Manatū Wāhine
Ministry for Women

Te Ōhanga Wāhine Māori

The Māori Women's Economy

berl

Making sense of the numbers

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Making sense of the numbers

Ngā whakakitenga matua Key insights

Te Ōhanga Māori is an integrated and fast-growing part of the Aotearoa New Zealand economy. GDP from Te Ōhanga Māori (accounting for 6.5 percent of national GDP) increased from $11 billion in 2013 to $17 billion in 2018, a real growth rate of 37 percent compared to national growth in GDP of 20 percent over the same period.

To date, there has been no comprehensive resource on the shape and size of the contribution of wāhine Māori to Te Ōhanga Māori and ultimately the economy of Aotearoa New Zealand. This report endeavours to fill this gap by shedding light on the economic and wellbeing contributions of wāhine Māori within households, businesses, and communities. What distinctly separates this report from previous work on Te Ōhanga Māori is the focus on wāhine Māori and the inclusion and calculation of the often invisible and undervalued realm of mahi tūao (unpaid work). For wāhine Māori, the decision to participate in the formal market economy cannot be separated from the decision to undertake work without pay.

Wāhine Māori are the workforce of the future.

The young, fast-growing wāhine Māori population will play an important role in shaping the future workforce of New Zealand. Between 2018 and 2043, the wāhine Māori population is expected to grow by over 50 percent, meaning that by 2043, wāhine Māori will comprise 22 percent of the total wāhine working-age population.

Wāhine Māori are a young and growing population, achieving increasingly higher levels of education and starting businesses at a faster rate.

The population of wāhine Māori has a much younger age structure compared to non-Māori wāhine. More than a quarter (27 percent) of all wāhine aged under 15 are Māori. By comparison, just seven percent of all wāhine over 65 years of age are Māori. The share of wāhine Māori over the age of 15 with no qualifications is falling fast, although much of the growth in educational attainment is concentrated in lower-level qualifications rather than at the bachelor's level or higher.

The number of wāhine Māori employers and self-employed grew by 31 percent between 2013 and 2018, much faster than in the case of non-Māori wāhine (seven percent), although it is starting from a low base. These entrepreneurs tend to be highly skilled, and the majority of growth has been from the younger cohorts. Ten percent of total income for wāhine Māori households is entrepreneurial and dividend income, although it is still lagging behind non-wāhine Māori households at 18 percent.

Unpaid work by wāhine Māori is a vitally important contribution to Te Ōhanga Māori.

Wāhine Māori generated $5.9 billion in production GDP, accounting for 1.9 percent of national GDP. However, the inclusion of the labour and production that is captured through unpaid work more than doubles the contribution of wāhine Māori to the Aotearoa New Zealand economy by $6.6 billion to $12.5 billion (or 3.2 percent of GDP).

Younger wāhine Māori are more likely to undertake unpaid care work compared to non-Māori wāhine which can impact their ability to participate in education and employment. Wāhine Māori aged between 25 and 35 have lower rates of participation in full-time work at 43.5 percent compared to 58 percent for non-Māori wāhine.

Ngā meka matua
Key facts

Wāhine Māori generated $5.9 billion value add to all sectors of the economy in 2022.

- The largest value add came from business services ($1.9 billion) and social services ($1.8 billion)
- The value add generated by the manufacturing ($535 million), primary ($246 million), and construction ($198 million) sectors was relatively low.

The value add of unpaid work added an additional $6.6 billion to the wāhine Māori economy.

- With the inclusion of unpaid work, the size of the wāhine Māori economy nearly doubled to $12.5 billion, equalling 3.2 percent of national production GDP
- The value add created by unpaid household service work accounted for 26 percent of the value earned by wāhine Māori households after wages and social security and assistance.

Economic contribution is underpinned by strong leaders and cultural identity.

- Wāhine Māori are repositories of knowledge and drive the intergenerational transfer of knowledge, history, values, and cultural traditions
- Wāhine Māori are, on average, more likely than tāne to rate culture, spirituality, the environment, kaitiaki practices, and te reo as being quite or very important.

Forty-three percent of wāhine Māori are employed in the social services sector.

- Between 2013 and 2018, close to an additional 12,000 wāhine Māori became employees in the social services sector, representing a 32 percent increase over the five years
- Wāhine are less likely to be employed in certain highly-paid industries, such as those related to engineering and technology. A large part of the reason for this is simply that they are also less likely to study these subjects in high school and at university.

Wāhine Māori are less qualified.

- Although the share of wāhine Māori over the age of 15 years with no qualifications is falling fast, most of the growth in educational attainment is concentrated in lower-level qualifications (level 1-3) rather than at the bachelor's degree level or higher, as is the case for non-Māori wāhine
- The share of wāhine Māori with no qualifications dropped from 28 percent in 2013 to 20 percent in 2018. However, this was still higher than the share of non-Māori wāhine with no qualifications (15 percent)
- In 2018, over a quarter (26.1 percent) of non-Māori wāhine aged over 15 had a bachelor's level or higher qualification. The share for wāhine Māori was just 13.8 percent during the same time period. Although this has grown from 11.3 percent in 2013, the increase for wāhine Māori has not kept pace with that for non-Māori wāhine.

Ngā meka matua
Key facts

Wāhine Māori earn, on average, 20 percent less than non-Māori wāhine.

- Greater caring responsibilities impact the ability of wāhine Māori to participate in education and employment. This is especially true for younger cohorts, with wāhine Māori aged between 25 and 35 having lower rates of participation in full-time work at 43.5 percent compared to 58 percent for non-Māori wāhine
- Over a quarter of all wāhine Māori households are single parent households compared to 12 percent of non-Māori wāhine households. This exacerbates financial burdens on wāhine Māori who are sole parents
- This also has implications for wealth accumulation. For instance, the home ownership rate for wāhine Māori households is just 47 percent compared to 69 percent for non-wāhine Māori households
- Additionally, the operating surplus of wāhine Māori in the producer enterprise sector is not high enough to match outlays, resulting in a negative net savings position.

Wāhine Māori are under-represented in business.

- Just 3.7 percent of the wāhine Māori workforce were employers or self-employed in 2018, less than half the rate for non-Māori wāhine (7.9 percent)
- However, the number of wāhine Māori employers and self-employed grew by 31 percent between 2013 and 2018 – much faster than in the case of non-Māori wāhine (seven percent)
- Wāhine Māori enterprises accounted for one percent of the operating surplus generated by all enterprises in Aotearoa New Zealand
- Just ten percent of total income for wāhine Māori households is entrepreneurial and dividend income, compared to 18 percent for non-wāhine Māori households.

% OF THE TOTAL WĀHINE POPULATION WHO ARE WĀHINE MĀORI

2021 **17.2%** 2013 **13.9%**

WĀHINE MĀORI POPULATION IS SIGNIFICANTLY YOUNGER THAN THE TOTAL WĀHINE POPULATION

SHARE OF POPULATION AGED UNDER 15 YEARS

29% WĀHINE MĀORI

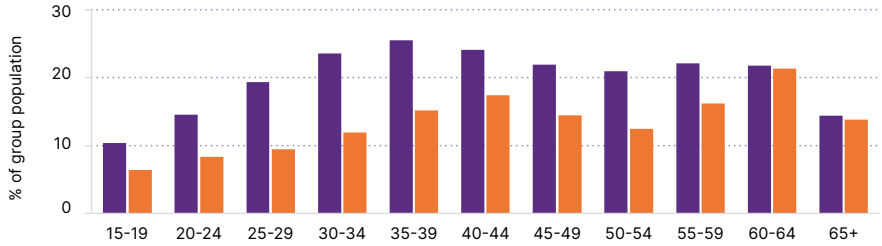
15% NON-MĀORI WĀHINE

CONTRIBUTION TO GDP

		SHARE OF NATIONAL GDP
$ in production GDP generated by wāhine Māori	$5.9 billion	1.9%
Value created from unpaid work undertaken by wāhine Māori	+$.6.6 billion	3.2%

WĀHINE MĀORI UNDER THE AGE OF 30 ARE MORE LIKELY TO PARTICIPATE IN UNPAID WORK

Looking after child not in own household, share of 2018 population aged over 15



The highest percentage point increases (2013-2018) for achieving qualifications wasin lower qualifications for wāhine Māori aged over 15 years. Notable decrease in no qualifications. Low uptake of high qualifications.

	2013	Change in %share	2018
WĀHINE MĀORI AGED OVER 15 YEARS WITH NO QUALIFICATIONS	27.5%	-7.4%	20.1%
WĀHINE MĀORI AGED OVER 15 YEARS WITH BACHELOR'S AND ABOVE	11.3%	+2.5%	13.8%

WĀHINE MĀORI ARE UNDERREPRESENTED IN BUSINESS

		WĀHINE MĀORI	NON-MĀORI WĀHINE
2018: As a share of working age population, participation lags:	Number of working age employers	1.2%	2.4%
	Number of working age self-employed	2.5%	5.5%
2013-2018: Significant growth in number of wāhine Māori self-employed and employers	Increase in employers	+32%	+1%
	Increase in self-employed	+29%	+10%
	Share of household income received from entreprenurial and dividend income (2022)	7%	14%

WĀHINE MĀORI ARE MORE LIKELY TO BE SOLE PARENTS

SOLE PARENTS HOUSEHOLDS

27% WĀHINE MĀORI

12% NON-MĀORI WĀHINE

HOME OWNERSHIP RATE

47% WĀHINE MĀORI

69% NON-MĀORI WĀHINE

WĀHINE MĀORI ARE REPOSITORIES OF CULTURE

WĀHINE MĀORI TĀNE MĀORI

50%	41%	57%	40%	93%	92%	87%	83%	37%	26%
Rate culture as quite or very important		Rate spirituality as quite or very important		Rate state of the environment as quite or very important		Rate kaitiaki practices as quite or very important		Rate Te Reo as quite or very important	

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1 Whakapuaki Introduction

Business and Economic Research Limited (BERL) was commissioned by Manatū Wāhine - Ministry for Women (MfW) to estimate the size and nature of Te Ōhanga Wāhine Māori – the Māori women's economy. This research is the first that attempts to shine a light on the unique contributions of one of the least researched groups in Aotearoa New Zealand: wāhine Māori. The purpose of this research is not only to understand the role of wāhine Māori as individuals within the overall economy but also to estimate the size and nature of the economy that is run by wāhine Māori. This includes a comprehensive picture of socio-economic participation, including labour market outcomes, business ownership and leadership, the value of unpaid work, and how it all relates to wellbeing. This is an attempt to present the wāhine Māori economy as understood, experienced, and shaped by wāhine Māori, with specific aspects being contextualised from a te ao Māori perspective.

This work builds on, and extends, the methodology used in Te Ōhanga Māori 2018 report.[1] Te Ōhanga Māori 2018 recognised the crucial linkages and reciprocal relationship between the Māori economy and the wellbeing of Māori. On the economic side, the approach focusses on economic contribution, including key data on the size, composition, and shape of Te Ōhanga Wāhine Māori. Financial measures of the core resources (assets) available to wāhine Māori are considered, including flows of income, expenditure, and GDP received, spent, produced, and delivered by wāhine Māori in Aotearoa New Zealand.[2]

Within Aotearoa New Zealand, wāhine such as Marilyn Waring and Anne Else have, for decades, been the driving force behind the kōrero on the inclusion of women's undervalued contributions to economic, social, environmental, and cultural wellbeing. Thus, this research goes a step further and formalises the participation and contributions of wāhine Māori outside the measured economy through the inclusion and estimation of the value of mahi aroha / mahi tūao (unpaid work). The value created from the unpaid work undertaken by wāhine Māori has been estimated at $6.6 billion in the 2022 year. Finally, this research also captures wāhine Māori perspectives and insights on leadership from a te ao Māori perspective.

1 https://berl.co.nz/sites/default/files/2021-01/Te%20%C5%8Changa%20M%C4%81ori%202018.pdf

2 A glossary, and the definitions of technical terms, is provided in Appendix B.

1.1 Methodological background

This report used a mixed methods approach and compiled and presented data and insights from a variety of sources, including publicly available and private data. The detailed methodology and full list of the data sources used in this report can be found in Appendix A.

This report covers the time period between 2013 and 2022. The use of data from a variety of sources means the time periods presented in this report differ. When possible, we have utilised the latest available data.

Our definition of wāhine Māori and non-Māori wāhine is based on the following criteria:

- An individual is classified as being 'wāhine Māori' if they are of female sex and self-identified as having Māori ethnicity in the 2013 or 2018 Census. This includes individuals who selected Māori and any other number of ethnic groups. [3]
- An individual is classified as 'non-Māori wāhine' if they are of female sex and did not self-identify as having Māori ethnicity in the 2013 or 2018 Census.

3 Ethnicity is self-perceived and people can belong to more than one ethnic group.

2 Te taiao o Te Ōhanga Māori - wāhine Māori
Te Ōhanga Māori ecosystem - wāhine Māori

Our starting point

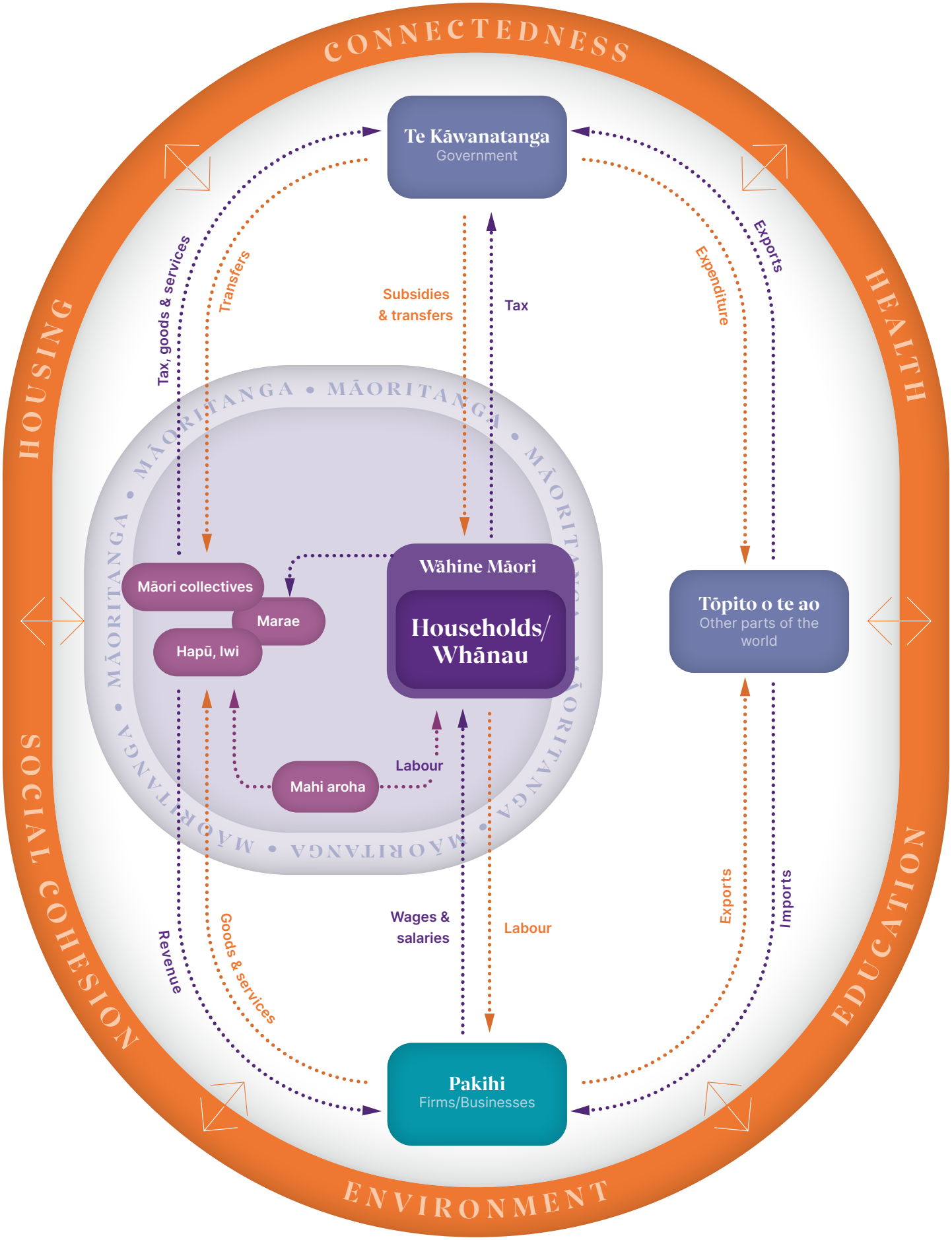
The circular flow of income is a widely used model of the economy. It depicts how money flows between the different economic agents, such as households, firms, and the government. One of the major flaws of this model is that while labour used in the production of goods and services in the "market economy" is included and valued, households' production of goods and services for their own use is excluded. This includes the work wāhine do within the household, the whānau, and the community, without pay. It includes care for children and the elderly, cooking and cleaning, upholding the mana of the marae, and the intergenerational transfer of knowledge, amongst various other things. This is a major flaw in the model, rendering it unfit to explain the workings of Te Ōhanga Wāhine Māori. The balanced flow of income within the market economy is the result of several complex and dynamic factors and influences that are not captured in traditional models of the economy.

Here, we extend the traditional circular flow model to capture, more accurately, the various factors and influences that determine the size, direction, and nature of these flows. Three key extensions have been added:

1. **Unpaid work** is recognised and valued as a distinct, important, and productive part of the household sector
2. **Māoritanga** forms the foundation of the household sector, and directly influences the stability and balance of the ecosystem
3. **Factors that influence and shape participation** in the economy, such as education, health, housing, and social cohesion. These factors are not completely independent or exogeneous. They are themselves determined, to a certain extent, by outcomes from participation in the ecosystem.

These extensions to the traditional model of economic flows help to form a more holistic picture of wellbeing that goes beyond GDP and monetary measures. It captures how economic participation and various aspects of wellbeing, both subjective and objective, and material and non-material, are mutually determined. The extended ecosystem attempts to capture the interlinkages between economic participation, outcomes, and other aspects of wellbeing. For example, the inclusion of unpaid work is an important step towards recognising its role in promoting other aspects of wellbeing such as social connection, the transfer of values and knowledge, and the mental and physical wellbeing of those who receive care.

Pūnaha hauropi — Ecosystem



2.1 Recognising and incorporating unpaid work

Without families and communities, the economy means nothing. It has no life of its own. Its only purpose is to enable us to live, to care for one another, and to raise our children to take our place. If we lose the power to do that, no matter how fast the gross domestic product rises, or how much the budget surplus grows, we will have no future worth working for.

- Anne Else, 1996

The most commonly used and accepted economic concepts, frameworks, and models used today were all designed from a western male-dominated worldview. In her 1988 book If Women Counted, Marilyn Waring argues for the systematic inclusion of gender in official statistical frameworks such as the United Nations System of National Accounts (SNA). The SNA is an internationally agreed upon standard set of recommendations on how measures of economic activity must be compiled. It provides an overview of economic processes but does not value unpaid work, such as care and domestic work, which is disproportionally done by wāhine. This means that these contributions remain unrecognised in traditional measures of the economy, such as Gross Domestic Product (GDP). The linkages between unpaid work, wellbeing, and the macroeconomy mean that any analysis that does not take into consideration the value of this work is partial and incomplete.

Within Aotearoa New Zealand, wāhine such as Marilyn Waring and Anne Else have, for decades, been the driving force behind the kōrero on the inclusion of women's contributions to economic, social, environmental, and cultural wellbeing. Despite calls for the recognition of the significant contributions that wāhine make to various aspects of the economy, progress towards gender-balanced accounting has been slow. While statistics disaggregated by gender and/or ethnicity are widely available, limited attempts have been made to contextualise and interlink the outcomes for wāhine in various aspects of the economy. There are even fewer examples of work that consider the important link between the work wāhine do outside the formal economy and their participation and outcomes in the labour market.

For wāhine Māori, the decision to participate in the formal market economy cannot be separated from the decision to undertake work without pay. The number of hours wāhine Māori spend on paid work is clearly linked to the number of hours spent on unpaid work. The more time that is committed to domestic and personal work, the less is spent on paid work. This directly impacts the flow of household incomes, government transfers, tax paid, goods and services purchased on the market, and savings. In other words, the quantity of domestic labour wāhine undertake has a very real impact on the entire circular flow of income. The inclusion of unpaid work within this circular flow provides a more accurate picture of the linkages within the wāhine Māori economy.

Some of the key decisions in the unpaid sector that affect the circular flow are:

- Households combine their own labour with goods purchased on the market (such as household appliances) to produce goods and services for their own consumption
- The decision to undertake unpaid work has an impact on the decision to undertake paid work, which affects the flow of labour from households, and wages from firms to households
- Household purchasing decisions are impacted. Domestic work, such as childcare and elderly care, carried out by wāhine Māori affects decisions to purchase these services from the market.

Work undertaken without pay also contributes to building social and cultural capital and an individual's sense of belonging. For many Māori, mahi tūao is a way to preserve and strengthen their ties with their whānau, hapū, and iwi. All of this contributes to collective wellbeing.

Connection to hapū and iwi also form an important part of the ecosystem for wāhine Māori who may undertake paid and/or unpaid work within their iwi, hapū, trusts, and marae. Māori collectives (iwi, hapū, trusts, and marae) also contribute to the wider Aotearoa New Zealand economy by producing a variety of goods and services for domestic consumption and exports. Iwi and hapū are presented as distinct actors within the system because not all wāhine Māori have the same level of connectedness with them.

2.2 Māoritanga - foundation supporting the ecosystem

The foundation of the household sector of Te Ōhanga Wāhine Māori are the core values and principles of Māoritanga. These guide and support wāhine Māori in their participation, interaction, and engagement within the ecosystem. These aspects of Māoritanga form the basis for how wāhine Māori participate in and view the economy as consumers, employees, employers, business owners, producers, and exporters. These values and principles provide stability and balance for the ecosystem. These aspects include, but are not limited to:

- **Wairua** (Spirit, soul, and spirituality)
- **Manaakitanga** (An expression of care, kindness, and respect)
- **Mātauranga** (Māori knowledge and skills)
- **Te reo Māori** (The Māori language)
- **Whanaungatanga** (Forming, maintaining, and strengthening of relationships)
- **Whakapapa** (Genealogy – ancestral and historic connections to people, place, and time)
- **Tikanga and kawa** (Māori practices, behaviours, customs, and protocol).

In our depiction of the ecosystem for Te Ōhanga Wāhine Māori, wāhine Māori participation is grounded within these core values and principles of Māoritanga. They reflect and guide how wāhine Māori participate and engage in the economy, both as individuals and as a group. We do not make an attempt to value these aspects, but we highlight the role of wāhine Māori in upholding the strength of this foundation.

2.3 Factors influencing participation in the ecosystem

Wāhine Māori participation within te ōhanga is influenced by a range of factors. These factors and the magnitude at which they influence participation are unique to each individual and whānau. The factors that influence wāhine Māori participation are themselves influenced by wāhine Māori participation in the wider ecosystem and thus not viewed as fully external. Influences such as the quality of housing, education, health, and the environment all affect how wāhine Māori participate in the economy. There is a reciprocal relationship between these influences and economic flows. Clearly, existing social inequities and imbalances play a role in determining economic outcomes. But income and wealth are also key influences on socio-cultural wellbeing. For example, those who face existing social inequities may not have access to the same educational opportunities as their peers. This impacts the quantity and quality of work, which explains economic outcomes such as income and wealth levels. Individuals with low income and wealth levels have lower socio-cultural wellbeing outcomes. Achieving some desired level of wellbeing requires balance in all that is important to wāhine Māori. This balance is highly subjective and cannot be calculated or defined. The influences include, but are not limited to:

- Housing
- Social cohesion
- Education
- Environment
- Health.

This is not an attempt to assign a value to any one of these factors. It is merely a reflection of what might influence participation in Te Ōhanga Wāhine Māori. For example, the quality of housing can determine health and the ability to effectively take part in employment, just as opportunities and income in employment can determine the quality of the house resided in. Many of these factors are interrelated and dependent on each other and cannot be seen in isolation.

3 Whakakitenga mō ngā wāhine Māori o Aotearoa Snapshot of wāhine Māori in Aotearoa

The Māori population is an integrated and connected part of the wider Aotearoa New Zealand population. In 2021, the Māori population totalled 875,300, representing 17.1 percent of the wider Aotearoa New Zealand population. The Māori population is much younger and growing much faster than that of non-Māori. The median ages for tāne and wāhine Māori were 25.3 and 27.3 years, compared to the national median ages of 36.7 and 38.8 years for men and women, respectively. Between 2013 and 2021, the Māori population increased by 18 percent, compared to 14.5 percent for non-Māori. Growth in the Māori population mostly results from natural increases, whereas the increase in the non-Māori population is largely driven by migration.[4]
In 2021, the wāhine Māori population totalled 434,600, representing 17.2 percent of total wāhine in Aotearoa New Zealand (2.5 million total wāhine). This share was up from 13.9 percent in 2013.

3.1 Population characteristics

Young, fast growing wāhine Māori population

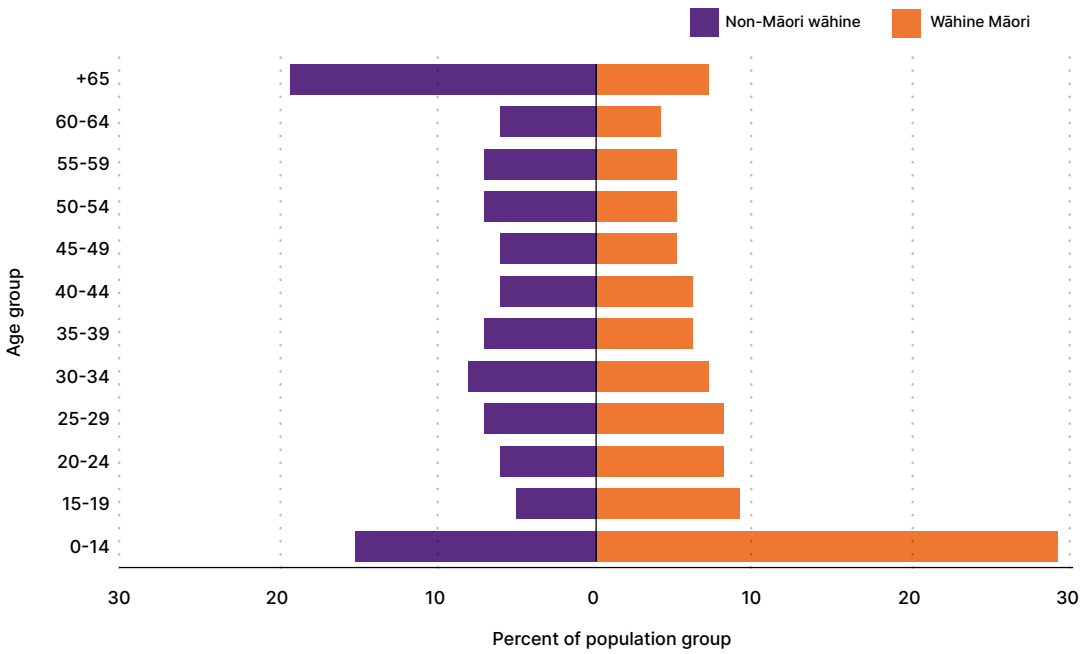
The wāhine Māori population has unique characteristics that distinguish it from the non-Māori wāhine population in Aotearoa New Zealand. Figure 1 shows the distribution of the wāhine Māori population by age group, compared to non-Māori wāhine. It shows that while the population of Aotearoa New Zealand overall is ageing, the same is not true for the Māori population. The wāhine Māori population is concentrated in the younger age groups, with their side of the population pyramid being bottom heavy. The opposite is true for the non-Māori wāhine population, which has a much larger share in the older age groups.

4 Natural increase is the difference between the number of births and the number of deaths.

Thus, younger wāhine are more likely to be Māori. For instance, 27 percent of the total wāhine population aged under 15 was Māori in 2021. The share of wāhine aged over 65 who were Māori was just seven percent during the same year. This trend is expected to continue to strengthen over the next few decades. Stats NZ (2022) estimates that by 2043, one in three children aged under 15 will be Māori.

Twenty-seven percent of the total wāhine population aged under 15 is Māori, compared to just seven percent of those aged over 65.

Figure 1: Age structure of wāhine Māori and non-Māori wāhine, 2021



Source: Administrative Census 2021, BERL analysis

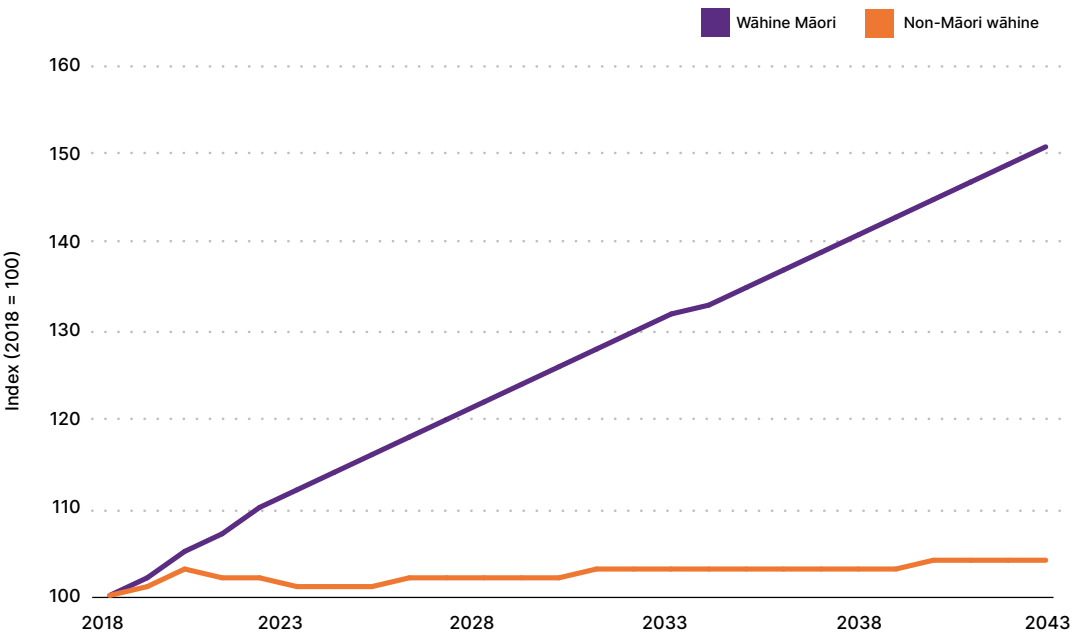
This also has implications for the labour market. The share of young wāhine Māori in the labour force will only continue to increase over the next few decades. As of 2021, 61 percent of wāhine Māori were under the age of 35, while just 41 percent of non-Māori wāhine fell in the same age group.

The workforce of the future

Figure 2 shows the growth trajectory for the wāhine population aged between 15 and 64, i.e., the working-age population. Between 2018 and 2043, the wāhine Māori population is expected to grow by over 50 percent. In contrast, the working age population for the rest of wāhine in Aotearoa New Zealand is only projected to increase by 4.5 percent. [5] This effect will be driven by the currently young wāhine Māori population advancing to working age over the next few decades. The higher fertility rates of wāhine Māori compared to the rest of the wāhine population also means that the number of wāhine Māori in the workforce will only grow over the coming decades. The share of wāhine Māori in the total wāhine working-age population is projected to increase from the current 16 percent to 22 percent in 2043. This means that it is imperative to ensure that wāhine Māori have access to all the factors that can enable participation in the workforce. This includes, but is not limited to, quality education, healthcare, additional support to gain access to opportunities in industries and occupations in which they are under-represented, quality housing, and access to childcare.

By 2043, wāhine Māori will comprise 22 percent of the total wāhine working-age population.

Figure 2: Projected proportional rate of working-age population growth, 2018 = 100



Source: StatsNZ population projections

5 These projections account for estimated levels of migration.

Spread across the motu

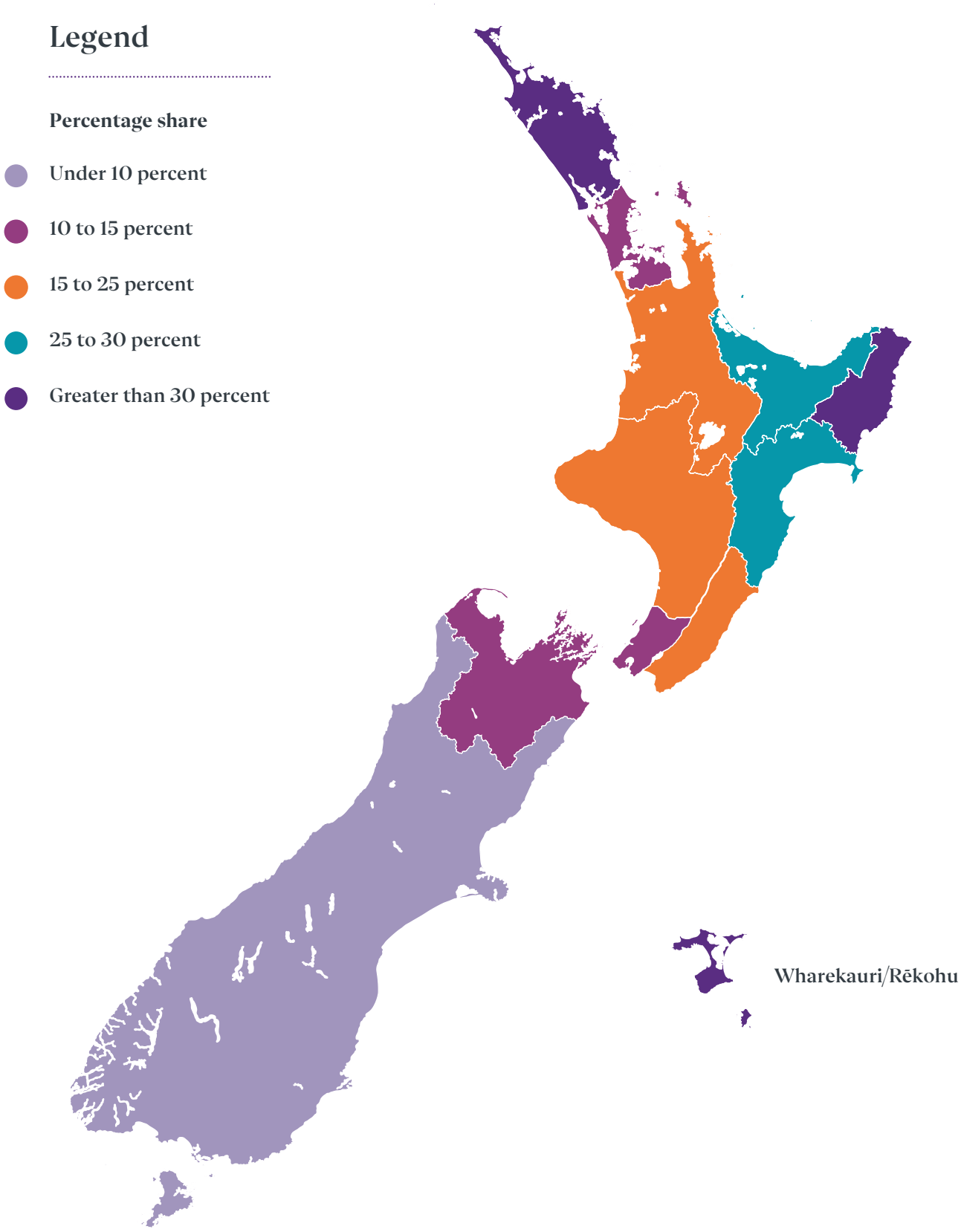
While wāhine Māori accounted for 17.2 percent of the total wāhine population in Aotearoa New Zealand in 2021 (and 13.9 percent in 2013), there were significant differences between rohe.[6] Figure 3 shows the wāhine Māori population as a share of the total wāhine population in each rohe across Aotearoa New Zealand in 2021.

Tairāwhiti had the highest share in 2021, with 39 percent of total wāhine in the rohe of Māori ethnicity. This was an increase from 34 percent in 2013. A similar increase occurred in Te Tai Tokerau, where wāhine Māori increased from 31 percent of the total wāhine population in 2013 to 36 percent in 2021. This trend is expected to continue, as the younger wāhine Māori population will continue to grow, outpacing the mostly ageing non-Māori wāhine population.

Close to half (48 percent) of all wāhine Māori live in three rohe: Tāmaki Makaurau, Waikato, and Te Moana a Toi-Waiariki.

6 Appendix C provides a visual representation of the rohe classification used in this research. This rohe classification aligns with Te Puni Kōkiri (TPK) and Māori Land Court (MLC) rohe.

Figure 3: Wāhine Māori population as a share of total wāhine population by rohe (2021)



Source: Administrative Census 2021, BERL analysis

In 2021, just over 96,000 wāhine Māori resided in Tāmaki Makaurau, accounting for one in five wāhine Māori in Aotearoa New Zealand. But they made up a smaller share of total wāhine in Tāmaki Makaurau (11 percent) compared to the national share (17 percent).

Four in every five wāhine Māori reside in the North Island of Aotearoa New Zealand.

Across each rohe in Aotearoa New Zealand the wāhine Māori population is growing at a pace that far exceeds that of non-Māori wāhine. There is, however, variation in population growth from rohe to rohe. Tāmaki Makaurau had the largest absolute increase in the number of wāhine Māori between 2013 and 2018, at 22,200, followed by Waikato (increase of 16,600), and Te Moana a Toi-Waiariki (increase of 14,900). This mostly aligns with previous estimates, which projected that the urban centres in Tāmaki Makaurau, Waikato, and Waitaha will have the greatest numerical increases between 2017 and 2038 (Te Puni Kōkiri, 2017).

The number of wāhine Māori in Te Tai Tokerau increased by 57 percent between 2013 and 2021, which was more than double that of non-Māori wāhine in the rohe (26 percent). Te Moana a Toi-Waiariki saw the wāhine Māori population increase by 42 percent (26 percent for non-Māori wāhine), while also having the third largest numerical increase. In Tairāwhiti and Waikato, the wāhine Māori population increased by 39 percent compared to 12 percent and 23 percent for non-Māori wāhine, respectively.

Wāhine Māori are becoming more qualified

The level of educational attainment plays an important role in influencing how and where wāhine Māori participate in the broader ecosystem. Employment outcomes are often linked to education type and success. A higher share of wāhine Māori over the age of 15 were achieving higher qualifications in 2018 than they were in 2013.

There has been a particularly notable uptick in the share of wāhine Māori over the age of 15 achieving level one to level three certificates post-school (Table 1). The share of those obtaining level four certificates post-school is also growing fast. Level one to three certificates post-school usually comprise certificates gained at polytechnics, while level four certificates post-school mostly represent trades.

The share of wāhine Māori with no qualifications fell from 27.5 percent in 2013 to 20.1 percent in 2018.

Table 1: Highest qualification by share of population over 15 years (2013-2018)

Highest qualification by share (%) of population over 15 years	Wāhine Māori			Non-Māori wāhine		
	2013	2018	Change	2013	2018	Change
No qualification	27.5	20.1	**-7.5**	16.4	14.9	**-1.5**
Level 1-4 certificate gained at school	33.8	24.8	**-9.1**	26.0	22.1	**-3.8**
Level 1-3 certificate gained post-school	5.6	12.4	**6.8**	3.0	5.5	**2.5**
Level 4 certificate gained post-school	5.7	8.7	**3.0**	4.5	4.9	**0.3**
Diploma (level 5-6)	6.8	7.9	**1.1**	9.3	9.2	**-0.1**
Bachelor degree and level 7 qualifications	8.6	9.5	**0.9**	13.7	15.5	**1.9**
Post-graduate and honours degree	1.5	2.8	**1.2**	3.1	6.2	**3.2**
Masters and doctorate degree	1.2	1.6	**0.4**	3.1	4.4	**1.3**

Source: Census 2013 and 2018, BERL analysis

There is still a notable gap in the share of wāhine Māori aged over 15 achieving higher level qualifications, compared to non-Māori wāhine. In 2018, over a quarter (26.1 percent) of non-Māori wāhine aged over 15 had a bachelor's level or higher qualification. The share for wāhine Māori was just 13.8 percent during the same time period. Although this has grown from 11.3 percent in 2013, the increase for wāhine Māori has not kept pace with that for non-Māori wāhine.

Table 1 reveals not only a gap between the shares achieving higher qualifications, but also a visible lag in the pace of the uptake for such qualifications. While the biggest percentage increase for wāhine Māori occurred in level one to four certificates gained post-school, for non-Māori wāhine it was higher level qualifications, such as bachelor's degrees or level seven qualifications, and post-graduate or honours level. A 2020 Ministry of Education (MoE) report revealed that individuals with a degree, or higher, level education, nine years after leaving can expect to be earning 15 percent to 20 percent more than someone whose highest qualification is finishing school with university entrance (UE) (MoE, 2020). Meanwhile individuals that achieved a level 4 certificate can expect to be earning 10 to 15 percent more than someone with NCEA level 2 as their highest qualification nine years after leaving school. Only those with a degree will be earning more than those with a level 4 certificate.

This reflects the interconnectedness between higher qualifications and income potential. Slow uptake of particular qualifications can be influenced by many factors. Education needs to be accessible, affordable, and accommodating to the needs of students.

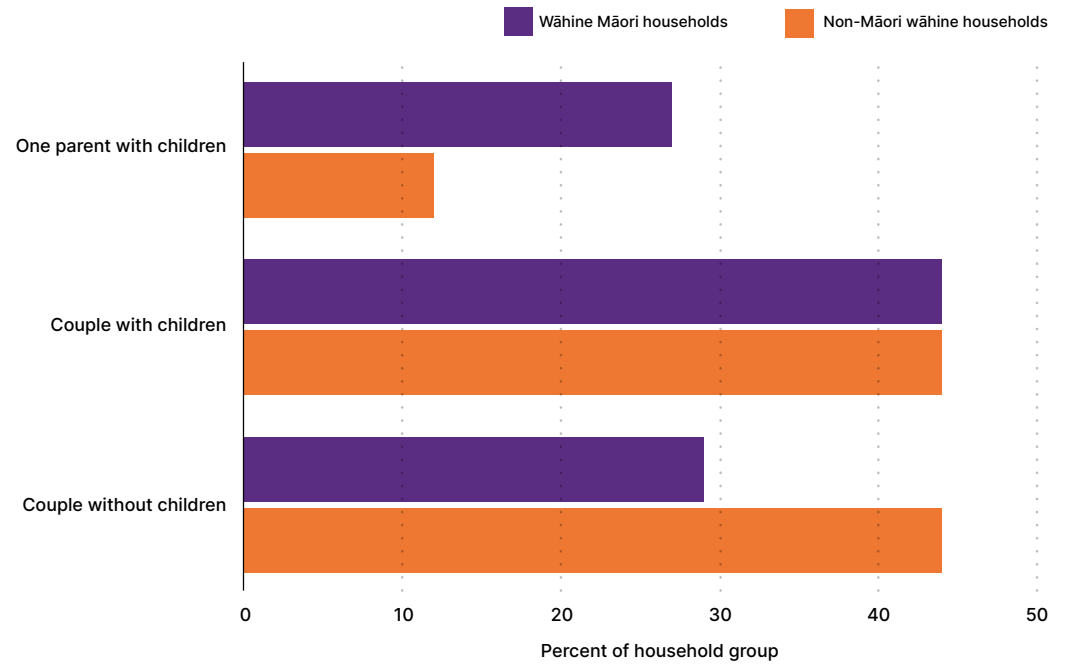
The share of non-Māori wāhine aged over 15 years achieving bachelor's level or higher qualifications was nearly double that of wāhine Māori in 2018.

Wāhine Māori are more likely to be sole parents

Over 40 percent of both wāhine Māori households and non-Māori wāhine households had two parents with one or more children (Figure 4). In the case of non-Māori wāhine households, a further 44 percent of households were made up of a couple without any children. In comparison, just over a quarter of wāhine Māori households fell into this category.

However, there is a stark difference when it comes to sole parent households. Over a quarter of all households led by wāhine Māori are single parent households. The share of non-Māori wāhine households that were sole parent households was 12 percent.

Figure 4: Household by family type, 2018



Source: Census 2018, BERL analysis

Sole parents hold the dual responsibility of often being the only breadwinners and primary carers for their whānau. Motherhood is already an important factor in how wāhine participate in work. The additional care responsibilities that come with being a mother result in wāhine altering work hours, changing industries, and impact upskilling. Being a sole parent, with limited financial support within your own household, is even more of a constraint on participation and impacts the outcomes wāhine experience in the labour market. Sole parent families are more likely to experience poverty, poor living standards, and mental and physical health issues (Ministry of Social Development, n.d.). Krassoi Peach and Cording (2018) looked at the multiple disadvantages that sole parents in Aotearoa New Zealand face. They concluded that the key domains to be affected included employment, health, education, income, and home ownership. They observed that Māori families were more likely to be disadvantaged compared to the general population, particularly in the income, housing, and employment domains.

An analysis of labour market outcomes for mothers in Aotearoa New Zealand showed that sole mothers have some of the worst outcomes (Flynn & Harris, 2015). Firstly, sole mothers have significantly higher unemployment rates compared to partnered mothers and wāhine with no dependents. The unemployment rates are over 25 percent for 25 to 29 year old sole mothers,

compared to 10 percent for partnered mothers in that age group. While the gap in employment rates does narrow for the older age groups, it never converges. The study also showed that, overall, Māori sole mothers had an unemployment rate of 26 percent, which was double that of Pākeha mothers. Employment and participation rates fall as the number of children increase, especially for wāhine with more than three dependent children. The higher fertility rates for wāhine Māori mean that this effect is likely to be stronger for them. One of the factors affecting employment and participation in work could be access to childcare. Wāhine Māori, in particular, are twice as likely to experience childcare issues compared to Pākeha mothers (Sin, 2022).

Aotearoa New Zealand has one the lowest employment rates for sole mothers in all of the Organisation for Economic Co-operation and Development (OECD) – Aotearoa New Zealand ranks seventh from the bottom in the group of 42 countries in the OECD (2019). There is over an 11 percentage point difference in the employment rate for partnered and sole mothers.

Higher levels of education, particularly above a bachelor's degree level, can result in a substantial improvement in labour market outcomes. The study by Flynn and Harris (2015) showed that the proportion of sole mothers with this level of qualification was exactly half that of partnered mothers. Similarly, the share of sole mothers with no qualifications was nearly double compared to partnered mothers. The importance of additional support provided by partners in terms of childcare cannot be ignored and may help free up time to undertake further study.

The effect of lower educational attainment can be seen in the industries sole mothers are employed in. Sole mothers were more likely than partnered mothers to be employed in the health care and social assistance, retail, accommodation, and food service industries. They also made up a disproportionately low share in the professional, scientific, technological, administration, and support services industry. In terms of occupation, a larger proportion of sole mothers were employed in community and personal services, and labourers occupation groups. These include occupations such as cleaners, food process workers, hospitality workers, and child carers.

The negative impacts on wellbeing of being a sole parent are strong, and extend beyond the individual who holds these responsibilities. The entire whānau experiences economic and social insecurity compared to other family types. Children in sole parent households are more likely to experience poor outcomes, such as higher poverty rates (Ministry of Social Development, n.d.). Over forty percent of all children in households in severe material hardship were living in single parent households. According to Stats NZ (2020), 27 percent of sole parents rated their overall life satisfaction as low, compared to only 12 percent of partnered parents with children. It is not surprising that nearly a fifth of all sole parents state that they do not have enough money to meet everyday needs, compared to just 5.2 percent of partnered parents. As a result of this, a quarter of all sole parents had received help at least once from an organisation in the form of food, clothes, or money in the previous year. Two-thirds of those sole parents receiving support had received such support more than once.

This has significant wellbeing impacts that go beyond the economic realm. A third of sole parents experienced poor mental wellbeing, compared to 20 percent of partnered parents. They also reported higher rates of poor overall general health (17 percent) relative to partnered parents (8.3 percent). Feelings of loneliness in the past four weeks were higher among sole parents (35 percent), and they had lower rates of trust, feeling safe, and reported higher rates of discrimination. Housing quality was also much poorer for sole parents. Over 11 percent reported major problems with dampness or mould, and 15 percent reported major problems with heating and keeping warm. The respective rates for partnered parents were just three percent and six percent.

4 Ngā Wāhine Māori i Te Ōhanga Māori
Wāhine Māori contribution to Te Ōhanga Māori

Te Ōhanga Māori is growing fast, much faster than the Aotearoa New Zealand economy. GDP from Te Ōhanga Māori (accounting for 6.5 percent of national GDP) increased from $11 billion in 2013 to $17 billion in 2018, a real growth rate of 37 percent compared to national growth in GDP of 20 percent over the same period. In 2018, the asset base of Te Ōhanga Māori was estimated to total $68.7 billion.

Wāhine Māori are an interlinked, vital component of Te Ōhanga Māori and the wider Aotearoa New Zealand economy, making valuable contributions. These contributions go beyond what is usually measured. Traditional measures such as GDP exclude the value that is gained from unpaid work, of which wāhine Māori bear more of the responsibility in a household and cultural setting. Without taking this into account, wāhine Māori generated $5.9 billion in production GDP, accounting for 1.9 percent of national GDP. However, the inclusion of the labour and production that is captured through unpaid work more than doubles the contribution of wāhine Māori to the Aotearoa New Zealand economy by $6.6 billion to $12.5 billion (or 3.2 percent of GDP).

4.1 Engagement in employment

Labour supply decisions and work structure

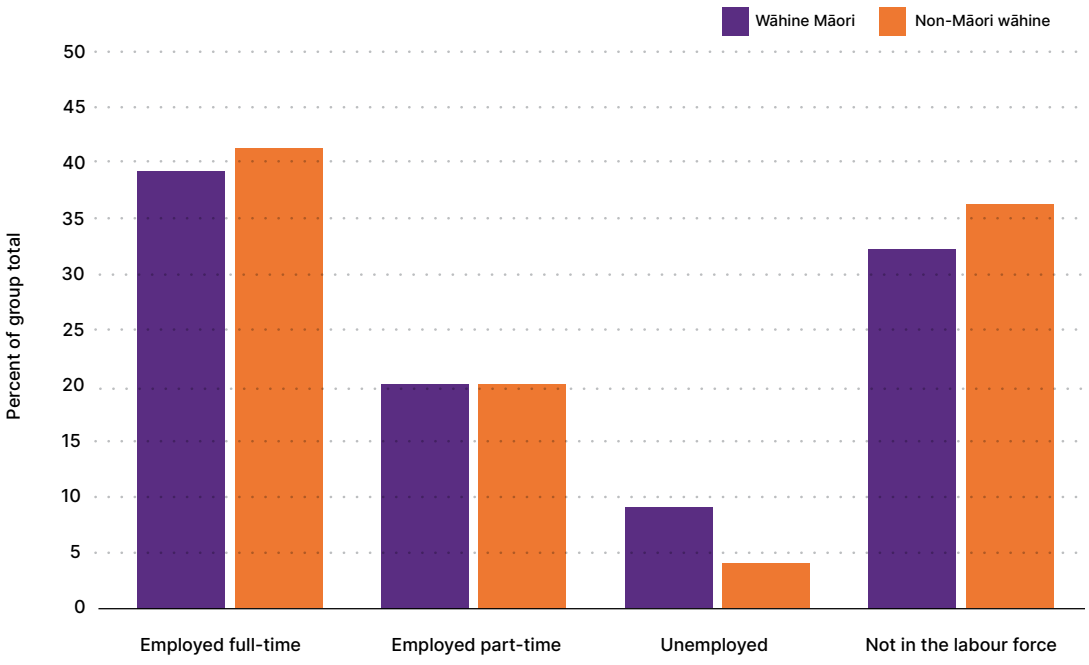
The household sector is a key component of the macroeconomy and is structurally intertwined with the rest of the economy. Households provide labour to the business sector and the public sector, which in turn supply goods and services that households consume. Unpaid work, which is not valued within the traditional boundaries of the economy, is in essence a subsidy provided by households to the rest of the macroeconomy (Hirway, 2015). For example, the care provided for older people and children within a household reduces the burden on the state to provide such services. However, there are implications within the “formal” economy for those who undertake much of this work within households.

Wāhine Māori had slightly higher rates of participation in the workforce compared to non-Māori wāhine

Figure 5 compares the workforce status of wāhine Māori and non-Māori wāhine from Census 2018. Overall, wāhine Māori had slightly higher rates of participation in the workforce compared to non-Māori wāhine. However, this was not true across all age groups. In fact, only wāhine Māori in the youngest (15-19 years) and oldest (65+ years) age groups of the workforce had a higher rate of participation than non-Māori wāhine. The gap in participation rates is the highest in the case of young wāhine. For example, over a quarter (26.5 percent) of wāhine Māori aged between 25 and 29 were not part of the labour force as of Census 2018. The relative share for non-Māori wāhine was 18.4 percent.

Part of this can be explained by the fact that wāhine Māori seem to carry greater responsibilities of unpaid care work within the whānau. Warburton (2008) showed that labour constraining structures, such as the burden of unpaid work in a household, are far more prevalent for wāhine Māori than others, particularly young wāhine Māori. This includes not only childcare responsibilities within one's own household, but also the presence of other household members' children, resident elderly, and those with health issues. The study shows that although the labour participation of wāhine Māori is not more or less sensitive to these responsibilities, they are more prevalent than for young Pākeha wāhine.

Figure 5: Workforce status of wāhine Māori and non-Māori wāhine, 2018



Source: Census 2018, BERL analysis

Wāhine Māori aged between 25 and 35 have a significantly lower rate of participation in full-time work

There were no significant differences in the total employment rates, full-time and part-time, between the two groups of wāhine. However, again looking at differences by age structure shows that wāhine Māori in the younger age groups, particularly those aged between 25 and 35, have a significantly lower rate of participation in full-time work, compared to the non-Māori wāhine group. On average, 43.5 percent of wāhine Māori in this age group undertake full-time work, compared to 58 percent of non-Māori wāhine. The share of wāhine Māori (18.5 percent)

in this age group who undertake part-time work was slightly higher than the share of non-Māori wāhine (16.7 percent). The fact that the younger age groups of wāhine Māori are also less likely to participate in the workforce and are more likely than non-Māori wāhine to undertake unpaid work (Figure 22), indicates a strong negative link between the labour supply of wāhine Māori in the formal economy, and work within the whānau.

Younger wāhine Māori have significantly lower rates of participation in full-time work compared to non-Māori wāhine.

Unsurprisingly, those who have greater caring responsibilities within a household will also have limited capacity to participate in paid work, given that an individual's capacity for work operates within the constraints of time. The fact that most of the unpaid work is carried out by wāhine has implications for their participation in work. The unpaid caring responsibilities of wāhine generally start to have a significant impact on labour market outcomes after they become parents. This "motherhood penalty" is clearly revealed in the data on gender pay gaps between tāne and wāhine who have the same qualification, by year after graduation. [7] Pay gaps within most fields of study begin to widen significantly after the fifth year of graduation. In some fields, by the ninth year, pay gaps are higher than 25 percent. The motherhood penalty refers to the deterioration, or stagnation, of pay and career progression, faced by wāhine post parenthood. Domestic research shows that, on average, hourly wages for wāhine fall by 4.4 percent after becoming a parent. For those who take longer to return (over 12 months), the average fall in wages is 8.3 percent. The median age of Māori mothers, as of the 2018 Census, was 27 years, compared to 30.5 years for all wāhine (Stats NZ, 2019). This means that the effects of the motherhood penalty are also likely to begin earlier for wāhine Māori.

The major channel through which childcare responsibilities and other forms of unpaid work affect labour outcomes for wāhine is via labour supply decisions. These decisions are made, in part, within the policy and regulatory context, particularly when it comes to childcare. Whether it be policy that creates more affordable and accessible childcare services, generous and supportive parental leave, or provides financial support, this context strongly impacts a mother's chosen balance between work and childcare responsibilities. The association between motherhood and lower wages can be explained in a number of related ways (Stats NZ, 2016).

- Many wāhine make the decision to spend more time at home, caring for children, which affects their ability to participate in full-time work. International estimates suggest that in countries where wāhine spend an average of five hours on care work that is not paid, just 50 percent of them are active in the labour force. In countries where the hours of unpaid work undertaken by wāhine are lower, at three hours, 60 percent of those in the working age population are active (Ferrant, Pesando & Nowacka, 2014). The unequal distribution of care responsibilities between genders is also an important factor in determining participation. For example, in countries where wāhine perform eight times the unpaid work of men, their participation rates in the labour force are just 35 percent. When the difference drops to two times, participation is higher at 50 percent. Thus, the link between care work, including its distribution within the household, and participation in paid work is undeniably strong.
- Post motherhood, wāhine often make the shift to lower-paying industries or occupations which frequently tend to have more opportunities for non-traditional work hours (Sin, Dasgupta & Pacheco, 2018).
- Conscious and unconscious bias by employers, who may discriminate against mothers.

The first two decisions are made at the household level, based on a variety of factors such as social norms, relative wage rates of household members, and the policy and regulatory context.

Māori mothers are more likely to have childcare access issues

Issues with accessing childcare, coupled with the perception of wāhine being primary caregivers, is one of the biggest reasons for the motherhood penalty. Māori mothers are two to three times more likely than Pākehā mothers to report that their child is not in childcare due to cost and/or other access issues (Te Mahere Whai Mahi Wāhine Women's Employment

7 https://women.govt.nz/gpg/field-study

Action Plan, 2022). Māori mothers are also more likely to experience persistent childcare access issues over longer periods.

Wāhine who work part-time, and were underemployed, were four times more likely to cite difficulties with finding suitable childcare as a reason, compared to their tāne counterparts (Meehan, Pacheco, & Turcu, 2022). They were also three times more likely to state other family responsibilities as a reason for being underemployed. A survey on sharing the responsibility of care work at home in Aotearoa New Zealand also pointed to similar dynamics being at play (Deloitte, 2021). Sixty five percent of wāhine who were not in full-time work said that their reason was either looking after children, home duties, or other care responsibilities. The share of tāne who stated one of these reasons was just 17 percent.

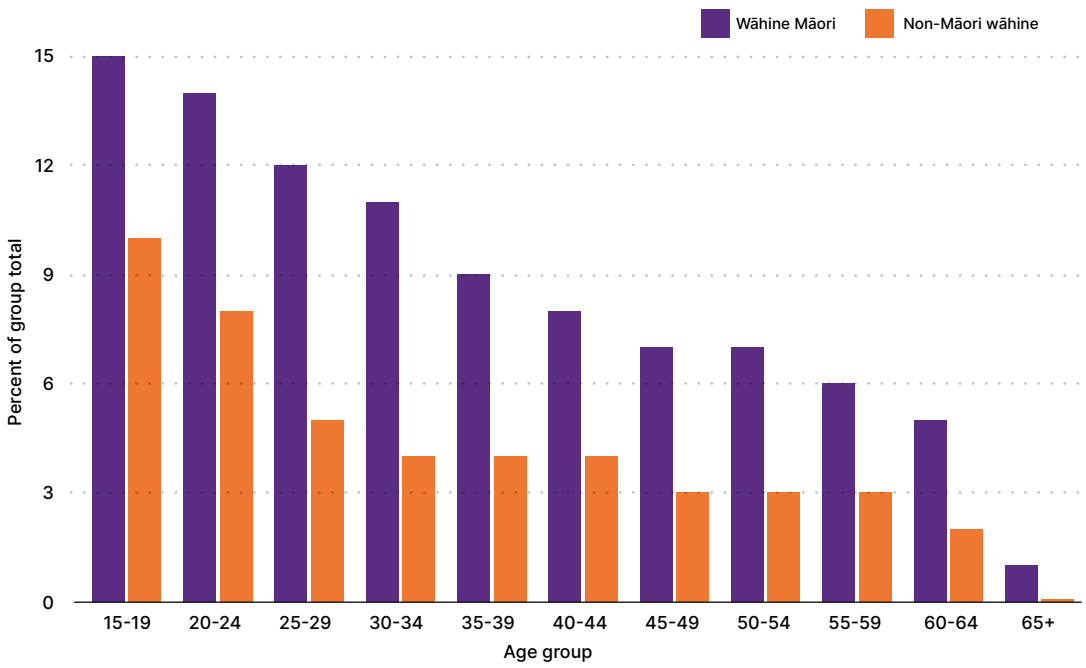
Childcare accessibility issues have been shown to hinder participation in work through a variety of channels. When a family has issues with accessing childcare, it is generally the mother who disproportionately bears the burden of care. Benison and Sin (2023) showed that in Aotearoa New Zealand, mothers with children under the age of three who are not in work because of childcare accessibility issues could be forgoing $116 million, or more, in wages each year. $32 million of this is attributable to Māori mothers.

Wāhine Māori higher rates of unemployment than non-Māori wāhine at all age groups

In the final quarter of 2022, wāhine Māori had an unemployment rate of seven percent, compared to just 3.4 percent for total wāhine (including wāhine Māori). This gap has persisted for decades. As of Census 2018, the total unemployment rate for wāhine Māori was nine percent, and for non-Māori wāhine it was just four percent.

Figure 6 shows the unemployment rate, by age, for wāhine. It is clear that there are large differences through all ages. But, once again, we can see that outcomes are comparatively the worst for young wāhine Māori.

Figure 6: Unemployment rate by age group, 2018



Source: Census 2018, BERL analysis

Maré (1995) examined labour market outcomes for Māori versus non-Māori and notes that differences between groups can arise as a result of a range of factors including population differences, education attainment, labour market experiences, discrimination, and structural and historical disadvantages. Davies and Jackson (1994) looked at the employment outcomes for different groups of wāhine in Aotearoa New Zealand over the years. They argue that the role of historical education policies and historical outcomes in the current employment outcomes for wāhine Māori cannot be underestimated. The authors state that the historical view of Māori abilities that underpinned educational policies, and the lower level of educational attainment for wāhine Māori, restricted their participation in high paying industries and advancement in the labour market.

Moreover, during economic shocks, such as the one brought on by the COVID-19 pandemic, wāhine are often disproportionately impacted. This is particularly true for wāhine Māori. When schools and childcare facilities shut down, and the elderly fell sick, wāhine stepped up and took on the brunt of unpaid care work (OECD, 2021). In Aotearoa New Zealand, research has found that the economic impacts of the pandemic on wāhine Māori included additional financial pressure resulting from redundancy, decreased work hours, pay cuts, and/or an increase in workload or care work (Tonumaipe'a, Wilson, & Heremaia, 2022). This also had a detrimental impact on participation in tertiary education.

The workforce of the future

Wāhine Māori will undoubtedly continue to make up a larger share of the workforce, specifically in younger age groups. Wāhine Māori employees aged between 15-24 years grew at five times the rate of non-Māori wāhine between 2013 and 2018, increasing by 55 percent compared to 11 percent. This is similarly the case for younger wāhine Māori participating in business as employers or self-employed. Of the 3,300 wāhine Māori employers (presented in Table 2), 41 percent were under the age of 44 years, while for non-Māori wāhine, 32 percent were in this age group. Again, similarly for self-employed wāhine Māori, 44 percent were under the age of 44 years, compared to 34 percent for other self-employed wāhine.

One fifth of all wāhine Māori employees were between the ages of 15 and 24 years in 2018, while only 13 percent of non-Māori wāhine employees fell in this age group.

A growing number of wāhine Māori are entering into employment and business

The rate of growth at which wāhine Māori are entering into employment and business far exceeds that of non-Māori wāhine. In 2018, there were just over 147,000 wāhine Māori employees in Aotearoa New Zealand, following an increase of 52 percent since 2013. That is more than double the increase that occurred for non-Māori wāhine employees during this period (24 percent).

Table 2: Growth in wāhine employers and self-employed (2013-2018)

	2013	2018	Change (%)
Wāhine Māori			
Employer	2,500	3,300	32
Self-employed	5,600	7,300	29
Sub-total	**8,100**	**10,600**	**31**
Non-Māori wāhine			
Employer	38,900	42,600	10
Self-employed	81,500	96,600	19
Sub-total	**120,400**	**139,200**	**16**

Source: Census 2013 and 2018, BERL analysis

Table 2 shows that for wāhine Māori in business, there were just over 3,300 employers and 7,300 self-employed in 2018. Since 2013, these totals have increased by 32 percent and 29 percent, respectively. This compares to just a one percent increase in the number of non-Māori wāhine employers and a ten percent increase for non-Māori wāhine self-employed. Previous research has shown that wāhine Māori-led businesses tend to employ higher percentages of Māori, compared to Māori businesses without wāhine Māori shareholders (TPK, 2020). This re-investment in Te Ōhanga Māori is a profoundly positive and impactful characteristic of wāhine Māori-led businesses.

The number of wāhine Māori entrepreneurs, business-leaders, and employees will continue to grow much faster than non-Māori wāhine.

Growing participation in all areas of employment for wāhine Māori

Table 3 presents the share of working age wāhine Māori and non-Māori wāhine that falls into either of three employment status groups (paid employee, employer, or self-employed). Although the number of wāhine Māori entering into employment and business has been growing fast, overall participation in employment lags behind non-Māori wāhine. This indicates that growth in numbers employed is largely accounted for by population growth. This is particularly evident for wāhine Māori self-employed, as well as for employers.

Table 3: Employment status by share of working age population (2013-2018)

Employment status by share (%) of working age population	Wāhine Māori			Non-Māori wāhine		
	2013	2018	Change	2013	2018	Change
Paid employee	45.7	51.7	**6.0**	43.2	56.7	**13.5**
Employer	1.2	1.2	**0.0**	2.4	2.4	**0.0**
Self-employed	2.7	2.5	**-0.1**	5.1	5.5	**0.4**

Source: Census 2013 and 2018, BERL analysis

Wāhine Māori employers and self-employed are growing, but not fast enough

Typically, individuals enter into business later on in their career, at an older age. Therefore, considering the pace at which wāhine Māori are entering into business we can expect to see an increase in wāhine Māori employers and self-employed over the next couple of decades. But, at present, wāhine Māori are still under-represented in business.

The 2022 BDO Māori business survey found that cash flow problems and other financial stresses were the main drivers of negative wellbeing among Māori business leaders. Leaders also identified general experience and financial acumen as the top two skills they were lacking. The intersectionality of ethnicity and gender mean that barriers are compounded for wāhine Māori. Dawson (2012) classified impediments and enhancers of Māori entrepreneurial success into internal and external factors. Internal impediments included lack of knowledge to start and grow a business, compliance issues, and undercapitalisation. External impediments included discrimination and bias, conflicting values between cultures, and education-related barriers including a lack of business, financial, and entrepreneurial education.

Wāhine Māori employers and self-employed are more likely to be high skilled

Wāhine Māori who are employers and self-employed are significantly more likely to have higher skills levels compared to wāhine who are employees (Figure 7).[8] Over half (53 percent) of all wāhine Māori employees have a skill level of four or five, i.e., they are in jobs that are classified as low skilled.[9] By comparison, 42 percent of non-Māori wāhine employees were in a job with a skill level of four or five. Non-Māori wāhine employees also had a higher share in level one jobs compared to wāhine Māori (37 percent versus 29 percent).

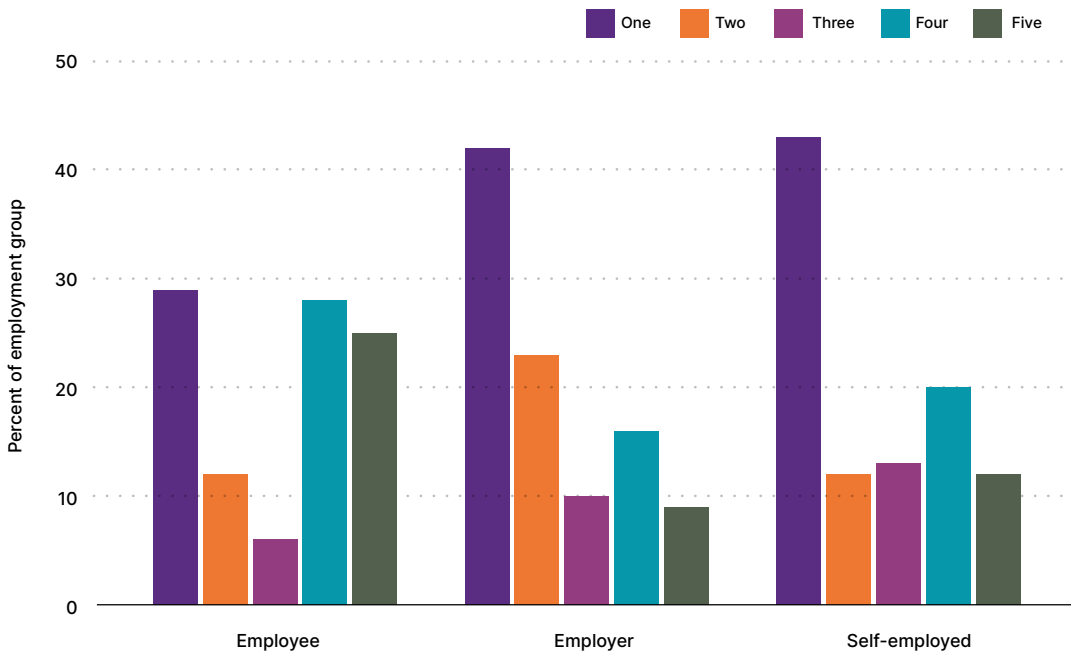
The share of wāhine Māori employees in low skilled jobs remained unchanged in the five years between 2013 and 2018. Similarly, there was no change in the share of high skilled wāhine Māori employees.

It is important to note that these skill levels do not measure the skill level of an individual, rather they refer to the level of skill that is typically required to competently perform the tasks of a particular occupation. The skill levels associated with a job are closely linked to the level of educational attainment required to enter it. Higher skilled jobs have more restrictive entry requirements. Jobs at skill level five are typically associated with a level one qualification, while those at level four generally require a level two or three qualification. Jobs with a skill level of one are those that have a level of skill commensurate with a bachelor's degree or higher qualification. In 2018, over 57 percent of wāhine Māori had a qualification below level four (Table 1), which makes it harder to enter higher skilled occupations.

8 Skill levels are derived from the Australian and New Zealand Standard Classification of Occupations (ANZSCO). This standard classifies occupations into five skill levels based on the amount of formal education and training, work experience or on-the-job training that is required to competently perform the tasks of the occupation.

9 Skill levels range from one to five, with one being the highest and five being the lowest.

Figure 7: Skill levels and employment type for wāhine Māori in the workforce, 2018



Source: Census 2018, BERL analysis

There has been strong growth in the share of high skilled wāhine Māori employers and self-employed. Between 2013 and 2018, the share of wāhine Māori employers who were high skilled went up from 42 percent to 47 percent. Similarly, the share of high skilled self-employed also went from 43 percent of self-employed to 46 percent.

Younger wāhine Māori make up larger proportions of total wāhine in business

Wāhine Māori representation in business is low, but it is growing, and doing so at much higher rates than for non-Māori wāhine. Numbers of younger wāhine Māori in particular, are increasingly growing as a share of total wāhine in business.

Of self-employed wāhine aged between 15-24 years, 15 percent were of Māori ethnicity in 2018, up from 12 percent in 2013. Of wāhine led businesses, more and more are going to be led by wāhine Māori. Although this trend will be more pronounced for businesses led by younger wāhine Māori.

One in every five wāhine employers aged between 15-24 years was of Māori ethnicity.

4.2 Sector representation

Employment by industry

Strong concentration in the service sector for wāhine Māori

Table 4 depicts the proportion of wāhine Māori in each sector by employment group in 2018. Although wāhine Māori are represented across a broad range of sectors there is a strong concentration within service sectors, particularly social services. This is most pronounced for wāhine Māori employees and self-employed, with nearly four out of five wāhine Māori employees and self-employed in one of the four service sectors. This is not dissimilar to the rest of wāhine who also have a strong presence in the service sectors. Wāhine are less likely to be employed in certain highly-paid industries, such as those related to engineering and technology. A large part of the reason for this is simply that they are also less likely to study these subjects in high school and at university. Perceptions about gender roles and access to mentors and role models in early life are strong influences on individuals' decisions about education. Around 75 percent of wāhine Māori respondents to a Public Service Association (2021) survey reported that they had faced challenges in the education system, the effects of which spilled over into their employment and pay prospects. This was particularly true for older wāhine Māori who felt they had been held back in the education system and were not expected to succeed. They also reported that social pressures, such as being expected to have children early, also held back their educational attainment. Many either did not complete schooling or had to return to education later.

Table 4: Share of wāhine Māori workforce across sectors by employment status (%), 2018

Sector	Employee	Employer	Self-employed
Primary sector	4	8	5
Manufacturing	8	7	5
Construction	2	9	4
Wholesale and distribution	6	6	5
Retail trade and services	19	26	18
Business services	16	19	22
Arts and recreation services	2	1	3
Social services	43	24	38

Source: Census 2018, BERL analysis

The leading sectors that tāne Māori were employed in were construction, business services, and manufacturing, with the primary sector not too far behind. This clearly indicates occupational segregation along gender lines. Domestic research on gender and ethnic pay gaps has shown that wāhine and non-Pākeha are more likely to work in lower-paid industries, such as hospitality and retail (Ministry for Women, forthcoming 2023). The research also showed that wāhine and Māori are under-represented in high-paying occupations such as managers and professional workers.

The number of wāhine Māori working in the social service sector is also increasing

The industries that comprise the social service sector serve the wider public and community. This sector includes education and training, public administration and safety, and health care and social assistance. These sectors are heavily dependent on government funding. In 2018, there were 20,800 wāhine Māori employees in health care and social assistance, 17,500 in education and training, and 10,700 in public administration and safety.

Wāhine Māori representation in these sectors has also been increasing over time. Between 2013 and 2018, close to an additional 12,000 wāhine Māori became employees in the social services sector, representing a 32 percent increase across the five years. Deloitte (2022) identified that Aotearoa New Zealand has been undergoing reforms on a scale not seen in decades. There has been reshaping and reordering across public sector industries. This level of reform poses a risk to those employed in these industries. A restructure can include job losses, which often impact on junior roles that may have low job security.

This risk, however, is balanced against the relatively high average annual income from wages and salaries that is provided. In 2018, the average income for wāhine Māori employees across the social services sector included:

- $56,300 in education and training
- $54,500 in health care and social assistance
- $75,900 in public administration and safety.

These levels of average income are comfortably above the overall average for all wāhine Māori employees ($52,300). The average income is also higher for wāhine Māori who are engaged in business as self-employed or employers in this sector. The health care and social assistance industry had just under 220 wāhine Māori employers, earning an average income of $58,700. Whereas for the just under 520 self-employed wāhine Māori in this industry in 2018, the average income was lower at $45,200. Wāhine Māori employers within the public administration and safety industry earned an average income of $76,900, which increased to $84,700 for self-employed wāhine Māori.

High wage opportunities in the business services sector

The business services sector provides high-value and high-wage opportunities.[10] As the increasingly digital world drives further growth across the industries comprising it, there are extensive opportunities for career development in this sector.

In 2018, the largest number of wāhine Māori in industries across the business services sector included:

- 11,000 wāhine Māori employees in administrative, support, and other services
- 5,300 wāhine Māori employees in professional, scientific, and technical services
- 3,000 wāhine Māori employees in financial and insurance services.

For wāhine Māori employees in professional, scientific, and technical services, the average income from wages and salaries was $66,100. This increases to $85,600 for the 140 wāhine Māori employers, and to $68,000 for the 250 wāhine Māori self-employed in this industry. This is similarly the case in financial and insurance services. The average income for wāhine Māori employees in this industry was $74,800, increasing to $76,900 for wāhine Māori employers, and $84,700 for self-employed wāhine Māori.

However, wāhine Māori are more strongly concentrated in administrative, support, and other services, which does not provide an income on the same level as other business services industries. This area does, however, tend to consist of roles and occupations that offer more flexibility in employment. Wāhine Māori

10 Industries comprising the business services sector include administrative, support, and other services, information media and telecommunications, electricity, gas, waste and water services, professional, scientific, and technical services, financial and insurance services, and real estate and property services.

employees, on average, earned an income of $34,100, which was just under three quarters of what non-Māori wāhine employees earn in this industry. Wāhine Māori employers earned $55,900, and self-employed wāhine Māori earned $33,200. This level of income was below the overall average for each employment group.

Wāhine Māori in tourism-based industries

Tourism is not pictured in Table 4 as it is directly and indirectly represented across a variety of sectors and industries. But it is particularly represented in the retail trade and services sector, which includes accommodation and food services and retail trade. These two industries include valuable pathways to employment, with a significant share of entry-level roles available. This does mean, however, that these roles offer lower wages.

The nature of this sector more broadly, with tourism strongly woven into it, means that it was one of the most severely impacted sectors during COVID-19. The border closures and national lockdowns essentially limited all activity in this sector for an extended period of time. In 2018, there were just over 17,500 wāhine Māori employees and just under 700 wāhine Māori businesses (employers and self-employed) in the sector. A Tourism Industry Aotearoa (2021) survey indicated that four out of every ten tourism jobs had been lost following the first year of COVID-19. This would have had a profound impact on wāhine Māori, particularly younger wāhine Māori.

Just over 17,500 wāhine Māori were employees in this sector, with over half of them in the retail trade industry, earning an average annual income of $39,000. Wāhine Māori employees in the accommodation and food services industry earned an annual income of $29,200 on average. This represented only 83 percent of what non-Māori wāhine employees earned in this industry.

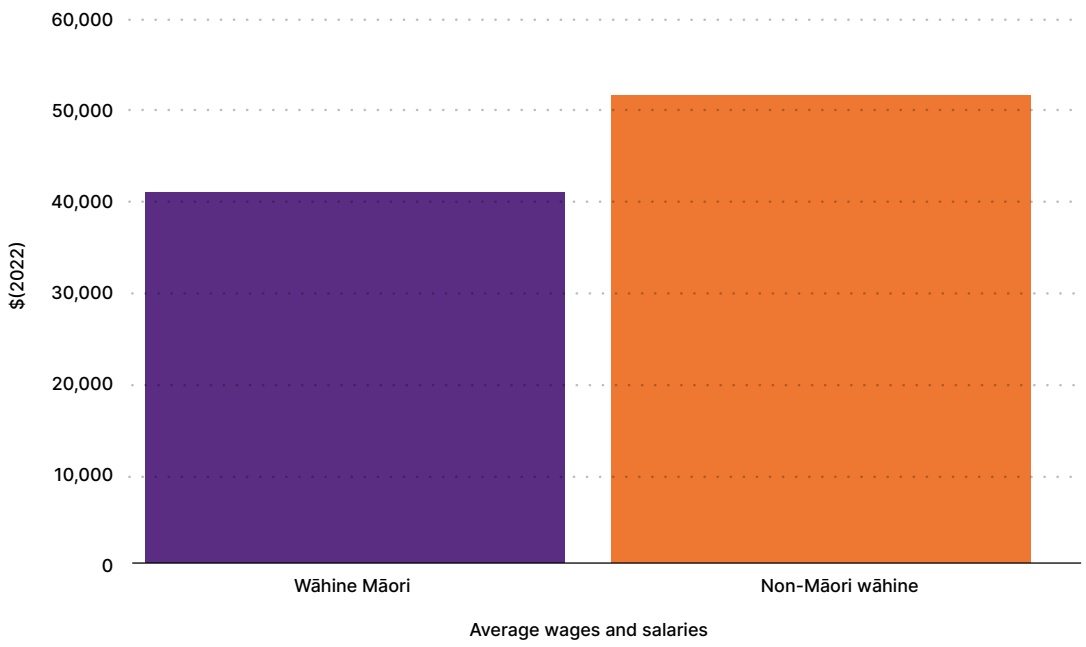
4.3 Income distribution

Social pressures, disadvantages, and inequities have a compounding impact on wāhine Māori. Such challenges profoundly affect how wāhine Māori participate in the workforce and their employment outcomes. These difficulties are enduring and complex.

On average, wāhine Māori earn 20 percent lower incomes than non-Māori wāhine

Figure 8 shows the average annual income earned from wages and salaries by wāhine Māori, compared to non-Māori wāhine, in the year to March 2022. On average, annual income for wāhine Māori was 20 percent lower than that for non-Māori wāhine. The latest research on pay gaps has shown that after accounting for factors such as differences in individual, regional, educational household, and job-related characteristics, the aggregate pay gap between Māori and Pākeha wāhine is around 13 percent. The gap is widest in the wholesale trade (19 percent) and construction (18 percent) industries.

Figure 8: Average annual income from wages and salary, 2022

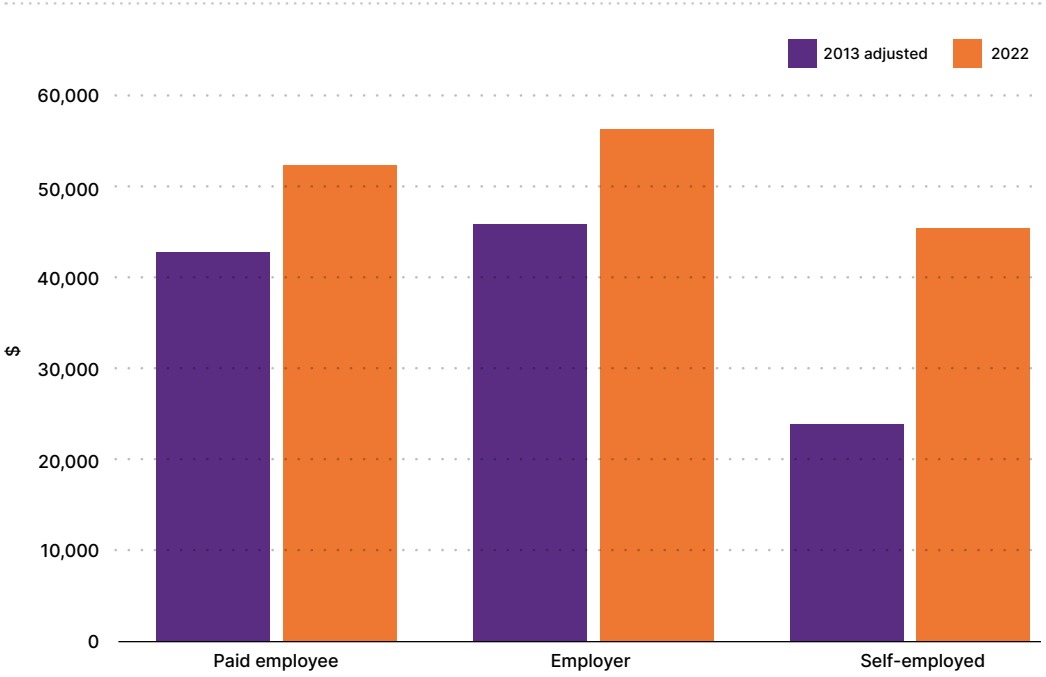


Source: Inland Revenue Department (IRD), Administrative Census 2021, BERL analysis

Wāhine Māori employers earn higher incomes

As Figure 9 shows, wāhine Māori employers earned an average income above both employees and self-employed in 2022. This indicates the potential benefit that can arise from entering into business. As illustrated in Figure 7, wāhine Māori employers are also much more likely to be higher skilled compared to wāhine Māori employees, which could also explain the differences in incomes. However, as we have seen in Table 3, wāhine Māori are under-represented in such positions.

Figure 9: Wāhine Māori average income by employment status



Source: IRD, Census 2018 and 2013, BERL analysis

Self-employed wāhine Māori earn the lowest average income from wages and salaries out of the three employment groups. This is despite the fact that, like employers, they are relatively higher skilled. This could be a reflection of the difficulties and challenges associated with starting a business, and particularly with growing a business to a size where it is possible to employ others. Another explanation could be that self-employment is one of the few options available to wāhine Māori with reduced employment availability (motherhood, unpaid work responsibilities, etc.) which essentially considers them as 'necessity entrepreneurs'. Whereby, wāhine Māori have entered into self-employment to create a job for themselves, and the lower income may reflect fewer hours worked. Anecdotal evidence suggests that Māori do have a higher rate of 'necessity entrepreneurship' compared to non-Māori (Te Puni Kōkiri, 2009).

The ability to reach that stage requires appropriate support and resourcing. This has important socio-economic implications as well. Previous research by Te Puni Kōkiri (2022) has shown that Māori-owned businesses that have wāhine Māori shareholders employ a higher percentage of Māori compared to other Māori businesses. This means that uplifting wāhine Māori owned businesses, and providing them with the support that they need to succeed, could have positive flow on effects to the rest of the Māori workforce. By providing whānau with employment opportunities, these wāhine Māori owned businesses contribute towards uplifting the social and economic wellbeing of not only those they employ, but also the wellbeing of their whānau and communities.

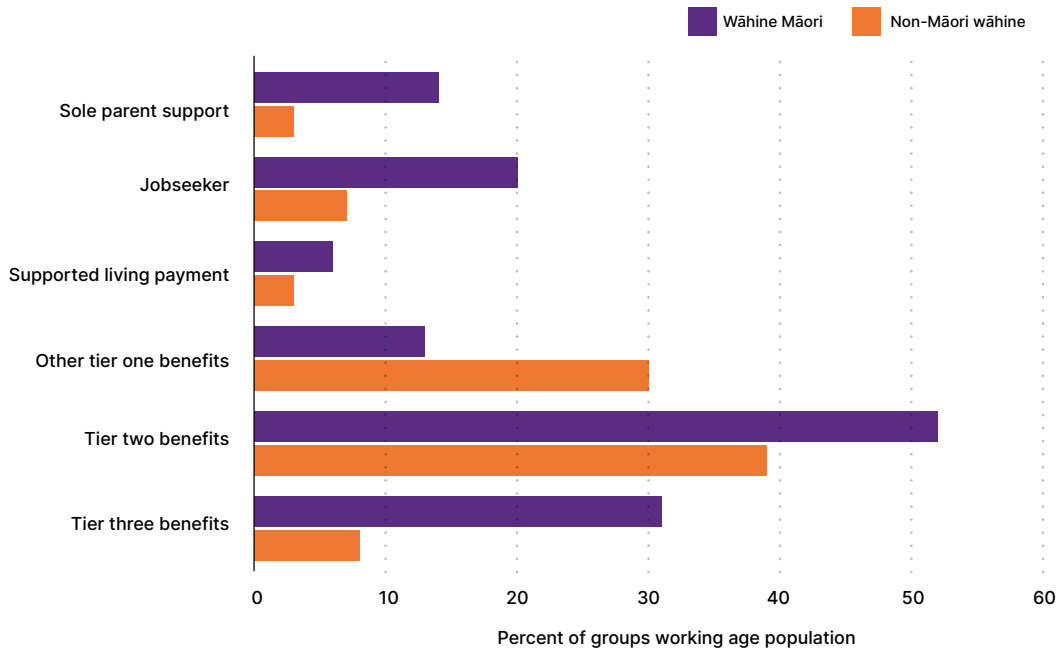
Social security and assistance benefits

The range of inequitable outcomes in the labour market has an impact on how wāhine Māori interact with the social security sector. The significant income gap that wāhine Māori face means that they are more likely to need additional support to meet their needs. Moreover, since wāhine Māori also have higher fertility rates and are more likely to be younger when they become mothers, they often need more parental support from the system.

Although wāhine Māori make up just over eight percent of Aotearoa New Zealand's population, they accounted for 13 percent of all benefit recipients in 2022, a share that has remained unchanged since 2013. Figure 10 illustrates the wāhine Māori benefit recipients as a share of the wāhine Māori working age population in 2022, compared to non-Māori wāhine. This is broken down by benefit type. At nearly all benefit types, proportionately more of the wāhine Māori working age population is dependent on government assistance, compared to working age non-Māori wāhine.

Wāhine of all ethnicities make up nearly 90 percent of the total recipients of sole parent support. However, wāhine Māori in particular make up a disproportionate share of such recipients. Over 48 percent of all female sole parent support recipients are wāhine Māori, but they make up just 17 percent of the total wāhine population. Given that economic outcomes are poorer, and insecurity is higher for sole mothers, and the fact that wāhine Māori are significantly more likely to be sole parents, helps to explain this disparity.

Figure 10: Benefit recipients as a share of group working age population, 2022



Source: MSD, Administrative Census 2021, BERL analysis

A relatively small share of working age wāhine Māori receive other tier one benefits. This category consists of a range of main benefit types, including NZ Superannuation. The fact that the wāhine Māori population is heavily skewed towards the younger age groups may explain part of this gap. Tier two benefits include those that are considered by MSD to be supplementary income, and tier three benefits are one-off, ad-hoc payments, such as loans. These are unable to be broken down further, given that no further definitions are provided by MSD.

4.4 Economic contribution of wāhine Māori

Wāhine Māori in Aotearoa New Zealand contribute to all facets of the economy. The extent of their contribution however is often not entirely recognised. For wāhine Māori, and wāhine more broadly, the decision to participate in the traditional 'market economy' cannot be separated from the decision to undertake unpaid work. There is a direct relationship between the amount of time committed to unpaid personal, household, or marae work, and time spent on paid work. This means that wāhine Māori participation in unpaid work strongly impacts the flow of income received from paid work, as well as how they interact with other aspects of the economy.

In recognising this, the following analysis first presents the economic contribution of wāhine Māori to the Aotearoa New Zealand economy, without unpaid work included. This analysis is then followed by the economic contribution of wāhine Māori, with unpaid work included. In doing so, a better understanding can be gathered on the full breadth and extent of wāhine Māori participation in the economy. The inclusion of unpaid work also better aligns with how wellbeing can be enhanced for wāhine Māori.[11]

4.4.1 Contributions to GDP across all dimensions

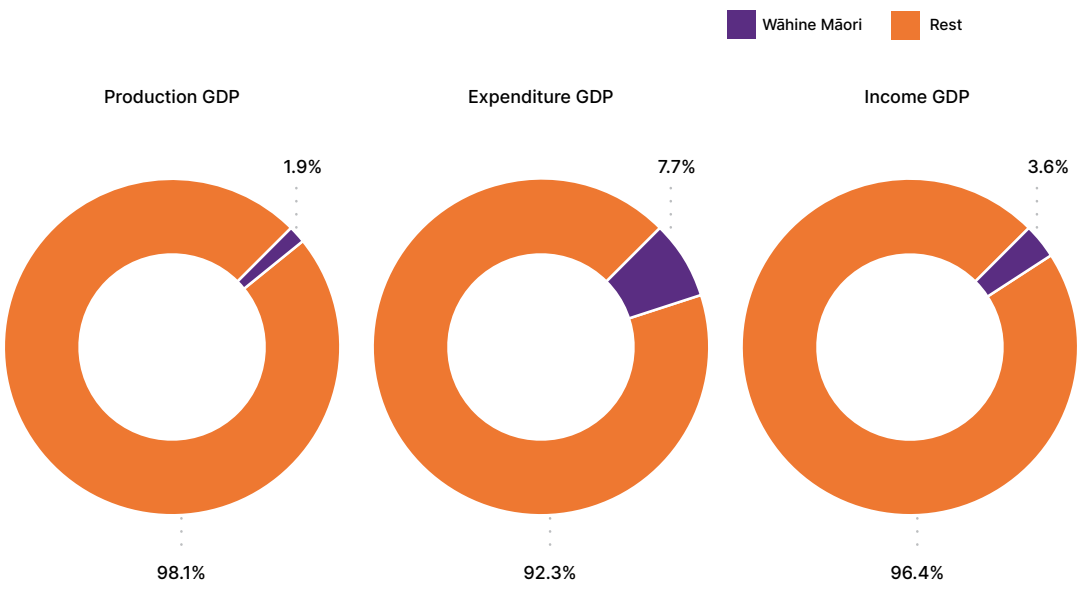
GDP, which is a measure of the total value added generated by all enterprises, can be calculated in three ways: production, income, and expenditure. Each way of calculating GDP provides unique insights into the participation and contribution of wāhine Māori to the overall Aotearoa New Zealand economy. GDP itself, however, is not a determination or reflection of wellbeing, nor does it capture everything that encapsulates wellbeing. The absence of unpaid work in traditional GDP estimates only further affirms this.

In the following context, we have presented GDP as a measure of economic activity only. The inclusion of unpaid work, however, is intended to provide a more fulsome and accurate representation of the economic participation and contribution of wāhine Māori in the Aotearoa New Zealand economy. Figure 11 illustrates how Te Ōhanga Wāhine Māori contributes to Aotearoa New Zealand GDP across these three dimensions:

- Value add produced by wāhine Māori organisations (the production measure)
- Income (wages and profits, also known as operating surplus) received by wāhine Māori individuals (the income measure)
- Spending of wāhine Māori households (the expenditure measure).

11 Please see Appendix D for the SAM methodology.

Figure 11: Wāhine Māori contribution to Aotearoa New Zealand GDP by type, 2022



Source: BERL analysis

Production GDP provides an insight into the value which is added by the activities and operations of wāhine Māori enterprises, including employers and self-employed. In 2021, Te Ōhanga Wāhine Māori contributed $5.9 billion to production GDP in the Aotearoa New Zealand economy (representing 1.9 percent of national production GDP).

Income that is generated from an individual's employment (wages) or an organisation's operations (profit) is captured within income GDP. In 2022, total income GDP in Aotearoa New Zealand was $297.5 billion, of which, Te Ōhanga Wāhine Māori represented 3.6 percent, with a contribution of $10.6 billion.

Expenditure GDP represents the sum of all spending on goods produced and services delivered from entities within the Aotearoa New Zealand economy. This includes spending from households, businesses, government, and overseas entities. Spending from Te Ōhanga Wāhine Māori accounted for 7.7 percent of the total expenditure (spend) GDP in Aotearoa New Zealand, which was equivalent to $19.7 billion.

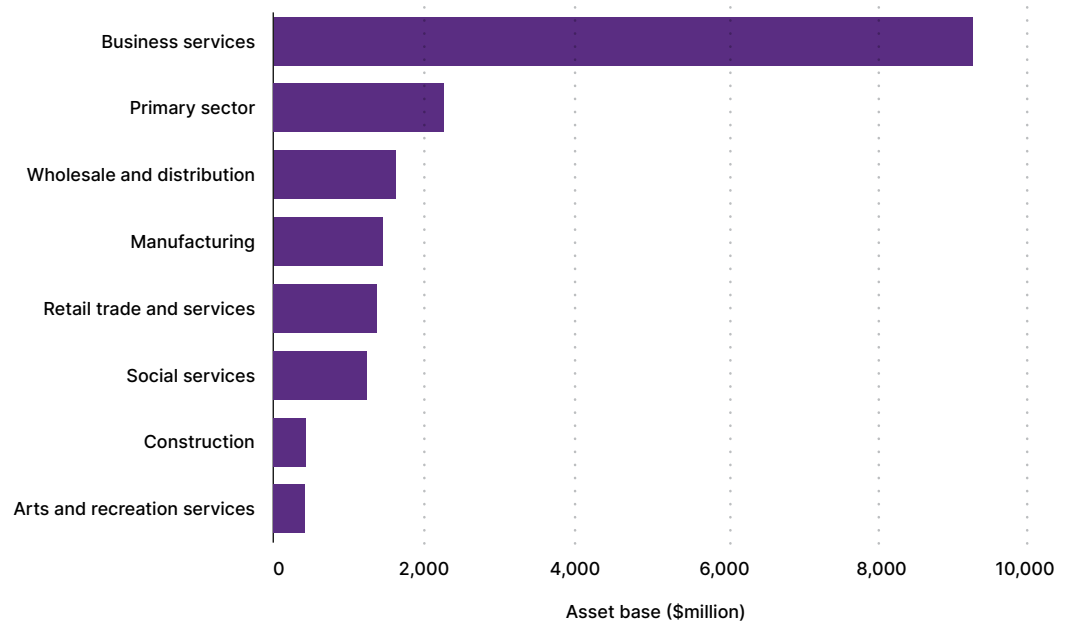
Asset base for wāhine Māori is mostly concentrated in the business services sector

In 2022, the financial value of Te Ōhanga Wāhine Māori asset base totalled $18.1 billion. The spread of these assets across sectors is depicted in Figure 12. Unlike what is seen for Māori more broadly, where the asset base is concentrated in the primary sector, the financial asset base for wāhine Māori is mostly concentrated in the business services sector.

Nearly $9.3 billion worth of assets are held by wāhine Māori enterprises in the business services sector.

Behind only social services, the business services sector accounted for the largest number of wāhine Māori employers and self-employed in 2018. Assets included: $6.2 billion in real estate and property services; $1 billion in professional, scientific, and technical services; $775 million in financial and insurance services; $854 million in administrative, support, and other services; and $393 million in information media and telecommunications. The asset base in real estate and property services is driven by significantly high-valued residential and commercial property.

Figure 12: Financial asset base of Te Ōhanga Wāhine Māori by sector, 2022



Source: BERL analysis

The primary sector has a considerable asset base value for wāhine Māori, valued at $2.3 billion. This included:

- $795 million in dairy farming
- $588 million in forestry
- $328 million in sheep and beef farming.

For Te Ōhanga Māori more broadly, the significant value in the primary sector asset base is more strongly derived from tāne Māori businesses, with nearly 2,000 operating in the sector in 2018. Whereas there were just under 320 wāhine Māori businesses.

A $1 billion tourism asset base

There is a sizeable number of wāhine Māori represented in sectors where tourism is dominant. Although not pictured in Figure 12, the tourism asset base held by wāhine Māori totalled $1.2 billion in 2022, with $983 million of this held by wāhine Māori employers and the remainder held by wāhine Māori self-employed.

Māori collectives

It is worth emphasising here that the numbers describing the size of the wāhine Māori economy, including the section on the size of their asset base below, do not include Māori collectives. Apart from wāhine Māori businesses, Māori collectives, in which wāhine Māori are well-represented, are an important part of the wāhine Māori economy. They deliver wellbeing across several dimensions in a multitude of ways including community engagement and participation, whānau and family caring, paid employment, and unpaid voluntary work. However, since these are collectively owned by wāhine and tāne Māori, it is impossible to separate out wāhine Māori ownership. In 2018, the asset base of Māori collectives equalled nearly $21 billion. Much ($14.1 billion) of this asset base was in the agriculture, forestry, and fishing industries.

Contributions to GDP by industry

Value added across Te Ōhanga Wāhine Māori

Real production GDP (value add) reflects the relative spread of the wāhine Māori asset base. Importantly it indicates the value add that is generated from each aspect of Te Ōhanga Wāhine Māori, regardless of the financial value of the asset base. This measure of GDP, although useful for understanding the productivity of an economy, is a blunt measure that does not take into account what actually contributes to wellbeing. For wāhine Māori, value added is the ability to provide improved outcomes for whānau, communities, hapū, and iwi.

Of the total $5.9 billion that wāhine Māori generated in production GDP, the sectors below were the main contributors (Figure 13).

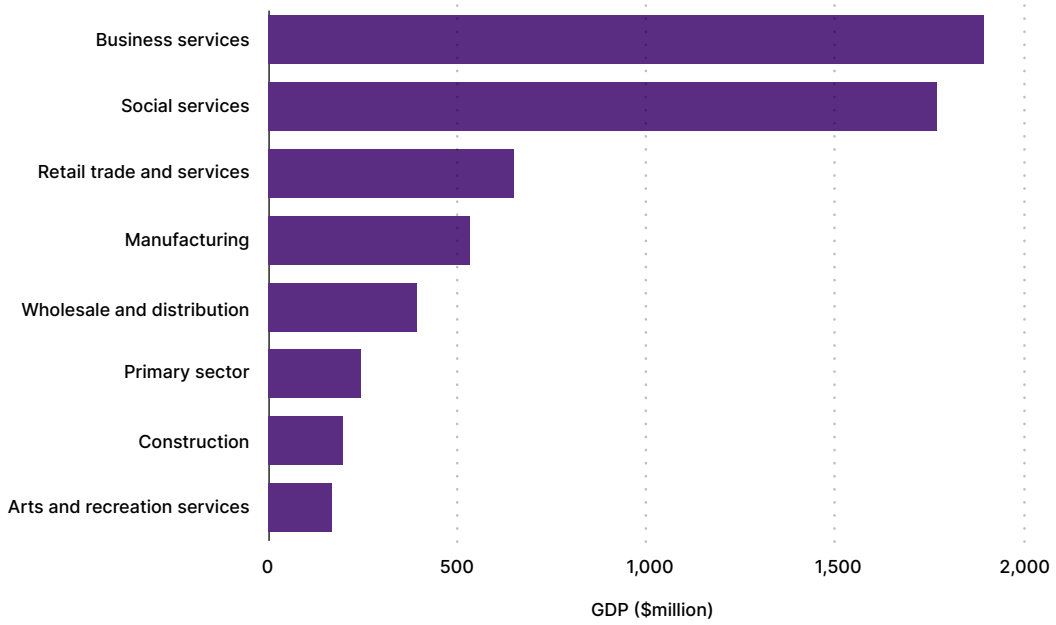
Wāhine Māori businesses generated $1.9 billion in value add to the business services sector.

The value wāhine Māori added to the business services sector totalled $1.9 billion in 2022, with significant contributions from real estate and property services ($781 million); professional, scientific, and technical services ($469 million); administrative, support, and other services ($329 million); and financial and insurance services ($167 million). This reflects the contributions from the combined 1,300 wāhine Māori employers and self-employed operating in the business services sector.

The social services sector is one of the most productive, high value-added sectors for wāhine Māori businesses.

Although possessing an asset base not as highly valued as business services, the social services sector is very productive, with significant value added by wāhine Māori. In 2022, value added to Te Ōhanga Wāhine Māori by the social services sector was $1.8 billion. This comprised $859 million from public administration and safety, $481 million from education and training, and $433 million from health care and social assistance. Value added across these industries lies within the delivery of vital services, including those from wānanga, kura kaupapa, kōhanga reo, and whānau ora providers.

Figure 13: Value added of Te Ōhanga Wāhine Māori by sector, 2022



Source: BERL analysis

There was also significant value added which was generated in the retail trade and services ($651 million) and manufacturing ($535 million) sectors. For the retail trade and services sector, most of the value added came from retail trade itself at $449 million, while accommodation and food services generated $202 million in value added.

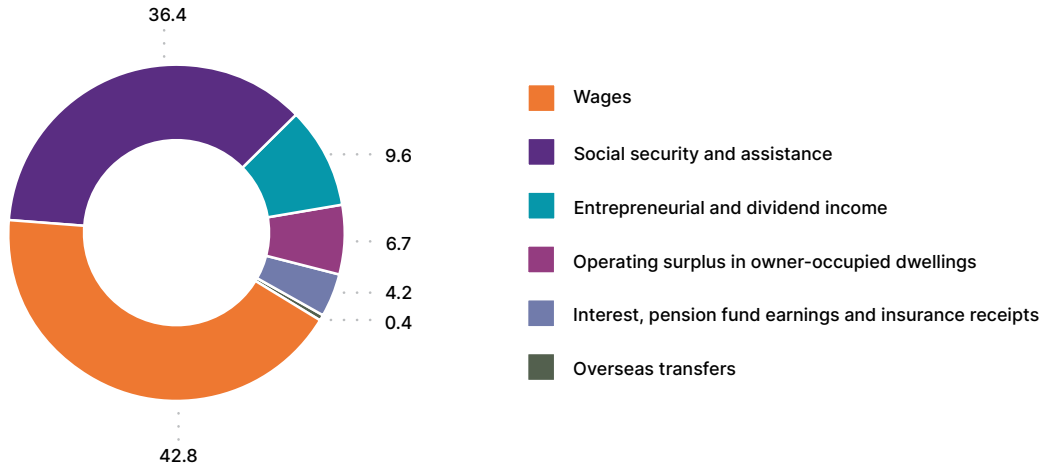
4.5 Wāhine Māori household income and expenditure

In 2022, wāhine Māori households had a total income of $18.8 billion, or 6.9 percent of the total income of the household sector.[12] The two biggest sources of income for wāhine Māori households were wages, accounting for 43 percent ($8 billion) of household income and social security and assistance benefits which made up 36 percent ($6.9 billion) of income (Figure 14). By comparison, the shares of wages and social security benefits in total household income for non-wāhine Māori households were 54 percent ($136 billion) and 11 percent ($28.4 billion) respectively. Wāhine Māori households had a comparatively lower share income from entrepreneurial and dividend sources at 10 percent ($1.8 billion) compared to non-wāhine Māori households (18 percent), highlighting their under-representation in the business sector.

Wāhine Māori household income is not high enough to sustain expenses, resulting in a net savings deficit.

12 A household is classified as a wāhine Māori household if at least one of its non-dependent members, aged 18 or over, identifies as wāhine Māori.

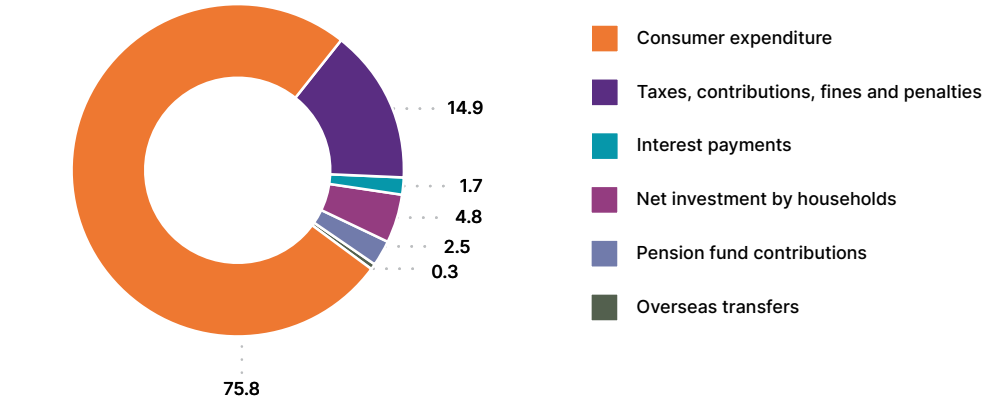
Figure 14: Wāhine Māori household income sources, 2022, excluding unpaid work, % of total



Source: BERL analysis

Wāhine Māori households have a negative net savings position. Although receiving $18.8 billion in household income, once expenditure, taxes, interest, and other deductions are taken into account, wāhine Māori spent more than they earned. This resulted in a net savings deficit of $4.6 billion. The largest sources of outlays were consumer expenditure, accounting for 76 percent (compared to 66 percent for non-wāhine Māori households) and tax, social security, fines and penalties making up 15 percent (compared to 21 percent for non-wāhine Māori households) of outlays (Figure 15).

Figure 15: Wāhine Māori household outlays, 2022, excluding unpaid work, % of total



Source: BERL analysis

4.6 Home ownership

Because the Crown refused to accept or acknowledge the mana that wāhine Māori held, wāhine were prevented from exercising tino rangatiratanga and kaitiakitanga over our tamariki, whānau, lands, and taonga.

- Te Amohia McQueen, Mana Wāhine Kaupapa Inquiry Tūāpapa Hearings

For wāhine Māori, and Māori in general, housing represents more than simply the ownership of resources for economic and material gain. It goes beyond this. A home is a place of connection for people and place (Stats NZ, 2021). The historical injustices of land grabbing by the colonists that Māori experienced were often even more severe for wāhine Māori. Pre European contact all resources, including land, were collectively owned. Even post contact, wāhine Māori owned use-rights over land and resources. These could be passed to a wāhine by either parent, and would remain her property even after marriage (New Zealand Legal Information Institute, n.d.). As assimilation intensified, and English laws were applied to wāhine Māori, their status was reduced to that of Pākeha wāhine. Under this system, the father, or husband, would have absolute control over all property. This contributed towards furthering the economic disenfranchisement of wāhine Māori. It also contributed to the destruction of the collective iwi/hapū unit in the sense of collectivisation of resources, which undermined the very values that maintained the wellbeing of those who were part of this unit. This further eroded the importance of the role of the wāhine, who upheld the community values of family, history, tradition, language, skills, mutual caring, and support.

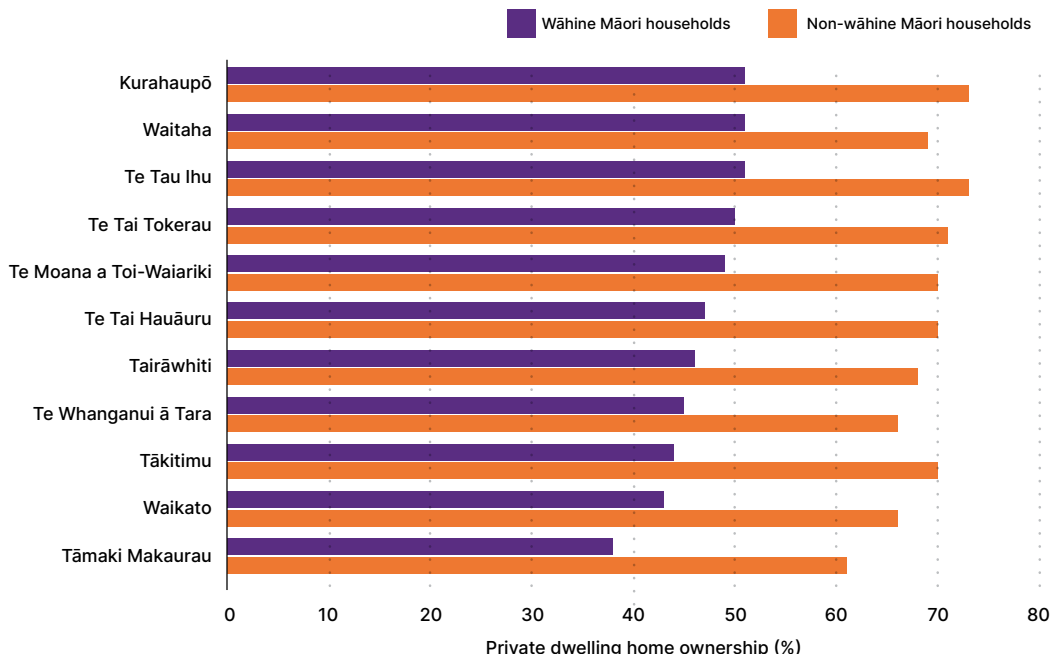
Less than half of all wāhine Māori households own the home they live in, compared to 69 percent of non-wāhine Māori households.

As part of the evidence provided by Donna Awatere-Huata (2021) for the tūāpapa hearings,[13] she noted that whakapapa began to be recalibrated to trace descent mainly through patrilineal lines, limiting wāhine access to property. All of this led to the degradation of the economic and social power of wāhine Māori.

Figure 16 shows the home ownership rates for wāhine Māori households, compared to non-wāhine Māori households in every rohe. This only includes those who live in a private dwelling and excludes households in public housing. Overall, less than half (47 percent) of all wāhine Māori households own the home they live in, compared to 69 percent of non-wāhine Māori households. There are drastic differences in home ownership rates for the two groups across the motu. In general, ownership rates are the lowest in rohe that contain major economic centres. Tāmaki Makaurau has the lowest ownership rates for both groups, but also a significant gap between wāhine-Māori and non-wāhine Māori households. Tāmaki Makaurau is also home to the largest share (over 22 percent) of the total wāhine Māori population in Aotearoa.

13 The tūāpapa hearings were conducted as part of the wider Mana Wāhine Kaupapa Inquiry. These hearings focused on the tikanga of mana wāhine and the pre-colonial understanding of wāhine in te ao Māori.

Figure 16: Private dwelling home ownership by households, 2018



Source: Census 2018, BERL analysis

Pre-urbanisation, Māori had the highest rates of home ownership in Aotearoa New Zealand at 71 percent (Stats NZ, 2021). But as the pace of urbanisation grew, and Māori moved away from traditional lands, these rates began to decline. Houkamu and Sibley (2015) studied the effects of perceived stereotypicality, defined as the degree to which a group is viewed in a stereotypical fashion, on home ownership rates amongst Māori. The authors studied the degree to which self-reported differences in appearance as Māori predicted lower rates of home ownership. The research found that controlling for other factors such as education, deprivation, age, relationship status, etc., merely appearing more Māori was significantly associated with decreased rates of home ownership amongst Māori, which raises the question of the role of institutional racism. The authors note that the study does not test for current bias in the likelihood of being approved for a home loan. Rather, these biases may have existed over a long period of time in the past, and these impacts can still be seen today.

Lower rates of home ownership influenced by young age structure of wāhine Māori

Another factor that plays a part in the lower rates of home ownership is the younger age structure of the wāhine Māori population. Nearly half of the wāhine Māori population was aged under 25 in 2018. However, this does not fully explain the differences. Individual-level analysis by Stats NZ (2021) has shown that although ownership rates are equally low for those of all ethnicities before the age 25, the gap between Māori and Pākeha widens significantly by middle age. Eighty percent of Pākeha in the 60-64 age group own their homes, but just 55 percent of Māori in the same age group do. In the 2018 General Social Survey, 13 percent of Māori rated their housing as unaffordable, compared to 8.8 percent of Pākeha.

It is also important to note here the link to family type. Nearly a third of wāhine Māori households are sole parent households. The range of socio-economic disadvantages these households face, along with lower annual median incomes, helps to explains some of the gaps in home ownership. A report by the Families Commission (2010) showed that just a third of sole parent families owned their own home, compared to two thirds of partnered families. Moreover,

sole fathers were more likely to own their homes compared to sole mothers. The home ownership rate for Māori sole parents was just 21.6 percent.

Home ownership intersects with many dimensions of wellbeing, particularly cultural wellbeing for Māori. A strong connection to whenua provides a sense of belonging and connection to people and place (Stats NZ, 2021). Māori who lived-in owner-occupied dwellings (65 percent) were significantly more likely to grow their own kai, compared with Māori who did not (48 percent). Māori who did not live in an owner-occupied home were also less likely to be culturally connected and engaged. They were less likely to say that being engaged in Māori culture was very important, and less likely to know their pepeha very well. Home ownership also provides tenure security, strengthening the sense of belonging to a place and community. The over-representation of Māori as renters means that they were more likely to move more frequently. They were also significantly less likely to move from a rented dwelling to an owned dwelling.

Māori who lived-in owner-occupied dwellings were more likely to grow their own kai.

Māori who did not own their own home were more likely to rate the wellbeing of their whānau poorly, compared to those who lived in an owner-occupied dwelling. This may also be related to the quality of housing. Although the rates of crowding have been falling for Māori, they have consistently been higher than those for Pākeha. Data from the 2018 census indicated that 20.8 percent of Māori lived in a crowded house, while the rate for Pākeha was 5.3 percent. The rates of severe crowding were also much higher for Māori (7.8 percent), compared to Pākeha (1.3 percent).[14]

Stark differences in wealth leads to further inequality

Wealth inequality is particularly pronounced for wāhine Māori households. Stark differences in home ownership rates across Aotearoa New Zealand for wāhine Māori households compared to non-Māori wāhine households creates a long-term wealth gap. Home ownership is a pathway to creating intergenerational wealth for whānau, something that wāhine Māori, with low ownership rates, are limited in their ability to achieve.

This also poses as an additional barrier and challenge in terms of access to capital for entrepreneurial ventures. Commercial banks in Aotearoa New Zealand often view small business lending as risky, and require some form of collateral that they can lend against. This usually comes in the form of housing.

For many wāhine Māori, who have lower home ownership rates, the ability to borrow against a home is not an option. This is a barrier to entry into business ownership and entrepreneurial ventures. This, in turn, limits their ability to earn higher incomes associated with businesses ownership. Wāhine Māori households received just 3.8 percent ($1.8 billion) of the total entrepreneurial and dividend income earned by all households in Aotearoa New Zealand in 2022.

The share of wāhine Māori enterprises of total operating surplus is one percent

The gross output, or trading revenue, of all wāhine Māori entities equalled nearly $12 billion in 2022 (Table 5). This was 1.8 percent of the total gross output of all enterprises in Aotearoa New Zealand. The gross output measure is akin to the turnover, or total revenue, of a business. After deducting wages for the use of labour and other production costs, the total operating surplus of wāhine Māori entities was $1.3 billion. This represents only one percent of the total operating surplus of all enterprises in Aotearoa New Zealand, reaffirming the under-representation of wāhine Māori in business. Wāhine Māori enterprises had a slightly higher share of revenue distributed as wages (26 percent) compared to non-wāhine Māori enterprises (22 percent).

There are three principal outlays for wāhine Māori enterprises: distributions of income and dividends to households ($1.8 billion); capital spending ($888 million); and corporate tax ($355 million). The distributions to households (also pictured in Figure 14) represent the proceeds of business, mostly self-employed, to households, but also include payments from trusts and incorporations.

14 Where two or more additional bedrooms are needed to accommodate all residents.

Table 5: Producer sector income and expenditure, 2022

Producer enterprises sector ($million)	Wāhine Māori	Aotearoa New Zealand
Gross output of enterprises	11,983	655,649
LESS Costs of production		
Compensation of employees	3,137	144,035
Intermediate and other input costs	6,267	358,118
Sub-total	**2,579**	**153,496**
LESS Surplus in own dwellings	1,254	17,360
Operating surplus of enterprises	**1,325**	**136,136**
Other income - insurance claims	16	877
Other income - overseas		6,846
Sub-total	**1,341**	**143,859**
LESS Outlays		
Distributions to households: entrepreneurial income and dividends	1,804	47,629
Corporate tax	355	19,598
Overseas payments		14,791
Capital spending	888	52,830
Sub-total	**3,047**	**134,848**
Net savings	**-1,705**	**9,011**

Source: BERL analysis

Capital investment spending by the wāhine Māori enterprise sector comprises spending on new or replacement machinery or equipment, as well as spending to maintain or improve the value of land and other assets. For wāhine Māori, the level of capital spending equated to 1.7 percent of total capital spending in Aotearoa New Zealand, which could imply that wāhine Māori businesses are either not prioritising capital investment at the same level as other businesses, and/or are not in the financial position to do so. The latter would align with the income and wealth gap that has previously been presented.

As evident in Table 5, net savings from wāhine Māori enterprises was negative. There are multiple potential causes of this. Firstly, it is important to note this sector is tied to self-employed individuals. One reason could be that a large share of wāhine Māori enterprises are young/new businesses that require larger cash injections. Income levels might also play a part, with self-employed wāhine Māori potentially pulling out money of their enterprise to pay themselves. The analysis period and surrounding economic conditions would have an effect as well, with potentially more cash negative enterprises at the time. Additional research is required to completely understand this result.

5 Ngā tūāpapa o te taiao wāhine Māori Foundations of the wāhine Māori ecosystem

5.1 Wellbeing - measuring beyond GDP

"Our Gross National Product ... measures everything, except that which makes life worthwhile."

- Robert F. Kennedy, University of Kansas speech, March 18, 1968

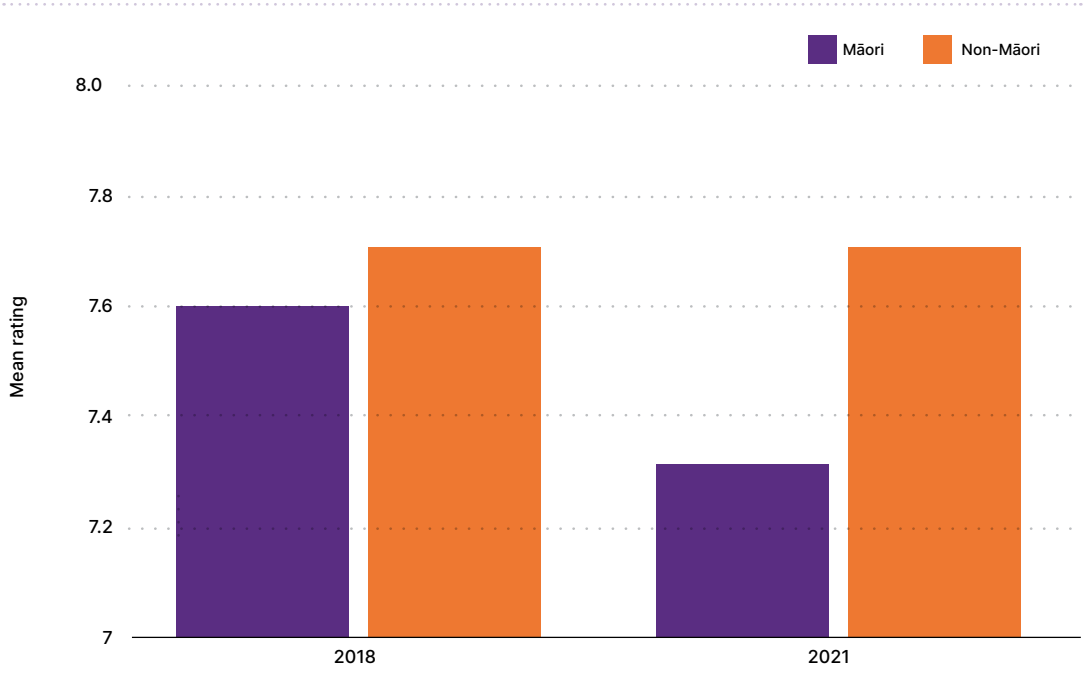
Money, wealth, income, profit, wages, revenue, GDP, or whatever else we want to call it, has, for most of economic history, been the sole indicator of success for individuals, households, firms, and nations. GDP has been used as a proxy for not just economic, but overall, wellbeing for decades. Simon Kuznets, the chief architect of GDP as a measure, himself warned against equating the two concepts. He emphasised that GDP is just a measure of economic activity, not of wellbeing. The atrocities that have been committed in the name of GDP growth are countless and include the large scale destruction of our natural world, the decimation of indigenous populations and cultures, and the countless health problems arising from air, water, and land pollution. The flaws of using GDP as the sole measure of progress have been discussed in much detail and are well-known. In her book, If Women Counted, Waring (1988), points out the deliberate omission of two important indicators in the measurement of GDP; changes to the natural environment and the value of unpaid work. It is well known that what gets measured gets managed, and Waring argues that ignoring these very important measures is an obvious blind spot for policymakers. Costanza, Hart, Talberth, and Posner (2009) provide a brief history of GDP as a measure, and make the argument that it has its benefits, but has been severely misused by policymakers. The authors make several well-established arguments on the limitations of GDP as a wellbeing measure. First, GDP growth actively promotes the depletion of natural resources faster than they can regenerate. Second, GDP masks inequalities and pays no consideration to intersectionality. Finally, apart from unpaid work, GDP also misses other transactions in the economy, namely the illegal and informal economies. The (many) limitations of GDP are discussed in countless papers, and a full discussion is beyond the scope of this work.

Although its flaws have long been recognised, for decades Indigenous peoples, academics, and social advocates in the "developing" world, who have called for systemic change, have been silenced. It was only in the twenty-first century, when the "developed" world started to feel the very real impacts of the destruction committed in the name of GDP growth, did policymakers start to pay attention. Since then, several models and frameworks that go "beyond GDP" have been developed. Many of these consist of thinly veiled indicators that perpetuate the age old practice of placing GDP growth above all, but some have made real progress on the issue. Further discussion on alternative models and frameworks, and subjective wellbeing, appears in Appendix E.

5.2 Wellbeing, are we satisfied with our life?

Māori have lower rates of self-reported life satisfaction compared to non-Māori. Between 2018 and 2021, the gap between European and Māori self-reported satisfaction with life widened significantly (Figure 17).[15] Sibley, Harre, and Houkamau (2011) found that there was an increase in the subjective wellbeing gap between Europeans and Māori between 2005 and 2009, a period which included the last major global economic downturn before COVID-19. The authors argue that the widening of this gap can be attributed to differences in the degree to which material and psychological wellbeing deteriorated for Māori. The systemic buffer that Pākeha benefitted from, in terms of access to social and financial resources, protected their personal wellbeing from the economic downturn. This was not the case for Māori, who did not have such a buffer.

Figure 17: Overall life satisfaction



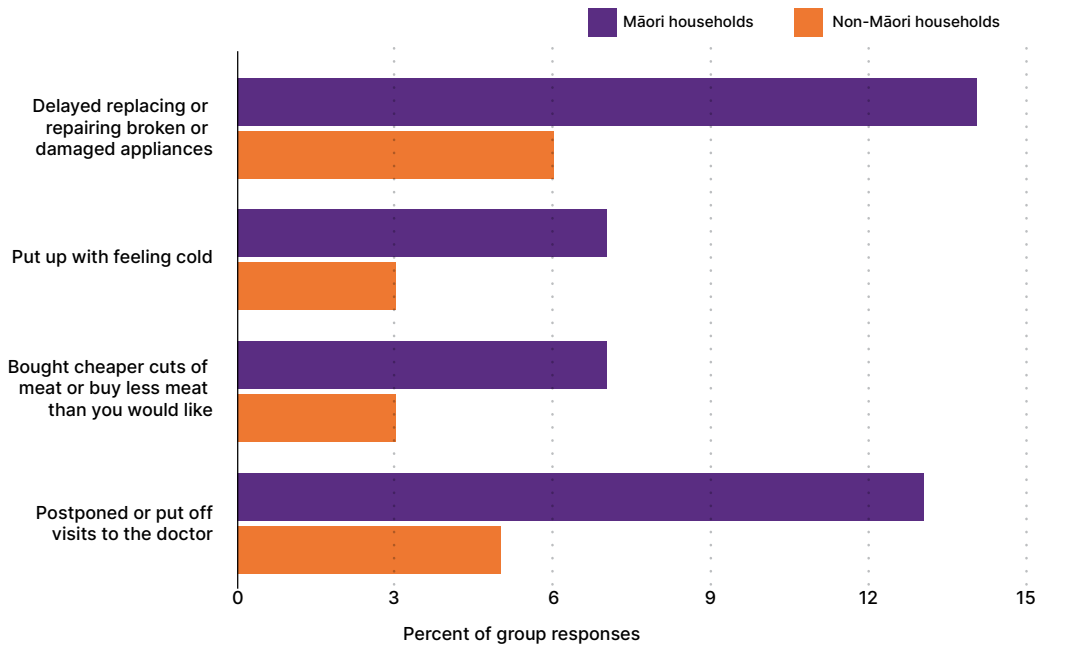
Source: Stats NZ, General Social Survey 2018 and 2021

15 Where 10 is completely satisfied and zero is completely dissatisfied.

Material wellbeing

Self-reported life satisfaction is linked to material wellbeing. Research conducted by MSD (2016) showed that the proportion of people who rate their overall life satisfaction highly increased as their material wellbeing increased. In 2014, 92.4 percent of people in the higher material wellbeing index category were satisfied with their lives, compared to just 62.1 percent of those in the lower middle material wellbeing index. The household economic survey (HES) is an important source of information on the material wellbeing of households. Questions in the HES cover various aspects of wellbeing, including health and economic wellbeing. Māori households are much more likely to rate their wellbeing lower, compared to non-Māori households. Figure 18 shows that Māori households are significantly more likely to make budgetary cuts to keep household expenses low. Clearly these have repercussions for wellbeing outcomes. Putting off doctor's visits and putting up with feeling cold can have impacts on both short- and long-term physical wellbeing.

Figure 18: Percent responding "a lot" to have you done the following in past 12 months?



Source: Household Economic Survey 2021

Over a third (36 percent) of Māori households also said that they would be unable to purchase a non-essential item costing $300 in the next month. The relative share for other households was 20 percent. When asked whether their household would be able to meet an unavoidable expense of $500 in the next week, 16 percent of non-Māori households said that they would not be able to do so. The share for Māori households was almost double at 30 percent. Income gaps between households also lead to wealth gaps, and high debt, perpetuating the cycle of negative wellbeing outcomes.

5.3 Māori wellbeing

A number of conceptual frameworks have been developed over the years to capture wellbeing from a Māori perspective. Durie (2006) established that Māori wellbeing can be measured from either a universal or Māori-specific perspective. Universal measures apply to everyone, including Māori, and can include indicators such as life expectancy, educational outcomes, and housing standards. He notes that Māori wellbeing also depends on Māori-specific measures such as te reo proficiency, connection to whānau, and knowledge of tikanga. Each measure of wellbeing must be applied at three levels: Māori as individuals, whānau, and Māori as a whole population. The individual level includes four dimensions which are taha wairua (spiritual health), taha hinengaro (mental health) taha tinana (physical health) and taha whānau (relationships with family and community). There is an emphasis on maintaining balance between these dimensions. The second level of whānau wellbeing includes the collective capacity for Manaakitanga (care), Pupuri Taonga (guardianship), Whakamana (empowerment), Whakatakato Tikanga (planning), Whakapūmau Tikanga (cultural endorsement), and Whakawhānaungatanga (whānau consensus). The third level of wellbeing, which includes the whole Māori population, contains outcomes based on the principles of connectedness, specificity, focus on Māori, commonalities, and relevance, and also on two domains; human capacity and resource capacity. The four outcome classes are Te Manawa (a secure cultural identity), Te Kāhui (collective Māori synergies), Te Kete Puawai (Māori cultural and intellectual resources), and Te Ao Turoa (the Māori estate). Each of these classes are broadly based and contain specific goals that can be applied within policymaking. The approach is also underpinned by the inseparability of human wellbeing from the natural environment.

Frameworks that truly seek to understand Māori wellbeing from a Māori perspective emphasise that both the individual and the collective wellbeing of a population are closely intertwined with whānau wellbeing. The six whānau capacities developed by Durie (2006) are each linked with a best outcome, and the author notes that any indicators should reflect these best outcomes. For example, indicators within the Pupuri taonga (guardianship) function should reflect the best outcomes of "active involvement in decision making about whānau estate, increase in value of whānau assets". Other research on measuring whānau wellbeing follows a similar vein. For instance, a report by the Taskforce on Whānau-Centred Initiatives (Durie et al., 2010), which was formed to create an integrated approach to whānau wellbeing to strengthen capabilities, identified six whānau outcome goals. These goals are met when whānau are: self-managing, living healthy lifestyles, participating fully in society, confidently participating in te ao Māori, economically secure and successfully involved in wealth creation, and cohesive, resilient, and nurturing.

He Ara Waiora is another conceptual framework developed by the Treasury to understand Māori wellbeing. It is built on te ao Māori knowledge and perspectives on wellbeing. Here, wellbeing takes the form of waiora. The ends outline what is important for waiora, while the means are the tikanga values or principles that help achieve those ends. The three ends are wairua (spirit), te taiao (the natural world), and te ira tangata (the human domain). The means to achieve these ends are kotahitanga (coordinated effort), tikanga (making decisions with the right values), whanaungatanga (fostering strong relationships through kinship and/or shared experience), manaakitanga (enhancing the mana of others by showing them proper care and respect), and tiakitanga (guardianship, stewardship).

A Māori statistical framework

Stats NZ has made significant, world-leading efforts towards using the capabilities approach as a theoretical base to devise a framework to measure Māori wellbeing and development. This has involved extensive consultation with Māori to develop a guide to understand, frame, and present Māori wellbeing within te ao Māori. Stats NZ's He Arotahi Tatauranga is an internationally recognised framework that is essentially consistent with the leading literature on development theory (Baker, 2016). In the journey towards the development of a Māori Statistics Framework, Stats NZ acknowledged that previous approaches were not working for Māori, and statistics that were being produced for this group were a by-product of information collected for the rest of the population (Wereta & Bishop, 2006). The new framework established Māori wellbeing as its goal, and Māori development as the process to attain that goal. Wellbeing was defined as a state in which Māori are able to live the life they choose to live (functionings). Māori development was defined as a

process of enablement and empowerment that extends the scope for how people can improve their own lives (capabilities).

Note that most importantly, He Arotahi Tatauranga has embedded within it the concepts of empowerment, self-determination, freedom, and security, which are missing from other frameworks. As discussed previously, the inclusion of these concepts allows us to see to what extent people have the freedoms and options to maximise their own wellbeing, and allows policy to work to expand the set of options available to people. Māori wellbeing in He Arotahi Tatauranga is made up of six dimensions:

- **Te ao Māori:** Key areas under this include te reo, tikanga, and mātauranga. This dimension also serves the purpose of highlighting the cultural diversity within Māoridom
- **Human resource potential:** This is articulated by mātauranga Māori and includes education, knowledge, wisdom, skills, and understanding. It also includes characteristics of the population, such as health, the talents embodied within the labour force, skills, knowledge, and the potential to achieve the desired states or activities
- **Empowerment and enablement:** This dimension includes concepts such as whakamana, which recognises that the ability to act in a self-determining way is integral to wellbeing
- **Economic self-determination:** This is captured in tino rangatiratanga, which reflects that Māori retain rangatiratanga over their resources and taonga. This enables Māori to have the material wealth and income they need to meet their own requirements, and to contribute to wider economic growth
- **Social capability:** This is expressed as mauri, the life principle. Social capital and social cohesion are included here
- **Environmental sustainability:** As Durie (2006) noted, wellbeing for Māori is closely intertwined with the wellbeing of the natural environment. The natural world also provides resources for economic, social, and cultural development.

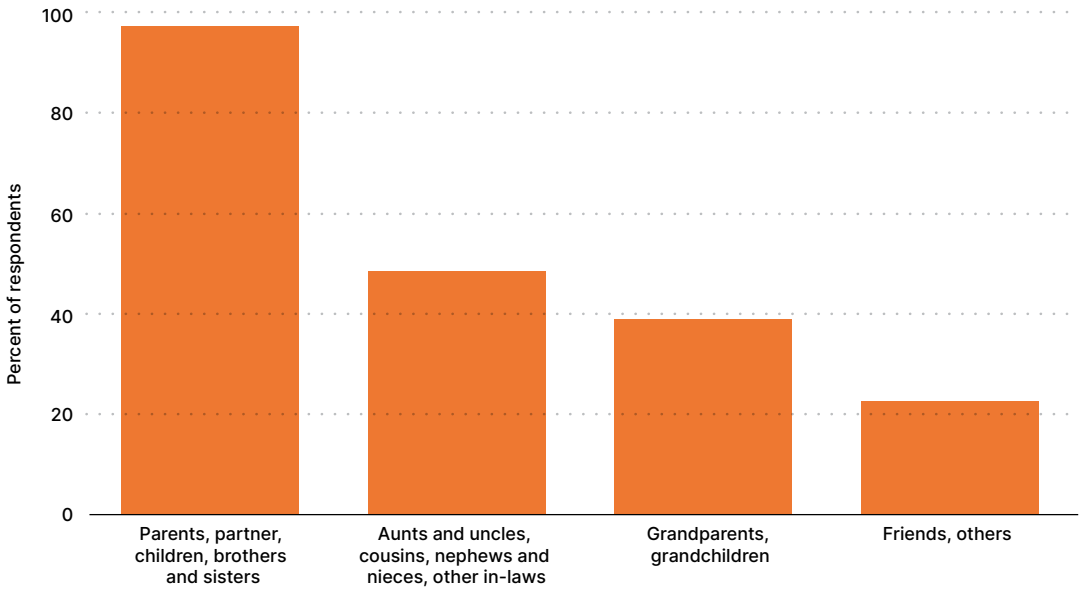
Another key feature of the framework is its recognition of the interplay of each of these dimensions. None of them can stand in isolation, and each is of equal importance. For example, if we consider the topic of Māori land, this can fall under the dimensions of te ao Māori, empowerment and enablement, and economic self-determination. Under the six dimensions are 18 development topics of significant interest to Māori. These are; Māori language; Māori knowledge; Mara; wāhi taonga; wāhi tapu; Māori land; population; families and households; social connections; modern knowledge, skills, and attachments; health; housing; income and expenditure; work; social issues; Māori business development; participation in political decision-making; and rights.

In the framework each of the development topics intersects with one or more dimensions of Māori wellbeing. Under the intersection of dimensions and topics are measures and their associated indicators.

Te Kupenga

Te Kupenga is a survey of Māori social, cultural, and economic wellbeing. It is a post-censal survey and was undertaken for the first time in 2013, and again in 2018. The survey is based on the framework provided by He Arotahi Tatuaranga, and Māori wellbeing is measured and understood within te ao Māori. For example, in national- and regional-level statistics, the household (or individual) is the most frequently adopted unit of measurement. In traditional Māori society, there is no concept of a “household”. The whānau represents the lowest level of social organisation. A household cannot be used as a proxy term for whānau, and whānau and individual wellbeing are essentially inseparable. However, most national and regional level statistics do not collect data at a whānau level. Moreover, the boundaries of what constitutes a whānau are not concrete, and can even change over time. Te Kupenga was the first statistical survey to incorporate a whānau measure and not only does it use whānau as the lowest unit of measurement (behind self/individual), but it is also inherently flexible in this definition. In other words, respondents are not told who is included in their whānau, but have the agency to describe this themselves. This approach recognises that no standard definition exists and who is, and who isn’t, considered part of a whānau can vary (Figure 19).

Figure 19: Groups included in whānau



Source: Stats NZ, Te Kupenga 2018

Te Kupenga is a rich source of data on Māori cultural wellbeing. The four areas of cultural wellbeing it collected information on are: wairuatanga (spirituality); tikanga (customs and practices); te reo; and whanaunatanga (social connectedness). Te Kupenga can also be linked to other data sources, such as the Census, providing data on universal measures of Māori wellbeing, for instance, measures of economic self-determination.

We know that in te ao Māori the distinction between the self and the collective (whānau, hapū, iwi) is blurred. Nevertheless, attempts at understanding Māori wellbeing continue to ignore this aspect. Te Kupenga allows us to understand the dynamics behind self-reported whānau wellbeing. An analysis of data from the 2013 version of Te Kupenga by Kukutai, Sporle, and Roskruge (2017) showed that wāhine Māori are more likely to report higher whānau wellbeing than men. The two strongest determinants of whānau wellbeing were found to be quality of whānau relationships and individual life satisfaction, providing further evidence on the interconnectedness of the self and whānau.

5.4 Wāhine Māori and wellbeing

Māori women and men have always been involved in the obvious Te Tiriti issues relating to land, language, forests, and fisheries. Māori women have also always been involved in the harder and more complex issues of collective identity, whānau, whakapapa, whai rawa, wairua and kainga.

- Ripeka Evans, Mana Wāhine Kaupapa Inquiry Tūāpapa Hearings

Wāhine Māori are, and always have been, drivers of cultural recovery and preservation. Since pre-colonial times, wāhine Māori have come together to advance the wellbeing of their whānau. Collectivisation and organisation have been used by wāhine Māori as the means to drive social change and promote wellbeing since time immemorial. Prior to European contact, this included undertaking activities such as cooking, weaving, contributing their skills to projects such as the building of whare whakairo, and helping to raise the younger generations. Colonisation threatened nearly every aspect of the traditional Māori economy and society. Nevertheless, wāhine Māori have spearheaded the preservation, and revival, of Māoritanga and te reo for decades.

The tūāpapa hearings, which are part of the Mana Wāhine Kaupapa Inquiry (Wai 2700), provided a tūāpapa (foundation) for the wider inquiry. These hearings focused on the tikanga of mana wāhine, and the pre-colonial understanding of wāhine in te ao Māori, firsthand. The evidence presented in these hearings has helped to build a picture of wellbeing through the experiences of wāhine Māori, and their role in safeguarding this wellbeing.

"In more modern times, when te reo Māori was at a critical stage of being lost, it was predominantly wāhine Māori all over the country who took on the role as teachers of te reo Māori. In garages, sheds, homes everywhere our kuia were teaching te reo Māori to our tamariki. This movement gained momentum very quickly and became a landslide."

- Deirdre Nehua, Mana Wāhine Kaupapa Inquiry Tūāpapa Hearings

A nationwide movement was launched by wāhine Māori in response to the threat of the erasure of te reo and Māori cultural values. Concern for the survival of te reo Māori was expressed by members at the first Māori Women's Welfare League meeting in the 1950s. Prior to the 1980s, the number of rangatahi who could speak te reo was in serious decline as a result of the prevailing educational policy and rapid urbanisation. It was only in 1982 that the first kōhanga reo opened in Wainuiomata (New Zealand History, 2018), after decades of rallying.
By 1990, there were over 600 kōhanga reo throughout Aotearoa New Zealand. Kōhanga reo were grounded on the Māori model of whānau development, and aimed to bring together kaumatua, who were fluent speakers, with mokopuna and their parents. Apart from pushing for the revival of te reo, another important aspect of the kōhanga reo movement was to enable the adults involved to extend their own language and cultural learning, and develop other skills such as management and administration. The great majority of the over 4,000 staff and other adults involved were wāhine Māori, 90 percent of whom were working as volunteers. The tradition of the intergenerational transfer of te reo, tikanga, and āhuatanga Māori continues to this day. As of 2018, Te Kohanga Reo was the largest employer of wāhine Māori in the early childhood

learning sector, highlighting their continued contribution. Kōhanga reo have played an integral part in the revitalisation and preservation of not just te reo, but Māoritanga in general.

The promotion and preservation of cultural values by wāhine Māori continues to this day. Results from Te Kupenga 2018 show that wāhine were more likely to teach or share Māori culture with others (51.3 percent of those surveyed) compared to tāne Māori (40.9 percent of those surveyed). Wāhine Māori were also, on average, more proficient at te reo; 20.4 percent reported that they could speak te reo very well or fairly well, compared to 15.3 percent of tāne. They were also more likely to report being able to understand, read with understanding, and write te reo Māori very well or fairly well.

Table 6 shows that wāhine Māori are, on average, more likely to rate culture, spirituality, the environment, kaitiaki practices, and te reo as being quite or very important, compared to tāne Māori. The biggest differences exist in how highly wāhine and tāne rate spirituality and te reo, with a significantly higher share of wāhine Māori placing importance on these.

Table 6: Proportion of Māori who self-rated quite or very important, 2018

Proportion of Māori who self-rated quite or very important	Tāne (%)	Wāhine (%)
Culture	41	50
Spirituality	40	57
State of the environment	91	93
Kaitiaki practices	83	87
Te Reo	26	37

Source: Te Kupenga 2018

6 Ngā mahi utukore ā ngā wāhine Māori
Wāhine Māori and unpaid work

The concepts of "volunteering" and "work without pay" are based on Eurocentric perspectives on the world of work, and the selective practice of valuing only some types of work. In many Indigenous cultures, including in te ao Māori, unpaid work is strongly associated with a sense of community, kinship, responsibility, and reciprocity (Kerr et al., 2001). The Māori identity is based on whakapapa, resulting in a sense of self which is deeply intertwined with the collective. The development and preservation of social capital shapes Māori perspectives on work. Robinson and Williams (2001) note that in te ao Māori, the distinction between social and cultural capital disappears in that cultural capital is an important aspect of social capital. Similarly, the expression of social capital is shaped by cultural influences such as tikanga and kawa. The authors also argue that the conditions for joining Māori associations are, in part, driven by obligations to one's whānau, hapū, and iwi. Social capital and the Māori concept of mahi tūao (voluntary work) is underpinned by manaaki (showing respect, generosity, and care for others), hāpai (to uplift, elevate, or enhance), and tautoko (to support within the community).

According to Mead (2016), pre-colonisation, only tohunga whakairo (master carvers) were compensated for their contribution. Everybody else contributed their time as mahi tūao for their hapū or iwi. Today, although technical jobs (such as electrical work, carpentry, building, plumbing, and painting) are carried out by paid specialists, all work on the marae is still voluntary. The chain of mahi tūao on the marae includes butchers who slaughter pigs and cows, divers who collect kaimoana, cooks, dishwashers, and cleaners etc.

6.1 Te ao Māori perspectives on unpaid work

Recent (post-colonial) attempts at understanding voluntary work in te ao Māori have led to the usage of the term "mahi aroha", which translates as work performed out of love, sympathy, or caring through a sense of duty (Office for the Community and Voluntary Sector, 2007). This definition captures the intentions behind the work wāhine Māori perform within the household, and beyond. Many wāhine Māori do not classify the work they do for their whānau as separate from their day-to-day activities. The motivators that sit behind mahi aroha are the same as those for mahi tūao. Some key motivations for mahi aroha were identified in the Office for the

Community and Voluntary Sector report. The common links across all participants' motives were:

- **Tikanga:** Doing the "right thing" according to te ao Māori as passed down by kaumatua
- **Cultural survival and recovery:** Ensuring the preservation and survival of tikanga Māori
- **Extent of need:** Responding to the needs of one's whānau.

For wāhine the key motivator for undertaking this work is often simply to express aroha. Pre-colonisation, the distinction between the market, the state, and the household did not exist. All Māori needs were met within the whānau, highlighting just how vital mahi tūao and mahi aroha were in the preservation and enhancement of economic, social, cultural, and environmental wellbeing. The external influences imposed by colonial political, social, and economic structures contributed to the evolution of whānau, hapū, and iwi based voluntary contributions, to the establishment of business oriented organisations (Te Momo, 2003).

Urbanisation and the disruption to whānau

Today, the family lifestyle of Māori is vastly different from the traditional whānau, and resembles Pākehā familial structures (Moeke-Pickering, 1996). In other words, single family households are now the norm. This shift has invariably resulted in a breakdown of the many types of support that the traditional whānau provided.

The social, cultural, and political shifts that happened in Aotearoa New Zealand in the post-colonial era were disruptive for wāhine Māori, and their way of life had to be significantly reorganised. The whānau is the basic building block of the whole Māori social system. Prior to colonisation, the whānau functioned as the traditional social and economic unit (Mead, 2016). Each whānau was fairly self-sufficient, undertaking tasks such as working a kūmara plot, building a waka, building an eel weir, fishing, and hunting. Whānau members also regularly met at their marae to discuss matters that affected their common welfare. The value of maintaining these links to whānau and hapū were passed on through the generations.

Before the end of the Second World War, while there was some urban migration, the vast majority of Māori lived rurally (Meredith, 2015). Māori who lived rurally, were geographically and socially distant from Pākehā. They were able to maintain many traditional lifestyle practices. Rural Māori were closer to their marae, shared resources with their whānau, and maintained the traditionally extensive social and cultural links with the rest of their whānau, hapū, and iwi.

During the Second World War, young Māori who were not eligible for military service were recruited into industries that supported the war effort. In the 1950s, as the economy boomed, many Māori moved to the cities to seek work. Within a generation, the Māori population went from largely rural, to largely urban. In 1945, an estimated 26 percent of Māori lived in urban areas. By 1986 this share had increased to 80 percent. During this period, a number of external factors conspired to isolate Māori from their traditional lifestyles. One of the biggest influences that threatened the loss of Māori identity and society was the loss of 95 percent of Māori land. This alienated hapū and iwi from their traditional ways of organising since, for Māori, identity was closely intertwined with place (Walker, 1989). The fact that the law, economic structures, and the education system were all controlled by Pākehā and were (and still are) based on their worldview, also contributed to the weakening of tribal structures. The use of broad categories such as nationalism, ethnicity, and race to define people also played a crucial role in alienating Māori from their unique, and varied, identities.

These socio-cultural trends have shaped the "contemporary whānau".

"Whānau, Hapū structures in the past provided an infrastructure of support for child rearing and socialisation in cultural values. Children were literally raised by the whānau but the cumulative effect of colonisation, assimilationist policies, cultural and institutional racism and, finally, urbanisation has almost destroyed these structures."

- Donna Awatere-Huata, Mana Wāhine Kaupapa Inquiry Tūāpapa Hearings

Houkamau (2006) studied, amongst other factors of identity, family structure and relationships, and the differences between wāhine Māori of different ages. Wāhine in the first, and oldest, cohort (born before 1950) were more likely to live interdependently with extended whānau. These wāhine reported that resources such as kai were openly shared amongst extended whānau in times of need, and it was not uncommon for whānau members to also share caring responsibilities. As noted by Jenkins (1992), traditionally wāhine Māori fulfilled their cultural role as part of a community. Whānau members such as grandmothers, aunts, non-Māori wāhine, and even male elders were all responsible for rearing the children of the kainga. A child's parents were not the sole caregivers. This shared responsibility gave wāhine the freedom and flexibility to undertake a range of other roles, including leadership.

In contrast to this, many of the wāhine in the second cohort in Houkamau's study (those born between 1951 and 1969) reported that were raised independently from their extended family networks, and Māori culture and identity was not emphasised in their upbringing. Moreover, the importance of outcomes such as getting a "good job" and "doing well" were underscored while growing up, as was the importance of fitting in to the Pākehā society. Mikaere (1994) argues that the destruction of the traditional Māori whānau was one of the most damaging outcomes for wāhine Māori and left them socially and economically vulnerable. For instance, it increased their dependence on their husbands as breadwinners, isolating them into caregiving at home. For many, the loss of traditional lands and economic hardship meant that they were required to contribute financially. The inculcation of Christian values on what made a woman a good wife and mother compelled them to continue to maintain that role. The gendered education system, and the push to raise Māori girls to be "good wives and mothers", and to gain an education based on cooking, cleaning, child rearing, and housekeeping is extremely well documented (Gemmell, 2013; Mikaere 1994). This physical and cultural isolation, coupled with historical disadvantages, has meant that wāhine Māori are particularly vulnerable to being time poor and overworked, exacerbating these inequities.

Recognising time use

Our current yardsticks of measuring the economy cling to the economic ideals that persisted before the 21st century. The traditional economic lens does not recognise the value of work done in the home, or the community, unless money flows through the formal channels as defined by the system. This means that the wider wellbeing benefits of this work go completely unnoticed. If we are to measure the real value of wāhine, and the wāhine Māori economy, we cannot do this through the age-old male-dominated western economic lens. This would paint a picture wildly inconsistent with reality.[16]

For statistical purposes, unpaid work is generally divided into four major categories: household work such as cooking and cleaning, caregiving for household members such as childcare, purchasing goods and services for the household, and unpaid work outside the home, which includes volunteering for organisations (Stats NZ, 2001). Today, the most commonly cited reason for the exclusion of these activities is that they are too difficult and costly to measure since placing a market value on them can be challenging. The United Nation's (UN) sustainable development goal five is aimed at achieving gender equality and empowering all wāhine and girls. Target 5.4 specifically calls for countries to recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family.

The implications of not measuring unpaid work are well understood. Apart from missing the context

16 https://sdgs.un.org/goals/goal5

in which the work of wāhine takes place, there are also significant policy implications. Not valuing and measuring unpaid work results in the implementation of policies that may hinder the economic participation of wāhine and wāhine Māori. In addition to this, it also results in the incorrect attribution of wellbeing improvements (Ferrant, Pesando & Nowacka, 2014).

The unequal distribution of unpaid work within the household has wide-ranging implications for wāhine in many aspects of the socio-economic sphere. Without understanding, or accounting for, unpaid work, any analysis of gender gaps, differences in labour outcomes between men and wāhine, and unequal access to social protections, are incomplete.

Wāhine participation in paid work has increased substantially over the past few decades.
The stickiness of the perception of wāhine as primary caregivers has meant that many wāhine undertake a "second shift" of unpaid work. In order to place a value on the unpaid work wāhine Māori undertake, and place it in the context of paid work, it is firstly important to understand the nature and size of this work.

Time-use surveys are the single most important source of information for measuring and monitoring unpaid household activity. Time-use surveys identify, classify, and quantify the activities that people undertake during a given period of time. This includes paid work, household work, care work, and leisure activities. Without disaggregated information on time use, it is impossible to quantify and measure the contribution of wāhine outside the boundaries of the market as measured within the formal system. In New Zealand, the last time-use survey was conducted well over a decade ago, in the 2009/10 year. Given the costs associated with administering such a large-scale and detailed survey, there are currently no plans to undertake a time-use survey in New Zealand in the near-term.

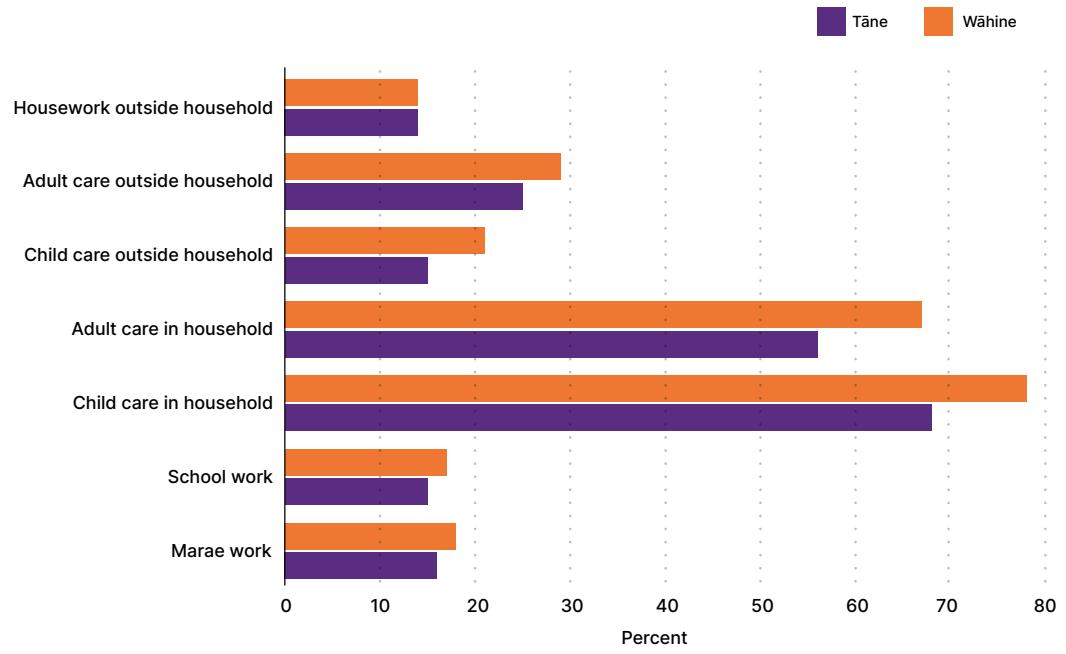
The distribution of paid and unpaid work between men and wāhine within a household can change over time. There are a variety of factors that can cause this shift including the relative wage rates of men and wāhine, changing social norms, and the availability and affordability of services such as childcare.

6.2 The nature of unpaid work undertaken by wāhine Māori

All wāhine over the age of 15 undertake a range of work without pay within, and outside, their households. The most common type of work includes household work for their own household (Figure 20). This includes activities such as cooking, cleaning, repairs, gardening, and laundry etc.

Figure 20 shows the distribution of unpaid work between tāne Māori and wāhine Māori, by category of work, as measured by responses to Stats NZ's Te Kūpenga survey undertaken in 2018. Overall, childcare within one's own household is the biggest area of unpaid work that both tāne and wāhine Māori undertake. Caring for adults within a household is the next biggest area. These are also the two categories that have the biggest gaps in tāne and wāhine participation. Wāhine Māori are more likely to provide care to adults and children within and outside their own household compared to tāne Māori.

Figure 20: Proportion of Māori who spent 20+ days a month on specific activities, 2018

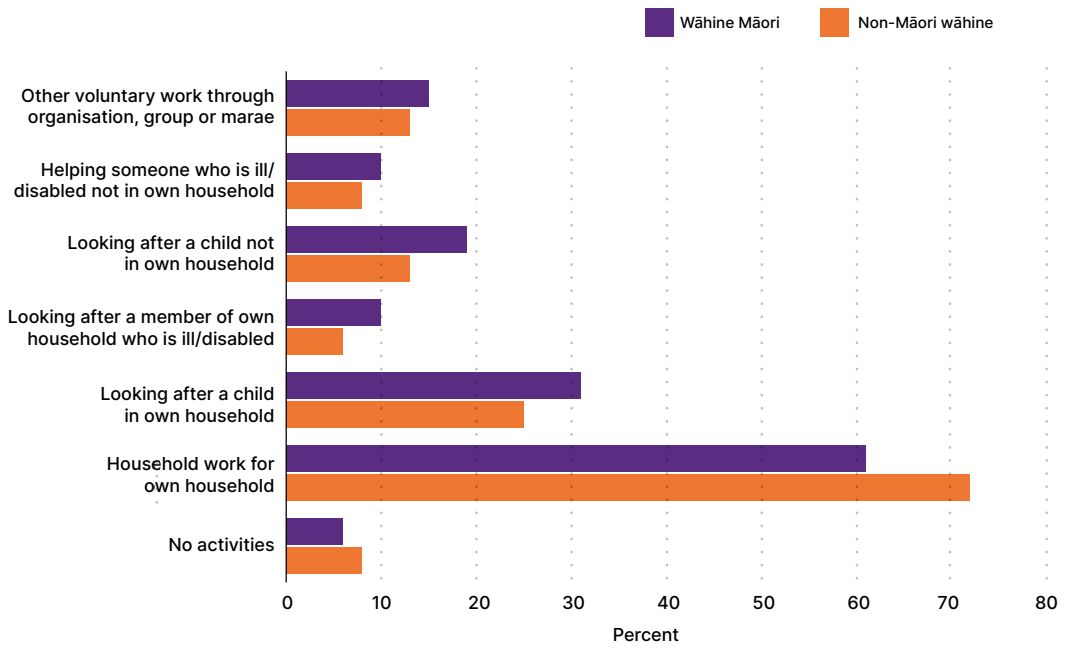


Source: Te Kūpenga Survey 2018

Non-Māori wāhine are also more likely to undertake this kind of work compared to wāhine Māori. Over 70 percent of non-Māori wāhine and over 60 percent of wāhine Māori undertake some form of non-care work within their household.

Wāhine Māori are more likely to perform care work within and outside their own household. A third of wāhine Māori provide care for a child in their own household. This is partially explained by their younger age structure, as well as higher fertility rate, compared to other groups of women. The total fertility rate for all women in Aotearoa New Zealand is 1.75 births per woman, compared to 2.14 births per woman for wāhine Māori. This means that at given point, wāhine Māori are more likely to undertake childcare duties.

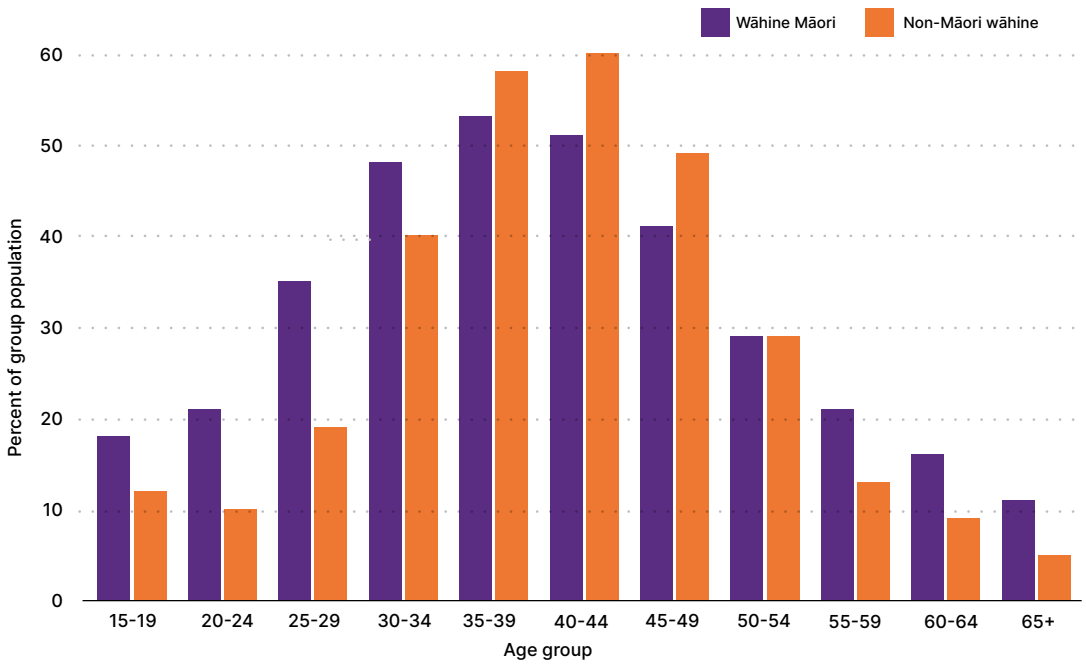
Figure 21: Unpaid work performed in past four weeks, share of 2018 population aged over 15



Source: Census 2018, BERL analysis

Not only are wāhine Māori, on average, likely to have more children, they are also more likely to be younger mothers. The median age of childbearing for all wāhine in 2018 was 30.5 years of age. For wāhine Māori this was lower, at 27 years of age, the youngest of all major ethnic groups. This makes them much more likely to undertake childcare at younger ages. Figure 22 clearly depicts this trend. Wāhine Māori are nearly two times more likely than non-Māori wāhine to look after a child in their own household in their twenties. Bearing the responsibility of childcare at younger ages means that the impacts of the motherhood penalty start to play out earlier for wāhine Māori. This, combined with the fact that wāhine Māori are also significantly more likely to be sole parents has serious implications for their participation in work. Research on outcomes for wāhine after parenthood has shown that they experience a range of negative outcomes. They experience a 4.4 percent decrease in hourly wages, they move from full-time to part-time employment, and they are less likely to be employed (Sin, Dasgupta, & Pacheco, 2018).

Figure 22: Looking after children in own household, share of age group population, 2018

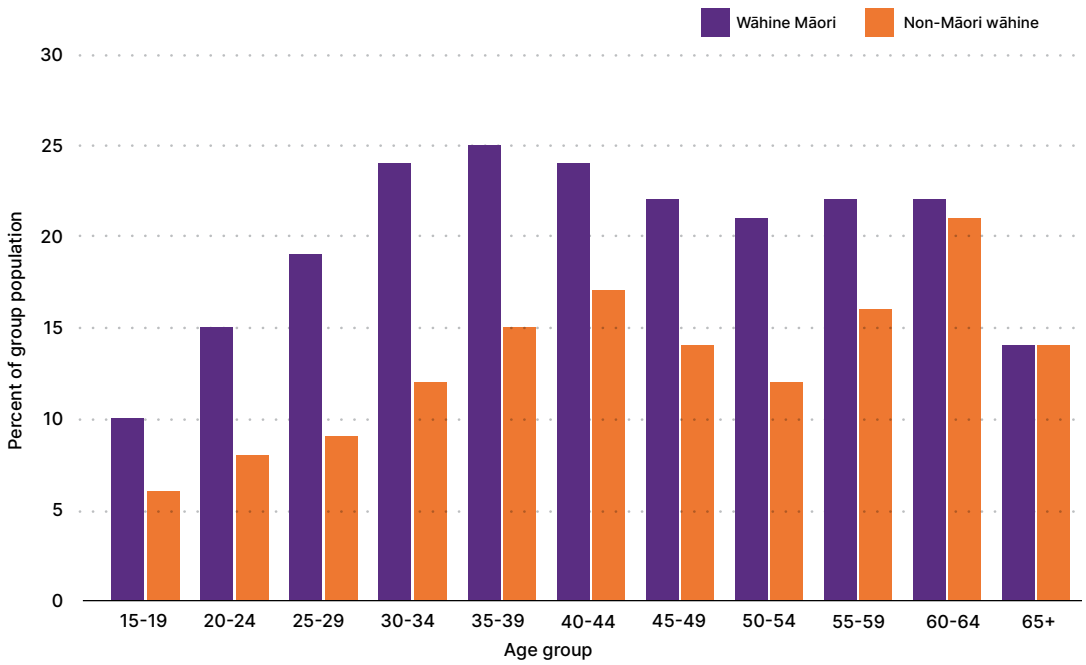


Source: Census 2018, BERL analysis

Traditionally, in te ao Māori, children born within a community are collectively cared for by various members of that community. Thus, these responsibilities are shared. This is still the case for many rural Māori communities where the boundaries of the whānau are extended beyond one's own household. This may help explain the higher share of wāhine Māori providing care for children outside their household, as well as care for adults outside their household (Figure 21). Breaking this category down by age and ethnicity strengths the case for this.

Figure 23 (below) shows the share of wāhine looking after a child not in their own household, by age group. Younger wāhine Māori are significantly more likely that non-Māori wāhine to provide care for children not in their household. The differences are particularly stark for younger wāhine. The fact that the proportion of wāhine Māori undertaking childcare outside their household reaches close to a fifth as early as 25 years of age may have repercussions for how they participate in paid work, how much time they have available for other activities, and also for wellbeing.

Figure 23: Looking after children not in own household, share of age group population, 2018



Source: Census 2018, BERL analysis

It is important to note that the wāhine undertaking this work do not always see it as a burden, and may not even consider it to be "work". It is often simply considered to be part and parcel of what comes with being a mother, or being part of a community. This could therefore result in what could be considered an "undercount" of Māori participation in unpaid work statistics. However, the fact that much of the responsibility for this work falls on wāhine, particularly wāhine Māori, can have implications for wellbeing. In their study on understanding the factors that influence whānau wellbeing, Kukutai, Sporle, and Roskruge (2017) found that Māori who provided unpaid help to those living in other households are less likely to report very high levels of whānau wellbeing (22 percent), compared to those who did not provide any help (27 percent). There was no significant difference in whānau wellbeing for those who provided unpaid help to marae and hapū. On the flip side, those who were able to access general support within their whānau were more likely to report higher whānau wellbeing.

International research has found that gender inequities in time spent on unpaid work has consequences for the mental health of those undertaking this work. Seedat and Rondon (2021) note that the subjective and objective stress associated with childcare and other household work can lead to adverse mental health outcomes. In Sweden and the USA, the "double burden" of paid and unpaid work, and the fact that women bear more of the burden of unpaid work, was associated with higher and more consistent rates of depression.

6.3 Measuring the value of unpaid work

Under the current economic concepts and definitions, for example GDP, unpaid work is excluded from "market" activities. The United Nations System of National Accounts (SNA) is an internationally agreed standard set of recommendations on how measures of economic activity must be compiled. The SNA provides an overview of economic processes. It shows how income from production is modified by taxes and transfers, and how it flows to consumption, saving, and investment (UN Stats, n.d.). Unpaid work, such as care and domestic work, which is disproportionally done by wāhine, is not valued within the SNA. This means that it sits outside of traditional measures of the economy, such as GDP. The linkages between unpaid work, wellbeing, and the macroeconomy mean that any analysis that does not take into consideration the value of this work is partial and incomplete.

The circular flow of income is an economic model that represents the flow of money, labour, and goods and services between the different economic agents including the government, households, and businesses. The unpaid work sector, which is not accounted for in these models, is crucial to mediating the flows within the "formal" economic system. For example, the amount and type of unpaid care work done within the household determines the amount of consumption and savings by households. In the absence of unpaid work, households would purchase these services from the market, leading to lower disposable incomes, and thus lower consumption and savings.

Unpaid work also has an impact on the quality and quantity of labour within the formal system. Households invest time and other resources towards the development of human capital in the form of care work. The absence of this work would undoubtedly have a significant impact on wellbeing and productivity. There is a growing recognition that unpaid care work is not just a constraint on wāhine participation in paid work, but is also fundamental to ensuring the smooth functioning of the entire economy.

A gender-responsive circular flow model developed by the United Nations (2018) shows households and the community care sector providing productive human and social capital to the market. Wāhine work within this sector, which is regulated by social norms rather than markets, without pay. Importantly, employment patterns within the market sector are a result of activities and their distribution within families in the household and community care sector.

In 2008, the French Government created the Commission on the Measurement of Economic Performance and Social Progress (CMEPSP) to identify the limits of GDP as an indicator of social progress and economic performance. Recommendation five of the report was to broaden income measures to non-market activities (Stiglitz, Sen & Fitoussi, 2009). The authors argue that, today, many of the services that people produced and consumed within the household in the past (such as childcare and housework) are now purchased on the market. This shift has resulted in a rise in income within the national accounts, but there has been no change to living standards.

Moreover, how households obtain these services is an important consideration for how households dispose of marketed income. International research has shown that household and market production are substitutes, to a certain degree. A study by Rüger and Varjonen (2008) that included non-market activities in the calculation of GDP per capita for Germany and Finland showed that per capita differences in total economic activity between the two countries, illustrated by extended gross value added, decreased when this measure was used. Germany's GDP per capita was estimated to be €24,863 while Finland's was €26,083. Extended GDP per capita estimates for the two countries were €35,666 for Germany and €35,511 for Finland. Therefore, unpaid work, and the price and accessibility of its substitutes, does influence households' spending decisions, which ultimately has implications for disposable incomes and wellbeing.

Suggested methodologies for measuring unpaid work

The choice of wage rates

A comprehensive guide on valuing unpaid work has been developed by the United Nations (UN) to provide a standard set of recommendations to national statistical offices on valuing time spent on unpaid work and own-use production of services.[17] There are a

17 Guidance on the production of services for other households, i.e., volunteering, is not provided due to methodological challenges.

number of methodological choices available during the process, and the final value can vary significantly based on these choices. Arguably, the most crucial choice is that of the wage rate used to value time spent on unpaid work. The goods and services produced for own use by a household are not valued within the market. Therefore, there are no directly observable market prices.

One of two approaches can be used to impute a value for these services. In general, the two approaches present a choice between the opportunity cost and the replacement cost of doing such work. The opportunity cost approach calls for the use of the average hourly wage of those for whom the work is being valued. In our case, this would mean using the average hourly wage for wāhine Māori. This is the approach we have used in our calculations. According to the UN (2020), the opportunity cost approach is the most relevant to an individual's own consideration of how they should spend their time as it informs decisions on utility maximisation. Alternatively, under the replacement cost method, an average hourly wage that represents the relevant activities covered in the production of the unpaid household services is used. For instance, using the wage rate of a childcare worker for the hours spent on childcare. However, given the complexity with using specialist wages, the UN recommends using a generalist wage instead, such as a general housekeeper wage to value all activities.

The choice of the wage rate used is an important one, and weighs significantly on the final value of unpaid work taking place within an economy. For example, in 1995, Statistics Canada used four wage rates to value own-use production. These were: opportunity cost before tax; opportunity cost after tax; replacement cost – specialist; and replacement cost – generalist. The opportunity cost before tax wage rate resulted in a total value of C$374 billion, while the value using the generalist replacement cost method was C$235 billion.

The Stiglitz, Sen, and Fitoussi (2009) report suggests comprehensive and periodic accounts of household activity, including time spent on unpaid activities, be added as satellites to the core national accounts. Satellite accounts allow analysis of particular aspects of the economy that are not part of the core accounts. For instance, Stats NZ currently has a tourism satellite account that provides information on the levels and impact of tourism activity. Failing to estimate how much unpaid work is done within households, and what kind of work is undertaken, introduces bias into economic estimates. Both the context behind wāhine participation in work, and the outcomes they face are masked. This limits the effectiveness of policy decisions based on economic data that only reflects market based activities.

The value of time for wāhine Māori unpaid work

According to data adjusted to current terms from the last time use survey conducted in Aotearoa New Zealand in 2009/10, each wāhine Māori spent over 17 percent of her day on unpaid work outside the formal economy. In total, wāhine Māori aged over 12 provided a total of 1.4 million hours of unpaid work per day. Translating this into language that aligns with how labour is valued in the formal market highlights how important this work is to the functioning of our economy, and the subsidy the economy receives from this work. If this were to be replaced by paid employment, a total of 168,000 workers would be needed to be employed per day, each working full time, for the same amount of care, household, and volunteering work to be completed.

The value of the unpaid work sector overseas

Overseas estimates have shown that unpaid care work makes a substantial contribution to countries' economies. Much of this contribution remains invisible. Nevertheless, attempts are being made over the world to understand how large the size of this sector really is. Many studies estimate the size of this sector by calculating the value of time spent on such work. Hernando (2022) shows that, according to International Labour Organisation (ILO) estimates, the value of unpaid care and domestic work accounts for as much as 9 percent of global GDP. The unpaid work done by all wāhine makes up 6.6 percent of GDP. In the Asia Pacific region, the variation between countries ranges from 5.5 percent of GDP to 41.3 percent of GDP. Estimates can vary widely depending on how time use is calculated and how the work is valued. In the OECD, using the replacement cost approach resulted in a value of 15 percent of GDP. Estimates were significantly higher with the opportunity cost method, at 27 percent of GDP.

These estimates of the value of time only account for labour inputs and do not take into consideration the intermediate goods, capital, and raw materials that households use to supplement their care work. For example, cooking a meal requires inputs such as the raw

food going into a meal, capital goods such as appliances used, as well as the hours put in by the cook. Thus, the value of time must be integrated into the production boundary of an economy to produce a more comparable estimate of the GDP contribution of the sector. Incorporating this sector into the SNA produces a clearer picture of the entire economy, particularly the way the household sector interacts with the market sector. This allows for analysis of the trade-offs between household and market production, and a comparison of the relative size of each sector. This, in turn, enables analysis from the perspective of long-term growth, productivity, distribution, and capital formation. It is also useful when evaluating the impact of labour market policy decisions for all wāhine in particular.

A number of countries maintain household satellite accounts that extend the production boundary in the SNA to include household production for own consumption. These accounts are separate from, but conceptually consistent, with the core national accounts. Results from the UK's household satellite account indicate that the value of their household service work was equivalent to 63 percent of GDP in 2016 (U.K. Office for National Statistics, 2018). The value of unpaid work was increasingly being driven by adults requiring full-time care. The latest account from 2020 for the United States of America (USA) puts the size of the household production sector at 25 percent of GDP (U.S. Bureau of Economic Analysis, 2022). An analysis over time showed that as more women were participating in paid work, the size of this sector had shrunk from 37 percent in 1965. Given that the latest release covered the pandemic period, the analysis showed that household production increased significantly during 2020, providing a buffer to the COVID-19 recession, reducing the decline in economic activity. The comparison also showed that this increase was driven by wāhine moving from employment to non-employment filling the gap in home childcare needs.

The contribution of unpaid work in households equals a quarter of our GDP

Having an estimate of the level of unpaid production and consumption activity in the economy is a step towards presenting a more accurate picture of people's wellbeing. How people divide their time between work and leisure can provide important information on stress level, work-life balance, and an understanding of the value this work adds to those who benefit from it.

To account for unpaid work within the SAM, a new household production sector has been created. This sector captures the production of goods and services by household members for their own consumption. This sector uses inputs such as unpaid labour and intermediate inputs (which would previously have been final inputs) such as groceries and clothing material. It also uses capital such as kitchen equipment, vehicles, and washing machines. The six "industries" that have been included in the new household production sector are:

- **Clothing services** include buying material to make clothing, washing, and ironing
- **Travel services** include travel associated with household work, childcare activities, purchasing goods, and other unpaid activities
- **Meal services** consist of tasks such as preparing food and drinks for the household's own consumption
- **Housing services** include cleaning, performing repairs, maintenance, financial budgeting, and other household administration
- **Adult care services** are performed by those who physically and emotionally care for other adults
- **Childcare services** include services provided to children such as physical care, teaching, playing, reading, supervising, and other childcare activities.

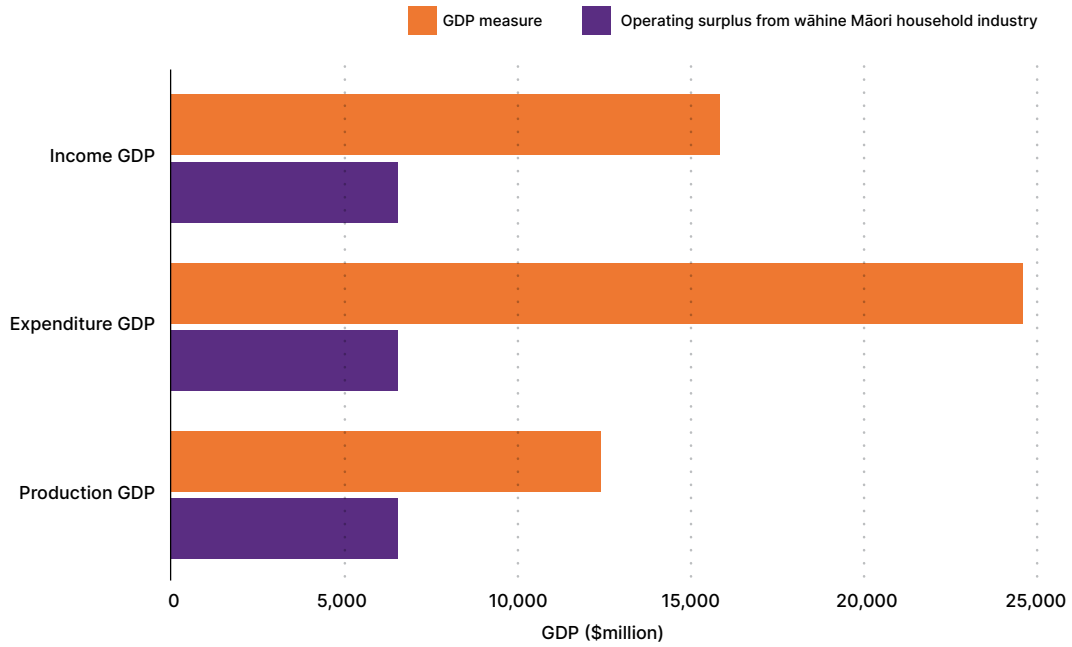
These categories follow those recommended by the guide on valuing unpaid work prepared by the United Nations Economic Commission for Europe (UNECE) (2017). The guide notes that while it is true that the lines can sometimes be blurred between time spent on own-use production activities and time spent on leisure, solving this problem requires a significant amount of further research and can be incredibly subjective on an individual level.

The value of unpaid work undertaken by wāhine Māori equals $6.6 billion

In 2022, Aotearoa New Zealand's production GDP without the unpaid work sector equalled $327.8 billion. Including the contribution of unpaid work, and extending the boundaries of the SAM to include a household production sector, boosts GDP to $408 billion. In other words, the unpaid sector equals 24.5 percent of our GDP. The unpaid work undertaken by wāhine Māori in particular makes up eight percent of the total value add created by the household production sector, which equals $6.6 billion of value created in the 2022 year.

Figure 24 shows the operating surplus produced by the household production sector, compared with the three GDP measures, for wāhine Māori. The operating surplus from the household sector is nearly half the size of the production GDP contribution of wāhine Māori. This is because of two main factors. Firstly, the substantial contribution that wāhine Māori make towards the household sector, in terms of the unpaid work they perform for whānau, is now considered to be a productive industry. Secondly, wāhine Māori have low rates of business ownership. This means that the overall surplus created by wāhine Māori organisations from the production of market goods and services is relatively low. This is similarly the case for income GDP, which reflects the income earned from the production of goods and services. It is higher than production GDP because it also accounts for income received by individuals. Under the extended version of the SAM, unpaid work is also valued and counted as income from work.

Figure 24: Operating surplus from wāhine Māori household industry (unpaid work) and GDP measures



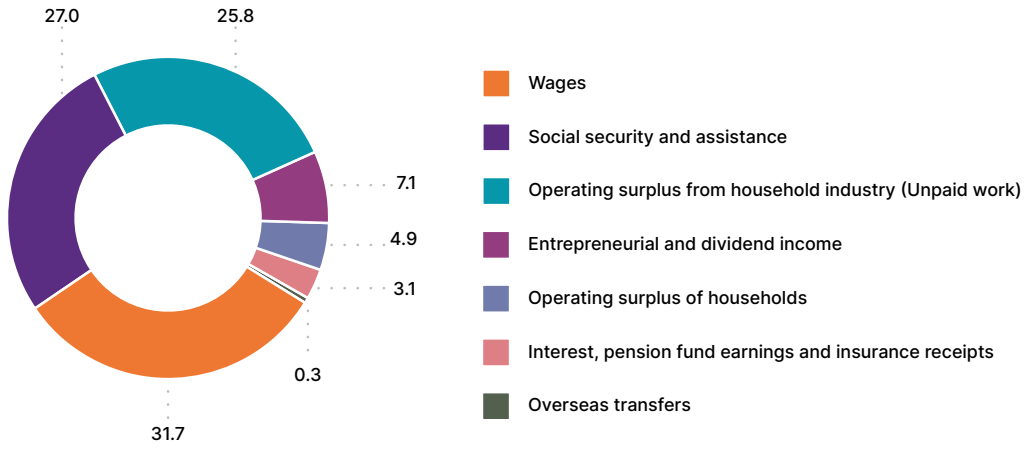
Source: BERL analysis

The expenditure GDP captures spending by wāhine Māori households on goods and services in the economy. This measure is the highest for reasons explained in the preceding sections, which diminishes the comparative contribution of unpaid work. Nevertheless, it still contributes a significant share to expenditure GDP.

Household sector

Figure 25 presents a view of the income sources of the household sector, after recognising the unpaid work undertaken by households as a productivity industry. This can be compared to Figure 14, which illustrates incomes sources without the inclusion of unpaid work. Treating unpaid work as a productive industry boosts wāhine Māori household sector income by $6.6 billion, bringing the total income from all sources up to $25.4 billion. The operating surplus wāhine Māori households "earn" from the new household industry is the third largest, behind wages and social security and assistance benefits. This highlights the immense value households gain from the unpaid work undertaken by wāhine Māori. The $6.6 billion captures the value of activities such as caregiving, education and skills development of children, providing meals, and maintaining and strengthening social and cultural bonds with the rest of the community. It is hard to capture the entire spectrum of short and long-term wellbeing benefits that result from the time invested by wāhine towards those around them. Nevertheless, assigning a value to this work and bringing it into the fold of traditional economic valuation techniques is a first step towards understanding the linkages of such work with other aspects of the economy. It helps underscore the fact that to truly promote gender equity at all levels, the "second shift" of work wāhine perform outside the measured economy cannot be ignored.

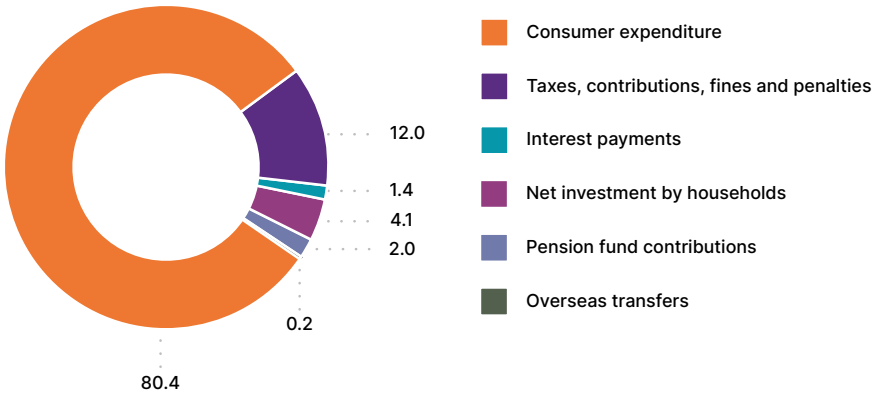
Figure 25: Wāhine Māori household income sources, including unpaid work, % of total, 2022



Source: BERL analysis

Recognising unpaid work as a productive industry also results in an increase in household consumer expenditure (Figure 26). The consumer expenditure of wāhine Māori households increases from $17.7 billion to $23.4 billion. This is because activities that were previously unaccounted for, such as cooking, cleaning, and childcare, are now a productive industry that households purchase from. Thus, the total value of goods and services purchased by households increases, and the share of consumer expenditure increases from 75.8 percent of total household outlays (Figure 15) to 80.4 percent with the inclusion of a new industry to account for household production of goods and services for own consumption.

Figure 26: Wāhine Māori household outlays, including unpaid work, % of total, 2022



Source: BERL analysis

7 Ngā māreikura i Te Ōhanga wāhine Māori
Leadership in Te Ōhanga wāhine Māori

The signing of Te Tiriti o Waitangi by wāhine Māori is illustrative of the rangatiratanga, mana and leadership roles that wāhine had within Te Ao Māori … the Crown and its agents actively denied wāhine Māori signing Te Tiriti. The colonial frame through which the colonising culture viewed Māori was one that looked to men as leaders and chiefs. This caused the negation of wāhine Māori mana motuhake and rangatiratanga over their whenua, taonga, mātauranga, hearts, bodies, minds, beliefs, and physical and metaphysical relationships.

- Ripeka Evans, Mana Wāhine Kaupapa Inquiry Tūāpapa Hearings

Wāhine Māori have a long history and tradition of leadership within traditional Māori society, as well as in the post-colonial setting. Tania Rangiheuea (2021) stated in her evidence for the Tūāpapa hearings that wāhine Māori were leaders, warriors, mothers, decisions makers, spokespersons, advocates, strategists, and intellects. She goes on to note that in the context of European laws and social norms, their roles were quickly marginalised. For example, wāhine Māori were actively discouraged from signing Te Tiriti. Within Aotearoa New Zealand today, wāhine Māori are engaged in leadership roles within their community, their hapū and iwi, as well as in the corporate world.

While the role of leadership is not explicitly highlighted in Te Ōhanga Wāhine Māori ecosystem, it is important to understand how wāhine Māori leadership styles influence their participation in paid and unpaid work, as well as the values that guide their decision making. The insights from this section help build an appreciation of the broader roles and responsibilities that wāhine Māori assume both inside and outside the measured economy, and importance of the preservation of cultural values and the wellbeing of their communities.

7.1 Wāhine Māori leadership - case studies

The case studies presented below provide a window into the leadership styles and journeys of two wāhine Māori leaders. These case studies illustrate the values the wāhine draw on in their leadership, some of the biggest barriers and challenges they face, as well as the importance of having layered support.

Case studies were undertaken as interviews in a semi-structured manner, to encourage free-flowing and open dialogue. A list of questions/prompts were provided to participants prior.

Staci Hare – chair of Rongowhakaata Iwi Trust

Journey to leadership

Māori and national politics and policies, and how these impact on Mana Whenua rights and values were everyday conversations in Staci's household during her childhood. Her journey to leadership started in Manutuke where she grew up within the fabric of her whānau and the marae. She considers her natural interest in the area to be just as important as the support and encouragement she has received on her pathway to leadership.

"The iwi space is a space that is really good at fostering leadership conditions, but I also had a lot of good mentors growing up."

Staci says that her whānau instilled in her the value of hard work and that nothing comes easy. The mentorship she received from her uncles, aunties, parents, and grandparents has been her foundation. Her understanding of the legacy of the strong-willed and politically active wāhine she descends from also provided inspiration to achieve more.

"There's a legacy that's been left for me, I think, so I always think about the legacy that I have to carry and pass on. And I've got more tools than they had. So that's also why I'm here."

Getting a degree in marine biology, and her subsequent work in the fisheries industry, being an iwi board member since her mid-twenties, and roles in several government departments have also been vital in developing her leadership skills. Working across iwi spaces, and the private and public sectors, and learning how to balance these has been part of Staci's journey.

Leadership values

The values that Staci practices as a leader are drawn from her upbringing. For her, growing up at the pā has been invaluable as manaakitanga was instilled in her from an early age. She believes that the level of care and respect you give is a reflection of your own mana.

"Being pono is a really huge value driver for me. So that's just about being true to whatever it is that you're doing in the context, because it's not as simple as just saying this is the right way. You have to seek a lot of counsel. So, listening to lead is a big thing for me. I don't make decisions lightly, but I also don't make decisions alone."

Staci draws on her dual Māori and Pākeha whakapapa equally. This was a source of diversity in her thinking, and taught her to become confident enough to walk in both worlds. Keeping her connection to the community, and staying grounded has been important in maintaining balance as a wāhine Māori leader.

"You have to have a briefcase and you have to have a kete. And if one's heavier than the other in terms of my experience, then you kind of lose balance."

Barriers and challenges

Being a young wāhine in leadership has presented several challenges for Staci. The prejudices around her age and gender have meant that she has had to work a lot harder to have a voice. Having a voice and standing up for what is right has been the foundation of her value system. She finds that this is not always accepted in all spaces, particularly where people are resistant to change. She believes that breaking the patterns of the past and moving away from a deficit mindset, is key to achieving vitality for her tribe.

"The challenges will break you if you don't have a strong support system and scaffolding around you."

Building trust and promoting cohesion and cooperation internally is a challenge that Staci faces on a regular basis. She considers healthy debate and patience to be key virtues, although she acknowledges that she sometimes lacks the patience to deal with some of the challenges. She stated that often resistance to change, and a fear of the unknown on the part of existing leaders, needs to be overcome.

For Staci, seeking counsel is more important than seeking support. Staci values healthy debate and points out the importance of debating issues that do not necessarily have universal agreement to understand the perspectives of everyone involved. As a leader, she believes that it is important for her to provide a platform for these discussions to take place, which makes for better decisions and shared understanding around pressing issues.

"I'm really lucky, I've got this institution of women, largely women, by the way, who are being active around me."

Staci considers the wāhine in her life to be an invaluable part of her support system. Each link is crucial and adds unique value to her as a leader. This includes her mother, the kaumatua, her sister, cousins, aunties, and her friends. The kaumatua are really good at providing straightforward advice and counsel because of their mana, knowledge, wisdom, and experience they have gained over the years. The marae space is also a crucial form of support. For example, she sees immense value in being able to learn from others in her raranga group.

Providing support

Staci highlights that she has a reciprocal relationship with her own support network, and that care and respect go both ways.

"Where I come from the people who are running the back are as important as the people you see at the front, because those people at the front, they can't host you and care for you, without the people in the back."

Being able to recognise a need and provide appropriate support and advice is an important part of being a leader. Staci takes a view that iwi leadership and accountability spans generations and need to reflect onamata, inamata, and anamata. The iwi's younger generation, is an area of increasing focus, creating pathways for them to take ownership and leadership roles in ways they want to for the tribe. Importantly she thinks that leadership and development of the next generation of young wāhine is one area that we could get wrong if we don't give it enough attention now.

Work without pay

"These are our traditions. This is our tikanga. This is my family. So, I don't view it as work. It's not that it's unpaid work, it's not work, it's my whakapapa. For me, I know I am privileged to have had an upbringing like mine and become a leader for the tribe."

Staci does not view the contributions she makes without pay to be work because it is part and parcel of being a member of the community. Staci believes that there is currently an imbalance around the value placed on tangible assets, such as economic returns, at the expense of mātauranga, identity, and abundance. She believes it is equally important to place value on these intangibles for future generations.

Gina Rangi – Chair of Tuaropaki Trust

Journey to leadership

Gina trained as a lawyer, specialising in resource management and Māori legal issues. She decided to stop practising law because she wanted to work more closely with clients on a project-basis (as opposed to litigation lawyers who are usually involved after a dispute has already arisen). She then entered the world of consulting, helping commercial firms and local and central government engage with Māori communities, and then got involved in treaty negotiations, including for her own iwi. Gina is currently a deputy chief executive of Rotorua Lakes Council and the chair of Tūaropaki Trust.

"My elders had always been of the view that they should bring people on early and train them rather than bring them on as replacement. And so, they were really intentional about that. I was lucky to be able to sit alongside them and learn."

Being exposed to decision making and development opportunities early on was key to Gina's journey to leadership. She talked about the importance of being connected with her own marae community on her pathway to leadership and governance. She considers this to have provided good grounding in terms of getting to know who the local community decision makers were and being seen to be a part of the community. Being mentored by leaders in her own community was crucial, and having their support was reassuring as she took on new roles and experiences.

"As a senior manager, I find it much easier to put myself in the shoes of governance, because I have that experience. And as a governor, I have clear expectations from senior managers because I have that experience too."

Leadership values

Gina does not subscribe to the view of leadership as it is seen in the western world. She has observed the many wāhine in leadership roles in the marae and the iwi tend to be very practical and very hands on, and are not fans of being in the front. For example, she says that many of the wāhine in her community prefer laughing, chatting, working in the community, rather than being in the limelight. She believes that to be a real characteristic of the wāhine leaders of her community – they are very humble and prefer to be in the background doing the mahi and being effective.

"When you're in a position of power and you can't push the envelope then who will?"

Gina strongly believes that those who can, should drive change to status quo, to further equality. For example, she talked about how when she first become a māmā almost 20 years ago, she would take her baby to Board meetings, which challenged the thinking around motherhood for some of the non-Māori organisations attending Board meetings during that time. Her fellow company directors were her uncles and were very supportive, but guests from other organisations were not sure how to respond. She says it is now much more common for companies to accommodate parents who have babies, and recognises that it is much easier to drive change from a position of leadership.

"I tend to see Māori leaders, particularly women, talking much more about the societal impact that they can have. So, you know, it's not just about being a commercially successful land trust, it's about how well can we most effectively use the dividends and the grants to effect social change through employment and education. Amongst my Māori colleagues, it's the focus of our kōrero, what is the social impact that we can have, the generational impact that we can have through the work. That's part of what makes the Māori economy special as they do think about commercial activity as an opportunity."

Gina also believes that commercial and economic success is a tool to further the wellbeing of society, and says that this is a common feature in the values that guide Māori leadership. Māori in all forms of leadership believe in making a lasting generational impact by responding to the needs of their communities. They are able to understand the issues that exist at a grassroots level, and drive change at a structural level by advocating for improved outcomes for their communities.

Barriers and challenges

Gina believes that wāhine leaders still have to operate within a system where sexism is ubiquitous. She noted

that generally the sexism is casual, and is displayed in the assumptions people make. Although younger generations are increasingly aware of these gender issues and discrimination, there is still a lack of willingness to champion change.

"Even though younger generations have been coming through with a bit more gender awareness, never underestimate a person's willingness to rely on systemic inequality to advance their own cause."

Gina also stated that she has been in situations where she has had to deal with more overt sexism, in that her leadership has been challenged on the sole basis of her gender. She had had other tāne leaders stand up for her in those situations, but the fact that it happens is disappointing. It is still not uncommon for the leadership skills of wāhine to be undermined publicly and behind closed doors. Gina recalled instances of the leadership capabilities of wāhine mothers, in particular, being judged.

"My uncle Brian Hauauru Jones was a senior leader in my community. He told me that my community appointed me to these roles, and when I speak, I represent them. So, he expected me to have the same rights as anyone else, no matter our age or experience or gender, we all represent the same people, and that's the voice we speak with."

Support

Gina talked about the layered nature of her support system. The logistical and emotional support, the first layer that her whānau provides, is absolutely crucial for her hauora. Her professional support is also part of this network. She believes that disagreements and discussions with peers are an important part of building trust, and figuring out the best way to navigate thorny issues, and that these decisions cannot be made in isolation. Thus, she considers her professional peers to be key providers of such support.

Other wāhine Māori in governance, senior management, and entrepreneurship are also a crucial source of advice for Gina. She talked about being part of a network of wāhine Māori leaders. This network has helped her work through governance and other important challenges. She added that support is also about reciprocity, and it is just as important to uplift one another and celebrate the achievements of other wāhine.

She also feels fortunate to have strong support from the other trustees in her role as chair. Fundamentally, she believes you have to enjoy the work you do, and the team around you.

Unpaid work

Gina has always undertaken, by her own estimates, 10 hours of work a week without pay outside her formal obligations throughout her life. This includes work within her iwi, environmental issues within her community, and providing advice and counsel on other issues within her community and whānau. She mentioned that increased obligations in her formal roles have meant that she has had to cut down on how much time she spends on other activities, given her role as a primary caregiver.

"Because I am younger, and the nature of the organisation that I'm chairing is so big. I still have children at home, young children, and I'm a single parent. So, I have massively cut down on the unpaid work that I do. I'm still an active part of my community on behalf of my organisation but I have to say 'no' to anything outside of that"

7.2 Wāhine Māori leadership on the marae

In te ao Māori, the marae atea is the open space in front of the wharenui (meeting house) which was traditionally part of a pā (village). In modern usage the term is often shortened to marae, and has come to include all the land and buildings associated with the marae atea. Today marae are storehouses of history, mātauranga, and taonga. Many marae are also venues for the provision of healthcare, education, justice, and social services (Te Puni Kokiri, 2022).

The marae was and is an important place for Māori. All members of the kainga had a role to play. Some roles were assigned according to age and others were more gender specific (Mikaere, 2003). Wāhine Māori have always been vital to the activities on the marae. This is a perspective current to Māori protocol today and it demonstrates the continuity of tikanga (Mead, 2016). At most marae the "aunties" are in charge.

In te ao Māori, both tāne and wāhine are considered to be essential parts of a collective whole. Within Māori social groups, each individual is responsible for fulfilling specific tasks that contribute towards enhancing collective wellbeing. This can be based on age, gender, skills, etc. Ralston (1993) suggests that the roles of wāhine in marae, which include calling guests onto the marae, farewelling them, and the means by which they criticise, or regulate, what male orators say is complementary to men's role on the marae, and constitutes its own form of leadership. Wāhine Māori also exercise influence and authority within the whānau, the wider community, and within political structures.

We do not make an attempt to quantify the value of the work that wāhine Māori do at the marae.

Case study: Rongowhakaata Iwi

First, we would like to acknowledge and express gratitude to the wāhine who welcomed us into their space and shared their views with us. This section details the findings from the wānanga that was held in Tairawhiti at Manutuke, with wāhine and kāhui kaumatua that whakapapa to Rongowhakaata iwi. The aim of the hui was to gather an understanding from wāhine on mana wāhine Māori within the context of the marae.

Method and participant profile

Wāhine that participated in the hui whakapapa to Rongowhakaata iwi. The participants were invited on behalf of Rongowhakaata Iwi Trust (RIT) and the hui was hosted at the kāhui kaumatua whare in Manutuke in July 2023. The style of the hui was informal. It was a rich discussion, with significant insights into what mana wāhine meant for the respective participants. It should be noted that prior to the initial introductions and discussion, some participants were hesitant to share their knowledge and experiences as they wanted to ensure that the information would not be misused and misconstrued. Introductions were then done by the Kaihautū of RIT, Teina Moetara and the chair of RIT, Staci Hare. The key themes and insights from the discussion have been approved by the participants, and are set out below.

Wāhine are the backbone of the marae

"It is the shapeshifting nature of a wāhine in being able to be both caring and courageous and strong and stepping in to do what they have to do for their whānau is mana wāhine."

Wāhine are the backbone of the marae. Nothing happens without wāhine, but more specifically kāhui kaumatua. When something happens, the wāhine are there from early morning on the first day to do the preparations. They call the manuhiri on to the marae, prepare the food, make the beds, and clean up after. And they are there until sundown on the last day.

"Who is the one that calls manuhiri onto the marae, and who is the last voice on the marae – wāhine of course. That's mana wāhine to me"

In many cases it is expected of wāhine to step into the duties that need to be undertaken at the marae, but also at other platforms, such as hosting Ministers, supporting wider communities in distress, like during Cyclone Gabrielle and during the pandemic. It is evident that wāhine do not see these roles as a burden, they are part and parcel of being part of the community.

Tongue in cheek "[people think] the pa fairies take care of everything that happens at the marae"

Everything they do is for whānau. They intuitively see the need and wear the hat they are required to in a

particular situation. There is an unspoken and intuitive way of stepping up, supporting whānau, and making sure things get done at the marae. For example, organising a tangi is an important part of the mana and the role of the marae. Providing the right manaakitanga to the manuhiri is important to uphold the mana of the marae. For the duration of the tangi, wāhine and kāhui kaumatua are a constant presence, welcoming people, feeding them, looking after them, and comforting whānau. Meaning kāhui kaumatua can be at the marae for up to four days at a time. It is expected of wāhine to fulfil these roles. Wāhine are cooking, making beds, hosting manuhiri, looking after children, all of this is a true reflection of mana wāhine.

"There are certain things that men have to do like preparing the kai. So, the men have their role. But the women can do the same job. So, if there's no men there, the women step up to the mark and they do it."

In recent times, as paid work takes a higher priority, there is a growing shortage of people, particularly men, to perform their duties on the marae. The wāhine have adapted to this, and are stepping into these roles when required.

"Outside cultures think that wāhine Māori are lesser than tāne Māori because tāne sit at the front. But we know that that is not the truth, we understand each other's roles and respect each other's position"

Leadership development

The marae is viewed as the ideal space for the development of different styles of leadership. The range of work that takes place at a marae, combined with the fact that it is an intergenerational space, means that rangatahi learn a range of skills from the elders of the community.

It is one of the first places where important life skills get taught to the next generation of leaders. Wāhine Māori do everything from making beds, cooking food, cleaning up, hosting manuhiri, and making sure tāne are performing their roles. Moreover, in order to ensure that the mana of the marae is upheld, there is an expectation that all tasks performed are held to a high standard, with kuia often monitoring the quality. Performing these tasks requires essential specialised skills that only come with experience.

"Marae is the space for the ultimate training ground for a strong sense of your identity"

When a need arises in the community, wāhine are often the first to recognise this need. The organisation and mobilisation of people and resources is also spearheaded by wāhine. Wāhine have an extensive network of relationships and have built up knowledge on who may be the best person to call upon for certain tasks, which means that they are able to efficiently organise activities and events. Moreover, collective decision making is vital to this process.

"You start from the back and you work to the front."

Leadership at the marae has always been a very organic process. Younger wāhine noted that the kuia actively support rangatahi wāhine and awhi them into roles that are best suited to their skills and interests. The rangatahi also learn by observing, and spending time on the marae where the relationships, knowledge base, and skills are honed. As the younger generations grow older, their responsibilities gradually increase as they take on new and more challenging roles. Children do jobs such as washing dishes and cleaning. Then you get older and learn how to cook. Then wāhine take on more caring responsibilities as they become mothers. Older wāhine call people on the marae. However, as younger generations are spending less time on the marae, they are missing out on this practical form of learning that has continued for generations.

Wāhine are successfully using the experience and skills that they have learnt at the marae within the corporate world. The organisational and management skills lend themselves well to managing projects and teams in a formal setting. The relationship skills and the ability to call upon the right people form the basis for networking and team building. Wāhine use these skills to lead hui and engage with their communities during times of crisis such as in the aftermath of Cyclone Gabrielle.

"The leadership skills that get honed at the marae are equal to having a business degree"

This model of leadership is undervalued and under appreciated

There is a clear dissonance between the actual value of these skills, and how they are valued outside te ao Māori. The unwillingness to recognise diversity in the forms of leadership has led to the under-recognition and under-valuation of the skills and knowledge wāhine Māori have acquired through the mahi they undertake on the marae and in the community. Formal qualifications and job titles and experience gained through corporate leadership are considered to be stronger indications of leadership capability.

"If a leader in a colonial sort of setup came to a place and had to sit there for three days, imagine what they would be charging. Whereas it's just expected of us to do those sorts of things and roles"

The success criteria for wāhine Māori leadership looks different. The role in the marae and in the community are not considered to be jobs. Having an education at a certain level is not required for people to look up to someone as a leader. Rather, it's all of the time one has done on the marae and how many people respect them. This makes for a different model of leadership where support and respect has to be constantly earned and maintained.

"I mean, you just think about it. If there's a tangi people are there within the day. What Pākeha organisation can rally the caterers, the greeters, the bed makers, take care of the guests. Everything organised within hours. And they do it with no money."

The work done at the marae by wāhine is huge. From opening up the marae, to turning up to the meetings, setting up the kai. The wāhine stressed that all of this is not easily quantified. The concept that helping or working at the marae may be a burden is absolutely foreign. Being at the marae is part of daily life and an integral part of who and what wāhine represent. The wāhine take the view that if they don't step up, then who will?

Strong cultural connectedness

The currency circulated is different at the marae, it is about the time, time spent with each other, time spent with mokopuna, manuhiri and each other.

The wāhine talked about the value all generations receive from gathering at the marae. For example, when there is a tangi, not only does a lot of knowledge transfer take place, but getting to spend time with uncles and aunties means that there are multiple things a rangatahi can learn. It can be relational, like how to engage with whānau that one has never met. It can include learning a variety of other skills like preparing kai, how to karanga, how to whaikōrero, how to be a leader and a follower at the same time. Titles and achievements have no place in the marae and no matter what an individual's position may be outside the marae, everyone is expected to participate in the preparations and the activities, which can be a humbling experience for many.

"Our ability to understand our connection not just to each other, but to place is reinforced constantly."

Connections to place and wider whānau are reinforced constantly for Māori who are engaged with their marae. This is through hearing the whaikōrero of the carvings, and all the narratives and names of whānau and places speak to this history and connection to place and people.

Wāhine are repositories of knowledge

"Integrity and class of our kāhui kaumatua, as a young woman these are the principles I want reach, I want this level of humility, these are big shoes to fill."

An immense amount of knowledge and skills transfer happens at the marae. Whether it is relationship building, showing the right amount of care and manaakitanga, managing a tangihanga, all of these skills get transferred from wāhine to wāhine at the marae. The wāhine at the hui noted that if you want to know the knowledge, the history, and traditions of an area, ask the nannies because they sit there tangi after tangi and hui after hui. They hear the stories time and time again and they become the repositories of the knowledge. It is these nannies who share these stories with their mokopuna, continuing the intergenerational transfer of history and values.

"I was lucky enough to hang onto my mom and my aunties skirts at the marae while growing up."

The pressures of modern life have impacted activities at the marae

"It's all changing, and we have to change with the times I'm afraid, whether we like it or not. Because there's not enough people out there to karanga, there's not enough people out there to whaikōrero."

Modernity and the western principles that determine the value of time have had an enormous impact on the activities of the marae. Commitments to paid work, and the flow of people from rural to urban areas in search of better economic opportunities has made it increasingly challenging to ensure that there are enough people to support the activities at the marae. Young people are moving away to work and are not coming back to live within the rohe. These modern-day challenges have put pressure on the activities at the marae, and also on wāhine that support the events.

There are less and less whānau that support the activities at the marae. Even those who live in the rohe cannot be called upon for help at any time because of commitments to work that take precedence. Because of this many wāhine felt that when whānau gather, those who are not accustomed to contributing to the work on the marae act like manuhiri. Money is taking a higher priority these days which means that there just aren't enough people to support the activities in and around the marae.

"When we have a tangi now. I just feel like you know, I go to support. But I look around, no body's there. And whereas once upon a time, the front on the veranda was full. But now it's all changing."

The wāhine also noted that the ability to step up and support the community comes from being able to see the need. Being so engaged means that the wāhine understand the heartbeat of their communities. Young people who move away from home only visit occasionally, which means they are often unaware of the challenges the community faces. Even if these challenges are visible to those who have moved away, they often do not often share the same level of connectedness with the community as those who stay back. This means that the challenges of the community may not always resonate. This is why the wāhine feel like it is their responsibility to teach their mokopuna, and make sure that when they go to the marae they know what their duties and roles are.

8 Kupu whakakapi Conclusions

This research marks a significant milestone towards building a comprehensive understanding of Te Ōhanga Wāhine Māori. It recognises and values the entire spectrum of the unique contributions wāhine Māori make to the wider economy, and also the nature and size of the wāhine Māori led economy. This research is also the first of its kind to include unpaid work: its implications on labour supply and labour market outcomes, as well as the valuation of such work to demonstrate the crucial role it plays in progressing wellbeing. The report also sheds light on the work undertaken by wāhine Māori within the marae, contributing to the strengthening of cultural wellbeing. The interlinkages between unpaid work and the rest of the economy cannot be ignored in the development of policies and initiatives designed to make progress on economic empowerment for wāhine Māori.

This research is only the first step towards developing a better understanding of Te Ōhanga Wāhine Māori. Several areas warrant further research to deepen this understanding. Some of these include:

- Wāhine Māori are under-represented as business owners and leaders. It is important to identify what the key barriers are for wāhine Māori in business. This should include building an understanding of why wāhine Māori are less likely to start a business compared to non-Māori wāhine.
- Wāhine Māori are more likely than other wāhine to undertake care work at younger ages, which impacts participation in work and education. Future research should consider, in detail, how greater caring responsibilities at a younger age impact longer-term outcomes such as educational attainment, choices about work, and employment outcomes for wāhine Māori.
- This research showed that the level of educational attainment for wāhine Māori clearly has implications for labour market outcomes. Thus, it is important to understand the barriers for wāhine Māori in attaining qualifications at the bachelor's degree level, or higher.

Ngā tohutoro
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Āpitinga A Methodology
Appendix A Methodology

The following section details the methodology undertaken by BERL in collecting and sourcing the data compiled in this report, in particular describing the use of Stats NZ Integrated Data Infrastructure (IDI), and provides definitions for various classifications, variables, and concepts used throughout the analysis and report. Additionally, BERL presents the methodology applied in the literature review on unpaid work.

Data collection

This report has been compiled using a variety of data sources, supplemented by modelling. The data has been obtained from the best available sources, such as official statistics, as well as other information, such as annual reports.

The methodology adopted and the data sources used are similar to those used in previous Te Ōhanga Māori iterations. In particular, core data used from Stats NZ includes:

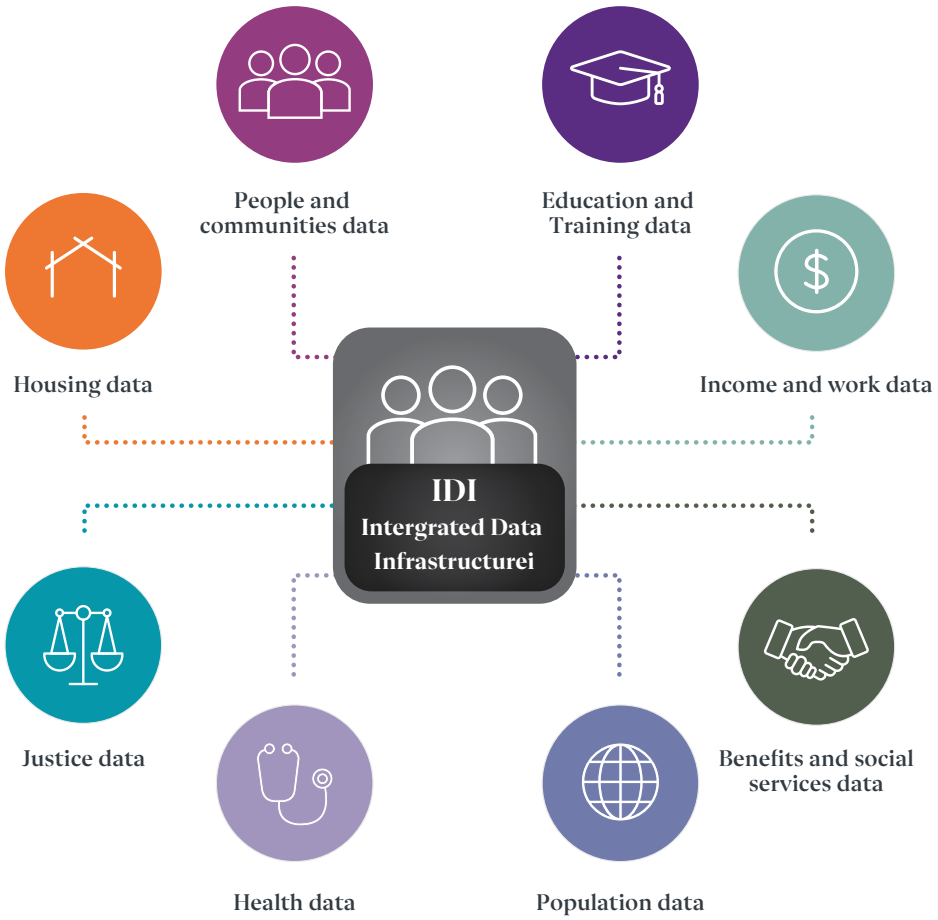
- 2013 and 2018 Censuses
- Annual Enterprise Survey (AES)
- Consumer Price and Capital Goods Price Indices, various dates
- Business Demography Statistics (BDS)
- Household Sector Income and Outlay Accounts
- National Accounts
- Inter-industry Transactions
- Te Kupenga 2018
- Household Economic Survey (HES).

The range of data we have secured, along with BERL's experience and knowledge of Te Ōhanga Māori activities, ensures we are confident of the robustness of our indicative estimates at the headline level. However, the greater the degree of disaggregation in the estimates, the greater the margins for error and inaccuracy. Hence, the more disaggregated estimates should be treated with appropriate caution.

All the data and tables in this publication have been estimated by BERL using a variety of official and unofficial sources. Estimates have been rounded and also aggregated to ensure confidential information is not released. Consequently, the sum of the components may not add precisely to the totals shown.

Integrated Data Infrastructure (IDI)

Stats NZ IDI is a large research database containing de-identified microdata about people and households (Stats NZ, 2023).



Disclaimer

Access to the data used in this study was provided by Stats NZ under conditions designed to give effect to the security and confidentiality provisions of the Data and Statistics Act 2022. The results presented in this study are the work of the author, not Stats NZ, or individual data suppliers.

These results are not official statistics. They have been created for research purposes from the IDI which is carefully managed by Stats NZ. Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the privacy impact assessment for the IDI available from www.stats.govt.nz

For more information about the IDI please visit https://www.stats.govt.nz/integrated-data/

Data limitations

Using data from a variety of sources causes difficulty when ensuring consistency of treatment. If we limit ourselves to one data source, we can obtain a large degree of sector disaggregation, but at the expense of less than comprehensive coverage of transactions. Using a variety of sources may improve the coverage of the information available, but the sector detail of this information is likely to be more highly aggregated.

For this reason, industry and sector definitions have been kept broad to reduce the degree of detail required to be extracted from the data. For similar reasons, many of the non-core transactions between and within sectors have not been explicitly identified in the SAM developed for this project. The use of Census data has advantages in its comprehensive coverage. However, information here is obtained from the perspective of individual details, rather than business details. Where appropriate we have had to imply relevant variables from individual data rather than from business data. This has limitations in that obtaining data relevant to businesses distinguished by ethnicity is difficult, except, for example, the income of Māori and non-Māori self-employed businesses.

Āpitinga B Glossary
Appendix B Glossary

Table 7: Technical terms

Term	Definition
Assets	Land, buildings, machinery, equipment, vehicles, cash, shares that can be used to produce goods and services. Includes fishing quota, forest cutting rights, exploration and mining rights.
Compensation of employees	Payments to employees working in an enterprise, including wages, salaries, overtime payments, bonuses, and other remuneration.
Consumption spending	Spending by households on goods and services, for example food, clothing, motor vehicles and servicing, petrol, electricity, gas and other energy, entertainment, visits to doctor and other medical supplies, insurance. Includes notional rent paid by owner-occupiers to themselves (refer owner-occupied housing). Contrast with investment spending.
Enterprises	Organisations that engage in producing goods and services for others to consume. Includes trusts, incorporations, businesses, service providers (profit and not for profits), iwi holding companies, rūnanga, Mandated Iwi Organisations (MIOs), Post-Settlement Governance Entities (PSGEs) and other similar entities.
Expenditure	Equivalent to spending. Sometimes termed outlays.
Final goods and services	Goods and services produced by enterprises that are purchased by or supplied to households, government, or foreigners. Also includes goods and services purchased by or supplied to enterprises as a result of their investment spending. Contrast with intermediate goods and services.
Gross Domestic Product (GDP)	A measure of the total value added generated by all enterprises in an area, region, or country. GDP is equivalent to the sum of all compensation of employees and operating surplus (including all forms of profits) earned by workers and owners engaged in all enterprises in an area. Strictly speaking, GDP also includes indirect taxes levied on production. This is also equivalent to the total expenditure on final goods and services produced by enterprises in the area.

Table 7: Technical terms

Term	Definition
Income	For enterprises, this is equivalent to the total revenue gained through the sale of their goods and services. For households, this includes compensation of employees; interest or dividends received; social security benefit or other welfare payment transfers; superannuation payments.
Industry	All enterprises in an area (region or country) that produce similar goods, or deliver similar services. They can be defined broadly (e.g. primary), narrowly (agriculture), or precisely (apples). Industry data for this study is based on Statistics New Zealand's Australian New Zealand Standard Industrial Classification (ANZSIC).
Intermediate goods and services	Goods and services produced by enterprises that are purchased by or supplied to other enterprises to be used in the production of other goods and services. For example, the purchase by a meat processor of a sheep carcass from a farmer who then processes the carcass into meat products. Contrast with final goods and services.
Investment spending	Spending by enterprises on goods and services that are new assets. Includes spending on maintaining assets or on improving their value; for example, research activities aimed at restoring the nutrient balance in pastoral land; rewiring school buildings to improve computer network connections.
Labour force	Comprises all those employed (part-time or full-time), or those unemployed. Note to be unemployed the individual must be available for and be actively seeking work. The measure of the labour force will exclude those retired, studying or otherwise not available for work. The labour force is a subset of the working age population.
Māori household	A single household can have members of multiple ethnic groups. For the purposes of this research, a household is classified as a Māori household if at least one of its members identifies as Māori and is at least 18 years of age.
Māori individuals' classification	An individual is classified as Māori if they self-identified as having Māori ethnicity in the 2013 or 2018 Census. This includes individuals that selected Māori and any other number of ethnic groups.
Māori population	This refers to the sum of all individuals that self-ideintifed as having Māori ethnicity in the 2013 or 2018 Census.
Nominal growth	The rate at which the sales of final goods and services increases. For example, if sales in one year totalled $100 and then $105 the next year, then nominal growth is said to be five percent per year (or 5% p/a). Note this growth includes the effect of changes in prices, as well as changes in the quantity, of final goods and services produced. Contrast with real growth.
Non-wāhine Māori household	Contrast to wāhine Māori household.

Table 7: Technical terms

Term	Definition
Not in the labour force	The subset of the working age population that are not employed, and are not available for work. Includes those retired, studying, at home looking after relatives, or otherwise not available for work.
Operating surplus	Total revenue from sales of an enterprise less payments for intermediate goods and services and compensation of employees. This is equivalent to the income return to the owners of the assets being used by the enterprise. While not strictly precise, this can be thought of as akin to profit. A component of this return will be the equivalent of consumption of fixed capital (akin to depreciation), being the portion of assets that have been used up during the period.
Other wāhine household	A single household can have members of multiple ethnic groups. For the purposes of this research, a household is classified as a other wahine household if at least one of its members identifies as any other ethnicity that is not Maori, is at least 18 years of age, and is of female sex.
Other wāhine population	This refers to the sum of all individuals that are of female sex and did not self-identify as having Māori ethncity in the 2013 or 2018 Census.
Owner-occupied housing	Industry defined as householders living in residential property that they themselves own. This is included in measures of GDP so that its treatment is consistent with that of landlords renting residential property to others.
Productivity	A measure of how much well assets, resources, and the environment are being used in the production of goods and services. An improvement in productivity occurs where more goods and services are produced this period (year) from the same group of assets than were produced last period (year). Equivalently, productivity can improve if fewer assets are required this period (year) to produce the same quantity of goods and services than were used the previous period (year). This definition, more correctly, relates to what is termed capital productivity. There is a parallel definition for labour productivity, e.g. how well labour is being used in the production of goods and services. Further, if we consider the use of assets and labour together, then there is a concept with a parallel definition termed total factor productivity.
Real growth	The rate at which the quantity produced of final goods and services increases. For example, if the quantity of items produced was 100 in one year then 103 the next year, then real growth is said to be three percent per year (or 3% p/a). Note, this growth excludes the effect of changes in prices and so is a measure of the change in production. Contrast with nominal growth.
Resources	Equivalent to assets.
Rohe	The boundary determinations of the eleven rohe in the report are depicted in Figure 15. These determinations follow thosed used in Te Ōhanga 2018. These details are aligned with Te Puni Kokiri and Māori Land Court classifications.

Table 7: Technical terms

Term	Definition
Sector	Aggregated equivalent to industry.
Skill levels	The Australia and New Zealand Standard Classification of Occupations (ANZSCO) assigns a skill level to every occupation in New Zealand based on the entry requirements to each position. Skill level one means that for an individual to enter this occupation, they would typically need at least a bachelor's degree or equivalent level of work experience or training. Skill level five indicates an entry-level occupation, with no relevant prior work experience or training being required to gain employment and tends to be more process driven and manual. Under the ANZSCO framework, qualifications are considered skill proxies, with, skill levels one and two classified as high-skilled occupations, and skill levels four and five classified low-skilled occupations. It is important to note that skill level classifications favour occupations that require prior qualifications, whereas occupations that may not need any prior qualifications, but still require skill in their own regard, will be weighted towards low-skilled.
Social Accounting Matrix (SAM)	A table summarising the payments or transactions within or between enterprises, industries, households, government and/or foreigners.
Unemployed	Those who are without a job, but who are available for and are actively seeking work. The unemployed are a subset of the labour force.
Value added	The result of the production processes or service delivery activities of enterprises. This is total revenue from sales less payments for intermediate goods and services used in their processes or activities. Value added is the equivalent of the compensation of employees plus the operating surplus generated by enterprises. Closely related to GDP.
Wāhine Māori household	A single household can have members of multiple ethnic groups. For the purposes of this research, a household is classified as a wāhine Māori household if at least one of its non-dependent members identifies as Māori, is at least 18 years of age, and is of female sex.
Wāhine Māori individuals' classification	An individual is classified as Māori if they self-identified as having Māori ethnicity in the 2013 or 2018 Census. This includes individuals that selected Māori and any other number of ethnic groups. Therefore, we have defined Wāhine Māori as an individual who identifies as female sex and is either of Māori ethnicity only or Māori ethnicity and some other ethnicity.
Wāhine Māori population	This refers to the sum of all individuals that self-ideintifed as having Māori ethnicity in the 2013 or 2018 Census and is of female sex.
Wealth	Equivalent to assets.
Wellbeing	Holistic perspective (or measure) of standard of living.
Working age population	The resident, non-institutionalised, civilian population aged 15 or more years old.

Table 8: Glossary of te reo Māori terms

Kupu Māori	English
Hapū	A social unit comprised of related families based in a geographical area, who whakapapa to a common ancestor, although people affiliated to a hapū may not live in that area.
Iwi	A number of related hapū sharing a territory, a confederation of tribes.
Mana	Prestige, status, authority, mandate.
Manaakitanga	Hospitality, generosity, showing respect and care for others.
Marae	Meeting place for where formal greetings are exchanged and discussion takes place. Can be more generally thought of complex of buildings surrounding this meeting place. Can also be broader term to encompass the institution combining community, physical, and spiritual support for Māori, culture, language, identity.
Mātauranga Māori	Māori body of knowledge that arises from a worldview based upon kinship relationships between people and the natural world. Humans are not seen as superior to the natural order but rather as existing within it (Royal Society).
Other wāhine	Female that is not of Māori ethnicity.
Rohe	District or region, or area of land.
Taha hinegaro	Mental health.
Taha tinana	Physical health.
Taha wairua	Spitirual health.
Taha whānau	Relationships with family and community.
Tane Māori	Māori male
Taonga	Something of value, may include goods or possessions, resources, ideas, and valuable items (culturally, socially, or financially).
Te Ao Māori	The Māori world.
Te Ōhanga Māori	The Māori economy.
Te Ōhanga wāhine Māori	The female Māori economy.
Te Reo Māori	The Māori language.
Te taiao	The natural environment, world.
Tikanga	The correct procedure, custom, way, protocol - the customary system of values and practices that have developed over time and are deeply embedded in the social context.
Wāhine Māori	Māori female

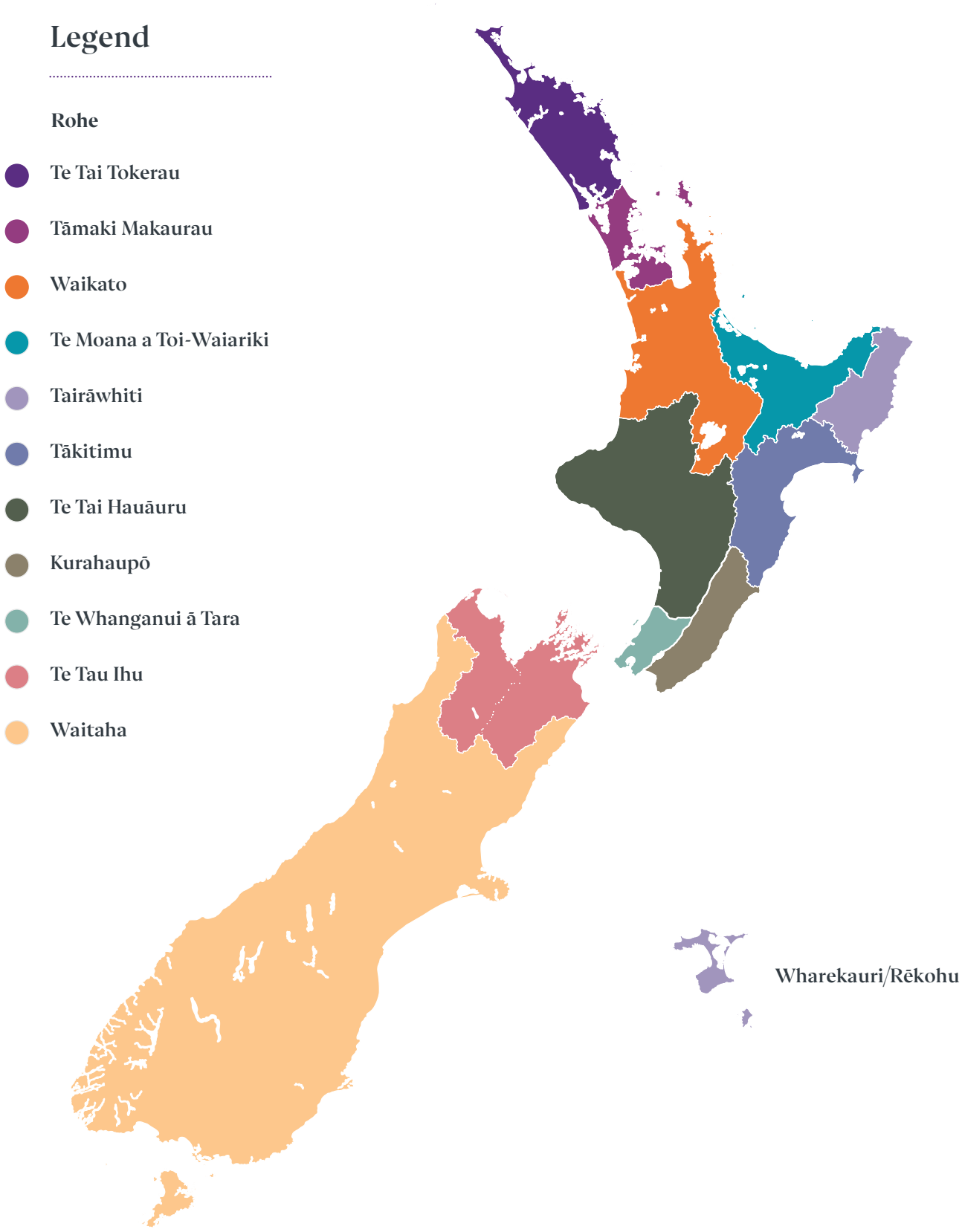
Table 8: Glossary of te reo Māori terms

Kupu Māori	English
Whānau	Family
Whare	House, home, building.
Whenua	Land, ground, country.

Āpitinga C Rohe classification
Appendix C Rohe classification

Figure 27 presents the rohe classification used throughout this research. It aligns with the rohe classification previously used in Te Ōhanga Māori 2018.

Figure 27: Aotearoa New Zealand rohe classification

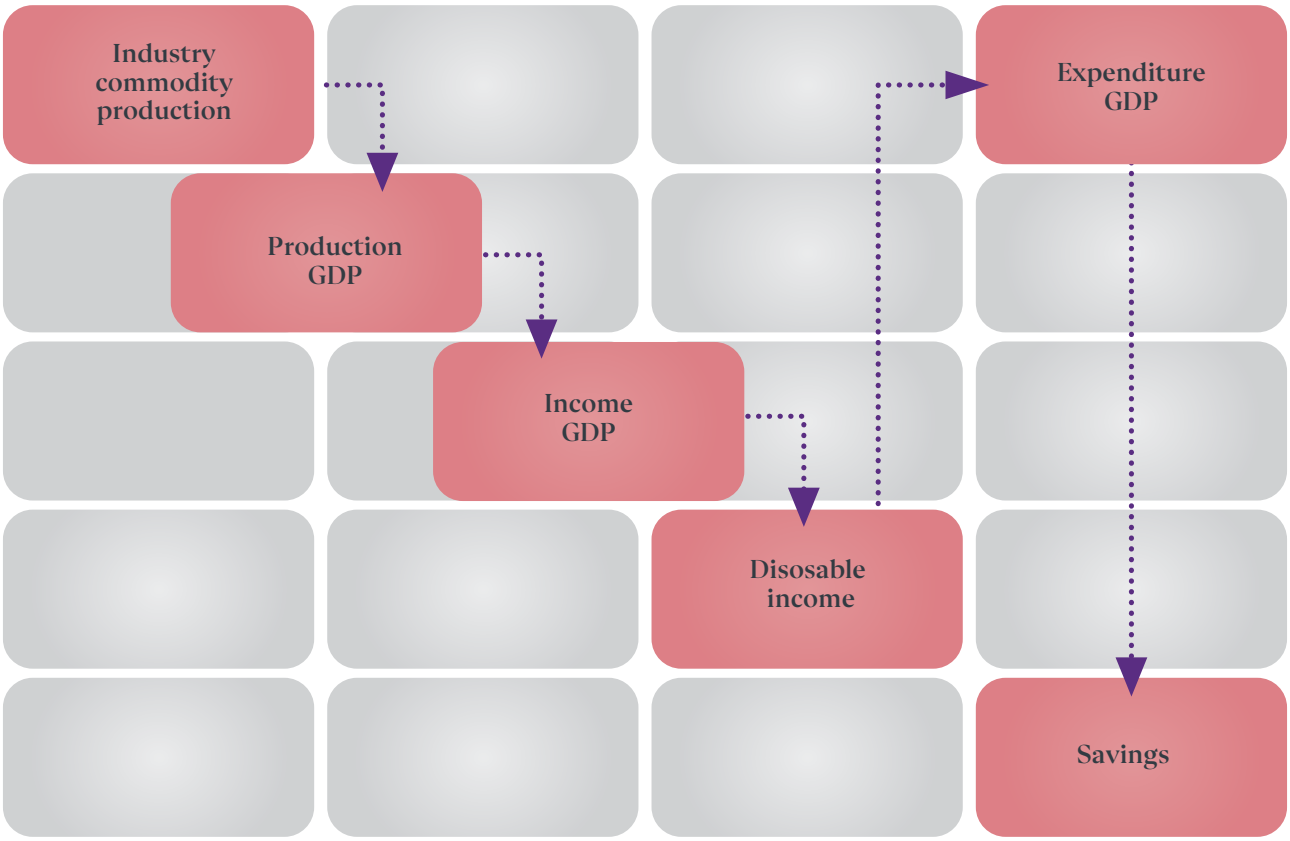


Āpitinga D Social Accounting Matrix (SAM)
Appendix D Social Accounting Matrix (SAM)

A Social Accounting Matrix (SAM) summarises the many payments or transactions in an economy. These transactions or payments may involve a person, an industry, a household, an enterprise, government, a foreign customer, or a supplier. The SAM summarises the source and destination of these transactions, i.e. who are making and who are receiving the payments. Figure 28 illustrates the payments or relationships representing the core transactions.

A matrix is another word for a table of numbers. In general, each column of the table represents payments by a person, and each row of the table represents payments received by that person. For example, take the case of a household paying income tax. This transaction will be represented by an appropriate figure in the intersection of the household column and the government row of the matrix.

Figure 28: Schematics of a SAM



Source: BERL analysis

There are other entries in the matrix. For example, there are some figures representing transfers within sectors and other notional transactions [18]. In a more formal sense, a SAM comprises a combination of an inter-industry transactions (or input-output) table and the accounting flows of income and outlays for particular institutional sectors of an economy.

Inter-industry transactions and production GDP

Transactions between the various industries of the economy form the basis of the production component of the SAM. For example, the fish processing industry buys the raw fish catch from the fishing industry along with other inputs from other industries (e.g. energy from the electricity industry) in order to make its fish product, or commodity. Thereafter, the processing industry is also likely to purchase transport services from the transport industry in order to convey its product to its final customer (whether to an export port ready for foreign customers or for internal distribution to retail consumers or other domestic users).

Of course, industries do more than just purchase and sell between them. They combine both the raw and material inputs they purchase from other industries and in such transformations they 'add value' to the products or commodities they ultimately produce. Such 'value added' is, in an economic sense, equivalent to the GDP contribution of each production industry.

This value added constitutes the payments (or returns) to the primary resources used in the production of each commodity. In its simplest form, primary resources (or factors of production) are limited to labour and physical capital. Consequently, production GDP is captured in a SAM as payments by industries to the owners of labour and capital – that is, wage and profit payments.

These wage 'transactions' are listed in a SAM at the intersection of the relevant industry columns and the owners of labour row. Similarly, the profit transactions are placed at the intersection of the relevant industry columns and the owners of capital row. The sum of these wage and profit 'payments' is conceptually equivalent to the total 'added value' contributed by the producers in an economy and is termed the production measure of GDP.

Thus, the added value of the fishing industry, for example, is equivalent to the wage payments to those employed in the industry and the surplus of the industry. The latter represents payments to the owners of the machinery, equipment and buildings used in the industry.

Income GDP and disposable income

From the production segment of an economy, we move on to the income segment.

In this context, a SAM firstly captures the 'conceptual transactions' that translate the income of labour and capital owners into income of households and those of the owners of the producer enterprises.

The entries in a SAM have, for example, figures at the intersection of the 'owners of labour' column and the household row. Other income payments received by households from the 'owners of capital' row would include returns to self-employed persons in their role as business owners across the various industries.

The income of enterprises, predominantly at the intersection of the producer enterprises column and the owners of capital row, represent the conceptual transfer of the surplus of industries into profits of producer enterprises.

It is true that the translation of the incomes of the factors of production (labour and capital) into the incomes of households and enterprises captures, in the main, 'notional' rather than 'actual' transactions. Nevertheless, this segment of a SAM enables an economy's value added to be expressed in an alternative form – namely, income GDP. Consequently, we can capture another dimension to the participation of wāhine Māori in the New Zealand economy, i.e. the participation via the income measure of GDP of wāhine Māori households.

Very generally, for example, the wage payments of those employed in the fishing industry are likely to be predominantly translated into household income. Similarly, the surplus of this industry is likely to form the basis of the income of producer enterprises.

18 Notional transactions are those recorded for economic or accounting purposes, but do not take place as a real world transaction. For example, the notional payment by those residing in their own home to themselves reflects the economic rental value of their owner-occupied property. This is included by Stats NZ to ensure that the economic operation of rental and owner-occupied property is treated equally in the National Accounts.

Disposable income

Having established the income GDP of households and producer enterprises, a SAM moves on to summarise the transactions that lead to the disposable income of these components of the economy. In contrast to the previous segment of the SAM, the majority of these transactions are actual rather than notional. In particular, entries in this segment include income and corporate tax payments to government by households and producer enterprises, as well as social security and benefit payments from government to households. In addition, mortgage and other debt interest payments by households are recorded here in the financial institutions row. Household receipts from financial institutions represent interest as well as superannuation income along with insurance payouts.

Expenditure GDP and net savings

Given the disposable income of households and producer enterprises, the final set of 'core' transactions captured by a SAM are the expenditure on goods and services (i.e. the commodities) that are produced by industries.

The expenditure by households on consumer goods would be included in the intersection of the household column and the row for the industry producing each consumer commodity. For example, purchases of fish products by the household are likely to be predominantly in the row of the fish processing industry (noting that the household is unlikely to be purchasing the raw fish catch of the fishing industry). Other consumer spending, such as fuel (purchased from the fuel retailing industry), to enable consumers to drive to the supermarket to purchase fish products will also be included here.

Expenditure by producer enterprises on goods and services predominantly involves capital expenditure (investment) on machinery, equipment, and buildings. This expenditure is required to maintain and expand the physical resources available to the industry for use in its production processes. For example, the purchase of a fishing boat by a producer enterprise active in the fishing industry would appear in the producer enterprise column and the row relating to the marine equipment making industry.

This set of transactions also includes government purchases of goods and services – for example, the purchase of health services from the health services industry.

The remaining set of transactions here are the purchases by overseas customers of the goods and services produced by New Zealand industry. These export transactions are captured in the intersection of the overseas column and the relevant industry row. Conversely, there will be a set of transactions representing the purchase by New Zealand households and industries of goods and services produced abroad. These import transactions will be represented by figures in the overseas row across the various columns for the range of households and industries.

For example, the petroleum refining industry will be purchasing crude oil imports, which gets translated into petrol purchased by a household via transactions with the fuel retailing industry. Similarly, the purchase of a fishing boat by a producer enterprise active in the fishing industry is likely to require the purchase of a variety of mechanical and electrical components from abroad by the marine equipment making industry.

The total of the expenditure in this segment of the SAM, net of imports, is equivalent to the expenditure measure of GDP. Consequently, a further dimension of the wāhine Māori participation in the New Zealand economy can be described – namely, through the expenditure of wāhine Māori households.

Net balance or savings

Finally, the SAM enables the calculation of the net balance position of the household, government, and producer enterprise sectors. This is calculated directly from the calculated disposable income of each of the sectors minus their expenditure.

In addition, the net balance of transactions with the overseas sector can also be calculated from the figures contained in a SAM. Note, as well as exports and imports of commodities, other transactions with the overseas sector are also included in a SAM. In particular, interest, profits. and/or dividends from producer enterprises active in New Zealand industries may be remitted to foreign owners. This will be shown in the intersection of the producer enterprise column and the overseas row.

Similarly, transfers or other transactions from the overseas sector to, for example, New Zealand households, will be shown in the intersection of the relevant row and the overseas column in a SAM. Consequently, the net balance of transactions with the overseas sector is equivalent to the balance on the current account of the Balance of Payments. This balance comprises the balance on trade

flows (i.e. export revenue minus import payments), as well as the balance on financial transactions (i.e. interest, profits and other asset income and payments) with the rest of the world.

A cross-check of the net savings figure is provided by the macro-economic identity. This states that the sum of the net savings of all these domestic sectors plus the net balance of transactions with the overseas sector must equal zero. In other words, if the balance of the overseas sector is a positive (i.e. surplus or savings) then the sum of the balances of all the domestic sectors would have to be a negative (i.e. deficit or dissavings) of the same magnitude.

Enterprises

Output and income

Gross output of producer enterprises begins with the estimate of gross output from the input-output tables.

Costs of production

The costs of production for each industry, including compensation of employees, purchase of intermediate commodities (including imports), and other input costs arise from the input-output inter-industry transactions table. In generating these costs, their proportions in relation to each industry's gross output are set the same as those implied by the input-output table.

Outgoings

Distributions to households in the form of entrepreneurial and dividend income are the converse of those in the household account. All entrepreneurial income accruing to wāhine Māori households is assumed to source from wāhine Māori producer enterprises. However, the proportion of the dividend distribution from these enterprises, allocated to the wāhine Māori household sector, is equal to the wāhine Māori proportion of reported household income from the interest, dividend, rent or other property income category from IR3 filing made to the Inland Revenue Department (IRD) for the year to March 2022.

Corporate tax from the Government Financial Statements is allocated to wāhine Māori enterprises according to the proportion of gross output in wāhine Māori enterprises to total gross output.

The proportion of the total for capital spending, from the input-output table allocated to wāhine Māori enterprises, is calculated as the wāhine Māori proportion in the consumption of fixed capital in industries from the input-output table.

Households

Most of the components of income are derived from a division of the income listed in the Household Income and Outlay Accounts. In all cases, where relevant, figures from the input-output table are retained for consistency with industry data. The division between wāhine Māori and non-wāhine Māori households is undertaken using appropriate proportions from the 2018 Census and the IRD.

Income

The income for wāhine Māori households is obtained by calculating the wāhine Māori proportion of total income earned by paid employees as reported to the Inland Revenue Department for the year to March 2022.

Social security assistance and benefits for all households is obtained from the Household Income and Outlay Accounts. The income for wāhine Māori households is obtained by applying the wāhine Māori proportion receiving income from the Ministry of Social Development (MSD) from the following sources: New Zealand superannuation or veterans pension, unemployment benefit, sickness benefit, domestic purposes benefit, invalids benefit, or student allowance.

Entrepreneurial income and dividend income for all households is accessed from Household Income and Outlay Accounts. Entrepreneurial income for wāhine Māori households is obtained by applying the wāhine Māori proportion of income earned by self-employment from IRD for the year to March 2022. Dividend income is split according to the proportion of total income from the interest, dividend, rent or other property income category from the IRD.

Operating surplus accruing from ownership of owner-occupied dwellings is from the input-output tables. The income for wāhine Māori households is obtained by applying the Wāhine Māori proportion from the 2018 Census reporting those who live in owner-occupied dwellings.

Pension fund benefits, including equity changes and interest and insurance receipts, are from the Household Income and Outlay Accounts. The former component is split according to the Wāhine Māori proportion of total income from the Other Superannuation, Pensions,

and Annuities category from IRD. The latter component is split according to the Wāhine Māori proportion of total income from the interest, dividend, rent or other property income category from IRD.

Overseas transfers are derived from the Household Income and Outlay Accounts. This is split according to the wāhine Māori proportion of the number of households from the 2018 Census.

Outgoings

Determining the outgoings from the household sector accounted for by Wāhine Māori households was achieved, predominantly, using appropriate shares from Census and other data sources. Key points include:

Consumer expenditure from the input-output tables is split according to the Wāhine Māori proportion of total household expenditure. This is determined from the 2019 household expenditure survey by household income decile, and by applying the proportion of Wāhine Māori households within each household income decile.

Income tax, other current taxes, social security contributions and fines and penalties are from the Household Income and Outlay Accounts. These are split according to the Wāhine Māori proportion of total income from all sources including benefits, wages and salaries, rent, interest and dividends, and other income for the year to March 2022, from IRD and MSD.

Interest on consumer debt and interest on housing are from the Household Income and Outlay Accounts. These are split according to the wāhine Māori proportion from the 2018 Census reporting that they live in their own dwellings.

Investment in owner-occupied dwellings is from the input-output tables. This is split according to the wāhine Māori proportion from the 2018 Census reporting that they live in their own dwellings.

Pension fund contributions are from the Household Income and Outlay Accounts. This is split according to the wāhine Māori proportion of total income from the superannuation, pensions, and annuities from IRD for the year to March 2022.

Overseas transfers are from the Household Income and Outlay Accounts. This is split according to the Wāhine Māori proportion of the number of households from the 2018 Census.

Net savings reconciliation

The Household Income and Outlay Accounts indicate net savings. The difference between these the estimates of household income and outlay accounts can be attributed to data limitations as well as to conceptual differences between input-output and National Accounts information.

Unpaid work

Unpaid work is normally not included in a SAM. This is because a SAM summarises the payments or transactions in an economy and unpaid work, by definition, does not include any payments or transactions that move through the economy. To include unpaid work within a SAM, we first need to value it, and then adjust the current pathways of transaction flows between households and other parts of the economy, to include the newly valued unpaid work.

Definition of unpaid work

The United Nations (2017) guide to valuing unpaid household service work classifies unpaid work into five sectors; care services, nutrition services, clothing services, travel services, and housing services. For our definition of unpaid work, we have used these categories but have renamed nutrition services as meal services, and have split care services into childcare and adult care services. These final six sectors are defined as:

- **Clothing services** which include buying material to make clothing, washing, and ironing
- **Travel services** which include travel associated with household work, childcare activities, purchasing goods, and any other unpaid activities
- **Meal services** which consist of tasks such as preparing food and drinks for own consumption
- **Housing services** which include cleaning, performing repairs, maintenance, financial budgeting, and other household administration
- **Adult care services** which are performed by those who physically and emotionally care for other adults
- **Childcare services** which include services provided to children such as physical care, teaching, playing, reading, supervising, and other childcare activities.

Valuing unpaid work

To value unpaid work, two elements need to be combined. These are the number of hours spent on unpaid work each year by individuals, and secondly the dollar value of those hours. In New Zealand, a time use survey was conducted in 2009/10, which determined the number of hours spent by individuals aged over 12 on various activities, including unpaid work, on average each day. The results from the 2009/10 time use survey for wāhine Māori, all wāhine, and all tāne were then allocated from the 25 unpaid work categories to each of the six unpaid work sectors.

Due to the time gap of 13 years between 2009 and 2022, we needed to determine if the results from the 2009/10 time use survey should be adjusted prior to valuing them. To make this determination, we reviewed the changes in total time spent on unpaid work over time from the latest Australian, Canadian, and American time use surveys, compared to previous time use survey. Overall, we found that on average the total time wāhine spent on unpaid work had declined by around 0.6 percent per annum, while the total time tāne spent on unpaid work had increased by around 0.04 percent per annum.

Applying these findings to the 2009/10 New Zealand time use survey meant that for 2022, there was an overall decrease of seven percent in the amount of time spent on unpaid work for wāhine, and an increase of 0.6 percent for tāne.

The second step of valuing unpaid work was to determine the dollar value of each hour spent on unpaid work. To do this we needed to use one of two approaches to impute a value for these services. In general, the two approaches presented a choice between the opportunity cost and the replacement cost of doing such work. The opportunity cost approach called for the use of the average hourly wage of those for whom the work is being valued. In our case, this would mean using the average hourly wage for wāhine Māori. The replacement cost method called for using an average hourly wage that represented the relevant activities covered in the production of the unpaid household services being used. For instance, using the wage rate of a childcare worker for the hours spent on childcare.

After evaluating both possible methods, we determined that the opportunity cost method was the approach we should use in our calculation of the value of unpaid work. Thus, we used the average hourly wage for Wāhine Māori, non-Māori wāhine, and tāne from IRD data on wages and salaries for the year to March 2022. The hourly average wage for each group, wāhine Māori, non-Māori wāhine, and tāne, was applied to the total annual number of hours of unpaid work, and was then multiplied by the number of individuals in each group aged over 12 in 2022. Overall, this yields a total value of unpaid work for the year to March 2022 of $181.2 billion.

Adding unpaid work into the Social Accounting Matrix

The inclusion of unpaid work into the SAM requires three broad changes to be made to the SAM to accommodate this inclusion. The first is the movement of expenditure from the final household consumption portion of the SAM into the capital expenditure portion and the inter-industry portions of the SAM. The second is the addition of the six sectors of unpaid work into the inter-industry production portion of the SAM. The six sectors would then be treated as separate industries within the SAM, making purchases of goods and services from other industries, as well as providing their outputs as both intermediate goods feeding into other industries (for example other unpaid work industries, such as meal services purchasing services from travel services for the delivery of food from the supermarket to the household), and into final consumption from households.

Finally, the transactions and payments moving through the remaining portions of the SAM need to be adjusted to account for the inclusion of six new industries, as well as the movement of expenditure from final consumption to capital expenditure, and the purchase of intermediate goods from other industries.

Firstly, for the movement of expenditure from the final household consumption portion of the SAM into capital expenditure portion, and the inter-industry portions of the SAM, we followed the approach outlined in the United Nations (2017) guide on valuing unpaid work, when splitting household final consumption expenditure into three parts; intermediate consumption, acquisition less disposals of fixed assets, and final consumption of goods and services.

This meant using the system of national accounts (SNA), which clarifies the boundary line between fixed assets and intermediate consumption, by noting that expenditure on durable producer goods that are small, inexpensive, and used to perform relatively

simple operations may be treated as intermediate consumption when such expenditures are regular and small compared with expenditures on machinery and equipment. Examples of such goods are hand tools such as saws, spades, knives, axes, hammers, screwdrivers, and so on.

In addition, the guide provides an annex (Annex 4.1), which provides a list of products, as well as a guide for reallocating expenditure from household final consumption to intermediate consumption and capital expenditure, by each specific activity. This allocation is largely based on the work undertaken in the United Kingdom by Holloway et al. (2002).[19] The guide also recognises that production processes, and the supply of certain products will differ by country. However, the guide recommends that all countries adhere to the allocations described in the annex as much as possible, as this will ensure consistency and comparability across countries. Lastly the guide notes that when some goods or services can be used for final consumption, intermediate consumption, and fixed capital formation for own use production work of services, that countries assign a quota allotment for each type. For instance, 60 percent of fruit is final consumption, while the remaining 40 percent is for intermediate consumption.

Overall, this process saw around $27.6 billion in final household consumption expenditure being reallocated to intermediate consumption for the six new unpaid work sectors, while a further $847 million of final household consumption expenditure was reallocated to capital expenditure for these new unpaid work sectors.

Once, household final consumption expenditure had been reallocated to household final consumption, capital expenditure, and intermediate consumption, we were able to use annex 4.2 from the guide to allocate the intermediate consumption across the six unpaid work sectors. Annex 4.2 from the guide provides an allocation list of products across the five unpaid work sectors the guide uses, with us then splitting the care services allocation across childcare and adult care as appropriate.

Second was the addition of the six sectors of unpaid work into the inter-industry portion of the SAM. This was done by the addition of six rows and columns within each of the industry output and industry input portions of the SAM. The reallocated final household consumption expenditure then could be added into the columns and rows of the new industries within the industry input portion of the SAM. In addition to adding the $27.6 billion in reallocated final household consumption, we also allocated the $181.2 billion of total value of unpaid hours into the SAM, split across hours used to provide services to other unpaid industry sectors, and final operating surplus of the new unpaid work sectors. For example, The Household Travel Survey 2018-2021 undertaken by the Ministry of Transport, shows that 32 percent of an individual's travel trips each year were for shopping, which we were able to use to help determine a portion of the total value of the travel services sector that were supplied to the meal services sector to transport food from shops back to the household.

Finally, with the introduction of the value of unpaid work and the reallocation of final household consumption expenditure to capital expenditure and intermediate consumption, it is important that all transactions and flows of payments captured throughout the SAM are reviewed to ensure that the SAM remains balanced across all row and column totals. For example, the row total of consumption of industry outputs for the construction industry should equal the column total for industry inputs for the construction industry, and the expenditure column total for disposable income of wāhine Māori households should equal the row total for generation of disposable income for wāhine Māori households.

19 Household satellite account (experimental) methodology, Sue Holloway, Sandra Short and Sarah Tamplin. Office for National Statistics, United Kingdom, 2002.

Āpitinga E Measuring wellbeing
Appendix E Measuring wellbeing

Alternative measures

There has been a proliferation of literature on this subject over the past few years, and countless frameworks have been developed to understand and measure wellbeing for specific groups, regions, and countries. The main tension in the literature is the choice between two types of frameworks. The first kind are "universal" frameworks that generalise the measurement of wellbeing indicators to an entire population group, for instance national frameworks. An example of this is Aotearoa New Zealand's Living Standards Framework (LSF) and the OECD's Better Life Index from which the LSF was adapted. The generic nature of the metrics used means that these frameworks allow for comparability between regions and countries. However, universal frameworks and the indicators within them do not always represent wellbeing for everyone, and often ignore cultural context. In fact, the adoption of such frameworks can often feel like an imposition of a specific worldview, similar to the imposition of GDP as a proxy for wellbeing, based on a Western patriarchal worldview. For example, the New Zealand Treasury acknowledges that the LSF does not provide a comprehensive evidence base for all agencies, sectors, or groups, and that the Treasury's own bias, in terms of what it considers important to understand progress in wellbeing in Aotearoa New Zealand, is embedded in the framework.

Before moving on to the second type of wellbeing frameworks, it is important to step back and consider what the word wellbeing means. Simply put, wellbeing is the state of being comfortable, healthy, or happy. In general, it is the presence of positive emotions, and the absence of negative emotions. Although, this definition may appear to be simplistic, it is important to remind ourselves that with diversity comes complexity.Each of us operates with our own set of values, judgements, beliefs, worldviews, experiences, and a cultural base that has shaped us. To complicate matters more, these factors are dynamic and are constantly shifting. Therefore, the factors that contribute to a fulfilling life for one individual will, in all likelihood, not lead to the same outcome for another with a different set of beliefs.

The second type of wellbeing framework give consideration to these "local" realities and priorities (McGregor, 2018).A starting point is provided by the capabilities approach developed by Nobel laureate Amartya Sen, who made the point that "ultimately, the process of economic development has to be concerned with what people can or cannot do" (Sen, 1983, p. 754). According to Sen, the central feature of wellbeing is the ability to achieve valuable functionings. Functionings refers to "beings and doings" that people have reason to, and do, value. These can include things like getting adequate nutrition, knowing how to read and write, or having a roof over one's head. Therefore, the state of a person's wellbeing is determined by their success in achieving these functionings. The "capability" of a person, in turn, reflects the alternate combinations of functionings the person can achieve. Sen distinguishes between the two in the following way: "A functioning is an achievement, whereas a capability is the ability to achieve".Here, quality of life is assessed in terms of the capability of an individual to achieve valuable functionings as they choose (Sen, 1993).Freedom of choice and agency are central concepts of the approach in that individuals should have the capabilities to lead the kinds of lives they do value and have reason to value.

The capabilities approach lends itself well to policymaking that empowers people to make the choices they want to by eradicating barriers to achieving the functionings

they value. For example, we know that mothers disproportionately bear the burden of childcare. However, it is also important to remember that not all mothers view this as a burden. Moreover, a range of social, cultural, and personal factors influence decisions on how the load of childcare is shared between partners. Thus, the goal of policymakers should be to ensure that mothers have the freedom to choose whether they want to take on all, or partial, responsibility for childcare, instead of taking on a paternalistic role in dictating that time use on childcare should be more evenly distributed between two partners. This is an extremely important distinction in terms of setting the direction for policy. The use of a framework grounded on the capabilities approach would encourage policymakers to direct resources and social arrangements to support diverse family life, regardless of the context an individual operates in (Hall, 2019).This could include improved access to childcare and flexible work, and encouraging pay transparency, etc.

It is important to note that the capabilities approach is a "deliberately incomplete" framework, which can be applied in a variety of contexts. It is not a theory or a measurement framework. It simply provides guidance on how to think about making wellbeing, or quality of life, comparisons. Given how personal the concept of wellbeing can be, and the importance of agency and freedom, Sen has argued that each group should itself select, weight, trade off, or aggregate capabilities. In other words, frameworks and the indicators within them, must be designed by the groups they are meant to represent. The capabilities framework has found many applications, and been interpreted in a number of ways, all over the world. Some examples include the Human Development Index (HDI), Gender Empowerment Measure (GEM), and the Gender-related Development Index (GDI).

Subjective wellbeing

Subjective wellbeing is a self-reported measure that is sometimes used as a proxy for overall wellbeing. The literature on subjective wellbeing highlights that this measure is best used in conjunction with other objective measures of wellbeing. Kahneman and Krueger (2006) showed how subjective wellbeing varies with individual characteristics and other factors. The authors note that it is important to recognise that subjective wellbeing measures inevitably capture features of individuals' perceptions of their experiences. The level of wellbeing, or life satisfaction, an individual reports in a survey has been shown be influenced by factors such as the weather, earlier questions in a survey, recent personal developments in life (such as bereavement, divorce, or winning the lottery), sleep quality, self-reported health, etc. Nevertheless, subjective wellbeing can be a powerful indicator when used in combination with other metrics and/or measures of wellbeing.

Stiglitz et al (2009) recommend using measures of both subjective and objective wellbeing to provide information on quality of life. The OECD (2013) has produced guidelines on measuring and using subjective wellbeing measures. The guide notes that subjective wellbeing measures can complement other outcome measures, help understand the drivers behind subjective wellbeing, support policy evaluation especially where non-market outcomes are involved, and help identify previously unexamined policy problems. Take labour market outcomes and subjective wellbeing for example. Comparing subjective wellbeing with labour market status shows that being unemployed is unsurprisingly linked with lower subjective wellbeing (Stiglitz et al, 2009).However, this result holds even when income is held constant, which may be an indication that the loss of friendship, meaning, and status may also be at play. Comparing subjective wellbeing to multiple factors can highlight the relative importance of each to overall self-reported wellbeing. For instance, international research has shown that while both unemployment and inflation depress wellbeing, unemployment has a stronger effect than inflation (Blanchflower, Bell, Montagnoli & Moro, 2014).

It is also important to recognise that different worldviews and cultural contexts can also have a powerful effect on subjective wellbeing. For instance, from a Māori point of view, this measure would reflect cultural aspects like te reo Māori, mātauranga Māori, connection to marae, wāhi taonga, and wāhi tapu (Stats NZ, 2014).The New Zealand Treasury (2022) undertook an analysis of the trends in Māori wellbeing, including subjective wellbeing. The report shows that in 2021, Māori had the lowest levels of subjective wellbeing, as measured by several indicators, of any ethnic group. Māori had the lowest levels of general life satisfaction, family wellbeing, and sense of purpose. While the analysis did not compare subjective wellbeing to other factors for Māori specifically, a general comparison found that Māori were over-represented in the segment with not/just enough income to meet everyday needs. Separately, the report also showed that wāhine Māori were 1.7 times more likely than non-Māori wāhine to experience psychological distress, and 1.9 times more likely to consider themselves in poor health, all of which no doubt contribute to lower perceived wellbeing.