Māori in New Zealand's Contemporary Development

Introduction

By conventional economic indicators, such as GDP per capita and unemployment, New Zealand is among the better off of the OECD countries (OECD, 2015). This, however, is not true for all areas in the country. The other empirical articles in this issue focus on the disparities between towns and rural centres across New Zealand, especially those in decline.

This article takes a different approach, focusing on the contribution of Māori to national and sub-national population and development. Its underlying postulate is that the Māori contribution to subnational dynamics has been insufficiently valued. Instead, in past public discourse on ethnicity, Māori have too often been viewed as a fiscal burden and as benefit-dependent. This article will discuss two related issues. Using national level data sets and case-study regions, it will document the contribution that Māori have made to population replenishment

and thereby New Zealand's economic development. At the same time, it also shows that this contribution has been achieved by overcoming contemporary inequalities that have their roots in colonisation.

It is fundamental to our article that until World War II, due to the loss of resources and sovereignty suffered by Māori in the 19th and early 20th centuries, Māori were disproportionately living either in low fertility, hilly regions of the North Island, or, if residing in lowland areas, were in communities that had

limited resources; in the 1890s Māori were in a deep 'under-development trap' (Pool 2015). The land available to them, moreover, was so subject to multipleownership, a residual effect of the individualisation of titles in the 1865 Native Lands Act, that economic development was well-nigh impossible (Hunn 1961: 141ff; Ward 1997 v1: xxiv). Many whānau and are still located in underdeveloped areas within their rohe. Finally, the modern method of escaping underdevelopment traps, by gaining access to financial capital for investment, was, until recently, largely closed to Māori (Belich 2001: 60-62; Monin 2009: 142-43). The Waitangi settlements have seen capital compensatory sums disbursed to some iwi, allowing them to become corporate players of significance, with, for example, Ngāi Tahu holdings being rated among the top 100 companies in New Zealand (Deloitte 2016). It is beyond the scope of this article to investigate whether Waitangi settlements and reparations have had a major impact, particularly at a regional level, as the disbursements to runanga have been diffused often outside the rohe limits.

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After World War II, however, Māori initiated their own strategy to escape this trap. The 'New Māori migration', as Joan Metge called it (Metge 1964), saw Māori engage in a mass rural exodus, unparalleled anywhere at that time according to a University of California study (Pool 1991:133). In this migration, Māori were assisted by government interventions such as in skill-training, employment, housing and health, but the main driver came from within Māori society. This definitely increased Māori wellbeing, although while the gaps with Pākehā decreased they were never bridged fully (Pool 1991:152-59). A downside, what Ngapare Hopa has called 'the torn whāriki', saw the core tissues of whānau and hapū strained by this exodus (Hopa 1996). This was a more extreme version of the demographic, economic and social

model has been elaborated particularly in the context of colonialism, notably in Africa (Cordell et al 1994). Far more critical for present purposes is that the framework has been operationalised and elaborated for New Zealand by Jackson (1998), specifically around ethnic stratification. By adopting and adapting this model, she also succeeds in bypassing the two blocks facing analyses of population and development: the fact that the 'demographic' models each deal with only one component of the population system (e.g. natural increase - the demographic transition model; mortality - the epidemiological transition), as well as the basic flaw in much economic development modelling that is monetised and thus oriented away from people.

A well aligned approach to population and development linkages, of direct import

By 1991, the Māori birth cohorts of the 1960s and early 1970s, born when their fertility rates were still very high, had reached workforce ages, so their contribution increased to exceed their population share at all ages.

strains seen recently in sub-national nonmetropolitan New Zealand, as shown by other articles in this issue. To add to this, many of the jobs Māori entered, such as in manufacturing and forestry, were those affected bv the economic most restructuring of the 1980s and 1990s. This was associated with the growth of the Māori diaspora, especially in Australia. Finally, to house Māori in-migrants, and Pasifika whose island exodus paralleled the Māori rural exodus, large housing estates were built, often creating urban concentrations of the poor, predominantly Māori and Pasifika.

This article looks at the Māori contribution to both the factors of production and reproduction, using what is termed a 'total social production model'. This model is outlined in another more theoretical article in this issue (Pool *infra*).

for the present article, comes with the growing corpus of analyses 'demographic dividends', which interlink age-structural changes economic trends. Its main representation in New Zealand has been work by Jackson which shows that the age-structural transitions of Māori and Pasfika could produce a dividend of wider significance across the entire economy. A caveat to this, which Jackson stresses, is central to our paper: A dividend will be realised only if there is real investment in human capital: education and training, pro-active employment policies and institution building (Jackson 2016; see also Pool 2007).

We look here at the contribution of Māori to growth overall; to the quantum of the child population, which is the future engine of growth; and to labour and employment. Our sole aim is to show what

happens for these three dimensions. Above all, we show how Māori have played a role in population and development dynamics, nationally and then in two case-study regions. The regions selected, Northland and Gisborne/Hawke's Bay, have been chosen because of the relatively high proportion of their population that identify as Māori, 30 and 28 percent respectively².

Data

Our data are drawn from official data statistics. We recognise that these data are subject to problems of interpretation, notably because of shifts in definition of 'who is a Māori'. Our analyses suggest that this has limited effects on two broad categories: Māori, including reporting Māori, and any other ethnicity and its residual, Non-Māori. We have used regions rather than iwi because reporting by iwi affiliation is incomplete (among those who record Māori descent), and the data are fraught with a range of definitional issues that affect the responses in the census and limit their utility for this article. We feel that, eventually, iwigenerated statistical series will answer many of these issues, but we have not used these, simply because most are not yet widely available for all iwi in the public domain and iwi are often still developing record-keeping protocols³. We mainly use census data, although some employment data come from Household Labour Force Surveys. A caveat is that because of small sample sizes in some regions, the latter have limitations.

Historical context

Table 1 provides data on Māori as a percentage of the total population for some variables, and rates for Māori and Total for others. It starts the series in 1936, the first moderately reliable census for Māori, to cover when Māori were still overwhelmingly rural, and men were clustered in farming, including for subsistence (Pool 1991).

The Māori proportion of the total population grew steadily and this was true for their workforce until 1971; nevertheless, movement into larger urban areas was still below their total population contribution. But when reproduction is analysed, Māori contribute greatly to

replacement (births + survivorship of children, measured here by Child-Woman Ratio). This contribution is particularly marked in 1971, when, even though this was still in the Pākehā Baby Boom, and Māori reproductive levels were starting to decline, Māori contributed disproportionately to the child population

By 1991, the Māori birth cohorts of the 1960s and early 1970s, born when their fertility rates were still very high, had reached workforce ages, so their contribution increased to exceed their population share at all ages. This is the base for a 'collateral demographic dividend', as Jackson (2016) has called it. But, as she notes, this is merely 'potential', dependent on improved access of Māori to education, skill training and pro-active labour market policies. That these have not been implemented is evident in the employment data presented here. The economic restructuring of the late 1980s had a major impact, particularly on Māori men. In 1971 both Māori men and women had been closing the employment gap with Pākehā; by 1991 they had widened again dramatically (see following section on the working age population and employment). Accompanying the closing of the employment gap, between 1956 and 1981 Māori incomes converged towards Non-Māori, but started to diverge 1981-86, and this accelerated 1986-91 (Martin 1998: Tables 6.5, 9.4)

Māori and regional population size and growth

Eleven percent of all New Zealanders identified as Māori in 1981, but by 2013 this had risen to 15 percent. Thus, in simple numerical terms, this period saw Māori increase their contribution to the total population of New Zealand. This proportionate increase also had an impact on regional population numbers. Table 2 shows the change in the proportion of people identifying as Māori for both the regions being used as examples, Northland and Gisborne/Hawke's Bay, and nationally over the period 1971-2013. It can be seen that the Māori share in the population rises markedly 1976-1996 before stabilizing post-1996 with both the example regions having Māori shares in the population around twice the national figure.

Table 1 Historical context

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Census	19	36	19	51	19	71	19	91	
Demographic									
Total Population size (% of total)??	5	,	6		8		10		
Living in larger Urban area (%)	[0.6]		[1.5]		6		n/d		
Reproduction									
Percent of Children 0-4	11		9*		13*		2	23	
Workforce									
Percent of persons 15-64	4		Ę	5		7		13	
Employment									
Percent of all persons 15 and over actively engaged									
Male	2		5		6		10		
Female	2		4		6		10		
b) Rates Child-Woman Ratios = ([Children 0-4/Women 15-44] * 100)									
Census:	1936		1951		1971		19	1991	
Māori	87		90		79		56		
Total Population	36		58*		52*		31		
Employment rate = ([Actively Engaged/Population 15-64] * 100)									
	1936		1951		1971		1991		
	М	F	М	F	М	F	М	F	
Māori	58	14	85	24	89	36	69	49	
Total Population	88	27	98	34	91	39	93	61	

Period of Pākehā Baby Boom, when Pākehā childbearing rose, while Māori rates remained constantly high although declining a little by 1971

Table 2 Proportion Māori by year*

	Year				
Area	1976	1996	2001	2006	2013
Northland	20.2	33.0	32.6	31.4	33.5
Gisborne/Hawke's Bay	17.9	29.1	29.6	29.2	30.5
New Zealand Total	11.4	15.4	15.1	14.9	15.6

Source: New Zealand Census, 1976-2013

The child population

Māori family sizes are larger than Pākehā, but the difference has decreased dramatically over recent years. Most notably, Māori went through a rapid fertility decline in the 1970s.

The important statistic is how Māori contribute to the child population, the engine of growth for a region as they survive to working age. Today, almost all children, Māori or Pākehā, will survive to middle-age.

Two common measures of the Māori contribution to the vitality of a region are the ratio of children to women at child bearing age and the percentage contribution of Māori to the total

population aged 0-4 years. These measures are defined in the Appendix to this article.

Table 3 shows the child-woman ratio for our selected regions, and total New Zealand. Māori child to woman ratios across the 1976-2013 period are consistently higher than those of the total population, indicating that they are making an above average contribution to population growth (as evidenced by the rising Māori population share). Except for the final inter-censal period (2006-2013) the ratio declines over time for the areas considered, consistent with the slowing of Māori population growth, and that of New Zealand as a whole. The earlier patterns are consistent with cross-national

Table 3 Child-Women ratio by ethnicity 1976-2013

Year	1976	1996	2001	2006	2013		
Mãori							
Northland	72.6	58.4	54.1	50.0	60.4		
Gisborne/Hawke's Bay	69.9	55.2	53.6	50.2	55.3		
New Zealand Total	68.3	54.8	53.0	49.0	54.4		
Total							
Northland	51.0	42.1	38.6	37.7	44.1		
Gisborne/Hawke's Bay	51.8	39.9	38.7	37.2	41.6		
New Zealand Total	52.0	34.4	32.7	31.3	34.5		

Source: New Zealand Census, 1976-2013

Table 4 Contribution (%) of Māori to population aged 0-4 years

Year	1976	1996	2001	2006	2013
Northland	27.6	50.6	52.5	49.2	55.2
Gisborne/Hawke's Bay	20.6	45.0	64.5	63.2	66.8
New Zealand Total	13.5	26.3	26.5	25.5	26.9

Source: New Zealand Census, 1976-2013

trends summarised in another article in this issue (Pool infra). The result for the most recent census is inconsistent with past trends, and requires further examination for it is national as well as regional. Is it a function of higher fertility, which seems unlikely for that date as Māori Total Fertility rates had declined 2008-14, or an artefact of a shift in registration, whereby parents declare Māori as the birth's ethnicity, or a disjunction between ethnicity as reported for numerators (vital data-based) and denominators (census-based)? A further possibility, passive migration, could be an explanation for Northland, as its childwoman ratio increases more sharply than does that for New Zealand as a whole.

The contribution of the Māori population to the reproduction of the total population is clearly seen in Table 4, which shows the share of the Māori population 0-4 years in each region's total population aged 0-4 years. At the end of the period considered (2013) the Māori share is 2-3 times larger than in 1976, indicating the increasing role Māori play in the reproduction of these region's populations, especially Gisborne/Hawke's Bay. By contrast, the Māori share nationwide barely changes at all from 1996 to 2013. Nevertheless, Māori contribute disproportionately to the

nation's stock of child-capital, but it is problematic that this contribution is heavily concentrated in marginal regions

This point about 'contribution' needs underlining. The child-capital of a country is really its future, as they become the young workers of tomorrow, provided, and this is an important proviso, that they are well educated/trained and employed. Many commentators argue that, as taxpayers, they should not be responsible for the children of others. However, when they themselves are old, even the wealthiest, or the most prudent savers, they will still need younger people to care for them, physically and in other ways - in New Zealand they will particularly rely on them to fund health care, superannuation, and the welfare state in general.

The working age population and employment Labour markets have two dimensions: how many people are at working age, and the employment patterns of those people. However, their significance goes far beyond production and jobs. There are, however, major issues such as the changing industry structure of regions or the impact of technological change and the demand for skills that we do not discuss here. Those at the working ages are also the lead consumers in their households. Furthermore, they are

instrumental in the reproduction of the whanau, as they typically also provide the intra-family support for other family members, especially the children and the elderly. Finally, they are the parents or potential parents of the next generation. So, their roles and functions are not just in terms of the 'factors of production', but also for the 'factors of reproduction'.

Two measures are considered here: the proportion of the working age population who identify as Māori, an indicator of the contribution of Māori to the potentially economically active population; and the employment rate which is the percentage of the population of working age in employment (see Appendix).

The choice of the employment rate, as opposed to the more commonly-used unemployment or labour force participation rates (as used in Table 1) requires justification. Both the unemployment rate and the labour force participation rates exclude various forms of discouraged or unavailable workers (Statistics New Zealand 2017) due to the restrictive definition of unemployment used in official statistics. Consequently, as a measure of labour market conditions, the meaning of the unemployment rate, and hence of participation rates, is ambiguous (Murphy & Topel 1997), as it reflects the number of people looking for employment rather than the extent to which the working age population is utilized in the labour market. This has perverse results, for when labour market conditions are poor many workers abandon job search and hence are not classed as unemployed, depressing the unemployment rate. Conversely when labour market conditions improve these workers may resume job search, exerting upward pressure on the unemployment rate. Due to these properties, the employment rate is preferred by many (and used here) as its meaning is clear cut; it is the proportion of the potentially employed population who actually have jobs – an unambiguous measure of labour utilisation.

From Figure 1 it can be seen that the proportion of Māori in the working age population nationally has increased over the 1986-2013 period, albeit at a decelerating rate, from about 10 percent

in 1986 to 13 percent in 2013, that is, in line with the growth in the proportion of the population identifying as Māori. For our two exemplar regions the growth is more dramatic, with the proportion of Māori in the total working age population in both regions increasing from around 18 percent in 1986 to close to 30 percent in 2013.

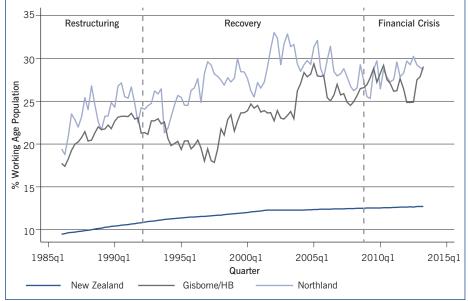
The evolution of the national level employment rates shown in Figure 2 can be loosely divided into three periods. The first of these (labelled 'Restructuring' in the Figures) commences in the mid-1980s and reflects the impact of the economic restructuring of the 1980s and early 1990s. Māori employment rates at the beginning of our time series are over 60 percent, albeit 5 percentage points lower than for non-Māori, but decline dramatically to a low of 44 percent in 1991-1992. This should be contrasted with the decline in non-Māori employment rates from 65 to 58 percent, around half that experienced by Māori.

After 1991-92 (labelled 'Recovery' in the Figures) the employment rates of both non-Māori and Māori begin to recover. Nevertheless, it takes until the mid-2000s for the employment rate, for both non-Māori and Māori, to rise to pre-restructuring levels. The increase in employment rates continues until around the time of the global financial crisis (labelled 'Financial Crisis' in the Figures) when this trend again reverses and rates begin to decline.

For Māori nationally, the decline in employment rate following the global financial crisis was considerably larger than for non-Māori, with the Māori employment rate falling from nearly 64 percent in the final quarter of 2007 to 57 percent in the final quarter of 2009 – a difference of seven percentage points. In comparison to the decline in employment rate experienced by Māori during restructuring (16 percentage points), the decline associated with the global financial crisis was around half that size.

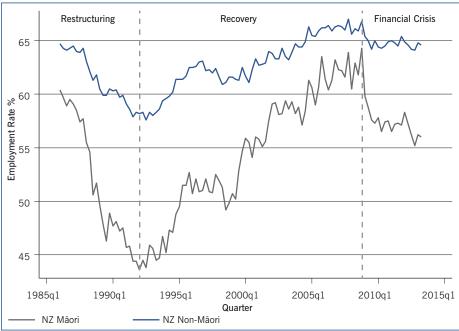
The non-Māori employment rate on the other hand fell from a peak of 67 percent in the last quarter of 2007, immediately prior to the global financial crisis, to a low of 64 percent in the final quarter of 2009. Again, this was about half

Figure 1: Māori share (%) of total working age population



Source: Household Labour Force Survey 1986-2013

Figure 2: Employment rates for New Zealand 1986-2013 by ethnicity (Māori /Non-Māori)



Source: Household Labour Force Survey 1986-2013

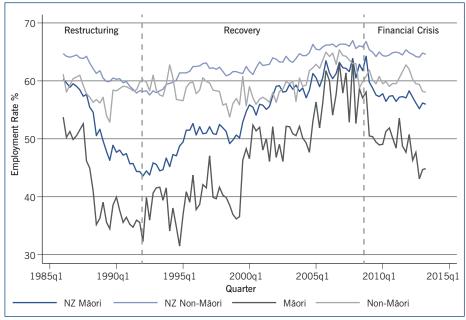
the size of the employment shock experienced during the period of economic restructuring.

Turning to the first of our examples, Northland, the trajectory followed by the employment rate is similar in profile to that of the national employment rate for Māori. That said, however, Northland Māori employment rates (50 percent) at the beginning of our time series are markedly lower than that of the national series (60 percent) for Māori. The size of the disparity between Northland and national employment rates varies over

time, coming close to zero in the period of low unemployment in the mid-2000s, but rapidly widens post the global financial crisis, the employment rate falling from a pre-crisis high of 64 percent in the final quarter of 2007 to a low of 49 percent in the last quarter of 2009.

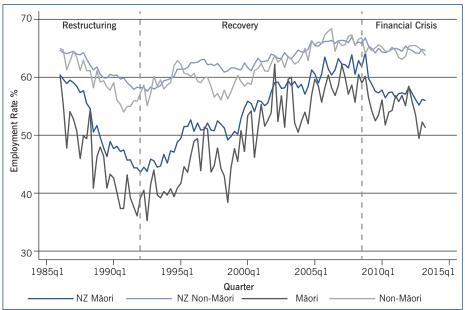
The impact of the restructuring period is clearly apparent from Figure 3 with the Māori employment rate falling precipitously from 54 percent at the beginning of 1986 to 35 percent in the September quarter of 1988. Not only is this downturn in employment sharp, but

Figure 3: Employment rate for Northland 1986-2013 by ethnicity (Total NZ Māori /Total NZ Non-Māori)



Source: Household Labour Force Survey 1986-2013

Figure 4: Employment rate for Gisborne/Hawkes Bay 1986-2013 by ethnicity (Total NZ Māori /Total NZ Non-Māori)



Source: Household Labour Force Survey 1986-2013

it is sustained, with the average Māori employment rate in the period June 1988 to June 1999 being only 38 percent. In fact, the 1986 rates of employment for Māori were not attained again until the early to mid-2000s.

The severity of the downturn in Northland Māori employment rates can be seen as an exacerbation of the general effects of economic and administrative restructuring by the concentration of Māori employment in sectors that were particularly hard hit, notably meat processing and forestry (Darroch 2010).

By contrast, the employment rates for non-Māori in these regions, while somewhat lower than the non-Māori national figures (60 percent versus 65 percent), respond less dramatically to the restructuring period. They reach a low of 53 percent in the September quarter of 1989 before recovering most of the decline by the middle of the 1990s. That said, the employment rates of non-Māori do not recover fully until the late 1990s/early 2000s.

As for Northland, the Māori employment rate for Gisborne/Hawke's

Bay follows a similar profile to the national rate, although somewhat below it in terms of level for much of the 1986-2013 period. The pattern is one of a strong initial decline, from a Māori employment rate of around 60 percent at the beginning of 1986 to a low of 35 percent in the September quarter of 1992, followed by period of rising employment rates that see rates around 60 percent being reached again in the early to mid-2000s.

The trajectory of the employment rate Gisborne/Hawke's Bay in restructuring period was heavily influenced by the closure of two large meat processing plants, Whaketu and Tomona, as well as by other economic and administrative changes. This in particular affected Māori, with 27 percent of all Māori men aged 15-59 years in the meat processing plants' commuting zone becoming unemployed as a result of plant closures4. From demographic perspective, the situation was particularly dire, with 60 percent of all Māori at the works being at peak reproductive age; among Māori males aged 20-29 years in the commuting zone 62 percent were employed in meat processing (Keefe et al 2002). This pattern is similar to that observed for Northland; the concentration of Māori employment in the sectors most affected by restructuring led to a prolonged period of low employment rates and a slow return to pre-restructuring employment rate levels.

The rising trend observed in the period from 1994 to the mid-2000s again reverses with the onset of the global financial crisis, falling from a pre-crisis level of close to 60 percent, to 50 percent in the last quarter of 2012. On the other hand, the trajectory of the employment rate of Non-Māori in the Gisborne/ Hawke's Bay Region closely tracks the national rate, though on average the level of the rate is one percentage point or so lower.

Conclusion

The historical data briefly summarised here carry two positive messages. First, until the 1970s, Māori and Pākehā trends were converging in both demographic and economic terms. Second, Māori were making a major contribution to the

nation's stock of children, essential for the country's future growth and potential workforce. The aim of government policy at the time was to facilitate the movement of hitherto under-employed Maori from isolated rural areas to 'economic' zones where there were jobs. As the data in Table 1 show this was largely successful until economic restructuring was undertaken in the late 1980s/early 1990s to satisfy objectives that were rational for financial capital needs, but without apparent concern about the human capital costs. Potentially, as Jackson (2016) argues,

New Zealand could have a collateral demographic dividend driven mainly by Māori (and Pasifika). But our data show that other gaps, dating from the restructuring, have re-emerged. This is not just a factor that affects Māori, but a failure to resolve it affects all the society and economy, both on the demand side (benefits) and the supply (depriving New Zealand of a young adult workforce). There is thus a 'double-burden' here: Māori, and particularly the North Island's marginal regions (as exemplified by our two case-studies), with poor employment

prospects also disproportionately bear responsibility for the nation's child capital that, eventually, could bring the country a demographic dividend. An unrequited dividend is, of course, the raw material of severe fiscal and familial burden.

- 1 This article draws on examples of case-studies covering all New Zealand regions and the iwi rohe within them: Cochrane and Pool (2017a-m).
- 2 2013 Census, Statistics NZ.
- 3 This is a rapidly emerging area in which Maori are playing a key role: see Tahu Kukutai and John Taylor (eds) Indigenous Data Sovereignty, Canberra, ANU Press 2016.
- 4 More detailed accounts of this maybe found in Calder and Tyson (1999), though this is mainly focused on management and enterprise level issues, Grimes and Young (2011), Keefe et al (2002) and Spoonley et al (1993).

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Appendix – Definitions of measures used

Māori Contribution

 $M\bar{a}$ ori Contribution = $\frac{100 \times M\bar{a}$ ori Population Aged 0-4 years}{Total Population Aged 0-4 Years}

Māori as a Percentage of the Working Age Population

% Working Age Population: $M\bar{a}ori = \frac{100 \times M\bar{a}ori \ Working \ Age \ Population \ Total}{Working \ Age \ Population}$

Where the working age population is the usually resident population aged 15 years and over. It should be noted that the New Zealand practice of defining the working age

population in these terms differs from many countries where the working age population is defined as those aged 15 to 64 years (Statistics New Zealand, 2017).

Māori as a Percentage of the Working Age Population

Employment Rate (%) = $\frac{100 \times \text{Total Employment}}{\text{Working Age Population}}$

Where the working age population is defined as above and total employment is the total number of people who work for at least an hour per week for pay.