on place of birth are readily available, including data from other countries. Second, the meaning of place of birth is clear, so the associated data are likely to be relatively reliable. Third, people have only one place of birth, so there is no danger of double counting.

Unlike the unpublished Statistics New Zealand study, and unlike some estimates of the Irish or Italian diasporas, we make no attempt to include spouses or descendants. Data with which to estimate numbers of spouses and descendants are only available for a few countries, such as Australia. It is also unclear whether spouses and descendants have the same potential as do New Zealand-born themselves to be international intermediaries.

Table 1 shows data on foreign and native populations from the websites of 20 national statistical agencies.<sup>2</sup> In Table 1, as in all tables in this paper, the estimates refer to the “usually resident” population: that is, the estimates try to include local residents temporarily overseas, and exclude overseas residents temporarily in the country. The row for Australia, for instance, shows the number of Australian residents born in Australia, Canada, Korea, and the other six countries, as recorded in Australia’s 2001 Census. Dashes indicate no data available, which, since statistical agencies generally report the major migration sources first, implies that the number of immigrants was small.

**Table 1: International diaspora, New Zealand and eight selected countries, 2001**

Country of residence	Country of birth								
	Australia	Canada	Korea	Ireland	Italy	Netherlands	New Zealand	United Kingdom	United States
Argentina <sup>a</sup>	--	--	--	--	328,113	--	--	--	--
Australia	13,629,685	27,289	38,900	50,235	218,718	83,324	<b>355,765</b>	1,036,245	53,694
Austria	659	1,658	1,446	546	26,099	5,248	<b>156</b>	6,786	7,371
Canada	18,910	23,991,910	82,745	26,210	318,095	118,460	<b>9,475</b>	614,610	258,420
Denmark	886	1,786	483	1,129	3,110	4,955	<b>382</b>	11,670	6,219
Finland	673	1,261	152	244	1,057	832	<b>88</b>	3,067	3,050
France <sup>b</sup>	2,868	8,790	9,781	3,858	523,080	20,813	<b>890</b>	59,356	26,320
Germany <sup>c</sup>	8,322	12,646	22,634	15,594	616,282	112,362	<b>1,643</b>	115,167	113,528
Ireland	5,947	3,926	--	3,354,025	3,634	3,428	<b>2,195</b>	242,155	20,977
Italy <sup>e</sup>	2,881	2,683	3,793	2,204	56,573,464	7,312	<b>234</b>	24,592	18,941
Japan <sup>c,e</sup>	4,759	5,824	560,414	--	1,017	--	<b>1,814</b>	8,789	38,954
Korea <sup>e</sup>	--	--	48,021,543	--	--	--	--	--	--
Netherlands	12,805	12,199	2,764	7,248	35,193	13,140,336	<b>4,260</b>	74,869	29,093
New Zealand	56,142	7,770	17,934	6,726	1,440	22,239	<b>2,890,869</b>	210,978	13,344
Norway	--	--	6,086	--	--	4,140	--	14,177	14,666
Spain	1,012	1,489	1,780	3,677	21,833	16,383	<b>275</b>	88,107	12,323
Sweden	2,387	2,324	9,320	1,200	6,538	4,777	<b>687</b>	15,458	14,711
Thailand <sup>d,e</sup>	1,400	1,400	1,800	--	600	900	<b>300</b>	2,300	5,200
United Kingdom	107,871	72,518	--	533,852	107,244	40,438	<b>58,286</b>	53,892,620	158,434
United States <sup>d</sup>	60,965	820,771	864,125	156,474	473,338	94,570	<b>22,872</b>	677,751	250,314,017
Total	13,918,172	24,976,244	49,645,700	4,163,222	59,258,855	13,680,517	<b>3,350,191</b>	57,098,697	251,109,262
<i>Total outside country of birth</i>	<i>288,487</i>	<i>984,334</i>	<i>1,624,157</i>	<i>809,197</i>	<i>2,685,391</i>	<i>540,181</i>	<i>459,322</i>	<i>3,206,077</i>	<i>795,245</i>

<sup>a</sup>1991 <sup>b</sup>1999 <sup>c</sup>1995 <sup>d</sup>2000 <sup>e</sup>Citizenship rather than birth

Note: Dashes indicate no data available.

Sources: See Appendix.

The rows for Germany, Italy, Japan, and Thailand are based on data for citizenship rather than birthplace. It seems unlikely that this makes much difference to the results.<sup>3</sup>

Reading down the columns of Table 1 gives, for each country, the international distribution of people born in that country. The “total” row at the bottom of the table shows the number of people born in the country, including both those inside and outside the country. The totals, and the sub-totals for people outside their country of birth, are all underestimates, because we have been unable to obtain data on immigrants for all countries. We suspect that, for New Zealand, the degree of underestimation is relatively small. All the major countries not included in Table 1 are non-English-speaking. For almost all the non-English-speaking countries shown in Table 1, the number of resident New Zealanders is low. There are, for instance, only 890 New Zealanders reported as living in France, only 234 in Italy, and only 88 in Finland. It seems likely that the numbers of New Zealanders living in countries not included in Table 1 runs to thousands rather than tens of thousands.

Table 1 shows that there were something in excess of 460,000 New Zealand-born living outside New Zealand in 2001. Of these, almost 360,000 were living in Australia. This represents about 11 per cent of all New Zealand-born, and 77 per cent of the total New Zealand-born population living outside New Zealand. The number of New Zealanders in other countries is much smaller than is often assumed. Expatriates in the United Kingdom often claim that London is New Zealand’s third or fourth largest city. As Table 1 shows, however, the number of New Zealand-born residents in the whole of the United Kingdom in 2001 was less than 60,000.<sup>4</sup> The New Zealand-born populations in the United States and Canada are also not particularly large, and we were able to identify only three non-English-speaking countries with New Zealand-born populations of more than 1,000.

The estimate of something over 460,000 New Zealanders living overseas is consistent with the fact that New Zealand lost 484,000 citizens abroad over the period 1954–2001 (Bushnell and Choy 2001:4). The two measures would not, in general be equal, since some New Zealand citizens are not born in New Zealand, and since the net loss measure does not take account of deaths. The number 460,000 is, however, substantially smaller than the figure of one million that is often cited as the size of the New Zealand diaspora. Some of the difference may be attributed to definitions: the larger estimates tend to include children and spouses of New Zealanders. The difference does, however, illustrate the danger of

generalising from anecdotes and from impressions gained on the London Underground.

**Table 2: Geographical distributions of populations born in New Zealand and eight selected countries, 2001**

	Australi a (%)	Canada (%)	Korea (%)	Ireland (%)	Italy (%)	Nether- lands (%)	<b>New Zealand</b> (%)	United Kingdom (%)	United States (%)
In country of birth	97.9	96.1	96.7	80.6	95.5	96.1	<b>86.3</b>	94.4	99.7
Outside country of birth	2.1	3.9	3.3	19.4	4.5	3.9	<b>13.7</b>	5.6	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0
Outside country of birth (excl. main destination)	1.3	0.7	1.5	6.6	3.5	3.1	<b>3.1</b>	3.8	0.2

Source: Calculated from data in Table 1.

Table 2 summarises the data shown in Table 1. The second row of the table gives the number of people living outside their country of birth as a percentage of the “total” population shown at the bottom of Table 1. Although the percentage of New Zealanders outside their country of birth is lower than the percentage of Irish, it is still substantially higher than for other countries in the table. It is several times higher than the percentages for Australia and Canada, even though commentators in both these countries express concerns about losing nationals overseas. Most of the countries shown in Tables 1 and 2 probably have larger numbers of people living overseas than is typical for wealthy countries, so New Zealand is likely to look even more unusual compared with the OECD average.

As noted already, however, most of New Zealand’s large diaspora is located in one country, Australia. Some of the comparator countries’ diasporas are also heavily concentrated in a big country close to home. Sixty-six percent of Irish-born based outside Ireland live in the United Kingdom, for instance, and 83 per cent of Canadian-born based outside Canada live in the United States. The bottom row of Table 2 shows figures for each country’s diaspora, once the biggest destination for that diaspora (ie, Australia for New Zealand, the UK for Ireland) is excluded. This might be called the “far-flung diaspora”. On this measure, New Zealand no longer appears particularly unusual. Compared to the country’s total population, New Zealand’s far-flung diaspora is considerably larger than that of

Australia, Canada, Korea, and the United States, but is approximately equal to that of Italy, the Netherlands, and the United Kingdom, and is considerably smaller than that of Ireland.

Table 3 provides further data on geographical concentration. New Zealand's diaspora is one of the most geographically concentrated of the nine countries chosen. For instance, 95 per cent of the identified New Zealand diaspora lives in just five countries. For Australia, the equivalent figure is 78 per cent, and for Italy and the Netherlands it is 60 per cent.

**Table 3: Geographical distributions of populations born in New Zealand and eight selected countries, 2001**

% of population outside country of birth in...	Australia (%)	Canada (%)	Korea (%)	Ireland (%)	Italy (%)	Nether- lands (%)	<b>New Zealand</b> (%)	United Kingdom (%)	United States (%)
Biggest destination	37.4	83.4	53.2	66.0	22.9	21.9	<b>77.4</b>	32.3	32.5
2 biggest destinations	58.5	90.8	87.7	85.3	42.4	42.7	<b>90.1</b>	53.5	52.4
5 biggest destinations	78.0	93.5	92.8	91.5	60.1	60.2	<b>95.1</b>	72.6	66.7
10 biggest destinations	89.0	96.0	96.6	96.7	84.1	83.1	<b>98.1</b>	86.8	78.3

Source: Calculated from data in Table 1.

## The Reverse Diaspora

People born in New Zealand migrate to live elsewhere, but people born elsewhere also migrate to live in New Zealand: this is New Zealand's "reverse diaspora". Table 4 presents some statistics on trends in the reverse diaspora, based on the reported birth places of New Zealand's usually resident population at the time of the 1981 and 2001 censuses. Between 1981 and 2001, numbers increased for all birthplaces, except the United Kingdom. The fastest increases occurred for Africa and Asia. The rise in migration from Africa and Asia reflected the changes in New Zealand's immigration policies during the 1980s and early 1990s. Preferences for migrants from "traditional" sources were ended and application decisions were based entirely on the personal characteristics of the migrants, such as age and human capital (Lidgard, Bedford and Goodwin 1998; OECD 2003).

**Table 4: Distribution of New Zealand population by place of birth, 1981 and 2001**

Place of birth	Number		Percent	
	1981	2001	1981	2001
Australia	43,809	56,142	1.4	1.5
East Asia	18,143	134,784	0.6	3.6
Europe <sup>a</sup> & Central Asia	47,484	67,440	1.5	1.8
Latin America & Caribbean	2,295	3,999	0.1	0.1
Middle East & North Africa	1,515	11,805	0.0	0.3
New Zealand	2,679,054	2,890,869	85.2	77.4
North America	11,769	21,279	0.4	0.6
Pacific	57,670	117,975	1.8	3.2
South Asia	7,440	30,690	0.2	0.8
Sub-Saharan Africa	7,527	36,234	0.2	1.0
United Kingdom	252,816	217,380	8.0	5.8
Unspecified / Undefined	13,785	148,680	0.4	4.0
Total	3,143,307	3,737,277	100.0	100.0
<i>Total foreign-born<sup>b</sup></i>	<i>452,452</i>	<i>726,636</i>	<i>14.4</i>	<i>19.4</i>

a Excluding the United Kingdom

b Assumes that the ratio of New Zealand-born to foreign-born among respondents who do not specify a birthplace equals the ratio among respondents who do specify a birthplace

Source: Calculated from unpublished Census tabulations from Statistics New Zealand

The bottom row of Table 4 shows estimates of total numbers and percentages of foreign-born. To calculate these estimates, we assumed that respondents whose birthplace was unspecified or undefined had the same probability of being foreign-born as respondents who did have a clear birthplace. Although this is a standard assumption, we suspect that respondents with unspecified birthplaces were in fact disproportionately likely to be foreign-born, since foreign-born people may have been more likely to give answers that census coders could not interpret. If this suspicion is correct, then the actual number of foreign born in 2001 may have been slightly higher than the 19.4 per cent suggested in Table 4.

Table 5 compares the percentage of foreign-born in New Zealand with percentages in other countries. Wherever possible, “unspecified” birthplaces

are treated in the same way as they are for New Zealand.<sup>5</sup> Following standard practice, we have had to use data on citizenship rather than birthplace for some countries. The two measures can diverge substantially: some countries, for instance, withhold citizenship from large numbers of locally-born children whose parents are foreign nationals (Coleman 2003: 310-314). The estimates for New Zealand are sufficiently large, however, that it can be safely concluded that the proportion of foreign-born in New Zealand is high by international standards. Though lower than Australia, it is substantially higher than in the United States, for instance, and over twice as high as in the United Kingdom.

**Table 5: Foreign-born population as percent of total population, selected countries, 2000-2001**

Country	Percent	Country	Percent
Luxembourg	37.3	United Kingdom	8.4
Australia	23.1	Denmark	5.8
Switzerland <sup>a</sup>	20.5	Norway	7.3
<b>New Zealand</b>	<b>19.4</b>	Spain	3.8
Canada	18.4	Hungary	2.9
Singapore	18.3	Finland	2.6
Ireland <sup>b</sup>	11.6	Italy <sup>a</sup>	2.4
United States	11.4	South Africa	2.3
Sweden <sup>a</sup>	11.3	Portugal <sup>a</sup>	2.1
Austria	10.4	Japan	1.3
Netherlands	10.1	Czech Republic	1.2
France	10.0	Slovak Republic	0.5
Germany <sup>a</sup>	8.9	Mexico	0.5
Belgium	8.4	Poland	0.1

a Foreign citizenship rather than foreign birth.

b Refers to 2002.

Sources: See Appendix.

Table 6 shows the top 30 sources of migrants to New Zealand in 2001. The United Kingdom remains the largest source, with Australia a distant second. The remaining countries are widely scattered, including some from Asia, Africa, Europe, and North America.



**Table 6: The top 30 sources of migrants to New Zealand, 2001**

Country	Migrants	Country	Migrants	Country	Migrants
1 UK	216,765	11 Cook Islands	15,222	21 Sri Lanka	6,168
2 Australia	56,142	12 USA	13,344	22 Niue	5,328
3 Samoa	47,118	13 Taiwan	12,486	23 Thailand	5,154
4 China	38,949	14 Malaysia	11,460	24 Iraq	4,848
5 South Africa	26,061	15 Hong Kong	11,301	25 Cambodia	4,770
6 Fiji	25,722	16 Philippines	10,134	26 Viet Nam	3,945
7 Netherlands	22,239	17 Japan	8,622	27 Singapore	3,909
8 India	20,889	18 Germany	8,382	28 Indonesia	3,792
9 Tonga	18,054	19 Canada	7,770	29 Russia	2,913
10 Korea	17,934	20 Ireland	6,726	30 Zimbabwe	2,886

Source: Calculated from unpublished Census tabulations from Statistics New Zealand

How does the diversity of New Zealand's migrant population compare with that of other countries? Table 7 shows some concentration measures for New Zealand, and for six countries that publish the necessary data. New Zealand's migrant population is more concentrated than the other six, with the exception of Ireland. The difference is fairly muted, however, for the biggest 10, 20, or 50 sources. New Zealand's migrant population appears to be only slightly less diverse than that of the few countries for which data are available.

**Table 7: Diversity of migrant populations, New Zealand and selected countries, 2001**

Percent of migrants from the...	Australia	Canada	Denmark	Ireland	Italy	Netherlands	<b>New Zealand</b>
Biggest source	25.4	11.2	12.8	66.8	13.3	12.4	<b>30.9</b>
2 biggest sources	34.1	17.3	19.2	72.6	24.5	24.6	<b>38.9</b>
5 biggest sources	46.8	33.3	33.9	79.2	37.9	51.5	<b>54.9</b>
10 biggest sources	59.2	51.2	54.6	86.9	53.9	67.7	<b>69.9</b>
20 biggest sources	74.5	68.3	77.3	95.4	72.6	80.7	<b>84.9</b>
50 biggest sources	92.7	87.8	93.1	--	92.9	94.2	<b>95.7</b>

Note : For the purposes of this table, a "migrant" is a person who was born outside his or her present country of residence.

Source: See Appendix.

To what extent has the rise in numbers of migrants in New Zealand lead to a rise in the number of migrant communities? Table 8 shows changes in the number of countries from which New Zealand has received a given number of migrants, where a “migrant” is defined as a person who was born outside New Zealand. The table uses four minimum sizes for communities. For all four minimum sizes, there has been a substantial increase in the number of migrant communities. There were, for instance, only five communities of 10,000 or more in 1981, but there were 16 in 2001.<sup>6</sup>

**Table 8: Number of migrant communities in New Zealand, 1981-2001**

Number of countries from which New Zealand has at least...	1981	1986	1991	1996	2001
10 migrants	149	135	141	163	177
100 migrants	85	84	89	108	120
1,000 migrants	28	33	36	46	48
10,000 migrants	5	5	7	15	16

Note: For the purposes of this table, a “migrant” is a person who was born outside New Zealand.

Source: Calculated from unpublished Census tabulations from Statistics New Zealand.

**Table 9: Numbers of migrant communities, New Zealand and selected countries, 2001**

Number of countries from which the selected country has at least...	Australia	Canada	Denmark	Ireland	Italy	Nether- lands	<b>New Zealand</b>
100 migrants	166	185	114	--	143	146	<b>120</b>
1,000 migrants	110	140	51	30	83	76	<b>48</b>
10,000 migrants	56	72	14	2	33	26	<b>16</b>

Note: For the purposes of this table, a “migrant” is a person who was born outside his or her present country.

Source: See Appendix.

**Table 10: National population, New Zealand and selected countries, 2001**

	Australia	Canada	Denmark	Ireland	Italy	Nether-lands	<b>New Zealand</b>
Population (millions)	19.5	31.1	5.4	3.8	57.3	16.0	<b>3.7</b>

Source: *OECD Labour Market Data* online database.

Table 9 compares the number of migrant communities in New Zealand with numbers in six other countries for which the necessary data were available, and Table 10 compares New Zealand's population with that of the same six countries. Together the tables suggest that New Zealand has fewer migrant communities than the OECD norm, but more than might be expected for a country with such a small population.

## **Discussion**

In 2001, the New Zealand diaspora -- defined as people born in New Zealand but resident overseas -- numbered something over 460,000. This was about 14 per cent of the international total of New Zealand-born. Relative to total population, New Zealand's diaspora is almost a third smaller than that of Ireland, but is bigger than that of Australia, Canada, Korea, Italy, the Netherlands, the United Kingdom, and the United States. Three quarters of the New Zealand diaspora is, however, located in Australia, and almost all of the remainder is concentrated in a few English-speaking countries.

In 2001, New Zealand's "reverse diaspora" -- people born overseas but resident in New Zealand -- numbered about 727,000. This was about 19 per cent of New Zealand's total resident population. Like the diaspora, New Zealand's reverse diaspora is relatively large. It is a somewhat smaller proportion of resident population than that of Australia, but larger, for instance, than that of the United Kingdom or United States. New Zealand's reverse diaspora does not show the same degree of geographical concentration as does its diaspora.

These basic population numbers are only one part, though an essential part, of the information required to satisfactorily understand how migration links New Zealand to the rest of the world. Information is also needed, for instance, on lengths of stay, and on age, occupation, income, and education. Such information is certainly available for the reverse diaspora. It can also,

in principle, be obtained for all members of the diaspora residing in countries that include questions on birthplace or nationality in their censuses or registration systems.

On their own, however, the basic population data do demonstrate that the diaspora is smaller and closer to home than popular stereotypes might suggest. In particular, the number of New Zealanders living outside the English-speaking world is probably under 20,000.<sup>7</sup> This is perhaps not surprising given that only 10 per cent of New Zealand-born adults can speak more than one language.<sup>8</sup> In contrast, the reverse diaspora large by international standards, and can link New Zealand to a strikingly wide range of countries, both English-speaking and non-English-speaking.

## Acknowledgment

We thank Statistics New Zealand for providing us with their unpublished study of the size of the New Zealand diaspora. Thank you also to Richard Bedford, Jim Rose, Bob Buckle, participants at a Treasury seminar and to Andrew Binning and Philip Liu for their excellent research assistance.

## Notes

- 1 The term “diaspora” is widely used in New Zealand to refer to the spread of New Zealanders overseas through temporary or permanent migration. The traditional meaning of the term is the international population of a given ethnicity, regardless of where they were born.
- 2 We tried a further 20 or so websites, but were unable to obtain comparable data.
- 3 The use of citizenship rather than birthplace could, however, make a substantial difference to estimates of overall foreign population in these countries. See Section 3 for details.
- 4 If it is assumed that about 50,000 of the almost 60,000 New Zealanders in the United Kingdom lived in London in 2001, then London was New Zealand’s eleventh-biggest city, behind Auckland, Wellington, Christchurch, Hamilton, Napier-Hastings, Dunedin, Tauranga, Palmerston North, Rotorua, and Nelson, and just ahead of New Plymouth (population 49,100). (These city population numbers were obtained from the *Subnational Population Estimates* page on the Statistics New Zealand website.)
- 5 Differences in assumptions about “unspecified” birthplaces can lead to non-trivial differences in estimates of foreign-born. In the *2001 Census Basic Community Profile and Snapshot* (available online) the Australian Bureau of Statistic states that 21.9 per cent of the Australian population is foreign-born. This figure is 1.2 percentage points lower than the one shown in Table 5. The

Australian Bureau of Statistics figure implicitly treats "unspecified" as a third category separate from foreign-born and Australian-born.

- 6 The 5 countries in 1981 were Australia, the Cook Islands, the Netherlands, the United Kingdom, and Samoa.
- 7 Table 1 shows a total of 10,729.
- 8 Calculated from data in Table 11 of the *2001 Census: People Born Overseas (2001)* -- *Reference Report* on the Statistics New Zealand website. Adult is defined here as anyone aged 15 and over.

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## Appendix

### *Data sources for Tables 1, 5, 7 and 9*

Country	Internet address
Argentina	<a href="http://www.indec.mecon.ar/">http://www.indec.mecon.ar/</a>
Australia	Australian Bureau of Statistics "Basic Community Profile" Catalogue No. 2001.0, Table B06
Austria	<a href="http://www.statistik.at/neuerscheinungen/vzaustria.shtml">http://www.statistik.at/neuerscheinungen/vzaustria.shtml</a>
Canada	<a href="http://www12.statcan.ca/english/census01/products/standard/themes/RetrieveProductTable.cfm?Temporal=2001&amp;PID=62124&amp;APATH=3&amp;GID=431515&amp;METH=1&amp;PTYPE=55440&amp;THEME=43&amp;FOCUS=0&amp;AID=0&amp;PLACENAME=0&amp;PROVINCE=0&amp;SEARCH=0&amp;GC=0&amp;GK=0&amp;VID=0&amp;FL=0&amp;RL=0&amp;FREE=0">http://www12.statcan.ca/english/census01/products/standard/themes/RetrieveProductTable.cfm?Temporal=2001&amp;PID=62124&amp;APATH=3&amp;GID=431515&amp;METH=1&amp;PTYPE=55440&amp;THEME=43&amp;FOCUS=0&amp;AID=0&amp;PLACENAME=0&amp;PROVINCE=0&amp;SEARCH=0&amp;GC=0&amp;GK=0&amp;VID=0&amp;FL=0&amp;RL=0&amp;FREE=0</a>
Denmark	<a href="http://www.statistikbanken.dk/statbank5a/default.asp?w=1024">http://www.statistikbanken.dk/statbank5a/default.asp?w=1024</a>
Finland	<a href="http://www.migrationinformation.org/GlobalData/countrydata/data.cfm">http://www.migrationinformation.org/GlobalData/countrydata/data.cfm</a>
France	<a href="http://www.ined.fr/englishversion/figures/france/index.html">http://www.ined.fr/englishversion/figures/france/index.html</a>
Germany	<a href="http://www.migrationinformation.org/GlobalData/countrydata/data.cfm">http://www.migrationinformation.org/GlobalData/countrydata/data.cfm</a>
Ireland	<a href="http://www.cso.ie/census/vol4_index.htm">http://www.cso.ie/census/vol4_index.htm</a> . Table 30A.
Italy	<a href="http://demo.istat.it/e/stra1/start.html">http://demo.istat.it/e/stra1/start.html</a>
Japan	<a href="http://www.stat.go.jp/english/data/kokusei/1995/1518.htm">http://www.stat.go.jp/english/data/kokusei/1995/1518.htm</a>
Korea	<a href="http://www.nso.go.kr/cgi-bin/SWS_1021.cgi?KorEng=2&amp;A_UNFOLD=1&amp;TableID=MT_ETITLE&amp;TitleID=BB&amp;FPub=4&amp;UserID=">http://www.nso.go.kr/cgi-bin/SWS_1021.cgi?KorEng=2&amp;A_UNFOLD=1&amp;TableID=MT_ETITLE&amp;TitleID=BB&amp;FPub=4&amp;UserID=</a>
Netherlands	<a href="http://statline.cbs.nl/StatWeb/start.asp?LA=en&amp;DM=SLEN&amp;lp=Search/Search">http://statline.cbs.nl/StatWeb/start.asp?LA=en&amp;DM=SLEN&amp;lp=Search/Search</a>
New Zealand	<a href="http://xtabs.stats.govt.nz/eng/TableFinder/index.asp">http://xtabs.stats.govt.nz/eng/TableFinder/index.asp</a>
Norway	<a href="http://www.migrationinformation.org/GlobalData/countrydata/data.cfm">http://www.migrationinformation.org/GlobalData/countrydata/data.cfm</a>
Spain	<a href="http://www.ine.es/censo/en/consulta.jsp">http://www.ine.es/censo/en/consulta.jsp</a>
Sweden	<a href="http://www.ssd.scb.se/databaser/makro/SubTable.asp?yp=tansss&amp;xu=C9233001&amp;omradekod=BE&amp;huvudtabell=UtrikesFoddaR&amp;omradetext=Population&amp;tabelltext=Foreign%2Dborn+persons+in+Sweden+by+country+of+birth%2C+age+and+sex%2E+Year&amp;preskat=O&amp;prodid=BE0101&amp;starttid=2000&amp;stopptid=2003&amp;Fromwhere=M&amp;lang=2&amp;langdb=2">http://www.ssd.scb.se/databaser/makro/SubTable.asp?yp=tansss&amp;xu=C9233001&amp;omradekod=BE&amp;huvudtabell=UtrikesFoddaR&amp;omradetext=Population&amp;tabelltext=Foreign%2Dborn+persons+in+Sweden+by+country+of+birth%2C+age+and+sex%2E+Year&amp;preskat=O&amp;prodid=BE0101&amp;starttid=2000&amp;stopptid=2003&amp;Fromwhere=M&amp;lang=2&amp;langdb=2</a>
Thailand	<a href="http://www.nso.go.th/pop2000/tables_e.htm">http://www.nso.go.th/pop2000/tables_e.htm</a>
United Kingdom	2001 Census Report for England and Wales, Part 3, Table UV08 at <a href="http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=10441&amp;Pos=&amp;ColRank=1&amp;Rank=422">http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=10441&amp;Pos=&amp;ColRank=1&amp;Rank=422</a> ; <a href="http://www.nisra.gov.uk/census/Census2001Output/UnivariateTables/uv_tables1.html#country%20of%20birth">http://www.nisra.gov.uk/census/Census2001Output/UnivariateTables/uv_tables1.html#country%20of%20birth</a> ; Table S15 <a href="http://www.groscotland.gov.uk/grosweb/grosweb.nsf/pages/scotcen6">http://www.groscotland.gov.uk/grosweb/grosweb.nsf/pages/scotcen6</a>
United States	<a href="http://factfinder.census.gov/servlet/QTTable?_ts=76463946999">http://factfinder.census.gov/servlet/QTTable?_ts=76463946999</a>



## Causes of Delayed Childbearing in New Zealand and Western Societies

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### Abstract

Motherhood...is combined with employment through varying degrees of compromise. At one extreme is the career woman who balances baby and briefcase. Many do not attempt her feat, some who do so abandon the attempt, and others simply stay at home when their children are small or take part time jobs. A few reject all the options for raising children and remain childless. (Joshi 2002: 466)

Fertility declines have been experienced in all industrialised countries since roughly the late 1970s and these have been accompanied by rising ages at first birth. This fertility decline may have significant consequences because a continuation of low levels of fertility will contribute to an ageing of the population and may lead to a decline in the size of populations. This will in turn have important social and economic outcomes. There are many different factors which are claimed to affect the timing of childbearing. These include changing roles of women, marriage status and changing marriage markets, the nature and availability of employment, macro-economic factors, national family friendly policies, availability and quality of childcare, education, the availability of contraception, and a more dedicated pursuit by both women and men of individual fulfillment through activities outside the family. As captured in the quote above, any discussion of the causes of delayed childbearing involves a controversy over the compatibility of paid employment and raising children, and the ability of the majority of women to combine these two pursuits. Many of the factors mentioned above affect this compatibility

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and this in turn will affect women's decisions to pursue or delay childbearing.

This essay will firstly outline events of the "second demographic transition" and increasing trends towards delayed childbearing in western countries, and discuss New Zealand's position within this. Next, causes of this pattern towards delayed childbearing will be examined and weighed up in relation to New Zealand's experience. Competing theories regarding timing of parenthood will be examined. These are firstly, Becker's (1981) theory of economic interdependence in which sex-differentiated economic roles are the major integrative factor in marriages. Secondly, some theorists (Easterlin 1980; Oppenheimer 1994; Oppenheimer and Lew 1995) propose that when young men's relative economic fortunes are declining, this will cause *them* to delay marriage and parenthood. The third theory (developed by Lesthaeghe 1983; 1995) suggests that a rise in post-materialist values has led to the pursuit of individual fulfillment outside the family through a broad range of activities. This pursuit thereby causes men and women to delay childbearing until other goals and desires have been met. More recently, writers who compare fertility in Southern Europe and Japan with Scandinavian countries propose that women have increasing equality in the workplace as well as political and social institutions but have seen no rise in the level of equality within the family. Women are still responsible for the bulk of household chores and child raising. This inequality causes women to delay marriage and child bearing (and domestic subordination) until they have enjoyed a period of economic and domestic freedom (Tsuya and Mason 1995; McDonald 2002). A discussion of these ideas will be followed by an outline of factors which are claimed to delay childbearing and the policy implications of these findings will be explored.

### **The "Second Demographic Transition"**

The last century has seen dramatic change in fertility in all Western industrialised countries. Fertility declined from 1900 up until the 1930s at which time it reached around replacement level (2.1 births per woman). At this time, many theorists held that western fertility would not drop below replacement, but would level out and stay at this replacement level; others held that these countries would soon see a decline in population numbers. This was known as the "first demographic transition". However, this was then countered by the baby boom, which was characterised by rising

fertility levels that peaked in the early 1960s when the total fertility rate in New Zealand reached over four live births per woman. Since then fertility has declined to below replacement in all industrialised countries reaching as low as 1.90 in New Zealand in 2002 and has fallen as low as 1.3 in Spain, Italy, Austria, Germany, Greece, most of Eastern Europe and the former USSR and Japan (Kohler *et al.* 2002; Statistics New Zealand 2004). This “second demographic transition” occurred with a remarkable similarity in timing across industrialised countries (Jackson and Pool 1994; Pool 1992; Gustafsson 2001; Bongaarts 2002; Caldwell and Schindlmayr 2003).

This phenomenon of below replacement fertility is also characterized by a rising age at first birth in all these countries excluding Eastern Europe and the former USSR (Caldwell and Schindlmayr 2003; Kohler *et al.* 2002). Historical trends in the median age of mothers in New Zealand reveal that women are choosing to delay childbearing until later in life (Statistics New Zealand 2004a). Over the past decade fertility for all age groups under 30 has dropped while the rates for those over 30 have increased. Figures for 2002 reveal that the 30-34 age group is the most common for childbearing, compared to the 1970s when 20-24 years was the most common. In addition, the median age at childbearing has increased; in 2002 it was 30.1, compared with 28.2 in 1992 and 24.9 in the early 1970s. This shows that New Zealand women are having their children about five years later than their counterparts in the 1970s (Statistics New Zealand 2004a). Therefore, while women are not having many children in their 20s, this lack of fertility is being recuperated later in life. However, total fertility is unlikely to be recuperated as some women may delay for too long and become unable to have children, because their circumstances may become unfavourable to having children once they reach their 30s. In addition, delayed childbearing is consistent with a decrease in the number of children a woman has because she has fewer years from the onset of childbearing in which to have children. Delayed childbearing will also lead to an ageing of populations because as more young people delay or forego having children the median age of population will rise. This will in turn have many social and economic implications (see Fussell 2002).

The fertility decline and pattern of delayed fertility in New Zealand is somewhat unique in that while the Pakeha population's fertility pattern mirrored the rest of the English-speaking world, the Maori fertility decline did not occur until the 1970s, at which time the fertility rate dropped

radically, in what has been termed a “reproductive revolution”. It is claimed to be the fastest fertility decline for a population anywhere (Jackson and Pool 1994; Pool 1992).

Declining fertility can be due to either quantum effects (how many children a couple have) or tempo effects (age of mother at which births take place). This is because one cohort can delay their childbearing in comparison to the previous cohort resulting in a lower total fertility rate for those years in which median age has been increasing. Likewise, fertility can increase if there is a decline in the age of childbearing resulting in different cohorts giving birth at the same time (Gustafsson 2001). This means that some of the decline in total fertility rates witnessed since the 1960s can be explained by this increasing age a first birth. Completed fertility rates are therefore useful as they show the average number of children women from each cohort have had at the end of their reproductive years, but this measure can only be calculated years after these women have done the bulk of their childbearing.

Bongaarts (2002) studied the results of this tempo effect and concluded that because the mean age of childbearing cannot rise forever due to biological limits, it must eventually stabilize. When this occurs the total fertility rate will begin to increase again and he concludes that European countries will soon see an upward rise in fertility as a result. However, if the mean age at childbearing continues to rise above current levels, the number of years between generations will be stretched and therefore the replacement fertility level will need to increase (from 2.1) in order for replacement to be maintained. This may present problems because the number of children couples are having has been steadily decreasing while the age at childbearing has been steadily rising. Completed fertility rates of cohorts are decreasing in all industrialised countries except the United States and there are strong indications that this decline will continue (Frejka and Calot 2001).

## **Causes of Delayed Childbearing**

### ***Economy and Employment***

Various theoretical explanations have been offered to account for this dramatic pattern of decreased fertility and delayed childbearing. The most common economic explanation was offered by Becker (1981) who argued

that women's increased economic independence due to paid employment (related to increased investment in education) and welfare benefits has decreased economic interdependence between husband and wife which was previously the main gain to be had from marriage. Each partner specialised; the female in home production and child raising and the male in market work. However, the increase in women's employment has reduced the advantage of sex-role specialization and subsequently reduced the desirability of marriage. The effect is to increase the opportunity costs associated with childbearing and household activities and thereby reduce fertility. Women anticipate spending longer in paid work and invest greater amounts of time and money in education. They then move into higher paid work which results in increased opportunity costs being foregone if women stop working in order to have children.

This theory seems plausible given that the countries which have witnessed a decrease in fertility in recent decades have also seen an increase in labour market attachment for women from about the 1960s (Oppenheimer 1994; Sceats 2003). Economic factors certainly seem to play a role in levels of fertility but it is interesting to examine whether this is due to women's economic independence or there are other ways economic factors influence fertility. In a study in Japan, Tsuya and Mason (1995) confirm this economic hypothesis finding that shortly before the onset of the fertility decline, young women's educational and employment opportunities improved markedly. This has led young women to enjoy a period of freedom before entering marriage. Because ex-nuptial births in Japan are very uncommon, this therefore delays childbearing.

However, many writers disagree with the economic independence argument. While Oppenheimer (1994) and Oppenheimer and Lew (1995) concede that economic independence can potentially delay marriage (and subsequent childbearing) by reducing the penalties of non-marriage and funding extended searches of the marriage market for suitable partners, they also see that economic independence may in fact work in the opposite direction. That is, economic independence may encourage earlier marriage because it provides women with disposable income to spend on going out to meet men and on "setting themselves up" for marriage, and moreover men's wages may not be enough to live comfortably on and therefore forming a marriage in which both partners work may be a rational solution to this problem. However, they argue that this economic independence theory

should be primarily an argument for non-marriage rather than delayed marriage. They find that economic independence has little or no effect on the timing of marriage and childbearing and that those in a good labour market position are even more likely to marry and bear children than women who are not economically independent. It is important to note that their ideas are built on the idea that nuptiality positively affects fertility. While studies show that married couples are more likely to have children than co-habiting couples, and even more likely than single women, solo parenthood and childbearing during co-habitation are increasingly significant and this needs to be taken into account (Ball 2000; Santow and Bracher 2001; Dharmalingam *et al.* 2004).

Some writers (Gustafsson 2001; Joshi 2002) discuss the opportunity costs associated with childbearing in great detail. These are related to increasing levels of education for women in industrialised countries. Economic speculation on the optimal age at first birth involves a trade off between desire to have children young in order to enjoy them and the lower costs of later births. The basic tenet is that an expectation of spending more years participating in the labour force makes it rational for women to invest in higher education. Once educated, women are more likely to pursue careers in which earnings increase progressively with experience. These “steep earning curves” will lead to women delaying childbearing as late as possible in order to minimize lost opportunity costs which are incurred when they drop out of the labour force to raise children. However, many factors will affect whether there are in fact lower opportunity costs foregone if a woman chooses to have children later. Gustafsson (2001) finds that these factors include education levels, how quickly a woman’s job skills are lost during labour force interruption, the level of a woman’s earnings, the skill level of her employment, and the length of time spent out of the labour force. Increases in all these factors will make delayed childbearing an economically rational decision.

Through a model or simulation of their lifetime earnings, Joshi (2002) shows that an educated woman with high earning power will forego less earnings by having children than a woman with no educational achievements who would typically have her children earlier. A woman with no educational qualifications who has two children at age 23 and takes a nine-year break from the workforce will forego up to 58 per cent of her earnings from the year of first birth until assumed retirement at age 65 (see

Joshi 2002). A mid-level educated woman who typically would delay her childbearing until later (age 28 in this model), likewise have two children and take only two years out of the workforce will forego only around 25 per cent. And in comparison a highly educated woman is likely to delay until age 30 forego earning on an even smaller scale (Joshi 2002).

Another theory that has been proposed to explain the fertility decline is the idea that fertility will decline and childbearing will be delayed as young *mens'* economic fortunes decline. Easterlin (1980) advances this idea, saying that if a cohort of young men have a lower economic status than their fathers enjoyed at the same age then they will delay marriage and childbearing; this will subsequently determine the rise and fall of women's age at marriage and childbearing. Oppenheimer (1994) stresses the importance of not just focusing on women and argues that social scientists' preoccupation with women's economic independence has led them to overlook other important socioeconomic shifts, especially the deteriorating economic position of men. She demonstrates that men's economic position has indeed declined in the past 20 years in the US as employment situations (especially for young men with less education) have worsened. She reasons that while women's incomes have improved in relation to men's (and this has been used as evidence that women's economic independence is the driving force in delaying childbearing), this improvement in ratio is due to a decline in men's incomes, not an increase in women's, which remained stable until the mid 1980s. Therefore it is the worsening position of men, not the improved position of women that causes delayed marriage and childbearing.

Related to this idea is the finding that macro economic factors have also been found to affect the timing of births. In contrast to declining fertility rates in industrialised countries, the fertility rate actually rose sharply in Sweden in the 1980s before plummeting again in the 1990s. In a study by Santow and Bracher (2001) it is found that this is in part due to declining economic conditions in the 1990s. They found that a decline in GDP per capita, and increased unemployment of young people of childbearing age negatively affected total fertility and increased the age at first birth. Likewise, Andersson (2000) found that an increase in unemployment of young people resulted in a move of large segments of women and men from high to low income groups; and also from groups which display high levels of childbearing to those which have low childbearing (the unemployed and students). An impact of unemployment on age at first birth and on fertility

rates has also been found in a study by Holdsworth and Elliott (2001) in Spain. They found that increased unemployment of young men and women in their 20s meant that these groups were delaying leaving the family home and were subsequently marrying and childbearing later in life. These arguments relate the economic position of both men *and* women to decreases in fertility and rising ages of childbearing. They therefore partially prove the theory above that it is the economic position of young men which is the significant determinant of age at childbearing; however they also take into account women's economic position. It seems only too rational that the economic position of both sexes will contribute to ages at childbearing as the majority of parents are either married or cohabiting when they decide to have a child.

It would be interesting to see whether unemployment rates affect fertility in New Zealand, as proposed above. Statistics for New Zealand unemployment rates show that this increased rapidly in the 1980s following the start of New Zealand's neo-liberal experiment, peaked in the early 1990s and has been gradually declining since then. Unemployment statistics for New Zealand are highest for young people. In 1996, 42.7 per cent of unemployed people in New Zealand were aged 15-25, yet this age group is only 21.2 per cent of the working age population (Statistics New Zealand 2004b; 2004c). In 2001 the unemployment rate for New Zealand was 5.3, but the youth unemployment rates stood at 15.6 (age 15-19) and 8.9 (age 20-24), significantly higher than the average (Statistics New Zealand 2002). The pattern of unemployment for young people, although it has been higher than the total unemployment rate, has followed a similar pattern to it. So if the hypothesis that increased unemployment leads to a decrease in the fertility rate and an increase in the median age of mothers is true, we would expect the fertility rate to decline until the early 1990s and then begin to increase since that time. The median age of mothers would be expected to decline in the 1990s as well. This has not been the case so while the general unemployment rate may delay childbearing it obviously cannot account for increases in this delay and there must be other factors that influence this. However, in general a high youth unemployment rate has probably contributed to delayed childbearing, just not to the recent increase in median age at first birth.

Some authors also cite inaccessible housing markets as a cause of decreasing fertility and rising age at first birth. Oppenheimer (1994)

explains that it is expected in Western societies that a couple will establish their own household prior to having children. Prohibitive housing costs will therefore delay marriage formation and childbearing. Andersson (2000) found this was the case in Sweden and Holdsworth and Elliott (2001) find that this causes delays for Spanish couples wanting to have children.

There are other ways in which employment affects fertility. Santow and Bracher (2001) found that timing of first births was not affected by current work status, work experience or earnings during the previous year, but what was important was the number of years women had been working full time. Women were most likely to have children once they had been working for two years, with no effect of subsequent years of employment. A two-year threshold was also identified in Norway, and Santow and Bracher suggest that this is because young women consider it important to accumulate savings before entering motherhood.

Another important consideration is the way in which the nature of the job market will affect the compatibility of motherhood and paid employment. Following industrialisation and urbanisation, the standard working week became 40 hours and most employers will not allow parents to bring children to work. This is not very compatible with child raising. Rindfuss *et al.* (2003) argue that some countries have made the roles of worker and mother more compatible in recent years by introducing a range of social and economic policies designed to make these two pursuits more compatible. If shift work is available, parents are able to stagger their working patterns so that at any given time only one parent is working. If part time work is available, mothers may take on part time hours that are more compatible with child raising. In addition, flexibility on the part of the employer to allow parents to stay home to care for sick children, work flexible hours or work from home will make motherhood and employment more compatible. Holdsworth and Elliott (2001) find that lack of flexibility in the labour market including lack of part time work is a cause of delayed childbearing in Spain.

## **Education**

Increased levels of education for women are strongly associated with declining fertility in all countries. In western countries it is also associated with delayed childbearing. Many studies find that more educated women tend to delay childbearing longer than less educated women (Ball 2000;



Santow and Bracher 2001; Rindfuss *et al.* 2003; Joshi 2001; Huinink and Mayer 1995; Wu and MacNeill 2002; Kohler *et al.* 2002; Gustafsson 2001; Oppenheimer 1994). There are a number of factors at work here. The first is the idea that more educated women embark on professional careers and, as a result, have a higher opportunity cost associated with childbearing and therefore tend to delay; this has been discussed above. Secondly, education is thought to reduce childbearing because it results in women entering adulthood later in life. In addition, increased education is usually associated with women having a greater knowledge of contraception and this also works to delay and reduce childbearing.

Moreover, being a student is negatively associated with childbearing. Women tend to delay childbearing until they have completed their studies. As women tend to stay in education longer in western industrialised countries, this will result in childbearing later. As Ball (2000:99) explains, “the process of obtaining a higher level education is largely incompatible with early childbearing...[this is] supported by the extremely low levels of childbearing recorded for university educated women at the ages 15-19”.

In New Zealand, higher education now has an even more significant influence on childbearing because since the 1990s there have been

rising tuition costs, the abolition of universal student allowances and the introduction of the student loan scheme. Thus many of the current generation of tertiary students face not only a lengthy period without earnings, but also an additional burden of a substantial personal debt (Ball 2000:102-103).

The effect of this will be to prevent young people from becoming home owners and accruing savings which are considered desirable achievements before entering parenthood in New Zealand.

## **Marriage**

Another determinant of timing of first birth is marriage or union status, but the relationship between marriage and childbearing is very complex because an anticipated birth or recent childbearing may cause a couple to marry. Alternatively a couple may make a joint decision to marry or cohabit and have a child at the same time. So some writers ignore union status because of the possibility that the birth may have caused the marriage rather than the opposite; that the marriage lead to the birth (Santow and Bracher 2001). In a study in Sweden, Santow and Bracher (2001) find that union status is

the most important predictor of the timing of first birth. Birth rates are higher for those who are married rather than cohabiting, and considerably higher among the cohabiting than among single people.

One factor related to this economic independence argument discussed by Oppenheimer and Lew (1995) and Huinink and Mayer (1995) is that increased labour force participation by women has changed the nature of marriage markets in a way that people are now marrying (and having children) later in life. In the past, men's desirability in the marriage market was earned, that is, men took time to establish themselves in the labour market then acquired savings and other necessary elements to establish a household. For women, socio-economic status as well as ethnicity and religion were inherited and therefore no delay of establishing oneself prior to marriage and childbearing was required. However, with increased labour force participation and changing marriage markets today, women are now required to obtain education as well as a favourable economic position before marriage and childbearing and therefore it is necessary that these are delayed in the same way they have been delayed by men in the past.

### **Pursuit of Individual Fulfillment**

A further theory that is used to explain the second demographic transition and delayed childbearing is the idea that both women and men are delaying childbearing until they have pursued individual fulfillment through activities not related to the family, and that this is caused by the rise of post-materialist values. This idea was developed by Lesthaeghe, who writes that,

the steep decline in marital fertility after the early 1960s in the West is...a recent indicator of the autonomous progression of an individualistically oriented Western value system: it coincides with the legitimization of cohabitation outside marriage, voluntary childlessness, nonconformist sexual behaviour, abortion, and euthanasia (Lesthaeghe 1983:412).

In other words, changing fertility is a result of value and attitude change in the West. He argues that central to the fertility decline is the "increasing centrality of goal attainment, that is, the individual's right and freedom of defining both goals and the means of achieving them" (Lesthaeghe 1983: 429). This desire for goal attainment is fueled by secularisation of values as well as rising incomes which increase individuals' aspirations, stimulate self-orientation and create an aversion to long term commitments (such as child bearing).

Lesthaeghe later draws upon the earlier work of Ariès who argued that the first demographic transition was inspired by parental investment in child quality. In contrast, the second demographic transition “marked the end of Ariès era of the ‘child-king’” (Lesthaeghe 1995: 19) and was instead a time of adult-centered preoccupations with individual fulfillment, and there was strong emphasis on the relationship between partners, and less on children. As evidence for this he points out that children are no longer considered to be an impediment to divorce. However, this seems to be more an argument for childlessness rather than delayed childbearing and it seems ridiculous to think that individuals and couples would embark on such a demanding role as parenthood unless they desired their lives to become centered around their children.

This idea related to pursuit of individual goals is difficult to test in many populations and as a result there is little empirical evidence to support it. Some support for these ideas is found by Santow and Bracher (2001: 359) who find that young Swedes “have repeatedly placed educational and employment advancement, and earning money to buy goods or travel or pursue leisure interests ahead of starting a career as a parent.” This quote brings together all the ideas discussed above regarding employment and education because it shows a motivation for women’s increased education and labour market participation. It is possible that the changes in economy, employment and education which have been linked to the fertility transition are also linked to changing values and it seems likely that the combination of these two changes has determined the extent and timing of changes in fertility. Lesthaeghe (1995) concludes by arguing that the economic and value-change theories are far more complimentary than mutually exclusive. Further, Holdsworth and Elliott (2001) found that a lack of value change and a strong emphasis on tradition within Spanish society has impeded the fertility transition in Spain from transforming to a more Northern European pattern. Pool (1992) discusses notions of value change in the New Zealand context but his study is impeded by a lack of data. He concludes that the family now occupies a shrinking space in the lives of New Zealanders and that this is caused by individualisation, which is motivated by changing cultural values as well as “the individualizing tendency of participation in our economy” (Bumpass 1990; quoted in Pool 1992:83).

However, Tsuya and Mason (1995) in a study in Japan reject this emphasis on value change altogether saying that,

unless one posits the existence of structural circumstances that make it difficult for women to achieve a sense of belonging, esteem, or self-realization while marrying or having children, there seems little compelling reason to think that post-materialist values will produce below-replacement fertility (Tsuya and Mason 1995:141).

They argue that valuing individual fulfillment does not mean that people will postpone parenthood until later in life but rather, it is easy to see circumstances where achieving self-realization and fulfillment are facilitated by early parenthood. In addition they question whether the relationship between post-materialist values and declining fertility is a causal process or just coincidental.

### **Inequalities in the Domestic Sphere**

The final proposition put forward as the cause of delayed childbearing is the idea that there is inequality between men and women in the domestic sphere. Despite the fact that women now make up a substantial proportion of the labour force, they are still responsible for the bulk of household chores as well as child raising. McDonald (2000) presents the argument that the cause of fertility declines is that gender equity has become very high in individual-oriented institutions (e.g. employment, political sphere), but has remained very low in family-oriented institutions. Women have gained some rights within the family, especially with the widespread availability of contraception they are now able to choose the size of their families and husbands are no longer given power to make this decision. However, major changes in the institution of the family are slow and women continue to see low levels of equity in their roles as wives and mothers in comparison with men's apparent freedom and autonomy from domestic duties. Therefore women are choosing to have smaller families to decrease the amount of inequality they suffer, or alternatively they are choosing to delay starting a family in order to enjoy a period of relative freedom before becoming wives and mothers.

Tsuya and Mason (1995) find a lot of support for this argument in Japan. Because Japanese family roles are very traditional (Japanese wives' roles are subordinated and highly domesticated and their position in the family has changed very little), but Japanese women face increasing employment and career opportunities combined with a high degree of equality in the workplace, they are reluctant to enter marriage and

motherhood before spending a period enjoying freedom from domesticity, during which time they can pursue higher education and work for pay. Likewise, Huinink and Mayer (1995) found that men do not do their fair share of domestic tasks and that this works to decrease fertility because women choose to have fewer children and later in life as a result.

Presser (1995) also discusses this idea. She argues that the emphasis in policy on women as primary caregivers for children, and men as providers has exacerbated this inequality. Her example in the US demonstrates that policy on divorce always puts the onus on women to continue caring for the children and demands only monetary payment from fathers. This double standard in which women's time inputs into children are considered more valuable than men's leads to a gendered conception of time. Women's time becomes more flexible and available for others, while a man's is scheduled and under his own control. This maintains women's inferior position within the household and in turn this leads to lower fertility because the difference between institutional equality and domestic inequality argued above will lead women to have no children, fewer children or to have them later in life. Presser prescribes equal involvement of fathers in child raising as the way to increase fertility.

Related to this gendered conception of time is the idea put forward by Joshi (2002), arguing that inequalities between male and female wages further the notion that women's time is more flexible and available for child care than men's. She argues for equality in pay, saying,

[m]en and women were paid unequally for a given level of human capital. This fact is relevant to the issues relating to women and children, as the higher price on a man's market time will tend to reinforce the tradition in which mothers rather than fathers adapt their market work (Joshi 2002: 452).

Work organization and culture seldom make it easier for a father than for a mother to adapt time to accommodate domestic tasks...Higher rates of pay for men usually mean that a two-parent family loses less in earnings if the father rather than the mother gives priority to earning (Joshi 2002: 458).

The idea is that because women are being paid less even while doing the same work as men, this reinforces the assumption that women will take time out from work and careers in order to raise children. This in turn delays childbearing because women may choose to delay or have fewer children in order to increase domestic equality.

So the problem here seems to be an incompatibility between employment and motherhood. Because mothers are required to perform household and child raising tasks as well as involve themselves in paid employment the compatibility of these two pursuits will determine fertility levels in the future. Rindfuss *et al.* (2003) show that compatibility of these change over time. In many countries they used to have a negative correlation, but in recent years they have become more compatible due to policy and attitude change and now have a positive correlation. Their hypothesis is that any changes that increase the compatibility between being a mother and being a worker will lead to higher and younger fertility and their study supports this hypothesis. Many factors influence this compatibility, including economic and employment factors discussed above, marriage, the nature of the job market, the extent to which men will do unpaid work, education, as well as family friendly policies involving maternity and paternity leave as well as childcare. The compatibility of combining motherhood with paid work is affected by the availability, acceptability, accessibility, quality and cost of childcare. In New Zealand, despite the sevenfold increase in childcare use between 1976 and 1987 and the fact that more than 90 per cent of four-year olds and 70 per cent of three-year olds were enrolled in a formal childcare service in 1997, childcare services continue to be poorly funded and rely on the voluntary contributions of both time and money by primary caregivers (Shirley *et al.* 1997). Hillcoat-Nallétamby and Dharmalingam (2002) find that informal childcare arrangements between friends and especially family are the most effective in allowing mothers to pursue a career in New Zealand.

Sceats (2003) discusses the ability of New Zealand women to combine paid employment with child raising. She finds that many women find it increasingly difficult to do this and many are being forced to make a choice between family and career. She concludes that there is a double standard in New Zealand with lip service being paid to the importance of family but little real support is offered to those families who are trying to cope on one income. In addition, lack of family friendly policies involving employment flexibility for parents is a barrier to family formation.

## **Conclusion**

Outlines of the causes of delayed childbearing have included economic incentives for delayed childbearing. These have involved increased

economic independence of women; the loss of opportunity costs being lowered by later childbearing; the declining economic fortunes of men; macro-economic factors which affect both men and women; inaccessible housing markets; length of time of employment required in order to “set oneself up” and the nature of the job market. Factors related to education have included increased opportunity costs being forgone for more educated women; the fact that young people are entering “adulthood” later due to years spent in higher education; increased knowledge of contraception; the incompatibility of combining motherhood with being a student and New Zealand’s student loan scheme. Marriage also affects levels of childbearing and the changing nature of marriage markets has also led young people to delay childbearing. The pursuit of self realisation and individual fulfillment also seems a convincing reason for delayed childbearing and because this rise in post materialist values occurred at the same time as economic changes it is possible that these factors combined have caused the fertility transition. However, the inequalities between men’s and women’s domestic roles also need to be considered as these decrease the compatibility of combining motherhood with paid employment.

It is possible that the combination of economic changes involving women’s independence and men’s worsening labour market conditions as well as increased levels of education have combined with both changing values as well as no change in the levels of domestic equality. It is likely to be a combination of these factors which have determined the nature, timing and speed of fertility changes in different countries around the world and in New Zealand. Scholars have warned us not to look for overarching theories to explain all fertility transitions in all industrialised countries as an interplay of these factors will have combined with culture and national policies to influence different countries in different ways (Caldwell and Schindlmayr 2003; Rindfuss *et al.* 2003). It is likely that in New Zealand, increasing economic opportunities from the 1950s onwards combined with value changes resulted in increased fertility then. However, economic declines combined with increased levels of higher education, changing marriage patterns, as well as changing values and no increase in domestic equality have probably all served to decrease fertility and increase age at first births in New Zealand since the late 1970s. New Zealand women now face increasing difficulty of combining motherhood with a career and thus

childbearing will continue to be delayed until the compatibility of combining these two pursuits is improved.

While it is hard to initiate value change that will result in men increasing their proportion of unpaid household work, policies that place the emphasis on women as primary caregiver can be changed. In addition, a longer period of paid maternity and paternity leave as well as more flexibility being required from employers in regards to the demands of children as well as improved childcare services will all help to make the role of mother more compatible with the role of worker and this should lead to increased fertility.

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# Demographic Change and Labour Force Participation: Implications for Workplace and Social Policy

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## Abstract

This paper uses cohort analysis and life course transitions analysis of New Zealand data to investigate how changing demographic and labour force participation patterns have interacted on productivity over the life course. Currently the years of prime family responsibility and of prime labour force participation intensity coincide, while there is an extension of the time people spend in paid work over their lifetimes. The paper argues that part-time employment over a longer life is potentially the new norm. Evidence based recommendations for workplace change and social policy initiatives to address the work-life conflict resulting from external constraints on the individual preferences emerging from the demographic and social changes that have already occurred are discussed.

*Any point in the life span must be viewed dynamically as the consequence of past experience and future expectation as well as the integration of individual motive with external constraint (Giele and Elde 1998:19).*

Changes in life expectancy, marriage and childbearing patterns, and in time spent in education, have implications for men's and women's labour force participation over their life course. While there have been profound changes in the timing and patterns of people's lives outside of paid work, changes in patterns of labour force participation have not kept pace in a compatible way. The subsequent work-life conflict issues require a shift in patterns of labour force participation, and hence of workplace and employer expectations and attitudes, if both the potential productivity and wellbeing of our society are to be realised.

This paper uses demographic cohort analysis and life course transitions analysis of new Zealand data, disaggregated by gender, to investigate how

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patterns in life expectancy, marriage and childbearing, education, and labour force participation have interacted for the current cohort<sup>1</sup> of prime labour force participants (aged 25-44) compared with those who are currently in retirement (aged 65+) and those who are approaching retirement (aged 45-64). It argues that, currently, the years of prime family responsibility and of prime labour force participation intensity coincide, resulting in what Quiggin (2001) calls “an obviously irrational allocation of labour effort over the life cycle.”

At the same time, the total period of labour force participation has increased, or has the potential to increase, but with less intensity currently at both entry and exit ends of the labour force participation continuum. Young people spend longer in education, but combine that with part-time labour force participation. Retirees have longer to spend in retirement and are increasingly spending more of that time in part-time work. The net result is an extension of the time people spend in paid work over their lifetimes, but decreased intensity at any one time. This pattern has the potential to be expanded – especially in the post-industrial information and service age, with less intensity of paid work at the time of prime family care responsibility, but similar overall lifetime productivity. This means fewer lifetime years spent in what is currently regarded as full-time employment (40+ hours per week) and more in what is now considered “part-time” employment. “Part-time” employment is potentially the new norm, combined with education, family responsibilities, retirement, and other lifestyle options.

Effects of labour supply and demand and barriers to the availability of quality part-time work to meet the demand for it by those potentially supplying their labour are discussed.

The paper concludes by offering evidence based solutions for workplace change and social policy initiatives to meet and alleviate the work-life conflict increasingly experienced as a result of external constraints on the individual preferences resulting from the demographic and social changes that have already occurred.

### **Part-Time Labour Force Participation**

There is evidence from New Zealand and other OECD countries that part-time work is increasing while full-time work is in decline. The 1996 census reported that the biggest growth in employment in New Zealand since 1991

was due to the increase in part-time work, accounting for 56 per cent of the total growth. While part-time work grew by 52 per cent from 1991, full-time work grew by 9 per cent. Women continued to make up the majority of part-time workers (71 per cent) but the proportion of men continued to increase. By 2001 nearly one in four New Zealand workers (23 per cent) was employed part-time (Statistics New Zealand Census data, [www.stats.govt.nz](http://www.stats.govt.nz)).

Part-time work is predominant in the 15-19 and 65+ age groups: the young who are still in education, and older workers in semi-retirement. One in three women workers at all ages except 25-29 is part-time (Statistics New Zealand 2004c Table 2.03).

There is evidence of growth in part-time work in recent years in Europe, UK and Australia (Jaumotte 2003; Equal Opportunity Review 1999; Renda 2003). Among men and older workers in Europe and the UK, recent growth in part-time work has outstripped that for full-time work (Platman 2004; Equal Opportunity Review 2001). While women continue to predominate in part-time work, an increasing proportion of men now work part-time.

The OECD reports variation between countries in part-time work trends related to policies on childcare, tax and benefits (Jaumotte 2003). The OECD average for part-time work by women aged 25-54 has been stable for two decades at 25 per cent. While many countries have an increasing proportion of people working part-time, supportive policies in Scandinavia have resulted in reduced part-time participation and increased full-time participation.

### **Part-Time Work and Life Cycle Stage**

Some of the increase in part-time work in New Zealand occurred as a result of economic restructuring in the 1980s and 1990s and was driven by employers and is low status, poorly paid and without the conditions and protections of full-time work (Davidson and Gray 1994; Lampe 1993). However, there is now evidence of a preference by many workers for part-time work at different stages of the life course to accommodate other aspects of their lives.

New Zealand research on work pattern preferences of couples with children found that the most satisfactory arrangement for parents is where they are not doing equally demanding jobs (Ministry of Social Development

forthcoming). Yet only 61 per cent said that permanent part-time work was currently available in their workplace. This study also found that women often choose to trade senior positions for greater flexibility in hours and/or part-time hours. This appears to be more common in younger families with women increasing their hours when their children start school.

These findings are consistent with findings in some European countries (Rasmussen *et al.* 2003; Thornthwaite 2002; Jaumotte 2003). There is a preference for dual earner households, with one or both part-time. There is evidence that it is not just women, but also some men who would like to work part-time rather than full-time.

An OECD study demonstrates a clear preference for part-time rather than full-time work at different stages of life (Jaumotte 2003: 33 table 7).

Other evidence for a preference for part-time work is found in European Commission surveys in mid 1990s (Evans *et al.* 2001) and in a comparative study of Western Europe, North America and Australia (Thornthwaite 2002).

People are living longer, but they are also healthier longer. At the same time, the nature of work has changed from physical labour to service knowledge or technical work that does not require early retirement due to declining physical capacity with age. Literature from overseas suggests that for many this will be part-time rather than full-time (Platman 2004; Hudson 2004; Moen 2004; Lissenburgh and Smeaten 2003).

In New Zealand, increases in life expectancy and consequent changes in the age of eligibility for superannuation are an incentive to continue earning income for longer. According to McGregor and Gray (2003) the trend toward early retirement in New Zealand ended, or paused, from the mid-1980s. Almost 50 per cent of people in their study of mature workers in the meat industry said they would not just stop working full-stop. More than one in five (22 per cent) said they would keep working part-time or fewer hours. A number of them would also like to shift to easier work later in life.

The gap between the preference for part-time work and the reality of full-time work may be for income reasons – i.e. the need for full-time income, or it may be due to a lack of availability of desired type of work on a part-time basis. The variations in preferences among OECD countries may be related to different government policies (Jacobs and Gerson 2004) or to different cultural norms around family, mothering and childrearing (Pfau-Effinger 2004).

The main individual barrier to part-time work during the parenting years is likely to be income. On a lifetime basis at an individual level, if part-time work during the early childhood years was offset by continuing in the labour force past 60-65 years, this latter income and productivity would offset that lost during the family years ie. take longer to pay off the mortgage. At the macro-level, continued part-time labour force participation into "retirement" would offset state spending on superannuation which could be transferred to family support in the mid-life years.

The increase in the potential productivity of older workers implies that a rational allocation of effort over the lifecycle would involve reduced labour supply during the years of peak family responsibilities supplemented by later retirement Quiggin (2001:189).

A Canadian study found that 52 per cent of 79 focus group participants aged 30-65 supported working less in earlier life in exchange for continuing part-time after 65 (Policy Research Initiative 2004:42,49). Moen (2004) also had similar findings. The Canadian study also found that the ideal retirement age is believed to be between 55 and 62 years of age, but most projected closer to 65 years as their actual age of retirement (Policy Research Initiative 2004:48). This is consistent with a reduction to part-time hours in later life to bridge the desire for not continuing their mid-life work pattern but perhaps a need to continue earning.

An OECD paper notes that the increasing availability of part-time work opportunities tends to raise female labour force participation although there are variations by country. These variations are dependent on social policy initiatives in the areas of childcare, taxation and benefits, as well as workplace policies and culture (Jaumotte 2003; 2005). Jaumotte suggests the gap between preference for part-time work and actual levels of part-time work is a result of market failure and that an increase in part-time work opportunities would be likely to raise female labour force participation.

In a study by the Australian Institute of Family Studies, the "overwhelming majority of couple families have increased rather than reduced their combined level of employment as a result of the greater availability of part-time work" (Renda 2003:20). Part-time working has also been shown to be an important source of job growth in Japan and many European countries (Evans *et al.* 2001).

If parents cannot achieve their desired work/family balance, economic development is curtailed, through reduced labour supply by parents. A

reduction in birth rates has obvious implications for future labour supply as well as the financial sustainability of social protection systems (OECD 2004 :abstract).

Two New Zealand sources claim that increased labour force participation has potential (positive) implications for GDP and standard of living (Statistics New Zealand 2004a; Bryant *et al.* 2004).

## Method

This paper looks at a number of demographic and labour force participation indicators for three birth cohorts: 1957-1976 (aged 25-44 in 2001), 1937-1956 (aged 45-64 in 2001), and 1917-1936 (aged 65-84 in 2001).

The indicators are: life expectancy; age at entry to and exit from labour force/full-time; full-time and part-time labour force participation across life course; peak childbearing years; coincidence of full-time work peak and childbearing peak; childlessness; age distribution of labour force; and total productivity across lifetime and across the two breadwinner family model compared with the single breadwinner model.

Labour force participation was calculated from census data. Each cohort covered four censuses per age group and averaged the sum of the percentage participation. Age of entry and exit to full time work for each cohort was calculated using the median, that is, when 50 per cent doing it, as per Ravenera *et al.* (2002). Proportion of life in full-time work was calculated by adding total number of years for each five year age group where full-time participation was 50 per cent or more, and expressing as per cent of total life years, defined as life expectancy for each cohort. Proportion of adult life in full-time work was calculated by taking away 15 years spent in school from total life expectancy, and calculating as above. Life time productivity was calculated by adding the per cent of all age groups in full time participation and dividing by the number of age groups (that is, four). Part-time was calculated on the same basis and then divided by 2.4. On average it takes 2.4 part-time employees to provide the same number of hours as one full-time employee (Hakim (1996:67). Statistics New Zealand uses a 2:1 ratio. Total productivity = FT + PT/2.4

The main data limitations were: lack of data for cohort 1 past age 44; data on part-time work not available pre-1981; and definition change in 1986 from 20+ hours per week to 30+ for full-time work. Missing data was imputed by using the previous rate of increase or available data and taking

the midpoint of the two results (which were close). The 1981 data used was revised to match 1986, so it is comparable from 1981.

## Results

All data in this section was processed by the author from Statistics New Zealand census and vital registration data.

### *Labour Force Participation over the Life Course*

The age at which people enter full-time work is increasing as a result of changes in the school leaving age and the need for a more educated work force (Table 1).

**Table 1: Age at entry to full-time work**

Birth Cohort	Men	Women
1957-1976	20 - 24	25 - 29
1937-1956	15 - 19	15 - 19
1917-1936	15 - 19	15 - 19

The age at which people retire from full-time work is also increasing as a result of increasing life expectancy and policy changes on retirement and the age of eligibility for superannuation.

Cohort 3 (born 1917-36) had a retirement age of 60-65 until it was scrapped by the 1993 Human Rights Act, resulting in no retirement age for cohorts 2 (born 1937-56) and 1 (born 1957-76). The age of eligibility for superannuation has also been increasing, from 60-65 for Cohort 3, 61-65+ for Cohort 2, and 65 with a possible increase to 70 for Cohort 1.

Women's pattern of exit from the labour force was originally to exit when they had children and stay out. Now it is to exit when they have children, with that age increasing, and then to return, and exit to retirement earlier than men (McPherson 2005).

The percentage of women in full-time work is increasing at all ages while the percentage of men in full-time work is decreasing at all ages except age 60-64 where it is increasing (See Table A1 in Appendix). Both men and women are doing more part-time work at all ages (except for women 25-44 where part-time work is stable). For men aged 60-64 part-time work is increasing at a faster rate than full-time work.



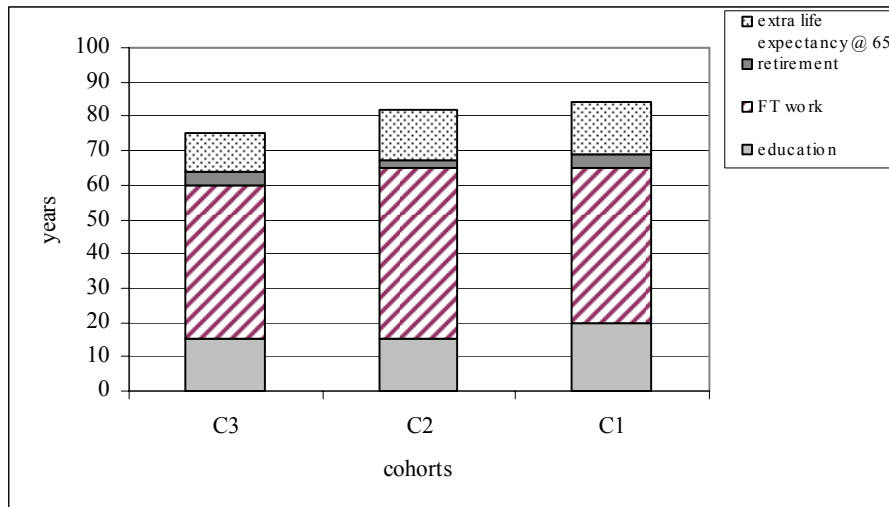
The proportion of life that is spent in full-time work peaked for Cohort 2 (born 1937-1956, aged 45-64 in 2001) with the percentage of men and women in full-time work higher than the previous cohort (born 1917-1936, aged 65-84 in 2001). Cohorts 1 (born 1957-1976 aged 25-44 in 2001) and 3 spent similar amounts of time in full-time work because as male full-time work declined, female full-time work increased (see Appendix Table A 2).

When the analysis is kept to adult life (aged 15+), Cohort 2 is still the peak, with cohort 1 and 3 similar but 1 slightly behind 3 (Appendix Table A2).

To assess total life time productivity, part-time work needs to be included. The proportion of life in part-time work has increased for both men and women over time as we have moved from the breadwinner model where men worked full-time and married women/with children were not in the labour force at all (McPherson 2005).

Figure 1 shows that as life expectancy increased, so did the proportion of life spent in full-time work for Cohort 2, but for Cohort 1 the proportion of life in full-time work has declined as more of our life span is spent in education and retirement.

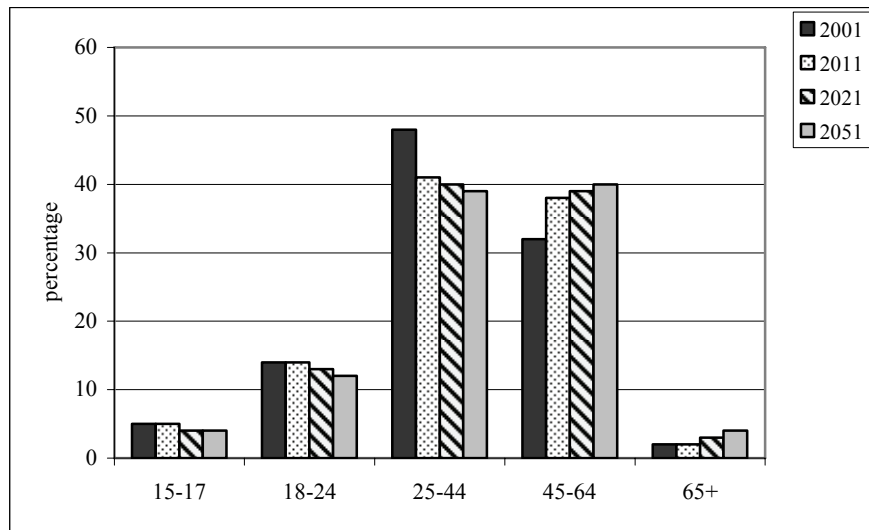
**Figure 1: Lifecourse distribution of education, FT work and retirement: men (based on life expectancy at birth)**



***Labour Force Participation and Productivity***

New Zealand’s population is ageing but not as rapidly as other developed countries as we have a youthful Maori and Pacific population. Population and labour force projections for New Zealand shows (Figure 2) that the youth labour force (18-24) will increase to a peak in 2021 and then decline; the middle labour force (25-44) will decline from 2001; and the 45-64 labour force will grow rapidly to 2020, then decrease. The population aged 65+ will increase. Statistics New Zealand projection also predicts a greater increase in the male labour force than the female labour force to 2051.

**Figure 2: Labour force projections by age group 2001-2051**



Source: Statistics New Zealand Labour Force Projections (1996 base -2051) Series 4M.

The combination of both full-time and part-time labour force participation for men and women over all ages shows that participation in both full-time and part-time work is increasing, but the rate of increase has slowed, particularly for full-time work, for Cohort 1, resulting in a reduction in total participation growth for Cohort 1. Total full-time productivity has increased as a result of longer life expectancy even though the proportion of life spent in full-time work is decreasing.

A nation’s total productivity depends on the combined labour force participation patterns of men and women. Gender patterns of labour force

participation differ most for married people, particularly those with children. The time spent on childrearing generally results in some degree of withdrawal from paid work. How this balance of time between paid work and childrearing is divided between men and women has changed over time.

The breadwinner couple model prevailed in the 1940s when the 40-hour week was introduced by the first Labour government. The general pattern was that men were in full-time work and married women did not do paid work.

In 2001 only eight per cent of adults in the main workforce (ages 15-64 years) lived in a traditional breadwinner couple where the man was in full-time work and the woman was not in the labour force at all.<sup>2</sup> In 2001, census data show that: 41 per cent of adults aged 15-64 years are single; 43 per cent live in couples where both partners work; 21 per cent live in couples where both work full-time; four per cent live in couples where neither are in the labour force; eight per cent live in couples where man in FT work and woman is not in the labour force and the rest (four per cent) are unemployed, not specified etc.

The prime childrearing years are from 25-44 which is a declining age group. According to some researchers, this period coincides with the traditional prime career building and labour force demand years also: "The period of early childhood coincides with the point at which traditional career paths demand maximum commitment to the labour force" (Quiggin 2001:185). Drago *et al.* (2004:28) found that:

the ability of full-time employees to achieve reductions in hours hits a minimum around the age of 43. (This) fits with the notion that the ideal worker norm is most heavily applied to employees in their prime earning years.

Testing Quiggin's claim on New Zealand data suggests an intensification of the combined peaks of labour force and family responsibility effort/demand, at least for men (Table 2).

An analysis of trends in total labour force participation and productivity during the prime years of caring for young children shows that total productivity (in terms of labour force participation) for this group peaked at Cohort 2, and has declined for Cohort 1. This decline is due to a decline in male full-time participation and a levelling in female part-time participation (McPherson 2005).

**Table 2: Age when the highest percentage are in full-time work and the peak age for childbearing**

	Full-time work	Childbearing peak
Cohort 1	Men: 25 - 34 Women: 20 - 24	25 - 34 (tending 30 - 34)
Cohort 2	Men: 25 - 34 Women: 20 - 24	20 - 29 (tending 25 - 29)
Cohort 3	Men: 25 - 44 Women: 20 - 24	20 - 29 (20 - 24 main)

There has been an increase in female full-time participation in this age group. This may in part be due to the increasing numbers of women who remain childless. It is not clear whether this means it is easier to work full-time because they don't have children, or whether working full-time makes it more difficult to have children. Research by Sceats (2003) in New Zealand and others overseas suggests that the difficulties of combining full-time paid work with having children are increasing rather than decreasing, and are in part responsible for our declining birth rates, particularly among higher educated and professional women. It could also be argued that people who do not have children have less need of a full-time income over their life course, and could potentially prefer part-time work if it were available at the same levels and conditions as full-time work.

Preferences for different work options vary over the life course according to other life activities such as education, childrearing and retirement. The 45-64 year life cycle stage is likely to be the main period of full-time work in the future, as people move from the childrearing life cycle stage and take longer to enter the retirement stage. Surveys show this to be the period of least work-life conflict (Gordon *et al.* 2004). The 45-64 age group is also the main growth area of the population and the labour force.

## Discussion

### *Supply of and Demand for Labour*

The balance between supply of and demand for labour fluctuates. At a time when demand for labour outstrips supply, the market needs to adapt to the conditions of the suppliers. To a large extent, this means providing part-

time work (Macran, Joshi and Dex 1996; Jaumotte 2003; Lee *et al.* 2002; Quiggin,2001).

A labour market framework which relies on insecurity to drive effort and treats older workers as expendable will not be viable in coming decades. An appropriate response requires a policy framework that takes account of the demographic realities of an economy based on human capital (Quiggin 2001:190).

There is currently a labour and skill shortage in New Zealand and the rest of the developed world. To further increase productivity through increased labour force participation requires increased participation in part-time work, or increased full-time work. Increased participation can come from immigration, from encouraging those in the labour force to work more and from encouraging those not in the labour force into work. Those currently not in the labour force tend to mainly be young people in education, women caring for children, older people and people with disabilities. While not all of those not currently in the labour force want to be in the labour force, the majority of these groups are potentially more likely to be available for labour force participation on a part-time basis rather than full-time.

Participation in full-time work is not likely to increase for those aged 20-24, as people need to spend longer in education/training than previously. Labour force participation of older workers could be increased as future cohorts in this age group will be living longer and healthier and will need to combine the need for some paid work with the desire for more leisure. But they are likely to want to work part-time, and may also require work-life balance initiatives, social policy incentives and changing attitudes by management to employing older workers. Similarly, increased participation by people with a disability requires changing attitudes, increased awareness of supports and funding available and more flexible working arrangements (EEO Trust 2005).

Women could be encouraged to do more full-time and part-time work through work-life balance initiatives, social policy incentives and changed employer attitudes, to overcome the barriers noted above. There is evidence of a New Zealand preference among mothers for not doing equally demanding jobs as their partner (Ministry of Social Development forthcoming) supported by international research on the conflict between ideals of full-time workers and ideals of parenting (Stone and Lovejoy 2004), the preference for a dual earner-dual carer model in some cultures (Gorneck

and Meyers 2000; Pfau-Effinger 2004; Hartmann 2004; Hughes and Hand 2005) and the well being of children being best met by fewer than full-time hours by both parents (Ruhm 2005). There is evidence that some women will not return to work after having a child if full-time work is the only option (Hill *et al.* 2004). If part-time work is not available, their skills, talent and productivity are lost. If part-time work is offered, their productivity is retained on at least a part-time basis, with the likelihood of eventual return to full-time work in that organisation.

Jaumotte (2005) attributed the gap between demand for quality part-time work and the availability of quality part-time work as evidence of market failure. According to Jacobs and Gerson (2004), demand side constraints in terms of the number and type of part-time jobs available are the main determinants of the level of part-time work.

Platman's (2004) model of barriers to increased labour force participation by older workers includes organisational factors, such as legislation regarding pensions, employment law, social attitudes to retirement; workplace values, culture, structures, bargaining processes, benefit packages, operating technologies, attitudes to age, experience, training and development, early retirement policies and job design factors, as well as individual factors such as health and wellbeing, caring responsibilities and personal finances.

The main barriers identified by Lee *et al.* (2002) were: cultures that emphasise face-time; pressure to return to full-time (ideal worker norm); and inexperienced/unsupportive senior managers. They also found that non face-time is accepted/not problematic when it ensues from work related travel but not from non-work responsibilities, so face-time is not the real issue. Rather it is attitudes about what Williams (2000) terms "the norm of the ideal worker".

### ***The Norm of the Ideal Worker***

The norm of the ideal worker was introduced by Joan Williams (2000) and used by Drago *et al.* (2004), who define it as: someone who obtains relevant career credentials; moves immediately into employment; works long hours with few interruptions for periods of years or even decades; expects such behaviour of themselves and others; and rewards those who most closely fit the norm with high pay, promotions and high status.

Historically the ideal worker norm was applied to men but as women have moved into professional careers the norm has been applied to them as well. The movement of women with children into paid work has challenged the assumptions on which work is organised (Jacobs and Gerson 2004). But changes in the workplace have not yet matched changes in the economy of the family. Drago *et al.* and Stone and Lovejoy (2004) postulate that the “ideal worker norm” impacts on labour market functioning and conflicts with norms and ideals of motherhood/parenthood. Therefore, they argue, policy interventions may be needed to allow employees to alter their hours over the life course.

As long as the ideal worker norm prevails and reward is attendant on it, couples will ensure at least one (normally the male because of higher earnings and traditional role expectations) maintains this norm (Drago 2004; Dex and Joshi 1999). The counter to this is that the other partner, therefore, is left with an unequal share of the unpaid work, with negative implications for women, the labour force and society (McPherson 2004).

The norm of the ideal worker involves long full-time hours and applies mostly to workers in prime earning years. According to Drago *et al.* age 43 is the hardest age at which to negotiate reduction in hours. This is an age at which those having children later in life are still involved in childrearing. This is not just a women’s issue. Drago found that men changed jobs in order to change their work hours more frequently than women:

The existence of barriers to reduced hours employment suggests the need for policies to protect the right of parents, or indeed of anyone with responsibilities external to the workplace, to reduce their working time when needed (Drago *et al.* 2004:29).

### **Workplace Initiatives to Support Part-Time Work**

According to Jacobs and Gerson (2004), time squeezes are not purely personal, nor uncontrollable. Time conflicts between paid work and the rest of life arise from social structures. Solutions therefore require fundamental changes in the way work is organised.

A review of the literature (Corwin *et al.* 2001; Hill *et al.* 2004; Lee *et al.* 2002; Drago 2004; Dex and Joshi 1999; Evans *et al.* 2001; Joshi and Hinde 1993; Quiggin 2001; Lissenburgh and Smeaton 2003; Williams 2000; Williams and Cohen Cooper 2004; Manning and Petrongolo 2004; Fox 2004) shows that the main workplace barriers to part-time work are:

- Part-time work is not offered at senior levels
- Part-time work is not offered at pay and conditions equivalent to full-time pay and conditions in the US and UK
- A lack of opportunity to transition from full-time work to part-time work and back again as life circumstances change. The statistics show that women's withdrawal from the labour force or reduction to part-time hours is a temporary, transitional state related to the age of the youngest child
- Lack of career path flexibility
- Lack of convenient, affordable, quality childcare

These barriers are mostly related to women with young children not fitting the norm of the ideal worker i.e. attitudinal, workplace culture and values. But there is also a need to accept that older workers may wish to step off the career trajectory into part-time work rather than going into full-time retirement.

### ***Part-Time Work Available at Senior Levels***

The increasing age at which couples are having children means part-time work needs to be available at senior levels. More than 50 per cent of children are now born to women aged 30 years and over (Statistics New Zealand 2004b), meaning that these women are mid-career, not entry level.

There is a body of research and evidence that part-time work can be successfully undertaken by senior managers and professionals. Ten per cent of US professionals work part-time (Corwin *et al.* 2001). Lee *et al.*'s (2002) research findings refute conventional wisdom that part-time work is not feasible for senior employees/those supervising others. They say it just takes some effort and attitude change by management to look at the factors that facilitate it and those that don't and make changes to workplace culture and practices. Their research included views of co-workers, direct reports and senior managers. The Catalyst (2000) 10 year longitudinal study of women managers and professionals working part-time also shows it can work and that women credit the availability of part-time work during critical child-rearing years as the key to maintaining career momentum (Catalyst 2000). Half of the women in the study had returned to full-time work within 10 years. Flexibility resulted in retention – over half of the



women in this study and 23 per cent in another study (Hill *et al.* 2004) said they would not have stayed without the part-time option while their children were young.

A New Zealand study of part-time work in the Public Service found it to be concentrated in the lower salary grades and underrepresented in the higher salary levels (Lampe 1993:5). This study also provides case studies of successful part-time work arrangements at management level, and practical advice on how to make such arrangements work.

In many countries part-time work is available at the same pay and conditions as equivalent full-time positions. But in other countries, such as the US and the UK, it is not. This suggests the availability of part-time work at the same pay rate and conditions as full-time is being constrained in some countries by attitudes and values, such as the norm of the ideal worker. Part-time work is stigmatized as low status work and part-time employees as not fully committed workers (Drago 2004; Dex and Joshi 1999; Evans *et al.* 2001; Joshi and Hinde 1993; Quiggin 2001; Lissenburgh and Smeaton 2003; Williams 2000; Jaumotte 2003; Giele and Stebbins 2003; Williams and Cooper 2004; Rasmussen *et al.* 2003). This has also been the case in New Zealand (Davidson and Bray 1994).

Women often return to work after a break (for child rearing) to a part-time job that is below their skill level, offers fewer opportunities for further training and career development, is segregated in specific female activity sectors and has a negative impact on their economic prospects (Equal Opportunity Review 2001:29; Jacobs and Gerson 2004).

People may wish transition between full and part-time work and back again after the birth of a child, when a family member needs care, to pursue study or as a result of a temporary illness or injury. While some people may like to work part-time throughout their life, for many it is a temporary, transitional requirement to accommodate a life course stage.

Research by Drago *et al.* (2004) shows there is a lack of flexibility available to transition between full-time and part-time hours, and that lack of flexibility is greater for women than men. Drago *et al.*'s research showed that fathers and childless women are more able to make the transition between full-time and part-time work than mothers. These distinctions indicate again that this lack of flexibility to vary the number of hours regularly worked over a period of time is at least in part related to attitudes,

values, and the norm of the ideal worker, rather than any organisational inability to accommodate the transition.

Drago *et al.* also found that professional and managerial workers of both sexes were more likely to face the lack of their normal job being available on a part-time basis than other occupational categories. Other research reports on the lack of part-time work being a barrier to retaining women at senior levels and retaining women in an organisation (McDermid *et al.* 2001; Hill *et al.* 2004).

### ***Benefits to Employers***

The business benefits of offering flexible work options that accommodate parenting responsibilities, as well as the needs of those at other life cycle stages are increased productivity, increased hours that parents can work, better efficiency, better bottom line and retention of experienced staff at a small cost to the business (Managing Work Life Balance International 2004; Yasbek 2004; Dex and Schiebl 1999). Yet a recent survey in Australia and New Zealand found management attitudes were the main barrier to greater flexibility in the workforce (Sweeney Research 2004). Managers are reluctant to do the work necessary to make special arrangements for employees (Sweeney 2004; Corwin *et al.* 2001). Change to a more flexible way of working requires three things: a recognition and acceptance of the benefits to productivity; a management shift from monitoring desk time to monitoring output; and an attitudinal shift from distrust to trust.

Overseas research shows that the small size organisations that predominate in New Zealand are generally high providers of work-life initiatives such as flexibility (Lee *et al.* 2002; Dex and Schiebl 1999). They tend to do this on an informal basis, without the need for formal policies. Research on the effect of organisation size on the provision of part-time work is mixed. Larger organisations (20+) may find it easier to allow desired hours changes as employees are more substitutable in larger organisations (Drago *et al.* 2004). However the ideal worker norm may also be stronger in larger organizations with a specified workplace culture, making them unlikely to deviate from the traditional workplace norms.

Corwin *et al.* (2001) suggest it is the manager's task to work out what makes for a successful part-time arrangement, but that employees can maximise the success of part-time arrangements through strategies such as

transparent schedules, promotion of the business benefits, and cultivating senior management support.

## Social Policy Initiatives

A comparative analysis of family policies in industrialised countries by Gauthier (1996) found that New Zealand, along with the US, Canada, the UK and Australia was in the lowest category of provision of family support. These countries were categorised as individual responsibility not state/public responsibility for families. Since then changes include:

- Increases in benefit abatement thresholds in 1996. These improved financial incentives to combine the Domestic Purposes Benefit (primarily received by sole parents) with part-time employment (Wilson 2000). This was accompanied by various facilitative measures aimed at smoothing the path from benefit to full-time work.
- The introduction of 12 weeks paid parental leave in 2002, increasing to 13 weeks in 2005, but still short of the 20 week optimum recommended (Jaumotte 2003).

The European Commission Report 2001 on the social situation in the EU recommends policy goals that enable couples to reconcile their desire for children with participation in the workforce. Compatibility between child-rearing and labour market participation is improved and fertility is higher in member states where caring activities are better shared between men and women, public caring infrastructure is more developed, part-time jobs are more available and legislation is more family and female friendly (Equal Opportunity Review 2001:29; Rasmussen *et al.* 2003; Jacobs and Gerson 2004).

A study of EU countries found rates of part-time employment vary across countries and within countries over time because they are highly responsive to shifts in public policies (forthcoming, reported in Drago 2004). These include: earnings thresholds in relation to social assistance payments; tax incentives for employers to hire part-time employees; wage equality policies for part-time employees. The highest employment rates for mothers in EU countries are found in Scandinavian countries as, in addition to these policies, they also have the most developed childcare and family leave provisions (Thorntwaite 2002; Dex and Joshi 1999; Gauthier 1996).

A summary of evidence-based incentives for part-time employment found in a review of international literature (Dex and Joshi 1999; Gauthier

1996; Jaumotte 2003; Drago *et al.* 2004; Thornthwaite 2002; OECD 2004) include:

- Benefits and allowances that support young people, women and mature people into part-time work
- Increasing earnings thresholds in relation to social assistance payments
- Tax incentives for employers to hire part-time employees
- Policies of wage equality with full-time workers for part-time employees
- A more neutral tax treatment of second earners relative to single individuals
- Stronger tax incentives to share market work between spouses
- Childcare subsidies especially targeted at low skilled women who suffer the biggest distortion in their labour supply decision
- Paid maternity and parental leaves
- Legislation to give parents the right to work part-time and to resume their full-time job
- Same training opportunities and other conditions as full-time workers, possibly by legislation.

Disincentives for part-time employment include: inadequate public childcare subsidies; child benefits rather than childcare subsidies; and tax penalties on couples earnings.

An OECD study, which includes New Zealand, recommends legislation for the right to request part-time flexible hours to be offered to people with children and cites countries which already have such legislation: Portugal, the Netherlands (OECD 2004). This legislation gives parents the right to work part-time and to resume their full-time job i.e. the right to part-time work as a bridge back to full-time. This option had low availability in the UK and Germany and without this many parents dropped out of the labour force completely rather than go straight back to full-time work after parenting leave.

The European Union (EU) introduced a directive on part-time work in 1997 setting out general principles and minimum requirements relating to part-time work to eliminate discrimination against part-time workers, improve the quality of part-time work and eliminate barriers to opportunities for part-time work (European Union Council Directive 1997). In response to the EU directive, the UK introduced The Part-time Workers

Regulations (Prevention of Less Favourable Treatment) in 2000 (for details see <http://www2.dti.gov.uk/er/pt-info.htm> and Lissenburgh and Smeaton 2003). This provides for part-time workers to: receive the same hourly rate as a full-time worker; not to be excluded from training; have the same leave entitlements; and have the same access to benefits eg. pension schemes.

Germany has prohibited discrimination between full-time and part-time work since 1985. New part-time laws introduced in 2001-02 brought Germany into line with the 1997 EU directive which aims to encourage more men to take the part-time option and increase the flexibility of the labour force (Bourke and Russell 2002).

## **Conclusion**

There is evidence in this paper to support the theory of a potential increase in labour force participation and productivity over the life course by extending the proportion of life spent in the labour force while at the same time reducing the intensity at earlier life cycle stages which conflict with the childrearing years. Part-time work is not yet the new norm, but it is increasing and may be the most likely source of increased labour force participation by those currently not in the labour force or about to leave it. The Australian Bureau of Statistics estimates that by 2010 20 per cent of couples will both be working part-time (Australian Bureau of Statistics 2005). A changing norm of the ideal worker, along with supportive policy changes at government and workplace level are needed in order for part-time work to increase its contribution to labour force participation and productivity.

New Zealand has both low levels of quality affordable childcare, and low availability of quality part-time work. While improvements in childcare options are necessary, I believe this is not sufficient given New Zealander's cultural preference for part-time work and parental childcare combined with part-time public childcare rather than full-time childcare (Ministry of Social Development forthcoming). Improvements in the availability and quality of part-time work and the transitioning between part-time and full-time work, and other flexible work-life initiatives within the workplace are needed alongside social policy initiatives such as affordable quality childcare, paid parental leave extended to the optimum of 20 weeks, and income support for parents reducing their combined work hours to care for their own children. For example, for the full potential of paid parental leave to be realised is the

need for graduated return to the workforce as shown by the experience of Westpac in New Zealand (Westpac 2004).

## Notes

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- 1 A cohort is a group of people sharing a common characteristic, in this case time of birth.
- 2 Customised data provided to the author by Statistics New Zealand.

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**Appendix: Tables****Table A1: Trends in labour force participation in New Zealand**

	Full-time		Part-time	
	Male %	Female %	Male %	Female %
<b>Age 20 - 24</b>				
Cohort 1	78	58	6	11
Cohort 2	93	54	-	-
Cohort 3	96	50	-	-
<b>Age 25-44</b>				
Cohort 1	79	44	5	23
Cohort 2	94	39	2	23
Cohort 3	99	26	-	-
<b>Age 45-59</b>				
Cohort 1*	75	48	-	-
Cohort 2	74	43	6	22
Cohort 3	90	34	4	18
<b>Age 60-64</b>				
Cohort 1	-	-	-	-
Cohort 2	50	22	10	18
Cohort 3	40	12	7	8

\* Only early part of cohort so far

**Table A2: Percentage of life in full-time work**

	Male	Female	Total
Cohort 1	65	20	43
Cohort 2	75	21	48
Cohort 3	70	15	43
<b>% of adult life (15+) in full-time work</b>			
	Male	Female	Total
Cohort 1	83	25	54
Cohort 2	96	27	62
Cohort 3	92	20	56

