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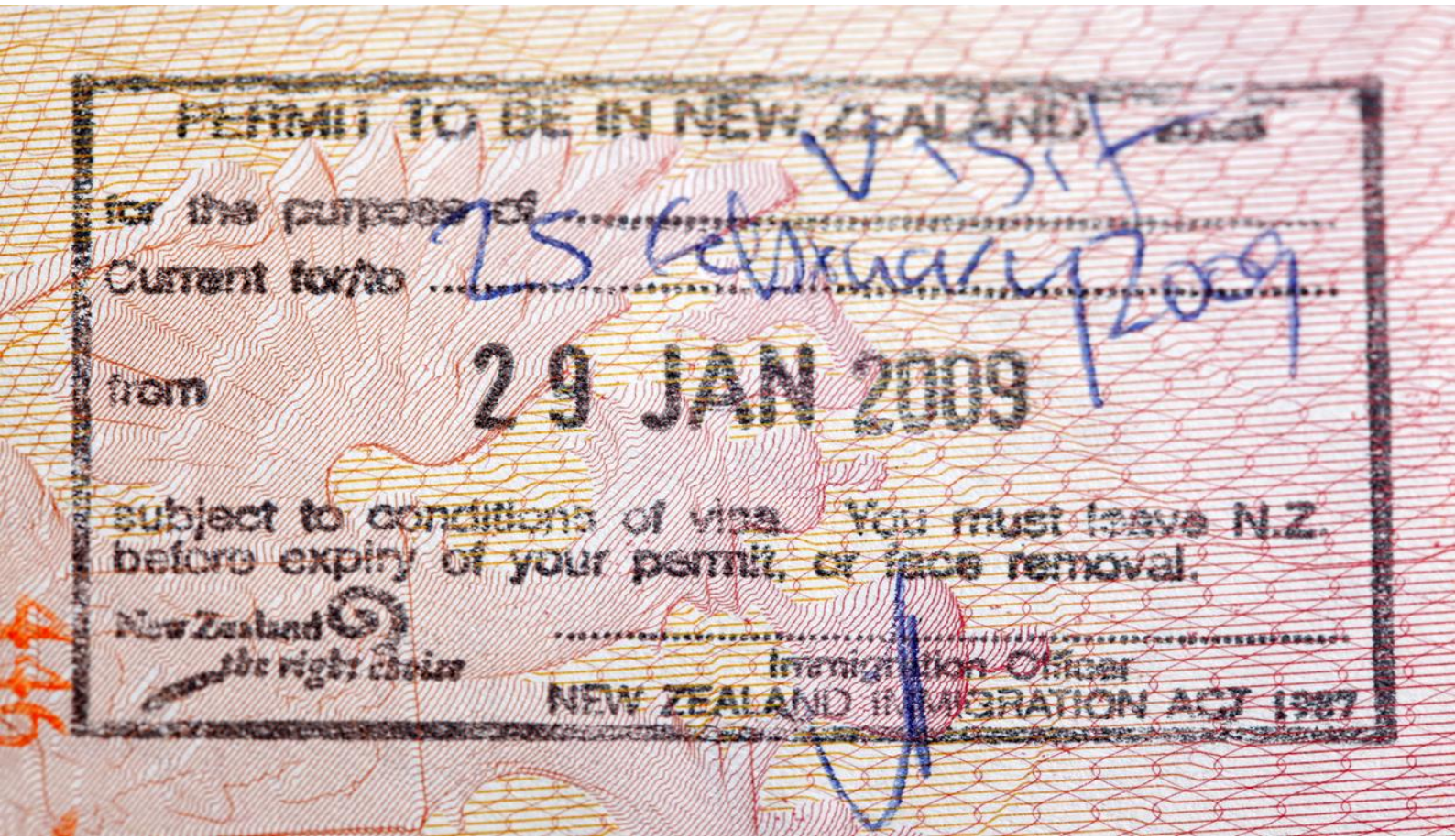

Planning for prosperity

Transparent and public immigration targets

NZIER report to the New Zealand Productivity Commission

March 2022

About NZIER

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice.

We undertake and make freely available economic research aimed at promoting a better understanding of New Zealand's important economic challenges.

Our long-established Quarterly Survey of Business Opinion and Quarterly Predictions are available to members of NZIER.

We pride ourselves on our reputation for independence and delivering quality analysis in the right form and at the right time. We ensure quality through teamwork on individual projects, critical review at internal seminars, and peer review.

NZIER was established in 1958.

Authorship

This paper was prepared at NZIER by Peter Wilson and Julie Fry.

It was quality approved by Todd Krieble.

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Registered office: Level 13, Public Trust Tower, 22–28 Willeston St | PO Box 3479, Wellington 6140
Auckland office: Ground Floor, 70 Shortland St, Auckland
Tel 0800 220 090 or +64 4 472 1880 | econ@nzier.org.nz | www.nzier.org.nz

Key points

The New Zealand Productivity Commission asked NZIER to provide a detailed analysis of some issues it raised in the Commission's interim report on immigration settings, *Fit for the Future*.

These issues concern a theme of governments taking a more strategic approach to immigration policy and administration through a government policy statement (GPS) mechanism. They include:

- How could the government develop and then apply a GPS on immigration?
- What is the capacity of the economy to absorb migrants?
- How could target numbers of migrants be determined?

The Commission's underlying objective in raising these issues was to determine how immigration policy can make a greater contribution to the wellbeing of New Zealand.

These themes are highly interrelated, and we have addressed them within a single factual narrative.

Four preliminary matters

We start by making four important preliminary points.

The COVID caveat

We have written this report during a period of unprecedented disruption to emigration and immigration in New Zealand.

While there are currently many migrants in New Zealand on various short and long-term visas, flows of people across the border have dropped to a trickle compared to pre-COVID figures.

Net migration has probably made a negative contribution to population growth since March 2020.

It is possible that net immigration numbers will not bounce back, and pre-pandemic policy settings will change. The future is exceedingly uncertain.

We have taken a least regrets approach in developing our advice. We present proposals that are robust against the full range of possibilities. Our particular focus has been on preventing unsustainable immigration settings.

Whose interests are we addressing?

There are at least five groups with an interest in immigration policy in New Zealand:

- potential immigrants
- potential employers of migrants in New Zealand

- the local community (including existing immigrants)
- tangata whenua
- the government.

This report focuses on the government and how it makes and applies immigration policy.

The ultimate constraint on immigration policy

In our view, the ultimate constraint on the extent to which immigration can improve wellbeing is the willingness of the current population to accept more immigrants. New Zealand's ability to build the capacity to absorb migrants and the preparedness of the community to bear the cost of doing so alongside the benefits that migrants bring will form part of that willingness. Clear evidence that immigration brings net benefits will also help build the case for any government policy.

A GPS should increase legitimacy

Government policy statements (GPSs) have been used to improve public understanding and acceptance in other areas ranging from fiscal responsibility and resource management to transport and health. We consider that the purpose of an immigration GPS should be to enhance the legitimacy of immigration in the eyes of the community. The GPS approach should increase legitimacy by improving the clarity and transparency of policymaking, especially through greater engagement with the Crown's Treaty partner and stakeholders, reinforcing accountability and leading to greater effectiveness of programmes in meeting their objectives.

Migration is a material issue in New Zealand

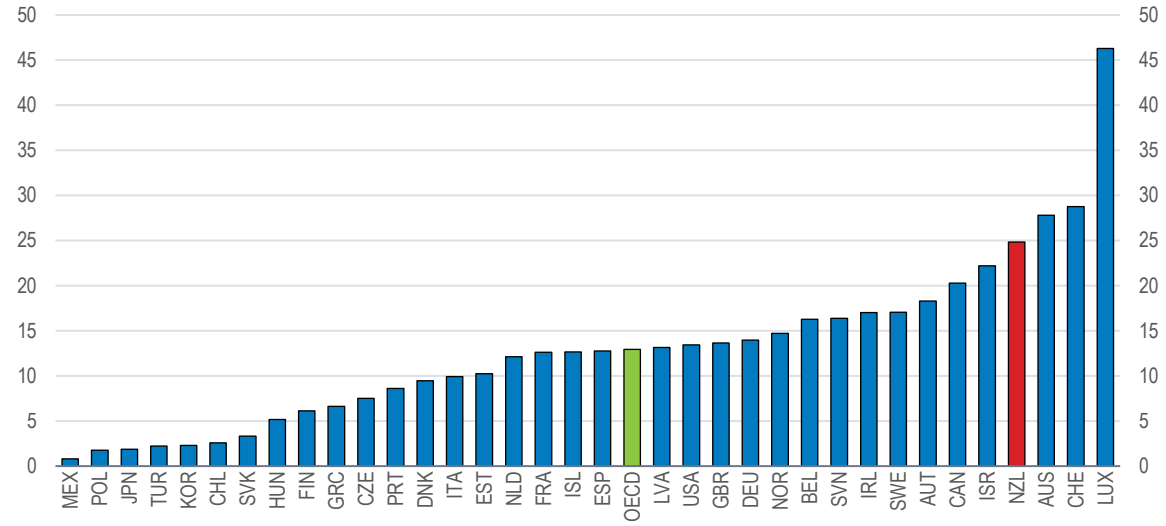
New Zealand is one of the most open economies to people flows in the developed world.

Up to a million New Zealand-born citizens and their children live overseas, which, as a share of the population, is one of the largest expatriate communities in the OECD.

At the same time, people born overseas make up one of the largest proportions of the New Zealand population in the OECD.

Figure 1 New Zealand has a high proportion of immigrants

Foreign-born share of the population, 2016 or earlier

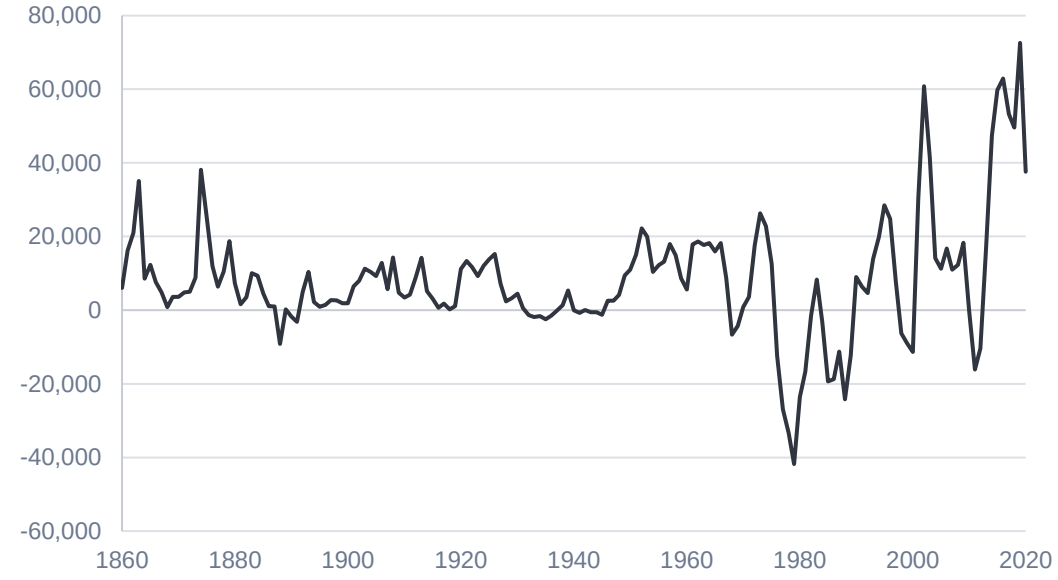


Source: Carey (2019)

There have been significant flows of people across the New Zealand border since records began to be collected in 1860. But they have not always been one way. As recently as 2012, net migration was negative.

Figure 2 A long history of migration

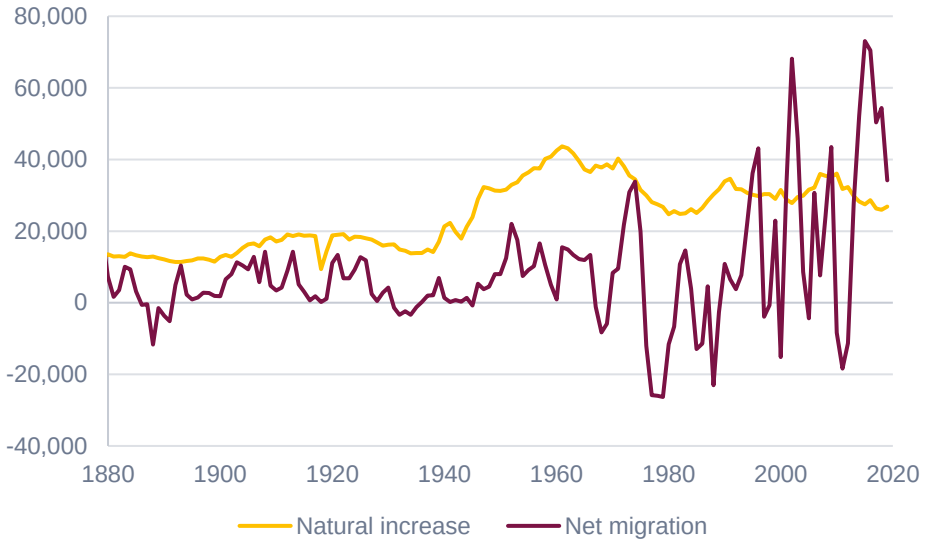
Net permanent and long-term migration, year ended December



Source: Stats NZ

New Zealand's population growth is currently high by OECD standards. Natural increase (births less deaths) has started to fall, while net migration has been making a variable, but recently positive, contribution.

Figure 3 The contribution of net migration to population increase



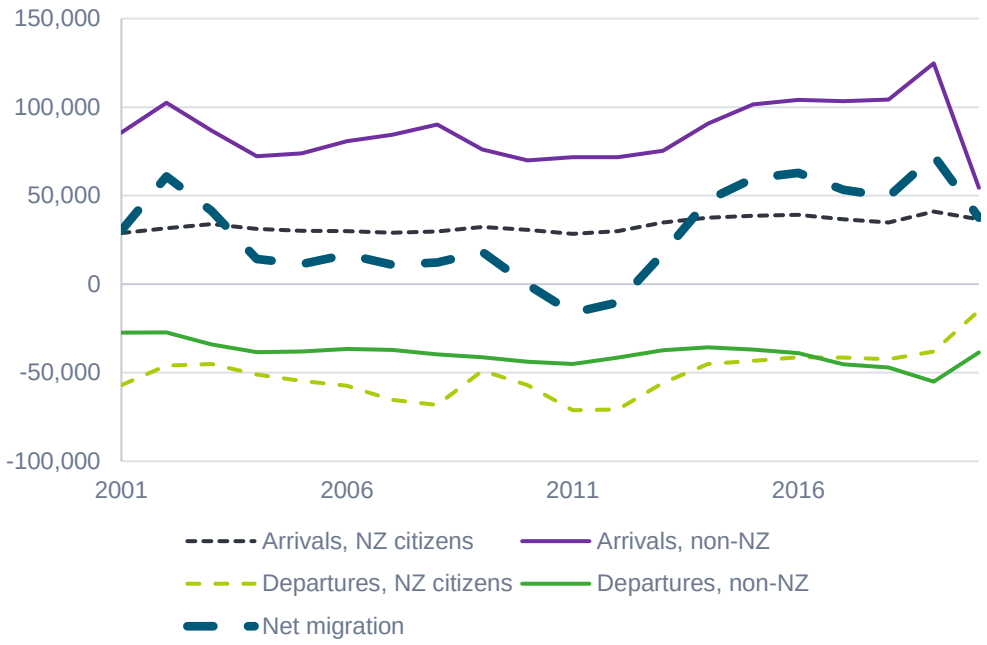
Source: Stats NZ

Net migration is hard to control or predict

Net migration consists of four components: arrivals and departures of non-citizens and arrivals and departures by citizens. The increase in total net migration from 2011 to 2019 shown in Figure 2 was largely the result of a marked reduction in the number of New Zealand citizens departing for Australia and an increase in arrivals of non-citizens. Departures of non-citizens and arrivals of citizens were both very stable.

Figure 4 The four components of net migration

Permanent and long-term migration, year ended December



Source: Stats NZ

Outside emergencies like COVID-19, the government can only control one of these components: arrivals by non-citizens. Each of these components also has its own drivers, and this makes forecasting net migration and, as a result, population growth, challenging.

What should be the goals of immigration policy?

We start our policy discussion by asking what a realistic goal for migration policy in New Zealand is. Is immigration just 'nice to have', or is it truly a necessary condition for sustainable growth in wellbeing?

The answers to these questions depend on the channels through which migration affects locals, the host community, and migrants themselves.

The reasons governments around the world have traditionally used to justify immigration include various combinations of:

- **Growing the population and thus the economy**. While net immigration can increase the population, it does not always do so in a way that leads to higher living standards.
- **Boosting productivity**. The evidence on this point is mixed. What matters most is whether immigrants are more productive, on average, than locals and whether they can bring skills, ideas and capital to New Zealand that will improve the productivity of locals.

- **Filling gaps in the labour market**. This has been the mainstay of immigration policy in New Zealand of late. Studies have consistently found that immigrants do not generally depress wages or employment of locals when migrant workers are very readily available. However, incentives to develop and train local workers, attract more locals into jobs through improved wages and conditions, and raise their productivity through increased capital investment are reduced.
- **Supporting the export of services**. Prior to COVID-19, international education and tourism were among New Zealand's top export earners. But tourism levels were probably unsustainable, and until policy changed in 2018, the education system favoured quantity over quality, leading to poor education outcomes, crowding and concerns about student welfare.
- **Addressing humanitarian concerns** through welcoming a small number of refugees and asylum-seekers each year.
- **Supporting family reunion**, primarily by allowing the partners and dependent children of certain migrants to join them.
- **Helping provide development assistance**, including through targeted programmes that allow limited numbers of people from the Pacific to settle here. Additionally, the Recognised Seasonal Employer scheme in the horticulture sector is a highly-regarded aid programme, although cracks are starting to appear as numbers grow.

The answers to each of these questions has implications for both high-level and detailed immigration policy settings. In Table 1, we summarise our answers and their implications.

Table 1 Summary of reasons for allowing migration

Reason	Answer	Implications
Growing the population	Net migration can have a material effect on population size. Experience in New Zealand has been that the actual contribution varies markedly, mainly due to variations in the number of New Zealand citizens departing.	A deliberate policy to boost the population would need to contain a mechanism to adjust inflows to account for outflows.
Boosting productivity	Limited effects in both theory and practice.	The instances where immigration can boost productivity are likely to be limited and require carefully targeted and possibly high-cost programmes like the Global Impact Visa. The number of residence visas issued under the Skilled Migrant Category and Essential Skills temporary visas should be scaled back, and skill thresholds increased if their main intended purpose is to boost productivity.

Reason	Answer	Implications
Filling labour and skills gaps	This has been the cornerstone of New Zealand policy for both temporary and permanent immigration, but the skills of migrants entering Aotearoa have often been lower than policy intended.	The immigration system is presently disconnected from other relevant policies, like education and urban development. Recruiting migrants is relatively low cost for employers and does provide them with the workers they need to support their current business models. Ready access to migrants gives the education and training system a 'free pass' to continue to fail large numbers of students. It should focus more on increasing the skills of locals who are currently entering the workforce without the skills that are in demand. Industry policy should incentivise firms to use business models that are not as reliant on migrants. Bringing in fewer migrants and treating them better is likely to enhance wellbeing overall.
Supporting exports of services	High levels of fee-paying students have been admitted to New Zealand. Experience suggests that an emphasis on quantity over quality can negatively affect New Zealand's reputation as an education provider, housing availability, especially for local students and the wellbeing of international students.	Continue the government strategic shift to focus on quality over quantity.
Humanitarian	New Zealand's intake is very small, but the potential for improvements in the wellbeing of refugees are enormous. Pressure to provide more places is likely to grow if climate change has the expected effects on Pacific Island states.	New Zealand can do more, including in response to national disasters (e.g. cyclones, recent events in Tonga).
Family	Potentially high wellbeing effects for the migrants. New Zealand has increasingly limited migration of the parents of existing immigrants, largely because of concerns about fiscal cost. Partners and dependent children are still permitted to enter, provided certain criteria are met.	High wellbeing effects need to be included in policy considerations.
Development	The RSE scheme is a stand-out internationally in terms of guest-worker schemes. However, there are concerns about some effects on host countries and migrants and the possibility of reinforcing low-productivity business models.	The RSE scheme may have reached its limit in terms of net contribution to workers and the economy in its current form. Increasing emphasis on skills development and continuing to increase flexibility to work for different employers would help. An alternative mechanism for delivering assistance to the targeted countries would need to be developed if allocations were substantively reduced.

Source: The authors

The need for better data and analysis

While we can learn from overseas studies and we have some data on the effects of immigration on the New Zealand economy, as part of a move to a more transparent system, the government should develop a suite of indicators of the effects of immigration and regularly make the results public. It should also commission new and updated research on the impact of immigration in New Zealand. This research should focus on increasing understanding of:

- the types of immigrants coming to New Zealand under what conditions (e.g., the relative numbers of permanent, temporary and transitory immigrants; their employment rights and how they are exercising those rights; number of accompanying family members)
- the contribution to wellbeing that these various groups can make.

Absorptive capacity

Our next subject for discussion is the Commission's proposal to use the capacity of the economy to absorb immigrants as an input to policy.

Considering absorptive capacity when developing immigration policy would be a clear advance over the current approach.

Allowing more immigrants to arrive than can be settled well is likely to impact the local community's wellbeing and reduce public acceptance of immigration.

We recommend that a working definition of "absorptive capacity" be:

That the rate of increase in New Zealand's population due to net migration should be such that, on average, over the short to medium term, the associated wellbeing of New Zealand residents is maintained or improved, and new immigrants can be treated as well as locals, across the relevant dimensions of wellbeing.

Along with other indicators designed to provide ongoing assurance that immigration policy is reaching its potential in delivering the highest possible net benefits, we recommend the government also monitor measures of absorptive capacity.

Focusing on key indicators of the parts of the economy that are most likely to respond slowly to increases in net migration (housing, health, education, urban land and transport) will enable the government to receive an early warning when capacity is coming under pressure. For example, data on GP waitlists could provide an initial signal that primary healthcare systems are experiencing capacity constraints.

GPS and consultation

The Commission sought our advice on the details of a government policy statement on immigration.

In seeking to improve the legitimacy of immigration policy going forward, the government should focus on improving clarity, building transparency, promoting accountability, providing opportunities for engagement, and ensuring programme effectiveness.

Regarding the **clarity** and **transparency** of immigration policy, we recommend that:

- The fiscal responsibility provisions of Part 2 of the Public Finance Act be used as a guide to reform
- The Immigration Act should be amended to require the government, at least every three years, to issue a government policy statement on immigration, with the Act specifying matters the statement should address.

To increase **accountability** and aid community understanding of the nature and effects of immigration, we recommend that the Immigration Act be amended to require officials to regularly publish a report on immigration, with the Act specifying the minimum data to be included in that report.

To increase community and other **engagement** with immigration policy, we recommend that the Immigration Act be amended to require:

- At least one year prior to the due date for the next Statement, the Minister to seek the written views of the Productivity Commission and the New Zealand Infrastructure Commission, Te Waihanga, on the content of the next Statement.
- The Minister to issue a draft GPS at least six months prior to the final Statement's due date and seek submissions from the public.
- The Minister to transmit the draft to the Productivity Commission and Te Waihanga, seeking their advice and recommendations.
- When making the final Statement public, the Minister to release the advice received from the Commissions and public submissions.
- The Minister to present the Statement to Parliament.

Regarding policymaking generally, we recommend that the government take a more open approach, seeking the input of the public and stakeholders before announcing major policies. As a matter of routine, it should publish discussion documents and seek submissions and engagement with employers, the public, current migrants, and potential migrants.

Since at least 1899, successive governments have viewed making and implementing immigration policy as an exercise of the sovereign powers they have considered were ceded to them by Article 1 of the English version of the Treaty of Waitangi. They have rarely engaged with iwi, hapū and Māori as Treaty partners. The Productivity Commission has received legal advice that there is a Treaty interest in immigration and has sought views on how this interest could be recognised. The implication is that the Crown should move away from the presumption that it has unrestricted sovereign power over the border to an approach where migration policy also recognises te tino rangatiratanga that iwi, hapū and

Māori retained. This will be a significant change in approach and will require the Crown to rebuild the relationship with Māori regarding immigration that existed at the time of the signing of te Tiriti/the Treaty.

The process of rebuilding the relationship should be appropriately resourced, respect tikanga (protocol), and be seen to be tika (right and just). It should seek to allow the Crown to develop a deep and genuine understanding of the views of its Treaty partner.

A GPS will not, of itself, improve the **effectiveness** of immigration policy. But requiring governments to set and state their objectives, report on results and engage with the public should, in time, lead to better policies and more effective administration.

Adjusting migrant arrivals and skill levels

Our final topic is what mechanisms the government should use to adjust migrant numbers.

Under current arrangements, many individual visa categories, including some working holiday and Essential Skills visas, are essentially uncapped, while others, such as the Recognised Seasonal Employer (RSE) Scheme and the Pacific Access Category (PAC), are capped. Places on capped visa schemes are allocated under various methods, including by ballots (the PAC scheme), past employment levels (in the case of the RSE scheme) and being 'first come, first served' (capped working holiday visas).

Capping overall visa numbers and individual categories would be the clearest way of moderating net migration flows. It would require companion measures to ensure that economic migrants with the greatest potential to contribute to wellbeing were selected and to allocate scarce visas to potential immigrants or their employers. Balloting is a neutral allocation method.

Auctions or setting high fees would allow immigrants or employers to reveal how they value the right to come to New Zealand or employ an immigrant. But an ability to pay does not equal an ability to contribute. Accordingly, these methods would need careful design to make them publicly and internationally acceptable.

Wage thresholds and other systems based on eligibility criteria are often used as ways of selecting economic immigrants with the greatest potential contribution to wellbeing. They can also be used to moderate numbers, but to do so successfully requires the government to understand the responsiveness of immigration to the thresholds set. An iterative approach might be required.

A particular challenge with using wage thresholds is the implied assumption that wages are a good measure of social value. This is clearly not always the case. COVID-19 border closures have shown just how much New Zealand values many low-paid workers, and for the foreseeable future, migrants are likely to remain an important source of workers in some key areas like aged care. Caps would also create a moral hazard for the government where it is the direct employer of immigrants, as in the case of healthcare, education and care workers.

The current system of largely uncapped visa categories with low salary and skills thresholds led to pre-COVID migration levels above New Zealand's absorptive capacity. Thus, any future rules need to admit fewer migrants for a time and ensure that they select those

migrants with a high potential to contribute to the wellbeing of locals and the migrants themselves.

Our recommendations

Caps with auctioning, with additional mechanisms to grant entry based on ability to contribute to wellbeing, would be the best of the available options if political and social acceptability concerns could be addressed. Immigrants would have a clear incentive to succeed as a way of recouping their investment in paying the entry fee. Contribution thresholds will not be required in some cases; for example, they would not be needed for working holiday or Recognised Seasonal Employer visas.

The second-best solution would be a pool system, with relatively high salary and skill thresholds for entry into the pool and selection by ballot. Thresholds could be adjusted iteratively to achieve the desired level of immigration but should never fall below a pre-set floor designed to ensure that economic migrants make a high contribution to wellbeing. Ideally, the chance of eventually being drawn for the ballot should be high, to ensure that people's expectations of success match reality and as a way of reducing incentives to game the system.

Conclusions

Ministers and their advisers rarely, if ever, bring the public into their confidence as they develop immigration policy.

The Productivity Commission has recommended that a new system of transparent and accountable policy development and implementation be introduced. This system could increase the legitimacy of immigration policy. Painful lessons from overseas – and New Zealand's own history – shows that immigration is a controversial policy with the potential to ignite passions.

Understanding the precise effects of migration is still developing and building a firm framework of accountability and reporting will be a major exercise.

Ensuring migration policy is effective and sustainable and results in New Zealand treating migrants well is in all of our interests. Acknowledging that, along with many benefits, migration can bring costs that need to be addressed is the key to maximising the wellbeing of migrants and locals alike.

We need to be very clear that it is not the fault of migrants that some of our institutions are responding poorly to the challenges they face. Housing supply and health infrastructure need to become more responsive to population increase, and educational institutions need to get better at equipping locals for in-demand jobs. At the same time, we should not shy away from accepting that while ready access to migrant labour makes some problems easier to address, it can also make others harder.

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1 Introduction

The New Zealand Productivity Commission has engaged NZIER to analyse in more detail a series of issues that it raised in its interim report on immigration settings, *Fit for the Future*.

The topics we have been asked to address are around a theme of governments taking a more strategic approach to immigration policy and administration, through the mechanism of a government policy statement (GPS). They include:

- How could the government develop and then apply a GPS on immigration?
- What is the capacity of the economy to absorb migrants?
- How could target numbers of migrants be determined?

These issues are interconnected:

- A GPS will set objectives, and absorptive capacity is a constraint within which those objectives must be developed.
- The objectives are put into effect via targets, thus creating a feedback loop between them.
- The practicality of meeting targets (especially when the government cannot easily influence many cross-border people flows) also constrains the objectives.
- The type of migrants allowed to enter can influence absorptive capacity (e.g. construction workers, health professionals and teachers can increase it, although not always immediately, while temporary migrants generally reduce it by less than permanent migrants do).

Accordingly, we have approached these issues through a single narrative rather than address them separately.

1.1 The COVID caveat

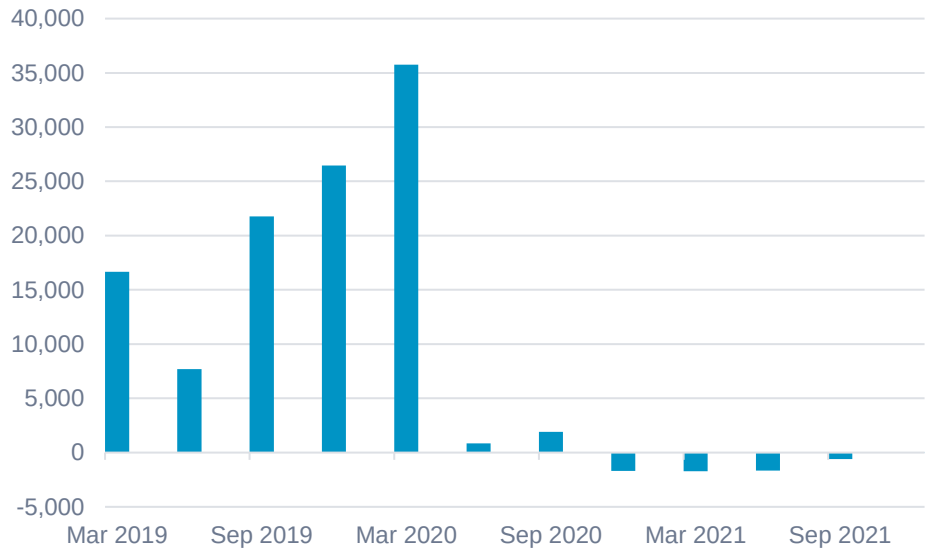
Discussing immigration policy when the borders have been effectively closed due to COVID-19 poses a challenge.[1]

After an initial surge when the borders were first closed, net permanent and long-term migration has been effectively zero for the last two years.

[1] The process of reconnecting with the world is proceeding apace. This document reflects the stated policies and intentions of the government as at 18 March 2022.

Figure 5 Permanent migration had a neutral impact on population during COVID

Quarterly net permanent and long-term migration

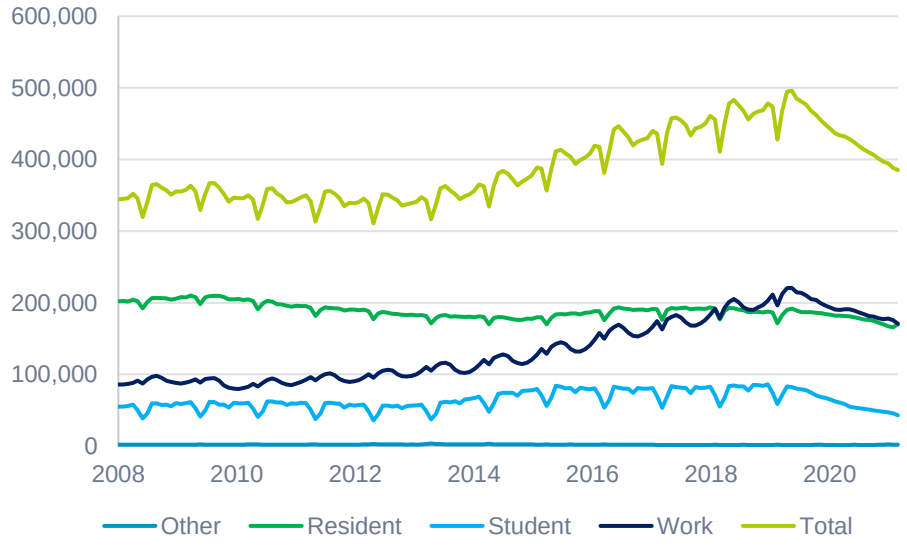


Source: Stats NZ

But the number of people in New Zealand on temporary visas has steadily fallen as visas expire and people depart. Total levels are now back to what they were five years ago.

Figure 6 The population of temporary immigrants is gradually falling

Monthly population by broad visa class



Source: MBIE

The economy is, however, currently experiencing resource constraints. Recently, the Reserve Bank commented:

> *Economic capacity pressures have continued to tighten. Employment is now above its maximum sustainable level, with a broad range of economic indicators highlighting that the New Zealand economy continues to perform above its current potential.* (Reserve Bank of New Zealand 2022, 3)

In our view, pre-COVID immigration settings were unsustainable (Fry and Wilson 2020).[2] But we do not know what the situation will be like once borders are fully reopened.

It is possible that immigration numbers will not bounce back. The Government is currently reviewing immigration policy (Nash and Faafoi 2021; Ministry of Business, Innovation and Employment 2021c), and we do not know whether pre-COVID settings will be re-applied. At the same time, the Government's ambitious programme to build infrastructure and increase capacity in the health and education systems is still to make its full contribution to the potential output of the economy.

Taking a least regrets approach, we have undertaken the analysis underlying this report on the assumption that, in time, demand for immigration will again start to push the boundaries of what the economy can absorb. Even if that is not the case, recalibration of the composition of migrants could improve net benefits overall.

1.2 Whose interests are we discussing?

There are at least five groups with an interest in immigration policy in New Zealand:

- **Potential immigrants** who would lead a better life if they left where they are now and moved to New Zealand. They number in the millions, if not billions.[3] Economic migrants have many location choices.[4]
- **Potential employers of migrants** in New Zealand. They will decide to hire a migrant, as opposed to hiring a local or investing in labour-saving technology, based on relative availability and suitability, their business model, management preferences and all the incentives they face.
- **The local community**, including existing workers and those people who are unemployed or not in the labour force, who will experience the effects (positive and negative) of immigration.
- **Tangata whenua**, who have not been involved in setting and applying immigration policy as partners under te Tiriti o Waitangi to date, but as we argue in section 5.6.1 on page 79, should be going forward.

2 In addition to raw numbers of migrants exceeding the economy's absorptive capacity, ready access to temporary migrants, particularly working holidaymakers and students with work rights, reduced employer incentives to train locals, improve terms and conditions, and invest in more capital-intensive production processes. The skill levels of many migrants were also significantly below what policy intended.

3 According to the latest version of the Penn World Table, in 2019, after adjusting for differences in purchasing power, there were 151 countries and territories where per capita GDP was less than New Zealand's. These places had a combined population of 6.7 billion people (Feenstra, Inklaar, and Timmer 2015).

4 Economic migrants are people moving country voluntarily, as opposed to refugees and asylum-seekers who are escaping persecution, arbitrary deprivation of life, torture or cruel treatment. Economic migrants will often have the choice of settling in one of the 31 countries and territories that had higher GDP per capita than New Zealand in 2019.

- **The government**, which has the power to regulate who can cross the border and under what conditions, as a part of a wider set of policy objectives.[5]

This report focuses mostly on the government and how it makes and operates immigration policy.

While the government can clearly influence the incentives that potential migrants and their potential employers operate under, it does so from a position of having less than full information. The potential contribution migrants can make is not always readily observable, meaning that governments need to rely on imperfect proxies, like years of education, job offers and testable language skills.

We consider that the government of the day is best placed to make high-level decisions around issues where there is enough information to enable effective regulation, such as:

- The number of migrants to be allowed entry
- Priorities to be given to various types of migrants (economic versus family versus humanitarian, levels of skills, etc.)
- Screening migrants against health and character criteria.

One powerful tool that the government has is the terms and conditions of employment under which migrants must be employed. Things like salary thresholds and required conditions of employment will alter the incentives faced by both employers and migrants. For example, limiting visas to jobs that pay a high salary is one way of increasing the chances that only migrants who can make a success of that job will be offered employment.

Potential migrants and their potential employers can then make their decisions based on elements much more observable to them than to the government (such as, does this migrant look like the right person for this job?)

1.3 The ultimate constraint on immigration policy

In our view, the ultimate constraint on the extent to which immigration can improve wellbeing is not the physical capacity of the country to employ, house, educate, care for or transport migrants; it is the willingness of the current population to accept more immigrants. That willingness is partly conditioned on the effects that migrants have on the wellbeing of locals and, as we will see, those effects, in turn, come, at least in part, from New Zealand's ability to build the capacity needed to absorb migrants.

The inability of councils to plan, provide and fund urban development and the education system to provide all students with in-demand skills are important policy issues that require attention in their own right.[6] Addressing these issues will have an impact on immigration policy, by either increasing the capacity of the economy to absorb more immigrants or by supplying local workers in fast-growing sectors of the economy. These are, however, issues that need to be addressed independently of immigration policy.

5 Governments and communities in source countries also have an interest in immigration in New Zealand, especially those in the Pacific, which will be a factor considered by the New Zealand government.

6 Eric Crampton from the New Zealand Initiative has gone so far as to say that "New Zealand has a housing and infrastructure problem, not an immigration one"(Crampton, quoted in Fonseka 2022). We think there are important parts of the immigration system that need reforming, but his basic point that housing and infrastructure are problems in their own right is well made.

Increasing the acceptance of immigration will require some work. Governments often assert what level of immigration 'feels about right'. But being able to articulate based on robust evidence and clear criteria why a particular number of immigrants (or the number of various types of immigrants) makes sense is key to ensuring the overall immigration programme and its elements are seen to be legitimate in the eyes of the public.

As recent experience in Australia, the United Kingdom (UK), the United States (US) and elsewhere shows, the risks of a populist backlash in response to poorly managed and communicated immigration policies are real. The consequences are well worth avoiding (Del Savio 2020).

New Zealand has also experienced periods of mismanaged immigration policy, perhaps most vividly evidenced by the 'dawn raids' of the 1970s. Official encouragement of short-term migration from the Pacific was followed by the government looking the other way when overstaying and other irregularities were convenient sources of much needed labour supply, only to turn to systematic discrimination and scapegoating of migrants when the economy was doing poorly and their help was no longer required (Spoonley and Bedford 2012, 211).

We remain concerned that recent increases in immigration in New Zealand have been pushing the limits of what is publicly acceptable and what is economically desirable. Some policy and practice, including migrant exploitation, repeatedly reissuing temporary visas, and giving insufficient attention to impacts on vulnerable locals, has not been consistent with the country's expressed values (Fry and Wilson 2018; Wilson and Fry 2020; Fry and Wilson 2020). We have argued elsewhere that explicitly focusing on wellbeing, as opposed to narrower issues such as impacts on gross domestic product (GDP) and the labour market, would allow a wider range of criteria to be used to judge individual immigration policies and practices (Fry and Wilson 2018).

There is scope to do better in terms of improving wellbeing and maintaining social licence through:

- Developing clear objectives and engaging in a more sophisticated public conversation about what different types and levels of migration can achieve, both in terms of wellbeing and economic impacts.
- Being clear that migration has costs as well as benefits, and thus policy requires a balanced approach. Both having too few migrants and having too many can be damaging.
- Acknowledging that in the short-term, migrants will be necessary to address pressing problems like building sufficient infrastructure to service the current as well as projected population and staffing the health and education sectors.[7]
- Being honest with migrants about their prospects – especially when chances of a residence visa are low – so people can make decisions based on facts, not hopes.[8]

7 In doing this, government should remain alert to why these positions are not being filled by well-trained locals. Where pay is too low or conditions are unattractive, or the education and training system is not working as well as it should, this points to the need for medium- and longer-term responses other than immigration.

8 Adda et al. (2021) conducted simulations which demonstrate the powerful effects that different policy settings can have on the behaviour of temporary migrant. One example is that regimes that deferred decisions on whether temporary migrants could stay permanently until the end of the initial visa period could act as a disincentive to migrants learning the local language.

- Focusing on improving 'fit' for New Zealand circumstances over the medium term, making complementarity with local factors of production – whether the migrants are high, low or medium skilled, temporary or permanent – the benchmark for economic migration.
- Having credible policies and programmes in place to expand the various components of 'absorptive capacity', including access to housing, infrastructure and public services, that are a constraint on achieving migration policy goals.
- Appropriately engaging with iwi, hapū and Māori.

These are all themes that the Commission has discussed in its interim report.

We see five cornerstones for legitimacy:

- Clarity: the government of the day should determine clear objectives for migration policy.
- Transparency: the government should make public its strategy, objectives, and priorities and how they were formed.
- Engagement: the government should seek input from people with an interest in migration policy.[9]
- Accountability: the government should report on the progress in achieving its policy goals.
- Effectiveness: the system should be fit for purpose.

1.4 A government policy statement

The Productivity Commission has specifically recommended that the Immigration Act be amended to require the government to issue a GPS on immigration.

There are a number of policy areas where the government now issues policy statements and there are proposals to introduce more. In Appendix A, we discuss various different types of GPS. We distinguish between the extensive statutory statements used in transport, for fiscal policy, and soon to be adopted in health, and more specific policy statements such as those issued under the Resource Management Act.

Issuing a GPS first requires developing a clear strategy, in order to derive overarching objectives and policy priorities on immigration within the context of the government's overall policy goals.

Any such strategy needs to be developed within the context of recent and more long-term New Zealand migration trends. It needs to build on what is currently known from local and international experience about the drivers of cross-border people flows and the impact of immigration on host countries and migrants.

Developing a single motivating policy objective (the migration equivalent of "broad base, low rate" in tax policy) might not be possible or useful: the risk is a slogan that repeats self-evident truths ("migration policy should be about having the right number of the right people") or an arbitrary target that is impossible to meet, given the vagaries of immigration

9 This would include existing citizens and residents, migrants, potential migrants and experts. We address the important issue of the role of engagement with iwi, hapū and Māori as the Crown's Treaty partner in Section 5.6.1 on page 80 below.

and emigration numbers. Governments are unlikely to be attracted to an approach that has the hallmarks of them being set up to fail.

To be useful in increasing legitimacy through building transparency, providing opportunities for engagement, promoting accountability and ensuring effectiveness, any policy objectives therefore need to be clear enough to give the public a sense of the likely number and type of migrants who will be welcomed to New Zealand, while giving the government sufficient flexibility to respond to short term developments, and acknowledging that the government has limited control over most cross-border people flows.[10]

We consider that the best way to develop such a policy is to start by asking the fundamental question of why New Zealand allows migrants to enter the country. The answers to this question (and as we will see, there will always be more than one) provide the appropriate starting point for the development of a GPS and subsequent examination of how the various elements of such a statement could be implemented.

2 Background

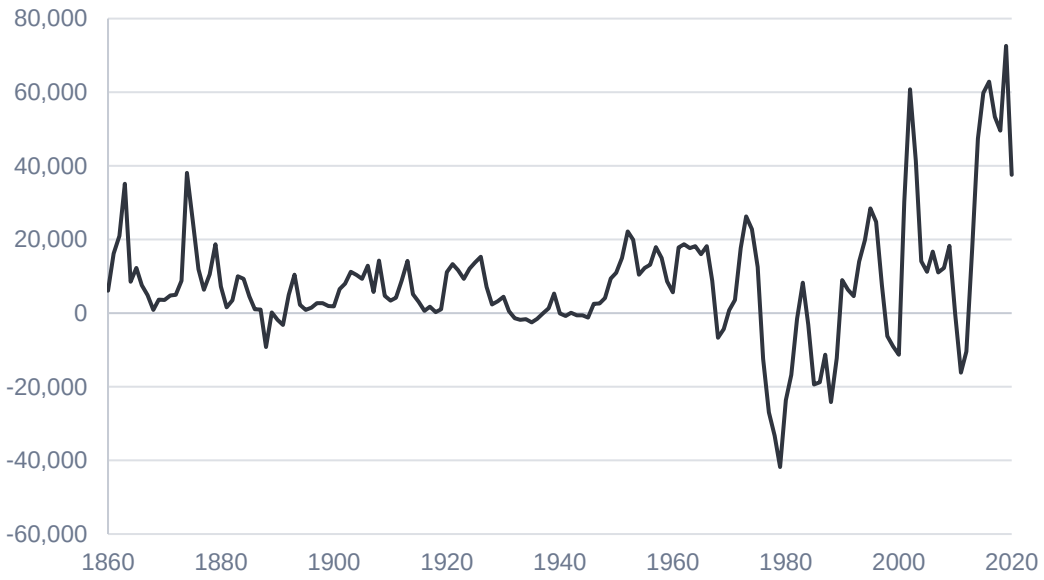
The general background to this report, which the Commission has discussed in its interim report and its published research papers, has been a marked change in both the scale and composition of immigration to New Zealand since the early 2010s (New Zealand Productivity Commission 2021a; 2021b; 2021c; 2021d).

Those changes, however, are recent when viewed against very long-term trends in immigration to and emigration from New Zealand. As Figure 7 shows, as recently as 2012, net migration to New Zealand was negative.

10 Outside emergency measures like those occasioned by COVID-19, only arrivals by non-citizens are subject to government control. Anyone in New Zealand can depart at any time, and citizens can arrive when they wish in accordance with section 18 of the New Zealand Bill of Rights Act 1990. Over the period from 2001 to 2020, about 40 percent of border crossings by permanent and long-term migrants were arrivals by non-citizens, 43 percent were departures by both citizens and non-citizens and the rest were arrivals by citizens. See Figure 23 on page 30 for more details.

Figure 7 Large net inflows are a recent phenomenon

Net permanent and long-term migration, year ended December



Source: Stats NZ

In examining this long data series, the Commission noted that:

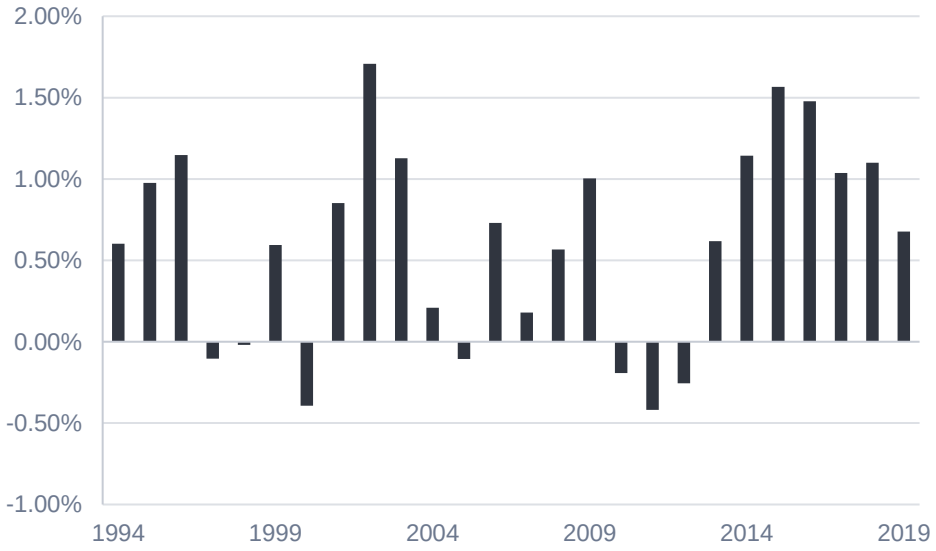
> *Throughout this country's history, there have been net outflows of people when the local economy was doing poorly, or when New Zealand's performance lagged those of other countries, especially Australia. (New Zealand Productivity Commission 2021d, 13)*

2.1 Migration policy and population policy

Migration policy is sometimes discussed within the context of population policy. This has particularly been the case in Australia, with Susan Love noting that "*Australia's immigration policy has often been characterised as its "de facto" population policy*" (Love 2022, 1).

As far as we know, New Zealand has never had an explicit population policy. There have certainly been periods where, as in Australia, immigration policy has been directed at increasing the population (see Spoonley and Bedford (2012, 27–52); Fry and Wilson (2018, 10–13); and New Zealand Productivity Commission (2021d, 7–11)). However, in 1994, the then Minister for Immigration, the Hon. Roger Maxwell called for a debate on what New Zealand's optimum immigration and population levels should be, and he proposed that a one percent annual growth in population by migration was the appropriate starting point for this debate (Farmer 1997a, 4). In fact, annual immigration growth was about 0.6 percent of the population over the subsequent years.

Figure 8 Net migration has averaged about 0.6% of the population since 1994



Source: Stats NZ

Despite governments not developing such a policy, there have been periodic calls for an explicit population policy, with Paul Spoonley providing a prominent recent example (Spoonley 2020). Thirty years earlier, Wolfgang Kasper called for a substantial boost in immigration to increase the population, which he, in turn, suggested would be a source of economic growth. He provocatively entitled his report "Populate or Languish" (Kasper 1990).[11]

More recently, Te Waihanga, an independent Crown entity charged with developing a national infrastructure strategy, has recommended that the government develop a long term and stable "National Population Plan" that should focus "*on reducing uncertainty of future demand for long-lived infrastructure*" (Te Waihanga 2021a, 59). We discuss this proposal in Section 2.1.5.

2.1.1 How predictable are the contributors to population growth?

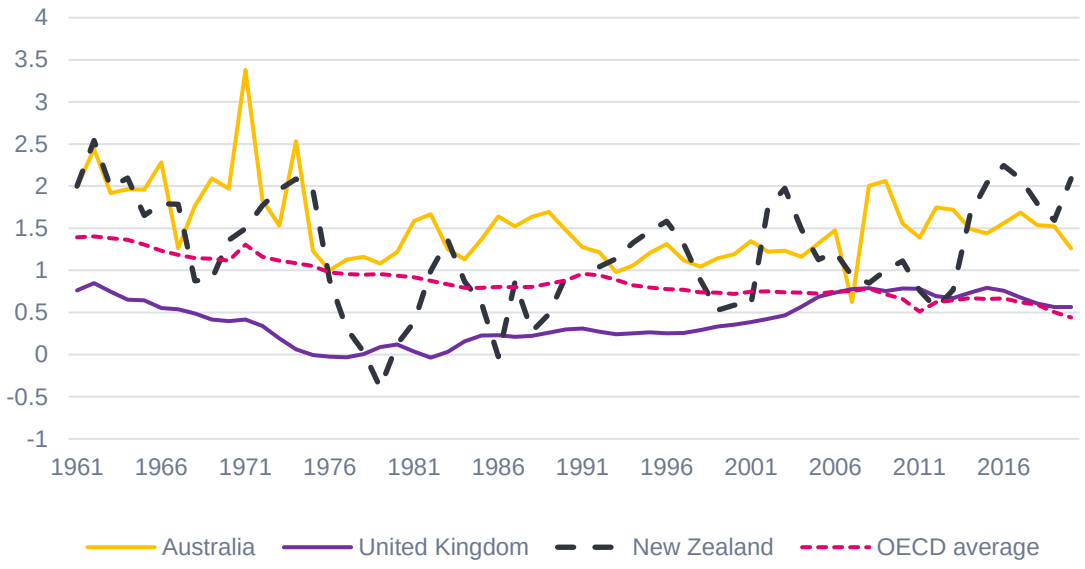
Population growth depends on fertility, mortality, and net migration (immigration less emigration). The degree to which these components can be predicted varies.

To put this discussion in context, New Zealand's population growth has been quite varied over the last 60 years, mainly due to fluctuations in net migration. More recently, it has been very high by OECD standards, even compared to the traditional high immigration countries of Australia, the UK and the US.

11 The title was probably an intentional throw-back to the "Populate or Perish" policy of post-World War Two Australian governments, although Kasper only mentions that policy once and even then only in passing (Kasper 1990, 26).

Figure 9 New Zealand's population growth is currently high by OECD standards

Annual population growth



Source: OECD (2022)

Natural increase (birth minus deaths) has made a relatively consistent contribution to population growth in Aotearoa for a very long time, adding about 29,000 people on average each year since 1975. Fertility and mortality are subject to long trends that make projections of natural increase in population much less error-prone than those of migration, although as we discuss below, government decisions can impact natural increase.

Net migration has made a highly variable contribution to population change. At times, it has been so negative that the overall population has barely risen.[12] More recently, the contribution of net migration has been positive.

This variability in net migration makes projecting population growth a challenging exercise. A comprehensive report by officials released in 2003 stated:

> *The population is unlikely to reach five million in the next 50 years. The New Zealand population is projected to grow to 4.4 million by 2021, grow further to 4.6 million by 2051 and fall back slightly to 4.2 million by 2101.* (Ministry of Economic Development et al. 2003, 5)

As at 30 September 2021, the estimated population of New Zealand was actually 5,126,300 (Stats NZ 2021a).

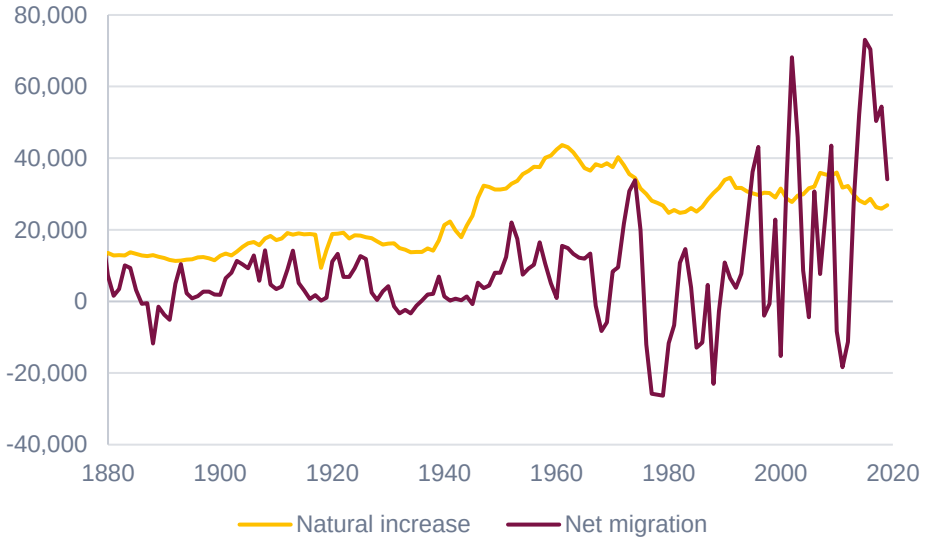
In discussing population trends over the last 100 years, the officials' report noted:

> *Natural increase has been the dominant element in population growth in that time. In half of the last 25 years, the contribution of net migration has been negative.* (ibid. 10)

12 Total population grew by 2,325 in 1977, 1,447 in 1978 and just 441 in 1979.

Therefore, it is perhaps not surprising that the officials thought that the New Zealand population would remain small.

Figure 10 The contribution of net migration to population increase



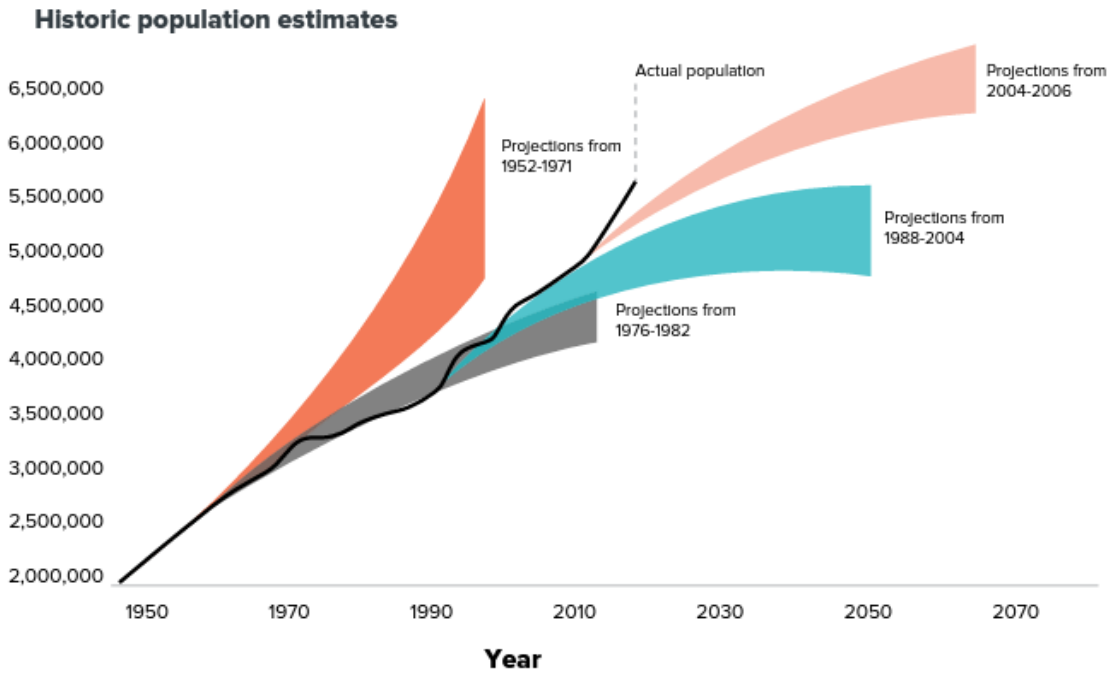
Source: Stats NZ

More recently, the 2010 New Zealand Yearbook estimated that the country's population would reach five million in 2031 (Statistics New Zealand 2010). In fact, this milestone was reached eleven years early because net migration was much higher than Stats NZ expected.[13]

Te Waihanga has presented a graphical analysis of the differences between official projections and outcomes since 1950.

13 Stats NZ assumed that net migration would average 10,000 people per year from 2013, which was close to the average from 1992 to 2012 (10,967). In fact, the annual average after 2013 was almost 50,000.

Figure 11 Projecting population growth is hard



Source: Te Waihanga (2021b)

These official forecasts are inputs into other areas of government activity.

Te Waihanga used official population projections in its work on an infrastructure strategy, although it did note the inherent difficulties in projecting population growth over the lifespan of major infrastructure assets:

> *Population projections have both over-shot and under-shot growth in past decades… Planners and decision-makers need to be familiar with the risks of projection uncertainty when planning for new infrastructure and have the requisite tools to manage uncertainty adequately (for instance, by phasing investment or future proofing corridors)* (Te Waihanga 2021a, 65).

The Treasury also uses these projections in its economic forecasts. Table 2 shows the labour market forecasts included in the 2010 Budget and Economic Update (The Treasury 2010). For comparison, the actual outturns are included.

Table 2 The Treasury uses Stats NZ projections

Labour Market Indicators – Number (000s) Totals may not sum due to rounding

	2010	2011	2012	2013	2014
Forecast natural increase	32	34	32	31	30
Actual natural increase	35	33	31	30	29
Forecast net migration	22	12	10	10	10
Actual net migration	17	4	-3	8	38
Forecast annual change	54	45	42	41	40
Actual annual change	52	37	28	38	67

Source: The Treasury, Stats NZ

2.1.2 Latest projections

Stats NZ's 2021 projections indicate that natural increase will eventually turn negative, as deaths increase while births remain largely static. Under this scenario, assumed net migration of 25,000 per annum will make an increasing contribution to population growth.[14]

Table 3 As natural increase falls, net migration will drive population growth

Projected contribution to population, median scenario

	Births	Deaths	Natural increase	Net migration	Population at 30 June
2020	..	..	..	..	5093500
2023	59300	35100	24200	25000	5222400
2028	60100	38800	21300	25000	5460500
2033	60400	43500	16900	25000	5679000
2038	61500	48500	13000	25000	5876400
2043	62900	53400	9500	25000	6055800
2048	62900	57600	5200	25000	6215800
2053	61900	61100	800	25000	6353400
2058	61300	63100	-1800	25000	6473700
2063	61500	64100	-2600	25000	6586900
2068	62100	64900	-2800	25000	6698500
2073	62700	67100	-4400	25000	6805600

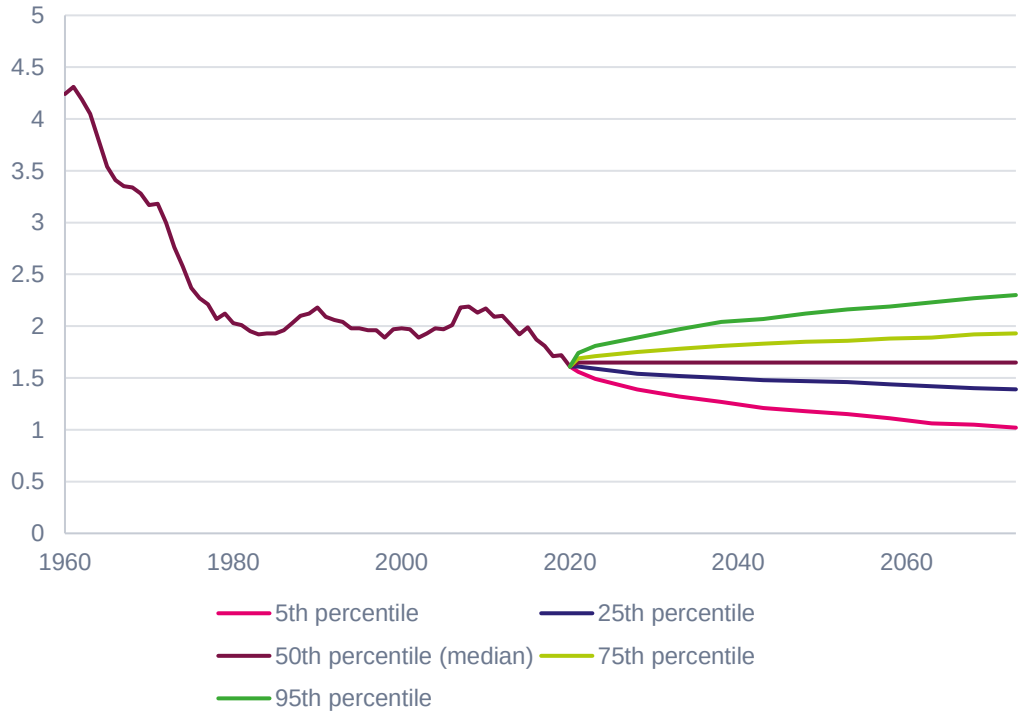
Source: Stats NZ

14 Stats NZ produces a range of scenarios of population growth, based on varying assumptions regarding fertility, mortality, and migration. Under the "very high migration" scenario (net migration of 50,000 per year), the population would reach 8 million by 2064. With no migration, the population would peak at 5.4 million in the early 2040s and then start to decline. In the late 2060s, the population would return to a similar size to what it was in 2020 and continue to decline to just under 5 million in 2073.

One important part of this scenario is that fertility is not expected to fall. As we discuss shortly, this might be an unrealistic assumption. Stats NZ includes other fertility scenarios in its projections that involve falling fertility. It does not, however, consider this to be likely: the scenarios suggest that there is only about a 5 percent chance that the reduction in fertility experienced in the last fifteen years will be repeated over the next fifteen years.

Figure 12 Projected fertility scenarios

Births per woman[15]



Source: Stats NZ

2.1.3 How controllable are the components of population growth?

The extent to which different components of population growth can be controlled or influenced by government also varies. In a modern New Zealand context, inwards migration by non-citizens is by far the most directly and readily controllable of these components, although government decisions can also influence fertility and mortality.

Fertility

In general, fertility rates decline with economic development, as families choose to have fewer children and invest more in educating each child (Jones 2020, 1). Thus, the extent to which government policies support economic development can indirectly influence fertility rates.[16]

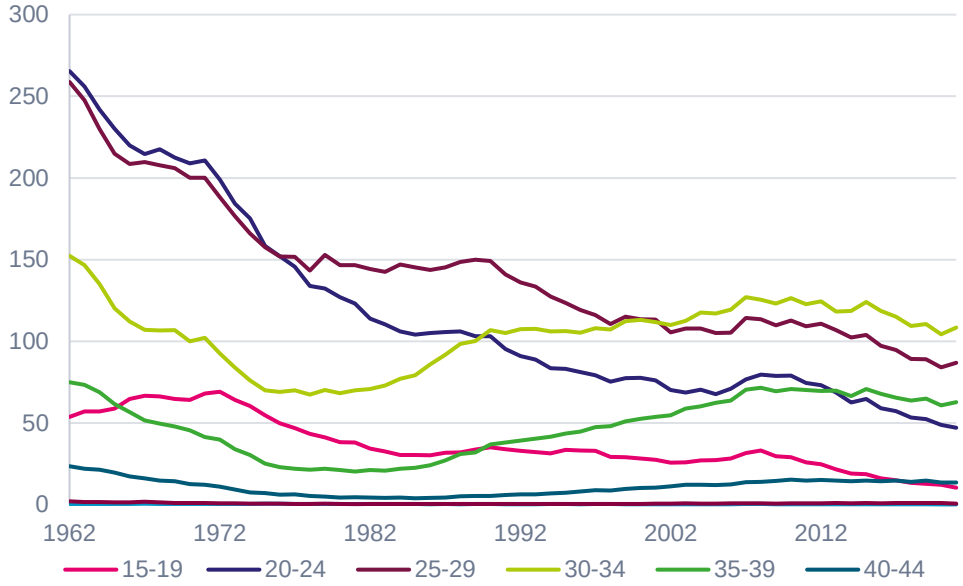
15 Note: compared to Figure 13 and Figure 14 this chart shows all birth rates, not just those occurring during a specified age range.

16 There are also examples of governments having much more direct influences on fertility, such as China's one child policy.

When given greater control regarding when to have children and how many to have, many people have decided to have fewer children later in life. As Figure 13 shows, the most common age to bear a child is now between 30 and 34, while in 1992, it was between 25 and 29, and in 1972 it was between 20 and 24.

Figure 13 Having fewer children, later in life

Births per 1000 women by age group

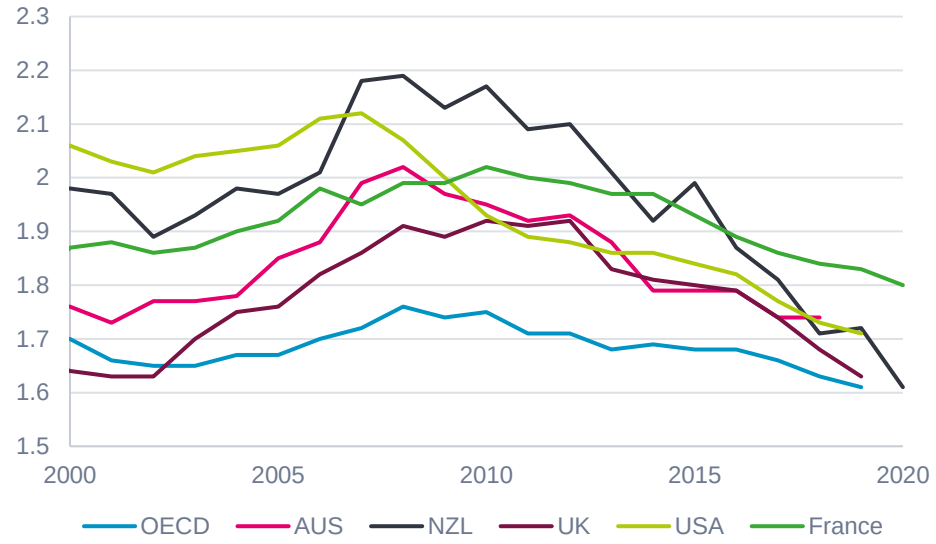


Source: Stats NZ

In a recent article, Melissa Kearney and her co-authors present evidence from the United States and other OECD countries pointing to a dramatic decline in fertility since 2007 (Kearney, Levine, and Pardue 2022).

Figure 14 Trends in birth rates

Children per woman



Source: OECD (2022)

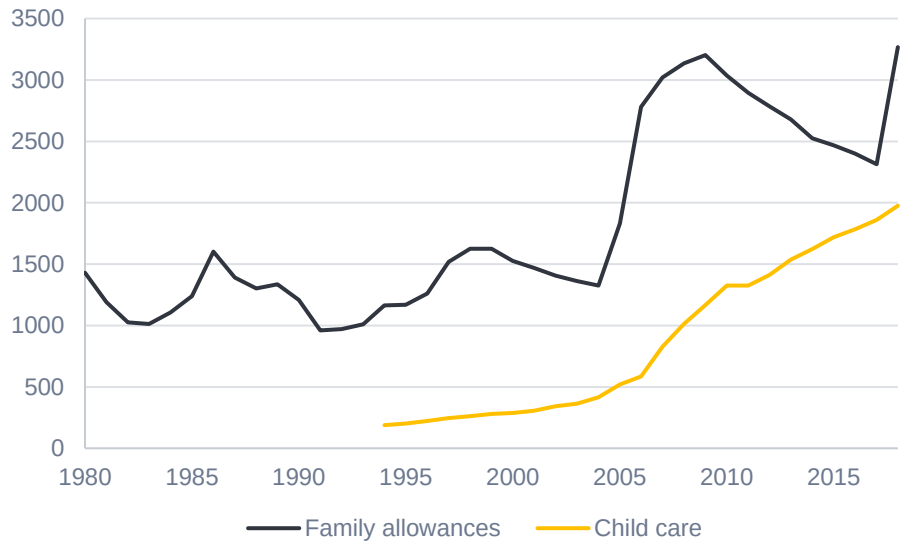
Kearney et al. explain this fall as follows:

> *We propose a general explanation for the decline in births across recent cohorts of US women that focuses on the shifting priorities of cohorts. We introduce this term as a catch-all phrase that encompasses preferences for having children, life aspirations, and the nature of parenting, among other things.* (Kearney, Levine, and Pardue 2022, 169)

Decisions about having children are also likely to be influenced by factors like after-tax wages, family allowances and the availability and cost of childcare. New Zealand governments are significant funders of these types of social assistance.

Figure 15 Spending that influences childbearing has increased

Real spending, 2018 $NZ millions



Source: OECD Stat

That said, Kearney and her co-authors, after reviewing recent evidence, concluded:

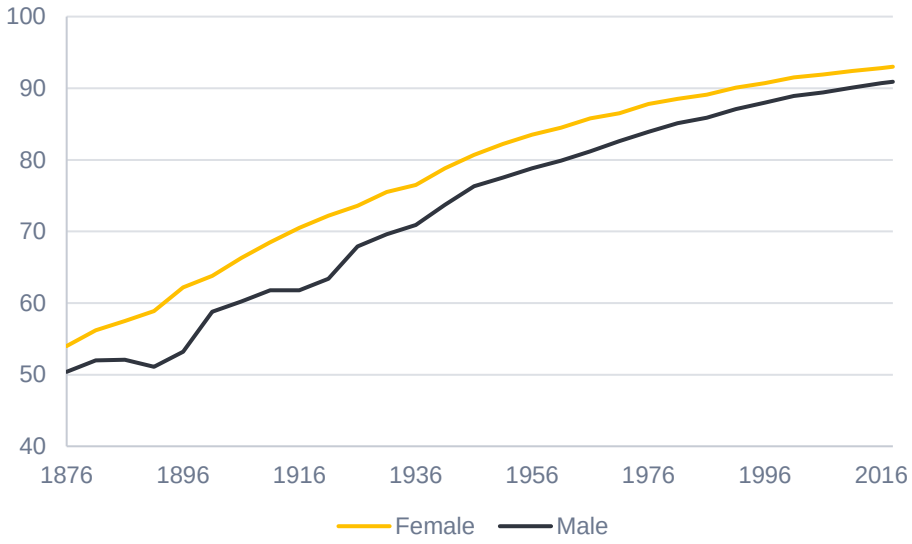
> *The evidence about pronatalist policies that have been implemented and evaluated in the United States and in other high-income countries suggests that these types of policies lead to modest increases in birth rates in the short-term, but are unlikely to lead to sustained higher birth rates.* (ibid, 172)

Mortality

New Zealanders are living longer, healthier lives. Since record-keeping began in the 1890s, life expectancy at birth has increased dramatically for both males and females.

Figure 16 Life expectancy has increased dramatically over time

Expected number of years of life remaining at age zero[17]



Source: Stats NZ

Looking ahead, Stats NZ projects continuing gradual increases in life expectancy for the whole population between now and 2060, rising from 81 to 86 years for males and from 84 to 89 years for females.[18] These figures do, however, vary by ethnicity, and despite projected improvements, life expectancy for Māori and Pacific people is expected to continue to remain lower than for other population groups (The Treasury 2021, 12).[19]

The observed improvements in mortality are occurring across all ages. Infant mortality has reduced markedly over the last century (as has maternal mortality), the incidence of accidental deaths and those associated with chronic conditions like cancer and heart disease have reduced during middle age and older people are living longer (Rodway and Wilson 2006).

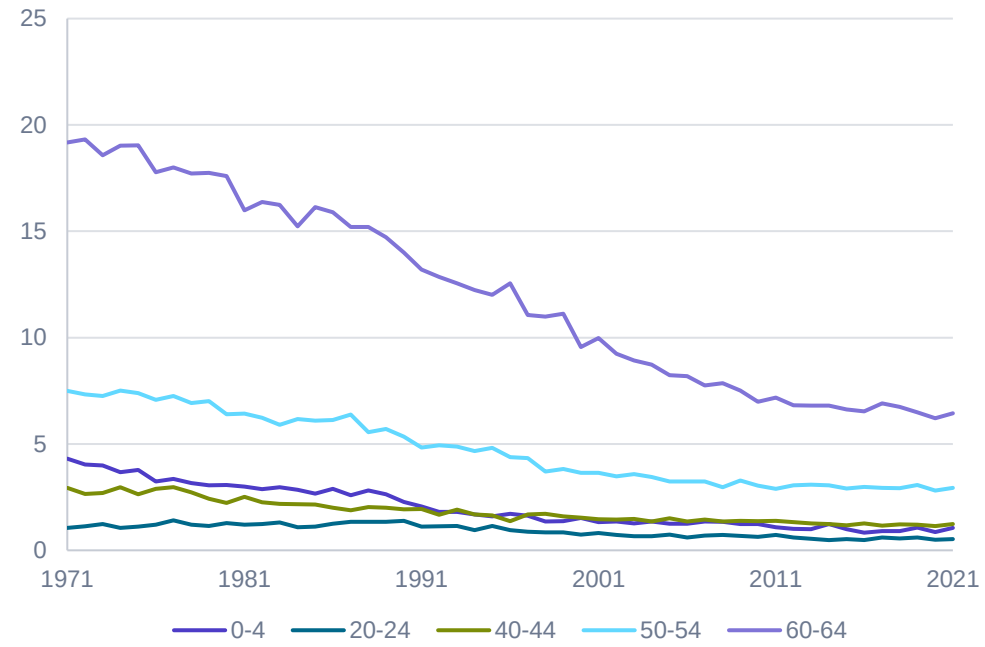
17 This data comes from the Stats NZ cohort life tables series, which measures life expectancy for a person born in a particular year.

18 These projections are based on the Stats NZ period life table series, which records life expectancy for the whole population. This is why the figures are lower than those shown in Figure 16.

19 Life expectancy for Māori was more than 7 years lower than for those in the European or Other (including New Zealander) ethnic group in 2019. The gap is forecast to close to around 5 years by 2043. For Pacific males and females, life expectancy in 2019 was approximately 6.0 and 5.4 years less than the comparison group noted above. By 2043, this gap is forecast to close to 2.3 and 2.1 years for males and females respectively (The Treasury 2021, 12).

Figure 17 Mortality is falling dramatically

Deaths per thousand, by selected age groups, total population



Source: Stats NZ

Some improvements in life expectancy reflect new or updated information (such as the benefits of exercising or eating certain foods or avoiding harmful substances) and individuals making different decisions as a result. Government actions also play a part, for example, through information campaigns to promote smoking cessation or safe driving practices or funding access to new drugs, treatments and medical technologies.[20]

Emigration

Emigration has many different drivers, including push and pull factors which, at times, may mirror each other (J. Lewis and Swannell 2018).

A person may seek to escape challenging circumstances at home (such as war, climate change, lack of economic opportunity, or social or personal conflicts). Governments in Aotearoa cannot affect many important drivers of emigration, such as the geography, climate, policy and opportunities in other countries. However, as Julie Fry notes, "*having the best possible policies, both general (low inflation, prudent fiscal policy, sound regulation) and those specifically affecting immigration does affect the relative attractiveness of New Zealand*" to both locals and potential immigrants (Fry 2014, 36).[21]

On the pull side, the economic literature suggests that the prospect of a better life is the main motivation for moving to another country.

The seminal paper in this literature is Borjas (1987), which uses an income maximisation approach developed by Andrew Roy to study labour markets:

20 Outside 'business as usual', major government decisions like going to war, planning for natural disasters and responding to public health emergencies can all have dramatic effects on population via their impacts on mortality.

21 Note that what economists consider to be 'best' may not always align with the preferences of migrants.

> *In this theory, homogeneous agents make an optimal decision across multiple destinations on whether to migrate or to stay. They do so by maximizing utility across the set of destinations and the country of origin and relate the expected benefits from migrating to the expected benefits of staying*. (Aburn and Wesselbaum 2017, 6)

A country where returns on skills are higher will attract migrants from countries where those returns are lower. In Borjas' model, however, the skill differential is an external difference assumed in the model, rather than being something that is generated by the model itself.

More recent work has made the drivers of the decision to migrate endogenous.[22]

For example, Isaac Ehrlich and Jinyoung Kim developed a simple, two-country ('source' and 'destination') model where the desire to migrate is motivated by the prospect of advancement abroad. Once an external technological shock occurs in the destination country, growth there encourages people in the source country with the skills and a desire to move to relocate. This stimulates more growth in the destination country, which in turn induces more emigration from the source country. An equilibrium is achieved when the marginal utility of a skilled worker is the same in both countries (Ehrlich and Kim 2015).

Ehrlich and Kim say their approach provides a stylised illustration of what occurred during the information technology revolution in the United States during the 1970s when the shift from mechanical and analogue electronic technology to digital electronics began. It also coincided with the reversal of seven decades of decline in immigration to the United States (ibid, 32).

Trans-Tasman emigration

The Ehrlich and Kim model also has parallels to the trans-Tasman situation, where there are few restrictions on migration.[23]

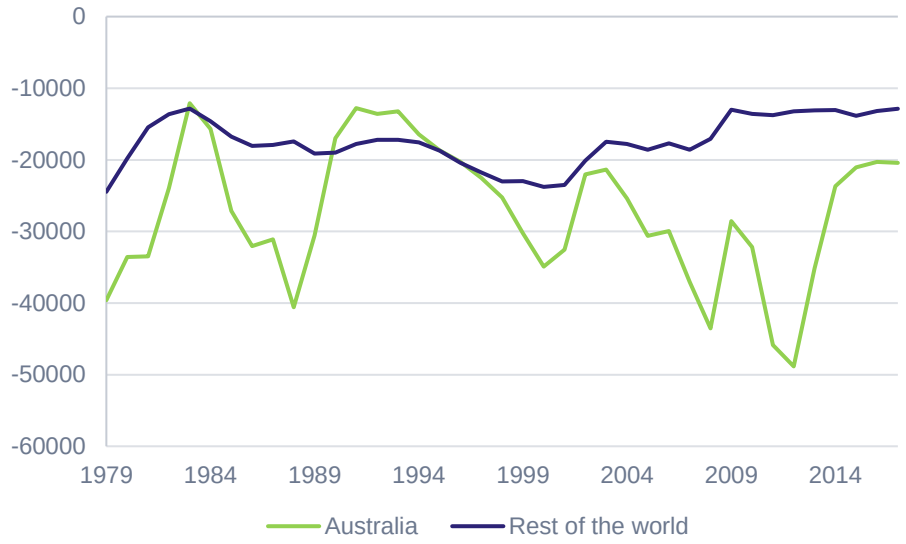
While there are New Zealand citizens living all over the world, most expatriates reside in Australia. Given similar cultures and proximity (most of what Australia has to offer by way of culture and scenery can be experienced on a holiday, without having to migrate), this suggests that economic and familial factors may dominate the decision to move to Australia.

22 These studies are based on the endogenous growth tradition, where the engines of growth are included within the model setup and where growth begets more growth.

23 For detailed discussion on trans-Tasman migration see Poot (2010) and Fry and Wilson (2018, 14–15).

Figure 18 Most New Zealand emigrants go to Australia

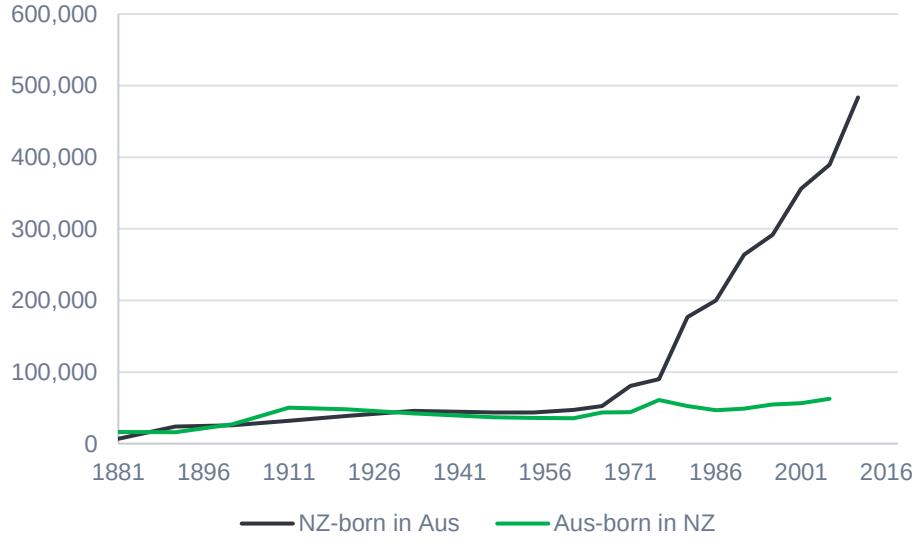
Permanent and long-term migration departures, year ended December. Note the negative sign of the Y-axis.



Source: Stats NZ

Jacques Poot notes that prior to 1966, the number of New Zealand-born people living in Australia was similar to that of Australians living in New Zealand (Poot 2010).

Figure 19 1966 marked a change in trans-Tasman migration



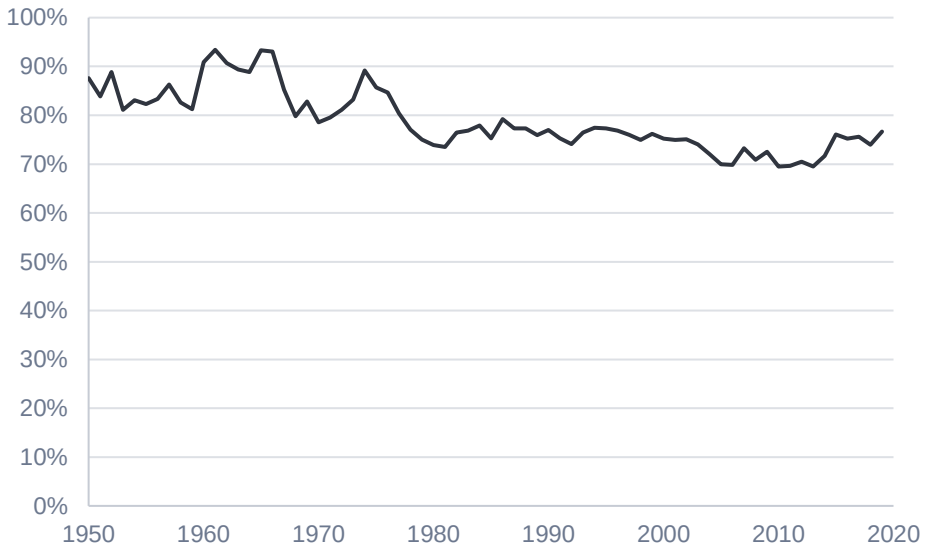
Source: Poot (2010)

Citing John Gould and Gary Hawke, Poot notes that 1966 was a watershed in New Zealand's economic history, marking the first recession since the end of the Second World War, high inflation and, significantly, the first time net migration had been negative (Poot 2010, 322).

This point also marks the start of a serial decline in relative economic fortunes between New Zealand and Australia.

Figure 20 New Zealand's GDP per capita as a proportion of Australia's

Real GDP per capita, adjusted for purchasing power differences.



Source: Feenstra et al. (2015)

Other factors influencing outflows include the desire to see more of the world or experience living in a different culture, especially for young New Zealanders. As Julie Fry and Hayden Glass note:

> *[It] is also possible that emigration could be in part a response to immigration, that is, the difficulty of finding a job in competition with migrants may motivate New Zealand residents to consider options in Australia or elsewhere.* (Fry and Glass 2016, 35)

Emigration is cyclical, and as Fry and Glass point out, "*primarily seems to reflect perceptions of the balance of economic advantage at home or abroad. More citizens leave for Australia when the Australian economy is doing better, and fewer leave and more come home when Australian economic prospects dim*" (ibid. 3).[24] That said, the Australian government has progressively tightened the conditions on which New Zealanders can enter and remain in Australia, including limiting access to social security benefits (Love and Klapdor 2020). This may be part of the reason for the observed reduction in departures of New Zealanders to Australia in recent years (Poot and Sanderson 2007).[25]

Immigration

In terms of controlling population, immigration is the key lever available to the New Zealand government in the short to medium term.

24 Jacques Poot and his colleagues have previously estimated the determinants of trans-Tasman migration: see Brosnan and Poot (1987), Gorbey et al. (1999) and Poot (2010). Duncan et al. (2020) incorporates the changes in benefit into a dynamic model of trans-Tasman migration and predict that the proportion of the New Zealand population living in Australia may start to decline.

25 See Figure 25 on page 32.

Immigration has, at times, played an important role in 'replacing' departing Kiwis who were leaving in such large numbers that some commentators quipped, "*Would the last one out please turn off the lights?*" (Fry and Wilson 2018, 25).

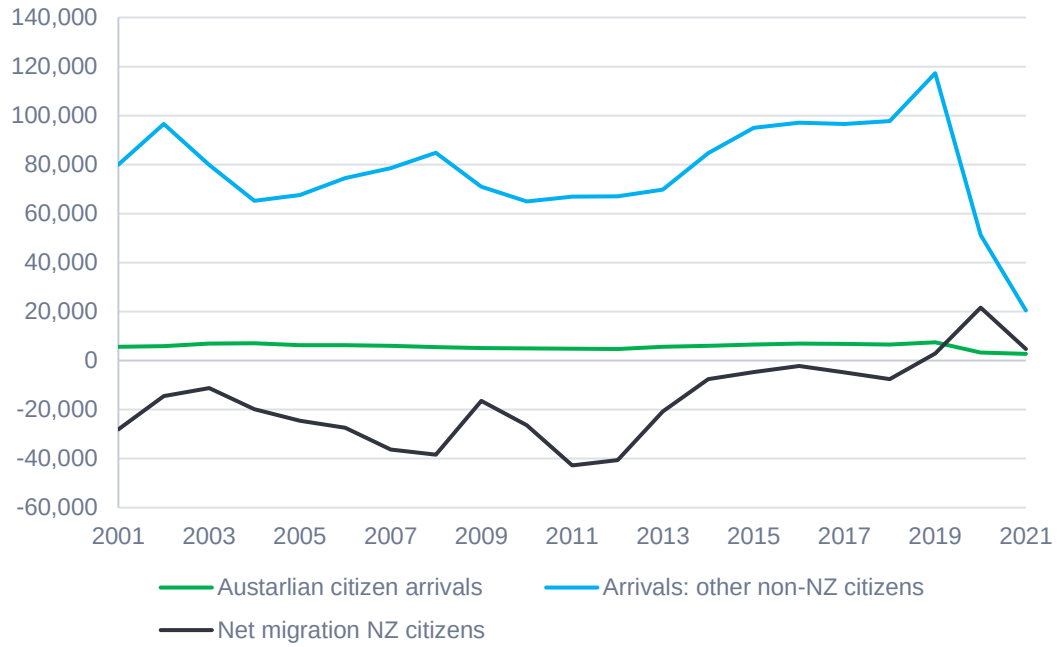
More than twenty years ago, Peter Bushnell and Wai-Kin Choy pointed out that inflows of immigrants were more than offsetting local departures:

> *New Zealand citizens are being replaced with citizens of other countries – The 483,883 New Zealand citizens who have departed over the past 47 years have been replaced with 81,159 Australian citizens, and 676,257 citizens of other countries, for a net gain of 273,533.* (Bushnell and Choy 2001)

In the years that followed, arrivals from Australia remained stable until they fell suddenly in response to COVID-19 border closures. From 2010, an upward trend in permanent and long-term arrivals from the rest of the world is readily apparent while net migration by New Zealand citizens declined. The impact of the pandemic on all three types of migration can be seen from 2020 onwards.

Figure 21 Arrivals from the rest of the world have been increasing

Permanent and long-term migration arrivals, year ended December



Source: Stats NZ

Although some older studies found that immigrants were more skilled than emigrants, we are not aware of more recent research that compares the skill levels of migrant inflows and outflows.[26]

26 A 2002 study by Wai-Kin Choy and Hayden Glass found that the skills of immigrants from the rest of the world were higher than those of departing New Zealanders (Choy and Glass 2002). People going to Australia had skills similar to the rest of the New Zealand population, a phenomenon the authors termed a 'same drain'. Given subsequent extensive increases in temporary migration, including large inflows in categories such as working holiday and RSE visas which do not have minimum skill requirements, updated analysis should be undertaken on this point. We discuss a programme of research in section 3.8 on page 47. Poot and Stillman

As we showed in Figure 24 on page 30, a significant proportion of the inflow of migrants involves people on temporary visas. However, as Fry has noted, there are limits to the extent to which immigration can make up for departing locals:

> *Although in New Zealand's recent history, immigration has more than compensated for emigration, it has limits as a strategy to address relative economic decline. Immigration is only a useful response to population decline if the immigrants address the underlying issues that led to the decline in the first place*. (Fry 2014, 17)

New Zealand also needs to be realistic about its attractiveness to migrants who are most in-demand internationally, given their potential contribution to the national economy and overall wellbeing. Despite many advantages, it remains a middle-income country with a small population, a long way from the rest of the world, especially centres of commerce:

> *We still suffer from complacency, seeing this country as inherently amazeballs without seeing it through the eyes of foreigners who want their children to be spoilt for choice in education, jobs and life choices.* (De Boni 2021)

The issue here is not the number of migrants that New Zealand can attract. There is in all likelihood a virtually unlimited supply of potential migrants whose standard of living would materially increase across almost every dimension of wellbeing if they had the opportunity to settle in Aotearoa. What matters for boosting wellbeing through economic contribution is attracting economic migrants who will do more than just lift the population: they must be able to make a **more than average** contribution to wellbeing per capita for overall living standards to increase.[27]

Net migration

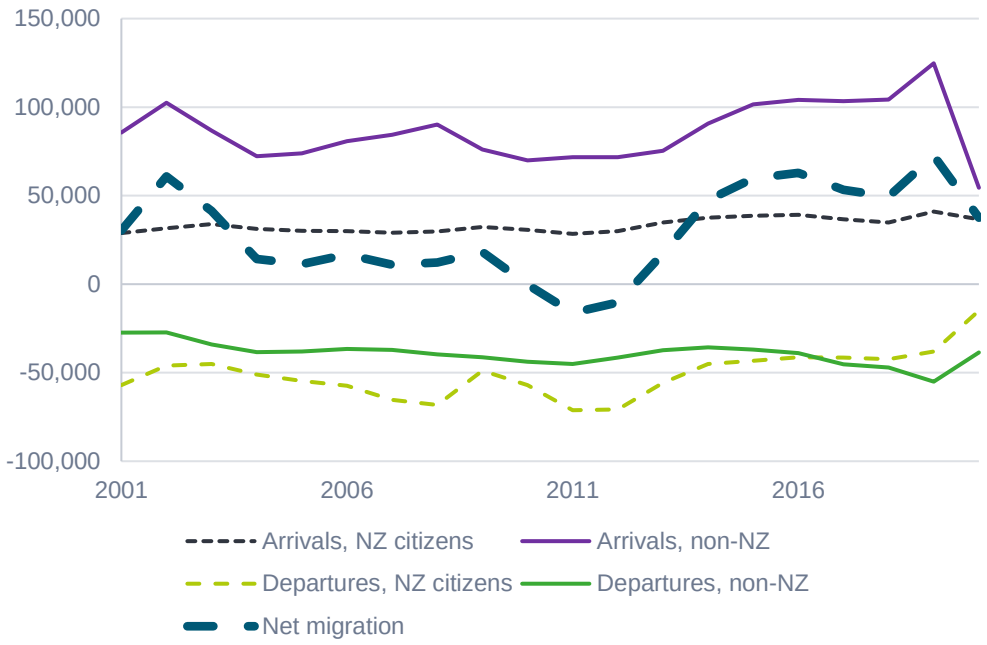
Putting the various drivers of migration together, we can see that the net figure is largely unknowable in advance. Of the four drivers of net migration (arrivals and departures of citizens and arrivals and departures of non-citizens), only one can be directly controlled by any government: the arrival of non-citizens.

(2016a) use data from the New Zealand Censuses in 1996, 2001 and 2006 to compare qualifications of migrants and locals. They initially found that migrants were more qualified than locals, but after adjusting for differences in the skills distribution of locals and migrants, they concluded that migrants, on average, have low education levels for the roles they hold.

27 As we note in section 1.2 on page 3, migrants entering on non-economic grounds can also make positive contributions to wellbeing, even though their economic or fiscal contributions may be negative.

Figure 22 The four components of net migration

Permanent and long-term migration, year ended December



Source: Stats NZ

In addition, Fry notes that the extent to which arrivals, departures and movements around the country might influence each other is understudied:

> *Relatively little is known about the extent to which immigration, internal migration and emigration are causally linked, and this would be an interesting area for further research, although it is difficult to obtain data about emigrants once they have left the country. While overall, immigration and emigration are both strongly related to the business cycle, the recent experience of Auckland, which attracts a disproportionate share of immigrants but also experiences net outward internal migration, suggests displacement is possible.* (Fry 2014, 12)

2.1.4 Feedback between immigration and demography

As Natalie Jackson has shown, immigration usually only has a limited and short-term effect on underlying demographic trends. Increasing the migrant intake does little to alter underlying demographics: migrant fertility and mortality progress much like those of locals. Jackson concludes that "*in the longer term it is primarily the size of the population that migration alters*" (Jackson 2011, 4).

Christian Dustmann and his colleagues suggest that the higher relative fertility of migrants can have an important effect on the population growth rate of the host country in the short run but will on its own be unlikely to offset ageing workforces in host countries (Dustmann, Facchini, and Signorotto 2015). After an extensive review of the available literature, which they note is often subject to data limitations on key life events and demographic characteristics of migrants, especially pre-migration, they suggest that:

> *Overall, and despite current limitations in fertility estimates and projections, the evidence we have reviewed suggests that migrants tend to assimilate to the*

> *destination country's fertility patterns. Immigrants' younger age and initially higher fertility rates may help rejuvenate the host countries' populations in the short run. However, migrants' assimilation to the host country fertility patterns implies that such rejuvenation will largely have to rely on a continuous inflow of immigrants. Therefore, migration alone is unlikely to compensate for the ageing workforces in European countries.* (Dustmann, Facchini, and Signorotto 2015, 124)

Temporary migrants are in particular unlikely to result in an increase in the number of local births. Only permanent residents have access to publicly-funded maternity care, so temporary migrants face a significant financial disincentive to having children in Aotearoa.

2.1.5 Te Waihanga proposal

Te Waihanga recently released a draft Infrastructure Strategy that includes a recommendation that a National Population Plan is developed, saying:

> *A long term and stable National Population Plan should focus on reducing uncertainty of future demand for long-lived infrastructure services at the national level, while respecting individual choices over where to live and work*. (Te Waihanga 2021a, 59)

Specifically, Te Waihanga has recommended that a National Population Plan should:

- Present a preferred population pathway over the next 50 years
- Provide direction for regional spatial plans
- Identify supporting policies required for New Zealand to capitalise on the benefits of greater population, while managing and minimising the costs of growth.

At the time of writing, Te Waihanga is considering feedback from the Minister of Infrastructure before finalising the Strategy.

Te Waihanga states in its report that "*New Zealand's population is expected to grow significantly over the next three decades*" (ibid.). While that is true in the sense that Stats NZ's projections of population, under certain scenarios, point to rising population, that growth is due largely to rising projected net migration. Natural increase is steadily falling and is expected to turn negative in 2058, as we showed in Table 3 on page 13.

Te Waihanga also suggests that *"[w]e have the potential to gain significantly from this growth"* (ibid).

Our reservations about this approach

As we and many others have pointed out, the benefits from the growth in economies occasioned by immigration, when measured in per capita terms, are small (Australian Productivity Commission 2006; OECD 2014; Australian Productivity Commission 2016; Fry and Glass 2016; New Zealand Productivity Commission 2021c):

> *Migration has frequently been touted as holding out the prospect of providing substantial economic benefits. In reality, migration typically has at most small positive effects on a local economy, many of which are captured by migrants and employers.* (Wilson and Fry 2020, 3)[28]

[28] The Productivity Commission makes this point as well (New Zealand Productivity Commission 2021c, 39). In economic terms, what this means is that there are few 'spillover' effects of migration.

Growing the New Zealand population might be possible (for example, by always having inwards immigration settings higher than expected departures of citizens). And it is true that certainty over population growth makes infrastructure planning significantly easier. The question is, is it good policy? As Julie Fry suggested in 2014:

> *[J]ust because greatly increasing population is feasible does not mean it is a wise strategy. While there is clear evidence that within countries, large urban agglomerations have higher incomes and productivity, there is no such evidence across countries (bigger, more densely-populated countries are not richer than smaller countries with more scattered populations). The observation that the very highest productivity is found in large urban areas producing knowledge-based products does not mean all societies can or should attempt to recreate the San Francisco Bay Area or London. When what is now the United States rust belt was the global productivity leader, many other regions improved their wellbeing through industrial development on a less extensive and less productive scale. Today New Zealand or other productivity "followers" may be able to materially improve productivity and living standards from current levels without adopting a large scale agglomeration strategy. Silicon Valley also illustrates the limitations of such strategies; notwithstanding the presence of Silicon Valley, the State of California has serious economic and fiscal problems. Similarly, Israel has a thriving innovative hi-tech sector, similar population, and comparable overall productivity to New Zealand.* (Fry 2014, 15, internal citation omitted)

Internationally, migrants tend to settle in large, prosperous urban areas since they provide the best opportunities to get ahead in a new country. This is certainly the case in New Zealand, where most migrants live in Auckland. In addition to agglomeration benefits, higher population and population density can lead to congestion diseconomies, which have negative effects on wellbeing:

> *Usually, the studies of the urbanization process consider interplay between the negative congestion diseconomies and positive agglomeration economies. However, it has been widely argued that the positive agglomeration effect prevailed in the early stages of economic development when an increase in urbanization was associated with industrialization. Later on, as countries developed economically, congestion diseconomies became dominant leading to deindustrialization of the large metropolitan areas, with manufacturing moving to suburban locations, smaller cities and semi-urban areas.* (Azarnert 2017, 4)

We consider the Infrastructure Commission's suggestion that any government can develop a 'stable' population plan to be unhelpful.[29] As we noted above, governments do not have enough policy levers to control population growth sufficiently while meeting other important policy objectives.

It is, of course, absolutely possible to reduce uncertainty to very low levels by committing to a particular level of population increase.

In practice, the only way to ensure a target level of population growth is met when there is very limited direct control over fertility, mortality and emigration is to relinquish control

[29] We are also of the view that Te Waihanga caveat, *"respecting individual choices over where to live and work*", should be expanded to include how people form relationships and how many, if any, children they choose have.

over the likely contribution that immigrants will make to wellbeing by, for example, by lowering entry thresholds.

New Zealand will not always receive sufficient applications from migrants who meet a particular target threshold. As we saw most recently in the years that followed the Global Financial Crisis (GFC), when this occurs, the temptation is to reduce the entry threshold rather than reducing the number of migrants admitted. But these thresholds are set based on the expected costs and benefits of different numbers and types of migrants, so arbitrary changes to the composition of migrants can both reduce economic benefits and increase wellbeing costs.[30]

As we discuss in section 4, reducing the benefits associated with migration is particularly problematic when some parts of the economy are struggling to respond to increasing demand. While the long-term solution to constraints on absorptive capacity is to improve the economy's responsiveness to population increase, in the interim, a higher threshold of benefits per migrant is warranted to justify granting entry.[31] We are concerned that the certainty to the construction sector resulting from the Infrastructure Commission's recommendation would come at too high a price for other equally important areas of government policy.

For example, the government's environmental policies stress the need to reduce the impact of humanity on our finite natural resources:[32]

> *[N]ew Zealand's growth model is approaching its environmental limits. Greenhouse gas (GHG) emissions are increasing. Pollution of freshwater is spreading over a wider area. And the country's biodiversity is under threat.* (OECD 2017, 3)

In addition, the Public Service Commission has identified demographic change and population growth as twin challenges that the state sector in New Zealand will need to face. As the population ages, a greater share of people will require health and care services. If at the same time, net migration increases the working-age population, the demand for services including education, customs, culture and the arts and community services will also increase:

> *These pressures are unlikely to be relieved by the tertiary education pipeline or by raising already-high labour force participation rates any higher. Instead there will likely be a continued need to rely on immigration to meet workforce needs*. (Public Service Commission 2020, 19)

This creates a somewhat circular dilemma: to service a population that is growing due to net migration; the public sector suggests that further immigration of skilled workers may be required.

30 For example, MBIE noted in 2013 that a large share of migrants granted residence in the years following the GFC had skill levels lower than policy intended. Rather than complementing local workers, they were likely acting as substitutes, thereby reducing potential productivity benefits and increasing the likelihood of displacement (Fry and Wilson 2018, 50; 2020, 4; 2021, 7; Wilson and Fry 2020, 8).

31 Again, as per our earlier comment, this is not to suggest that migrants are to blame for capacity constraints. As Eric Crampton has noted, there are many parts of the New Zealand economy that have had no apparent trouble adjusting to increased demand (Crampton, quoted in Fonseka 2022). However, while adjustment that needs to occur is not happening in key areas including housing, reducing population growth would be pragmatic.

32 The Ministry for the Environment and Stats NZ note, for example, growing urban populations create tension between the use of land for housing and for agriculture on the fringes of New Zealand cities (Ministry for the Environment and Stats NZ 2021, 13).

Given this type of uncertainty, the appropriate approach to policy- and decision-making is to consider net benefits. This would imply managing immigration flows based on the best available information on their respective costs and benefits, rather than seeking to increase certainty at an unknown cost. In this regard, we would note that the net costs of exceeding absorptive capacity are likely to be larger than undershooting – even for the infrastructure sector.

In short, the effect of migration on population should be one of the factors that governments consider when setting immigration policy, but population growth per se should not be a **target** of immigration policy.

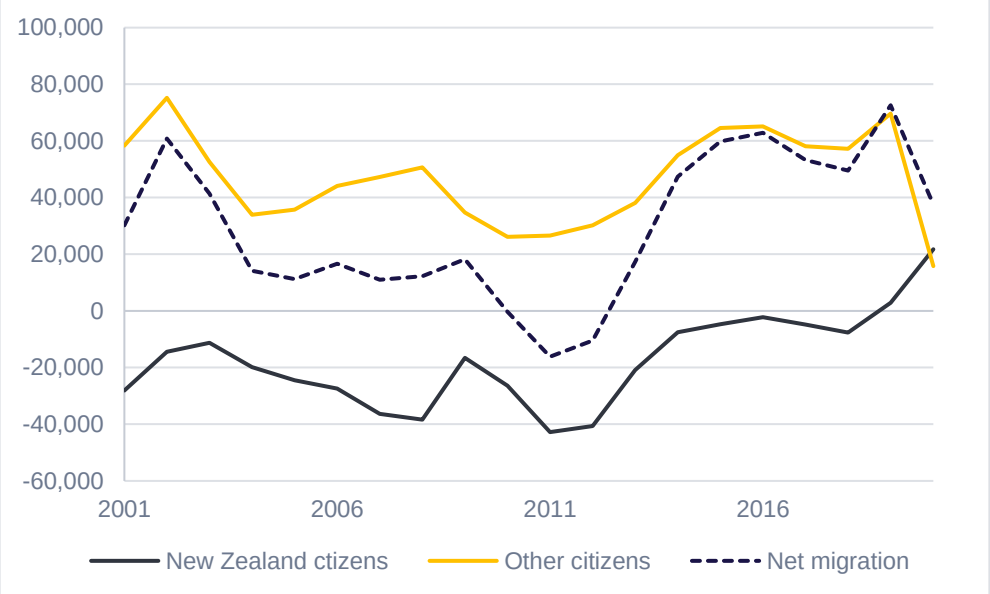
2.2 The drivers of the recent trend in net migration

Figure 23 shows the recent observed increase in permanent and long-term migration is a combination of a marked reversal of the long-term trend of negative net migration of New Zealand citizens (the solid black line) and a near tripling of immigration by non-citizens (the solid orange line) since 2012.

Stats NZ's definition of 'permanent and long-term migrant' is not based on visa categories or citizenship but on the length of time spent in New Zealand. Under the current approach, a person who enters New Zealand is regarded as a permanent and long-term migrant if they are physically present in New Zealand in 12 of the 16 months after their arrival. Many people on temporary employment, visitor and student visas meet this definition and are included in the data underlying Figure 23.

Figure 23 A marked increase in permanent net migration since 2012

Year ended December



Source: Stats NZ

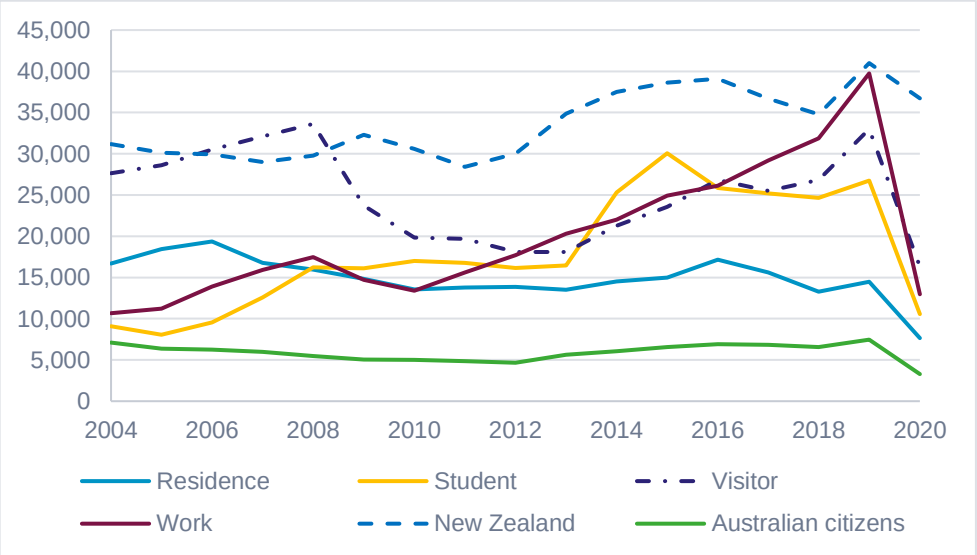
Figure 24 breaks the arrivals component of the data in Figure 23 down by visa type and citizenship. It shows a significant increase in temporary migration by people with work rights, while the number of people seeking permanent residence and Australian arrivals

entering under the trans-Tasman agreement is steady.[33] While people on visitor's visas generally do not have work rights, they can consume infrastructure and accommodation services and thus affect the absorptive capacity of the economy.

The number of people holding student visas more than tripled between 2004 and the peak in 2015, before declining a little before the start of the pandemic, partly in response to a shift in emphasis by the government to prioritise value over volume (see Section 3.4.3 on page 40 below).

Figure 24 Work and student visa numbers increased prior to COVID-19

Estimated permanent and long-term migrant arrivals by citizenship and visa type, year ended December



Source: Stats NZ

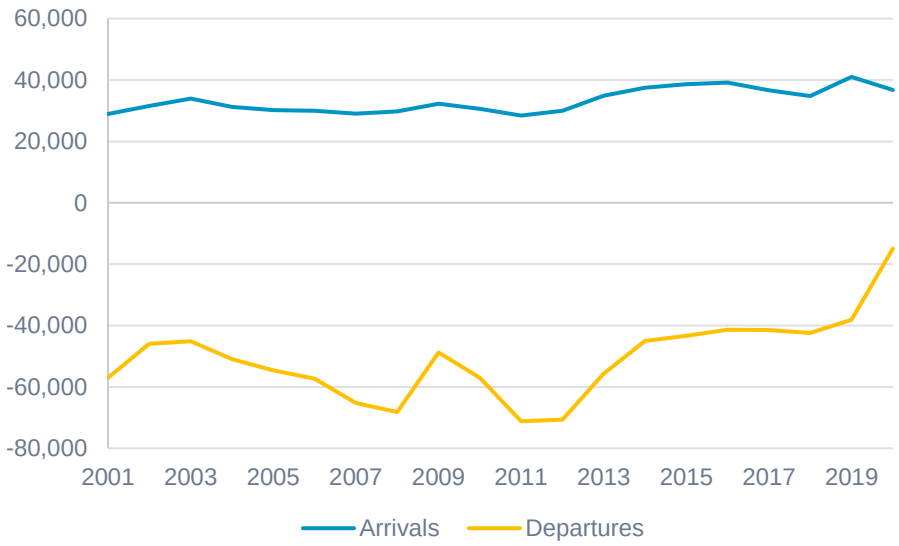
The final piece in the data puzzle is that the fall in net migration by New Zealanders is mainly the result of a marked decrease in the number of departures rather than a boost in numbers of returning Kiwis. This change predates the start of the COVID-19 pandemic: the peak year for departures was 2011, although the pandemic has clearly accelerated this trend. Arrivals after March 2020 have not increased substantially.[34]

33 Under the trans-Tasman Travel Agreement, Australian citizens have the same rights as permanent residents to enter, work, vote and access publicly-provided services.

34 The data does not tell us whether this is because New Zealanders did not want to come home or if they would have done so if they could access flights and places in Managed Isolation and Quarantine (MIQ) facilities.

Figure 25 Fewer New Zealanders are leaving

Estimated migrant arrivals and departures by New Zealand citizens, year ended December



Source: Stats NZ

2.3 The future remains uncertain

Uncertainty abounds in the migration policy space, which will have implications for how governments implement any recommendations the Productivity Commission makes:

- How will an understanding of the implications of the Treaty relationship concerning immigration policy evolve over time?[35]
- How can the wellbeing of locals, migrants and potential migrants be more centred in decision-making and practice? How should trade-offs be managed and addressed?[36]
- Can social cohesion be strengthened as the population continues to grow and diversify? How can the rights of migrants to remain connected to their languages, cultures and homelands be supported while at the same time helping people to feel a sense of belonging in Aotearoa?[37]
- Will we see sizeable emigration of Kiwis to Australia and the rest of the world when borders reopen?[38]

35 In its interim report, the Productivity Commission discussed the possibility of requiring the Government to consult with Māori when developing a GPS or introducing a Treaty clause in immigration legislation (New Zealand Productivity Commission 2021a, 45). In section 5.6.1 on page 80 we argue that this would be premature. We suggest that the Crown focus initially on rebuilding a relationship with its Treaty partner and work in partnership to determine an appropriate way forward.

36 For example, allowing migrants unrestricted work rights would improve their wellbeing, while potentially reducing the wellbeing of locals who are struggling to get a foothold in the labour market.

37 Section 20 of the New Zealand Bill of Rights Act provides, for example: "*A person who belongs to an ethnic, religious, or linguistic minority in New Zealand shall not be denied the right, in community with other members of that minority, to enjoy the culture, to profess and practise the religion, or to use the language, of that minority*".

38 We are already seeing reports that the 'Big OE' is about to make a comeback (Chiang 2022). The Government has also announced that it is "working expeditiously" with the UK government to "extend and improve" the existing New Zealand-UK Working Holiday/Youth Mobility scheme (Ardern and O'Connor 2021).

- To what extent will New Zealanders who have been unable to return during the pandemic come home once they can? Will they come back permanently or temporarily?
- How much will inequality and climate change increase the pool of potential migrants over time, particularly from the Pacific? What are the implications for migration policy of moving to a less extractive and more climate-positive economic strategy?
- How can the immediate need for skills be balanced against incentives to create longer-term improvements in education, training and on-the-job learning?[39]
- To what extent will distance, industry composition, relative economic performance, and low pay relative to house prices continue to constrain New Zealand's attractiveness to migrants and indeed locals, particularly those who are highly skilled and entrepreneurial?
- How will technological change develop globally, and how well will New Zealand firms adopt those developments, especially when doing so requires skills that are not available locally?
- To what extent can the New Zealand economy build absorptive capacity and become more responsive and resilient to unexpected changes in migration flows?

These uncertainties underscore the need for any policy and policy development process to be sufficiently flexible to adjust to changing values, priorities and circumstances.

2.4 Where to from here?

Migration is a material issue in New Zealand.

The size of flows of people across the New Zealand border is substantial, as the Commission has noted in both its Interim Report and the published supporting papers (New Zealand Productivity Commission 2021a, 5; 2021b, 3).

Across a range of metrics, we are one of the most open economies to people flows in the developed world:

- There have been significant periods since 1945, the most recent ending in 2012, when net migration has been negative.
- At between 700,000 and one million people, depending on whether children of New Zealand citizens born overseas are counted, New Zealand has one of the largest diasporas in the OECD. These people have been more than replaced by migrants, not all of whom are as well qualified (Ministry of Business, Innovation and Employment 2021c, 7).
- Over 25 percent of the population resident in New Zealand at the time of the last Census was born overseas, and in Auckland, the share is even higher, at 49 percent.

39 This needs to be considered in the context of both the tendency for many highly-qualified local workers to emigrate and wider demographic trends. New Zealand's education system performs relatively poorly for many Māori and Pacific students, a group that is expected to grow relatively quickly in the coming years.

- The OECD has suggested that in New Zealand, temporary migrants granted work visas comprise by far the highest percentage of the labour market of any OECD country (although their data for EU countries does not appear to include citizens from other EU nations with automatic work rights).[40]

Not only are these flows material, but they are all at least potentially susceptible to short-term volatility.

Given this, it is disturbing that "*the [immigration] system lacks clear objectives, cohesiveness, limits and boundaries*" (New Zealand Productivity Commission 2021a, 41).

We now turn to what objectives should guide immigration policy.

3 Objectives

The Productivity Commission has recommended that the government of the day be required to issue a policy statement on immigration (ibid. 43).

Issuing a GPS first requires the development of a clear Government strategy on immigration, followed by establishing objectives and then crafting policies that will achieve those objectives.

While it will be for the government of the day to develop a strategy if the Commission's recommendations are accepted, we have considered the possible elements of such a strategy as we have developed the advice in this report.

As we noted in Section 1.2, we are focusing here on the Government's interests in migration.

3.1 Absorptive capacity

The Commission has recommended that in the future, 'absorptive capacity', which broadly speaking reflects the extent to which the economy and society can accommodate population increase, should play an important short-term role in immigration policy via a GPS.

Migration itself can increase absorptive capacity if we can attract and retain people with particular skills.

However, when the economy is at – or beyond – the limit of its current capacity, this creates a paradox: more migrants who could, in the medium term, increase absorptive capacity will make things worse in the short term. While migrants boost both supply and demand across the economy, there will often be a lag, especially in providing long-lived assets like roads, schools and hospitals, before the economy responds to the increased demands that immigrants place on absorptive capacity.

40 The OECD notes that *"the data consist of inflows of seasonal and non-seasonal (interns, intra-company transfers and working holidays) foreign workers **who obtained a working visa**"* which we take to mean that it does not include intra-EU flows, because they do not require visas (Carey 2019, 15, emphasis added). At time of writing, the Productivity Commission is following up with the OECD to clarify this point.

We are seeing evidence of this today, with calls for construction workers to be given preferential access to New Zealand to build more houses, with little attention being paid to exactly where these workers will live (Reidy 2021).

This points to a timing issue: the best time to encourage migrants who will contribute to absorptive capacity is when the economy is operating well within its limits.

We do not, therefore, think that increasing the capacity of the economy to absorb more migrants should be, in itself, an objective of migration policy.

Building capacity is not costless.[41] It must be justified by offsetting benefits that are at least equal to, if not greater, than the alternative uses to which the funds required could be put.

We will return to the issue of defining and measuring absorptive capacity in Section 4, starting on page 49.

3.2 Some fundamental questions

What is a realistic goal for migration policy in New Zealand? Is immigration something that is just 'nice to have', or is it truly a necessary condition for sustainable growth in wellbeing?

The answers to these questions depend on the channels through which migration affects locals, the host community, and migrants themselves.

We have started our analysis of overarching policy from the position that the default border setting involves restrictions: only citizens have a right to enter New Zealand, and all others require explicit permission.[42]

Given this default setting, it is natural to then proceed to consider the reasons why governments allow migrants to enter New Zealand. The main reasons that have traditionally been used in the economic literature and policy documents issued by governments locally and internationally are:

- To **grow the population and thus the economy**. This was a principal motivation in the early development of the four British 'settler societies' of Australia, Canada, New Zealand, and the United States.
- To **boost productivity**, by bringing in people with skills that are not otherwise present in New Zealand that will complement local factors of production, or who will introduce new ideas or capital to New Zealand.
- To **fill labour market and skills gaps**, giving employers access to workers that are absent or in short supply locally.

41 Economists have been concerned about the costs of constrained capacity and the opportunity cost of addressing it for some time. As we note on page 51, Belshaw (1952), Gould (1982), Holmes (1966), and Hawke (1981; 1985) have pointed out that in an economy experiencing supply constraints, immigration could lead to excess demand, inflationary pressure and a deterioration in the balance of payments. More recently, Michael Reddell has argued that the resources consumed to accommodate immigrants came at the cost of forgoing opportunities to increase the export capacity of the economy (Reddell 2013; 2020; 2021). We discuss Reddell's analysis in more detail in Box 1 on page 52.

42 Borders being closed as a default seems to be a common international approach (Vernon and Zimmermann 2021, 6). Restrictions on migration began in earnest in the twentieth century. New Zealand's first general restrictions on migration date from 1899 (Fry and Wilson 2018, 28). In the United States, visa requirements and quotas on immigration were enacted in 1924 (Guerreiro, Rebelo, and Teles 2020). Passing the Immigration Restriction Act 1901 was one of the early actions of the Australian Federal Parliament (Langfield 1999). The Aliens Act 1905 was the UK's first attempt by that country to establish a permanent system of immigration control on entry (Wray 2006).

- As an adjunct to the **export of services**. Tourists need to be in New Zealand to consume services, and work rights have been used to attract students, who, until the border closures occasioned by COVID-19 expanded online offerings, also primarily attended in person.[43]
- To address **humanitarian concerns**. We have obligations as a member of the United Nations to accept a number of refugees for resettlement.[44]
- **Family reunion**. We allow certain family members of previous migrants to join them and build a life here.
- As part of providing **development assistance**, including through targeted programmes that allow limited numbers of people from the Pacific to settle here. Additionally, the Recognised Seasonal Employer scheme in the horticulture sector is a highly-regarded aid programme, where the ability to work in New Zealand provides access to remittances and skills development.

We now consider each of these reasons in more detail.

3.3 Growing the population

When it began, the large-scale development of settler societies was seen as a beneficial tool for growing the populations and economies of 'less-developed' societies.[45] Assessing more than two centuries of global migration, economists Timothy Hatton and Jeffrey Williamson described how industrial revolutions and improvements in transportation technology enabled growing numbers of people to move to other countries to search for a better life (Hatton and Williamson 2005).

The actions of colonising nations are viewed very differently today, with growing recognition of both the absence of consent and often devastating ongoing impacts on the resources, autonomy, society, culture and health and life outcomes of people who were colonised. As Malcolm Mulholland and Veronica Tawhai have observed:

> *The 6th of February 1840 was to mark a downward spiral for Māori, a loss of political autonomy that would result in the tangata whenua being culturally, socially and economically bereft in their own* lands. (Mulholland and Tawhai 2017, 8)

Modern arguments favouring population growth tend to emphasise the benefits of scale and agglomeration. As Julie Fry commented:

> *The potential for large scale benefits has been used to argue not only that New Zealand's productivity performance could improve with a large enough number of people with the right skills and connections, but also that such an increase is a necessary precondition for improved performance.* (Fry 2014, 14)

43 COVID-19 has, however, prompted an expansion of the use of remote teaching techniques across all form of education. Whether this will endure after borders reopen is unclear.

44 More generally, we see a need to support people to escape injustice and persecution. In the future, providing a safe haven for people, particularly those from the Pacific impacted by climate change and sea level rise will become increasingly important.

45 Settlement also had political goals, including enforcing occupation and making it irreversible. Peter Adams discusses in detail the motivations of those promoting ordered settlement of New Zealand (Adams 2015, Chapter 3).

With larger, denser populations, firms that locate near one another *"can benefit from the cost advantages arising from greater competition, specialisation and economies of scale"* (Fry and Glass 2016, 19). And, as Anna-Lee Saxenian showed in her research on Silicon Valley, face-to-face contact between diverse, interconnected people can support innovation (Saxenian 1999; 2000; 2005; 2007; Saxenian, Motoyama, and Quan 2002).

Fry and Glass concluded that *"[to] date, there is no evidence of a link between immigration-induced population growth and innovation in New Zealand"* (Fry and Glass 2016, 19). Dave Maré, Richard Fabling and Steve Stillman have suggested that this may be because New Zealand does not yet have a large enough population for the benefits of agglomeration to develop (Maré, Fabling, and Stillman 2011, 20). They do not suggest what level of population might be necessary to produce such effects. However, as we noted above in our discussion on the Infrastructure Commission's proposals, even if large increases in population could occur without straining absorptive capacity, "*getting more people is no guarantee of better economic performance"* (ibid. 20).

On current projections, New Zealand's natural rate of population growth will eventually turn negative as deaths start to outnumber births (Stats NZ 2021b). Without offsetting positive migration, the population will start to decline. As Fry has noted, the predictions of economic and demographic theory regarding the consequences of population decline are ambiguous (Fry 2014, 16).[46] However, the projected decline in natural increase is decades away. For now, we consider it appropriate for the government to continue to plan on the basis that the population, even without positive net migration, will grow. But it should test the consequences of different scenarios, including sudden outflows or inflows of New Zealand citizens, on its policy settings.

So, it is undoubtedly true that immigration can increase the population. But does this necessarily lead to higher living standards?

3.4 Benefitting the economy

Immigration has frequently been touted as holding out the prospect of providing substantial economic benefits for receiving countries.[47]

Michael Clemens has suggested that world economic production could be increased by up to one trillion dollars if all restrictions on the movement of labour were removed (Clemens 2011). Christian Dustmann and Ian Preston noted that achieving such gains implies migration on a truly spectacular scale. They report studies suggesting that achieving all the gains on offer would require the migration of three billion people. More modest liberalisation, which still achieves 40 percent of the potential gains, implies the movement of a little under 500 million people (Dustmann and Preston 2019). To put this into context,

46 Van Dalen and Henkens (2011) suggested New Zealand would perform better with a much smaller absolute population size. However, Fry has noted that because it is small and isolated, New Zealand might be *"particularly vulnerable to small scale diseconomies, or damaged confidence and investment expectations from a falling population*", especially from the housing market (Fry 2014, 16).

47 This implies that immigration can influence productivity, which is the key to increasing material living standards:

> *Productivity isn't everything, but, in the long run, it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.* (Krugman 1994a, 11)

As we set out in *Better Lives*, immigration policy should be set to achieve wellbeing, which involves more than increasing GDP per capita (Fry and Wilson 2018). But we agree with Krugman that it is important to understand how immigration might improve productivity if that is going to be used as a justification for any policy.

there were an estimated 281 million migrants in the world in 2020, equal to about 3.6 percent of the global population (McAuliffe and Triandafyllidou 2021).

Joao Guerreiro and his colleagues suggest that the optimal unilateral migration policy for a small open economy can include restrictions on migration, depending on the information available to the government (Guerreiro, Rebelo, and Teles 2020).

Overall, empirical studies tend to show that immigration typically has at most small positive effects on a local economy when measured in terms of GDP per capita, many of which are captured by migrants and employers (Wilson and Fry 2020, 3).

3.4.1 Addressing labour market gaps

According to the OECD:

> *The central objective of labour migration policy is to help meet those labour market needs which cannot be satisfied through tapping domestic labour supply in a reasonable timeframe, without adversely affecting the domestic labour market and without hindering development prospects in vulnerable origin countries.* (OECD 2019)

Commenting directly on New Zealand, the OECD observed:

> *The cornerstone of New Zealand's immigration system is the Essential Skills (ES) temporary work visa, which is for migrants who fill jobs for which no New Zealander or permanent resident is available.* (Carey 2019, 29)

Immigration can be especially helpful when there are unexpected large-scale skills shortages that are not addressed by the internal movement of local workers. For example, following the Christchurch earthquakes, bringing in migrant construction workers helped reduce wage pressures that otherwise might have created a need to tighten monetary policy (Fry and Wilson 2018, 51).

Skilled migration policy is designed to bring in immigrants who, rather than substituting for locals, will work alongside and 'complement' them, for example, through performing different tasks or bringing in new skills, ideas and perspectives.[48]

However, over time, there have been growing concerns expressed around the extent to which migrants entering New Zealand on work visas have had skill levels lower than policy intended. In a 2013 paper, the Ministry of Business, Innovation and Employment (MBIE) noted that in 2011/12, only 60 percent of people granted Essential Skills visas were in skilled occupations (Ministry of Business, Innovation and Employment 2013, Appendix 1, 4) and "*a high proportion of [Skilled Migrant Category] migrants are not employed in occupations in shortage"* (Ministry of Business, Innovation and Employment 2013, Appendix 3, 5-6).

This pattern has continued. As we pointed out in *Could Do Better*:

> *[T]he increased emphasis on job offers, coupled with a reduced supply of migrants following the Global Financial Crisis, significantly changed the profile of incoming*

48 As we noted in *Picking Cherries*, "*Skills are complementary when the people with them can work together to produce something: a migrant doctor and a locally trained nurse complement each other in treating patients. Two doctors with the same skills, one local and one foreign trained, on the other hand, would be substitutes: you do not need both to treat a single patient*" (Fry and Wilson 2021, 7).

> *migrants. Along with people whose skills complemented those of existing workers, people who substituted for New Zealand workers were increasingly granted entry.* (Wilson and Fry 2020, 17)

More recently, MBIE noted that in 2019/20, nearly half of people granted an Essential Skills Visa were at the two lowest (out of five) skill levels, up from 28 percent in 2010/11 (Ministry of Business, Innovation and Employment 2021c, 7).

Both current and future labour market impacts matter. Studies consistently find that *"immigrants do not have a significant negative impact on the labour market outcomes of the local population"* (Fry 2014, 22).[49] However, when migrant workers are very readily available, as they have been in recent years, incentives to develop and train local workers, attract more locals through improved wages and conditions, and raise their productivity through increased capital investment, are reduced.[50]

3.4.2 Boosting productivity

As Francesco Campo and his co-authors note:

> *[T]he theoretical impact of immigration on productivity is ambiguous, because there are a number of conceptually different mechanisms that are potentially at work.* (Campo, Forte, and Portes 2018, 2)

The possible transmission mechanisms that they cite include:

- A 'batting average' effect, where migrants may increase or lower average productivity in the host country through being more or less highly skilled than locals
- Within-firm complementarities, where migrants can boost the productivity of local employees
- Within-sector beneficial 'spillovers', because of economies of scale, clustering effects or increased competition
- Incentive effects, where the presence of migrants could increase or decrease the incentives for local workers to acquire more skills
- Investment effects. Migration could either reduce incentives to invest, if it allows low-cost employees to enter the labour market, or, if migrants are complements to some types of new technology or other innovations, it could increase the return on investment (ibid, 2).

We would also add within-city agglomeration economies and learning and knowledge spillovers to this list.

49 While there is no evidence that immigration has negatively impacted employment and wages overall in Aotearoa, the detailed picture is more mixed. For example, Keith McLeod and Dave Maré found international students led to more young people and beneficiaries being hired. Outside main urban areas, and in horticultural regions, temporary migration reduced beneficiary hires, and Essential Skills visa holders had negative effects on hiring New Zealanders overall (McLeod and Maré 2018, 33–35).

50 Fry and Wilson (2021, 38). Also see Costa and Martin (2018, 1) on incentives to train locals and improve terms and conditions, and Lewis (2011, 1037), Peri (2016, 15), and Dustmann and Görlach (2016, 129) and the discussion below on incentives to invest in capital.

Most studies examining the impact of immigration on productivity look at permanent migration. Florence Jaumotte, Ksenia Koloskova, and Sweta Saxena summarised the results of recent research in a study for the IMF (Jaumotte, Koloskova, and Saxena 2016).

They concluded that there are unlikely to be long-term impacts on labour productivity via changes to the capital-labour ratio. Rather, the effect of permanent migration depends on the skill mix of immigrants.

If immigrants are more highly skilled than locals, permanent immigration can increase labour productivity by increasing the diversity of skills and ideas, supporting skill complementarity and specialisation, and encouraging local workers to upgrade their skills.

Conversely, *"a large entry of low-skilled immigrants could change the sectoral specialisation of the economy, for instance toward lower-productivity sectors such as construction, lowering [Total Factor Productivity]"* (Jaumotte, Koloskova, and Saxena 2016, 3).

As Christian Dustmann and Joseph-Simon Görlach have noted:

> *A continuing supply of low cost temporary foreign workers may also induce employers to reduce capital accumulation and move toward labor-intensive production technologies. This may have negative effects on the marginal productivity of labor.* (Dustmann and Görlach 2016, 129)

Campo et al. also reviewed the literature and concluded that it is yet to reach a clear theoretical consensus on either the sign or magnitude of possible effects:

> *Overall, the message from these papers is that the impact of immigration on productivity is generally positive, but effect sizes (and the implicit causal mechanisms assumed to be at work) vary – along with the different definitions of productivity – and results are generally not conclusive.* (Campo, Forte, and Portes 2018, 6)

They, therefore, undertook their own detailed study of the effects of immigration on productivity and training in the United Kingdom.[51]

For the UK, Campo et al. found that immigration has had positive, substantial and significant effects at the local level, likely due to migrants having higher skill levels than locals (they were unable to test the impact of low-skilled migrants on productivity). At the national level, there is no evidence that migration has been responsible for the UK's 'dismal' productivity performance. As far as training is concerned, the results are less robust, but it does not appear likely that immigration has reduced the extent to which firms train locals (ibid. 33).

Singapore is another example of the different effects that immigration can have on population size, GDP and GDP per capita. Singapore experienced high GDP growth rates from 1965 to 2017, but its productivity, measured in terms of total factor productivity (TFP) – the portion of changes in economic output not explained by the factors of capital or labour – did not rise.[52]

[51] In doing so they also note that migration, especially at the firm or local level, is not a random variable. Migrants and employers will, at least in part, select the place they choose to live or the people they want to employ based on their potential productivity. As a result, simple regressions that seek to determine the causal relationship between measures of productivity or training and the level of immigration in a particular area or sector will be biased, and this bias could run either way. Campo et al. employed instrumental variables to overcome this endogeneity (ibid. 12).

[52] Paul Krugman made this point in a much-cited and highly influential 1994 paper (Krugman 1994b).

Alex Nowrasteh suggests that:

> *The puzzle of low productivity growth in a country with high economic growth is partially explained by foreign worker churn. Additional foreign laborers increased growth by pushing out the production possibilities frontier, but these same foreign laborers slowed TFP growth by just adding more workers rather than more productive workers.* (Nowrasteh 2018, 21)

The lack of a definitive theoretical prediction coupled with varying empirical results for different countries means that more detailed local research is needed to draw robust conclusions about productivity impacts in New Zealand. The Productivity Commission has found that:

> *Microeconomic evidence suggests positive, but small, impacts from immigration on average levels of labour productivity. New Zealand evidence on the impacts of immigration on innovation and exporting as channels for productivity growth finds minor or conditional effects. (New Zealand Productivity Commission 2021c, 41)*

The Commission is sponsoring a new study that will hopefully shed additional light on this issue.

3.4.3 Supporting services exports

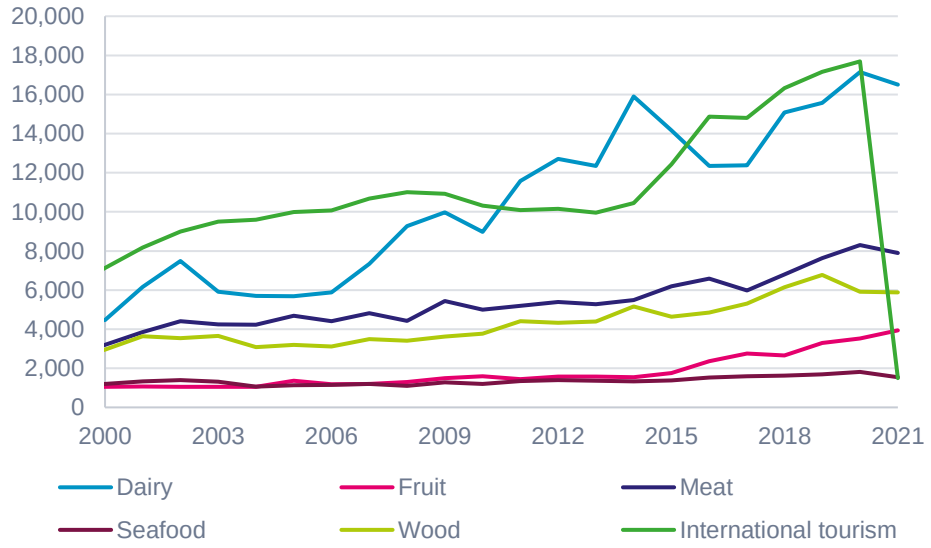
The export of services before COVID-19 was an area of significant growth in the New Zealand economy, and international education and tourism were among New Zealand's top export earners.

Tourism

In 2019, tourism generated a direct annual contribution of $16.4 billion, or 5.5 percent of New Zealand's total GDP, and a further indirect contribution of $11.3 billion, another 3.8 percent of GDP (Tourism Industry Aotearoa 2022).

While this level of international tourism may not have been sustainable (Clough 2020) and there is considerable uncertainty about the future of international travel due to COVID-19, from an immigration policy perspective, the tourism and hospitality sector was particularly reliant on migrant workers (Hospitality NZ 2021). In addition to specialist immigrant staff such as chefs, students with work rights and working holidaymakers have been an essential component of staffing tourism and hospitality (Bell 2021; Restaurant & Café 2021).

Figure 26 Tourism was a growing part of the economy



Source: Stats NZ

International education

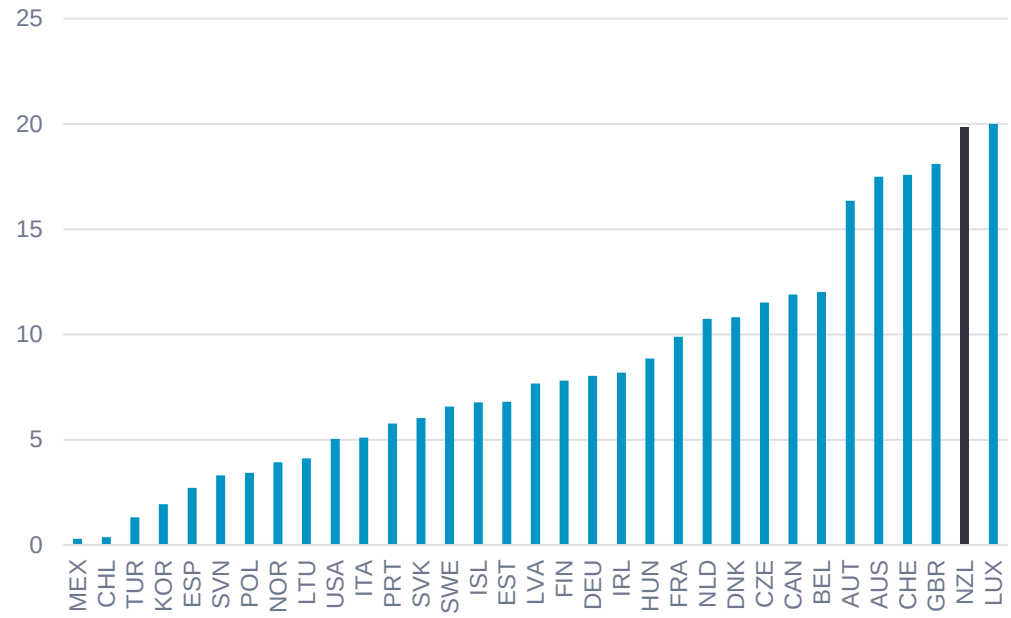
An NZIER report from 2020 concluded that international education generates at least $1.25 billion per year for New Zealand, with universities' earnings from export education representing 1.2 percent of all New Zealand's exports of goods and services (Hensen 2020).

The number of people holding student visas more than tripled between 2004 and the peak in 2015, before declining a little prior to the start of the pandemic. As a result, by 2016, New Zealand was an outlier within the OECD, with international fee-paying students comprising almost one-fifth of all tertiary students. The prospect of work rights was increasingly used to boost the attractiveness of New Zealand as a destination for international students (Hipkins 2020, 3).[53]

53 Note that some international education, particularly students who are studying for less than 12 months, is included in the Stats NZ Tourism Satellite Account.

Figure 27 Share of international students in tertiary education

Percent of total, 2016



Source: Carey (2019)

In 2018, the government signalled a shift to prioritise value over volume:

> *Cabinet approved the launch of the International Education Strategy 2018-2030 (the IES) in late 2018 to signal a new vision and clear objectives for international education.*
>
> *This included an important 'volume to value' strategic shift. We agreed to move the focus from international education being a revenue generating export industry focused on attracting high volumes of students, to one that focuses on quality of education, higher value students and markets, incorporates domestic students and global competencies, and contributes to economic, social, and cultural benefits for New Zealand. Student wellbeing has also increased as a key priority.* (Hipkins 2020, 3)

In preparation for the re-opening of the border, the Government developed and is now implementing a long-term strategic recovery plan for international education. That plan continues to build on the 2018 strategy.

3.5 An international dimension

New Zealand admits migrants for various reasons relating to international obligations and supporting relations with other countries, especially in our region of the world.

3.5.1 Humanitarian migration

New Zealand is a party to a range of international agreements covering refugees, including:

- the 1951 United Nations Convention on Refugees and its 1967 Protocol Relating to the Status of Refugees

- the 1984 Convention Against Torture
- the 1966 Covenant on Civil and Political Rights.

These conventions oblige New Zealand to protect the refugees that it accepts.

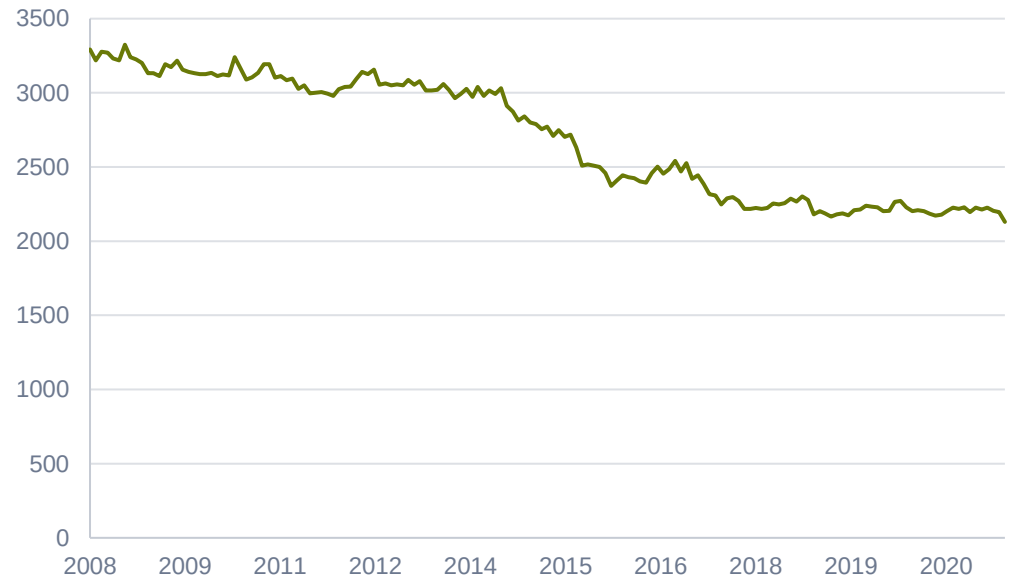
Refugees can enter New Zealand through two different means. The first is via the New Zealand Refugee Quota Programme, which is part of the United Nations High Commissioner for Refugees (UNHCR) regular refugee resettlement programme. The quota is currently set at 1,500 places, although due to COVID-19, fewer than this number are expected to be settled this year (Immigration New Zealand 2022e). Under this programme, potential migrants are identified by the UNHCR and assisted in coming to and settling in New Zealand.

The second route is via a person making their way to New Zealand privately and then seeking asylum on arrival (Immigration New Zealand 2021). While their claim is being assessed, asylum seekers are entitled to stay in New Zealand, and if successful, they may apply for a temporary visa or permanent residence.

However, the total number of people granted residence under the various humanitarian categories is small. Figure 28 shows that the total number of refugees resident in New Zealand has averaged about 2,250 since 2017.

Figure 28 Relatively few refugees are granted New Zealand residence

Refugees granted residence



Source: MBIE

3.5.2 Development assistance

The focus of New Zealand's Official Development Assistance Programme is "*to help improve sustainable development and reduce poverty in developing countries, with a strong focus on the Pacific"* (Ministry of Foreign Affairs and Trade 2021).

While much of this programme is delivered via funding activities in development partner countries, migration is also used as a delivery mechanism.

The Recognised Seasonal Employer (RSE) programme is a prime example. Under this programme, prior to COVID-19, upwards of 14,000 seasonal workers, mainly from selected countries in the Pacific, were granted visas to enter New Zealand to work in the horticulture and viticulture sectors.[54] A scaled-back programme continued to operate while border access was restricted. We undertook a detailed analysis of this programme for the Productivity Commission as part of their Inquiry into frontier firms (Fry and Wilson 2021).

There are categories of permanent residence visas allocated each year to Pacific people which also have a development focus. The largest is the Samoan Quota, which currently allows 1,100 visas to be granted each year to Samoan citizens between the ages of 18 and 45 who have an offer of employment and meet health and character checks. If the applicant has dependent children coming with them, then the offered employment must have an annual income of at least NZ$38,577.76 (Immigration New Zealand 2022f, Section S1.10).

The Pacific Access Category allows up to 250 citizens of Fiji, 250 citizens of Tonga, 75 citizens of Tuvalu, and 75 citizens of Kiribati to be granted residence class visas in New Zealand each year under the same conditions that apply to the Samoan Quota (ibid. Section S1.40).

3.6 Promoting wellbeing

Studies of migration in economics have traditionally used measures like GDP, productivity and employment to judge the effects of the inflow of new workers and citizens.

In the context of developing objectives on migration, the government will need to undertake additional analysis of how migration might impact on the domains of wellbeing (Fry and Wilson 2018). This suggests, at least initially, that any GPS might set out some high-level wellbeing objectives and commit the government to further refinement of the policy details in time or the next edition of the statement.

3.7 Why should New Zealand allow migrants to enter?

The answers to each of these questions has implications for both high-level and detailed immigration policy settings. In Table 4, we summarise our answers and their implications.

Table 4 Summary of reasons for allowing migration

Reason	Answer	Implications
Growing the population	Net migration can have a material effect on population size. Experience in New Zealand has been that the actual contribution varies markedly, mainly due to variations in the number of New Zealand citizens departing.	A deliberate policy to boost the population would need to contain a mechanism to adjust inflows to account for outflows.
Boosting productivity	Limited effects in both theory and practice.	The instances where immigration can boost productivity are likely to be

[54] The government has recently announced that the cap for the scheme will be increased to 16,000 for the 2021/22 season (Faafoi and O'Connor 2022).

Reason	Answer	Implications
		limited and require carefully targeted and possibly high-cost programmes like the Global Impact Visa. The number of residence visas issued under the Skilled Migrant Category and Essential Skills temporary visas should be scaled back, and skill thresholds increased if their main intended purpose is to boost productivity.
Filling labour and skills gaps	This has been the cornerstone of New Zealand policy for both temporary and permanent immigration, but the skills of migrants entering Aotearoa have often been lower than policy intended.	The immigration system is presently disconnected from other relevant policies, like education and urban development. Recruiting migrants is relatively low cost for employers and does provide them with the workers they need to support their current business models. Ready access to migrants gives the education and training system a 'free pass' to continue to fail large numbers of students. It should focus more on increasing the skills of locals who are currently entering the workforce without the skills that are in demand. Industry policy should incentivise firms to use business models that are not as reliant on migrants. Bringing in fewer migrants and treating them better is likely to enhance wellbeing overall.
Supporting exports of services	High levels of fee-paying students have been admitted to New Zealand. Experience suggests that an emphasis on quantity over quality can negatively affect New Zealand's reputation as an education provider, housing availability, especially for local students and the wellbeing of the international students.	Continue the government strategic shift to focus on quality over quantity.
Humanitarian	New Zealand's intake is very small, but the potential for improvements in the wellbeing of refugees are enormous. Pressure to provide more places is likely to grow if climate change has the expected effects on Pacific Island states.	New Zealand can do more, including in response to national disasters (e.g. cyclones, recent events in Tonga).
Family	Potentially high wellbeing effects for the migrants. New Zealand has increasingly limited migration of the parents of existing immigrants, largely because of concerns about fiscal cost. Partners and dependent children are still permitted to enter, provided certain criteria are met.[55]	High wellbeing effects need to be included in policy considerations.

55 Currently, the parent category is suspended due to COVID-19, and inflows of partners and dependent children have been greatly reduced, in large part due to border restrictions and constraints on MIQ capacity (Immigration New Zealand 2022d).

Reason	Answer	Implications
Development	The RSE scheme is a stand-out internationally in terms of guest-worker schemes. However, there are concerns about some effects on host countries and migrants and the possibility of reinforcing low-productivity business models.	The RSE scheme may have reached its limit in terms of net contribution to workers and the economy in its current form. Increasing emphasis on skills development and continuing to increase flexibility to work for different employers would help. An alternative mechanism for delivering assistance to the targeted countries would need to be developed if allocations were substantively reduced.

Source: The authors

3.8 Building a firm analytical foundation for policymaking

We suggest that the government take a multi-year, iterative approach to develop the empirical and analytical base for setting objectives, a GPS and monitoring absorptive capacity.[56]

These work programmes will need to proceed based on a common understanding of the same set of migrant and country-specific factors that influence how migrants impact the economy and society, albeit with different degrees of granularity being used in different work.

As part of our analysis of the issue of a GPS in Section 5.3.1, we also recommend that the government should be required to report regularly (say, every 1–3 years) on a range of quantitative measures. Appendix C contains a consolidated list of the data we suggest be collected and analysed.[57]

Over time, we recommend the government supports more bespoke research on the drivers of immigration and its effects.[58]

We have identified from the literature two studies that provide useful templates for research that might be undertaken over the next several years.

56 Much of the best local research on how migrants settle, particularly into the housing and labour markets, is now quite dated. Information on choices that migrants to New Zealand make (for example, around transport) and the goods and services they consume is limited. For example, the most recent study looking at differences in housing demand between migrants and locals uses data from the 2001 and 2006 Censuses (Sanderson et al. 2007). The work Steve Stillman and Dave Maré did on labour markets uses Census data from 1986 through to 2006 (Stillman and Maré 2009).

57 We acknowledge that much of this data is currently published by either MBIE or Stats NZ. However, the material included in the Fiscal Strategy Report and the Budget Policy Statement is also reported elsewhere by Stats NZ, the Treasury, and the Reserve Bank. It is bringing this information together and reporting it within the contest of the principles of responsible fiscal management that gives the Public Finance Act its power and we, therefore, recommend that any immigration GPS should follow this approach.

58 We are reminded here that the then Department of Labour undertook a substantial programme of research on the impacts of migration in the mid-2000s. Jacques Poot and Bill Cochrane produced a scoping study for the project (Poot and Cochrane 2005) and then Rob Hodgson and Jacques Poot surveyed the results five years later (Hodgson and Poot 2010). These two papers and the reports produced by the programme provide a firm foundation for the sort of work we have in mind.

Dustmann and Frattini (2010)

Twelve years ago, Christian Dustmann and Tommaso Frattini undertook a cost/benefit study for the UK Migration Advisory Committee (Dustmann and Frattini 2010). In this study, they reported the result of studies of the effects of immigration on:

- the labour market
- productivity and innovation
- inflation
- housing
- growth
- crime
- the government's fiscal position.

Dustmann and Frattini recorded a number of challenges in undertaking this sort of study, both conceptual and in terms of data. One key difficulty is that:

> *[T]here is no over-arching theoretical model that allows us to answer all the questions on how migration affects the receiving economy - the complexity of the issue is far too large. And even if we had developed such a model, a major challenge would be to obtain reliable estimates on the different parameters that determine the model structure.* (ibid. 106)

This inevitably leads researchers to look at sub-sectors of the economy and then aggregate these components to draw overall conclusions, which is what the authors did here. For the government to use this approach to make final decisions on absorptive capacity, they need to determine what weight should be given to these different policy objectives.[59]

A further confounding factor for this type of study is the issue of what would have happened in the absence of migration:

> *The key difficulty for the estimation of the effects of immigration relates to the construction of a "counterfactual" situation: whenever immigration occurs we always observe how the labour market of the receiving country changes through immigration; however, we do not observe how the labour market would change in the absence of immigration.* (Dustmann and Frattini 2010, 103)[60]

Despite these constraints, Dustman and Frattini reported that the literature on the impacts of migration is developing, and more answers to important policy questions are being provided. This has certainly been the case in the period since they wrote their report.

Glass et al. (2017)

In 2017, Hayden Glass and his colleagues used Stats NZ integrated data infrastructure (IDI) to calculate the net contribution of a cohort of 264,204 applicants who were either granted a visa (including visitors' visas) or arrived in New Zealand in the year to March 2003 over

59 Chapter 6 of Fry and Wilson (2018) discusses how this might be done in the context of wellbeing-based migration policy in New Zealand.

60 Some studies, especially those conducted in the United States where data is often available at state or city level do use econometric techniques that attempt to exploit regional variations to estimate and make inferences about the unobserved effects of migration. See Fry and Wilson (2021) and the references it cites for details.

the following ten years (Glass et al. 2017). Table 5 describes the benefits and costs that they studied.[61]

Table 5 Net contribution of migrants

Fiscal	Labour market	Entrepreneurship	Consumption
Tax paid minus Welfare benefits and Other government transfers, including Heath Education Corrections	The contribution migrants add to an industry is based on the labour shortage indicator of an industry and the value-added per worker in that industry. The labour shortage index was created from the 2008, 2011 and 2014 Business Operations Survey. The value-added measure comes from the operating surplus per employee taken from the Annual Enterprise Survey.	Entrepreneurial income received by migrants in a given sector.	Tourism comes from the number of days a migrant spent in New Zealand on a 'Tourist Visa' multiplied by a representative regional rate of tourist spending obtained from the International Visitor Survey. Education comes from the number of quarters a migrant spent on a student-foreign-fee-paying Visa multiplied by a representative rate for their institution constructed using Infometrics' estimate of the contribution of the education industry to GDP).

Source: Adapted from Glass et al. (2017, 2)

The authors concluded:

> *We have demonstrated that it is possible to measure the value to New Zealand from immigration in a conceptually coherent way across visa types and over time. We have defined net value based on labour market value-add, fiscal contributions, and consumption of tourist and education services. We included entrepreneurship, i.e., self-employment and job creation by immigrants, in our measures in a limited way… We now also know that it is possible to use the IDI to measure value in a practical way.* (ibid.)

The study did not look at a number of important issues, including housing outcomes, although the authors did indicate that this could be done using Census data. Our purpose in citing this study is to demonstrate that using available data, the government could measure the impact of migrants on some major parts of the economy. Measuring all the impacts comprehensively and accurately is, as we have noted, not a simple task. But initial steps in this direction are possible.

61 The authors used the term 'value' to describe a measure based on net taxes and expenditure. However, taxes minus spending is a transfer of income from the migrants to the government, rather than an addition to the value-added created by the migrants. For example, if the tax rate increases, net taxes would increase, but GDP would stay the same (deadweight loss effects excluded). The consumption data is also likely to be recording gross expenditure, not value-added. That said, the methodology demonstrates the utility of using IDI data to provide insights into the effects of immigrants on the economy.

4 Absorptive capacity

In its Interim Report, the Productivity Commission said that it had found:

> *Finding 11*
>
> *The disconnection of immigration from other policy areas has meant that the rapid growth in net migration and population in the years preceding the Covid-19 pandemic exceeded New Zealand's ability to successfully accommodate and settle new arrivals.* (New Zealand Productivity Commission 2021a, 41)

The Commission recommended that:

> *Recommendation 1*
>
> *The Immigration Act should be amended to require the Crown to take account of the country's absorptive capacity (our ability to successfully accommodate and settle new arrivals) when determining the "national interest".* (ibid, 42)
>
> *Recommendation 3*
>
> *Amendments to the Immigration Act should specify that, in preparing an immigration GPS, the Government must describe what it considers New Zealand's absorptive capacity to be and how it intends to manage that capacity, or invest to expand capacity, in order to align it with long-term policy objectives.* (ibid, 43)

4.1 The Productivity Commission's analysis

Research papers published by the Commission alongside their interim report include discussions of absorptive capacity (New Zealand Productivity Commission 2021b, 4, 5, 9, 10 and 22; 2021d, 19) and the Reddell hypothesis, which we examine in Box 1 over the page.

The Commission's research papers note that the concept of absorptive capacity may relate to:

- the ability to physically house people to a satisfactory standard, or to provide adequate access to infrastructure
- social outcomes like cultural and social cohesion
- economic opportunities, including whether institutions can integrate new people and skills
- financial constraints on redistributive programmes for either political or fiscal reasons.

The Commission noted that:

> *Scarce or limited capacity is an inherently short-term concept, since new capacity can be added with sufficient time and prior investment, subject to available economic (real) resources. (New Zealand Productivity Commission 2021b, 4)*

Writing in 2011 within the context of the discussion about a shift to a sustainability paradigm in relation to population, the Chairman of the Australian Productivity Commission, Gary Banks, observed that the rate of change of population was perhaps more important than future projections of levels. A focus on the rate of change *"puts the focus on*

what might best be called 'absorption capacity' (a dynamic concept) rather than static notions of 'carrying capacity'" (Banks 2011, 2).[62]

The Commission's interim report described the many different factors that go to make up the ability of an economy to absorb immigrants:

> *The absorptive capacity of a country may relate to social outcomes, such as cultural and social cohesion and to economic opportunities, including the ability of a country's institutions to integrate new people and skills. It may also relate to the physical ability to house new people within available housing and infrastructure and to a standard that society is comfortable with… [there could also be] financial limits…being reached by political and fiscal stresses on redistributive programmes.* (New Zealand Productivity Commission 2021b, 4 and 10)

While the recent spike in net migration has elevated concerns about this issue, they are not new. Julie Fry notes that New Zealand's post-World War II history is replete with examples where the demand created by unexpected increases in net migration raised concerns about macroeconomic consequences:

> *Economists such as Belshaw* (1952)*, Gould* (1982)*, Holmes* (1966)*, Hawke* (1981; 1985) *and others warned that immigration shocks in a supply-constrained economy with low unemployment would generate excess demand, inflationary pressure and a deterioration in the balance of payments.* (Fry 2014, 27–28)

62 Banks may have had in mind a report of a Committee of the Australian Parliament that had discussed the 'carrying capacity' of Australia when it comes to population. The Committee defined 'carrying capacity' in static terms as; *"that combination of population, location and demographic characteristics which best serve Australia's national interests, and which allow individuals in the society to live long, self-fulfilling lives"* (House of Representatives Standing Committee for Long Term Strategies 1994, 23).

Box 1: The Reddell hypothesis

Economist Michael Reddell has hypothesised that substantial net migration to New Zealand has damaged economic performance because it has caused persistent excess demand, which has shifted the composition of output from tradeables to non-tradeables (New Zealand Productivity Commission 2021f, 15–17; Reddell 2013; 2020; 2021).[63] A separate but important part of the hypothesis is Reddell's view that the size of New Zealand's natural resources (water, climate, land and biodiversity) constrain the aggregate income it can produce (Reddell 2021, 2). He is essentially suggesting that the resources that have been consumed in supporting immigrants (through providing houses, roads, schools, hospitals and so on) could have been put to more productive uses, especially in expanding export industries.

Reddell contends that high immigration provides an explanation of the observed fact that despite superior policy settings that should have boosted growth, New Zealand has had weak productivity performance, consistently high real interest rates, a high average real exchange rate and low exports as a percentage of GDP. He also considers that his hypothesis provides a better explanation than other alternatives. Reddell makes it clear that he has no prior view on migration, but the evidence of its effect on New Zealand makes him question its desirability.

At its core, Reddell's policy recommendation is that we must do the best with what we have now, which includes the current population:

> *Successful countries make their economic success primarily with and for their own people. We can again do it here. We have talented and fairly well-educated people, we have reasonably open markets, we have a history of innovation, but distance really works against us and we will mostly prosper by doing better and smarter with (and investing more heavily in) the natural resources we have - things that really are location-specific. Lots of other bright ideas are, and will be, dreamed up by people here. But if those ideas work well, they'll typically be much more valuable abroad. You may not like it - neither do I really – but it is what experience shows*. (ibid. 9)

Reddell proposes that inward migration into New Zealand should be greatly reduced from current levels. His specific focus is on the residence programme, suggesting it should be limited to 5,000 to 10,000 high-skilled migrants plus a further 5,000 refugees and family members of citizens per year (ibid. 9) In 2019, the total number of residence visas granted was about 38,000, down from a peak of about 49,000 in 2016. On temporary migration, Reddell favours not granting international students work rights. He would replace salary thresholds and work tests with an annual fee of $20,000 or 20 percent of the migrant's salary, whichever is higher, to provide an incentive to hire and train locals (Reddell 2021, 7).

In its published research, the Productivity Commission has said that it is not taking a definitive view on the Reddell hypothesis. It does comment that:

> *Overall, the Commission's view of New Zealand's future and its ability to sustain a higher population is less pessimistic than Reddell's.* (New Zealand Productivity Commission 2021f, 18)

Reddell's work has been highly influential in reshaping the conversation in Aotearoa to acknowledge that migration has costs as well as benefits. Within the context of the Productivity Commission's current inquiry, the hypothesis has drawn attention to the fact that increasing the absorptive capacity of the economy is not costless. Any proposal to increase that capacity must be tested against the alternative uses to which the resources could be put.

The hypothesis remains something of an enigma in New Zealand immigration policy debates. While Reddell tells a story that is well-supported by stylised facts, until someone can identify and undertake a robust econometric test of the Reddell hypothesis, it has probably made all the contribution to debates on migration that it can.

Source: The authors

4.2 A working definition

We suggest as a working definition of 'absorptive capacity':

The rate of increase in New Zealand's population due to net migration should be such that, on average, over the short to medium term, the associated wellbeing of New Zealand residents is maintained or improved, and new immigrants can be treated as well as residents, across the relevant dimensions of wellbeing.

This definition is, per Gary Banks's comment above, dynamic. It looks at the growth rate in the short to medium term, rather than focusing on some longer-term target population level. While it nests immigration policy within the context of population change, it does not involve the government taking a view on what the desirable population of New Zealand should be.

We suggest that the wellbeing of New Zealand residents should be assess across all the relevant dimensions of wellbeing that we set out in *Better Lives.* (Fry and Wilson 2018) This would mean that applying the definition in practice requires a granular approach, looking at issues such as housing, the health and education systems and infrastructure, and less tangible factors like civic engagement, security and life satisfaction, for both immigrants and locals. This is important since recent experience in New Zealand of the impact of population growth, some of which is due to immigration of non-citizens, has had substantial negative wellbeing impacts, including through increased house prices and congestion.

It explicitly states that the wellbeing of migrants should be part of the equation and that they should, in wellbeing terms, be treated as well as locals. As the Productivity Commission has noted, for example, visa conditions can have a negative impact on the wellbeing of migrants:

> *Some current visa conditions – such as tying people to specific employers – significantly weaken the bargaining power of temporary migrant workers and raise the risk of their exploitation*. (New Zealand Productivity Commission 2021a, 30)

Thus, it is not just the number of migrants that matters for absorptive capacity but also New Zealand's capacity to treat them well. As we discuss in Section 4.3 below, migrants do not uniformly impact absorptive capacity. Their characteristics, choices, and the terms on which they can live and work in New Zealand also play a part. The timing and rate of arrival and the degree to which their arrival is anticipated or not are also important.

Finally, this definition does not include a qualifier like 'at reasonable cost'. This is deliberate and does not mean that we consider any cost should be incurred to treat migrants the same as locals. Rather, we consider that if the cost of allowing a certain number of migrants to enter is too high, then the appropriate solution is to reduce the number of migrants.

4.3 A simple model of supply and demand

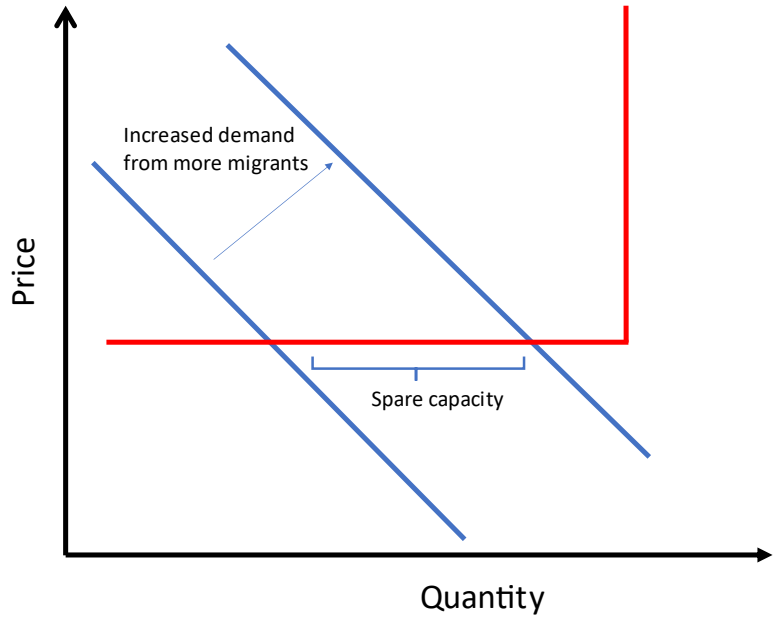
One way to think about absorptive capacity is using the familiar supply and demand curves of introductory economics.[64]

The arrival of migrants will increase demand, as shown in the three demand curves in Figure 29.

If there is spare capacity in the market for a particular item, then the increase in demand will not affect that market: the required quantity will be delivered. However, once that capacity is exhausted, the short-run supply curve for infrastructure (including housing) becomes highly inelastic. At that point, any additional demand will have an impact, as we can see from the third, higher, demand curve.

If the good or service in question is provided in a market, then its price will increase. If it is not provided in a market, demand increases will be reflected in other ways. For example, in the case of publicly-provided health services, longer waiting times, more crowded facilities, and closed GP lists might be observed. In the case of transport, congestion would be the likely result.

Figure 29 An economy with spare capacity can absorb migrants with little impact, up to a point



Source: The authors

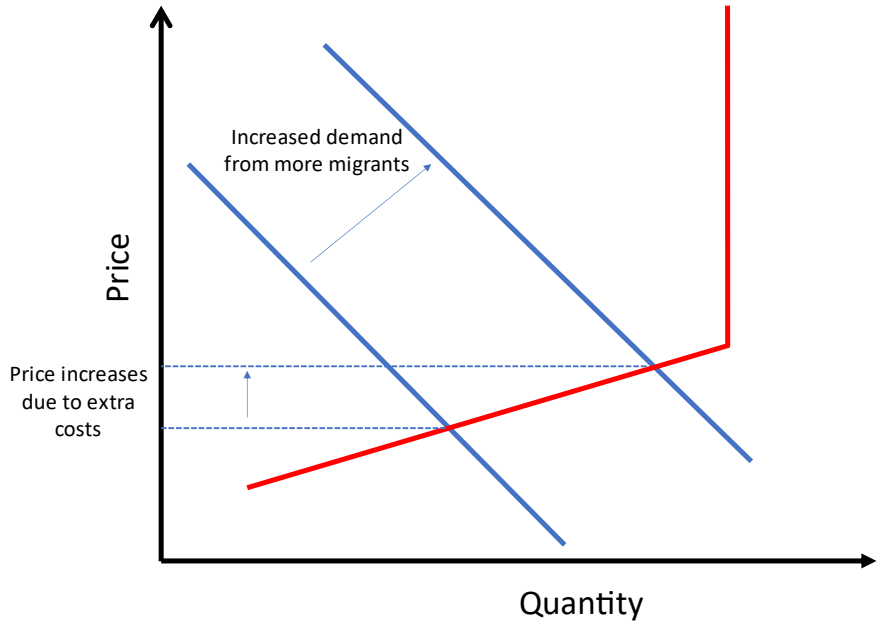
64 Christian Dustmann and Tommaso Frattini use a similar simple but powerful approach to discuss the impacts of migration on an economy (Dustmann and Frattini 2010).

4.3.1 Where supply can be increased (up to a point)

In some situations, there may not be spare capacity available immediately, but it might be possible to increase supply relatively quickly in response to rising demand, again, up to a point. This situation is illustrated in Figure 30. Consider the example of a hydroelectric dam that can run more turbines or run existing turbines for longer hours. Overall demand might also be reduced somewhat by increasing the price of electricity, but at some stage, capacity will be reached.

In the example in Figure 30, the upward sloping portion of the supply curve demonstrates that responding to this increase in demand requires the application of more resources (when the supply curve becomes vertical, resource constraints mean more capacity cannot be provided). This will have an opportunity cost, which will be reflected in the steepness of the slope of the curve. How quickly supply responds to the increases in demand, by in this example, new capacity being acquired, is the key to the effect of the increase in demand on absorptive capacity.[65]

Figure 30 Responding to immigration can be costly in the short term



Source: The authors

4.3.2 Anticipated vs unanticipated increases in demand

The response of suppliers may vary depending on whether increases in net migration are anticipated or not.

Where increases in net migration are expected**,** then suppliers operating in a free market can often increase capacity to match the resulting increases in demand.

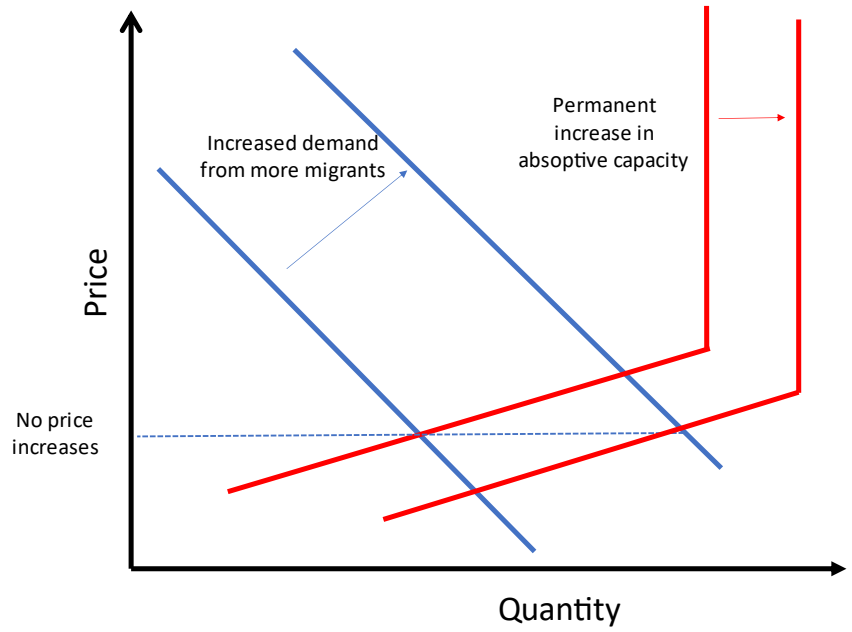
65 In practice, this situation also raises questions about the relative costs and benefits of the new capacity, and who pays for any associated costs.

Outside of a free market, the speed with which organisations and institutions respond will depend on the details of their funding, commissioning and contracting arrangements. As the list in section 4.3.3 below implies, it is possible to design some of these arrangements so that supply increases more in lockstep with demand, but this is not the norm.

What if migrant arrivals exceed expectations? Here, the ability to increase capacity at short notice becomes critical.

This is the example shown in Figure 31. Supply increases to match the increase in demand to the extent that price remains stable. However, it is important to remember that prices are related to costs since it is the opportunity costs of production that sellers are seeking to at least recover. The total amount of resources consumed in providing the new level of goods and services will increase.

Figure 31 Immigrants can be absorbed without prices increasing if supply responds



Source: The authors

4.3.3 Constraints on supply responsiveness

Future absorptive capacity depends on the responsiveness of systems to increases in demand in situations where demand outstrips supply.

Here, the number and composition of and rate of increase in migrant numbers can all have an impact. Large, unexpected, rapid and high-impact migrant inflows all have the potential to cause challenges when system responsiveness is lacking.

The supply response in some markets in Aotearoa, particularly housing, and in public service provision, including health, is demonstrably problematic at the present time. Wider, systemic solutions to these issues are needed.

On housing, these include changes to planning rules and the attitudes of local councils to their role in providing infrastructure, especially how they respond to risk (New Zealand Productivity Commission 2017).

For publicly-funded infrastructure such as health, education and transport, evidence gaps may need to be addressed before determining whether and how responsiveness to migration-induced increases in demand can be improved. In a UK context, Carlos Vargas-Silva, Yvonni Markaki and Madeleine Sumption suggest that questions that need to be answered include:

- The extent to which local government funding formulae reflect the additional costs of public services that result from a larger local population or from migrant-specific factors.
- How funds are distributed across different types of public services at the local level in areas with varying levels and types of migration.
- Whether migration has impacted the quality of public services, for example, through increased waiting times in the National Health Service (Vargas-Silva, Markaki, and Sumption 2016, 29).

To this list, we would add:

- Whether the rate of population increase is such that it might cause issues for public sector responsiveness. For example, in Aotearoa, school funding is based in part on twice-yearly roll checks. Is this frequency sufficient in areas with high immigration?
- Specifically, whether existing funding models are sufficiently responsive to high-impact migrants. As an example, can refugees receive the physical and mental health services they need under health capitation funding models that assume 2-3 GP visits per year (Fry 2022, 86)?
- Whether, outside of funding, there are additional constraints on service responsiveness. In the case of health, there is a worldwide shortage of trained health professionals from which New Zealand is neither immune nor in a position to influence, and increasingly, there are similar issues in education.[66]

We have not considered possible wider reforms to improve the public sector's efficiency and responsiveness, which could also contribute to improved absorptive capacity.[67]

4.3.4 Conceptual challenges

Absorptive capacity is difficult to conceptualise because more migration can, in some contexts at least, lead to a higher capacity to absorb more migrants in the medium to

66 Economic migrants are screened for health conditions as part of the visa application system. There are two parts to this screening: to ensure that potential migrants do not pose a risk to public health through suffering from contagious diseases such as tuberculosis and to ensure that they do not place excessive demands on the health system (Immigration New Zealand 2022f, Section A4.1). The ability to fund likely healthcare costs or gain private health insurance are not taken into account when determining the possible impact on the health system (Immigration New Zealand 2022f, Section A4.10.2).

67 The Productivity Commission has addressed a range of relevant issues in its previous inquiries, including social services (New Zealand Productivity Commission 2015), state sector productivity (New Zealand Productivity Commission 2018) and local government funding and financing (New Zealand Productivity Commission 2019). Its current inquiry into intergenerational disadvantage is also examining alternative funding and governance models that may have more general application to the type of services provided to immigrants. See Fry (2022) for a discussion of innovative social services provision.

longer term. This is especially the case if migration leads to economic growth in per capita terms; if there are economies of scale in the production of goods and services, both private and public; if migrants themselves add to absorptive capacity,[68] or if migrant communities support each other in adjusting to life in Aotearoa.

Absorptive capacity is also not static. Developments in technology, in particular, are increasing the abilities of people to produce valuable products – especially services – in ways that have lower impacts on the rest of the economy. For example, Xero has built a major international company that leverages both local and migrant staff and team members based offshore. The fewer people who need to be physically present to contribute, the lower the impact on absorptive capacity.

At one level, having sufficient absorptive capacity requires balancing supply and demand.[69]

Immigration policy can influence demand at reasonably short notice. The government can alter visa numbers and conditions in response to adverse shocks, like the sudden decline in New Zealand citizens departing for Australia we noted in Section 2.2, or in response to the COVID-19 pandemic.

Increases in absorptive capacity, especially when it involves physical structures like houses, hospitals, schools and other infrastructure, are likely to take significantly longer. Te Waihanga has discussed the challenges of expanding this aspect of absorptive capacity in detail in its work on developing the New Zealand Infrastructure Strategy (Te Waihanga 2021a; 2021b).

Many migrants add to absorptive capacity through their contributions to the labour market. Construction workers help build housing, offices and factories; doctors, nurses, specialists and care workers are an essential component of our health system; and teachers increase the education sector's capacity to teach, to provide just a few examples.

But even here, there can be issues around whether we should be focusing on temporary migrants, who come on their own for a short period, who may have a relatively modest impact on absorptive capacity while they are here, or whether we encourage migrants to come permanently with their immediate – or even extended – families.[70] Some countries like Singapore and the Gulf states rely on guest workers to undertake work for which there are few available locals.[71]

Where the economy is at or beyond capacity limits, as is presently the case in New Zealand, a case can be made for prioritising migrants who have the greatest potential to increase absorptive capacity until capacity has 'caught up'.

68 For example, in the health context, as Christian Dustmann and his colleagues have noted:

> *Migrant workers play an increasingly important role in the healthcare sector. Immigration is often seen as the quickest and cheapest solution to perceived short-term shortages in the availability of medical staff* (Dustmann, Facchini, and Signorotto 2015, 136).

69 It can also be impacted by elements that are derived from the consequences of this demand, such as public opinion and social cohesion.

70 We have argued elsewhere that allowing extended family migration can boost the wellbeing of both migrants and the communities in which they settle (Fry and Wilson 2018, 115).

71 The wellbeing and absorptive capacity tradeoffs that guest workers models can require careful consideration. For example, guest workers may need to travel in and out of the country for work on a daily basis, or be required to stay in intensive, barracks-style accommodation.

That said, there are some irreducible impacts of migrants: they need somewhere to live, will travel from place to place, and they will, especially as they get older, consume health services. All of these can impact absorptive capacity.

4.4 Analysing absorptive capacity

We are not aware of any international studies that have used a national lens to address the issue of absorptive capacity, as we have defined the term.

Much of the discussion around this issue in the European Union has been within the context of refugees and their access to state-funded transfers and public services.

We have found research looking at the impact of immigration from much more detailed perspectives, often focusing on the circumstances of individual countries or areas at a particular point in time.[72] The insights from these studies, rather than the specific results, can be used to build up a picture of the capacity of an economy to admit migrants and treat them as well as locals.

When they arrive in their new host country, migrants consume a wide range of goods and services available in the economy.[73] Many of these goods and services will be provided by markets (food, rented accommodation); some will be publicly provided (roads and public transport, health, education, police); and some will be the result of natural endowments (national parks and other wildernesses, beaches), access to which may be free or subject to a charge (like the Great Walks operated by the Department of Conservation).

We have examined the issue of the goods and services that immigrants consume from two different, overlapping perspectives, both of which provide insights into how absorptive capacity can be conceptualised, measured and, in time, increased.

The first looks at the differences in consumption patterns and behaviour by different types of immigrants. The literature is starting to emphasise that permanent and temporary immigrants are not just the same sort of people staying different lengths of time, but can have material differences in motivations, behaviours and thus impacts on their host (and destination) countries.

Second, we examine absorptive capacity in terms of different parts of the economy, the impacts that immigrants can have on them and how they respond to changes in population, including that induced by immigration.

Where possible, we have tried to differentiate between impacts created by immigrants and those resulting from any increase in population. Once absorptive capacity is very strained, any increase in population strains it further. Linking back to increasing the legitimacy of immigration, we consider it important not to scapegoat immigrants and suggest that they are the cause of any shortfall in absorptive capacity. The inability of many private and public sector bodies to plan for growth from whatever cause (natural increase, internal migration and net migration of both citizens and non-citizens) is the real issue that needs to be addressed.

72 There has, for example, been considerable discussion recently in both the literature, in public discourse and in official circles of the issue of the ability of European Union members to absorb refugees from the Middle East, especially Syria.

73 Some goods and services are not able to be consumed by migrants. There are restrictions on temporary migrants owning residential land in New Zealand (see the Overseas Investment Act) and accessing publicly funded health services (Minister of Health 2011) and their children attending state schools (Ministry of Education 2022).

4.5 Temporary and permanent migrants can have different impacts on absorptive capacity

The nature and extent of demand created by individual migrants differs based on where they move to and their characteristics, circumstances and rights (e.g. are they coming alone or bringing a partner and/or family members, can they work or study?), their motivations for coming and their intended length of stay.

4.5.1 Permanent migrants

The literature suggests that permanent migrants tend to become integrated into the local population and through time, start to behave much like locals, including having similar spending patterns (Frattini 2017). The length of this transition depends on factors such as speed at acquiring language skills, the degree of difference between local and home country cultures and social norms and the educational qualifications of the migrants.[74] The extent to which migrants integrate into the local labour market, which we discuss in Section 4.6.1, is also critical.

On average, migrants who apply for, and ultimately receive, New Zealand residence are likely to have an impact on absorptive capacity that is less than or equal to that of locals. This is because migrants are screened before being granted residence and those with health, character or criminal histories deemed problematic are not eligible. Permanent migrants are also screened based on their age and employability.

As we noted in *Better Lives*:

> *[W]hen immigrants first arrive, they are more likely than the locally born population to rent housing. By the time they have lived in New Zealand for fifteen years, the housing choices of immigrants are similar to those of locally born New Zealanders – that is, their income and family configuration explain their housing decisions better than their migration status.* (Fry and Wilson 2018, 56)

Permanent migrants are also likely to either bring a family with them or form a family here. They are less likely to live in shared or group accommodation, unlike students or working holidaymakers.

Of course, within any spectrum, there will be outliers and individual instances where migrants obtain residence and/or citizenship and have more or less substantial impacts on absorptive capacity. One example would be high net worth migrants who purchase multiple properties and live in them part-time.

4.5.2 Temporary migrants

Temporary migrants include a very diverse range of people, some of whom will be granted permission to stay in New Zealand for up to three years, while others (such as artists, performers and athletes) will be here for a matter of days.

People on ultra-short visas are unlikely to have meaningful impacts on absorptive capacity since the numbers involved are relatively small (although they may have meaningful impacts on other dimensions, especially at the local level).

[74] An important point here is that economic migrants choose to migrate and want to do well in their new home (Chen, Kosec, and Mueller 2016). It should not be surprising that migrants become successful in their new country over time.

As the examples set out below illustrate, other temporary visa recipients span a very wide range of potential impacts on absorptive capacity.

Compared to permanent migrants, temporary migrants often have different motivations:

> *[I]f the cost of life is lower in the origin than in the host country, temporary migrants will likely have lower reservation wages than permanent ones (and than natives), and thus accept lower-paid jobs. Further, temporary migrants are also less likely to make costly investments in host-country specific skills, like for instance, learning the host-country language, which have an economic (higher wages and employment probability) and social (possibilities of networking with natives) payoff in the host country, but whose returns may be considerably lower in the home country.* (Frattini 2017, 104)

Another important difference is the extent to which temporary immigrants are sending remittances home or saving for their eventual return, which may reduce the overall amount and pattern of spending in the host country across all goods and services (Dustmann, Ku, and Surovtseva 2021).

Some temporary immigrants may be more likely to stay in higher-density, lower-cost shared accommodation, both for reasons of affordability and availability and to prioritise using earnings to save or spend on other things.[75]

And finally, across a range of publicly-provided services, temporary migrants may have different consumption patterns. For example:

- Migrants are less likely to consume health services because being in good health is a requirement for entry
- Migrants are less likely to engage with the criminal justice system as character and police checks are required for entry
- Temporary visas may not allow immigrants to be accompanied by dependents who might, for example, otherwise attend school.

4.5.3 Some local case studies

Local research on how different types of migrants settle, especially in the housing and labour markets, is dated, and there is limited information on the goods and services they consume.

Here, we provide examples of specific groups of migrants that illustrate how the elements that matter for absorptive capacity often interact.

Case study 1: RSE visa holders

At one end of the spectrum, people entering Aotearoa under the Recognised Seasonal Employer scheme have relatively small impacts on absorptive capacity, by design.

[75] For example, Frances Collins reports that in Auckland in 2015, working holidaymakers and students lived in larger household units than holders of work visas (F. Collins 2016, 17).

Prior to policy changes introduced in response to COVID-19-related border closures, most RSE workers worked for a single employer and returned home once seasonal operations were complete.[76]

The scheme requires Recognised Seasonal Employers to demonstrate that they have been unable to hire any local workers and provide suitable accommodation and pastoral care for RSE workers. Workers stay in designated on-farm accommodation and generally use shared transport. The rules have been changed in recent years to ensure that RSE workers are not housed in accommodation that could otherwise have been used to house locals. This policy was introduced in response to concerns about the potential for displacement of locals in areas where there were housing shortages. As a result, many local councils are taking a strategic approach to accommodation provision,[77] including ensuring recognised employers are now providing purpose-built shared accommodation facilities for RSE workers or converting under-utilised buildings such as older motel facilities.[78]

Workers undergo health and character screenings prior to arrival and are required to purchase comprehensive health insurance that guarantees to cover the full costs of all medical expenses (Immigration New Zealand 2022f, Section WH 1.25). This, combined with site-specific rules developed by employers and team leaders, reduces the likelihood of workers engaging with the public health or criminal justice systems.[79] There have been rare cases of RSE workers needing assistance with previously unidentified or undiagnosed pre-existing conditions. More commonly, engagement with the health system occurs due to poor nutrition (as workers focus on saving to send funds home), work-related pain (headaches and backaches), or colds and flu.[80]

Under the terms of their visas, RSE workers cannot bring a partner or family members with them.[81] Most RSE workers focus on saving funds to remit home rather than spending much locally. Compared to other temporary migrant categories, the numbers of RSE workers remain relatively modest, further reducing their likely impact on absorptive capacity.[82]

76 Several requirements have been loosened in a bid to address staffing shortages in the horticulture and viticulture sector, particularly in response to COVID-19 border restrictions. These include extensions to the length of visas, and changes making it easier for RSE workers to move to jobs in different locations and work for more than one employer.

77 See for example Hastings District Council (2018).

78 Bostock New Zealand (2019) and Lewis (2017).

79 These include requirements to stay at approved accommodation, keep curfews, avoid drinking alcohol, and limit contact with local Pacific residents and churches (Bedford, Bedford, and Nunns 2020, 50–51).

80 A recent study by Heather Nunns and her colleagues identified poor diets and nutrition for RSE workers driven by a desire to keep food costs as low as possible (Nunns, Bedford, and Bedford 2019, 60–62). As a result, RSE workers are increasingly presenting to GP surgeries with short-term issues such as boils and constipation. The authors also noted ongoing weight gain for returning workers, which they attributed to workers eating to boost their energy levels when tired, and expressed concerns about potential longer-term health risks for returning workers including diabetes and high blood pressure (ibid, 62).

A study by the same authors released the following year found that a third of RSE employers report workers arriving in New Zealand with health issues including dental problems, boils and rashes, and there were also reports of workers getting colds and flu as they adjust to colder temperatures. Reports of serious health issues are rare, probably due to prior screening. The authors also reported workers needing medical help for headaches and backaches caused by the nature of the work they do (Bedford, Bedford, and Nunns 2020, 55–56).

81 INZ Operational Manual (Immigration New Zealand 2022f, section V3.10).

82 The government recently announced that the number of RSE visas would be increased by 1,600 to 16,000 for the 2121/2022 season (Faafoi and O'Connor 2022). This compares to a total of 388,197 residence, study and work visas being on issue in December 2021 (Ministry of Business, Innovation and Employment 2022).

Case study 2: Working holidaymakers

New Zealand's working holiday scheme, much like similar schemes in other countries, is intended to allow young people the opportunity to earn modest amounts to fund travel within the country for a limited period (generally from 12–24 months). The visa should not be used to enable 'career-type' work, and there are limits to the extent to which visa holders can work for single employers.

Inflows under the scheme essentially stopped in March 2020, and discussion in this section relates to the experience before the emergence of the COVID-19 pandemic.[83]

Working holidaymakers often stay in shared 'backpacker' type accommodation as they travel. However, given the sheer volume of working holidaymakers entering New Zealand (at the 2017 peak, more than 70,000 working holiday visa holders were in the country), and the scarcity and rapidly rising cost of accommodation, it would be surprising if some displacement of locals and competition for housing had not occurred, particularly in urban areas.

While we are not aware of any specific research on this point, the relatively low incomes that result from incidental work suggest that working holidaymakers are likely to use transport options with lower impacts on absorptive capacity (public transport, walking, cycling) for affordability reasons.

We are also not aware of any research that identifies the extent to which working holidaymakers use the healthcare system, ACC or other social services, although the methodology employed by Glass et al. (2017) could be used to obtain this information.

Case study 3: Refugee families

Refugee families may have a greater impact on absorptive capacity than other migrant households. As well as needing assistance finding suitable accommodation, transport and employment, they may need to access specialist education, healthcare and social services. Depending on their circumstances, they may have limited financial resources on arrival.

However, as we noted in Section 3.5.1, New Zealand accepts minimal numbers of refugees. Consequently, their overall impact on absorptive capacity is likely to be minor.

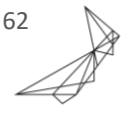
Case study 4: Aged care workers

A high share of aged care workers in Aotearoa are migrants. Across the labour market, about five percent of the New Zealand workforce is on temporary visas, which is very high by OECD standards (Carey 2019). Industry reports indicate that around a quarter of aged care workers in New Zealand are migrants, and around 55 percent of aged care nurses are on temporary visas (RNZ 2021).

Registered aged care nurses have been added to Immigration New Zealand's Long Term Skill Shortage List. Provided they meet work, qualification and other requirements and have a permanent or long-term job offer, they can apply for a Work to Residence visa and then, after 24 months, apply for New Zealand residence (Immigration New Zealand 2022b).

Aged care workers who are not registered nurses face a more precarious future. Due to low pay and lack of formal qualifications, they are unlikely to qualify for permanent residence under the Skilled Migrant Category. The expectation is that after three years, these workers

83 The border was opened to holders of Working Holiday visas on 13 March 2022.



on temporary visas will leave New Zealand for a period before being eligible to reapply. This policy was designed to reinforce the 'temporary' nature of temporary visas (Woodhouse 2017, 8) and leads to a pattern of employers cycling through a pool of replaceable temporary workers. Before this rule was introduced, many aged care workers had been on multiple, sequential temporary visas. Many had built lives in Aotearoa, had children who thought of themselves as New Zealanders, and hoped, given the rule change for their more qualified colleagues, that they might eventually become eligible for residence based on their prior contribution to New Zealand.

These long-term, but still temporary migrants are likely to have a much larger impact on absorptive capacity than short term or less settled temporary migrants.

4.6 Factors influencing absorptive capacity

We now turn to the issue of the impact that immigrants have on various parts of the economy. While the impact of migration on the labour market has been thoroughly examined, both here and overseas, other areas are less well-studied.

4.6.1 Labour market

There is extensive theoretical and empirical literature on how labour markets adjust to migration.[84] The general conclusion of that literature is that immigration has small effects on wages but can either increase or decrease employment, although instances of decreasing employment are less common (Dustmann and Frattini 2010; McLeod and Maré 2013; 2018).

Important determinants of the overall effects include:

- the skills of migrants compared to locals
- the diversity of the economy in terms of sectors and openness to trade
- the rigidity of labour market regulation (Fry and Wilson 2021, 9).

At a high level, the most recent Census data is encouraging. As Table 6 shows, overall, migrants are employed at similar rates to locals in Aotearoa. They are slightly more likely to be employed full-time and correspondingly less likely to be employed part-time. The overall unemployment rate for migrants is lower than for the New Zealand-born population, and migrants and locals are equally likely to be not in the labour force. This last point may be a cause for concern, given migrants are more likely than locals to be of working age.

Table 6 Comparing local and migrant labour market outcomes
2018 Census

	Employed full-time	Employed part-time	Unemployed	Not in the labour force
New Zealand-born	49.5%	15.2%	4.1%	31.1%
Overseas born	51.4%	13.5%	3.6%	31.5%

Source: Stats NZ

84 See Fry and Wilson (2021) for a summary.

Research using data from earlier Censuses suggests the picture may be less rosy when looking over time rather than at a point in time and when the data is broken down, for example, by country of origin, ethnicity and skills.

On average, it takes permanent migrants ten to twenty years to be as successful in the labour market as equivalently qualified New Zealanders (L. Winkelmann and Winkelmann 1998; Poot and Stillman 2016b). And although on average, these earlier studies find that immigrants are more qualified than people born in New Zealand, many need time to overcome language and social barriers, including discrimination and to develop familiarity with local conditions and customs.

The time it takes immigrants to integrate into the labour market depends on where they come from and their skills. A New Zealand study by Steve Stillman and Dave Maré based on data from 1997 through to 2007 found that migrants who have university qualifications and come from source countries like Australia and Britain adjust more quickly. On average, migrants from Asia take longer to adjust, and those from the Pacific Islands never reach parity with New Zealand-born people, possibly because they enter mainly on family reunification grounds and non-skills-based quota schemes (Stillman and Maré 2009).[85]

Ultimately, in terms of absorptive capacity, what matters in the labour market is:

- Are there ready uses for the skills and experience migrants bring?
- Are there barriers to migrants using their skills and experience (e.g. issues with qualification recognition, a lack of suitable vacancies, or racism and xenophobia?)
- Whether migrants substitute for or complement locals. Migrants who substitute for available locals are likely to consume absorptive capacity, while migrants who are complements may add to overall absorptive capacity, particularly if they help fill shortages in key areas such as teaching, healthcare or construction.
- Any longer-term dynamic effects, including whether skilled migrants can transfer their skills to local workers and how quickly.

4.6.2 Housing

Immigrants need somewhere to live, and emigrants vacate their accommodation. The net impact on absorptive capacity will reflect the relative size of the two groups, particularly when immigrants exceed emigrants. Differences in the characteristics and choices of the two groups also matter. For example, home-owning emigrants who plan to return to New Zealand may decide to rent out their property, choose to leave it uninhabited, or sell it, and each of these decisions will have different impacts.

Kel Sanderson and his colleagues conducted the most recent New Zealand study of differences in housing demand between migrants and locals using data from the 2001 and 2006 Censuses (Sanderson et al. 2007). The authors reported that 109,000 new households were created in New Zealand between 2001 and 2006. Of these, 42,000 were migrant couples, 21,000 were mixed New Zealand-born/migrant couples, 36,000 were New Zealand-born couples, and 3,500 were single migrants. Over the same period, the number of New Zealand-born single households decreased by 40,000, most likely due to net emigration.

[85] Given the extent of flows since this time and changes in the composition of flows, an update of this study would be very welcome.

Sanderson et al. concluded that migrant characteristics (income, family configuration) explain differences better than migration status. Again, given the time that has elapsed since this study, it would need to be updated using the most recent Census data to effectively guide decisions based on absorptive capacity. That said, the much higher net population increase between 2013 and 2018 compared to the period between 2001 and 2006 suggests a significant jump in pressure on absorptive capacity could have occurred.

4.6.3 Transport

Research on migrants and transport use is limited, and the conclusions reached are specific to the people, time, and locations concerned.

Flavia Tsang and Charlene Rhor studied the impact of migrants on the use of transport networks in the United Kingdom (Tsang and Rohr 2011). They concluded that migrants were generally concentrated in urban areas where public transport is better provided and tended to use private vehicles less than locals. The authors also found differences in travel patterns between migrants and locals decrease over time.

Similarly, a small-scale German study by Janina Welsch, Kerstin Conrad and Dirk Wittowsky concluded that migrants were more likely to use readily-available public transport because they both had more limited access to cars and bicycles and were less likely than locals to know how to drive or ride a bike (Welsch, Conrad, and Wittowsky 2018).

While the conclusions of these studies may not be generalisable to a New Zealand context, it is certainly true in New Zealand that migrants are concentrated in urban centres. Indeed, the 2018 Census shows that over 75 percent of all overseas-born people lived in one of the main population centres, with just over one-half living in Auckland.

Table 7 Most migrants in New Zealand live in big cities

2018 Census usually resident population

Centre	Population	New Zealand born	Overseas born	Percentage of population born overseas	Percentage of total overseas-born people
New Zealand	4,699,755	3,370,122	1,271,775	27	100
Auckland	1,571,718	904,905	644,337	41	50.66
Greater Wellington	407,808	286,080	117,402	29	9.23
Christchurch	369,006	266,397	98,880	27	7.77
Hamilton	160,911	115,764	43,254	27	3.40
Tauranga	136,713	105,483	29,622	22	2.33
Dunedin	126,255	99,924	24,909	20	1.96
Palmerston North	84,639	66,519	17,112	20	1.35
Queenstown-Lakes	39,153	22,737	15,621	40	1.23
Rest of New Zealand	1,803,516	1,502,274	280,638	16	22.07

Source: Stats NZ

To build a robust picture of the extent to which migrant transport use impacts absorptive capacity, specific New Zealand research will be needed.

4.6.4 Social services

A small number of studies have examined the extent to which migrants use social services.

Heather Rolfe and her colleagues studied the impact on the UK of the accession of Bulgaria and Romania to the EU (Rolfe et al. 2013). They looked at evidence of the previous accessions of eight countries (the 'EU8') in 2004 for clues on what might happen.[86] The authors found that many services were not prepared for the scale of migration following these countries joining the EU and were thus not well prepared to cope with the increase in demand. Immigrants from the EU8 settled in a wide area of the UK, meaning that the impacts of their arrival were equally widespread, and several locations where they moved to had not had previous experience of providing the services migrants might need.

Carlos Vargas-Silva and his colleagues' analysis of the impacts of international migration on poverty in the UK noted that how social services are funded can have a marked impact on how migrants affected local services:

> *Many public services in the UK are delivered at the local level and the funding available for them has traditionally depended on factors such as population density, population growth and other adjustments that draw on available statistics. Data limitations and difficulties in measuring small, local-area populations in between Censuses, however, may decrease councils' ability to respond swiftly and efficiently to sudden shifts or increases in demand for certain services.* (Vargas-Silva, Markaki, and Sumption 2016, 18)

This is relevant to New Zealand, where population-based funding is used in the health and education sectors.

In New Zealand, a study by Hayden Glass and others used the Stats NZ IDI to examine the social services used by a cohort of just over 264,000 migrants (including visitors) who obtained a visa in the year from 1 April 2002 and who spent time in New Zealand over the next decade (Glass et al. 2017). Table 8 below summarises the expenditures identified for the cohort over this period.

The authors also reported that the cohort paid a total tax of approximately $6,602.1 million, more than double the expenditures incurred (Glass et al. 2017, 64). Although not reported in the study, to the extent that this tax revenue was used to supply these services or payments, it would impact absorptive capacity.[87]

While not allowing for comparisons between different types of taxpayers (e.g. short-term and permanent migrants, migrants and locals) it does demonstrate what data analysis techniques are available to the government to use in deciding issues surrounding the development of policy on absorptive capacity.

86 The EU8 countries were Poland, Lithuania, Latvia, Slovenia, Slovakia, Czech Republic, Estonia and Hungary.

87 This level of granularity – who pays taxes – is not part of the usual ministerial decision-making on expenditure, outside a few specific cases of hypothecated taxes and levies that fund certain programmes. While migrants paying taxes in excess of expenditure, they receive will affect the amount of revenue available to finance other activities, we do not consider that at present it could be said that this surplus is used in any deliberate way to fund expenditure that might increase absorptive capacity. But this could become part of the policy development process around the development of a GPS on immigration. We return to this issue in Section 5.3.1.

Table 8 Expenditures on migrants

264,204 migrants granted visas between 1 April 2002 and 31 March 2003

Type of expenditure	Approximate cost for cohort ($ million)
Welfare Benefits - Unemployment - Domestic Purpose - Invalid's - Sickness	$783.8 m
Other transfers - ACC - Superannuation - Paid parental leave - Student allowance	$443 m
Health costs - Inpatient - GP capitation rates - Laboratory tests - Pharmaceuticals	$804.3 m
Education costs - Secondary school government funding - Tertiary providers government funding - Industry training - Student loan write offs	$1094.2 m
Corrections costs	$72.6 m[88]

Source: Glass et al. (2017, Figure 32, 64)

The authors segmented migrants into groups based on 'value' rather than by visa category and did not compare expenditures with those of locals.

4.6.5 Environmental context

Conceptually, any increase in population, whether it is a result of natural increase or net migration, will impact the environment: people just have environmental footprints. However, we are not aware of any research that would enable us to determine whether migrants and locals in Aotearoa have the **same** footprint or what those respective footprints might be, individually or collectively. That said, it is clear that the total demand for environmental services will to a significant extent rise with the total number of people, and that many environmental assets are non-reproducible: New Zealand can, at least in theory, build more waste management capacity, but it cannot create another Aoraki Mt Cook or Abel Tasman National Park, or double its biodiversity.

88 Just under one percent of the cohort (around 2,500 migrants) incurred corrections expenditures. The most common sentence types were prison, followed by community work.

Carmel Price and Ben Feldmeyer have noted, within the context of the United States, that:

> *There is no shortage of claims in public discourse, popular press, and political arenas suggesting that immigration may contribute to environmental harm (and other social problems) by placing increased pressure on local ecosystems and straining the environmental carrying capacity of local communities.* (Price and Feldmeyer 2012, 121)

Price and Feldmeyer studied the impact of migration on air quality. They found that areas with high levels of migration do not tend to have high levels of air pollution. They concluded that:

> *[I]t is not altogether surprising that population growth from immigration appears to be less taxing on the environment than domestic migration and natural population growth, perhaps due to differences in lifestyles of the foreign- and U.S.-born.* (ibid. 136)

Since environmental impacts are likely to depend on migrant numbers, characteristics, behaviour and the contexts they enter, it does not seem prudent to speculate based on results from elsewhere. This is another area where more New Zealand research is required.

4.6.6 Public attitudes

Constraints on physical absorptive capacity, environmental challenges and supply responsiveness can all impact on public attitudes towards migration and potentially can contribute to a backlash against migrants. Consider the following recent examples from New Zealand media, which demonstrate:

- Concerns about migrants driving up house prices, particularly in popular school zones (Hutchison 2012; A. Gibson 2015; RNZ 2018)
- Concerns about migrants crowding out young New Zealanders from jobs (McClure 2010; S. Collins 2016)
- Concerns about migrant customers, ironically in conjunction with a shortage of migrant healthcare providers, leading to unmanageable demand for health services (Gooch 2021)
- Concerns about overcrowding on popular tourist sites (Carville 2017).

It is clear from reading these examples that in many cases concerns related to absorptive capacity interact with both overt and covert racism and xenophobia. This is one of the reasons that we consider that increasing the legitimacy of migration policy should be a priority. While social attitudes may be hard to shift, we see a clear role for the government in confronting myths about migration being damaging where research shows that is not generally the case and educating people on actual impacts.

It is also important to recognise that while some concerns are based on erroneous perceptions, others derive from diverse, deeply held, and sometimes conflicting preferences based on objective facts about the effects of population increase. Looking throughout our history, we can see tangata whenua wanting tino rangatiratanga and autonomy; later settlers preferring low population density; and people having a desire to preserve what is unique about Aotearoa and avoid homogenisation (everywhere being a ‘mini America’); or looking to extend multiculturalism and diversity.

4.7 Could the Reserve Bank's 'output gap' measure absorptive capacity?

The Reserve Bank's 'output gap', which measures the difference between actual output and what the economy could produce without increasing inflation, has some features in common with absorptive capacity. Appendix D provides some detailed background on the output gap and its construction.

As discussed below, this measure might provide a helpful sense check on measures of absorptive capacity. However, because the output gap has been designed as a specific input into monetary policy, it would be a relatively blunt instrument.

4.7.1 Are absorptive capacity and the output gap related?

The output gap has similarities to the concept of absorptive capacity in that both are directed at judging whether the economy has spare capacity.

In the case of migration, absorptive capacity, as we have defined it, is the ability of the economy to adjust to additional migrants without reducing the wellbeing of the current population or requiring migrants' wellbeing to be below that of locals.

The output gap is different in that it is a measure of the difference between an observed statistic (actual output, measured by GDP) and a hypothetical level of output that could be achieved if certain conditions exist. As Frederic Mishkin, a Governor of the US Federal Reserve System put it:

> *The Federal Reserve operates under a dual mandate to achieve both price stability and maximum sustainable employment. In that context, it is natural to think of potential output as the level of output that is consistent with the maximum sustainable level of employment: That is, it is the level of output at which demand and supply in the aggregate economy are balanced so that, all else being equal, inflation tends to gravitate to its long-run expected value.* (Mishkin 2007)

At any point in time, it is likely that absorptive capacity and the output gap should be highly correlated.

4.7.2 Using the output gap as a proxy

The output gap might be a convenient proxy for absorptive capacity that is sufficiently robust to be used as a tool for setting migration levels, but there are some important caveats.

While there may well be a conceptual and statistical relationship between the output gap and our definition of absorptive capacity, the monetary and immigration policy responses may be quite different.

There are two concerns we have.

Migrants self-select to come to Aotearoa

The first is that net immigration is not a random variable. Rather, it is the result of decisions made by immigrants and their employers, which are influenced, at least in part, by the conditions of the labour market (see Appendix D).

As we noted above, the economics literature posits that the decision to immigrate is based, on the assessment potential migrants make of their prospects in their new host country:

> *While there are many push and pull factors affecting the migration decisions of individuals, the difference in the standard of living between two locations is a major macro-level determinant of net migration, particularly when migration flows are not restricted.* (Poot 2010, 326)

Economic conditions in New Zealand will influence not only decisions by non-citizens to come to New Zealand but also whether they remain.[89] Similarly, employers will decide to employ a migrant, as opposed to a local, based in part on economic conditions in Aotearoa.

Even after they have made an in-principle decision to either move to New Zealand or hire a migrant, the state of the economy, especially the state of the labour market, is often an important consideration for whether a visa will be issued. It may also influence policy decisions around capped visas. For example:

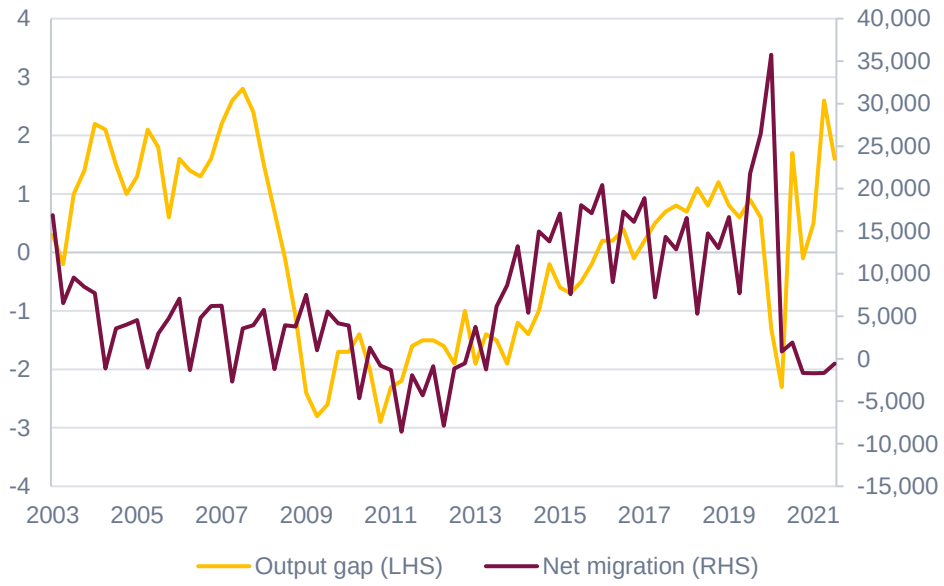
- Eligibility for entry under the temporary Essential Skills visa in New Zealand is, at least in part, conditional on there being labour market shortages at the local level, suggesting that in times of low unemployment, more visas will be granted, possibly with a lag (Immigration New Zealand 2022f, Section WK3.10).
- When assessing eligibility for Skilled Migrant Category residence visas, additional points are awarded for having a job offer (or being employed if they are already in New Zealand), which again should be at least correlated with labour market conditions (ibid. Section SM 6.5).
- Our previous work for the Productivity Commission on the RSE scheme has shown that it has grown due to ongoing shortages in the supply of locals prepared to pick and prune fruit (Fry and Wilson 2021).

We can see the effect that we are discussing in a plot of the recent level of permanent and long-term migration compared to the Bank's estimate of the output gap.

89 They will also be a factor in whether New Zealand citizens stay, leave or return, which also impact absorptive capacity. Jaques Poot has undertaken a number of studies, either alone of with colleagues, which show how relative economic conditions between Australia and New Zealand are a major determinant of net migration of New Zealand citizens. See Brosnan and Poot (1987), Gorbey, James, and Poot (1999) and Poot (2010).

Figure 32 The relationship between net migration and the output gap

Net permanent and long-term migration, November 2021 Monetary Policy Statement output gap



Source: Stats NZ and Reserve Bank of New Zealand

Different policy responses

Our second concern is that, while the output gap might be a statistically valid proxy for absorptive capacity, there are, we believe, real risks in attempting to use it as an input into immigration policy.

This is because of how the Reserve Bank uses the output gap in formulating monetary policy. The Bank's Monetary Policy Committee considers the output gap, along with other data, as an indicator of the relative strength of aggregate supply and demand (Reserve Bank of New Zealand 2019, 49):

> *A careful assessment of the output gap is crucial for the Reserve Bank's monetary policy framework. When the output gap is positive, or equivalently, the economy is operating above potential, inflation will rise. The output gap is also important for the Reserve Bank's new objective of supporting maximum sustainable employment. For instance, a negative output gap may imply that the use of resources, including labour, is below its maximum sustainable level*. (Jacob and Robinson 2019, 3, internal citations omitted)

This means that the Bank will see a change in the output gap as a signal that monetary conditions might need to be adjusted.

If, at the same time, immigration officials decided that immigration should also be changed due to a change in the output gap, the risk is that there could be a 'double correction' of policy.

For example, say the output gap increased, meaning that the available spare capacity in the economy had reduced. The Bank might raise interest rates, and immigration officials might reduce migration. However, reducing immigration would further expand the output gap via

the effect of migration numbers on how the output gap is calculated, albeit potentially with a lag.[90]

Referring back to Figure 32, if immigration officials were using the output gap as a guide for setting immigration policy, they would have progressively been restricting immigration over the period from 2009 to 2019 and while the counterfactual is difficult to predict, this may have in turn caused an accelerated tightening of the output gap and thus monetary policy.

4.7.3 Our view

The Bank's output gap provides some information about the state of the economy, which could inform immigration policy. But in our view, bespoke measures that focus on the key drivers of absorptive capacity, including infrastructure and the health and education systems, will be required to provide input into detailed immigration policies, such as the number of various classes of visa to be issued each year.

4.8 Conclusions and recommendations

Bearing absorptive capacity in mind when setting immigration policy would be a clear advance over the current approach.

Allowing more immigrants to arrive than can be settled well without impacting on the wellbeing of the local community is likely to reduce public acceptance of immigration. It will undermine any claims that a well-managed migration system produces net benefits.

We recommend that a working definition of "absorptive capacity" be:

That the rate of increase in New Zealand's population due to net migration should be such that, on average, over the short to medium term, the associated wellbeing of New Zealand residents is maintained or improved, and new immigrants can be treated as well as residents, across the relevant dimensions of wellbeing.

We have suggested in Section 3.8 that the government commission a coordinated research programme to develop an understanding of the likely level of sustainable immigration to New Zealand.

In relation to absorptive capacity, we consider that the main priority will be to monitor the impacts of the level, composition and rate of change of net migration against a few key measures. Currently, the data we have on housing, health, education and transport appear to indicate that capacity is coming under pressure, but these priority areas may change over time as governments build both capacity and responsiveness to population increase.

90 Monetary policy also operates with a lag (Reserve Bank of New Zealand 2019, 6). While it is possible that the lagged effect of monetary policy and a 'tightening' of immigration settings might impact on the economy together sometime after policies change, some lags are inevitable with whatever measures are used to determine absorptive capacity.

5 The GPS and consultation

In its Interim report, the Productivity Commission said that the immigration system needs a mechanism to:

- allow the public to engage over policy goals and priorities
- set clear objectives for the system as a whole, including its fit within the education and training system and the government's wider economic strategy, against which decisions and trade-offs can be made
- enable businesses and communities to invest and plan for the future and
- provide a platform for monitoring and accountability (New Zealand Productivity Commission 2021a, 42).

To achieve these objectives, the Commission has recommended that:

> *Recommendation 2*
>
> *The Immigration Act should be amended to require the Minister to regularly develop and publish an immigration Government Policy Statement (GPS). These amendments should specify that a GPS must include:*
>
> - *short-term and long-term objectives, and relative priorities;*
> - *performance measures or indicators;*
> - *how it recognises the Treaty of Waitangi interest in immigration;*
> - *a description of how the demand for temporary and residence visas will be managed over the period of the GPS; and*
> - *specification of planning ranges for new residents over the period covered by the GPS, and a description of how the planning range will affect other government policy objectives.* (ibid.43)

In this section, we provide advice on how this recommendation might be given effect.

5.1 What type of GPS?

The Productivity Commission has modelled this approach on the GPS system contained in the Land Transport Management Act 2003.

We reviewed this and other examples of policy statements within the New Zealand public management system to determine if there was a more suitable model for an immigration GPS. Details are set out in Appendix A.

While the statements vary in terms of the statutory guidance given to Ministers regarding process and content, what they have in common is that they require the government issuing the statement to clearly state what is it planning to do.

As we explain in the Appendix, there are important public sector management differences between the various types of statements, depending on the degree of independence between Ministers and the agency undertaking the activity in question. In general, Ministers do not issue a GPS in areas where they or their delegates in the Public Service (e.g. officials in government departments) are the decision-makers. The GPS mechanism is

primarily used to require a Crown entity or local authority with independent decision-making powers to either implement or have regard to policies decisions and priorities established by Cabinet.

A notable exception is the fiscal responsibility and wellbeing provisions of Part 2 of the Public Finance Act (PFA), which requires the Minister of Finance, on behalf of the Cabinet, to issue detailed statements, in the form of the annual Budget Policy Statement and the Fiscal Strategy Report, of Ministers' priorities, intentions and expected results. We consider that this approach provides a model that can be readily adapted to immigration policy.

5.2 The fiscal responsibility and wellbeing framework

The key element of Part 2 of the Public Finance Act is that while mandating a robust accountability and reporting regime, the central policy objective – the target level of government debt – is left to the government of the day to decide.

The Act's provisions are centred around the concept of a "prudent level of total debt", which is itself nested within a set of principles of responsible fiscal management prescribed in Section 26G of the Act.

As set out in Section B.1 on page 127, governments have come to very different views about the levels of debt that are considered prudent in different circumstances.

Other reasons why we think the PFA is a suitable model include:

- The Fiscal Strategy Report is a statement of policies that the government itself and its departments of state are committing to implement.
- The system has proved to be robust across a range of governments with different priorities and policies.
- Conceptually, the links between economic and fiscal policy and desired economic and social outcomes are not well understood in the economic literature. The PFA, therefore, includes a range of reporting and analytical approaches that, while being flexible, support accountability.[91]
- Robust reporting and accountability systems are embedded in the whole fabric of Part 2 of the PFA.

We suggest a similar approach would be beneficial when developing a GPS for immigration.

5.3 An immigration equivalent of responsible fiscal management

We propose that the Immigration Act be amended by inserting a set of accountability and reporting measures that mirror the responsible fiscal management approach set out in the Public Finance Act.

Given the more limited number of immigration policy levers available to the government, we do not consider it necessary to develop the equivalent to a set of principles of responsible fiscal management.

91 For example, Part 2 of the Public Finance Act mandates the publication of reports on fiscal strategy, government investment, wellbeing, the long-term fiscal position as well as a regular series of economic and fiscal updates. Together, these publications require comprehensive analysis across a wide range of domains of wellbeing.

5.3.1 Core principles

At its core, we would recommend that the government of the day be required to set out and explain its view of what constitutes a prudent long-term level of net migration, the conditions under which net migration might be permitted to deviate from that level; and how the government might respond to unanticipated peaks or troughs in net migration.[92]

Reporting requirements could be used to require the government to formulate and report performance against what it considers appropriate measures of success.

We recommend that the government should be required to:

- state its long-term objectives for immigration policy
- describe how those objectives relate to other government policies, including how they are intended to impact each other. Specific policy areas that must be included are:
  - employment
  - infrastructure
  - housing
  - urban development
  - health
  - education and vocational training
  - environmental management and conservation
- state the period to which those objectives relate
- explain how those objectives accord with the level of immigration being prudent
- indicate explicitly, by the use of ranges, ratios, or other means, the number of migrants expected to arrive and depart from New Zealand over the short term (say three years)
- state the broad strategic priorities by which the government will be guided in making short-term decisions regarding migration, including:
  - the overarching policy goals that will guide the government's decisions
  - the wellbeing objectives that will guide the government's decisions
  - the policy areas that the government will focus on in that year
- describe in detail how that planned level of immigration will contribute to the wellbeing of both migrants and locals.

We recommend that the government should be required to report regularly on the range of quantitative measures outlined in Appendix C.[93]

92 As noted earlier in Section 2.2, recent peaks have occurred as a result of unanticipated reductions in emigration. The most recent experience of troughs that were not foreseen followed the reduction in immigration associated with the Global Financial Crisis.

93 Consistent with the Public Finance Act, this reporting should be the responsibility of officials using their best professional judgement: see Sections 26N(2)(b), 26NA(4), 26NB(4) and 26W(3) of the PFA.

5.4 Examples of a statement

Any GPS could be developed and presented in one of three ways. A top-down approach would concentrate on deciding overall objectives for the entire immigration system. For example, it might start with a discussion of the current level of absorptive capacity and discuss the government's view on a desirable rate of increase in population at the national level. A bottom-up approach would focus on determining objectives for individual sub-parts of the overall programme. An alternative approach would be to base policy on the domains of wellbeing that we developed in Fry and Wilson (2018).

The government of the day will make the final decision on which approach to take. To aid that decision, we have set out in Appendix E how to apply these different methods in practice. In each case, we have used the template we presented in Section 5.3.

5.5 Possible development process

We have analysed several existing approaches to how policy statements are issued to determine how an immigration GPS should be formulated.

Any development process should support the underlying purposes of having a GPS, which we see as increasing legitimacy through improving clarity, building transparency, providing opportunities for engagement, promoting accountability and ensuring programme effectiveness.

Ultimately, however, policy is the preserve of the government of the day, and the government needs to be able to govern. Any process should allow decisions to be made while at the same time allowing Parliament and the public to hold the government to account for its actions.

Phases of development

There are a number of phases that will be involved in the development of a GPS. These include:

- analysis of relevant literature, data and evidence, including an assessment of outcomes under the previous edition of the statement
- formulation of high-level objectives
- formulation of detailed policies
- drafting of the statement.

Each one of these stages can be undertaken in a variety of ways.

Table 9 discusses the main variants.[94] Some of these options can be combined rather than being alternatives.

94 Release of material produced in all of these variants would be subject to the Official Information Act (OIA) and the government's policy on proactive release.

Table 9 Options for developing the GPS

Approach	Description	Examples
Officials and Ministers working in private.	Officials undertake all the work on the GPS and then decisions are taken by Ministers in private. The final operative GPS is released once agreed.	The Budget Policy Statement and the Fiscal Strategy Report.[95]
Engaging external experts to assist private deliberations.	Officials engage experts to undertake specialist analysis, which is an input into the development of the GPS.	The cost-benefit analysis of the proposed National Policy Statement on Urban Development (NPS-UD) 2020 (PwC 2020).
Establishing an external panel to provide recommendations.	A panel of experts is established with terms of reference to develop a GPS and make recommendations accordingly. Officials support the panel. Ministers make final decisions based on advice from officials.	Ministerial Inquiry into the use and allocation of migrant labour in the seafood sector. Boards of inquiry under the Resource Management Act formed to develop national policy statements.
Formally delegating development to an independent body.	An independent body undertakes the analysis and develops the statement, possibly with arms-length input from Ministers.	The Infrastructure Strategy developed by Te Waihanga.[96]

Source: The authors

All of these variants can be combined with different types of engagement and consultation, which can have a range of purposes, including:

- seeking information that is not readily available to policymakers by way of requesting submissions and information
- sharing facts and other information that is only normally known to policymakers
- distilling the views of different stakeholders obtained through submissions and engagement
- providing transparent policy development by requiring policymakers to make their work public before final decisions are made and
- encouraging debate and discussion based on agreed facts or proposals.

The degree of engagement and consultation can also vary. Table 10 includes some examples of current practice.

95 The Fiscal Strategy Report is released with the Budget (usually delivered In May) and its development is informed by the feedback received on the Budget Policy Statement (BPS) that is traditionally released with the Half Year Economic and Fiscal Update in the preceding November. The BPS is referred to the Finance and Expenditure Committee of Parliament, which calls for submissions, holds hearings and reports to the House, which then debates the report.

96 The final content of the strategy is prepared by Te Waihanga, after considering feedback from the Minister. Once the Commission finalises the strategy, it must be tabled in Parliament and a government response prepared within six months.

Table 10 Different types of engagement

Approach	Description	Examples
Informal	Engagement is undertaken informally by policymakers as they deem necessary.	The current system of Immigration Instructions.
Ex-post	Final results of policy development are made public and are subject to review and analysis.	The Budget Policy Statement is referred to the Finance and Expenditure Committee of Parliament, which conducts hearings, and reports to the House of Representatives, which debates the Report.
Seeking submissions	Policymakers seek submissions from stakeholders prior to undertaking analysis.	The Productivity Commission usually seeks submissions at multiple points during its inquiries, including on issues papers, published research and draft reports. The Ministry for the Environment is currently consulting on proposed changes to the National Environmental Standard for Sources of Human Drinking Water (Ministry for the Environment 2022).
Consultation documents	Policymakers release a discussion document outlining their views and proposals and seek comment.	Consultation document on the proposed Infrastructure Strategy (Te Waihanga 2021b).
Draft statement	Policymakers release a draft statement and seek submissions from stakeholders before making final decisions.	Draft Government Policy Statement on Land Transport (Ministry of Transport 2021).

Source: The authors.

In our view, the principles of consultation set out in Section 82 of the Local Government Act should apply.

Table 11 Principles of consultation

Principle	Description
Access	People with an interest in a decision or matter or who will be affected by it should be given reasonable access to relevant information in a manner and format appropriate to those persons' preferences and needs.
Encouragement	Affected and interested persons should be encouraged to make their views known.
Clarity of purpose	The authority should make clear the purpose of the consultation and the nature of any subsequent decisions.
Opportunity	Affected and interested persons should be given the opportunity to present their views in a manner and format appropriate to those persons' preferences and needs.
Open-mindedness	The authority should receive submissions with an open mind and give them due consideration.
Reporting	The authority should provide submitters with access to a clear record of any decision made, together with access to any material used by the authority to make that decision.

Source: Local Government Act

We also consider there would be merit in adopting the proposal in the Pae Ora (Healthy Futures) Bill, currently before Parliament, regarding consultation with specialist bodies in preparing the GPS. In that Bill, the Minister must consult with Health New Zealand and the Māori Health Authority and consider their views before finalising the health GPS. We would suggest that the Minister for Immigration be required to consult with the Productivity Commission and Te Waihanga when developing an immigration GPS.

5.6 Role of engagement and consultation

To date, New Zealand's immigration policy has been set by Ministers with no requirement for formal consultation.[97] Should a GPS be introduced, more explicit consultation will be needed.

5.6.1 With iwi, hapū and Māori

Legal advice to the Productivity Commission says:

> *In our view there is a strong Treaty-based interest in immigration given Te Tiriti was intended to protect Māori interests (including rangatiratanga) in the face of rapidly increasing immigration and settlement of Aotearoa.*(Whāia Legal 2021)

The Commission's interim report includes the following finding:

> *The preamble of the Treaty of Waitangi, and the duty of active protection, demonstrate that there is a Treaty interest in immigration policy, which should be*

97 It is not unusual for sovereign powers to claim total control over both policy and practice when it comes to decision-making on immigration.

> *reflected in policy and institutions*. (New Zealand Productivity Commission 2021a, 45).[98]

After noting that there is a range of ways in which the Treaty interest could be acknowledged, the Commission has sought feedback on how the Treaty interest could best be reflected in new institutions and policies.

Traditionally, the Crown has regarded immigration as being exclusively within the domain of its sovereign powers, which the Crown has argued were ceded by Māori under Article 1 of the English version of the Treaty.[99] Under this argument, the Crown is acting in accordance with the Treaty in not engaging with Māori on immigration policy. This approach was exemplified in a major policy document issued in 1987. The then Minister for Immigration said:

> *Decisions about who shall be permitted to be in New Zealand, other than New Zealand citizens who are entitled as of right to be in New Zealand are for the New Zealand Government alone to make and are the prerogative of the executive.* (Burke 1986, 10–11)

An alternative view, which we support, is that protecting Māori from mass migration was a central part of the agreement forged at Waitangi in 1840. As Khylee Quince has commented:

> *Immigration was at the heart of the bargain struck in te Tiriti – made in the context of a rapidly changing landscape, where Pākehā were seeking new opportunities in the fledgling settlement.* (Quince 2021)

For this reason, we view Te Tiriti o Waitangi, especially the Preamble, as the first written immigration policy in Aotearoa (Fry and Wilson 2018). While more migration from England and Australia was to happen, the Crown promised Māori would not be overwhelmed by migrants and would continue to be able to live their lives as they wished on their lands. The Crown would have the power to control the behaviour of migrants. (Waitangi Tribunal 2002, 526). As Kirsty Gover and Natalie Baird note:

> *The central goal of the Treaty's authors, if one can be distilled from complex histories, was to permit a settler culture to exist alongside Māori and to establish British sovereignty over New Zealand by providing guarantees that Māori would not be overrun and would continue to exercise authority over their own affairs.* (Gover and Baird 2002, 42)

Our review of the admittedly minimal literature on immigration and te Tiriti/the Treaty supports the view that the Crown has an obligation under te Tiriti o Waitangi to share decision-making powers with Māori on immigration policy and practice. This is certainly the view of a number of Māori commentators.[100]

98 Two "official" versions of the treaty are set out in Schedule 1 of the Treaty of Waitangi Act 1975: one in te reo Māori and one in English. As is now well understood, the two texts are not literal translations of each other (Ross 1972). In this report, we will refer to the text in te reo Māori as "Te Tiriti" and the English version as 'the Treaty'.

99 This was the approach taken in 2005 by Nicola White, in a report to the Department of Labour (White 2005). Since then, successive governments have increased the level of engagement with Māori across a wide range of areas of public policy. In 2019, for example, the Cabinet issued extensive guidance to policymakers on how to think about te Tiriti/the Treaty in policy development and implementation (Cabinet Office 2019).

100 See Walker (1993), Kukutai and Rata (2017), Quince (2021) and Rata (2021).

Regardless of the precise legal and constitutional position, we see engagement with Māori on immigration as justified on wellbeing grounds. As Dani Rodrik has commented:

> *A clearly delineated system of property rights, a regulatory apparatus curbing the worst forms of fraud, anti-competitive behavior, and moral hazard, a moderately cohesive society exhibiting trust and social cooperation, social and political institutions that mitigate risk and manage social conflicts, the rule of law and clean government--these are social arrangements that economists usually take for granted, but which are conspicuous by their absence in poor countries.* (Rodrik 2000, 2)

On the Crown's side, the Treaty relationship has been characterised by a failure to act in good faith, repeated breaches of foundational promises, and abuse, which has damaged the relationship with its Treaty partner. A key starting point in rebuilding this relationship is the Crown accepting and acknowledging past wrongs, providing appropriate redress and credibly committing to doing better in the future.

Rebuilding the relationship between the Treaty partners in relation to immigration is likely to take time. The process should be appropriately resourced, respect tikanga (protocol), and be seen to be tika (right and just).

Any change away from the presumption that the Crown has unrestricted sovereign power over the border to an approach where immigration policy also recognises te tino rangatiratanga that iwi retained will be significant.

We suggest that the Crown will need to seek a deep and genuine understanding of the views of its Treaty partner to rebuild a stronger relationship. The following open questions could form the basis of dialogue:

- What did the Crown promise Māori in Te Tiriti o Waitangi regarding immigration?
- What would a modern immigration system compliant with Te Tiriti o Waitangi look like?
- What level of immigration might there be under a Tiriti-based migration policy?
- Which immigrants should we welcome to Aotearoa?

How this discussion proceeds – be it via hearings of the Waitangi Tribunal[101], hui or some other form of conversation between the Treaty partners – is for iwi, hapū and Māori to decide.

A way forward

One important question will be whether the government should proceed to state its current policy on immigration in advance of engaging with iwi, hapū and Māori. That is, should the GPS approach proceed now, before any partnership approach has been agreed?

Having a clear articulation of what the government is seeking to achieve through its immigration policies and programmes might form a useful basis for discussion with iwi, hapū and Māori and avoid having to proceed from an imagined blank slate. But care will be needed to ensure that this is not presented as a 'take it or leave it' basis.

101 We are aware of at least one Waitangi Tribunal claim relating to immigration policy: that of late Reverend Eru Potaka-Dewes for the Auckland District Māori Council (Wai 223), submitted in 1991. Two research reports were commissioned by the Tribunal in relation to this claim (Stevenson 1992; Bennion and Boyd 1994), but no further action has been taken on it.

Te Tiriti o Waitangi is an agreement between the Crown and hapū Māori, not with some single body that represented all Māori, since no such thing existed in 1840.[102] The guarantee of tino rangatiratanga relates to iwi and hapū. The Crown's recent attempt to engage substantively with Māori on immigration did not progress because the Minister of Immigration's expectation that Māori would present a united view on the issue were not fulfilled.[103]

Māori are tangata whenua, not just another stakeholder group whose views should be considered. Failure to recognise this would make engagement counterproductive.

Moreover, immigration policy, at least as it operates today in New Zealand, is developed and applied at the national level. Migrants have the right to enter New Zealand and, once here, enjoy the same rights to freedom of movement as citizens.[104] As a result, attempts to use the levers of immigration policy to encourage migrants to settle in particular locations have not always been successful (Fry and Wilson 2018, 82–83).

How to combine the essentially local concept of tino rangatiratanga with the national and international dimensions of immigration is just one of the many issues that will need to be addressed by the treaty partners. Options include using existing organisations like the Iwi Chairs' Forum or creating a new body specifically designed to engage in immigration matters. On this latter idea, the process by which Ngā Toki Whakarururanga, the Māori body created to enable effective Māori influence on trade negotiations, could provide guidance.

Moving to a full partnership on immigration will take time. We consider that, should the government proceed with the GPS approach the Productivity Commission has recommended, engagement with iwi, hapū and Māori on how to bring immigration into a Treaty framework should begin in parallel. In practice, this might mean that an initial GPS would contain relatively high-level input, which could be developed in later versions.

5.6.2 With employers

In the past, employers have proven very adept at lobbying Ministers for increases in migration. With wider objectives such as absorptive capacity being considered, it is likely that the numbers of visas granted will be reduced, at least in the short to medium term. The government will need to consult with employers in order to gain a deeper understanding of:

- where there are skills and labour shortages, and how to prioritise across them
- any barriers to attracting local workers through improving terms and conditions and

102 Te Tiriti does say that the Māori signatories included Ko nga Rangatira o te Wakaminenga (Chiefs of the Confederation of the United Tribes of New Zealand), a reference back to Te Wakaputanga o te Rangatira o Nu Tirene (the New Zealand Declaration of Independence).

103 Dame Tariana Turia, then co-leader of the Māori Party, recalled in 2007 that when the Minister for Immigration, Lianne Dalziel, had called together a group of Māori leaders to discuss immigration, the "*strong report which focused on the need to address issues of sovereignty*" which the group had produced had "*disappeared*" (Turia 2007). Speaking later in Parliament about the same meeting, Hon Lianne Dalziel said it was "*a complete and utter disaster*" because there was not a unified view from those around the table (Dalziel 2009). Separately, Ranginui Walker recorded what he considered to be unsatisfactory consultation with Māori over immigration policy in 1991 (Walker 1993, 87).

104 Section 18(1) of the New Zealand Bill of Rights Act provides: "*Everyone lawfully in New Zealand has the right to freedom of movement and residence in New Zealand*".

- any barriers to training local workers, such as lack of local training facilities, needing very small numbers of highly specialised workers, or needing skills for a very short period.[105]

5.6.3 With migrants and potential migrants

To date, immigration policy has very much been 'take it or leave it' for migrants and potential migrants. As policies change in response to changing priorities, including a greater focus on absorptive capacity and wellbeing, current and future migrants will be impacted. It would therefore be appropriate for them to be able to provide input to the GPS.

In practice, we would expect the government to consult migrant groups in New Zealand as one way of receiving feedback about the views of potential migrants. Immigration New Zealand's overseas offices are another avenue to elicit input from potential migrants. And simply posting a request for feedback on relevant government websites will bring the consultation to the attention of some people seeking to come to New Zealand.

Regarding the diaspora and returning New Zealand citizens, an organisation like KEA could be consulted and used as a conduit.

The result of this changing focus will likely be a smaller number of migrants who are treated better. The wellbeing of those migrants who can live and work in Aotearoa should improve.

One transitional issue that will need to be addressed is the timing of any change and whether it applies to people already in New Zealand or only those who might arrive after some date in the future. If it did apply to current temporary migrants who had expectations that they might one day be granted residency (regardless of whether those expectations were reasonable or not), it is likely that some people would be disappointed by the change.

The trade-off is between the speed of implementing any new policy and the treatment afforded to affected people. Whatever the decision, actual and prospective migrants should always be treated with courtesy and respect.

5.6.4 With the public

Engagement and consultation with the New Zealand public is key to improving transparency and ensuring the ongoing legitimacy of immigration policy and practice.

If the government moves to consider absorptive capacity as a key element of policy, they will need to demonstrate to the public that their policies on migration and the provision of services and infrastructure are indeed aligned.

Ministers have the right to make decisions, but the reasons for those decisions should, subject to caveats around applicant privacy, be transparent, consistent, and clearly communicated to the public.

5.7 Conclusions and recommendations

Increasing transparency and engagement should increase the legitimacy of immigration policy.

105 For example, in the seafood sector, the lack of access to a training vessel makes it difficult for local training providers to give trainees experience at sea. Some specialised dry dock engineering skills are needed for only a few weeks at a time (Wilson, Fry, and Johansson 2021).

Regarding **clarity** and **transparency** of policy, we recommend that:

- Part 2 of the Public Finance Act be used as a guide to increase transparency of immigration policy
- The Immigration Act should be amended to require the government, at least every three years, to issue a Government Policy Statement (GPS on immigration, with the Act specifying matters the statement should address.

To increase **accountability** and aid community understanding of the nature and effects of immigration, we recommend that the Immigration Act be amended to require officials, on an annual basis, to publish a report on immigration, with the Act specifying the minimum data to be included in the report.

To increase community and other **engagement** with immigration policy, we recommend that the Immigration Act be amended to require:

- At least one year prior to the due date for the next Statement, the Minister to seek the written views of the Productivity Commission and Te Waihanga on the content of the next Statement.
- The Minister to issue a draft GPS at least six months before the due date of the final Statement and to seek submissions from the public.
- The Minister to transmit the draft to the Productivity Commission and Te Waihanga, seeking their advice and recommendations.
- When making the final Statement public, the Minister to release the advice received from the Commissions and public submissions.
- The Minister to present the Statement to Parliament.

In relation to policymaking generally, we recommend that the government take a more open approach, seeking the input of the public and stakeholders before major policies are announced. It should, as a matter of routine, publish discussion documents and seek submissions and engagement with:

- employers
- the public
- current migrants
- potential migrants.

We recommend that the Crown seek to engage on immigration with **iwi, hapū and Māori** as Treaty partner, acknowledging that a change away from the presumption that the Crown has unrestricted sovereign power over the border to an approach where migration policy also recognises te tino rangatiratanga that iwi, hapū and Māori retained will be significant.

Rebuilding the relationship between the Treaty partners on immigration is likely to take time. The process should be appropriately resourced, respect tikanga (protocol) and be seen to be tika (right and just). It should seek to allow the Crown to develop a deep and genuine understanding of the views of its Treaty partner.

How this discussion proceeds is for Māori to decide.

A GPS will not, of itself, improve the effectiveness of immigration policy or deliver better programmes. But by requiring governments to set and state their objectives, report on

results against announced measures of success and engage with the public, it should, in time, lead to improved policies and more effective administration.

> *Trust in government has been identified as one of the most important foundations upon which the legitimacy and sustainability of political systems are built. Trust is essential for social cohesion and wellbeing as it affects governments' ability to govern and enables them to act without having to resort to coercion. Consequently, it is an efficient means of lowering transaction costs in any social, economic and political relationship. A high level of trust in government might increase the efficiency and effectiveness of government operations.* (OECD 2013, 21, internal citations omitted)

6 Adjusting migrant arrival numbers

Our assessment of the likely net benefits of pre-COVID immigration levels leads us to conclude that the contribution of net migration to wellbeing would be increased through bringing in fewer economic migrants, at least in the short term. Ideally, this reduction would occur in tandem with improving overall migrant skill levels, although there are several instances where less-skilled migrants, including care workers, can make important contributions to wellbeing.

6.1 Why limits are needed

After reviewing recent experience with immigration in Aotearoa, the Productivity Commission concluded that some moderation in overall net migration volumes might be necessary for the short term to bring immigration within the country's absorptive capacity if net migration returned to pre-COVID levels (New Zealand Productivity Commission 2021a, 47).

In the longer term, the Commission proposes that absorptive capacity guide population levels, with immigration generally being adjusted to ensure New Zealand stays within that capacity.

Beyond the important issue of absorptive capacity, there are a number of other reasons why a least regrets approach to policymaking points to reducing net migration from pre-pandemic levels, at least for now.

As we noted in Section 3.4.1, bringing in large numbers of people with lower skills than policy intends reduces incentives to develop and train local workers, to attract more locals through improved wages and conditions, and to raise their productivity through increased capital investment. There are growing concerns about migrant working conditions and exploitation.[106] Michael Reddell has also raised concerns about immigration diverting resources from higher-value uses, particularly exports (see Box 1).

This section discusses how reductions in migrant arrival numbers might be achieved in practice now the border is being reopened.

106 MBIE is currently leading a policy and operational review of Temporary Migrant Worker Exploitation in New Zealand. See Ministry of Business, Innovation and Employment (2020).

6.2 Limits under the existing system

There are only a few examples in the current New Zealand immigration system where limits are applied to individual visa types (New Zealand Productivity Commission 2021e, 1). Examples include:

- Within the Residence Category:
  - the Samoan Quota (1,100 visas)
  - the Pacific Access Category (650 visas)
  - Category 2 Investors (400 visas)
- Among temporary visas:
  - Most working holiday schemes, such as those for Brazil (300 places), China (1000 places) and Korea (3,000 places). However, note that fourteen schemes, including those covering our largest source countries, are uncapped.[107]
  - The Global Impact Visa, a four-year visa for entrepreneurial migrants, which has a cap of 400 places over four years.

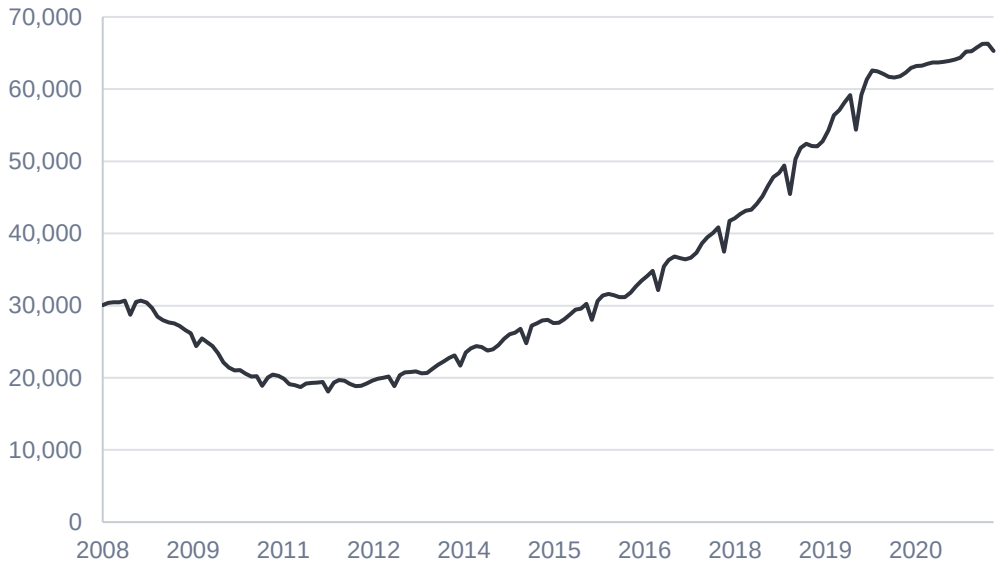
The Essential Skills temporary visa category, which has become the mainstay of New Zealand's short-term immigration system, is also uncapped, although there are criteria that potential migrants need to meet to be granted access. The number of visas granted under this category has grown rapidly since 2011.[108]

[107] New Zealand does not limit working holiday visa numbers for citizens of the United States, the United Kingdom, Canada, Italy, Sweden, Denmark, Belgium, France, Germany, Norway, Finland, Ireland, the Netherlands, and Japan who meet the scheme criteria.

[108] Note that even with the borders being essentially closed due to COVID, the number of immigrants on this visa has continued to grow, albeit slowly. This is because of immigrants already in New Zealand transferring to this type of visa.

Figure 33 Essential Skills visa numbers have grown

Number of holders of Essential Skills visas in New Zealand, by month



Source: MBIE

The New Zealand residence programme is subject to a planning range, and the government can adjust thresholds in the points system to increase or reduce the number of potential migrants who can be offered visas, but the programme itself is not formally capped.[109]

6.3 A range of options

Conceptually, there are four main ways to limit the inflow of immigrants:

- Limit the number of visas granted in various categories (through caps).
- Set criteria that limit the number of people who can enter or the time they can remain.
- Reduce the attractiveness of New Zealand as a destination for immigrants.
- Increase the monetary cost of applying for a visa (which is a subset of the third approach, which uses cost to reduce attractiveness).

The Commission has identified a number of specific ways to manage migration:

> *Overall volumes can be managed through a range of tools, rather than only numerical caps. Other options include reducing visa durations, limiting work rights (eg, post-study visas could be limited to specific fields of importance to New*

109 The allocation of the 50,000 to 60,000 places in the current 18-month residence programme across the three streams of Skilled/Business, Family and International/Humanitarian are:

- Skilled/Business 25,500 to 30,600 places
- Family 19,000 to 22,800 places
- International/Humanitarian 5,500 to 6,600 places (Immigration New Zealand 2022f, Section R6.5).

Prior to COVID-19, approximately 80 percent of applicants for residence were already in New Zealand on some form of temporary visa, meaning that the residence visa is not particularly effective in controlling the number of people working and living in New Zealand at any one point in time (Lees-Galloway 2018, 2).

> *Zealand, or be identified in skills shortage lists), increasing wage thresholds for temporary visas, raising eligibility criteria (eg, English language proficiency), and using market mechanisms (eg, fees, auctions, tradable permits).* (New Zealand Productivity Commission 2021a, 47)

Some of these options, such as wage thresholds, are current features of the New Zealand immigration system, while others, like market mechanisms, for example, would be new.

6.4 Top-down versus bottom-up control

When it comes to setting limits to the number of immigrants entering the country, there are three broad options

- setting an overall, top-down objective
- aggregating totals from individual immigration categories from the bottom up and
- combining the two via a bottom-up assessment that is 'sense-checked' against an overall total.

The most comprehensive top-down approach would involve determining an upper ceiling on the total number of migrants, regardless of type, who could enter New Zealand in any one year. The rationale for this approach is that when it comes to high-level objectives, like population growth or remaining within the economy's absorptive capacity, what matters most is the raw number of migrants, not the type of visa or the characteristics of the migrants.

More likely, a more granular approach that looks at broad classes of migrants would be needed. This could focus on distinctions such as:

- Permanent versus temporary migrants, because temporary migrants will make a smaller contribution to any population-based objectives but will still impact the capacity of the economy to absorb migrants (e.g. through needing accommodation and transport or accessing health services).
- Employment-related versus other migrants, because migrants seeking to work could potentially displace locals, depending on their skills and experience and the state of the labour market, but can also, in some circumstances, build capacity.
- Ultra-short-term visitors, like tourists, can have localised effects, as evidenced by the traffic congestion in Queenstown before the pandemic.

A top-down approach would require both setting an overall level of immigration and a mechanism for cascading down limits to individual visa types.

A bottom-up approach would focus on the number of immigrants admitted on a finer scale, such as the number of people admitted under individual visa categories. As the Productivity Commission has noted, many current temporary visa categories are uncapped, albeit often with criteria that must be met before being granted, which gives the government some ability to control numbers to an extent (New Zealand Productivity Commission 2021e, 13).

If a pre-determined level of absorptive capacity becomes a high-level constraint on overall migrant numbers, then logically, this implies that all individual visa categories will need to be capped.

6.4.1 Recent experience

New Zealand has experience with both top-down and bottom-up controls.

New Zealand began using a top-down residence target in conjunction with the new points-based immigration system in 1991.[110]

With rapidly rising numbers of uncapped temporary visas, operating this system has become more challenging, as large increases in numbers of applications for residence from people already in New Zealand on temporary visas led to a growing backlog in the Expression of Interest pool.

In 2018, Cabinet discussed a paper that proposed moving to something akin to a bottom-up approach, with the Minister proposing to:

> *[C]hange the approach to controlling residence numbers and priorities from one based on an overarching planning range and streams structure to one based on managing forecasts of individual resident visa categories.* (Lees-Galloway 2018, 1)

6.5 Top-down

There are various ways that an overall top-down immigration cap can be determined. Managing it will need to take account of both permanent and temporary inflows and have sufficient flexibility to respond to unanticipated 'surges' in flows.[111]

Many governments have preferred to articulate a sense of what level of net migration feels 'about right' than having to justify such targets empirically.

Susan Love has provided a detailed account of how Australian governments, since the 1940s, despite being advised by a succession of expert committees and reviews that have undertaken an exhaustive analysis of the issue, have struggled to express an operational immigration target that goes beyond a general impression of what is 'about right' (Love 2022).

Ruth Farmer reports a similar situation in New Zealand in 1995, when Immigration New Zealand said that a recently published net migration target of 20,000 people per year was "*based more on a judgement regarding the ability of New Zealand's economy and society to absorb migrants than on an overall population goal*" (Farmer 1997a, 2).

The problem with targets based on visceral judgements is that different people bring different senses of what matters to the table. Without a clear underlying framework setting out what has been considered in reaching a target, it can be difficult to determine whether any given target is robust.

Governments will, of course, have different priorities, and different circumstances may warrant different targets.[112]

110 The Immigration Amendment Act 1991 replaced the occupational priority list with a points system that aimed to increase New Zealand's overall levels of human capital. Previously, residency policy had been used *"as a short-term labour market tool"* (R. Winkelmann 1999).

111 The experience of COVID-19 is likely to have recalibrated people's expectations about what it is reasonable for governments to do when it comes to managing the border and indeed immigration policy. However, stability, certainty and fair dealing are often highly valued elements of policy.

112 For example, between 1990 and 1995, Immigration New Zealand (INZ) had a minimum target for permanent residence of 25,000. In 2004-2005, INZ set a residence target of 45,000, equivalent to 1.5 percent of the population at the time.

There are a number of ways to set an overall target. For example, the government could:

- Define threshold levels of desirable qualities for migrants (e.g. age, skills) and admit all candidates that meet those criteria.
- Calculate the overall absorptive capacity of the economy and use that to derive the cap.
- Define a desired rate of increase in population and set immigration to meet that.

While conceptually simple, putting these approaches into effect would require considerable analysis and information.

A more transparent approach would be to publicly state the grounds on which an overall cap is set. This might include increasing the previous year's target by no more than a stated number or percentage, targeting a share of the estimated population, or a rule that immigration this year would be equivalent to no more than the amount of emigration last year.

However, as the 2018 Cabinet paper mentioned above commented:

> *The NZRP planning range is not a specific target or hard cap, as it contains a number of uncapped visa categories within it, which fluctuate according to demand. This means that the main way the Government controls residence is by limiting the number of visas available under different categories, either through numerical caps or through policy requirements.* (Lees-Galloway 2018, 4)

This uncertainty has serious implications for setting an overall **net** migration target. The likelihood of over- and under-shooting the target in any one year would be high.

There are several possible ways to address this.

One would be to set targets with a lag, so that permitted arrivals of non-citizens in one year would be set to achieve a balance with the actual net migration figure from a previous year. For example, if actual net migration in, say 2025 was 55,000, against a target of 50,000, then visas issued in 2026 would be reduced by 5,000 compared to the permitted level in 2025.

An alternative would be to set the number of migrants to be admitted for a number of years (say five) based on historical data, which would allow some of the variability of departures of migrants and the movement of New Zealand citizens to play out.

This approach was used by the then Government in 1998 when setting a new target. The Minister of Immigration told Cabinet:

> *[A] 10,000 net gain cannot be assured in every year, because it is not possible to control, and difficult to accurately predict, most of the flows contributing to net migration, in particular outward migration. However, there is scope for meeting the net migration goal on average over a longer timeframe of five to ten years.* (Bradford 1998, 5)

Finally, the number of migrants could be set by explicit reference to the desired level of population growth, say 1.2 percent a year over a five-year period, but on the understanding that the number of non-citizens allowed entry each year would need to be adjusted more frequently to account for movements in other drivers of population growth, most notably two-way migration of citizens and departures of non-citizens.

Regardless of how a cap is ultimately set, it will need to be based on a robust and clearly articulated rationale to provide transparency and certainty and be perceived as legitimate. For example, the government would need to be able to explain how a population growth rate of 1.2 percent was determined and why it is superior to alternatives.

6.6 Bottom-up

When working from the bottom up to aggregate component migrant categories into an overall cap, it is important to examine each migrant category in some detail to assess likely impacts on the economy. In practice, this approach is likely to be undertaken by visa type.

The advantage of this approach is that it requires a clear understanding of the rationale underlying each visa type and why it has been put in place. From this, analysis can determine the appropriate number of visas in a given context.

6.7 Difficult choices

As we discussed in section 4.5 on page 59, research has shown that different types of migrants can have different effects across a range of dimensions, including:

- their impact on the labour market
- their potential contribution to productivity and other domains of wellbeing
- their demands for different types of housing and their pattern of use of infrastructure and other long-lived assets (like schools and hospitals)
- the pattern of consumption of other goods and services and consequent impacts on absorptive capacity
- the resources required to assist settlement and integration.

These differences matter when it comes to thinking about what level and mix of immigration will best meet the country's needs.

When the population is falling, governments may be tempted to concentrate more on pure numbers of immigrants rather than focusing on contribution to wellbeing. When absorptive capacity is an issue, difficult choices need to be made.

We have identified two possible ways of determining how to allocate migration places. In each case, we assume that decisions would involve both backwards-looking and future-focused elements, based on what has worked previously and current and anticipated priorities.

6.7.1 An ad hoc, discretionary approach

Under this approach, decisions would be made by Ministers and their delegates on a case-by-case basis, possibly based on pre-set criteria.

While flexible, this approach carries the risk that priority is given to those best able to lobby and get the attention of decision-makers rather than granting visas to the people who can make the greatest contribution to the wellbeing of New Zealand.

6.7.2 An economic cost-benefit approach

This approach involves examining the benefits different types of migrants bring to New Zealand, alongside their costs, to assess potential net benefits.

While robust, this approach involves a substantial amount of work. In order to meaningfully reflect both contributions and costs, it should look back over a reasonable timeframe. As visa rules and the types and characteristics of migrants seeking entry to New Zealand change, net impacts will also evolve, and past results may become less effective at predicting future outcomes.

In Section 3.8, we proposed that the government undertake an analytical work programme designed to build a better base for policymaking. This work could feed into decisions around controlling numbers should the government decide to adopt a cost-benefit approach.

6.8 Possible control schemes

We now turn to assess how different control schemes could work in practice.

Even if the government adopts a top-down methodology based on its assessment of net benefits and absorptive capacity, it will need to cascade that level down to individual visa classes to operationalise the overall target.

Given this, in this section, we focus on how restrictions on numbers could be implemented at the visa level.

6.8.1 Framework

In thinking about control schemes, we have used the following criteria for judging alternatives:

- **Employment decisions should be determined in the labour market.** The question of which migrant is best suited to available vacancies should be determined by the outcome of the normal operation of the (appropriately regulated) labour market, with potential power imbalances between migrants and employers being given appropriate weight. Potential employees and employers, provided they are acting in good faith, can be expected to make the right decisions about matching candidates to jobs.
- **Locational neutrality:** migrants should be allowed to settle where they consider they will lead a successful life. Lowering thresholds to encourage migrants to move to areas that are not attractive in themselves often means that New Zealand is accepting people who will make a lower contribution to overall wellbeing. Immigration has not proven to be particularly effective as a tool for regional development: migrants tend to gravitate to the main centres because they are the places that offer them the best opportunity for a good life.
- **Setting supply with demand in mind.** Offering far fewer places than the likely number of applicants is likely to both create resentment and frustration and encourage gaming. For visas where this is likely, caps have advantages over other rationing devices.

- **Contribution to wellbeing should underlie thresholds.** Thresholds and other selection criteria should be set based on potential contribution to New Zealand rather than being used as a pure rationing device. This means that some rules should have minimum levels that will always apply, even if this means that there may be a shortfall in applicants.
- **The 80/20 rule.** Setting immigration thresholds is not a precise science, and most of the gains in terms of identifying suitable candidates will likely come from a few broad metrics rather than trying to excessively fine-tune criteria.
- **Migrants have choices.** Potential immigrants will often qualify under several different visa classes and will naturally gravitate to the one that offers the highest chances of entry and the lowest cost (in terms of fees, effort to satisfy criteria and waiting time).

While governments, both in New Zealand and internationally, often attempt to select individual migrants that they expect will succeed and increase wellbeing, they are at a considerable informational disadvantage, in that they are unable to observe underlying features like ability, willingness to take risk and motivations for migrating that are critical to migrants being successful. Thus, governments use proxies such as education, occupational qualifications, and prior and proposed earnings to screen applicants. In contrast, migrants and their potential employers have better information about these underlying characteristics of individual immigrants and their potential to contribute to wellbeing. An additional consideration in designing and assessing selection schemes is that those with the best information should, in general, be making decisions that rely on that information.

6.8.2 Deciding on control schemes

Deciding what control schemes should be implemented will involve weighing different criteria that influence wellbeing, rather than making an empirical assessment based only on monetary values like income or contribution to GDP.

If the government values simplicity of administration, ease of understanding, and predictability, then it would likely favour caps over uncapped schemes, thresholds that are pegged to objective criteria (wage thresholds as a percentage of median incomes; qualifications based on occupational registration) and be willing to accept that the number of successful applicants may vary in time, based on migrants' views of the desirability of moving to New Zealand.

If the government, on the other hand, wants a steady stream of immigrants, then it might favour detailed selection criteria, with thresholds or caps being adjusted frequently to keep numbers of visas relatively consistent.

6.8.3 Capping visa numbers

The administratively simplest way to restrict immigrant numbers would be to cap the number of visas that can be issued under various categories.

Numerical limits have several desirable features. They do not require the government to assess immigrants against criteria, especially unobservable characteristics like ability. Limits are certain: the government can be confident that the number of immigrants permitted to enter will not be above the desired level, rather than having to have information about the number of potential people that fit within particular criteria. Likewise, provided the number

of unallocated visas is made public, potential migrants and their employers will know whether places are available.[113] Limits can be adjusted administratively via Immigration Instructions, which means they can be moved up or down as circumstances require. Finally, apart from a check at the border that a migrant has the appropriate visa, no post-arrival enforcement is needed.

A fixed limit, however, requires some system of allocating visas to potential immigrants. We defer consideration of this issue to Section 6.8.8, where we discuss allocation methods.

Once a limit has been agreed, there would also need to be a mechanism for adjusting it through time. The main alternatives would either be to leave this to ministerial discretion or specify some required process in legislation, which might list a number of factors, such as overall population and employment growth, that the Minister would need to have regard to.[114]

We recommend the second approach. It provides greater certainty and could automatically accommodate growth.[115]

Capping individual visa streams would also enable the government to move away from ineffective labour market tests that are very difficult to verify, and to consider alternative ways to allocate a limited pool of visa places.

Whatever number is ultimately agreed upon for a cap, we recommend that it always be set slightly below the level of demand. This would provide a clear incentive for employers to employ locals where possible and to employ migrants in their highest value roles.

Capping total visas just below total demand based on historic employment patterns, vacancies, and visa issues may be controversial and is likely to be the subject of considerable debate. As we noted in our recent report of the Ministerial Inquiry into the use and allocation of migrant labour in the seafood sector:

> *Incumbents often express concerns that introducing a new requirement is essentially unfair and involves 'moving the goal post after the ball has been kicked'… Proponents of reform argue that this approach means perpetuating an undesirable situation… A pragmatic approach is to acknowledge that new rules can be disruptive, but at the same time, if the status quo is undesirable, reform is required.* (Wilson, Fry, and Johansson 2021, 35, footnotes omitted).

Capping some visa categories but not others could potentially lead migrants to seek to enter through uncapped categories. Much depends on how restrictive the criteria used to determine eligibility for any uncapped visas are. Our recommendation is that all visas

113 As we will discuss further in Section 6.8.8, if the number of visas on offer is known to be well below potential demand, then this can induce migrants and potential employers to spend resources trying to game the system. One example from the United States H1-B skilled migrant visa illustrates this point: employers are only allowed to submit one application into the pool from which successful candidates are drawn at random. Faced with this restriction, corporate groups submit applications from their wholly-owned subsidiaries to sponsor the same person to increase their chances of being drawn from the pool (Casella and Cox 2018, 199).

114 This is the approach adopted in the RSE scheme. The number of places in the scheme is periodically reviewed by Cabinet and increased if that is considered appropriate. The number of places has increased significantly since the scheme was introduced on 30 April 2007, with the cap growing from 5,000 places to 16,000 in 2021/22.

115 The simplest way to operationalise this approach would be to set the cap for one year based on employment levels for the previous year. Where sectors are growing at a rapid pace, it might be more appropriate to base the cap on vacancies.

should have a cap of some sort, as this would give the government of the day the greatest ability to manage overall immigration numbers.[116]

Conclusions

Capping visa categories would be the surest way to ensure that overall immigration numbers were kept within a desired level, be it determined via a top-down or bottom-up approach.

It would, however, require some mechanism to allocate visas to applicants if demand was above supply. We discuss the options in Section 6.8.8.

6.8.4 Reducing visa durations

Temporary visas are issued for a fixed period. The current default time limits, as set out in the Immigration New Zealand Operation Manual (Immigration New Zealand 2022f), are:

- Visitor visas: 12 months
- Work visas: 5 years
- Student visas: 4 years
- Interim visas: 6 months.[117]

Some visas also contain more specific limits, for example:

- The RSE scheme allows people to work for 7 months in any 11-month period.[118]
- For the Essential Skills work visa, the period of employment is limited depending on earnings, up to a maximum of:
  - 3 years for employment paid at or above the median wage or
  - 24 months for employment paid below the median wage.
- The Entrepreneur Work Visa has a limit of 3 years.
- The Global Impact Visa allows entry for up to 4 years.

Some visas, like the Essential Skills visa, have a 'stand-down' period, meaning that at the end of their stay, the immigrant must leave New Zealand for a year before applying for another visa of this class. Other visas allow immigrants to apply for a second or subsequent visa when their initial visa expires, meaning that the current time limits are not always binding.

There are currently few restrictions on immigrants switching from one visa to another, which further reduces the stringency of the time limits (New Zealand Productivity Commission 2021e, 13).

In some cases, transferring from one visa to another is understood to be a pathway to residency, with most applications for residency coming from people already in New Zealand (ibid. 19). Under the Skilled Migrant Category, for example, additional points are awarded

116 We note, however, that some of New Zealand's working holiday agreements with other countries include uncapped numbers.

117 Interim visas are granted to allow people to remain in New Zealand lawfully while their application for a further temporary visa is considered (Immigration New Zealand 2022f, Section I1.1).

118 Note that as part of the New Zealand government's response to the COVID-19 pandemic, RSE visa holders who were in New Zealand when the country went into lockdown had their visas automatically extended (Lees-Galloway 2020).

for work experience and qualifications gained in New Zealand. As the Commission has commented, expectations that working and studying in New Zealand will lead to residency are not always matched by reality (New Zealand Productivity Commission 2021a, 32).

One option, therefore, would be to introduce an overall time limit on the period that a person can be in New Zealand on any temporary visa, or to extend stand-down requirements to all visa categories. A variant would be to link the period of any stand-down to the wages earned in New Zealand, with higher-earning immigrants being required to stand down for a shorter period.[119]

Discussion

Reducing the time limits on visas would probably not, in general, reduce the number of people in New Zealand at any one time, but it might increase turnover: for example, employers might employ a series of immigrants in a single role.

But shorter visa limits would make coming to New Zealand less attractive to both immigrants and employers, especially given there are fixed costs involved in migrating and sponsoring a migrant. So, this approach would have some impact on the number of applicants, but if demand for places is generally high, it is unlikely to be a very effective mechanism for reducing overall numbers, and it would impose costs through churn for little offsetting benefit.

6.8.5 Limiting work rights

There are two main classes of visa that grant open work rights to people coming to New Zealand for other purposes: student[120] and working holiday visas.[121]

As the Productivity Commission has noted, we know comparatively little about the skill levels and jobs carried out by students, graduates and working holidaymakers (ibid. 22). The Commission has also suggested that:

> *There would be benefit in having specific visa categories formally evaluated, especially those that are uncapped and provide open work rights. Two obvious candidates would be the various working holidaymaker schemes that New Zealand has agreed, and student work visas (including post-graduation visas).* (ibid. 36)

We agree with this suggestion.

The closure of the border due to COVID-19 has exposed the extent to which a number of sectors have relied on students and working holidaymakers.[122] We have previously noted concerns about potential impacts on the New Zealand workforce, especially those just starting in employment without high educational attainment (Wilson and Fry 2020).

119 That said, remuneration is not always a good proxy for social value: care workers, teachers and many 'essential' workers earn relatively low pay. A threshold other than just salary will be needed for these groups.

120 As we noted in Section 3.4.3, the government is currently implementing a 'quantity to quality' strategic shift in relation to export education, which includes consideration of the role that offering work rights has had in attracting large volumes of students, especially to institutions with lower-quality educational offerings.

121 A number of working holiday schemes were suspended due to COVID-19 and places were not generally made available for these sorts of tourists in MIQ facilities. As part of the government's reconnection strategy, these scheme are being progressively reopened (Faafoi 2022).

122 See Wilson et al. (2021) for a discussion of the use of working holidaymakers in the seafood sector and Fry and Wilson (2021) for a discussion of the horticulture sector's use of these types of workers.

We have also suggested that limiting work rights for international students and raising the skill thresholds that apply when progressing from student to work visas would "*reduce the demand for student places, reduce the attractiveness of marginal providers, and, through reducing access to low-cost labour, help raise productivity over time*"(Wilson and Fry 2020, 24). Changes to working holiday schemes could also improve productivity:

> *Limiting the numbers of working holiday visas granted would raise productivity over time. Rather than engaging potentially over-qualified working holidaymakers to continue to operate low-wage, low-skills business models, employers would have an incentive to look for less labour-intensive practices.* (ibid 24)

That said, at the very heart of the working holiday scheme is the idea that young tourists can earn some money while they are in New Zealand:

> *The objective of working holiday schemes is to allow young citizens of approved countries, whose primary intention is to holiday in New Zealand, to undertake employment and study during their stay in accordance with their scheme.* (Immigration New Zealand 2022f, Section WI2.1)

Some form of work rights would need to be retained, as without that, this would just become a tourist visa.

Note that, outside of the recent pandemic-related border restrictions, any changes would require agreement with the relevant bilateral partners.

Options

Limiting work rights could be implemented in various ways other than simply removing them.[123] For example, the government could:

- reduce the number of hours that students can work (currently 20 hours per week during term time and 40 during holidays) or
- limit the categories of occupations or employers that visa holders could work for.

Discussion

Work rights are part of what can attract people coming to New Zealand for another principal purpose.

However, we are not convinced that allowing often highly-qualified people the ability to compete in the local labour market against those with fewer skills and experience is good policy. We have previously suggested that the government should:

> *Reduce inflows of low-cost imported labour by eliminating generous employment rights for fee-paying students and working to reduce the current number of working holidaymaker visas.* (Wilson and Fry 2020, 32)

Limiting work rights for students is probably the most practical alternative. It would reduce the attractiveness of New Zealand as a study destination, but by how much would be difficult to judge in advance.

123 The enforceability of all of these restrictions would need to be confirmed.

Limiting work rights for working holidaymakers would defeat the purpose of this scheme. If the government is concerned about the impact of the number of visas, it should seek discussion with its bilateral partners to address the matter directly.

6.8.6 Eligibility criteria

Many immigration systems use some sort of criteria to determine who can enter a country. These are mostly seen in the case of economic migrants, who must meet earnings potential, education, health and character tests. Humanitarian visas, such as those given to refugees and asylum-seekers, do not typically use this type of screening mechanism.[124]

The New Zealand Skilled Migrant Category

The Skilled Migrant Category (SMC) within the New Zealand Residence Programme is an immigration system based on detailed criteria. The programme uses a mix of absolute and points-based criteria for entry. Australia and Canada use similar systems (Law Library of Congress 2013), and the UK is introducing such a system as part of its exit from the EU (Portes 2022).

The absolute (pass/fail) criteria in the SMC are health, minimum English language proficiency and character. These are all criteria that the government can relatively easily observe, using third-party verification in some cases (foreign police checks, internationally recognised language tests like the Test of English as a Foreign Language and appointing panels of registered physicians and radiologists).

The points-based test determines the applicant's chances of successful settlement in New Zealand.[125]

To be eligible to enter the pool from which applicants are selected, a person must achieve a score of at least 100 points. Points are awarded for:

- age
- skilled employment, including length of experience
- qualifications.

Bonus points are awarded for:

- partner's skilled employment and qualifications
- qualifications gained in New Zealand
- employment outside Auckland
- high remuneration (over $112,320)
- employment in an area of absolute skills shortage

124 In New Zealand, admission on humanitarian grounds is generally based on the risks the immigrants face in their home country, not their ability to contribute to the New Zealand economy (see Part 5 of the Immigration Act 2009). However, the community sponsored refugee scheme, which aims to support entry for up to 150 refugees over three years does have restrictions on qualifications and employment history (Immigration New Zealand 2022c). This aspect has been criticised by Amnesty International on the basis that it limits access to the scheme for people who have had training or work interrupted, particularly widows and women with children (Hill 2022).

125 The current system awards points based on an assesment of skills and experience that will allow the potential immigrant to settle in New Zealand and do well. When first introduced in 1991, the system was based on human capital, and assessed potential to suceed (Farmer 1997b). Over time, addtional points were granted for local job offers, in a bid to increase the likelihood of applicants gaining suitable employment (Fry and Wilson 2018).

- recognised skilled work experience in New Zealand.

Discussion

The conceptual idea behind eligibility criteria is that it is possible to set tests to identify which potential migrants will make the greatest contribution to the host country.

Unfortunately, the characteristics that will often be the best predictors of success will be unobservable, like ability and willingness to learn new skills. In this case, proxies, like income and education qualifications can be used instead.

Some criteria, such as health status and prior criminal convictions, are used to rule potential applicants in or out of contention and should not be used to adjust numbers.

While increasing criteria to restrict immigration would mean that immigrants more likely to contribute to wellbeing would still be allowed to enter, reducing criteria may have perverse wellbeing effects. As we noted in relation to productivity in section 3.4.2, the 'batting average' of immigrants in terms of their ability to produce goods and services is one of the channels by which immigration can improve economic performance.

Wellbeing considerations therefore mean that limits should be imposed on using selection criteria as an adjustment mechanism. For example, there should be a floor imposed below which the government will never reduce salary thresholds, even if this would mean fewer total immigrants under the relevant visa. As we noted in the case study on aged care workers in Section 4.5.3 on page 62, there will, at least in the short term, need to be sufficient flexibility to grant entry to groups of migrants that make large contributions to wellbeing despite having relatively low skills.

6.8.7 Increasing wage thresholds

Wage thresholds, where employment in a job paying a minimum level of remuneration is an entry test, are a particular example of an eligibility-based approach.

The Grattan Institute has recently recommended that Australia's temporary skilled migration visa be reformed by removing the current labour market test based on occupations and using a wage threshold of $AUD70,000, combined with a requirement to pay immigrants the same as locals, as a selection criterion.

> *Temporary skilled migration currently focuses on addressing skills shortages directly by restricting temporary sponsorship to jobs in occupations deemed in shortage. While this approach is superficially attractive, it is practically impossible to quickly and reliably identify skills shortages in individual occupations, and fill them via temporary sponsorship. Occupation lists appear to reflect industry lobbying. Targeting skills shortages also opens the door to less-skilled migrants, who are likely to suppress the wages of lower-skill Australian workers, and are at greater risk of being exploited.* (Coates, Sherrell, and Mackey 2022, 21)[126]

126 While the analysis that the Grattan Institute has undertaken is conceptually relevant to New Zealand, we note that Australia's temporary skills visa is limited to listed occupations and skills. New Zealand's Essential Skills visa can be granted to people in a wider class of roles. The Institute's conclusion that eliminating all the lower-paid temporary migrants will not be disruptive (because they make up such a small proportion of the relevant workforce – even in age care) would not hold in New Zealand.

The Essential Skills visa

Under the Essential Skills visa, immigrants must receive the market rate paid to New Zealand workers in comparable positions. Wage thresholds are, however, used to screen migrants who are permitted to enter:

- higher-paid employees can be granted longer periods of stay and
- employers offering positions paid above a certain threshold ($56,160 per annum) are not required to undertake a labour-market test.

Other visas also have wage thresholds that apply to people employed on them in New Zealand, e.g.:

- foreign fishing crew must be paid the New Zealand minimum wage, plus $2 dollars, per hour[127] and
- work to residence visa holders must be paid at least $79,560 per annum.

Discussion

Prospective salary is an indication of the value that an employer thinks an employee will bring to their firm, especially where the labour market is tight. As Jonathan Portes comments, such an approach:

> *…puts the market, rather than bureaucrats or politicians, in charge of the selection process, and selects those with the highest direct impact on productivity, as measured by salary. This avoids having to pick winners, engage in central planning, or allow the loudest business voices to determine which occupations and sectors qualify and which do not.* (Portes 2022, 92)

That said, market wage rates are not always a perfect reflection of social value. Commenting on UK proposals to use wage thresholds to limit immigration, Portes adds:

> *Care workers, bus drivers, and supermarket staff all fulfil essential functions, and it is far from obvious that there will be public support for an immigration system that excludes them all in favour of relatively junior bankers.* (ibid. 94)

Given that absorptive capacity seems at present to be most constrained in some areas where the government is the predominant employer (health and education), the government might face a fiscal incentive to have lower thresholds when it is paying the wages itself. This might be overcome by setting thresholds by reference to an independently determined rate, such as the national median wage.

A further variant would specify that the threshold would always be a fixed percentage of the median wage for an occupation or sector. This would reduce the incentives for costly lobbying while allowing flexibility when relative wages move in the economy. It could also enable some immigrants to fill generally low-paid jobs, provided they were well-paid within the context of that sector.[128]

127 As part of a package of measures that allowed a number of foreign fishing crew access to MIQ facilities, the Government imposed an additional requirement that the workers be paid $4.00 above the minimum wage (Immigration New Zealand 2022a).

128 There is a limit to how far this approach should be allowed to go. The potential for special pleading would be reduced if the government always kept wage thresholds at a general level, like a percentage of the median wage for the occupation, rather than introducing finer graduations, like location, whether outputs in the sector are exported, or detailed 'skills shortage' lists.

A wage threshold will restrict the number of migrants, but setting the threshold to meet a specific target or cap would require the government to have information about the responsiveness of immigration and emigration to the wage thresholds. More information would become available as experience with any such regime is developed.

A wage threshold would not be appropriate for some visa types, including students, family reunion and humanitarian categories.

Compliance would require monitoring to ensure that employees were being paid the required rate.

6.8.8 Allocation mechanisms

New Zealand visas grant non-citizens a right to enter, remain and in some cases work in New Zealand. Those rights attach to the individual.[129]

Some visas, such as the RSE visa, include conditions that can tie the right to work to an individual employer or even a particular place of work. Some visas also require an employer to provide employees with certain working conditions before a visa can be granted. The Fishing Crew Work visa is an example.

The new Accredited Employer Work Visa will involve a greater role for employers than the temporary visas it is replacing (New Zealand Productivity Commission 2021e, 6). Employers will need to be accredited to employ immigrants and undertake a job check before inviting a migrant to apply for a visa.

New Zealand employers are also free to employ people legally in New Zealand with general work rights, including permanent residents, students with work rights and working holidaymakers.

Visas can be thus thought of as comprising both a right to enter New Zealand and work and a right to employ migrants.

While administrative fees are charged to cover the cost of processing, the rights conferred by visas are currently given to immigrants and employers essentially for free.

In our report for the Ministerial Inquiry into the use of migrant labour in the New Zealand seafood sector, we examined various tools for allocating a limited number of existing visa places among a larger number of applicants. Our focus was on allocating the right to employ migrant seafood vessel crew to existing employers, but the concepts that we developed are, we consider, of general application, at least as a transition from uncapped to capped visas.

For the current report, we have also examined a number of other approaches, including:

- The approach used in developing the planning range for the current Residence Programme (New Zealand Productivity Commission 2021e).
- The ballot used for the Samoan Quota (J. Gibson, McKenzie, and Stillman 2013).

129 Other rights are granted by other legislation and policies, but flow from the grant of a visa. See, for example, Section 74 of the Electoral Act 1993 (right to vote), Section 7 of the Overseas investment Act (right to acquire land), Health and Disability Services Eligibility Direction 2011 (right to receive publicly funded health services) and Section 33 of the Education and Training Act 2020 (right free education at State schools).

- The systems used to allocate skilled and unskilled visas in the United States (Casella and Cox 2018).

Market approaches

A further set of options involve using market mechanisms to allocate visas.

Rather than using administrative discretion or random selection, market approaches seek to identify which migrants might make the highest contribution to wellbeing by running auctions or setting a fee that does more than recover costs.[130]

At the outset, we acknowledge that any perception that the government might be 'selling visas' can be controversial.[131] It can be associated with people trafficking if it is thought that employers have acquired a legal right to 'buy immigrants'.[132] 'Sale to the highest bidder' might also be seen as unfair to potential immigrants of limited means and might allow people with money acquired from dubious sources to purchase entry to New Zealand.

These are all valid points and would need to be considered if a market approach was to be implemented. Additional financial and character checks might be required.

The economic theory underlying this approach is that migrants themselves and their prospective employers are in a good position to judge how much they would value being able to come to New Zealand or employ a migrant. In the case of employers, this value would be closely associated with the wage they are prepared to pay an immigrant. In this respect, market mechanisms can be thought of as a way in which the wage thresholds discussed in the previous section can be set.

They can also be thought of as a tax imposed on immigration that is set to extract all or part of the benefits of immigration that accrue to migrants and employers.

One clear difference between these sorts of charges and wage thresholds is that they involve an additional charge to either the migrant or their employer. Like any tax, they reduce the benefit derived from the taxed activity.

Auctioning visas is a way of discovering the true value of immigration to bidders.[133] Visas could either be auctioned to migrants themselves, in which case they would then arrange suitable employment, or to employers, who would secure the right to employ migrants, who, after passing health and character checks would be issued a visa.

Sale at a fixed price is a simpler approach and has been suggested by Gary Becker (Becker and Coyle 2011) and, in the New Zealand context, by Michael Reddell (Reddell 2021). This approach requires the government to determine its valuation of the visas, which in the absence of good information could be too high, thus excluding migrants with the potential to enhance wellbeing or too low, which would have the opposite effect. Again, experience

130 Proposals in the literature for this sort of system include Ochel (2001); Freeman (2006); Collie (2009); Becker and Coyle (2011); Moraga and Rapoport (2014); Zavodny (2015); Casella and Cox (2018); Johnson (2018); Sparber (2018); Freiman (2019); Lokshin and Ravallion (2019a; 2019b); Orrenius and Zavodny (2020); and Auriol et al. (2021).

131 For a discussion of why market mechanisms might be seen as repugnant, admittedly from a proponent of such schemes, see Clemens (2018).

132 Emmanuelle Auriol and Alice Mesnard suggest, however, that a system of selling visas could actually reduce the incentive to smuggle people, since it gives a legal alternative to immigration that could be more attractive, especially if combined with heavy sanctions for illegal immigration (Auriol and Mesnard 2016).

133 The type of auction used is important, and there is a large body of examples on which to draw. A common approach to selling rights is a Vickery Auction, where the winner is the person who submits the highest bid, but they pay the second-highest bid. This approach maximises the incentive on the part of bidders to reveal their true valuation.

could allow the government to adjust the valuation towards a level that achieves its objectives.

More complex variations of market mechanisms involve introducing a variant of the 'tradeable permit' approach to environmental rights.[134] Under such schemes, visas, thought of as rights to employ immigrants, could be allocated to employers, who could then transfer them with other employers on mutually agreed terms.

Discussion

From an economic perspective, market mechanisms have many desirable features in terms of increasing the efficiency of immigration. They help ensure that immigrants are employed where they will make the greatest contribution to wellbeing. That said, they are controversial and can be perceived as treating people as commodities. Alternatives such as setting caps and wage thresholds could achieve many of the benefits of market mechanisms.

6.9 Conclusions and recommendations

Moderating immigration numbers will require some new approaches to be introduced into the New Zealand immigration system and some existing approaches to be applied more widely than they are currently.

Capping overall visa numbers and individual categories would be the clearest way of moderating net migration flows. It would require companion measures to ensure that economic migrants with the greatest potential to contribute to wellbeing were selected. Means to allocate limited visas to potential immigrants or their employers would also be required.

Balloting is a neutral allocation method. Auctions or setting high fees would allow immigrants or employers to reveal their valuation of the right to come to New Zealand or employ an immigrant. But these methods would need careful design to make them publicly acceptable.

Wage thresholds and other systems based on eligibility criteria are often justified in their own right as ways of selecting economic immigrants with the greatest potential contribution to wellbeing. They can be used to moderate numbers, but to do so successfully requires the government to understand the responsiveness of immigration to the thresholds set. An iterative approach might be required.

Wage thresholds, however, assume that wages are a measure of social value, and this is clearly not always the case. COVID border closures have shown just how much New Zealand values many low-paid workers. Caps would also create a moral hazard for the government where it is the direct employer of immigrants, as in the case of health and education.

The current system of largely uncapped visa categories led to pre-COVID migration levels above New Zealand's absorptive capacity. The overall calibre of economic migrants is also too low. As a result of too many migrants with low salary and skills thresholds being granted entry, incentives to develop and train local workers, attract more locals through improved wages and conditions, and raise their productivity through increased capital investment have all been reduced.

134 See Wilson et al. (2021) for a discussion in the context of Fishing Crew Work visas.

Concerns have also been raised about immigration diverting resources from higher-value export uses and migrant working conditions and exploitation. Any future rules will likely need to not just admit fewer migrants in the short term but ensure that they select those migrants with a high potential to contribute to the wellbeing of locals, as well as the migrants themselves.

Caps with auctioning would be the best of the available options if political and social acceptability concerns could be addressed. Immigrants would have a clear incentive to succeed as a way of recouping their investment in the entry fee.

The second-best solution would be a pool system, with high salary and skills thresholds for entry into the pool and selection by ballot. The thresholds would need to be adjusted iteratively to achieve the desired level of immigration. Ideally, the chance of eventually being drawn for the ballot should be high to ensure that people's expectations of success match reality and reduce incentives to game the system.

7 Planning for prosperity

Immigration is a powerful economic instrument. It can potentially affect economic performance, the structure of the community, and the wellbeing of both migrants and locals.

The size of flows across the New Zealand border are substantial by developed country standards. Over 25 percent of the resident population were born overseas, and by some estimates, there are a million New Zealanders and their children living overseas.

People migrate for a variety of reasons, but seeking a better life is the prime motivation for many. While the focus of a lot of analysis on the impacts of immigration is on the host country and its economy, migrants' lives matter too.

7.1 Transparency will increase acceptance

Despite its potential impact on the economy and the lives of over two million migrants, immigration policy in Aotearoa is largely developed in a black box, with Ministers and their advisers rarely, if ever, bringing the public into their confidence as they develop policy.

The Productivity Commission has recommended that a new system of transparent and accountable policy development be introduced. This has the potential to increase the legitimacy of immigration policy. Painful lessons from overseas – and New Zealand's own history – show that immigration is a controversial policy with the potential to ignite passions.

Understanding the precise effects of migration is still developing and building a firm framework of accountability and reporting will be a major exercise. We consider that the ideas we have set out above will provide the basic building blocks for such a system.

7.2 Addressing issues for the right reasons

Ensuring migration policy is effective and sustainable and results in New Zealand treating migrants well is in all of our interests. Acknowledging that migration can bring costs that

need to be addressed, along with many benefits, is the key to maximising the wellbeing of migrants and locals alike.

We need to be very clear that it is not the fault of migrants that some of our institutions are responding poorly to the challenges they face. Housing supply and health infrastructure need to become more responsive to population increase, and educational institutions need to get better at equipping locals for in-demand jobs. At the same time, we should not shy away from accepting that while ready access to migrant labour makes some problems easier to address (e.g. through staffing the healthcare system), it can also make others harder (e.g. by reducing incentives to train locals well, or further straining our already stretched housing capacity).

The last thing we want to see in New Zealand is the kind of hostile, anti-migrant backlash familiar to the US, UK, Europe, and elsewhere. Honest conversations grounded in facts, and practical solutions, not myths and scapegoating, are needed.

At least in the short term, it is likely that bringing in fewer, more carefully selected migrants and ensuring we treat them at least as well as locals while they are here would be in the best interests of both Aotearoa and the migrants we welcome.

Whaowhia te kete mātauranga.

References

Aburn, Amelia, and Dennis Wesselbaum. 2017. 'Gone with the Wind: International Migration'. Economics Discussion Papers No. 1708. Dunedin: University of Otago.

Adams, Peter. 2015. *Fatal Necessity: British Intervention in New Zealand, 1830–1847*. Kindle Edition. Wellington: Bridget Williams Books.

Adda, Jérôme, Christian Dustmann, and Joseph-Simon Görlach. 2021. 'The Dynamics of Return Migration, Human Capital Accumulation, and Wage Assimilation'. CDP 11/21. CReAM Discussion Paper Series. London: Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London.

Ardern, Jacinda, and Damien O'Connor. 2021. 'New Zealand Secures Historic Free Trade Deal with the United Kingdom'. Beehive.Govt.Nz. 2021. http://www.beehive.govt.nz/release/new-zealand-secures-historic-free-trade-deal-united-kingdom.

Armstrong, Jed. 2015. 'The Reserve Bank of New Zealand's Output Gap Indicator Suite and Its Real-Time Properties -'. Reserve Bank of New Zealand Analytical Note Series AN2015/08. Reserve Bank of New Zealand. https://www.rbnz.govt.nz/research-and-publications/analytical-notes/2015/an2015-08.

Auriol, Emmanuelle, and Alice Mesnard. 2016. 'Sale of Visas: A Smuggler's Final Song?' *Economica* 83 (332): 646–78. https://doi.org/10.1111/ecca.12204.

Auriol, Emmanuelle, Alice Mesnard, and Tiffanie Perrault. 2021. 'Controlling Irregular Migration: Can a Market for Temporary Foreign Work Permits Help?' Discussion Paper DP16777. London: Centre for Economic Policy Research.

Australian Productivity Commission. 2006. 'Economic Impacts of Migration and Population Growth: Research Report'. Canberra: Australian Productivity Commission.

———. 2016. 'Migrant Intake into Australia - Productivity Commission Inquiry Report'. Canberra: Australian Productivity Commission. https://www.pc.gov.au/inquiries/completed/migrant-intake/report.

Azarnert, Leonid V. 2017. 'Migration, Congestion and Growth'. CESifo Working Paper 6508. Munich: Munich Society for the Promotion of Economic Research - CESifo.

Banks, Gary. 2011. 'Introduction'. In *A 'Sustainable' Population? - Key Policy Issues*. Canberra: Australian productivity Commission. https://www.pc.gov.au/research/supporting/sustainable-population.

Becker, Gary S., and Diane Coyle. 2011. 'The Challenge of Immigration: A Radical Solution'. Monographs Occasional Paper 145. London: Institute of Economic Affairs. https://doi.org/10.2139/ssrn.1846567.

Bedford, Charlotte, Richard Bedford, and Heather Nunns. 2020. 'RSE Impact Study: Pacific Stream Report'. Wellington: Ministry of Business Innovation and Employment (MBIE).

Bell, Jess. 2021. 'NZ Restaurants Turn out Lights in Protest over Crippling Skill Shortage'. 2021. https://www.hcamag.com/nz/news/general/nz-restaurants-turn-out-lights-in-protest-over-crippling-skill-shortage/258174.

Belshaw, Horace. 1952. *Immigration, Problems and Policies*. Wellington: Wright and Carman.

Bennion, Tom, and Judy Boyd. 1994. 'Immigration Claim Wai 223'. Wellingon: Waitangi Tribunal.

Borjas, George J. 1987. 'Self-Selection and the Earnings of Migrants'. NBER Working Paper No. 2248. National Bureau of Economic Research.

Bostock New Zealand. 2019. 'Hawke's Bay's Largest Purpose-Built Accommodation for Seasonal Workers Is Well Underway'. *Bostock New Zealand* (blog). 18 December 2019. https://www.bostock.nz/hawkes-bays-largest-purpose-built-accommodation-for-seasonal-workers-is-well-underway/.

Bradford, Max. 1998. 'Immigration Target Levels'. Wellington: Government of New Zealand.

Brosnan, Peter, and Jacques Poot. 1987. 'Modelling the Determinants of Trans-Tasman Migration after World War II*'. *Economic Record* 63 (4): 313–29. https://doi.org/10.1111/j.1475-4932.1987.tb00665.x.

Burke, Kerry. 1986. 'Review of Immigration Policy'. Wellington: Government of New Zealand.

Bushnell, Peter, and Wai Kin Choy. 2001. 'Go West, Young Man, Go West!? (WP 01/07)'. Treasury Working Paper 10/07. Wellington: The Treasury. https://www.treasury.govt.nz/publications/wp/go-west-young-man-go-west-wp-01-07.

Cabinet Office. 2019. 'Te Tiriti o Waitangi / Treaty of Waitangi Guidance'. Cabinet Office Circular CO (19) 5. Wellington: Government of New Zealand.

Campo, Francesco, Giuseppe Forte, and Jonathan Portes. 2018. 'The Impact of Migration on Productivity and Native-Born Workers' Training'. IZA Discussion Paper 11833. Bonn: Institute of Labor Economics (IZA), Bonn.

Carey, David. 2019. 'Improving Well-Being in New Zealand through Migration'. OECD Economics Department Working Papers No. 1566. Paris: Organisation for Economic Cooperation and Development.

Carville, Olivia. 2017. 'The Great Tourism Squeeze: New Zealand Signature Walk Overrun by Tourists'. *NZ Herald*, 2 May 2017, sec. Business, Rotorua Daily Post, Whanganui Chronicle, Environment. https://www.nzherald.co.nz/business/the-great-tourism-squeeze-new-zealand-signature-walk-overrun-by-tourists/PYQ3NBLYDAZIQFEPRSXW27OZGE/.

Casella, Alessandra, and Adam B. Cox. 2018. 'A Property Rights Approach to Temporary Work Visas'. *The Journal of Legal Studies* 47 (S1): S195–227.

Chen, Joyce, Katrina Kosec, and Valerie Mueller. 2016. 'Temporary and Permanent Migrant Selection: Theory and Evidence of Ability-Search Cost Dynamics'. IZA Discussion Paper No 9639. Bonn: Institute for the Study of Labor (IZA). https://www.iza.org/publications/dp/9639/temporary-and-permanent-migrant-selection-theory-and-evidence-of-ability-search-cost-dynamics.

Chiang, Jessie. 2022. 'What Will the Return of the Big OE Mean for Employers?' RNZ. 21 February 2022. https://www.rnz.co.nz/programmes/the-detail/story/2018831397/the-return-of-the-big-oe.

Choy, Wai Kin, and Hayden Glass. 2002. 'Brain Drain in New Zealand: Issues, Evidence and Implications'. *Agenda: A Journal of Policy Analysis and Reform* 9 (1): 65–82.

Clemens, Michael A. 2011. 'Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?' *Journal of Economic Perspectives* 25 (3): 83–106. https://doi.org/10.1257/jep.25.3.83.

———. 2018. 'Testing for Repugnance in Economic Transactions: Evidence from Guest Work in the Gulf'. *The Journal of Legal Studies* 47 (S1): S5–44. https://doi.org/10.1086/694615.

Clough, Peter. 2020. 'Tourism beyond Covid-19 - Is the Future Sustainable, Local and Green?' 87. NZIER Insight. Wellington: New Zealand Institute of Economic Research. https://nzier.org.nz/publication/tourism-beyond-covid-19-is-the-future-local-and-green.

Coates, Brendan, Henry Sherrell, and Will Mackey. 2022. 'Fixing Temporary Skilled Migration: A Better Deal for Australia'. Sydney: Grattan Institute.

Collie, David R. 2009. 'Auctioning Immigration Visas'. *Review of Development Economics* 13 (4): 687–94. https://doi.org/10.1111/j.1467-9361.2009.00521.x.

Collins, Francis. 2016. 'Temporary Migration and Urban Incorporation in Auckland'. University of Auckland. https://doi.org/10.13140/RG.2.1.2015.5284.

Collins, Simon. 2016. 'Migrants "crowding out" Young Kiwis'. *NZ Herald*, October. https://www.nzherald.co.nz/nz/migrants-crowding-out-young-kiwis-from-jobs-salvation-army/E2CXSB3CV4XR2FN7LG46F5CRVU/.

Costa, Daniel, and Philip Martin. 2018. 'Temporary Labor Migration Programs: Governance, Migrant Worker Rights, and Recommendations for the U.N. Global Compact for Migration'. Washington, DC: Economic Policy Institute. https://www.epi.org/publication/temporary-labor-migration-programs-governance-migrant-worker-rights-and-recommendations-for-the-u-n-global-compact-for-migration/.

Dalziel, Lianne. 2009. 'Immigration Bill'. In *Hansard*, 657:6671. https://www.parliament.nz/en/pb/hansard-debates/rhr/document/49HansS_20090917_00001521/dalziel-lianne-immigration-bill-in-committee.

De Boni, Dita. 2021. 'It's Not about Us Wanting Immigrants – It's about Them Wanting Us'. *NBR*, 19 May 2021, sec. The Flip Side, Opinion, Columns. https://www.nbr.co.nz/node/230204.

Del Savio, Lorenzo. 2020. 'Anti-Immigration Backlashes as Constraints'. *Ethical Theory and Moral Practice* 23 (1): 201–22. https://doi.org/10.1007/s10677-019-10058-y.

Department of the Prime Minister and Cabinet. 2022. 'Long-Term Insights Briefings'. Long-Term Insights Briefings. 2022. https://dpmc.govt.nz/our-programmes/policy-project/long-term-insights-briefings.

Duncan, Natasha T., Jacques Poot, and Brigitte Waldorf. 2020. 'Modeling the Dynamics of Circular Migration'. In *Population Change and Impacts in Asia and the Pacific*, 183–200. New Frontiers in Regional Science: Asian Perspectives 30. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-10-0230-4_8.

Dustmann, Christian, Giovanni Facchini, and Cora Signorotto. 2015. 'Population, Migration, Ageing and Health: A Survey'. 1518. *CReAM Discussion Paper Series*. CReAM Discussion Paper Series. Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London. https://ideas.repec.org/p/crm/wpaper/1518.html.

Dustmann, Christian, and Tommaso Frattini. 2010. 'Can a Framework for the Economic Cost-benefit Analysis of Various Immigration Policies Be Developed to Inform Decision Making and, If so, What Data Are Required?"'. London: Migration Advisory Committee.

Dustmann, Christian, and Joseph-Simon Görlach. 2016. 'The Economics of Temporary Migrations'. *Journal of Economic Literature* 54 (1): 98–136.

Dustmann, Christian, Hyejin Ku, and Tanya Surovtseva. 2021. 'Real Exchange Rates and the Earnings of Immigrants'. 10/21. CReAM Discussion Paper Series. London: Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London.

Dustmann, Christian, and Ian P. Preston. 2019. 'Free Movement, Open Borders, and the Global Gains from Labor Mobility'. *Annual Review of Economics* 11 (1): 783–808. https://doi.org/10.1146/annurev-economics-080218-025843.

Ehrlich, Isaac, and Jinyoung Kim. 2015. 'Immigration, Human Capital Formation and Endogenous Economic Growth'. IZA Discussion Paper DP No. 9599. Bonn: Institute for the Study of Labor (IZA). https://www.iza.org/publications/dp/9599/immigration-human-capital-formation-and-endogenous-economic-growth.

Environment Foundation, and Environmental Defence Society. 2022. 'Environment Guide'. 2022. https://www.environmentguide.org.nz/.

Faafoi, Kris. 2022. 'Return of Working Holidaymakers a Boost to Economic Recovery'. Wellington: Government of New Zealand. http://www.beehive.govt.nz/release/return-working-holidaymakers-boost-economic-recovery.

Faafoi, Kris, and Damien O'Connor. 2022. 'Boost in RSE Numbers to Help Hort Sector Grow'. Wellington: Government of New Zealand. http://www.beehive.govt.nz/release/boost-rse-numbers-help-hort-sector-grow.

Farmer, R.S.J. 1997a. 'New Zealand's "Targeted" Immigration Policy, 1991 to 1996.' *People and Place* 5 (1): 1–15.

———. 1997b. 'New Zealand's "Targeted" Immigration Policy, 1991 to 1996.' *People and Place* 5 (1): 1–15.

Feenstra, Robert, Robert Inklaar, and Marcel Timmer. 2015. 'The Next Generation of the Penn World Table'. *American Economic Review* 105 (10): 3150*3182.

Fonseka, Dileepa. 2022. 'Immigration "reset" Could Link Migrant Numbers to Building Consents, and Tightly Limit Migration'. *Stuff*, 12 February 2022, sec. business.

https://www.stuff.co.nz/business/127732546/immigration-reset-could-link-migrant-numbers-to-building-consents-and-tightly-limit-migration.
Frattini, Tommaso. 2017. 'Integration of Immigrants in Host Countries. What We Know and What Works'. *Revue deconomie du developpement* 25 (1): 105–34.
Freeman, Richard B. 2006. 'People Flows in Globalization'. *Journal of Economic Perspectives* 20 (2): 145–70. https://doi.org/10.1257/jep.20.2.145.
Freiman, Christopher. 2019. 'The Case for Markets in Citizenship'. *Journal of Applied Philosophy* 36 (1): 124–36.
Fry, Julie. 2014. 'Migration and Macroeconomic Performance in New Zealand: Theory and Evidence'. 14/10. New Zealand Treasury Working Paper. New Zealand Treasury.
———. 2022. 'Together Alone: A Review of Joined-up Social Services'. Wellington: New Zealand Productivity Commission.
Fry, Julie, and Hayden Glass. 2016. *Going Places: Migration, Economics and the Future of New Zealand*. 1st ed. BWB Texts. Bridget Williams Books. https://doi.org/10.7810/9780947492694.
Fry, Julie, and Peter Wilson. 2018. *Better Lives: Migration, Wellbeing and New Zealand*. BWB Texts. Wellington, New Zealand: Bridget Williams Books Limited.
———. 2020. 'Migration after Covid-19'. 89. NZIER Insight. New Zealand Institute of Economic Research. https://nzier.org.nz/publication/migration-after-covid-19-nzier-insight-89.
———. 2021. 'Picking Cherries: Evidence on the Effects of Temporary and Seasonal Migrants on the New Zealand Economy'. New Zealand Institute of Economic Research. https://nzier.org.nz/publication/picking-cherries-evidence-on-the-effects-of-temporary-and-seasonal-migrants-on-the-new-zealand-economy.
Gibson, Anne. 2015. 'Education Driving China Property Interest'. *NZ Herald*, 16 July 2015, sec. Business, Property. https://www.nzherald.co.nz/business/its-education-migration-driving-prices-says-china-property-site/FXW7EBJ6C6EFZKR5XD75A6TAZA/.
Gibson, John, David McKenzie, and Steven Stillman. 2013. 'Accounting for Selectivity and Duration-Dependent Heterogeneity When Estimating the Impact of Emigration on Incomes and Poverty in Sending Areas'. *Economic Development and Cultural Change* 61 (2): 247–80.
Glass, Hayden, Michael Ryan, Jo Smith, Tom Love, and Julie Fry. 2017. 'Defining and Applying the Value That INZ Applicants Bring to New Zealand: Methodology and Results'. Wellington: Sapere Research Group.
Gooch, Carly. 2021. 'Nationwide GP Shortage a "workforce" and "Workload" Issue'. *Stuff*, 15 August 2021, sec. national. https://www.stuff.co.nz/national/health/126040965/nationwide-gp-shortage-a-workforce-and-workload-issue.
Gorbey, Susi, Doug James, and Jacques Poot. 1999. 'Population Forecasting with Endogenous Migration: An Application to Trans-Tasman Migration'. *International Regional Science Review* 22 (1): 69–101.
Gould, John. 1982. *The Rake's Progress: The New Zealand Economy since 1945*. Auckland: Hodder and Stoughton.
Gover, Kirsty, and Natalie Baird. 2002. 'Identifying the Māori Treaty Partner'. *The University of Toronto Law Journal* 52 (1): 39–68. https://doi.org/10.2307/825927.
Government of New Zealand. 2004. '2004 Fiscal Strategy Report'. Wellington: The Treasury.
———. 2009. 'Fiscal Strategy Report 2009'. 2009. https://www.treasury.govt.nz/resources/fiscal-strategy-report-5.
———. 2021. 'Wellbeing Budget 2021 - Securing Our Recovery - 20 May 2021'. Wellington: The Treasury.
Guerreiro, Joao, Sergio Rebelo, and Pedro Teles. 2020. 'What Is the Optimal Immigration Policy? Migration, Jobs, and Welfare'. *Journal of Monetary Economics*, SI:NOV2019 CRN CONFERENCE, 113 (August): 61–87. https://doi.org/10.1016/j.jmoneco.2020.04.009.

Hamilton, James D. 2017. ‘Why You Should Never Use the Hodrick-Prescott Filter’. Working Paper 23429. Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w23429.
Hastings District Council. 2018. ‘Providing Future RSE Accommodation Needs’. Hastings: Hastings District Council.
Hatton, Timothy J., and Jeffrey G. Williamson. 2005. *Global Migration and the World Economy: Two Centuries of Policy and Performance*. Cambridge, MA, USA: MIT Press.
Hawke, Gary. 1981. ‘The Growth of the Economy’. In *The Oxford History of New Zealand*. Wellington: OUP.
———. 1985. *The Making of New Zealand: An Economic History*. Cambridge: Cambridge University Press.
Hensen, Mike. 2020. ‘Economic Impact of Universities’. Wellington: New Zealand Institute of Economic Research. https://nzier.sharepoint.com/Library/Collection%20-%20NZIER/Contracts%20final%20reports/2020/13784%20University%20economic%20impact%202019.pdf.
Hill, Ruth. 2022. ‘Refugee Sponsorship Scheme Sees Kiwis Volunteer to Help Settle Migrants’. *RNZ*. https://www.rnz.co.nz/news/national/462405/refugee-sponsorship-scheme-sees-kiwis-volunteer-to-help-settle-migrants.
Hipkins, Chris. 2020. ‘A Strategic Recovery Plan for the International Education Sector’. Wellington: New Zealand Government. https://covid19.govt.nz/assets/resources/proactive-release-2020-july/E12-Minute-and-Paper-International-Education-Recovery-22-June-2020.pdf.
Hodgson, Rob, and Jacques Poot. 2010. *New Zealand Research on the Economic Impacts of Immigration 2005 - 2010: Synthesis and Research Agenda*. Economic Impacts of Immigration Working Paper Series. Wellington: Department of Labour.
Holmes, Frank. 1966. ‘Some Thoughts on Immigration’. NZIER Quarterly Predictions NOs, 9, 10 and 11. Wellington: New Zealand Institute of Economic Research.
Hospitality NZ. 2021. ‘Hospitality Skills Shortages At Crisis Level, Says Hospitality New Zealand | Scoop News’. 10 June 2021. https://www.scoop.co.nz/stories/BU2106/S00173/hospitality-skills-shortages-at-crisis-level-says-hospitality-new-zealand.htm.
House of Representatives Standing Committee for Long Term Strategies. 1994. ‘Australia’s Population 'Carrying Capacity''. Canberra: Parliament of the Commonwealth of Australia.
Hutchison, Jonathan. 2012. ‘School Boosts Home Values in an Auckland Neighborhood’. *The New York Times*, 17 February 2012, sec. Great Homes & Destinations. https://www.nytimes.com/2012/02/17/greathomesanddestinations/school-boosts-home-values-in-an-auckland-neighborhood.html.
Immigration New Zealand. 2021. ‘Claiming Refugee and Protection Status in New Zealand’. Wellington: Immigration New Zealand. https://www.immigration.govt.nz/documents/forms-and-guides/claiming-refugee-and-protection-status-in-new-zealand-march-2021.
———. 2022a. ‘Approved Classes of Workers’. Immigration New Zealand. 2022. https://www.immigration.govt.nz/about-us/covid-19/covid-19-information-for-employers/bringing-workers-to-nz/approved-classes-of-workers.
———. 2022b. ‘Are You Employing Migrant Aged Care Workers?’ 2022. https://www.immigration.govt.nz/employ-migrants/guides/aged-care.
———. 2022c. ‘Community Organisation Refugee Sponsorship Visa Category Now Open’. Immigration New Zealand. 2022. https://www.immigration.govt.nz/about-us/media-centre/media-releases/community-organisation-refugee-sponsorship-visa-category-now-open.
———. 2022d. ‘Information about: Parent Resident Visa’. Immigration New Zealand. 2022. https://www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/about-visa/parent-resident-visa.

———. 2022e. ‘New Zealand Refugee Quota Programme’. Immigration New Zealand. 2022. https://www.immigration.govt.nz/about-us/what-we-do/our-strategies-and-projects/supporting-refugees-and-asylum-seekers/refugee-and-protection-unit/new-zealand-refugee-quota-programme.
———. 2022f. ‘Operational Manual’. 2022. https://www.immigration.govt.nz/opsmanual/#35439.htm.
Jackson, Natalie. 2011. ‘The Demographic Forces Shaping New Zealand’s Future. What Population Ageing [Really] Means’. Working Paper. National Institute of Demographic and Economic Analysis (NIDEA). https://researchcommons.waikato.ac.nz/handle/10289/6539.
Jacob, Punnoose, and Finn Robinson. 2019. ‘Suite as! Augmenting the Reserve Bank’s Output Gap Indicator Suite’. Reserve Bank of New Zealand Analytical Note Series AN2019/08. Wellington: Reserve Bank of New Zealand. https://www.rbnz.govt.nz/research-and-publications/analytical-notes/2019/an2019-08.
Jaumotte, Florence, Ksenia Koloskova, and Sweta Chaman Saxena. 2016. ‘Impact of Migration on Income Levels in Advanced Economies’. No. 8. Spillover Notes. International Monetary Fund. https://www.imf.org/en/Publications/Spillover-Notes/Issues/2016/12/31/Impact-of-Migration-on-Income-Levels-in-Advanced-Economies-44343.
Johnson, Kit. 2018. ‘A Citizenship Market’. *U. Ill. L. Rev.*, 969.
Jones, Charles I. 2020. ‘The End of Economic Growth? Unintended Consequences of a Declining Population’. Working Paper 26651. Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w26651.
Kasper, Wolfgang. 1990. ‘Populate or Languish? Rethinking New Zealand’s Immigration Policy’. Wellington: New Zealand Business Roundtable. https://www.nzinitiative.org.nz//reports-and-media/reports/populate-or-languish-rethinking-new-zealands-immigration-policy/?1.
Kearney, Melissa S., Phillip B. Levine, and Luke Pardue. 2022. ‘The Puzzle of Falling US Birth Rates since the Great Recession’. *Journal of Economic Perspectives* 36 (1): 151–76. https://doi.org/10.1257/jep.36.1.151.
Krugman, Paul. 1994a. *The Age of Diminished Expectations: US Economic Policy in the 1990s*. 3. ed. Cambridge, Mass.: MIT.
———. 1994b. ‘The Myth of Asia’s Miracle’. *Foreign Affairs* 73 (6): 62–78. https://doi.org/10.2307/20046929.
Kukutai, Tahu, and Arama Rata. 2017. ‘From Mainstream to Manaaki: Indigenising Our Approach to Immigration’. In *Fair Borders? Migration Policy in the Twenty-First Century*. Wellington: Bridget Williams Books.
Langfield, Michele. 1999. ‘More People Imperative: Immigration to Australia, 1901–39’. Canberra: National Archives of Australia. https://www.naa.gov.au/sites/default/files/2020-06/research-guide-more-people-imperative_0.pdf.
Law Library of Congress. 2013. ‘Points-Based Immigration Systems.’ Image. Washington, DC: The Law Library of Congress, Global Legal Research Center. https://www.loc.gov/item/2013404868/.
Lees-Galloway, Ian. 2018. ‘New Zealand Residence Programme: New Objectives and Approach to Managing Residence Numbers’. Wellington: Government of New Zealand.
———. 2020. ‘Supporting Stranded Seasonal Workers to Keep Working with More Flexible Options’. Wellington: New Zealand Government. http://www.beehive.govt.nz/release/supporting-stranded-seasonal-workers-keep-working-more-flexible-options.
Lewis, Ethan. 2011. ‘Immigration, Skill Mix, and Capital Skill Complementarity*’. *The Quarterly Journal of Economics* 126 (2): 1029–69. https://doi.org/10.1093/qje/qjr011.
Lewis, John, and Matt Swannell. 2018. ‘The Macroeconomic Determinants of Migration’. Staff Working Paper No 729. Bank of England.
Lewis, Oliver. 2017. ‘Marlborough Vineyard Contractors Encouraged to Invest in Purpose-Built Accommodation for Workers’. *The Marlborough Express*, 23 May 2017, sec. marlborough-

express. https://www.stuff.co.nz/marlborough-express/news/92766386/marlborough-vineyard-contractors-encouraged-to-invest-in-purposebuilt-accommodation-for-workers.
Lienert, Ashley, and David Gillmore. 2015. 'The Reserve Bank's Method of Estimating "Potential Output"'. Reserve Bank of New Zealand Analytical Note Series AN2015/01. Reserve Bank of New Zealand. https://www.rbnz.govt.nz/research-and-publications/analytical-notes/2015/an2015-01.
Lokshin, Michael, and Martin Ravallion. 2019a. 'A Market for Work Permits'. NBER Working Paper 26590. National Bureau of Economic Research, Inc. https://www.nber.org/system/files/working_papers/w26590/w26590.pdf.
———. 2019b. 'The Missing Market for Work Permits'. Policy Research Working Paper 9005. World Bank. https://documents1.worldbank.org/curated/en/382301568302053377/pdf/The-Missing-Market-for-Work-Permits.pdf.
Love, Susan. 2022. 'Population Policy since the Second World War: Immigration Aspects'. Text. Canberra: Parliament of Australia, Department of the parliamentary Library. Australia. https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp2122/PopulationPolicySinceWWII.
Love, Susan, and Michael Klapdor. 2020. 'New Zealanders in Australia: A Quick Guide'. Research Paper Series. Canberra: Australian Parliamentary Library. Australia. https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1920/Quick_Guides/NewZealandersInAustralia.
Maré, David C, Richard Fabling, and Steven Stillman. 2011. 'Immigration and Innovation'. Motu Working Paper 11–05. Motu Economic and Public Policy Research.
McAuliffe, Marie, and Anna Triandafyllidou. 2021. 'World Migration Report 2022'. New York: International Organization for Migration.
McClure, Margaret. 2010. 'Crowding on the Tongariro Crossing'. In *Te Ara - the Encyclopedia of New Zealand*. Wellington: Ministry of Culture and Heritage. https://teara.govt.nz/en/photograph/23202/crowding-on-the-tongariro-crossing.
McLeod, Keith, and David Maré. 2013. 'The Rise of Temporary Migration in New Zealand and Its Impact on the Labour Market.' Wellington, NZ: Ministry of Business, Innovation and Employment.
———. 2018. 'Impact of Temporary Migration on Employment and Earnings of New Zealanders.' Wellington: Ministry of Business Innovation and Employment (MBIE). https://www.mbie.govt.nz/dmsdocument/4241-impact-of-temporary-migration-on-employment-earnings-new-zealanders.
Minister of Health. 2011. 'Health and Disability Services Eligibility Direction 2011'. Wellingon: Ministry of Health.
Ministry for the Environment. 2022. 'Have Your Say on Making Drinking Water Safer for Everyone'. Ministry for the Environment. 10 January 2022. https://environment.govt.nz/news/have-your-say-on-making-drinking-water-safer-for-everyone/.
Ministry for the Environment and Stats NZ. 2021. 'Our Land 2021.' Wellington: Government of New Zealand. https://environment.govt.nz/assets/Publications/our-land-2021.pdf.
Ministry of Business, Innovation and Employment. 2013. 'Review of Skilled Migration Policies: Objectives, Analysis and Issues Identification'. Wellington: Ministry of Business Innovation and Employment (MBIE).
———. 2020. 'Temporary Migrant Worker Exploitation Review'. 5 August 2020. https://www.mbie.govt.nz/immigration-and-tourism/immigration/temporary-migrant-worker-exploitation-review/.
———. 2021a. 'Energy Strategies for New Zealand'. 2021. https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-strategies-for-new-zealand/.

———. 2021b. ‘Gas Regulatory Framework’. 2021. https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-generation-and-markets/gas-market/gas-regulatory-framework/.
———. 2021c. ‘Long-Term Direction for the Immigration Portfolio: A Rebalance’. Wellington: Ministry of Business, Innovation and Employment.
———. 2022. ‘Migration Data Explorer’. 2022. https://mbienz.shinyapps.io/migration_data_explorer/.
Ministry of Economic Development, Ministry of Social Development, Department of Labour, and New Zealand, eds. 2003. *Population and Sustainable Development 2003*. Wellington, N.Z.: Ministry of Economic Development ; Department of Labour.
Ministry of Education. 2022. ‘The Education (Domestic Students) Notice 2022’. Wellingon: Ministry of Education.
Ministry of Foreign Affairs and Trade. 2021. ‘New Zealand’s International Development Cooperation’. Ministry of Foreign Affairs and Trade.
Ministry of Transport. 2020. ‘Government Policy Statement on Land Transport’. Ministry of Transport. 2020. https://www.transport.govt.nz/area-of-interest/strategy-and-direction/government-policy-statement-on-land-transport/.
———. 2021. ‘Government Policy Statement on Land Transport: Draft for Engagement’. https://www.transport.govt.nz//assets/Uploads/Other/DraftGPS2021.pdf.
Mishkin, Frederic. 2007. ‘Estimating Potential Output’. In . Dallas, Texas. https://www.federalreserve.gov/newsevents/speech/mishkin20070524a.htm.
Moraga, Jesús Fernández-Huertas, and Hillel Rapoport. 2014. ‘Tradable Immigration Quotas’. *Journal of Public Economics* 115 (July): 94–108. https://doi.org/10.1016/j.jpubeco.2014.04.002.
Mulholland, Malcolm, and Veronica M. H Tawhai. 2017. ‘Introduction’. In *Weeping Waters: The Treaty of Waitangi and Constitutional Change*. Wellington: Huia Publishers.
Nash, Stuart, and Kris Faafoi. 2021. ‘Immigration Reset: Setting the Scene’. Government of New Zealand. http://www.beehive.govt.nz/speech/immigration-reset-setting-scene.
New Zealand Productivity Commission. 2015. ‘More Effective Social Services’. Wellington: New Zealand Productivity Commission. http://www.productivity.govt.nz/sites/default/files/social-services-final-report-main.pdf.
———. 2017. ‘Better Urban Planning’. Wellington: New Zealand Productivity Commission.
———. 2018. ‘Improving State Sector Productivity. Final Report of the Measuring and Improving State Sector Productivity Inquiry, Vol 1’. Welington: New Zealand Productivity Commission. https://www.productivity.govt.nz/assets/Documents/a110722008/Final-Report-Improving-State-Sector-Productivity.pdf.
———. 2019. ‘Local Government Funding and Financing Final Report’. Wellington: New Zealand Productivity Commission. https://www.productivity.govt.nz/assets/Documents/a40d80048d/Final-report_Local-government-funding-and-financing.pdf.
———. 2021a. ‘Immigration - Fit for the Future: Preliminary Findings and Recommendations’. Wellington: New Zealand Productivity Commission. https://www.productivity.govt.nz/assets/Documents/Immigration_draft-report.pdf#page=4.
———. 2021b. ‘Immigration Policy: International Perspectives’. NZPC Working Paper No. 2021/08. Wellington: New Zealand Productivity Commission.
———. 2021c. ‘Impacts of Immigration on the Labour Market and Productivity.’ https://www.productivity.govt.nz/assets/Documents/Impacts-of-immigration-on-the-labour-market-and-productivity.pdf.
———. 2021d. ‘International Migration to New Zealand: Historical Themes & Trends.’ NZPC Working Paper No. 2021/04. Wellington: New Zealand Productivity Commission. https://www.productivity.govt.nz/assets/Documents/International-migration-to-NZ_historical-themes-and-trends.pdf.

———. 2021e. ‘Primer to New Zealand’s Immigration System.’ Wellington: New Zealand Productivity Commission. https://www.productivity.govt.nz/assets/Documents/Primer-to-New-Zealands-immigration-system.pdf.
———. 2021f. ‘The Wider Wellbeing Effects of Immigration.’ NZPC Working Paper No. 2021/07. Wellington: New Zealand Productivity Commission. https://www.productivity.govt.nz/assets/Documents/The-wider-wellbeing-effects-of-immigration.pdf.
Nowrasteh, Alex. 2018. ‘Singapore’s Immigration System: Past, Present, and Future’. Cato Working Paper No. 53. Washington, DC: Cato Institute.
Nunns, Heather, Charlotte Bedford, and Richard Bedford. 2019. ‘RSE Impact Study: New Zealand Stream Report’. Wellington: Ministry of Business Innovation and Employment (MBIE).
Ochel, Wolfgang. 2001. ‘Selective Immigration Policies: Point System versus Auction Model’. *CESifo Forum*, no. Summer. https://www.cesifo.org/en/publikationen/2001/article-journal/selective-immigration-policies-point-system-versus-auction-model.
OECD. 2013. ‘Government at a Glance 2013’. Paris: Organisation for Economic Cooperation and Development. https://doi.org/10.1787/gov_glance-2013-en.
———. 2014. ‘Is Migration Good for the Economy?’ Migration Policy Debates. Paris: Organisation for Economic Cooperation and Development.
———. 2017. ‘New Zealand 2017 Highlights’. Environmental performance reviews. Paris: Organisation for Economic Cooperation and Development.
———. 2019. *Recruiting Immigrant Workers: Canada 2019*. Recruiting Immigrant Workers. OECD. https://doi.org/10.1787/4abab00d-en.
———. 2022. ‘Demography - Population’. OECD Data. 2022. http://data.oecd.org/pop/population.htm.
Orrenius, Pia, and Madeline Zavodny. 2020. ‘An Auctions Approach to Immigration Policy’. IZA Policy paper 151. Institute for the Study of Labor. http://ftp.iza.org/pp151.pdf.
Peri, Giovanni. 2016. ‘Immigrants, Productivity, and Labor Markets’. *Journal of Economic Perspectives* 30 (4): 3–30. https://doi.org/10.1257/jep.30.4.3.
Poot, Jacques. 2010. ‘Trans-Tasman Migration, Transnationalism and Economic Development in Australasia’. *Asian and Pacific Migration Journal* 19 (3): 319–42. https://doi.org/10.1177/011719681001900302.
Poot, Jacques, and William Cochrane. 2005. ‘Measuring the Economic Impact of Immigration: A Scoping Paper’. Working Paper. University of Waikato, Population Studies Centre. https://researchcommons.waikato.ac.nz/handle/10289/823.
Poot, Jacques, and Lynda Sanderson. 2007. ‘Changes in Social Security Eligibility and the International Mobility of New Zealand Citizens in Australia’. DP-65. *Population Studies Centre Discussion Papers*. Population Studies Centre Discussion Papers. University of Waikato, Population Studies Centre. https://ideas.repec.org/p/wai/pscdps/dp-65.html.
Poot, Jacques, and Steven Stillman. 2016a. ‘Skill Composition of Immigration Flows and the Measurement of Education-Occupation Mismatch’. *IZA Journal of Migration* 5. http://search.ebscohost.com/login.aspx?direct=true&db=ecn&AN=1648212&site=ehost-live.
———. 2016b. ‘The Importance of Heterogeneity When Examining Immigrant Education-Occupation Mismatch: Evidence from New Zealand’. IZA Discussion Paper No. 5211. Institute for the Study of Labor (IZA). https://www.iza.org/publications/dp/5211/the-importance-of-heterogeneity-when-examining-immigrant-education-occupation-mismatch-evidence-from-new-zealand.
Portes, Jonathan. 2022. ‘Immigration and the UK Economy after Brexit’. *Oxford Review of Economic Policy* 38 (1): 82–96. https://doi.org/10.1093/oxrep/grab045.
Price, Carmel E., and Ben Feldmeyer. 2012. ‘The Environmental Impact of Immigration: An Analysis of the Effects of Immigrant Concentration on Air Pollution Levels’. *Population Research and Policy Review* 31 (1): 119–40. https://doi.org/10.1007/s11113-011-9216-3.

Public Service Commission. 2020. ‘Future of Work Environmental Scan – Demographic and Labour Force Change’. Wellington: Public Service Commission.
PwC. 2020. ‘Cost - Benefit Analysis for a National Policy Statement on Urban Development’. Wellington: Ministry for the Environment. https://environment.govt.nz/assets/Publications/Files/NPS-UD-CBA-final.pdf.
Quince, Khylee. 2021. ‘Immigration Reset Allows Us to Honour the Bargain Struck in Te Tiriti’. *Stuff*, 25 June 2021, sec. pou-tiaki. https://www.stuff.co.nz/pou-tiaki/125559229/immigration-reset-allows-us-to-honour-the-bargain-struck-in-te-tiriti.
Rata, Arama. 2021. ‘Rangatiratanga and Immigration’. *E-Tangata*, 4 December 2021. https://e-tangata.co.nz/comment-and-analysis/rangatiratanga-and-immigration/.
Reddell, Michael. 2013. ‘The Long-Term Level “Misalignment” of the Exchange Rate: Some Perspectives on Causes and Consequences’. Reserve Bank of New Zealand.
———. 2020. ‘Economic Performance: A Prosperous, Very Distant Economy’. In *Public Policy and Governance Frontiers in New Zealand*, 32:53–70. Public Policy and Governance. Emerald Publishing Limited. https://doi.org/10.1108/S2053-769720200000032023.
———. 2021. ‘Rethinking Immigration Policy for a Post-Covid New Zealand’. Presented at the Wellington North Rotary Club.
Reidy, Madison. 2021. ‘Construction Industry Warns Government Its Agenda at Risk Unless Worker Shortage Solved’. *Newshub*, 9 August 2021, sec. Politics. https://www.newshub.co.nz/home/politics/2021/08/construction-industry-warns-government-its-agenda-at-risk-unless-worker-shortage-solved.html.
Reserve Bank of New Zealand. 2019. ‘Monetary Policy Handbook -’. Wellington: Reserve Bank of New Zealand. https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/monetary-policy-handbook.
———. 2022. ‘February 2022 Monetary Policy Statement’. Wellington: Reserve Bank of New Zealand.
Restaurant & Café. 2021. ‘Hospitality Sector Facing New Wave of Labour Shortages’. Restaurant & Café. 8 July 2021. https://restaurantandcafe.co.nz/hospitality-sector-facing-new-wave-of-labour-shortages/.
RNZ. 2018. ‘Twyford “regrets” Chinese NZers Felt Unfairly Targeted by 2015 Survey’. RNZ. 18 September 2018. https://www.rnz.co.nz/news/political/366730/twyford-regrets-chinese-nzers-felt-unfairly-targeted-by-2015-survey.
———. 2021. ‘Lack of Migrant Workers a Concern for Aged Care Sector’. RNZ. 26 February 2021. https://www.rnz.co.nz/news/national/437255/lack-of-migrant-workers-a-concern-for-aged-care-sector.
Rodrik, Dani. 2000. ‘Institutions for High-Quality Growth: What They Are and How to Acquire Them’. Working Paper 7540. Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w7540.
Rodway, Paul, and Peter Wilson. 2006. ‘Modelling New Zealand’s Long-Term Fiscal Position’. Treasury Policy perspectives paper 06/01. The Treasury. https://www.treasury.govt.nz/publications/ppp/modelling-new-zealands-long-term-fiscal-position-pp-06-01.
Rolfe, Heather, Tatiana Fic, Mumtaz Lalani, Monica Roman, Maria Prohaska, and Liliana Doudeva. 2013. ‘Potential Impacts on the UK of Future Migration from Bulgaria and Romania’. London: National Institute of Economic and Social Research.
Ross, Ruth. 1972. ‘Te Tiriti o Waitangi: Texts and Translations’. *New Zealand Journal of History* 6 (2): 129–57.
Sanderson, Kel, Ganesh Nana, David Norman, and JIani Wu. 2007. ‘The Economic Impact of Immigration on Housing in New Zealand 1991–2016’. Wellington: Business and Economic Research Limited.
Saxenian. 1999. ‘Silicon Valley’s New Immigrant Entrepreneurs’. San Francisco: Public Policy Institute of California.

———. 2000. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. 8th ed. Cambridge, Mass.: Harvard Univ. Press.
———. 2005. 'From Brain Drain to Brain Circulation: Transnational Communities and Regional Upgrading in India and China'. *Studies in Comparative International Development* 40 (2): 35–61. https://doi.org/10.1007/BF02686293.
———. 2007. *The New Argonauts: Regional Advantage in a Global Economy*. First Harvard University Press paperback edition. Cambridge, Massachusetts London, England: Harvard University Press.
Saxenian, Yasuyuki Motoyama, and Xiaohong Quan. 2002. *Local and Global Networks of Immigrant Professionals in Silicon Valley*. San Francisco, CA: Public Policy Institute of California.
Sparber, Chad. 2018. 'Choosing Skilled Foreign-Born Workers: Evaluating Alternative Methods for Allocating H-1B Work Permits'. *Industrial Relations: A Journal of Economy and Society* 57 (1): 3–34.
Spoonley, Paul. 2020. *The New New Zealand: Facing Demographic Disruption*. Auckland, New Zealand: Massey University Press.
Spoonley, Paul, and Richard Bedford. 2012. *Welcome to Our World? Immigration and the Reshaping of New Zealand*. Auckland, N.Z: Dunmore Pub.
Statistics New Zealand. 2010. *New Zealand Official Yearbook 2010*. 107th ed. Auckland: David Bateman.
Statistics NZ. 2017. 'Household Labour Force Survey Sources and Methods: 2016'. Wellington: Stats NZ.
Stats NZ. 2021a. 'Estimated Population of NZ'. 2021. https://www.stats.govt.nz/indicators/population-of-nz.
———. 2021b. 'National Population Projections: 2020 (Base)–2073'. 2021. https://www.stats.govt.nz/information-releases/national-population-projections-2020base2073.
Stevenson, Tim. 1992. 'Immigration Claim Wai 223'. Wellington: Waitangi Tribunal.
Stillman, Steven, and Dave Maré. 2009. 'The Labour Market Adjustment of Immigrants in New Zealand'. Motu Working Paper. Motu Economic and Public Policy Research. https://www.motu.nz/our-expertise/population-and-labour/migration/the-labour-market-adjustment-of-immigrants-in-new-zealand/.
Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development. 2021. 'Government Policy Statement on Housing and Urban Development'. Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development. 14 June 2021. https://www.hud.govt.nz/urban-development/government-policy-statement-gps/.
Te Waihanga. 2021a. 'Draft New Zealand Infrastructure Strategy Rautaki Hanganga o Aotearoa'. Wellington: New Zealand Infrastructure Commission, Te Waihanga.
———. 2021b. 'He Tūāpapa Ki Te Ora: Infrastructure for a Better Future'. Wellington: New Zealand Infrastructure Commission, Te Waihanga. https://infracom.govt.nz/assets/Uploads/Infrastructure-Strategy-Consultation-Document-May-2021.pdf.
The Treasury. 2010. 'Budget Economic and Fiscal Update 2010'. Wellington: The Treasury. https://www.treasury.govt.nz/publications/efu/budget-economic-and-fiscal-update-2010-html#section-3.
———. 2020. 'Types of Companies and Entities'. 2020. https://www.treasury.govt.nz/information-and-services/commercial-portfolio-and-advice/commercial-portfolio/types-companies-and-entities.
———. 2021. 'Higher Living Standards'. 2021. https://www.treasury.govt.nz/information-and-services/nz-economy/higher-living-standards.
Tourism Industry Aotearoa. 2022. 'Quick Facts & Figures'. 2022. https://www.tia.org.nz//about-the-industry/quick-facts-and-figures/?1.

Tsang, Flavia, and Charlene Rohr. 2011. 'The Impact of Migration on Transport and Congestion'. RAND Corporation. https://doi.org/10.7249/TR1187.
Turia, Tariana. 2007. 'Maori Concerns Can Not Be Brushed Aside'. Maori Party. https://www.scoop.co.nz/stories/PA0702/S00047.htm.
Van Dalen, Hendrik P., and Kène Henkens. 2011. 'Who Fears and Who Welcomes Population Decline?' *Demographic Research* 25 (13): 437–64. https://doi.org/10.4054/DemRes.2011.25.13.
Vargas-Silva, Carlos, Yvonni Markaki, and Madeleine Sumption. 2016. 'The Impacts of International Migration on Poverty in the UK'. The Joseph Rowntree Foundation.
Vernon, Victoria, and Klaus F. Zimmermann. 2021. 'Walls and Fences: A Journey Through History and Economics'. In *The Economic Geography of Cross-Border Migration*, edited by Karima Kourtit, Bruce Newbold, Peter Nijkamp, and Mark Partridge, 33–54. Footprints of Regional Science. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-48291-6_3.
Waitangi Tribunal. 2002. *The Ngai Tahu Sea Fisheries Report*. Wellington, N.Z.: Waitangi Tribunal.
Walker, Ranginui J. 1993. 'New Zealand Immigration and the Political Economy'. *The Social Contract* 4 (2): 86–95.
Welsch, Janina, Kerstin Conrad, and Dirk Wittowsky. 2018. 'Exploring Immigrants Travel Behaviour: Empirical Findings from Offenbach Am Main, Germany'. *Transportation* 45 (3): 733–50. https://doi.org/10.1007/s11116-016-9748-9.
Whāia Legal. 2021. 'Legal Advice on Immigration Policy and Te Tiriti o Waitangi'. Wellington.
White, Nicola. 2005. 'Immigration and the Treaty'. Wellington: Institute of Policy Studies.
Wilson, Peter, and Julie Fry. 2020. 'Could Do Better: Migration and New Zealand's Frontier Firms'. Wellington: New Zealand Productivity Commission. https://nzier.org.nz/publication/could-do-better-migration-and-new-zealands-frontier-firms.
Wilson, Peter, Julie Fry, and Greg Johansson. 2021. 'Te Whakatipu I Ngā Tāngata o Tangaroa -- Growing Ocean People: Report of the Ministerial Inquiry into the Use and Allocation of Migrant Labour in the Seafood Sector.' Government of New Zealand.
Winkelmann, Liliana, and Rainer Winkelmann. 1998. 'Immigrants in New Zealand': Wellington: Labour Market Policy Group.
Winkelmann, Rainer. 1999. 'Immigration: The New Zealand Experience'. IZA Discussion Paper No. 61. Bonn: Institute of Labor Economics (IZA).
Woodhouse, Michael. 2017. 'Review of Immigration Temporary Work Visa Settings'. Wellington: Government of New Zealand.
Wray, Helena. 2006. 'The Aliens Act 1905 and the Immigration Dilemma'. *Journal of Law and Society* 33 (2): 302–23.
Zavodny, Madeline. 2015. 'Should Countries Auction Immigrant Visas?' *IZA World of Labor*. https://wol.iza.org/articles/should-countries-auction-immigrant-visas/long.

Appendix A Policy statements

In this Appendix, we present the results of our analysis of the use of government policy statements in New Zealand.

A.1 The current approach in immigration policy

Immigration New Zealand is a business arm of the Ministry of Business, Innovation and Employment, and its staff are public servants, and they are, therefore, bound to automatically apply government policy.

Section 22 of the Immigration Act empowers the Minister to issue Immigration Instructions relating to:

- residence class visas, temporary entry class visas, and transit visas
- entry permission
- conditions relating to resident visas, temporary entry class visas, and transit visas, including, without limitation, conditions relating to:
  - travel to New Zealand
  - the holder's ability to work or study in New Zealand or in the exclusive economic zone of New Zealand
  - the periods for which each type of temporary entry class visa may be granted and
  - the types of temporary visas that may be granted, and the name and description of each type.

Immigration Instructions are statements of government policy (section 22(8)), and the Chief Executive of MBIE is required to make copies available. They are currently online in the form of the Immigration New Zealand Operational Manual (https://www.immigration.govt.nz/opsmanual/#35439.htm). Immigration New Zealand also makes public amendments to the Instructions and advice given to its staff on their administration (https://www.immigration.govt.nz/about-us/policy-and-law/how-the-immigration-system-operates/immigration-instructions).

The Instructions are a mix of statements of policy objectives and detailed rules to be followed.

An example of the former in relation to the Recognised Seasonal Employer scheme is:

WH1.1.1 Objectives

The objectives of the RSE Instructions are to:

a allow horticulture and viticulture businesses to supplement their New Zealand workforce with non-New Zealand citizen or residence class visa holder workers when labour demand exceeds the available New Zealand workforce and employers have made reasonable attempts to train and recruit New Zealand citizens and residence class visa holders; and

b promote best practice in the horticulture and viticulture industries to support economic growth and productivity of the industry as a whole, while ensuring that the employment conditions of both New Zealand and non-New Zealand citizen or residence class visa holder workers are protected and supported; and

WH1.1.1 Objectives
c encourage economic development, regional integration and good governance within the Pacific, by allowing preferential access under RSE Instructions to workers who are citizens of eligible Pacific countries; and d ensure workers recruited under these instructions are adequately paid and financially benefit from their time in New Zealand; and e ensure outcomes which promote the integrity, credibility and reputation of the New Zealand immigration and employment relations systems.

A.2 The role of policy statements

Under the New Zealand public management system, there are four main types of agencies involved in developing policy and the delivery of services to the public.[135] These are departments of state, such as MBIE and three types of statutory entities:

- Crown agents, which can give effect to government policy
- Autonomous Crown entities (ACEs), which may have regard to government policy
- Independent Crown entities (ICEs) that are generally independent of government policy.

Departments of state are usually required to implement government policy under the direction of Ministers.[136]

Examples of the various types of statutory entities are in Table 12, together with the general provisions in the Crown Entities Act relating to the ability of Ministers to give policy directions to the entity.

Table 12 Crown entities

Type of entity	Example	Relevant generic provision of the Crown Entities Act
Crown agents	Accident Compensation Corporation Environmental Protection Authority Waka Kotahi NZ Transport Agency	Section 103 (1): The responsible Minister of a Crown agent may direct the entity to give effect to a government policy that relates to the entity's functions and objectives.
Autonomous Crown Entities	Government Superannuation Fund Authority Museum of New Zealand Te Papa Tongarewa Board	Section 104 (1): The responsible Minister of an autonomous Crown entity may direct the entity to have regard to a government policy that relates to the entity's functions and objectives.

135 There are other companies and entities in which the Crown has an interest, including State-own Enterprises, (e.g. New Zealand Post); Crown Research Institutes, (e.g. the Institute of Environmental Science and Research); Crown-owned companies (e.g. Radio New Zealand Ltd), and listed companies in which the Crown owns shares (e.g. Air New Zealand). In this report, we are only concerned with core policy and service delivery entities.

136 Some departments operate under 'statutory independence', where they are not subject to ministerial direction on certain functions. The Inland Revenue Department's administration of the revenue statutes is an example. See Sections 6A and 6B of the Tax Administration Act.

Type of entity	Example	Relevant generic provision of the Crown Entities Act
Independent Crown Entities	Commerce Commission New Zealand Productivity Commission	Section 105: A responsible Minister of an independent Crown entity or a Crown entity company may not direct the entity or company to have regard to or to give effect to a government policy unless specifically provided in another Act.

Source: The Treasury (2020)

A.3 Examples of statutory policy statements

Several Acts include specific provisions relating to the issuing of government policy statements that have an effect on some Crown entities. The following examples demonstrate the variety of guidance given to ministers by the various laws.

A.3.1 Government policy statement on housing and urban development

The Kāinga Ora–Homes and Communities Act 2019 requires the Minister to issue a GPS on housing and urban development.[137] The Minister is also required to review the statement every three years.

Kāinga Ora must give effect to the statement when performing its functions.

In preparing the statement, the Minister must consult Kāinga Ora and with people and representative groups who have an interest in housing and urban development, but has discretion in identifying who those people and groups are.

The statement must include the following provisions:

- the Government's overall direction for housing and urban development within a multi-decade outlook
- the Government's priorities for housing and urban development
- how the Government expects Kāinga Ora to manage its functions and operations to meet the Government's direction and priorities
- how the Government expects other agencies to support its direction and priorities
- the Government's expectations in relation to Māori interests, partnering with Māori, and protections for Māori interests
- how the Government expects Kāinga Ora to recognise the need to mitigate and adapt to the effects of climate change.

[137] For details of the current statement, see Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development (2021).

A.3.2 Government policy statement on gas governance (Gas Act 1992).

The Gas Act sets up a co-governance regime for the gas industry, with the Minister and the Gas Industry Company (which is owned by industry participants) sharing regulatory responsibilities.[138]

The Minister **may** set objectives and outcomes that the Government wants the Gas Industry Company to pursue in relation to the governance of the gas industry and against which the industry body must report.

The Minister must publish each statement in the Gazette and present it to the House of Representatives.

The Gas Industry Company must have regard to the objectives and outcomes when making recommendations for gas governance regulation.

A.3.3 Government policy statement on land transport (Land Transport Management Act)

Land Transport Management Act requires the Minister to issue a GPS that covers a period of six years.[139]

The statement must include:

- the results that the Crown wishes to achieve from land transport funding over the next ten years
- the Crown's land transport investment strategy
- the Crown's policy on borrowing for the purpose of managing the national land transport programme.

The statement **may** also include national land transport objectives, policies, and measures for the next ten years.

When preparing the statement, the Minister must:

- consider any national energy efficiency and conservation strategy and any relevant national policy statement issued under the Resource Management Act 1991
- have regard to the views of Local Government New Zealand and representative groups of land transport users and providers.
- consult the Waka Kotahi New Zealand Transport Agency about the proposed statement.

As soon as it is made, the Minister must present a copy of the statement to the House of Representatives and make it publicly available.

Waka Kotahi must give effect to the GPS on land transport when performing its functions under subpart 1 of Part 2 in respect of transport planning and funding.

[138] Details of the gas industry regulatory framework are contained in Ministry of Business, Innovation and Employment (2021b).

[139] For details of the GPS on land transport, see Ministry of Transport (2020).

A.3.4 National energy efficiency and conservation strategy Energy Efficiency and Conservation Act 2000

The Minister must prepare and issue a national energy efficiency and conservation strategy.[140]

The purpose of a strategy is to give effect to the Government's policy on the promotion in New Zealand of energy efficiency, energy conservation, and the use of renewable sources of energy.

The Energy Efficiency and Conservation Authority (EECA) must perform its functions in accordance with the strategy.

The strategy must state:

- the Government's policies in relation to the promotion in New Zealand of energy efficiency, energy conservation, and the use of renewable sources of energy
- the objectives to be pursued to achieve those policies
- targets to achieve those policies and objectives, being targets that are measurable, reasonable, practicable, and considered appropriate by the Minister
- means by which those policies and objectives, and any such targets, are to be achieved.

A draft strategy may either be prepared by the Minister or, at the Minister's direction, by EECA.

In preparing a draft strategy, comments must be sought from the Parliamentary Commissioner for the Environment and from representatives of industry and commerce, environmental and community organisations, Māori organisations and local authorities. Comments from others may also be sought.

Once prepared, the draft strategy must be made public, and submissions invited. EECA must prepare a report and recommendations on all submissions for the minister.

After considering the report, the Minister must approve the final strategy and make it publicly available. The Minister must also provide every person who made a submission with a summary of the EECA's recommendations and the Minister's decision on them.

A.4 Economic and fiscal updates

The fiscal responsibility provisions of the Public Finance Act provide another model. It does not require the Minister to issue a GPS, but it does set out a comprehensive accountability and transparency regime within which fiscal policy must be conducted.

When viewed objectively, the provisions of the Act appear to be weak: they merely require the Government to state its intentions regarding a set of principles of responsible fiscal management to give the government of the day significant leeway to define.

The core of the provisions is a requirement for the government to define what it sees as a 'prudent' level of debt and then to run operating balances that, on average over time, are consistent with the desired trajectory of the debt.

[140] For details of the energy efficiency and conservation strategy, see Ministry of Business, Innovation and Employment (2021a.)

Included in the regime are extensive reporting and accountability provisions, including:

- A Budget policy statement to be delivered before the Budget, setting out "*the broad strategic priorities by which the government will be guided in preparing the Budget*" (Section 26M(2).
- A fiscal strategy report, to be delivered with each budget, setting out the government's short and long-term objectives for fiscal policy and explaining how those objectives are consistent with the principles.
- Requiring the Treasury, independently of the government, to prepare three separate reports:
  - an investment statement
  - a wellbeing report and
  - a statement on the long-term fiscal position.
- Delegating to the Treasury the responsibility for preparing twice-annual economic and fiscal updates, one to be presented with the Budget and another, the Half-year economic and fiscal update, to be produced between 1 November and 31 December.
- Requiring Treasury to 'open the books' and publish a Pre-election economic and fiscal update between 30 and 20 days prior to each election.

Companion provisions in Parliament's Standing Orders require all these statements and reports to be referred to the Finance and Expenditure Committee and require the Committee to report back to the House on its inquiry into them, which itself is then debated in Parliament.

A.5 Long-term insights briefings

The Public Service Act 2020 (Schedule 6, clauses 8 and 9) introduced a new requirement for public service Chief Executives to prepare a Long-term Insights Briefing at least once every three years. Briefings are provided to the relevant Minister, who must table them in the House of Representatives.

The intention is that these briefings will provide information to the public about medium- and long-term trends, risks and opportunities that affect New Zealand society. The briefings include impartial analysis, including policy options for responding to these matters.

Chief Executives have the discretion to decide what matters relevant to their department's work should be included in the briefing.

The Department of the Prime Minister and Cabinet has provided extensive guidance material to departments on the form, content, and development process of Long-term briefings (Department of the Prime Minister and Cabinet 2022).

A.6 The Resource Management Act

There is a hierarchy of policy documents within the planning system established by the Resource Management Act (RMA), as set out in Table 13.

There is a sophisticated process for developing each of these statements, which can, depending on the document, include:

- public notification of the document and the reasons behind it
- the receipt and consideration of submissions from the public and iwi authorities
- hearings by independent panels
- the commissioning of economic analysis
- appeals to the Environment Court and then, on questions of law, to the High Court and the senior courts.

Table 13 Policy documents in the resource management system

Document	Purpose	By whom made
National Policy Statements	To state objectives and policies for matters of national significance that are relevant to achieving sustainable management.	The Minister for the Environment
National Environmental Standards	Regulations that prescribe technical standards, methods or other requirements for environmental matters.	The Minister for the Environment
National Planning Standards	Which set out requirements relating to the structure, format or content of regional policy statements and plans. Standards must give effect to national policy statements and be consistent with national environmental standards.	Minister for the Environment
Regional Policy Statements	Which must give effect to national policy statements and enable regional councils to provide broad direction and a framework for resource management within their regions.	Regional councils
Regional plans	Which must give effect to national policy statements (including the New Zealand Coastal Policy Statement) and regional policy statements.	Regional councils
District plans	Which must not be inconsistent with regional plans and must give effect to national policy statements (including the New Zealand Coastal Policy Statement) and regional policy statements.	District and unitary councils

Source: Environment Foundation and Environmental Defence Society (2022)

A.7 Climate Commission

The Climate Commission is an independent crown entity that provides advice to Ministers during the development of New Zealand's climate change policies.

Section 5J of the Climate Response Act 2002, which established the Commission mandates a consultative process the Commission must undertake while performing its functions.

The Commission **must:**

- proactively engage with persons the Commission considers relevant to its functions, duties, and powers
- where the Commission believes it is necessary provide for participation by the public.

It has discretion on how it undertakes the required engagement, and it **may**:

- issue discussion papers and draft reports and invite submissions
- undertake any other type of consultation that it considers necessary.

Appendix B The fiscal responsibility provisions in practice

The fiscal responsibility and wellbeing provisions of the Public Finance Act are centred around the concept of a 'prudent level of total debt', which is itself nested within a set of principles of responsible fiscal management proscribed in Section 26G of the Act set out in Box 2.

Box 2 Principles of responsible fiscal management

The Government must pursue its policy objectives in accordance with the following principles (the principles of responsible fiscal management):

a reducing total debt to prudent levels so as to provide a buffer against factors that may impact adversely on the level of total debt in the future by ensuring that, until those levels have been achieved, total operating expenses in each financial year are less than total operating revenues in the same financial year; and

b once prudent levels of total debt have been achieved, maintaining those levels by ensuring that, on average, over a reasonable period of time, total operating expenses do not exceed total operating revenues; and

c achieving and maintaining levels of total net worth that provide a buffer against factors that may impact adversely on total net worth in the future; and

d managing prudently the fiscal risks facing the Government; and

e when formulating revenue strategy, having regard to efficiency and fairness, including the predictability and stability of tax rates; and

f when formulating fiscal strategy, having regard to the interaction between fiscal policy and monetary policy; and

g when formulating fiscal strategy, having regard to its likely impact on present and future generations; and

h ensuring that the Crown's resources are managed effectively and efficiently.

Key terms like 'prudent level of total debt' and 'reasonable period of time' are left undefined. But the responsible Minister is required in various reports to specify what the government thinks a prudent level of total debt is and the timeframe under which it plans to achieve that level.

For example, during periods of sustained economic growth, then Finance Minister Michael Cullen focused on running budget surpluses and reducing debt in anticipation of projected increases in fiscal pressures due to an ageing population (Government of New Zealand 2004, 20). More recently, Finance Minister Grant Robertson used New Zealand's healthy balance sheet to "*invest to address the health and economic impacts*" of the COVID-19 pandemic (Government of New Zealand 2021, 38). The specific long-term debt objectives set by the two Ministers are in Table 14.

Table 14 What is prudent depends on circumstances

Long-term debt objectives state in various Fiscal Strategy Reports

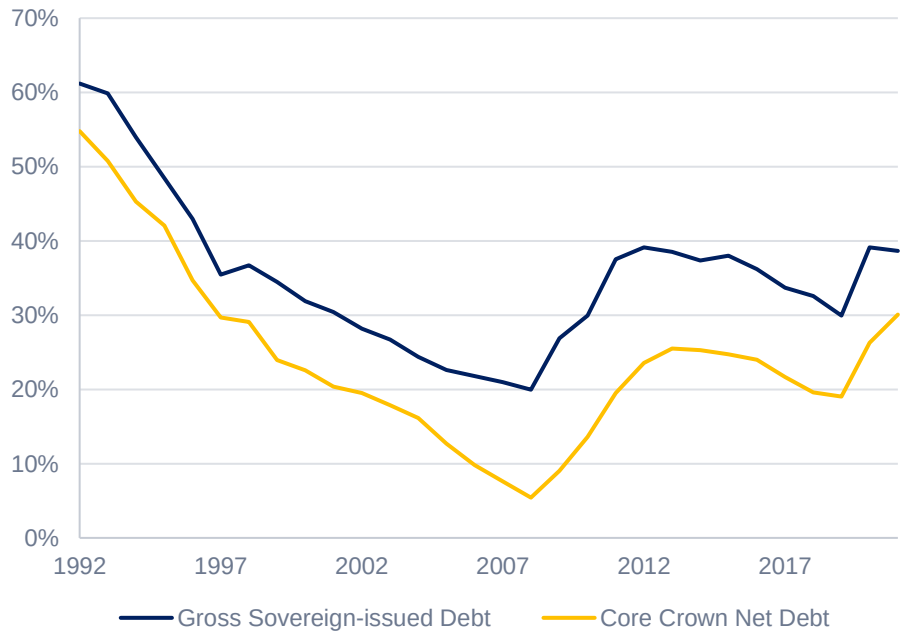
Fiscal Strategy Report	Long-term debt objective
2004	Manage total debt at prudent levels. Gross sovereign-issued debt as a percentage of GDP slowly reducing over the longer term and passing through 20% of GDP before 2015.
2021	The Government will stabilise net core Crown debt as a percentage of GDP by the mid-2020s and then reduce it as conditions permit (subject to any significant shocks).

Source: The Treasury

Figure 34 shows two measures of debt – gross and net – that have been used to define the prudent level of government debt under the fiscal responsibility provisions and how they have progressed through time.

Figure 34 Prudent debt levels vary

Debt as a percentage of nominal GDP, June years



Notes

1 Gross sovereign-issued debt (GSID) is debt issued by the sovereign (i.e. core Crown) and includes Government stock held by the NZS Fund, GSF, ACC or EQC, for example. In other words, the total sovereign-issued debt does not eliminate any internal crossholdings held by these entities.

2 Net Core Crown Debt represents GSID less core Crown financial assets (excluding advances and financial assets held by the NZS Fund).

Source: The Treasury

B.1 A flexible approach

Three examples from history show the flexibility of this approach.

B.1.1 When times are very good

First, we look at the Fiscal Strategy Report issued by the Hon. Michael Cullen in 2004, against the backdrop of five years of sustained economic growth. The Minister stated:

> *The Government is preparing for the future fiscal pressures that will come with an ageing population. We are already more than meeting the long-term debt objective that was specified in the 2002 FSR as:*
>
> > *Manage total debt at prudent levels. In the longer term, gross sovereign-issued debt below 30 per cent of GDP on average over the economic cycle.*
>
> *With this in mind, we signalled in the 2004 BPS that we would look at lowering the long-term debt objective. We have now decided to change the objective to:*
>
> > *Manage total debt at prudent levels. Gross sovereign-issued debt as a percentage of GDP slowly reducing over the longer term and passing through 20 per cent of GDP before 2015.* (Government of New Zealand 2004, 22)

In the end, the goal of 20 percent was actually achieved in 2008.

B.1.2 When times are looking bad

In the 2009 Fiscal Strategy Report, issued at start of what would become the Global Financial Crisis, the then Minister of Finance, the Hon. Bill English said:

> *Over the short to medium term it is prudent to let debt rise. Rising debt indicates that we are using the buffer provided by New Zealand's currently low levels of public debt to deal with the current economic shock. However, there is a limit to how far New Zealand can let debt rise in response to economic shocks.*
>
> *…*
>
> *[I]t is prudent to allow an increase in net debt in response to the current economic and fiscal shock and then ensure that this increase is reversed and we return to a lower net debt ratio. We will keep net debt consistently below 40 of GDP with the ratio reaching around 30 of GDP no later than the early 2020s. Over the longer term we consider that it is prudent to have net debt closer to 20 per cent of GDP.* (Government of New Zealand 2009, Section 5)

B.1.3 When times are very, very bad

Finally, we look at what the government thought was prudent in the middle of the COVID pandemic.

In the 2021 Fiscal Strategy Report, the current Minister of Finance, the Hon. Grant Robertson said:

> *The COVID-19 pandemic has caused a 1-in-100-year global economic shock and ongoing international volatility. Governments around the world have used their balance sheets to invest to address the health and economic impacts of the pandemic. Investment has caused forecast net debt to rise above 100 percent of GDP in many of countries we compare ourselves to, and has created ongoing operating deficits.*
>
> *…*

Forecasts for net core Crown debt are well below the Half Year Update forecast peak of 45.6 percent of GDP. Inclusive of the impact of FLP [Reserve Bank's Funding for Lending Programme], net core Crown debt is expected to peak at 48.0 percent of GDP in 2022/23, compared to the Half Year Update forecast of 52.6 percent of GDP.

…

Debt remains at prudent levels throughout the forecast and projection periods. Even at its peak, New Zealand's net debt as a share of GDP remains considerably lower than the starting point for many of our international peers. (Government of New Zealand 2021, 38–39)

The Minister's long-term debt objective was:

The Government will stabilise net core Crown debt as a percentage of GDP by the mid-2020s and then reduce it as conditions permit (subject to any significant shocks). (ibid. 43)

Appendix C Data requirements

In sections 3.8 and 5.3, we recommended that the government develop the empirical and analytical base for developing objectives, constructing a GPS and monitoring absorptive capacity. In this Appendix, we combine the data we consider the government should be collecting into a single consolidated list.

C.1 Data

Some of the data that we recommend being gathered is currently publicly available, so we propose that it be collected and reported against the government's objectives in any GPS. However, some of the datasets would require new collection and analysis, possibly using Stats NZ's IDI database.

The data we propose be collected is:

- The overall number of migrants entering the country, relative to departures, broke down between permanent and temporary immigrants.
- The rate of change of population due to net migration.
- The number of new migrants arriving each year, broken down by demographic and other dimensions, including:
  - age
  - gender
  - country of origin and citizenship
  - type of visa
  - work and other rights granted
  - qualifications
  - length of visa.
- Comparisons between the characteristics of immigrants and emigrants (both New Zealand citizens and other nationals).
- Transitions between visa types and from immigrant to citizen.
- The employment pattern of immigrants including features such as:
  - incomes
  - type of employment (full-time, part-time self-employed)
  - industries in which the immigrants work
  - any spells of unemployment.
- Migrant choices and decisions including around:
  - proximity to other immigrants – do migrants cluster or disperse?
  - accommodation - broken down by:

    - location (CBD versus urban fringe versus provincial centres versus rural communities versus farms)
    - tenure type (owning versus renting)
    - household size and density (and whether this differs by immigrant type and/or length of stay)
  - transportation, including the extent to which migrants use public and private transport
  - purchases of goods and services
  - levels of remittances.
- How quickly migrants integrate into New Zealand society as both workers and as consumers of goods and services.
- Public service needs based on characteristics such as family size, age of children (particularly relevant for education and health), and any support needs.
- Any business-creation activity by migrants.
- Taxes and other levies paid by migrants.
- The housing choices of migrants, in terms of:
  - location (CBD versus urban fringe versus provincial centres versus rural communities versus farms
  - tenure type (owning versus renting) and
  - size and density (do temporary migrants, for example, live in shared accommodation and is that transitory on their arrival or does it persist).

Appendix D The Reserve Bank's output gap

The Reserve Bank of New Zealand has developed a measure of the capacity of the economy, called the output gap. It estimates the difference between actual output and what the economy could potentially produce without causing inflation to rise.

> *Potential output can be thought of as the level of activity that the economy can sustain without causing inflation to rise or fall, all else equal (for example, assuming no shock, such as big changes in oil prices). By implication, the difference between actual and potential output (the output gap) indicates the extent of excess demand, and therefore the direction and magnitude of this source of inflation pressure.* (Lienert and Gillmore 2015, 3)

Because the output gap is unobservable (it is a hypothetical 'what if' concept), it has to be estimated using various econometric techniques and available data. The Reserve Bank uses two different economics models to estimate the output gap:

- It uses a multivariate production function approach to estimate the historical gap.
- The Bank's dynamic stochastic general equilibrium (DSGE) model, NZSIM is used to forecast the gap in the future (Armstrong 2015).

Many of the data inputs into both models are produced with a delay. GDP for one quarter, for example, is normally published about three months after the end of the quarter, meaning that it is reporting what was happening in the economy between six and three months ago. Some of the data is also subject to revisions, as Stats NZ reviews the data it has collected. The statistical techniques used to develop the inputs into the model (filtering) also means that revision to one quarter's data mean that previous quarters' data are also adjusted. So, for example, the estimate of the gap produced in, say, June 2022 will give a different estimate for what the gap was in June 2020 than the estimate produced in November 2021.

To help overcome these difficulties, the Bank uses a suite of direct capacity indicators to inform the more recent inputs into both models.

While used in producing the data to go into the two models, the suite of indicators itself provides information about the state of the economy that the Bank uses in formulating monetary policy (Armstrong 2015, 19). When introduced in 2015, the suite consisted of eight indicators, with an additional seven being added in 2019 (Jacob and Robinson 2019, 5), divided between labour-market indicators and non-labour indicators:

> *The labour market suite is intended to provide a holistic overview of the labour market, in order to assist the Monetary Policy Committee in assessing maximum sustainable employment*. (ibid. 6)

Table 15 Labour market indicators

Indicator type	Description
HLFS employment rate gap	Total employment as a share of working-age population. Calculated using an HP filter with λ=40,000.
QES employment rate gap	Filled jobs as a share of working-age population. Calculated using an HP filter with λ=40,000.
Phillips curve unemployment rate gap	Using the Kalman filter on a reduced-form Phillips curve model to estimate the NAIRU.
New Keynesian model unemployment rate gap	Using the Kalman filter on a New Keynesian structural model to estimate the NAIRU.
RBNZ forecast system unemployment rate gap	Using the estimate of the trend unemployment rate from the RBNZ's forecasting model. Calibrated at the end of history using the above unemployment rate gaps.
HP-1600 unemployment rate gap	Using an HP filter with λ=1,600.
HP-100000 unemployment rate gap	Using an HP filter with λ=100,000.
Hours worked gap	The gap between average hours worked per-person, and an estimate of the trend level of average hours worked per-person from the RBNZ forecasting model (with adjustment to exclude changes in labour force).
Hours worked gap (MA)	A four-quarter moving average of the hours worked gap, which is quite volatile from quarter to quarter.
Labour utilisation composite index in levels (LUCILE)	A principal component of a range of labour market variables.

Source: Jacob and Robinson (2019)

The second set of indicators captures capacity pressures in other spheres of economic activity, based in part of NZIER's Quarterly Survey of Business Opinion.

Table 16 Non-labour market indicators

Indicator type	Description
QSBO principal component	A principal component of 50 QSBO measures related to capacity pressure.
QSBO composite	Combines measures of capacity utilisation and ease of finding labour.
Core business investment	A measure of core business investment, as a share of potential GDP.
Structural VAR	A structural vector-autoregression of GDP and non-tradeables inflation, identified using long-run restrictions.
Hamilton filter	GDP filtered using the linear projection method in Hamilton (2017).
Mean of indicator suite	This is the mean of the output gap indicator suite (in real-time).

Source: Jacob and Robinson (2019)

D.1 How is the output gap calculated?

The methodology used by the Bank for creating the estimate of the current output gap involves estimating a production function, which calculates potential GDP based on a formula derived from economic theory.

The production function is in the following form:

$$Y_t = A_t(C_t K_t)^{(1-\alpha)}(H_t L_t)^{\alpha}$$

where Y_t is output, A_t is Total Factor Productivity, C_t is capacity utilisation, K_t is capital stock, H_t is hours worked per person, and L_t is the number of persons employed. The parameter α is labour's share in output ($0<\alpha<1$).

The number of persons employed, L_t, is given by the following formula:

$$L_t = E_t P_t N_t$$

where E_t is the employment rate (calculated as 1 minus the unemployment rate), P_t the participation rate, and N_t the working-age population.

In terms of migration, Immigrants (and returning New Zealand citizens) who are of working age will enter the employment equation via being in the working-age population.[141]

The sources of the variables in these formulas are shown in Table 17.

Table 17 Sources of data used to construct the output gap

Variable	Description	Data source
Y_t	Output: real production GDP	Statistics NZ, National Accounts
C_t	Capacity utilisation (economy-wide)	NZIER, QSBO
K_t	Capital: productive capital stock	Statistics NZ, National Accounts, & RBNZ calculation
H_t	Hours worked per person • Total weekly hours • Total official employed	Statistics NZ, HLFS
N_t	Working-age population	Statistics NZ, HLFS & RBNZ calculation
P_t	Participation rate	Statistics NZ, HLFS
E_t	Employment rate = 1 – unemployment rate	Statistics NZ, HLFS

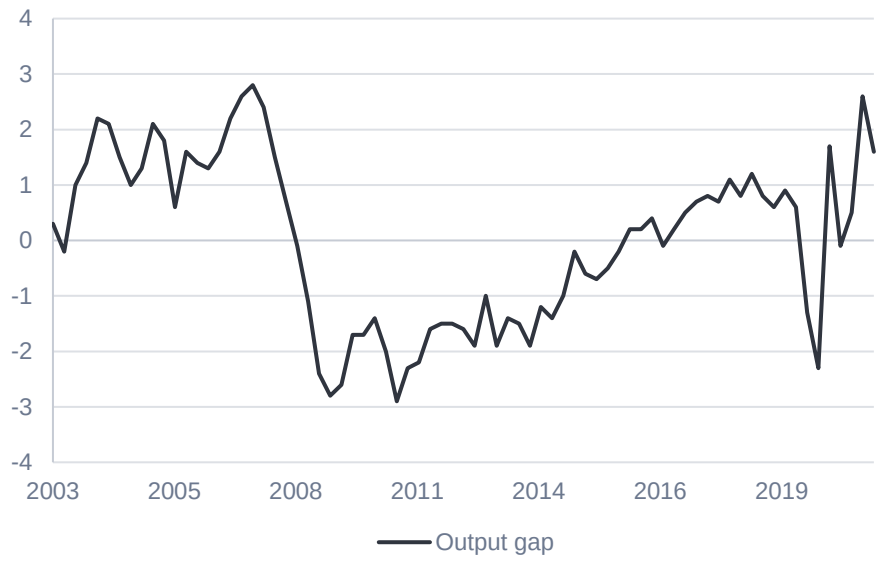
Source: Lienert and Gillmore (2015)

The results of this model from the November 2021 Monetary Policy Statement are shown in Figure 35.

141 Note, however, that some short-term migrants, especially working holidaymakers, will not be counted, because the Household Labour Force Survey on this the employment figures are based does not include people who are not regarded as being in the "*permanent labour force*". Specifically, the survey excludes "*people who have been living in New Zealand for less than 12 months, and who do not propose to stay in New Zealand for a total of 12 months or more*" (Statistics NZ 2017, 12).

Figure 35 The Reserve Bank's estimate of the output gap

November 2021 Monetary Policy Statement

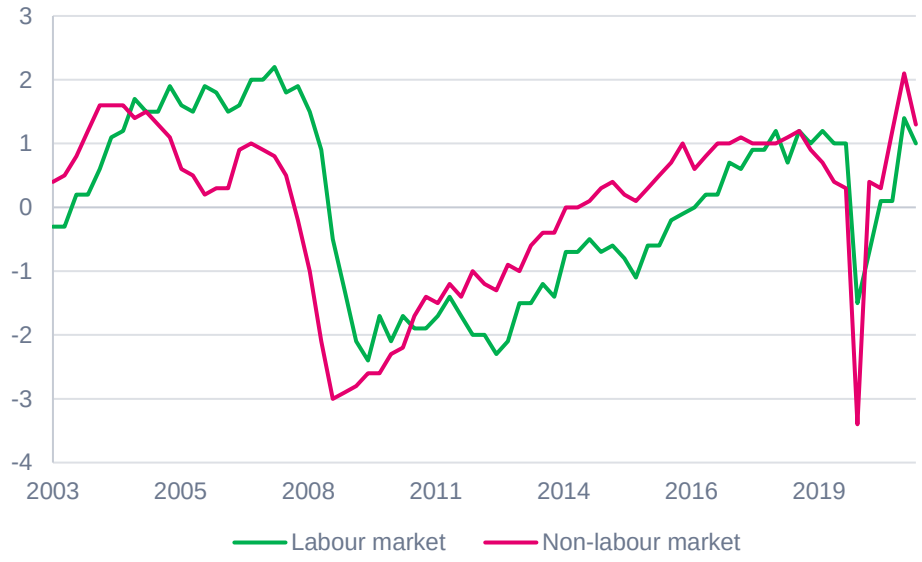


Source: Reserve Bank of New Zealand

The Bank also publishes the mean of the two components of the suite of measures.

Figure 36 The Reserve Bank's indicators of capacity

November 2021 Monetary Policy Statement



Source: Reserve Bank of New Zealand

Appendix E Drafts of a GPS

In this Appendix, we sketch out a series of draft government policy statements to provide examples of what the final product might look like.

We have not undertaken the extensive analysis required to prepare a complete GPS.

E.1 Two different approaches

We have developed two different types of GPS.

The first uses domains of wellbeing as the basis for articulating the government's objectives. Under this approach, how migration can influence each domain is discussed, and then objectives for different types of immigration are specified.

The second uses a bottom-up approach, starting with various migrant and immigration programmes. It specifies individual objectives for each, building an overall programme from discrete areas.

A third possibility, a top-down approach that starts with high-level objectives and then determines objectives for individual programmes, could easily be 'reverse engineered' from the bottom-up approach that we have presented.

E.2 Using a common structure

Both of these options address the same issues but use different formats and involve different emphases. For example, whatever format a current GPS took would focus heavily on housing and absorptive capacity.

Both examples are based on the same structure that we presented in section 5.3. That is, the government should:

- state its long-term objectives for immigration policy
- state the period for which those objectives relate
- explain how those objectives accord with the level of immigration being prudent
- indicate explicitly, by the use of ranges, ratios, or other means, the number of migrants expected to arrive and depart from New Zealand over the short term (say three years)
- state the broad strategic priorities by which the government will be guided in making short-term decisions regarding migration, including:
  - the overarching policy goals that will guide the Government's decisions
  - the wellbeing objectives that will guide the Government's decisions
  - the policy areas that the Government will focus on in that year and
- describe in detail how that planned level of immigration will contribute to the wellbeing of both locals and migrants.

The order in which these elements are presented will differ depending on the approach taken.

E.3 A GPS based on domains of wellbeing

Using the domains of wellbeing to determine overall policy objectives is an exercise in weighing the different effects of migration on the different domains.

In practice, these domains will be weighted differently in different contexts, as the following examples illustrate.

E.3.1 A wellbeing-based GPS for 2022

Table 12 below sets out what a GPS constructed around domains of wellbeing might look like in 2022. We have drafted this in the language appropriate for a forward-looking statement of policy, so the text tends to be categorical rather than conditional. This text should not be regarded as government policy.

Table 18 A 2022 GPS based on domains of wellbeing

Domain	Overarching policy objectives	Strategic priorities	How the planned level of immigration will contribute to the wellbeing of both locals and migrants
Treaty of Waitangi	Immigration policy should be based on the Crown's obligations to hapū and iwi under te Tiriti o Waitangi.	Rebuilding a relationship with hapū, iwi and Māori around how to bring immigration within a Tiriti framework. This should include addressing the nature of any redress for past breaches.	Uncertain at this stage.
Housing	The economy should have the capacity to house all migrants and existing residents to a satisfactory standard, providing affordable, safe, healthy housing at an acceptable cost.	Improving rental and owner-occupied housing availability, affordability, and suitability through improving land supply and reforming the RMA and local government financing. Improving forecasting of likely migrant numbers to avoid unanticipated spikes in net migration. While housing shortages remain, scale migration back and prioritise entry for those, who will help the economy build absorptive capacity (e.g. construction workers, healthcare workers, and teachers). Most temporary migrants do not have a pathway to residence, meaning that they will eventually depart, freeing up housing for non-migrants.	Scaling back migration in the short to medium term will lessen pressure on housing prices. At the same time, the government will acknowledge that high levels of net migration are not the main cause of the current shortage of suitable land and that a significant factor in rising net migration recently has been the reduced departures of New Zealand citizens, not increasing immigrant inflows. Focusing on attracting skilled workers in constrained areas will increase absorptive capacity.

Domain	Overarching policy objectives	Strategic priorities	How the planned level of immigration will contribute to the wellbeing of both locals and migrants
Health	Most migrants are selected following checks to ensure that they are, on average, in better health than locals, thus creating a fiscal benefit. Target migrants (both individuals and in aggregate numbers) who assist with staffing shortages and do not themselves impose excessive burdens on the New Zealand health system.	Seek migrants who can supply skilled medical labour that cannot be supplied locally at reasonable costs while being mindful of impacts on developing countries (brain drain). While staff shortages remain, prioritise entry, qualification recognition/upgrading (where needed) and residence for healthcare workers.	Immigration policy will support a health system that is staffed at closer to the required level.
Environment	Any population growth is consistent with maintaining or improving environmental quality.	Reducing overall inflows until a sustainable population is achieved. Prioritising entry of migrants into areas of economic activity with a low environmental footprint, e.g. weightless export of services. Prioritising entry for migrants with relevant expertise in improving environmental quality.	Resource use is sustainable and environmental degradation is reducing across the country.
Income	In addition to high-productivity migrants, bring in those who can improve other dimensions of wellbeing (e.g. care workers).	Selecting migrants who have higher than average productivity who are likely to increase the overall incomes of all New Zealanders (e.g. migrants who have skills that are complementary to local labour and capital).	Economic migrants, on average, will make a higher net contribution to the economy than locals.
Jobs	Avoid bringing in migrants with below-average skills that are in reasonable supply locally.	Having targeted entry rules to allow entry of migrants who complement the skills of locals.	Fewer, more complementary migrants will reduce any adverse effects for locals (increased labour-market insecurity and unemployment; decreased wages and employment) in the short to medium term.
Community	Migrants settle well, and engage with the community, while retaining connections to their own language and culture.	Provide a high-quality support network so migrants can access the social capital that they need to thrive. Existing migrant networks have sufficient resources to assist settlement.	The number of migrants does not overwhelm the capacity of society to support their settlement.

Domain	Overarching policy objectives	Strategic priorities	How the planned level of immigration will contribute to the wellbeing of both locals and migrants
Education	An education sector that develops ngā tāngata o Aotearoa and provides people with the skills employers need. The goal should be to admit on labour-force grounds only people who have skills that cannot be supplied by trained locals.	Pre-COVID, ready access to migrants at all skill levels discouraged investment in developing and training locals for rewarding roles. Reduced migrant availability through COVID-19 border closures changed employer expectations and terms and conditions in ways that improved wellbeing. Build on this dynamic. Managing migration flows to avoid masking policy failures in the education system. Improving the alignment between education and training and the skills employers need; and the effectiveness of the system for those it does not serve well currently (including Māori, Pacific and low-income students).	An education system that is providing all locals with in-demand skills. While export education providers are profitable, work rights and the prospect of residency are not used as marketing tools to attract students to New Zealand.
Civic engagement	Migrants quickly become engaged citizens.	Explore interventions such as access to settlement support; assistance to learn te reo and understand te ao Māori; US-style citizenship tests; and resources to promote engagement (e.g. supporting volunteering, providing information). Migrant expectations, especially around pathways to residency, are matched to reality. Temporary migrants willingly leave New Zealand at the end of their stay, with fond memories of their time here.	Migrants feel welcome in New Zealand and do not harbour resentment over their treatment.

Domain	Overarching policy objectives	Strategic priorities	How the planned level of immigration will contribute to the wellbeing of both locals and migrants
Life satisfaction	Migrants increase the life satisfaction of locals and experience a good life in Aotearoa.	Enhancing public acceptance of immigration, through selecting fewer migrants and treating them well. Balancing the benefits migrants bring from skills, and the wider range of experiences greater diversity can provide, against concerns about safety, access to housing and any negative effects on the labour market, income inequality, and absorptive capacity, will support wellbeing.	The level of migration and the terms on which migrants enter and depart New Zealand do not negatively affect life satisfaction for either migrants or locals.
Safety	Bring in migrants who maintain or increase the safety of Aotearoa overall.	Continue to pre-screen migrants to maintain social licence. Build understanding within the wider community that migration as a whole does not pose a risk to safety, but some subgroups (e.g. young, single males) may need greater support to settle well. Increase efforts to support and rehabilitate New Zealand citizens deported from Australia, noting that these people have a right to return and the number deported is outside New Zealand's control.	Migrant numbers will be within the capacity of the pre-screening system.
Work-life balance	Migrants and locals to have a positive work-life balance. Not seeking to follow approach adopted in some other countries where wellbeing of locals is prioritised, and migrants are exploited. Migrant wellbeing is equally important.	Balance the opportunities migrants can create for locals (e.g. through home help and childcare) in a way that does not undermine conditions for locals in similar roles.	Migrants work in jobs that are as good as those held by locals.

Source: The authors

A wellbeing-based GPS produced now would give high priority weighting to te Tiriti o Waitangi, housing, and health dimensions.

The importance of immigration policy and practice reflecting commitments made to the Crown's Treaty partner is being acknowledged again after a long period of seeing immigration as the exclusive preserve of the Crown under Article 1 of the English version of the Treaty of Waitangi.

Immigration policy will be seen as contributing to solutions to the housing shortage, not exacerbating it.

The health system will be able to recruit trained overseas workers to fill staffing gaps.

There will be a more deliberate connection between the immigration system and other policy areas, especially housing, health, infrastructure (including transport), and education.

The focus of the permanent settlement parts of immigration will be on:

- Humanitarian migration, with refugees supported to settle well in New Zealand.
- Selecting the likely relatively few very highly-skilled migrants who will want to make permanent homes in New Zealand.
- Recruiting trained staff for the healthcare system (including aged care).
- Family reunification.
- Only admitting the number of migrants who can be accommodated within the environmental constraints of the country, which is likely to be closely related to the number of departures of New Zealand citizens, i.e., growing the population, will not be an overt aim of immigration policy.

With regards to temporary migration:

- Most temporary migrants will not have an automatic pathway to residence.
- The incentives on employers will be changed to make employing migrants less attractive, as a way of boosting training of locals and supporting moves to business models that are less reliant on low-cost labour.
- While temporary workers are in Aotearoa, they will be employed under the same labour market terms and conditions as equivalent locals.
- Workers who can boost the absorptive capacity of the economy (e.g. construction workers engaged on building infrastructure) will be prioritised.
- Export education will continue to transition towards an emphasis on quality over quantity.

E.4 A bottom-up government policy statement for 2022

Under a bottom-up GPS, governments would identify long-term strategic priorities for individual categories/sources of migrants designed to support their overall wellbeing objectives. They would then set binding limits, targets or caps for each individual category consistent with these priorities and objectives, in essence, based on a cost-benefit assessment of each category.

Table 19 below sets out an example of what a bottom-up GPS for 2022 might look like. This list is not an exhaustive breakdown of all entry categories, which would be needed to operationalise this approach. Target ranges and caps would need to be specified after appropriate analysis had been undertaken.

Table 19 A bottom-up government policy statement for 2022

Visa category	Long-term strategic priorities and wellbeing objectives	Target range (000s)
Visitors	Visitor arrival numbers are consistent with: • any border controls necessitated by management of COVID-19. • a sustainable tourism industry, with environmental impact that generates economic and wellbeing benefits greater than costs. • genuine welcome and manaakitanga expressed by tangata whenua and locals.	
Student	Export education will continue to transition towards an emphasis on quality over quantity. Work rights will be scaled back to reduce any adverse effects for locals (increased labour-market insecurity and unemployment; decreased wages and employment) in the short to medium term. For most students, permanent residence will not be an expected outcome once studies are completed.	
Work	Incentives on employers will be changed to make employing migrants less attractive to boost the training of locals and support a move to business models that are less reliant on low-cost labour. This will be reflected in lower binding caps on the numbers of migrants entering through individual visa classes and increased skill thresholds. Allocation approaches will contribute to migrants being initially employed in the sectors of the economy where they can make the greatest contribution. A New Zealand educational qualification would not grant any preferential status to applicants. Specific groups of workers with the capacity to boost societal wellbeing, such as health and care workers, will be prioritised.	
Business/skilled	Investment thresholds and activity requirements for business migrants will be increased to ensure that migrants significantly contribute to the New Zealand economy.	
Family	Except for a spouse/domestic partner and dependent children, all applications from family members would be considered under one capped total. An expression of interest pool would prioritise applicants based on potential contribution to wellbeing including through: • Support for family/culture of adult children and grandchildren • Support for people granted entry as refugees. It is anticipated that people entering under this route may have a negative fiscal impact, but it is expected that they would improve family and potentially wider wellbeing.	
International/ humanitarian	Humanitarian migration will support refugees to settle well in New Zealand, including through streamlining processes for family reunification.	

Source: The authors

E.5 A top-down government policy statement for 2022

Under a top-down GPS approach, following some introductory context, a set of high-level objectives would be specified and then applied to various types of immigrants.

The following text is a mock-up of what such a statement prepared in 2022 might look like.

Context

A brief description of the context in which this GPS is being presented

Before the border closures necessitated by COVID-19, New Zealand's net migration levels were unsustainable.

Increasingly, migrants were being admitted with skills lower than policy intended.

Large numbers of temporary visas granted for other purposes, such as study, had work rights attached. Students and working holidaymakers were competing for jobs with locals who were just starting to enter the labour market. Sectors like hospitality, horticulture and seafood had become heavily reliant on these sorts of workers, as evidenced by the reduced production and business closures that resulted from pandemic border restrictions.

Ready access to less skilled temporary migrant labour also reduced incentives to invest in new technology and move to high-wage, high-productivity business models.

High levels of population growth, resulting from both reductions in departures of New Zealand citizens and high net migration of non-citizens was influencing housing availability and affordability.

While research and the natural experiment provided by COVID-19 have both reinforced that immigration alone did not cause this crisis, any government policy that leads to an increase in population in this context requires additional benefits to outweigh higher costs.

Long-term objectives for immigration policy

The government's long-term objective is to ensure that the economy's absorptive capacity can accommodate net migration flows and that migrants are treated as well as locals, subject to genuine differences in preferences.

This means that, for example, some migrants (and locals) might choose to live in lower-cost, more intensive shared accommodation to save money to spend on other things, but no one should be living in unsafe or unhealthy conditions.

This objective will be achieved by 2025.

Strategic priorities

The overarching policy goals that will guide the government's decisions are that:

- **Net migration flows will be reduced to a level that is less than or equal to the economy's absorptive capacity**. This will occur through:
    - An overall reduction in temporary and permanent visas granted, with higher proportionate reductions in the student and working holiday visa classes.

- Reprioritisation of flows within immigration categories to give precedence to migrants who can help boost absorptive capacity such as:
  - Migrants with skills that will boost **housing** availability, quality and affordability (e.g. construction workers)
  - Migrants who can help address staffing shortages in **healthcare** and aged care (e.g. doctors, nurses, specialists, care workers)
  - Migrants who can improve the quality and relevance of **education and training**, particularly for groups not well-served currently (e.g. teachers and education administrators)
  - Migrants who can help improve the responsiveness of public and private **transportation** systems to rising demand (e.g. engineers)
  - Migrants who can support sustainable resource use and reduce environmental degradation (e.g. business migrants who could support the development of more cost-effective solar power)
- If MIQ restrictions need to be reintroduced following their removal, prioritising migrant MIQ places for people who can help boost absorptive capacity.

- Concurrently, **the economy's absorptive capacity will be increased** through a combination of:
  - proposals to boost **housing** availability, quality and affordability (e.g. reform of the Resource Management Act, increasing the capacity of local government to provide and fund infrastructure, implementing the proposed Infrastructure Strategy)
  - proposals to boost access to and availability of **healthcare** (e.g. establishment of Health New Zealand)
  - proposals to improve the quality and relevance of **education and training**, particularly for groups not well-served currently (e.g. reform of vocational education)
  - proposals to increase the responsiveness of public and private **transportation** systems to rising demand (e.g. implement the GPS on Land Transport and the Infrastructure Strategy)
  - proposals to support sustainable resource use and reduce environmental degradation (e.g. implement the Essential Freshwater package and the Emissions Reduction Plan).

How the government's planned level and target composition of immigration will contribute to the wellbeing of both migrants and locals is set out in Table 20 over the page.

Table 20 Impact of planned immigration on the wellbeing of locals and migrants

Domain	How planned immigration will contribute to wellbeing
Treaty of Waitangi	Uncertain at this stage.
Housing	Scaling back net migration will reduce pressure on housing prices. Focusing on attracting skilled workers in constrained areas will increase absorptive capacity.
Health	Immigration policy will support a health system that is staffed at closer to the required level.
Environment	Resource use will be sustainable and environmental degradation will be reducing.
Income	Bringing in fewer low-productivity migrants should boost income and wellbeing relative to the status quo.
Jobs	Fewer, more complementary migrants will reduce any adverse effects for locals (increased labour-market insecurity and unemployment; decreased wages and employment) in the short to medium term.
Community	By bringing in a smaller number of migrants and treating them better, overall wellbeing should improve.
Education	An education system that is providing all locals with in-demand skills will improve the wellbeing of workers.
Civic engagement	By bringing in a smaller number of migrants and investing more in helping them to settle, overall wellbeing should improve.
Life satisfaction	Bringing in fewer, more carefully selected migrants and treating them better should boost wellbeing overall.
Safety	Pre-screening and improving support will improve the wellbeing of both migrants and locals.
Work-life balance	The planned approach should be neutral to work-life balance.

Source: The authors

The policy objectives that the Government will focus on in 2022 are set out in Table 21 over the page.

Table 21 Wellbeing-based immigration policy objectives for 2022

Domain	Overarching policy objectives
Treaty of Waitangi	Immigration policy will reflect the Crown's obligations to iwi, hapū and Māori under te Tiriti o Waitangi.
Housing	Aotearoa will develop the capacity to house all migrants and existing residents to an acceptable standard, providing affordable, safe, healthy housing at an acceptable cost.
Health	Migrants will be selected following health checks to ensure that they are, on average, in better health than locals to create a net fiscal benefit (taxes paid by migrants exceed overall expenditure on migrants). The government will seek migrants (both individuals and in aggregate numbers) who assist with staffing shortages in the health system and do not themselves impose excessive burdens on the New Zealand health system.
Environment	Any population growth resulting from immigration will be consistent with sustainable resource use and reducing environmental degradation.
Income	In addition to high-productivity migrants, the government will aim to bring in people who can improve other dimensions of wellbeing (such as care workers).
Jobs	The government will seek migrants who complement locals and avoid bringing in large numbers of migrants with below-average skills or skills that are in reasonable supply locally.
Community	The aim will be to bring in migrants who can build community while maintaining cultural and linguistic connections to their country of origin.
Education	The government will support an education sector that develops ngā tāngata o Aotearoa and provides employers with people with the skills they need. The goal will be to admit on labour-force grounds only people who have skills that cannot be supplied by locals.
Civic engagement	The aim will be to bring in migrants who quickly become engaged with life in Aotearoa.
Life satisfaction	The government will aim to bring in migrants who increase the life satisfaction of locals and who can themselves experience a good life in Aotearoa.
Safety	The government will aim to bring in migrants who will maintain or increase the safety of Aotearoa overall.
Work-life balance	The goal is for both migrants and locals to have a positive work-life balance. The government is not seeking to follow the approach adopted in some other countries where the wellbeing of locals is prioritised, and migrants are exploited. Migrant wellbeing is equally important.

Source: The authors

Expected numbers

[To be stated after appropriate analysis has been undertaken]