Te Kura Kāwanatanga – School of Government, Te Herenga Waka – Victoria University of Wellington

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Vagrancy, Homelessness and Policing by Consent

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Editorial – Should departmental chief executives be political appointees?

For over a century, New Zealand has embraced a meritocratic, professional, non-partisan public service. It lies at the heart of our 'constitutional ecosystem', as highlighted by Dean Knight in this issue of *Policy Quarterly*, and has been reflected in multiple Acts, most recently the Public Service Act 2020. Hence, departmental officials, including chief executives (CEs), are appointed on merit (i.e. based on their competence, skills, expertise and experience), not because of their political views, party connections or policy preferences.

The fundamental logic for a non-partisan public service is to ensure not only the provision of a stable, competent and permanent bureaucracy, but also one that serves the elected government in a loyal, dedicated, professional and lawful manner regardless of which political parties hold office. Above all, such arrangements are designed to protect the long-term public interest and democratic legitimacy by minimizing the risks of political patronage, cronyism and corruption. But they also help ensure that ministers receive expert and impartial advice on the full range of policy issues needing attention and that governments can implement their policies and deliver public services efficiently and effectively.

Many systems of public management operate differently. In particular, government departments are often led by political appointees. In some jurisdictions such appointees are limited to the very top-tier (i.e. departmental CEs or their equivalent). In others, such as the US, political appointees occupy the top four tiers of the federal public service. In yet other systems, most senior appointments are non-political, but the heads of several key departments (e.g. the Department of Prime Minister and Cabinet or its equivalent) are political appointees or at least are assumed to be sympathetic to the party or parties in office. Accordingly, such officials typically resign when there is a change of government and/or Prime Minister.

Over the years, there have been various proposals to politicize the top tier of the New Zealand public service. The most recent comes from Oliver Hartwich, the Executive Director of the New Zealand Initiative. In a 'Research Note' entitled 'Who runs the country'?, published in April 2026, Hartwich advocates highly significant changes to New Zealand's public management system and constitutional arrangements. These are designed to address what he sees as a serious 'democratic deficit', namely a public service that is insufficiently responsive and accountable to the elected government. Departmental officials, he believes, regularly obstruct and frustrate governments' policy objectives and plans. This contributes to major 'implementation deficits'. Meanwhile, ministers, he argues, lack adequate influence over the work of their officials because they do not determine CE appointments and reappointments; that is the prerogative of the Public Service Commissioner.

To rectify these systemic flaws, Hartwich draws heavily on the German public management model. Specifically, he proposes a staged programme of reforms, combining three main elements: removing the Commissioner's statutory power to appoint and re-appoint departmental chief executives and placing these responsibilities firmly in the hands of ministers; creating a dedicated 'State Secretary function' in departments in which the responsibilities for political direction and operational management are clearly defined and formally separated; and instituting a statutory duty on public officials to object (with defined escalation provisions) if they believe a ministerial directive is unlawful or violates human dignity.

There are multiple problems with Hartwich's proposals. A brief response must suffice. First, there is little evidence that bureaucratic intransigence or obstructionism is a serious problem in New Zealand. Nor is it clear that countries with a politicized top tier of officials lack such phenomena.

Moreover, excessive rather than inadequate political responsiveness may be a greater problem. In other words, officials may be too reluctant to perform their vital guardianship and stewardship roles, tendering free and frank advice and questioning, where appropriate, the juggernaut of political expediency. If so, politicizing the top echelons of the public service is hardly the solution.

Second, Crown entities and non-governmental organizations implement many policies and deliver numerous vital public services (e.g. childcare, elder care, education, health care, accident compensation, transport services, natural hazard insurance, regulatory functions, etc.). Changing how *departmental* CEs are appointed and held accountable will not affect how these non-departmental entities operate. In any case, ministers, not the Public Service Commissioner, appoint the boards of Crown entities. Hence, to the extent that Crown entities exhibit implementation deficits or lack political responsiveness, having political appointees in the top governance roles does not appear to be an obvious solution.

Third, Hartwich's account both exaggerates the influence of the Public Service Commissioner and underestimates the role of ministers in CE appointments. The current model was established in 1988 under State Sector Act and retained under the Public Service Act 2020. Under Schedule 6(3)(2) of the most recent Act, the Public Service Commissioner must inform the relevant ministers about CE vacancies and invite them 'to identify any matters' that ought to be taken 'into account when deciding upon the person to be recommended for appointment to the position'. Plainly, this enables ministers to indicate their policy goals and priorities for the department in question and identify the preferred leadership skills, attributes and expertise.

Additionally, the Public Service Act (Schedule 6(3)(15), like its predecessor, enables ministers to reject the Commissioner's recommendation for a CE appointment and advise the Governor-General to appoint someone else. To date, however, this provision has not been employed.

Crucially, then, under our current legislative provisions ministers can override the formal recommendations of the Commissioner. Their reluctance to do so highlights a strong cross-party commitment to retaining a non-partisan public service at all levels. It also suggests that Commissioners have generally handled CE appointment processes prudently, and appointed people willing to work professionally and diligently for ministers regardless of their policy preferences or philosophical disposition. Arguably, too, there are adequate exit arrangements for CEs who fail to meet acceptable performance standards or lack the confidence of ministers.

Let us not abandon a public management system that works tolerably well and replace it with one that carries many obvious and serious risks.

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Jonathan Boston, co-editor

Kim Workman

Vagrancy, Homelessness and Policing by Consent

Abstract

This article examines the historical and contemporary politics of vagrancy, homelessness and policing in Aotearoa New Zealand, arguing that current policy debates echo the punitive cultural attitudes of the late 19th century. Drawing on historical accounts of an 'atomised' colonial society marked by high levels of vagrancy and drunkenness, the article shows how early governments relied on imprisonment and coercive legislation to preserve an image of social cohesion and civility. It then traces the evolution of policing from coercive control to the 20th-century model of 'policing by consent', grounded in public trust, discretion and community partnership. Under this model, homelessness was managed collaboratively between police and social agencies rather than through criminalisation. Since 2024, however, large-scale defunding of emergency housing and social services has produced a sharp rise in homelessness, rough sleeping and associated public tensions. The government's responses – including expanded citizens' arrest powers and proposed 'move-on orders' – represent a return to punitive, politically driven approaches that prioritise public order over social wellbeing. Such measures undermine the principles of policing by consent, erode public trust, and fail to address the structural drivers of homelessness.

Keywords vagrancy, homelessness, move-on orders, coercive control, policing by consent

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The history of vagrancy and homelessness in Aotearoa is worthy of close examination. Not only does it yield lessons for politicians, bureaucrats and legislators alike, but it tells us something of the culture in which we live, where it came from, and why it needs to change.

The community is currently wrestling with the prospect of an amendment to the Summary Offences Act 1981 which will empower police to 'issue move-on orders as a tool to deal with disorderly behaviour in public places'. It will apply to people as young as 14 who are experiencing homelessness and who 'obstruct' access to businesses, beg or sleep rough, or who display disorderly, disruptive, threatening or intimidating behaviour. Those who resist can be arrested, and are liable to a $2,000 fine or up to three months' imprisonment (Goldsmith and Mitchell, 2026).

The public kerfuffle that followed the minister of justice and minister of police's announcement of these measures was not surprising. While many Auckland city retailers were supportive, others were strongly opposed. Social service organisations, the Police Association and Māori organisations were highly critical. Aotearoa is seeing the greatest rise in vagrancy and homelessness since the latter part of the 19th century. This article argues that the cultural and political environment that prevailed then is not dissimilar from the political culture that exists today.

Vagrancy and homelessness in the 19th century

From the mid to the latter part of the 19th century we were, according to Miles Fairburn, an 'atomised' society, characterised by a high number of single, transient men and high levels of drunkenness and interpersonal violence (Fairburn, 2013, p. 248). Vagrancy was the third highest crime in the 1870s, while drunkenness made up a third of convictions (ibid., p. 206).

This was not the image that the new settlers wanted to convey to the rest of the world. Since New Zealand's colonisation by Britain in 1840, numerous commentators had noted its traits of friendliness, hospitality and informality. Its developing culture included characteristics such as social cohesion, homogeneity, security and conformity, which cumulatively were instrumental in New Zealand regularly being described as a 'paradise'. It was sometimes described as a 'Better Britain'. New settlers were determined to preserve and protect that image to present to the outside world.

From the mid to the latter part of the 19th century we were … an 'atomised' society, characterised by a high number of single, transient men and high levels of drunkenness and interpersonal violence …

The desire to defend paradise led to a marked intolerance for those who threatened its social cohesion. Ferocious anti-vagrancy and prostitution legislation was passed in the 1870s. During World War 1, conscientious objectors were treated more harshly than in other Commonwealth countries (Belich, 2002). Just as the strong central state was there to bolster stability and security, so it was there to police morals and conduct fervently. Homogeneity was hallowed; diversity was discouraged. Outsiders were not welcome.

An 'out of sight, out of mind' mentality evolved, and imprisonment provided the answer. Prison absorbed all types of offenders from the lower strata of society: the habitual drunks, vagrants, the mentally ill, and so on. Prison provided social benefits: it hid such people from view; it allowed politicians and the courts to maintain public credibility. The recidivist nature of these low-level offenders guaranteed the long-term maintenance of the prison estate (Pratt, 2006).

This approach was influential in the government promoting indeterminate prison sentences and other forms of confinement for the socially unfit, rather than coherent proposals which would have restricted entry to prison. As was explained in the 1901 report of the inspector of prisons, 'it is needless to point out that none of the above mentioned class can in any true sense of the word be termed "criminals" but merely tend to swell the figures and create an erroneous impression as to the criminal situation of the colony' (Inspector of Prisons, 1901, p. 3). In 1902, the inspector reported that 'drunks and lunatics were similarly placed in prisons in the absence of any alternative facilities for them; … Encumbering gaols with such cases is not only inhumane and improper, but is also unjust to the patients themselves, who on account of having lost their reason – probably through no fault of their own – are branded with the prison stamp' (Inspector of Prisons, 1902, p. 1).

Drunkenness tailed off in the early part of the 20th century, and with the impact of increased social solidarity and homogeneity one would have expected a drop in the crime rate. However, the combination of high policing levels and a high rate of prosecutions for petty crime and drunkenness led in turn to a rate of imprisonment that was excessive.

By the turn of the 19th century, the tide of public opinion had begun to turn. In 1886, the Police Force Act established an unarmed police, and there was a gradual shift from coercive and oppressive tactics to a strategy of 'order maintenance'. Successive police commissioners increasingly looked to the London Metropolitan Police and Sir Robert Peel's vision of 'policing by consent'.

New Zealanders were intent on being regarded by other nations as a civilised society, and a professional police was part of the equation. They would be disciplined, organised, conspicuously impartial, under civilian control, above party politics, isolated by their uniform and authority,

and free from the corrupting influences of the local community (Miller, 1977, p. 25). Any fears of 'political control' were met by police claims to an historical constabulary independence, and to a more general 'community accountability'.[1] The 'new' police force would operate through and with the consent and support of the general public. Public acquiescence and goodwill would be gained through effective crime prevention, sobriety, restraint and discretion in law enforcement. A focus on crime and crime prevention was a significant part of the process of consent.

Policing by consent

In 1920, the police commissioner, John O'Donovan, brought the 'policing by consent' model to life (Dunstall, 1996). In his preface to a new set of police regulations, he stressed the need for police initiative and extolled the virtues of police discretion: 'we keep a baton, but seldom use it; when we do, its application should be scrupulously proportioned to the need. Consistency and firmness without harshness should be the guiding principle' (O'Donovan, 1920). He emphasised the need for the police to stand above community and factional influence and to act out their part as impartial servants of an impartial law.[2]

O'Donovan's commitment may have been the product of his passion for police professionalisation, training and organisational change. However, he may also have been motivated by the 1912 Waihī miners' strike, during which a miner was batoned so severely by police officers that he died in hospital, and the 1916 raid on Rua Kēnana's community at Maungapōhatu.

For O'Donovan, public acceptance of police authority depended on two basic attributes of the police: their legal relationship and the aloofness it gave them from the political process, and the restraint and decency of their actions (Cameron, 1986, p. 12). On the one hand, the police were the impartial, efficient agents of an impartial, consensual law. On the other, they were to use their powers and position with circumspection – using force only where necessary, sparing even serious offenders' feelings, and helping ex-convicts, strangers, women, children and ex-soldiers alike.

Vagrancy and homelessness in the 1950s

In 1958, the author began his police career in Wellington. Vagrancy and homelessness existed, but to a much lesser degree than in the 1890s. The police relied on the services of social agencies such as the Salvation Army, the City Mission and the Sisters of Compassion soup kitchen (established in 1901) to provide basic support. There were a small group of street dwellers, mostly habitual male drunks who were well known. As winter approached, and with tacit support from the local magistracy, the homeless would be arrested under the vagrancy provisions of the Police Offences Act 1927, with charges of sufficient severity to qualify for three months' imprisonment. They would be sentenced in May or June, and released from prison in August or September. For three months they were guaranteed food, accommodation and warmth, all provided in the humane environment of Mt Crawford Prison – rough and ready, but supportive.

Extreme police zealotry was discouraged. On one Sunday morning, local drunks gathered outside the public library and began to party. A police officer waited until midday, and then arrested 11 miscreants. The Monday morning magistrate was less than impressed, convicting and discharging them all, and complaining to the police superintendent about the abysmal lack of police discretion. What he may not have known was that the watchhouse keeper (the officer responsible for processing arrested persons) was required to process all prisoners received during his shift. The arresting officer wasn't fond of the watchhouse keeper in question, and by presenting him with 11 prisoners at 12.45pm, ensured that he would have to spend an extra two or three hours at the station after his shift finished at 1pm. While there was no legal provision to enable the police to 'move on' disorderly or homeless people, it did happen from time to time.

Police and community engagement

Between 1960 and 2000, policing styles fluctuated. The late 1960s saw a focus on 'reactive' policing and developing a rapid and efficient response to the public. It rapidly transitioned into a form of policing where confrontation rather than persuasion became the order of the day' (Mainwaring-White, 1983). The discussions that followed favoured proactive policing, which recognised that the sources of crime and disorder lay in the deeper social conditions of the community. It was seen as critical to identify those social problems which generate crime, and work collectively with social agencies to prevent and reduce it.

By the 80s and 90s the view that developed internationally focused on the role that the community should play. Rather than the community being passive recipients of police services, it was argued that there should be a 'social contract' between the police and their communities – a framework for working together in the pursuit of crime prevention and peace-keeping – an approach often referred to as 'active citizenship' or 'community engagement' (Marinetto, 2003, pp. 39–40, 1). The police were expected to show leadership in mobilising the community to achieve common goals (Alderson, 1979, pp. 177, 179).

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Central to the police future was the issue of accountability: a police service which was widely seen as being responsive and accountable was in a good position to both initiate and influence change. There was a need to broaden formal local input into policing, and for the building of relationships with significant local organisations, including iwi and tribal entities. Māori and other minority groups needed to be specifically targeted; they were likely to opt out of structures which they could not influence. It was acknowledged that what was needed was a genuine effort to locate concepts and forms of consultation and accountability that were generated by and culturally appropriate to specific local situations.

Rather than invest in addressing the social causes of homelessness, the government decided to address the problem by increasing the enforcement powers of both the citizenry and the police.

In 1995, Commissioner Peter Doone became concerned about the police relationship with iwi and Māori. Police embarked on a journey of bringing the voice of Māori into policing as a means of working towards reconciling past grievances, and recognising the importance of policing in partnership with Māori in New Zealand society.

Successive commissioners' formal commitment to community-oriented policing from 2000 onwards has served society well. There has been sufficient momentum for the police to develop strong partnerships with key social services. In turn, that has meant that, until recently, vagrancy, homelessness and disorder have been managed by the police in partnership with community organisations.

The turning of the tide

Why, then, have vagrancy, homelessness and public disorder reached a level not witnessed since the 1880s? Is it a 'perfect storm', one of those rare situations where multiple independent scenarios or events converge simultaneously to create a disastrous outcome?

Since September 2025, the government has funded some additional Housing First and community housing places, and additional outreach and support workers and programmes. At the same time, it encouraged Ministry of Social Development staff to 'use greater discretion when assessing emergency housing (EH) applications', a euphemism which encouraged a more stringent approach.[3] As a result, the number of government emergency housing grants to people who are homeless declined (Salvation Army, 2025). By June 2025 more than one in three applications (36%) were being turned down, compared with one in 25 (4%) in March 2024. The effect was to reduce the financial assistance to people facing homelessness from $24.4 million to just $3.2 million per month. Funding available through government budget allocations for homelessness support has reduced by $79 million in the year to June 2026 compared with 2025 (ibid., p. 6).

In the 17 months to November 2025, the government cut funding for emergency accommodation by 81% and reduced the number of homeless living in motels by 82%. Systemic exclusion of emergency housing applications continued, resulting in higher levels of unrecorded need and a growing loss of confidence in accessing the system (ibid.).

By late 2025, it was clear that social services were struggling to cope with the reduced funding and increasing homelessness. Out of a total of 21 services in 10 centres, 14 reported increases, and 7 reported no change. Mental health and addiction support services were urgently needed, including supportive accommodation for those with higher needs (ibid.).

Increase in retail crime

The increase in homelessness and rough sleeping had a negative impact on retailers, particularly in Auckland. A late 2025 survey by Heart of the City found that 91% of central city business owners believed rough sleeping and begging were actively harming their trade (Heart of the City, n.d.; Dillane, 2025). Social agencies urged the government to address the underlying factors that were driving the increase in rough sleeping and retail crime. Auckland City Council's morning 'wake-up' patrol was regarded as an example of an alternative approach that produced a more positive result (Scott, 2026).[4]

Rather than invest in addressing the social causes of homelessness, the government decided to address the problem by increasing the enforcement powers of both the citizenry and the police. In doing so, it relied on political power and influence rather than community engagement.

At the centre of the strategy was Sunny Kaushal – someone who had been deeply involved in Auckland's homelessness and retail crime debates for years, and who also had a long history of political ambition. After two unsuccessful attempts to become a Labour MP, he switched to National and built a public profile arguing for tougher penalties, broader citizens' arrest powers, and stronger responses to shoplifting (Chapman, 2026). During their years in opposition (2017–23), National MPs regularly attended Kaushal's Crime Prevention Group meetings and accepted his petitions at Parliament. Once National came to power in 2023, those same relationships shifted into the Beehive. Suddenly Kaushal wasn't just lobbying ministers, he was appearing alongside them in Facebook posts and community meetings.

In mid-2024, the National-led government created a five-person Ministerial Advisory Group for Victims of Retail Crime and appointed Kaushal as a full-time member and chair, with a $1.8 million budget. The

other members included people with strong retail or political ties: Ash Parmar (former ACT candidate in Hamilton and owner of three liquor stores), Michael Bell (Michael Hill Jeweller), Lindsay Rowles (Foodstuffs) and Carolyn Young (Retail NZ). According to Young, the group never really agreed on its purpose or direction (Collins, 2026). Members repeatedly asked the chair, Kaushal, to draft a basic document outlining what the group was trying to achieve, but this never happened. Without that foundation, the agenda ended up being driven almost entirely by Kaushal and the ideas he'd been promoting for years: expanding citizens' arrest powers, changing trespass laws and increasing penalties for shoplifting.

The group's first major report, sent to the minister of justice in late 2024, proposed a significant expansion of citizens' arrest powers – essentially allowing any adult to detain someone they believed was committing a crime. Kaushal's foreword to the report admitted there were differing views, with small business owners supposedly more supportive of stronger detention powers and arming security guards. But the submissions attached to the report show a much more divided picture: some small business groups backed the changes, while others – including the New Zealand Security Association, the Motor Trade Association, Hospitality New Zealand and Retail NZ – warned that the proposal was unsafe, ineffective, or a step backwards.

Despite that lack of consensus, the government accepted the recommendations. In February 2025, Justice Minister Paul Goldsmith announced that the Crimes Act would be amended to allow citizens to detain offenders at any time. The backlash was immediate: the Police Association criticised the move, Retail NZ called it dangerous, and many community groups expressed concern for staff safety. Some supporters – including Destiny Church leader Brian Tamaki – celebrated the increased powers.

The impact of citizen's arrest rights on policing

Promoting citizen's arrest rights, particularly through expanded legislation, creates significant operational and safety challenges for policing, with law enforcement officials warning that it may worsen public safety. First, promoting these rights can lead to more violent confrontations, as offenders may carry weapons or use greater force if they expect to be detained by untrained civilians. Second, police may be forced to investigate and potentially charge citizens who use 'unreasonable force' or unlawfully detain people. Citizens are not trained and lack clear guidelines as to what constitutes 'reasonable force'. Third, expanded powers require citizens to call the police immediately, potentially overwhelming the police with low-priority calls (New Zealand Police Association, 2026).

Housing advocates reacted adversely to the idea of 'move-on' legislation, including Auckland City Mission, Visionwest Community Trust, Lifewise, Kāhui Tū Kaha, Te Matapihi, Community Housing Aotearoa and Housing First (Crimp, 2025).

Political expectations of the police

Operational matters have traditionally been a matter for the police commissioner. In the absence of any comment from the police, politicians spelt out their expectations. The prime minister told RNZ's *Morning Report* police were capable of dealing with the issues and that the orders gave the police another tool to address anti-social behaviour (RNZ, 2026). Paul Goldsmith's office said that it had been made very clear that police are expected to connect people given 'move-on' orders with the support they may need. Both Goldsmith and Mitchell said that 'it will be left to police officers to decide what support a person needs, if any'. The police minister did qualify his initial response: '[I]n terms of the rough sleepers, no, police are not the lead agency on that, but they have the skills and the training and the powers to be able to deal with these people who often have mental health issues' (Williams, 2026).

At the time of writing it was still unclear who the lead agency is supposed to be. All the potential lead agencies oppose the 'move-on' proposals and are clear that they do not have the resources to address the issues.

> A regulatory impact statement, which included the views of a range of government agencies, criticised the proposed 'move-on orders', saying they could deepen the social and financial hardship experienced by beggars and rough sleepers, and push housing further out of reach …

Introducing 'move-on' legislation

At the end of 2025, the government introduced 'move-on' legislation via amendment of the Summary Offences Act 1981. Prime Minister Christopher Luxon told reporters the government was in discussion with 'lots of different stakeholders' in Auckland to improve the state of the city centre. The justice minister said he had been tasked with ensuring that police had the tools they needed to tackle public disorder, and that 'We're open to some new suggestions in that area.' Police Minister Mark Mitchell said he supported giving police more tools to move homeless people on from public areas: 'You're not just going to pick up someone that's in a vulnerable position and drop them off in another vulnerable position. You're actually going to take them to a place of safety. That's the whole idea of it' (McCulloch, 2025).

Mounting opposition

Social agencies have widely condemned the move, saying shifting people around cities would do nothing to solve homelessness or the mental health and addiction problems that many rough sleepers were dealing with. Likewise, Retail NZ chief executive Carolyn Young took the view that 'without wider social support, Retail NZ didn't believe they would make a difference in the long run' (Baker-Wilson et al., 2026).

When the Police Association spokesperson spoke out against the proposal, explaining that it was a drain on resources, he was publicly chastised by Mitchell: 'they're completely out of touch. They need to get out on the beat with their officers, because often, rough sleepers, police are having to deal with it anyway' (Williams, 2026).

> … the motivating driver behind the 2025 'move-on' proposal … was the consequence of a massive defunding of social services in the housing sector, followed by a major exodus of those with housing needs from emergency housing onto the streets.

In March 2026 it was revealed that officials from the Ministry of Justice and the Ministry of Housing and Urban Development opposed the proposed legislation. A regulatory impact statement, which included the views of a range of government agencies, criticised the proposed 'move-on orders', saying they could deepen the social and financial hardship experienced by beggars and rough sleepers, and push housing further out of reach (Laughton, 2026). Justice officials noted a 'lack of empirical evidence' that the orders would reduce crime rates, and said they were 'highly likely' to merely shift begging or rough sleeping to different locations. Goldsmith noted the advice from officials, but said it was for the elected government to determine how it moved forward (McCulloch, 2026).

There has always been a strong populist tradition in New Zealand politics, and an attendant scepticism of expert knowledge. As Jackson and Harre commented, 'the preference for the opinion of the ordinary man over that of the expert is but one aspect of the uncompromising assertion of the principle of equality which is a national fetish' (Jackson and Harre, 1969, p. 71). On this occasion, however, the 'national fetish' reached an unhealthy extreme. Not only were the opinions of in-house experts ignored, but also those of charitable organisations, entities and individuals with a lifetime of experience and expertise. Instead, the government relied on the advice of their own political appointee.

On this occasion, however, it would seem that the government had seriously miscalculated the level of public support for the proposed legislation. On 29 March, communities from across the country mobilised as part of a 'national day of action' – Kia Tū Kotahu: Move on the Move on Orders. Events were held in Auckland, Tauranga, Wellington, Blenheim, Christchurch and Dunedin (Conchie, 2026; Palmer, 2026). Those opposing the proposal argued that:

- the legislation would simply shift the problem to one of law enforcement, without addressing the underlying problems of homelessness, poverty and mental health;
- targeting non-violent behaviours such as rough sleeping or begging criminalised poverty and vulnerability;
- the legislation potentially breached the New Zealand Bill of Rights Act in regard to the right of freedom of movement and protection against 'cruel and degrading treatment';[5]
- the new powers could stretch resources, potentially delaying responses to more serious incidents;
- imposing fines of up to $2,000 on homeless people who do not have the ability to pay leads to increased incarceration and increased taxpayer costs;
- the law disproportionately affects Māori, Pasifika and at-risk youth and increases their vulnerability.

Political response to vagrancy and homelessness

Are there any similarities between the political response to vagrancy and homelessness in the 1870s and the government's response over the last two years? While the origins of vagrancy and homeless in the two periods are very different, the prevailing political inclinations bear remarkable similarities.

In the earlier period, New Zealand wanted to present itself to the world as a civilised society, one in a stage of advanced social and cultural development. Widespread drunkenness, vagrancy and homelessness undermined this vision. An 'out of sight, out of mind' mentality developed and prisons and institutions provided a ready answer. What was the motivating driver behind the 2025 'move-on' proposal? It was the consequence of a massive defunding of social services in the housing sector, followed by a major exodus of those with housing needs from emergency housing onto the streets.

When Prime Minster Christopher Luxon was asked about impact of the 'move-on' orders for the homeless in the Auckland CBD, he replied, 'The bigger issue is like Chuck and Mary coming in for their once-in-a-lifetime trip' and 'getting intimidated because someone's sitting on the doorstep of a shop they're trying to get into, threatening, shouting at them, abusing them'. In response, columnist Verity Johnson posed the following questions: 'Did he actually say that? Does he seriously mean the country's rising homeless, and the citizens whose lives it destroys, *were less of an issue* than tourists trying to get into a store?' She pointed out that in the 17 months to November 2025, the government cut funding for emergency accommodation by 81% and reduced the number of homelessness in motels by 82% (Johnson, 2026).

Revisiting policing by consent

O'Donovan's seminal work in the 1930s set the foundation for the future of democratic policing in New Zealand, and 'policing by consent' was a critical component. Policing by consent meant establishing trust and confidence between the police and the public, with public approval of the force's philosophy and actions based on that mutual respect. Public acceptance of police authority depended on both their political independence and the restraint and decency of their actions. For 'policing by consent' to survive, two factors were required: police autonomy and public consent. Autonomy entailed a clear separation from political influence; consent was about an ongoing relationship with the 'law abiding' public.

The concept has taken a battering in recent years. When the National Party announced its law and order policies in 2023, the police spokesperson, Mark Mitchell, declared that it would scrap Labour's 'policing by consent' model and encourage a '"back to basics" policing model'. He later denied making that statement, and explained what he meant.

> We never said we were scrapping any policing by consent; we said that Labour had … somehow adopted their own perverse approach to policing by consent ... creating an environment where it's very permissive, for example, organised crime and gangs go out there and do what they want to do and act as if they've got complete impunity. (Mitchell, 2023; Quinlivan, 2023)

In November 2024 the incoming police commissioner was pressed about his stated pivot away from 'policing by consent' to focusing on 'trust and confidence' in law enforcement. He responded:

> 'Policing by consent is not part of my vocabulary, frankly. I don't believe that sufficient people actually understand what it means. I struggle with it, right?' he told Q+A. 'I don't think too hard about policing by consent, because it's something that I've personally been confused by. There's not too many people that I've come across that understand what it actually means.' (Hu, 2025)

The 'principles' of policing by consent

The concept of policing by consent is not political property, to be reshaped at ministerial whim. Nor is it synonymous with gaining public trust and confidence, although that is certainly part of it. It is a concept that has informed democratic policing for nearly 200 years. While attributed to Sir Robert Peel in the UK, it was probably codified by the first commissioners of the London Metropolitan Police, Charles Rowan and Richard Mayne, and issued as a general instruction to police officers following the passage of the 1829 Metropolitan Policing Act.

The nine original principles can be summarised under five headings:

- Public approval and co-operation: the ability of the police to do their job depends on the public's approval of their actions and willingness to co-operate.
- Minimum force: police should only use physical force when persuasion, advice and warnings have failed, and then only the minimum degree necessary.
- 'The police are the public': this principle suggests that the police are simply members of the community who are paid to give full-time attention to duties that are incumbent on every citizen.
- Impartial service: public favour is maintained by demonstrating impartial service to an impartial law, regardless of the person's status or the popularity of a specific law.
- Prevention as success: the true test of police efficiency is the absence of crime and disorder, not visible evidence of police action.

There is a clear similarity between these principles and section 8 of the Policing Act 2008, which states that the Act is based on the following principles:

(a) principled, effective, and efficient policing services are a cornerstone of a free and democratic society under the rule of law:
(b) effective policing relies on a wide measure of public support and confidence:
(c) policing services are provided under a national framework but also have a local community focus:
(d) policing services are provided in a manner that respects human rights:
(e) policing services are provided independently and impartially:
(f) in providing policing services every Police employee is required to act professionally, ethically, and with integrity.

> If the New Zealand community had been fully consulted, then it is almost certain that it would have advised against the police having additional powers to arrest and imprison vagrants and the homeless.

How does the proposed 'move-on' legislation measure up?

It is instructive to consider the way in which the proposed legislation was first conceived, who was consulted, the level of political involvement, the degree of public support and confidence, and whether the principles inherent in the concept of policing by consent or section 8 of the Policing Act were observed.

Public approval and cooperation

There is no evidence of wide public approval or support. The political decision to defund emergency housing eligibility and housing support was followed by the appointment of a politically aligned chairperson – Sunny Kaushal – to the Ministerial Advisory Group for Victims of Retail Crime, and the introduction of

ideas he had been promoting for a decade by way of ministerial fiat. Consultation was confined to city retailers.

Policing operates under a national framework but also has a local community focus

Consultation was mainly limited to Auckland CBD retailers, not all of whom were supportive. Nationally, local communities, industrial organisations and unions, social service providers and Māori organisations were strongly opposed. Every indication is that the legislation will result in a loss of trust and confidence in the police. There was no consultation with Māori.

Minimum force

According the principles, police should only use physical force when persuasion, advice and warnings have failed, and then only the minimum degree necessary. This principle is breached in both the proposed move-on orders and amendment to the Crimes Act. Citizen's arrests would likely lead to an increase in unnecessary violence by untrained members of the public. Targeting non-violent behaviours such as rough sleeping or begging criminalises poverty and vulnerability. Social agencies argued that the law simply shifts the problem to one of law enforcement without addressing the underlying problems of homelessness, poverty and mental health.

The police are the public

This principle is turned on its head with the proposal that citizens should have a power of arrest. Law enforcement officials warned that it may worsen public safety and lead to violent confrontation. The public have been critical of the proposal.

Impartial service

Public favour is maintained by 'demonstrating impartial service to an impartial law'. This principle is ensconced in the Police Oath, which requires police officers to swear on oath that they will act 'without favour or affection, malice or ill-will'. But what does a police officer do when the law is neither impartial nor consensual? In such a case, the public may well encourage the police to ignore it. If that is so, then it is bad law.

Prevention as success

The true test of police efficiency is the absence of crime and disorder, not visible evidence of police action. This is a critical issue. The police minister and the commissioner have emphasised the importance of core policing, meaning the essential, fundamental duties of law enforcement: protecting life and property, preserving public order, preventing crime, and enforcing the law. If legislation is introduced which increases the level of police activity without reducing crime and disorder, and also lowers the level of public trust and confidence in the police, it does not meet the criteria.

The police minister's contention that 'the best way to police by consent is by maintaining the trust and confidence for the people that you serve' is a truism (Palmer, 2024). But if legislation is introduced without public consent and negatively affects public trust and confidence, then it is time to review police policy and procedures.

Conclusion

The coalition government's proposed 'move-on' legislation constitutes a significant departure from the 'policing by consent' tradition that has held fast for the last 75 years. It poses major risks. It would require the police to 'move on' vagrants and the homeless, without fulfilling any other purpose than that of 'clearing the streets' to make them acceptable for tourists with money. If enacted, the police will no longer be, in the words of O'Donovan, 'impartial servants of an impartial law'. Instead, the police will be seen as political servants, there to do the work of a government whose preference is to treat those in poverty and dire need in an inhumane way, rather than address their social needs.

This approach runs counter to O'Donovan's call in 1920 for police officers to use their powers and position with circumspection, using force only when necessary, helping ex-convicts, strangers, women, children and ex-soldiers.

If the New Zealand community had been fully consulted, then it is almost certain that it would have advised against the police having additional powers to arrest and imprison vagrants and the homeless. It would have instead sought increased resources for social services and housing support.

A final issue is whether the proposed legislation is likely to increase public trust and confidence in the police. The evidence suggests that it will receive support from a small group of retailers, mostly in Auckland. It is clear that the general public are not in favour. For those who are vulnerable and in need of support, it will lower their trust levels further. For groups who already have low trust in the police, it could turn distrust into hatred. This is not O'Donovan's vision; nor is it 'policing by consent'.

1 The 'police still retained the capacity for maximum coercive response', as seen in the joint police–military response to the 'dog tax rebellion' in 1898 and the police suppression of Rua Kenana's movement in 1916, and more recently the 1976 dawn raids and the 2009 Operation Eight at Ruatoki, both of which, along with the raid on Rua Kenana, have been the subject of a police apology (Hill, 2003, pp. 2–3; Hill, 1989, p.365).

2 The author recalls that when he joined the Police in 1958, he was issued with a tattered manual containing the Police Act, Police Regulations and a manual of instructions. The foreword by Commissioner O'Donovan was part of the issue.

3 Interpretation and application of whether people have 'contributed to their own homelessness' remains a major reason for declining access to emergency housing grants. It is unclear how this test is used in practice, including how the ministry considers circumstances such as mental or physical health issues and addictions.

4 Auckland City Council employs 34 'community compliance' officers, who wake up rough sleepers every morning to make way for businesses to operate, and that the footpaths are clear. With community support, they address individual issues over time. The emphasis is on empathy before enforcement.

5 NZ Council for Civil Liberties, 2026 February 23, 'Move on' Orders an Over-reaction'

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Eddyn Treacher, Juliet A. Gerrard
and Emma Brown

Cellular Agriculture's Role in Diversifying Food Exports for Aotearoa New Zealand

how can we optimise our policy and regulatory settings for opportunities in future foods?

Abstract

Cellular agriculture is an emerging form of food production which aims to ethically and sustainably meet increased food demands in a fast-changing world. This article explores key regulatory challenges associated with this new industry, alongside opportunities and potential pitfalls in our uniquely Aotearoa New Zealand context. Existing regulatory frameworks around the world are explored, building a picture of a varied policy landscape influenced by strongly held political attitudes towards food and food production. To maximise the promise of this potential new export market for Aotearoa New Zealand, policymakers need to ensure that regulation is safe, efficient, well communicated and responsive to less visible sociopolitical needs.

Keywords alternative proteins, future foods, cell-cultured meat, cellular agriculture, novel food safety, sustainable agriculture

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Context

It has long been recognised that Aotearoa New Zealand's primary industries and food export economy are a source of both vulnerability and future opportunity for New Zealand (Ministry of Research, Science and Technology, 2003, 2005). Food exports made up about 67% of New Zealand's total export goods in 2023, with our two largest food exports dairy and meat respectively (Ministry for Primary Industries, 2023). New Zealand is the largest single-country exporter of milk products in the world (Te Puna Whakaaronui, 2022). Our economy's reliance on the sector means future shocks stemming from breakthrough technologies, increasing extreme weather events, animal disease epidemics, evolving consumer preferences and geopolitical tensions all pose an outsized threat to our economy (Ministry for Primary Industries, 2023; Te Puna Whakaaronui, 2022). Diversifying our food export offerings affords an opportunity to improve the resilience of our export market while leveraging existing expertise and infrastructure. Diversification can also provide new opportunities for high-value jobs.

New forms of protein production provide an opportunity to diversify without necessarily undermining our existing primary industries, particularly as new export markets open and younger generations show increasing interest in alternative food sources (Food HQ, 2023; Ministry for Primary Industries (MPI), 2023; Te Puna Whakaaronui, 2022). Although New Zealand has historically put limited funding into the alternative protein space (Food HQ, 2023), our level of investment has increased significantly in recent years, surpassing US$28 million in 2024 (GFI, 2025), including investment in cell-based products. Cell-based products are already widely used for cellular therapy and regenerative medicine applications (Ganesan et al., 2025), and this expertise is now being applied to the agrifood sector. Here, we interrogate the opportunities and risks specifically associated with cell-based food products, and address how we might adapt our regulatory and policy frameworks to support this emerging industry.

The rise of 'future foods'

As the global population expands, the interest in using technology to enhance food production grows, with a particular interest in proteins. The size of the global challenge to produce high-quality proteins is formidable, as noted recently by the EAT-Lancet Commission (Rockström et al., 2025; Rosin and Campbell, 2024). A variety of alternative protein sources are produced internationally: a basic overview is shown in Table 1. To meet this challenge will require multiple solutions to meet different market niches, and here we focus on one of them – cellular agriculture. McKinsey and Company recently estimated that the global market for cell-based or cellular agriculture products alone could be worth up to $320 billion by 2050 (Cellular Agriculture Australia, 2025).

Table 1: Protein types currently being explored as alternative protein sources to those extracted from traditional animal agriculture

Alternative proteins			
Plant-based proteins	Cell-based proteins (cellular agriculture)		Other proteins
	Acellular proteins (no cells in product)	Cellular proteins (product contains cells)	
· Legumes · Cereals · Seeds · Leafy greens (Rubisco)	· Animal cell-cultured proteins (milk / egg) · Precision fermentation* · Molecular farming*	· Animal cell-cultured proteins (meat / seafood) · Biomass fermentation (e.g. mycoproteins, microalgae)	· Insects · Seaweed
Hybrid (or blended) products can be formed by combining different protein sources (including conventional proteins).			

*Requires genetic engineering of inputs
Source: Food HQ, 2023; Te Puna Whakaaronui, 2022

What is cellular agriculture?

Cellular agriculture, where agricultural products are formed through cell culture (Martins et al., 2024), is emerging as an alternative to conventional farming methods. Although production costs today are higher than for plant- and fungi-based products, cell-cultured products can more accurately replicate the taste, texture, appearance and aroma of a diverse range of existing products, including meat, dairy and egg proteins (FAO and WHO, 2023a; Kaplan and McClements, 2025). Cellular agriculture can also be used to create breast milk for infants, animal-based materials such as leather, and non-animal products, including coffee and cocoa (Cellular Agriculture Australia, 2025; FAO, 2023). Cell-cultured meat[1] is produced by growing animal cells inside environmentally controlled 'bioreactors',[2] replicating the processes responsible for muscle and fat growth in live animals (Kaplan and McClements, 2025; Martins et al., 2024). During production, cells may be attached to edible biomaterial

Figure 1: A general overview of process stages and associated technical and scaling challenges within cell-cultured production

Procedures			
· Tissue sampling · Cell isolation · Cell storage	· Initial cell culture · Large-scale culture · Cell differentiation	· Cell maturation · Cell collection · Scaffold removal*	· Formulation · Packaging · Storage
Current technical and scaling challenges			
· High cost of cell banking	· High cost of growth media · Large quantity of biomaterials required for feedstock and edible scaffolds	· Incomplete nutritional and flavour profiles	

*If inedible scaffold materials are present during expansion
Source: image adapted from FAO and WHO, 2023a. Procedures and challenges from Bennie et al., 2025; Gordon et al., 2025; Martins et al., 2024

'scaffolds' to structure their growth. Use of scaffolds can reduce production cost and improve the quality of the resulting 'hybrid' (or 'blended') product (Gordon et al., 2025; Kaplan and McClements, 2025). Touted as a highly secure, sustainable and ethical means of producing convincing animal protein substitutes (ibid.), cellular agriculture nevertheless faces as yet unresolved technical challenges throughout its production life cycle, shown in Figure 1.

International public investment in the cellular agriculture industry has helped to encourage significant growth across the sector over the past decade (GFI, 2024, 2025). The first cell-cultured bovine meat was produced at Maastricht University in 2013, with a price tag of over NZ$1 million per kg (Te Puna Whakaaronui, 2022). Since then, the cellular agriculture industry has grown considerably, with over 250 companies active in the cell-cultured protein space in 2026 (GFI, 2026); investment from multinational food producers include Tyson Foods, Nestlé and Cargill, and bovine meat produced at less than NZ$100 per kg (Food HQ, 2023; Te Puna Whakaaronui, 2022). Cell-cultured beef products could feasibly reach a competitive price point once serum-free media costs drop below US$0.75 per litre, with past industry-backed predictions forecasting cell-cultured meat prices becoming competitive as early as 2030 (Negulescu et al., 2023; Vergeer et al., 2021).

However, as few commercial-scale cell-cultured production facilities currently exist, cell-cultured products are not widely available for purchase, and it is difficult for cellular agriculture companies to establish sustainable revenue streams. Outside of limited tasting events and restaurant dining, hybrid cell-cultured meat products designed for human consumption are currently only available for purchase in Singapore and Australia (GOOD Meat, 2026; Vow, 2026); cell-cultured products have not yet been consumed in New Zealand. With a more challenging landscape for private investment post-Covid-19 as well, the international research and start-up ecosystem has become highly volatile, with new start-up companies emerging as more established cultivated meat companies shut down operations (Watson, 2025; Protein Trends, 2026). Indeed, it has been suggested that after a period of unrealistic expectations, investor sentiment towards cellular agriculture is sitting within a 'trough of disillusionment', despite continued innovation (Fino et al., 2024; McNulty et al., 2025).

Hazards associated with cell lines include misidentification or cross contamination, contamination with microbial pathogens or contamination with chemical residues.

This dynamic landscape presents a challenge for regulators and compounds the risk that innovation is compromised by regulatory delays, creating significant barriers to scaling. Responsive design and implementation of regulation can help enable and promote innovation while protecting consumers (Fino et al., 2024; Monaco, 2025a). For example, the scaling of hybrid meat production requires supply chains for large quantities of biomaterial ingredients. These ingredients could be supplied through lower-value byproducts from our conventional agrifood industries (Glaros, 2025; Gordon et al., 2025). Robust and efficient safety evaluation of new sources of biomaterials can help progress the development of these supply chains, especially when approvals are coordinated with other regulatory agencies. Scaling also requires equipment that is food-grade rather than medical-grade, and regulators can provide useful insights into food-grade standards as companies scale up their facilities (Te Puna Whakaaronui, 2022).

Key questions for regulators

The challenges associated with cellular agriculture are common for production processes still in the early stages of technological development, with limited presence at a commercial scale. Here, we discuss some of the major questions about the emerging industry being asked by regulators worldwide.

How can we ensure cell-cultured products are as safe to consume as other foods?

Internationally, the principle of substantial equivalence is generally applied: the safety of novel foods is determined through comparison with foods produced conventionally. Novel foods must meet the same food safety standards as currently commercialised food products, including effective management of novel hazards (FAO and WHO, 2023a). Although food safety risks associated with cell-cultured products are generally similar to those of other food products, the unique production process and the use of new food ingredients, such as cell lines, growth media and scaffold materials, each introduce novel hazards. These hazards[3] include new avenues for microbial contamination and new sources of chemical toxicity and allergenicity (Kaplan and McClements, 2025). Hazards can be managed using good hygiene practices coupled with international systems for food safety management, a primary example being the Hazard Analysis and Critical Control Points (HACCP) approach. The principles of HACCP are set out in the Codex Alimentarius Code of Practice: hazards should be identified, monitored with regard to established safe limits, and reduced or eliminated via control measures (FAO and WHO, 2023b; Manning, 2024).

Ensuring the widespread adoption of standardised measures to identify and control novel hazards requires industry transparency and close cooperation between researchers, companies and regulatory bodies. Efforts are underway to systematically categorise hazards by type and origin (FAO and WHO, 2023a) and document appropriate mitigation methods. Hazards associated with cell lines include misidentification or cross contamination, contamination with microbial pathogens or contamination with chemical residues.

The risk these hazards present can be controlled through standardised cell banking, monitoring the health of source animals, and routine cell line testing for biological or chemical contamination (Bennie et al., 2025; Semper et al., 2024; Sun et al., 2024). Media components used for cell culturing should also be assessed to determine maximum safe limits on residue present in the final product (Huang et al., 2024; Ong et al., 2025). Novel allergen risks can arise from genetic modification of cell lines or cell culture-induced changes in gene expression (Bennie et al., 2025), or from the addition of allergenic media and scaffold components.[4] Proteins in cellular products that differ from those in conventional meat can be considered as potential novel allergens and subjected to further allergenicity testing (Ham et al., 2025).

How can we ensure cell-cultured products are labelled appropriately for purchase/export?

The presence of cell culture ingredients in food must be clearly communicated to the consumer, who needs to understand the difference between these new offerings and traditional produce. For instance, the presence of macronutrients (e.g., protein, fat), micronutrients (e.g., iron, vitamin B_{12}), and their digestibility and bioavailability may differ significantly between cell-cultured and conventional ingredients (FSANZ, 2025a; Gordon et al., 2025; Kaplan and McClements, 2025). Thus, cell-cultured ingredients should be clearly distinguished from conventional equivalents to enable consumers to recognise important nutritional differences and respond appropriately. Distinctive labelling should also highlight differences in storage, shelf-life or preparation requirements existing between cell-cultured and conventional products (FSANZ, 2025a; Hocquette et al., 2025). The risk that those allergic or hypersensitive to conventional meats may inadvertently consume cell-cultured equivalents should also be mitigated. Allergens and nutritional differences may need to be highlighted or featured prominently to educate consumers as products become available for purchase (FSANZ, 2025a; Hallman et al., 2023).

Recent LCAs indicate that the production of cell-cultured meat can have reduced environmental impacts relative to conventional beef … but also demonstrate that there is a non-negligible risk of cell-cultured meat production having an greater environmental impact than conventional meat production overall …

How does the environmental footprint of cellular agriculture compare with conventional agriculture?

The environmental impacts of cell-cultured meat production have previously been compared with those from conventional meat production through a variety of life cycle analyses (LCAs).[5] Recent LCAs indicate that the production of cell-cultured meat can have reduced environmental impacts relative to conventional beef (Kossmann et al., 2025; Sinke et al., 2023; Tuomisto et al., 2022), but also demonstrate that there is a non-negligible risk of cell-cultured meat production having a greater environmental impact than conventional meat production overall (Risner et al., 2025; Tuomisto et al., 2022). Regulators and policymakers should therefore carefully interrogate environmental claims, which are critically dependent on the estimates used and the boundaries of the analysis for both traditional and cell-cultured products. Recent LCAs typically exclude elements of the full production process from comparisons between conventional and cell-cultured meat, including the construction of industry facilities and equipment, as well as packaging, storage and transport of products (ibid.). They do not always consider regional variation in agricultural systems and innovation in agriculture practices, such as regenerative farming (Hocquette et al., 2025; Kossmann et al., 2025). Broader sustainability considerations, such as antimicrobial resistance risk, biodiversity and ecosystem impacts, food security, food sovereignty, and the flow-on benefits of traditional agriculture, are also absent from recent LCAs (Glaros, 2025; Risner et al., 2025; Sinke et al., 2023).

Despite their limitations, LCAs provide useful guidelines for the responsible development of new industrial processes. LCAs and techno-economic assessments in a New Zealand context would be a valuable resource for local decision makers while industry presence remains limited (Semper et al., 2024). It should not be assumed that all cellular agriculture will have a net environmental advantage over all forms of conventional agriculture; depending on the approach used, cellular agriculture may present environmental advantages over some forms of farming but not others (Sinke et al., 2023). Therefore, LCAs can be useful to identify interventions that improve future environmental outcomes. From recent LCAs, it appears that potential environmental benefits of cell-cultured production over conventional meat rely heavily on industrial-scale design decisions. For example, operating bioreactor systems with renewable energy and seawater cooling can significantly reduce their net environmental footprint (Fino et al., 2024; Tuomisto et al., 2022). The cost of resources used to produce culture media ingredients can also be greatly reduced by building new supply chains for sustainable media formulations – for example, those that incorporate food industry by-products (Kossmann et al., 2025; Sinke et al., 2023).

Table 2: Food safety authorities and standards for non-GM cell-cultured foods in jurisdictions with specific mention of cell-based products (or foods produced from cell culture) in their food safety laws or regulations

Jurisdiction	Authority responsible for food safety assessment	Safety regulations for cell-cultured food	Cell-cultured food approved for human consumption?
Australia and New Zealand	Food Standards Australia New Zealand (FSANZ)	Australia–New Zealand Food Standards Code: Standards 1.5.4 and 3.4.1, Schedule 25A	Yes (2025)
Singapore	Singapore Food Agency (SFA)	SFA's Requirements for the Safety Assessment of Novel Foods and Novel Food Ingredients (2019)	Yes (2020)
South Korea	Ministry of Agriculture, Food and Rural Affairs / Ministry of Food and Drug Safety	Ministry of Food and Drug Safety Public Notice No. 2024–13	No
Hong Kong SAR	Hong Kong Food and Environmental Hygiene Department – Centre for Food Safety	CFS's Technical Guidance Notes on the Safety Assessment of Cultured Meat (2025)	Yes (2024)
United States of America	Food and Drug Administration (FDA) / Department of Agriculture Food Safety and Inspection Service (FSIS)	Specific regulatory regime described in the formal agreement between FDA and USDA (2019)	Yes (2023)
Brazil	Brazilian Health Regulatory Agency	Collegiate Board Resolution (RDC) 839/2023 (the 'New Food Safety Guidelines')	No
European Union (EU) / European Economic Area (EEA)	European Food Safety Authority	Regulation (EU) No. 2015/2283 (the 'Novel Food Regulation')	No
Switzerland	Federal Food Safety and Veterinary Office	Federal Act on Foodstuffs and Utility Articles (Regulation 817)*	No
United Kingdom	UK Food Standards Agency / Food Standards Scotland	Standards currently harmonised with EU Regulation 2015/2283	No
Israel	Ministry of Health – National Food Services	Novel Food Directive 2006 (No. 004-08)	Yes (2024)

*Based on EU framework for novel foods
Source: assessing authorities and retail approval dates from GFI, 2024, 2025; FSANZ, 2025a

How have regulators responded internationally?

Progress in developing regulatory frameworks and standards for cellular agriculture has been uneven between jurisdictions across the globe. Policy responses remain limited to a small number of countries with financial or strategic interests in cellular agriculture, while most countries lack substantive rules for the industry (GFI, 2025). More advanced frameworks entail a risk analysis approach that takes into account public health, safety and consumer protection, involving evidence-based risk assessments prior to political authorisation (Monaco, 2025b). However, there exist significant points of difference across even the most mature frameworks, reflecting ongoing uncertainty about the future impacts of new cellular agriculture technologies (Johnson and Monaco, 2025). Both the immediate political context, as well as the extent to which regulators engage with industry and the public, influence regional approaches towards novel foods (Monaco, 2025b). See Table 2 for a summary of legislative responses to the emergence of cellular agriculture to date.

In Singapore, the first country to approve cell-cultured products for sale, cellular agriculture is managed under their novel food regulations (GFI, 2024). The Singapore Food Agency (SFA) set out an initial set of guidelines for pre-market approval of novel foods in 2019, then updated them in 2023 (SFA, 2023). Early adoption of these guidelines was driven by Singapore's '30 by 30' national food security strategy aimed at increasing local agricultural production (Johnson and Monaco, 2025). The guidelines give a detailed overview of required information from the safety assessment of cell-cultured meat, covering cell lines, culture media, scaffolding materials and a range of other inputs. Formal legislation for the regulation of novel food production was passed in 2025 to provide further regulatory clarity and certainty. The Act requires pre-market approval by the SFA for the production, import, distribution or sale of 'defined foods' within Singapore, covering both novel and genetically modified foods (GFI, 2025; Johnson and Monaco, 2025). The approval process takes into account 'public health and safety considerations', such as hazards arising from the source, production or final composition of the food (Johnson and Monaco, 2025). Most jurisdictions with an active cellular agriculture industry also manage cellular agriculture products through their novel food regulations, including the EU and Israel.

In contrast, the US has opted to create a pathway for cellular agriculture products that sits outside an existing novel food framework (Bennie et al., 2025; Johnson and Monaco, 2025). Rather than take a 'top-down' regulatory approach to encourage industry growth as in Singapore, this framework is a 'bottom-up' response to the growth of industry out of the existing US biotechnology ecosystem (Grossman, 2019; Stephens et al., 2019). This regulatory approach more closely matches that applicable to conventional meat products (Manning, 2024), where the Food and Drug Administration (FDA) assesses tissue collection, cell lines, cell banks, components

and inputs, while the Food Safety and Inspection Service (FSIS) regulates production facilities, post-harvest processing, packaging and labelling (Bennie et al., 2025; Giglio et al., 2024). Note that only cell-cultured products with conventional equivalents regulated by the Department of Agriculture fall under this framework, covering meat, poultry and catfish. Unlike Singapore, the US does not to date provide specific guidelines describing the process for safety approval, although the FDA and Department of Agriculture plan to announce additional guidelines in future that provide greater clarity. It is likely that US regulations will continue to change as more applications are processed (Johnson and Monaco, 2025).

Several jurisdictions have established regulatory 'sandboxes' to better understand the future role of regulators once cell-cultured products are approved for sale locally. The South Korean government established the Gyeongbuk Regulatory-Free Special Zone for Cultivated Food in 2024, allowing ten participating cellular agriculture companies to establish cell banks and explore product commercialisation through demonstrations and tastings (GFI, 2025). Exemptions for tastings of cellular agriculture products are also available in other jurisdictions, such as the Netherlands (Rijksoverheid, 2023; Staten-Generaal, 2025). In 2025, the UK government launched a limited-time regulatory sandbox for cell-cultured meat, involving eight cell-cultured food companies, three academic organisations and two non-profit partners. UK food regulators plan to gather safety and nutritional data from participating companies for use in developing future regulation, alongside completing full safety assessments of two existing cell-cultured products (FSA, 2025). Regulatory sandboxes can provide a useful forum to facilitate communication and collaboration between industry and regulators, helping early-stage companies navigate complex approval processes and reduce the costs associated with employing third-party consultants (Monaco, 2025b; Reinhardt and Monaco, 2025).

Alternative approval pathways exist in jurisdictions where cell-cultured foods are not currently approved for human consumption. Pet foods containing cell-cultured meat are already allowed onto the market in the EU and UK (EU Feed Chain Task Force, 2026). Through a multi-agency collaboration between the UK Food Safety Agency (FSA), the Department for Environment, Food and Rural Affairs, and the Animal and Plant Health Agency, the UK also approved a hybrid cell-cultured product for sale as pet food in 2024. This alternative regulatory pathway is governed through the UK's animal by-product regulations rather than its novel food framework (Gordon et al., 2025; Meatly, 2024). Pet foods with cell-cultured ingredients have also been sold in jurisdictions where cell-cultured foods have previously been approved for human consumption (Green Queen, 2026). Alternative regulatory pathways can significantly reduce the time to market for cellular agriculture products, ensuring that companies can secure revenue while continuing to scale.

Political opposition to 'unnatural' cell-cultured products ... are often supported by agricultural lobbyists, who may see cellular agriculture as an economic threat to 'authentic' production or as a cultural threat to their national food heritage ...

Political opposition to 'unnatural' cell-cultured products has led to prohibitions on cellular agriculture products in some regions. These bans are often supported by agricultural lobbyists, who may see cellular agriculture as an economic threat to 'authentic' production or as a cultural threat to their national food heritage (Fino et al., 2024; Hocquette et al., 2025; Monaco, 2025a). In the EU, there have been national prohibitions in place in Italy since 2023 and Hungary since 2025 (GFI, 2025; Hungary Today, 2025), and bans have also been proposed by lawmakers in Romania, Austria and France (Fino et al., 2024; GFI, 2024). In the US, cell-cultured meat bans were enacted in Florida and Alabama in 2024 (Gerber et al., 2025), while Texas, Indiana, Mississippi, Montana and Nebraska passed their own bans in 2025 (GFI, 2025; Smith-Schoenwalder, 2025). While the federal administration in the US has a benign attitude towards state-level bans (Smith-Schoenwalder, 2025), the European Commission has argued that bans by EU member states are 'unjustified' and potentially unenforceable (GFI, 2025). State and country-level bans in both the EU and US are also being challenged in court by industry and advocacy groups (GFI, 2024).

How have our local food safety authorities responded to date?

In 2023, the joint Australia–New Zealand regulator Food Standards Australia New Zealand (FSANZ) began assessing the first application for approval of a cell-cultured product. The regulator initially intended for the product to be regulated under novel food standards within their Food Standards Code (GFI, 2024; Monaco, 2025b). However, after two rounds of public consultation, FSANZ created a separate regulatory pathway for pre-market clearance of cell-cultured products, introducing new standards 1.5.4 and 3.4.1. These safety standards regulate production of cell-cultured foods[6] throughout the supply chain, covering 'inputs, premises and equipment, processing protocols, monitoring and verification' (FSANZ, 2025a, 2025c). Standard 1.5.4 requires the

use of 'cell-cultured' and 'cell-cultivated' on labels for food containing a cell-cultured ingredient (FSANZ, 2025c), as 'consumer evidence indicates both terms perform equally in relation to consumers' objective understanding, descriptiveness of the food and perceived allergenicity' (FSANZ, 2025a). The use of secondary legislation to specifically regulate cell-cultured foods differs from the more informal guidance issued in the US and Singapore (Table 2).

After approval by the FSANZ board in April 2025 and with no objections from the Australian and New Zealand food ministers (FSANZ, 2025a, 2025b), amendment no. 239 was gazetted in New Zealand in June 2025, permitting the use of cell-cultured quail cells in food and paving the way for streamlined future approvals of cell-cultured foods (FSANZ, 2025d; New Zealand Gazette, 2025). While cell-cultured products are being produced for retail purchase in Australia (Vow, 2026), cell-cultured foods have not yet been produced or sold in Aotearoa New Zealand. Alongside regulatory approval from FSANZ, cell-cultured products must comply with other New Zealand-specific food regulation frameworks before they can be produced or sold locally or to export markets. These frameworks include risk management requirements for food businesses, consumer rights laws, animal welfare laws, biosecurity requirements, rules around food imports and exports, gene technology regulations and our responsibilities under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Australian Government, 2022; Department of Agriculture, Fisheries and Forestry, 2026; Ministry for Primary Industries, 2024). Existing settings will require review to ensure that they are appropriate for the future management of cell-cultured products.

What are the unique opportunities and risks in an Aotearoa New Zealand context?

New Zealand's role as an exporter of high-value primary products has historically led to significant investment in our biotechnology sector (Ministry of Research, Science and Technology, 2005). After the signing of a science partnership agreement between New Zealand and Singapore in 2019 (Ministry of Business, Innovation and Employment, 2025), an ongoing joint programme on future food research was established in 2020 through the Catalyst Fund (Ministry of Business, Innovation and Employment, 2020). This research partnership has helped to foster an emerging alternative protein industry in New Zealand alongside start-ups such as Leaft Foods (Rubisco) and Daisy Lab (precision fermentation). While the costs associated with bioreactor installation and operation at scale are major barriers to cell-cultured production in a relatively small economy (Te Puna Whakaaronui, 2022), our existing food sector expertise gives us opportunities to develop valuable intellectual property in this space (Food HQ, 2023; MPI, 2023). Furthermore, since cell lines and scaffolds derive from traditional agricultural production, New Zealand's reputation for high-quality primary products provides us with a strong value proposition as a business-to-business supplier for the cellular agriculture industry (Cellular Agriculture Australia, 2025; Food HQ, 2023). The only New Zealand company currently active in this space, Opo Bio, has a business model producing cell lines sourced from high-quality New Zealand livestock as a value-add component for cellular agriculture products (Food HQ, 2023).

Potential sources of public mistrust include quality, safety and ethical concerns regarding a new cell-cultured product, and social, cultural and economic concerns around the impacts of an emerging cellular agriculture industry ...

Another major local advantage is New Zealand's responsive regulatory framework for the production and sale of cellular agriculture products. While New Zealand has relatively stringent laws for domestic food production using genetic technologies, cell-cultured production does not always require genetic engineering to occur. In contrast to other jurisdictions, New Zealand has a relatively short time frame for approval, with typical novel food applications taking 15 months to be approved compared with an average of 37 months in the EU. FSANZ also has a relatively high level of engagement with applicants, with one sector representative noting that regulators 'make themselves available to companies to have a pre-application conversation so you can actually get a sense of how much information they're going to need' (Monaco, 2025b). Despite the shorter approval time frame, FSANZ considers a more rigorous list of factors in their approval process than regulators in jurisdictions such as the EU, US and Singapore; and Australia-New Zealand is the only jurisdiction to date requiring formal public consultation as part of the approval process for specific cell-cultured products (Johnson and Monaco, 2025). The relative efficiency of the FSANZ consultation process, despite its scope, provides advantages for local innovation, while building public trust (Monaco, 2025b). Further efforts to streamline the process of food safety application and approval may afford a competitive advantage for local companies.[7]

Capitalising on these advantages will require open conversations with consumers and a willingness to consider their concerns. Potential sources of public mistrust include quality, safety and ethical concerns regarding a new cell-cultured product, and social, cultural and economic concerns

around the impacts of an emerging cellular agriculture industry (Tsvakirai et al., 2023). Religious consumers may also have concerns around whether ingredients used in cell-cultured food are halal or kosher (GFI, 2025; Hocquette et al., 2025). Quality concerns include questions around the sensory properties, value for money, healthiness and naturalness of the new food, including whether the food can be considered 'ultra-processed' and whether it contains food additives or genetically modified organisms (FSANZ, 2025a; Gordon et al., 2025; MPI, 2023). To maintain public trust, it is essential that effective mechanisms exist for consumers to provide feedback on regulation of this new technology on an ongoing basis.

As is the case for conventional agriculture, it is likely that the major audiences for a local cellular agriculture industry are offshore and exist as part of specific market niches (MPI, 2023), meaning that it is important to develop an accurate picture of consumer sentiment in different jurisdictions. Awareness of markets that will welcome our produce is required to develop a detailed understanding of local regulatory requirements for imported cellular agriculture produce. The limited availability of cell-based foods to date has led to a lack of comprehensive sensory studies, although robust frameworks exist for these studies as cell-cultured products become available (Gordon et al., 2025; Semper et al., 2024). Initial consumer surveys show that those most willing to try cell-cultured products are likely to be younger, male, and have low food neophobia and some awareness of cellular agriculture (Table 3). It should be noted that there has not yet been a consumer survey undertaken that specifically examines Māori or Pasifika views towards cellular agriculture (FSANZ, 2025a).

While consumer attitudes towards cell-cultured products remain changeable, domestic manufacturing and consumption of cellular agriculture needs to develop in the context of open conversations about this new technology (Rosenfeld and Tomiyama, 2023). Global consumer surveys show that a lack of awareness of the technology and a perception of unnaturalness fuels mistrust of cellular

Table 3: A sample of recent surveys on consumer acceptance of cell-cultured meat with N>500 total participants

Survey	Locale	Demographic categories	Sample size (year collected)	Key findings for cell-cultured meat (CM) (WTT – willing to try, WTP – willing to purchase, WTE – willing to eat)
Wendt and Weinrich, 2025	Germany	Gender, age, education, income, location, dietary habits	1099 (2024)	55.0% had positive levels of trust in CM, 24.3% would not purchase Most accepting group younger, more educated, with higher incomes and lower food neophobia
Lwin et al., 2025	Singapore	Gender, age, education, marital status, income, dietary habits	2000 (2023)	CM acceptance higher among those younger, male, less educated, with lower incomes, with lower food neophobia and higher CM awareness
Proi et al., 2025	Italy	Gender, age, education, location, dietary habits	800 (2023)	49.4% 'definitely' or 'probably' willing to try CM, 14.4% 'definitely not' WTT / WTE group younger, male, eat meat, have higher CM awareness, highly value meat, have a positive perception of cell-cultured benefits WTT less likely for those with conservative viewpoints
Chia et al., 2024	Singapore	Ethnicity, gender, age, education, income, dietary habits	1224 (2021–22)	25% 'very likely' or 'likely' to consume CM, ~15% 'very unlikely' to consume CM Acceptance of CM higher among male consumers, those with low food neophobia, those with higher CM awareness Acceptance lower among women and ethnic Malays; perception of unnaturalness strongest barrier to consumption, along with distrust of gene technologies
Melios and Grasso, 2024	United Kingdom	Gender, education, religiosity, political ideology	802 (2020)	Cluster of respondents who consumed more meat (meat 'fans') were less WTT or WTP hybrid meat than cluster who consumed less meat (meat 'reducers') 'Fans' preferred hybrid meat products containing beef, while 'reducers' preferred those containing chicken
Tsvakirai et al., 2023	South Africa	Ethnicity, age, education, income, location, dietary habits, family structure	658 (2022)	WTP higher among younger consumers, those with low food neophobia Concern about meat quality was found to be the largest barrier to acceptance, followed by concerns around impacts on the economy and primary sector
Giezenaar et al., 2023	Aotearoa New Zealand	Ethnicity, gender, age, income, location, dietary habits	572 (2021)	67% were willing to try CM WTT higher among those younger, male, those with low food neophobia, those with higher CM awareness, more regular consumers of plant-based meat alternatives, less regular consumers of meat

agriculture (Table 3), potentially resulting in a similar backlash to that previously seen for genetically modified food products (Gerber et al., 2025; Glaros, 2025; Hocquette et al., 2025). This type of backlash may be harnessed for political leverage, leading to attempts to limit the adoption of new technologies regardless of their merits or evidence for harm (Gerber et al., 2025; Monaco, 2025b). Transparency between industry, regulators and the public is key to building trust, instead of keeping information siloed (Fino et al., 2024). Some advocates have suggested that as public familiarity increases, public concerns can be lessened by emphasising the ethical and environmental issues involved with conventional agriculture (Rosenfeld and Tomiyama, 2023).

A sustainability framing risks creating unnecessary conflict between the alternative protein industry and sceptical farming communities (Briggs, 2017; Fowler, 2017). In turn, this approach could encourage lobbying by agribusiness against alternative protein companies (Monaco, 2025b). It should also be recognised that there are tangible environmental and social benefits that emerge from livestock farming, particularly in terms of sustaining rural populations (Hocquette et al., 2025; Nath et al., 2025). In New Zealand, cooperation could be fostered between the two industries – for example, encouraging the implementation of decentralised cellular agriculture within existing farms – bringing new opportunities to farming communities (Glaros, 2025; Kossmann et al., 2025; McNulty et al., 2025), an approach currently being trialled in the Netherlands (RESPECTfarms, 2026). Likewise, although restrictions on the term 'meat' for cell-cultured foods are contested by some as a form of 'label censorship' (Gerber et al., 2025; GFI, 2025), these restrictions can be useful to clearly delineate the regulatory framework for cell-cultured foods from that of conventional meats (FAO and WHO, 2023a; FSANZ, 2025a).

Kai (food) plays a central role in te ao Māori, intimately connected to collective and intergenerational knowledge systems. Burgess and Koroi note that 'any conversation about kai is inherently a conversation about whanaungatanga – being in good relation' (Burgess and Koroi, 2024). The right for Māori, as the Indigenous people of Aotearoa, to exercise culturally relevant food practices are protected by instruments such as the United Nations Declaration on the Rights of Indigenous Peoples, He Whakaputanga and te Tiriti o Waitangi (Smith and Hutchings, 2025). However, Māori have historically had little influence over the introduction of new food technologies or the commercialisation of local resources (Burgess and Koroi, 2024). The emergence of cellular agriculture offers an opportunity for policymakers to engage in conversations pertaining to kai sovereignty and Māori leadership in this space (Hudson et al., 2019; Macmillan et al., 2025). Early conversations might involve the management of cell lines from taonga species (Smith and Hutchings, 2025), approaching the safety and labelling of cell-cultured products in a Māori-specific context (Macmillan et al., 2025), and the development of terminology and clear labelling in te reo.[8] It is important that these conversations are led by Māori stakeholders and have direct benefits for the Māori economy, recognising the significant role of Māori agribusiness in New Zealand's primary sector (Rout et al., 2024; PWC, 2025).

> Cellular agriculture is at an embryonic stage in the Aotearoa New Zealand food landscape, with active researchers, a small number of start-up companies and a comparatively agile regulator by international standards.

How can regulators best manage cellular agriculture going forward?

As New Zealand begins to formulate its response to this evolving technology, it has been suggested that two 'interpretative paradigms' can be used to assess existing regulation of cellular agriculture (Johnson and Monaco, 2025). The first assumes that cell-cultured production will scale to be cost-competitive in the short to medium term, beginning to provide significant ethical, environmental and public health benefits within the next five years. Innovation should therefore be enabled through responsive regulation. Efficient approval processes mean companies can begin generating revenue quickly enough to stay viable. Under this paradigm, regulation is mainly necessary to ensure product liability and address potential consumer concerns around the quality and safety of cell-cultured food (Johnson and Monaco, 2025; Manning, 2024). Therefore, regulation should be primarily informed by robust engagement with industry and the repurposing of frameworks from existing industries, then continuously adjusted as more scientific data is collected (Bennie et al., 2025). This paradigm, where the focus is on 'minimum viable regulation', is often encountered in scientific literature and industry reports (Johnson and Monaco, 2025).

The second interpretative paradigm moves beyond a scientific risk assessment approach, placing less tangible social and environmental implications and perspectives forward for regulatory consideration (Johnson and Monaco, 2025). Here, despite the potential benefits of cellular agriculture, policies should not simply advance 'better' innovation. Food safety regulations are seen as necessary but not sufficient for sustainable innovation; it is not guaranteed that short-term biotechnological progress will provide net environmental benefits or ensure equitable access to food (Reinhardt and Monaco, 2025). As a result, evidence-based standards should be developed that encourage companies to direct investment towards

socially responsible goals (Manning, 2024; Monaco, 2025b). Within this paradigm, public participation and values-based debates are encouraged, and instead of focusing on specific foods or technologies, the broader future of food is considered.[9] While underexplored in the context of cell-cultured meat, it has been used elsewhere in the literature when considering novel foods and technologies (Johnson and Monaco, 2025). Both paradigms can contribute useful insights when considering the future of cell-cultured food regulation.

Local authorities should therefore emphasise both efficiency and transparency when reviewing legislation in the context of cellular agriculture. This could include considering whether amendments should be made to the Animal Products Act 1999 and the Food Act 2014 to ensure safe cell-cultured food production in New Zealand (FSANZ, 2025a), or whether the existing import health standards for cell cultures (under the Biosecurity Act 1993) are sufficient for cell lines and other cell-cultured ingredients for food use (MPI, 2026). Our response should be informed by developments internationally, ensuring that regulations are harmonised with those of other jurisdictions where possible and appropriate in a local context.[10] There is particular interest from industry in mutual recognition of approvals between jurisdictions to shorten timelines, although establishing mechanisms to do so could come at the cost of valuable local debate (FSANZ, 2025a; Monaco, 2025b). In the first instance, aligning risk assessments with other jurisdictions can help provide direct access to markets for local companies – for example, regulating hybrid cell-cultured pet food production in a manner that simplifies entry to the EU pet food market, or standardising guidelines for cell culture media ingredients.[11]

Conclusion

Cellular agriculture is at an embryonic stage in the Aotearoa New Zealand food landscape, with active researchers, a small number of start-up companies and a comparatively agile regulator by international standards. This sets us up for success as an innovator and exporter of this novel food class. Trusted relationships between researchers, companies and regulators will be key to nurturing success, along with open and transparent communication with the general public and specific interest groups, to avoid the mistakes that have been made in the past around analogous new technologies. The lessons learned from successfully enabling cellular agriculture in Aotearoa New Zealand can inform our approach to managing other emerging food technologies in the future.

1 Cell-cultured meat is variously known as cultured meat, cell-based meat, (cell-)cultivated meat, cellular meat, *in vitro* meat, animal-free meat, slaughter-free meat, clean meat, synthetic meat, artificial meat, vat-grown or lab-grown meat, among other terms (FAO and WHO, 2023a).

2 Similar in appearance to a commercial brewing tank or milk tank at scale.

3 In food safety, a hazard is any 'factor or agent that may lead to undesirable effects', while a risk is the chance that one or more of these 'effects' will occur (Bennie et al., 2025).

4 Cross-reactions between materials during processing may also create new allergenic by-products.

5 Environmental effects investigated in recent LCAs include impacts on soil, water and atmosphere. Additionally, they compare the use of limited resources such as water, land, fossil fuels and energy (Kossmann et al., 2025; Risner et al., 2025; Sinke et al., 2023; Tuomisto et al., 2022).

6 Defined in Standard 1.5.4 as 'a food obtained by culturing cells isolated from any of the following sources: livestock; poultry; game; seafood (including fish); an egg or an embryo of any of the former' (FSANZ, 2025c). By contrast, novel foods are defined as any food with no history of human consumption that requires an assessment to ensure safe consumption (Monaco, 2025b).

7 This is particularly true for processes rapidly undergoing constant innovation during scale-up: these may not match the initial processes documented on application after several months have passed.

8 Translation of cellular agriculture terms is being explored in other jurisdictions using back translation methods (FAO and WHO, 2023a).

9 As Manning notes, 'the application of technology in food production is neither ethically nor morally neutral; rather, it is value-laden as the technology itself shapes future culture and society' (Manning, 2024).

10 If local authorities introduce additional measures that are not present in other jurisdictions, they should be justified under one of the interpretative paradigms discussed.

11 Currently being explored by Singapore and China within the Codex Committee on Food Additives (Codex Committee on Food Additives, 2025).

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Ben Dudley Tombs,
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Perpetuating Disasters

breaking New Zealand's cycle of inertia following natural hazards

Abstract

New Zealand is stuck in a loop. The country has accumulated findings from decades of post-event inquiries into storms, floods, landslides and earthquakes. Yet it continues to default to short-term fixes despite continual recommendations for system-level reform. Institutional amnesia and an unwillingness to tackle ingrained systemic issues fuels political short-termism, permissive land-use settings, and entrenched path dependency on hard engineering responses such as stopbanks and sea walls, which alone are insufficient to reduce the risks, and raise residual risk. The result is the perpetual inertia of a reactive response system. This inhibits any transformation towards a more resilience-centric model in the face of increasingly frequent, intense, progressive and ongoing climate changes.

Keywords climate adaptation, natural hazards, resilience, disasters, emergency governance, short-termism

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Introduction: from 'creating' to perpetuating flood disasters

New Zealand is stuck in a loop. A geophysical or weather-related natural hazard event causes mayhem and generates public and media attention. After recovery, requisite government-sponsored inquiries diagnose familiar systemic failings and urge pre-emptive long-term reform (New Zealand Government, 2024). Political attention then ebbs, and institutional priorities shift. Those identified systemic impediments remain unremedied until the next event, and the cycle repeats.

This cycle of short-termism is sustained by institutional amnesia. There is also a perception that it is too complex and costly to make systemic changes, which is exacerbated by the tyranny of the urgent. Councils and government agencies are overwhelmed by immediate operational pressures of infrastructure, housing supply, and the statutory limits on their land use functions. Meanwhile, elected leaders face incentives to prefer visible near-term 'fixes' over longer-term adaptation measures. Added to this are a reluctance to alter protections on existing use and, for some, scepticism about the validity or urgency of managing climate-related risk.

This is not a new story. Forty years ago, Neil Ericksen's *Creating Flood Disasters* (1986) documented how policy in Aotearoa

tended to protect existing and ongoing intensified land uses with structural works like levees and sea walls, despite their protection limits and their tendency to induce further exposure (the so-called 'levee effect') (Ericksen, 1986). Ericksen argued that if we cannot eliminate the risk of flooding, we must constrain the land uses. He located this power squarely in the remit of local and central government under the Town and Country Planning Act 1977. Those prescient arguments were empirically grounded, but since then have been largely forgotten or ignored in policy and practice (Ericksen, 2024). We have continued to build flood protections while allowing development to intensify, despite exposing that development to increasing residual risk (Fu et al., 2023). Four decades on, amnesia and a reluctance to tackle risk reduction and climate-change adaptation is deepening.

This article summarises some key findings of a larger research project (Tombs, Lawrence, Bell 2026) that analysed post-disaster reports over the last decade, a period which has seen an observable increase in such reports. Our objective was to understand why law and policy recommendations are not sufficiently spurring systemic change. The main finding was unsettling. We know the systemic shortfalls; we identify them after each event. We just do not action the identified long-term systemic fixes. Worse, many post-disaster inquiries and reviews no longer just reiterate recurring issues but explicitly call out the repeated failure to implement the lessons from previous reviews. Ironically, these are also largely ignored.

This article is in two parts. Part one characterises New Zealand's reactive response style and the evidence for it, and assesses the social and fiscal consequences of remaining reactive in a changing and intensifying climate. We unpack how New Zealand has responded to successive findings from decades of post-event inquiries into storms, floods, landslides and earthquakes. Part two identifies recurrent issues across post-disaster reviews over the last decade. We distil six recurring themes: failure to learn; unclear responsibilities; hard-infrastructure path dependency; legislative gaps and misalignments; uncoordinated governance; and fragmented expertise and under-resourced local authorities. We then canvas law and policy reforms that could align disaster risk reduction and climate adaptation into one coherent system. We argue that as climate hazards accelerate, compound and cascade, the associated risks magnify the costs of our default to reactivity.

History shows that New Zealand moves on quickly after extreme hazard events, even though communities and individuals experience effects over the longer term ...

Key concepts

Risk

In climate contexts, 'risk' arises from dynamic adverse interactions between hazards, exposure and vulnerability. Each element can change over time due to socio-economic processes and decision making, while also being subject to uncertainty. Effective adaptation therefore relies on pre-emptive adaptive planning, embracing future uncertainty by considering a range of plausible futures and stress-testing the flexibility and viability of risk-reduction options or planning actions (e.g., for sea level rise, rising groundwater, flooding and rain-induced landslides).

Residual risk

Not all risk can be mitigated. Adaptation redistributes risk, sometimes increasing it for some populations even as it reduces it for others, although this will change over time as climate change intensifies and residual risk increases rather than vanishes. This is an important caution for 'protect' or 'accommodate' strategies in exposed locations (e.g., stopbanks or raising floor levels).

Compound and cascading hazards

Hazards interact. Earthquakes destabilise slopes and prime them for rain-induced slips. Sea level rise backs up stormwater and elevates groundwater, raising liquefaction potential in coastal lowlands. Treating hazards in silos underestimates systemic risk and misdirects policy.

Adaptation, disaster risk reduction and resilience

Adaptation is anticipatory and long-term. Disaster risk reduction focuses on readiness, response and recovery, often on shorter cycles, such as the five-year cycle provided by the Civil Defence Emergency Management Act 2002 (s46). Resilience must move beyond 'bounce back' towards maintaining adaptive capacity and learning, but in practice is still too often framed as post-event recovery and staying in place. The imperative is to integrate disaster risk reduction and climate-change adaptation, aligning both short and long planning horizons and matching different hazard dynamics with appropriate adaptations.

Identifying the problem

Characterising a 'reactive' response style

History shows that New Zealand moves on quickly after extreme hazard events, even though communities and individuals experience effects over the longer term (de Guttry and Ratter, 2022). Lessons learned are not being applied. The problem is a complicated attention deficit issue that couples political default to short-termism with an apparent belief that development of sound integrative policy is in the 'too hard basket'. Inertia is further enabled by willing institutional amnesia and the (erroneous) belief that the event will not happen again for a long time, or that climate change is not a significant exacerbator of climate damage.

As a result, attention generated by extreme events fails to spur long-term

change. Rather, it focuses on short-term fixes, even when external shocks like natural hazards focus national attention on a particular vulnerability. Coordinated communication of an issue's urgency is no guarantee of it making it onto the political agenda. In a context of climate change, there is also a risk of 'over-catastrophising' when discussing the scale of climate adaptation required and paralysing political will by its seeming complexity for longer-term planning and action (Intergovernmental Panel on Climate Change, 2022, Chapter 17).

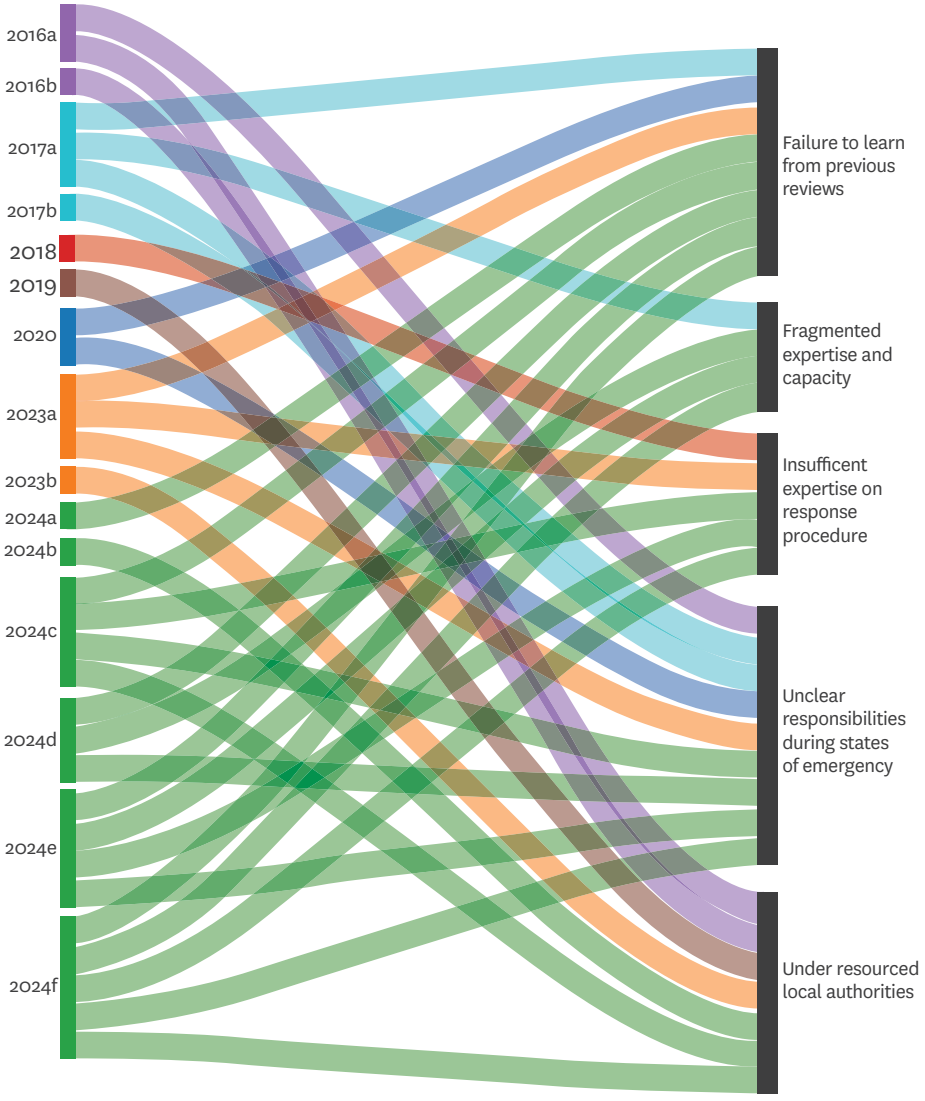
The issue is becoming increasingly salient with the emergence of compound hazards and cascading climate risks. As disaster response and climate adaptation discourses are increasingly blurred or they are dealt with separately, cogent efforts to design integrated pre-emptive policy responses must compete with more noise.

Evidence of New Zealand's reactive response

A review of post-event inquiries since 2016 spans earthquakes (East Cape, Kaikōura), fires (Port Hills, Tasman), storms (Auckland, 2018 and 2023) and Cyclone Gabrielle (2023). These inquiries and reports identify many of the same issues: fragmented expertise and capacity; unclear responsibilities during emergencies; outdated legislative frameworks; permissive regulatory instruments; and outdated or mis-targeted infrastructure. A visual mapping of report years to recurrent issues (Figure 1) illustrates that the same failures are identified, year on year, across different hazards and regions.

Multiple recent reports state, explicitly, that they are repeating earlier recommendations. The 2017 report of the Better Responses review acknowledged that many of its recommendations were not new and that progress had been 'patchy or slow' (New Zealand Government, 2018). The Government Inquiry into the Response to the North Island Severe Weather Events (2024) made the same point. Likewise, a Department of the Prime Minister and Cabinet review following the extreme weather events in January–February 2023 noted that 'the issues raised are not new' (Department of the Prime Minister and Cabinet, 2024). These meta-observations are crucial: they demonstrate self-awareness of institutional amnesia.

Figure 1 Recurrence of identified systemic issues in New Zealand post-disaster reports



Notes: Left labels identify year of report. Flow path colour denotes year of report.
Right labels show the identified reoccurring issues. The same issues are identified in 2024 as previous years.
Details of the reports are provided in the Appendix.

Recurring themes

The surveyed reports point to six recurring themes:

- institutional amnesia – an inability to learn from previous reviews;
- unclear responsibilities during emergencies – persistently ambiguous 'who does what, when?';
- hard-infrastructure path dependency – over-reliance on protections that lock in exposure;
- legislative gaps and misalignments – laws that are outdated, permissive or unintegrated;
- uncoordinated governance – opaque policy hierarchies, incoherent instruments; and
- fragmented expertise and under-resourced local authorities – over-reliance on consultants, underfunding and inadequate training.

These are not isolated issues; they reinforce one another. Ambiguous responsibilities reduce accountability for implementing lessons; permissive consenting regimes create pressure to protect rather than to avoid or retreat; engineering path dependency then consumes fiscal and political bandwidth that could otherwise support anticipatory measures.

Costs and consequences of staying reactive

The social and fiscal costs are already significant. Since 2010, total estimated disaster costs have been roughly $64 billion,

about half borne by private insurers. The largest weather events of 2023 (Cyclone Gabrielle and the Auckland Anniversary weekend floods) alone incurred a $9–14.5 billion loss to the national economy, besides nearly $4 billion in insured losses (Insurance Council of New Zealand, 2025). Yet central and local government spending remains overwhelmingly skewed towards response and recovery rather than pre-emptive risk reduction and resilience (97% to 3% respectively) (Johnston, 2026; White et al., 2025).

Despite the clear fiscal liabilities attached to unaddressed climate impact, government resource allocation has been myopic, unambitious and fiscally unsustainable. The Climate Change Commission reported in 2024 that the first National Adaptation Plan (2022) does not present a clear and coherent plan at the required 'scale and pace' (Climate Change Commission, 2024a, p. 5). Moreover, the 'natural hazard resilience fund' was dismantled by the National–New Zealand First–ACT coalition government (Cooke, 2026). There is clearly a reluctance to recognise the urgency of this issue, aggravated by a short-term mindset that leads to more unpredictable and reactive Crown expenditure in future.

The 2021 Westport floods illustrate perverse incentives (Buller District Council, 2026). Government support favoured near-term flood defences over comprehensive adaptation (including managed retreat). This discounts future residual risk and perpetuates path dependency. Protections induce more development behind them, misleading people that they are 'safe' and increasing the value of property and infrastructure at risk (Ericksen, 1986). The consequence is that although protections may be cost-effective in the short term, future transformative options like planned relocation are perceived as politically and financially more difficult. Councils are constrained by budgets, threats of rates caps and little durable funding specifically for adaptation. They may feel pressure to delay hard choices if they anticipate central government bailouts after the next event. However, the opportunity exists to plan for eventual relocation in parallel with protections, thus signalling the temporary nature of the protections in such highly exposed sites. Westport District Council has purchased alternative housing land for that purpose (Heyler Donaldson, 2025).

Distributional impacts matter. Lower-income households are less able to respond to price signals of (for example) insurance premiums, insurance excess rises and targeted rates. As a result, they may be more likely to remain in risky locations. The longer we stay reactive, the more we entrench this inequity. Those with the least resources bear disproportionate hazard exposure and disruption to lives and livelihoods. Meanwhile, insurers adjust their appetites and pricing as they increasingly withdraw coverage from New Zealand's high-risk locations, influenced partly by a changing landscape of risk at the global level (Newton, 2026). As a result, communities risk the 'property purgatory' of stranded assets, negative liquidity and eroding insurability (Tombs et al., 2021).

> The current system is at capacity coping with New Zealand's hazards as they arise, and this misdirected capacity ultimately subtracts from the system's ability to implement cohesive long-term thinking.

Enablers of poor decision making

Institutional amnesia

New Zealand quickly forgets disaster review findings, even though the frequency of disasters means they are often fresh in mind and experienced by many. Boston (2019) writes about how these moments should pose small windows of political opportunity. Relatedly, Kingdon discusses the dynamic of 'isolated flukes', repeated crises and collective urgency. Kingdon's point is that repeated crises should cumulatively build attention to systemic factors and appetite for change (Kingdon, 1984, pp. 99–100).

New Zealand's record is well beyond the point of 'isolated flukes'. However, no clear and comprehensive strategy for the inevitable and more frequent disasters ahead has emerged. Clearly, resilience and disaster readiness are two facets of a larger approach. A strong pre-emptive resilience rationale must underpin decision making by creating a predictable system that eases the shocks caused by 'unprecedented' events. This was noted in terms of the 'ineffective prioritisation of some critical infrastructure restoration activities, and gaps in communication throughout the system' in the 2024 report on 2023's severe weather events (New Zealand Government, 2024, p. 92).

Coherent climate adaptation policy would dovetail neatly with a clear sense of disaster preparedness. Failing to act on post-disaster report recommendations in a coordinated and systemic way has led to duplication and fragmentation of responses and a focus on recovery, predominantly in situ. The current system is at capacity coping with New Zealand's hazards as they arise, and this misdirected capacity ultimately detracts from the system's ability to implement cohesive long-term thinking. This 'fixing the plane while flying it' incurs a future burden of potential maladaptation and associated transition costs as climate-driven hazards increase.

Responsibility distribution – and the limits of 'individual agency'

The Independent Reference Group on Climate Adaptation emphasised household responsibility and floated cut-off dates for recovery assistance and buy-outs (Independent Reference Group on Climate Adaptation, 2025). Yet the analysed reports, and the report of the Expert Working Group on Managed Retreat (2023), point more directly to systemic barriers in local government, including unclear mandates,

cross-departmental coordination issues, planning cycles, legal liability concerns, political appetite, capacity and cost constraints (see also Lawrence et al., 2013). These are all structural and legislative gaps that need filling if households are to be left on their own. The Climate Change Commission has likewise noted 'the lack of a clear and coherent national framework' in clarifying roles and responsibilities as a high priority area for progressing New Zealand's climate adaptation (Climate Change Commission, 2024a, p. 14).

Overly focusing on 'individual agency' for resilience overlooks statutory responsibilities and tools held by central and local government (most notably in land-use control) and the risks of shifting costs onto those least able to bear them. Improved risk information, such as a nationwide flood-risk map, is useful, but without enabling legislation, funding and clear policy direction, information alone rarely shifts outcomes, and will be contested by property owners.

Hard-defence path dependency and the PARA trap

For decades, New Zealand has prioritised engineering responses to make 'water adapt to humans' over spatial planning tools that would avoid or retreat from flood risks (Ericksen, 1986). The popular PARA adaptation schema (protect–accommodate–retreat–avoid) is too often interpreted as a sequence that puts 'protect' first and 'avoid' last. This normalises delay via preventative measures, while increasing residual risk.

These strategies are attractive. They deliver visible 'certainty' and a narrative of control that is deeply embedded as the obvious choice to guard communities and infrastructure. However, forthcoming climate adaptation thresholds and escalating life-cycle costs present physical and economic limits. Once installed, protections can become political and physical barriers to longer-term land use-based transformation. This is classic maladaptation. Today's 'solution' becomes tomorrow's constraint.

Legislative gaps and misalignments

The Civil Defence Emergency Management Act 2002 is two decades old and increasingly misaligned with today's risk landscape and technology. Introduced in late 2025, the current Emergency Management Bill (No 2) does present opportunity for systemic reform. However, early indicators are not promising. The word 'climate' does not appear in the bill. Terms like 'adaptation' and 'relocation' are also absent. There is no clear linkage to the Climate Change Response Act's adaptation provisions or to the Climate Change Commission's monitoring of adaptation progress and effectiveness. Nor is there a mandate to integrate recovery planning with long-term adaptation plans. These omissions occur despite the government's stated intention to make such linkages in an adaptation framework, which is yet to be developed (Ministry for the Environment, 2025b). Without formally making these connections in statute, we risk inadvertently codifying the reactive bias and worsening the default recovery-centric model.

At a local scale, councils lack fit-for-purpose legislative measures to implement anticipatory adaptation. Dynamic adaptive pathways planning (DAPP) is widely recommended for dealing with changing risk and deep uncertainty (Lawrence et al., 2025). But implementation of DAPP requires legal mechanisms to embed triggers and enable switching pathways through plan changes. Those mechanisms are currently absent, weak or ambiguous. Furthermore, without well-considered statutory scaffolding for pre-event acquisition, relocation at scale, and reconciling existing use protections with risk reduction, adaptation will continue to rely on ad hoc acquisitions by agreement. Adaptation plans mandated in statute, utilising DAPP and other supporting modelling tools, are essential now to start reducing the misalignment between council intention and action. Continued reliance on the ad hoc is limited in scope and equity and economic viability.

Uncoordinated governance and conflicted hierarchies

The National Adaptation Plan and the National Disaster Resilience Strategy could provide guidance as high-level policy instruments, but they are poorly connected to councils' business-as-usual workstreams. They fail to articulate priorities when objectives compete. This is crucial for decisions on whether to protect or avoid, where development or housing strategy may clash with hazard avoidance (Ministry for the Environment, 2025a, 2023). In the absence of a clear hierarchy of objectives – anchored in statute and operationalised through national planning standards – local practice defaults to permissive consenting with case-by-case 'mitigation', even where mitigation is ill-suited to long-lived, progressively changing risk profiles. The 2024 severe weather inquiry noted that central government's approach to infrastructure lacks coherence and that unsuitable or missing processes are common across reviews – symptoms of fragmented governance (New Zealand Government, 2024).

> … overly permissive consenting regimes for forestry intensification and coastal and floodplain subdivision have failed to prevent predictable off-site harms, such as from redistributed forestry … (slash) …

Long-term spatial planning is misaligned with hazard and climate risk. A vivid symbol of planning incoherence, some Civil Defence Emergency Management operational centres were themselves flooded during the 2023 events. More broadly, overly permissive consenting regimes for forestry intensification and coastal and floodplain subdivision have failed to prevent predictable off-site harms, such as from redistributed forestry 'woody

debris' (slash) (New Zealand Government, 2023). Another effect is the mixed message sent to constituents. Credible climate change risk messaging is impossible if plan rules continue to enable intensification in harm's way.

For this reason, it is unsurprising that local authorities' property buyouts to effect localised managed retreat have been a patchwork of ad hoc acquisitions by agreement (Hanna et al., 2020). That said, the lack of any legislative provision for this course of action has meant that there is no rubric for implementing relocation at any scale. Some ambitious projects have forged on regardless. The Hutt River City Centre Upgrade Project, giving room for the river, has so far succeeded, relying on acquisition by agreement and the Public Works Act 1981 (Greater Wellington Regional Council, 2015, 2016; Lawrence et al., 2019). This programme and one at Amberley in Canterbury employed the DAPP framework effectively to identify triggers for successive actions. Amberley has also developed creative uses of existing land use tools for acquisition to effect a staged relocation of residents to another site (Allen, 2025). There is an opportunity with the second National Adaptation Plan to develop a bespoke toolbox and guidance for such initiatives.

A positive legislative development in 2025 was reform of the Local Government Official Information and Meetings Act 1987, enabling local authorities to place climate change risk information on land information memoranda (LIMs). Under section 44D of the Act, authorities are shielded from liability where the information is provided in good faith. This has potential to move the needle if local councils maximise this tool for longer-term spatial planning and adaptation signalling.

The DAPP approach is promising, but just as there are implementation questions at a statutory level, so too there are gaps at the granular planning level. DAPP is being used by local authorities widely to navigate adaptation planning and communicate it to the community in an intuitive way using thresholds and 'trigger points' (Lawrence et al., 2020; Lawrence et al., 2025). The agility to monitor and pivot when a predetermined condition is triggered is the appeal. DAPP can address issues inherently uncertain such as climate change effects on natural hazards, or progressive permanent impacts from sea level rise. However, the monitoring, triggering and path implementation cannot self-deploy. These processes must be embedded into existing local authority functions and local government procedure for land use governance.

There is a move from early species-focused protection towards a recognition of ecosystem diversity, ecological processes, critical ecosystem services and integrity.

Fragmented expertise and under-resourced local authorities

Reviews of Cyclone Gabrielle and the Auckland floods found fragmented coordination and expertise and capacity gaps. Many councils rely on external consultants on a project-by-project basis, which hamstrings development of in-house capability and the ability to take a systemic approach. At leadership levels, inconsistent training and part-time roles can leave gaps in command, communication and interoperability during events. The 2018 Better Responses report recommended a 'common operating system' to better coordinate actors involved in response, recovery and prevention (New Zealand Government, 2018). By 2024, inquiries were still calling for this, while noting that a 2019 business case to establish one had not progressed (Department of the Prime Minister and Cabinet, 2024). Without professionalised emergency management workforces being provided with access to shared systems, the next large-scale response will face similar challenges, to be identified by more inquiries.

Green shoots – and gaps

Some agencies are pushing towards pre-emptive, integrated adaptation thinking. The Department of the Prime Minister and Cabinet has proposed 'decision trees' to guide recovery decisions across social, economic and leadership dimensions. Optimistically interpreted, such tools could become bridges between recovery and adaptation – if linked to statutory mandates, funding, and interlocking responsibilities. Other initiatives underway and set out in a recent Waitangi Tribunal evidence brief (Waitangi Tribunal, 2026) show ad hoc progress, largely focused on disaster recovery rather than integration of adaptation actions.

Furthermore, several constraints are highlighted in the evidence brief that are similar to those identified in this study: limited funding, lack of regulatory levers, unclear roles and responsibilities, liability risks for adaptation decisions, and limited capability and capacity across local government to manage natural hazard risks and the effects of climate change. For example, despite a reform of the emergency management system, the Emergency Management Bill (No 2) still lacks explicit integration with climate adaptation. Whether forthcoming instruments – e.g., national policy direction and standards under the Planning Bill, signalled adaptation planning framework mandates in an amended Climate Change Response Act, and the recently enacted changes to LIM reports – will supply the missing hierarchy and coordination across legislation and agencies remains uncertain.

Law reform opportunities

We identify the following areas for law and policy reform.

- Emergency Management Bill: integrate climate adaptation explicitly into recovery planning, link to Climate Change Response Act adaptation functions, and require alignment with national adaptation progress monitoring (Climate Change Commission (2024)). This would ensure that event recovery neither

contradicts nor crowds out any long-run dynamic adaptive pathways plan.

- Planning Bill and national direction: provide clear national policy direction and standards that: articulate a hierarchy prioritising risk avoidance where feasible; operationalise DAPP triggers and plan-switch mechanisms; and reconcile existing use protections with risk reduction, including in subdivision decisions. Without this architecture, councils will remain trapped in permissive, case-by-case mitigation.
- Acquisition and relocation frameworks: clarify pre- and post-event acquisition powers, including valuation principles beyond 'willing seller/willing buyer' when market value is eroded by increasing risk. Provide pathways for land swaps and the use of Crown land. Ensure consistency with Treaty settlement obligations, including rights of first refusal, to enable managed relocation at scale and with equity.
- Sectoral alignment: tighten currently permissive regimes that enable trans-boundary damages such as slash debris flows; require infrastructure consenting to assess long-term maladaptation risks; mandate DAPP integration of monitoring and actionable triggers in adaptation plans and provide funding mechanisms to kick start avoidance of further climate risk.
- The proposed legislation merging the Ministry for the Environment, the Department of Internal Affairs' local government functions, and transport and housing policy potentially provides an opportunity for greater coordination on adaptation policy that is focused on risk reduction, and greater pre-emptive policy mandates than in the legislation they individually administer.

Coming full circle

Insurers have begun reassessing cover: AA Insurance (a joint venture with Suncorp New Zealand) has paused new home policies in high-risk areas such as Blenheim, Westport and parts of Canterbury. In public discourse, the proposed remedy is often more defences, rather than changes to land use or planning to retreat. As one industry expert put it: 'If you build defences, people build new houses. We shouldn't be building any new houses in Westport, full-stop' (Newton, 2026). This encapsulates the trap Ericksen warned of 40 years ago: protection encourages intensification of exposure, which demands more protection. This further entrenches exposure and perpetuates a spiral of maladaptation. That spiral tightens as climate change accelerates.

The deeper point reaches beyond reaction time or response resourcing. Our institutions remain misaligned with the pace, frequency, intensity and complexity of emerging hazards in a changing climate. Staying reactive increases costs, worsens inequity and diminishes capacity for transformation. Aotearoa has no shortage of diagnoses. The task is to move from knowing to doing and link recovery to adaptation plans in law. Practically, this means giving councils the tools, mandates and funding to act ahead of impact, to professionalise and connect response capabilities, and to re-weight priorities so that avoiding risk where feasible is the default, not the exception. The window for pre-emptive action is narrowing. We should stop wasting money and time perpetuating the disasters we created and have repeatedly identified how to avoid.

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Appendix: Figure 1 post-disaster review reports

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Tim Hughes

Beyond PAYGO and Debt

five reasons to keep discussing SAYGO

Abstract

It is often debated whether New Zealand should follow the lead of Australia, Singapore and others with greater pre-funding of the future costs expected from population ageing, climate change and miscellaneous shocks. Those in favour suggest doing so would have economic benefits and would promote intergenerational equity. The simplicity of a PAYGO system worked well in the 20th century, but in this article I suggest five reasons why greater pre-funding could be better suited to 21st-century realities, with high levels of global population movement, plummeting fertility, growing insecurity, increasing climate-related risks and falling social cohesion.

Keywords pre-funding, ageing, climate change, pensions, social cohesion

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The design of New Zealand's welfare state is unique in relying almost solely on a pay-as-you-go (PAYGO) structure, whereby taxes collected in one year are spent in that year. This design has important advantages, such as simplicity. For example, in the few places where future costs are partly or fully pre-funded, as with ACC, the Natural Hazards Commission and the New Zealand Superannuation Fund, this creates complexity in the management of accumulated funds.

Historically, New Zealand's unique design of its retirement income system has served it well. The system has been simple, well understood, and effective at preventing elder poverty at relatively low fiscal cost compared with systems in other countries (Retirement Commission, 2025). Yet it has also been long understood that population ageing will place the sustainability of our PAYGO-funded system under stress. The Treasury has regularly projected rising health and pension costs, and has more recently identified the need to make stronger provision for regular shocks as well (Treasury, 2006, 2025a, 2025b).

There will always be a foundational role for tax-funded, PAYGO supports, especially to achieve poverty reduction and distributional goals. And as Nicholas Barr and Peter Diamond often emphasise, there is no first-best design of a welfare state, with pros and cons with both PAYGO and save-as-you-go (SAYGO) approaches (Barr, 2021; Barr and Diamond, 2008). A particular difficulty is the challenge of transitioning from a PAYGO system to one with greater pre-funding, which requires at least one generation to 'pay twice', forgoing consumption now in order to fund the needs of older people today and to save for their own future consumption.

Nonetheless, the potential benefits of shifting to a system with a different balance between PAYGO and SAYGO elements in New Zealand are regularly noted by various people, often in the pages of *Policy Quarterly*. The second issue included an article about pension policy by Richard Hawke. He identified that our PAYGO approach to funding pensions gave an 'appearance of stability [that] is deceptive; the system results in an inter-generational transfer which is large and increasingly burdensome for the working-age cohort' (Hawke, 2005, p. 22). Hawke argued that a transition to a system with greater individual pre-funding of retirement incomes would not just improve sustainability; it would also improve economic growth via higher capital formation and work incentives, and by countering some of the problems created by the tax advantage of housing. Andrew Coleman and Adrian Katz, more recently, have made similar arguments, and also suggested that compounding returns to capital investment in a pre-funded system would reduce the overall cost of support (Coleman, 2024; Katz, 2025).

Compounding returns are dependent on risky investment returns, and so are not guaranteed – especially if population ageing were to depress returns to capital (Barr and Diamond, 2008). Any returns may also be subject to political redirection to other purposes, although Hawke (2005) suggests that this risk is lower for individual savings than for collective savings. On the other hand, pre-funding also allows for greater diversification in future revenue sources than a PAYGO system. PAYGO relies on taxing the proceeds from domestic economic performance, whereas pre-funding can benefit from higher growth elsewhere via investment offshore.

While some welfare state expenditure is directed towards those in the middle of their lives, most is skewed towards young and old in the form of education, health, aged care and retirement spending.

Writing as a young person for the recent special edition of *Policy Quarterly* on retirement income policy, Eliana Heo (2025) also suggested that pre-funding would be more equitable from an intergenerational perspective, because it would avoid an increasing burden of funding being placed on younger generations. If used in combination with greater means testing of support, as suggested by Shamubeel Eaqub (2018), then it could be seen as more equitable from an intra-generational perspective too, by restricting public support to people most in need of it. In suggesting that in future, KiwiSaver balances could be used to partly purchase New Zealand Superannuation as an annuity, Michael Cullen (2013) also spoke to equity concerns, promoting the idea as a way to reduce the cost of NZ Super without reducing the standard of living of the elderly.

While the argument for pre-funding often focuses on pensions, this is not the only area where it has potential relevance. Susan St John and Claire Dale have argued for intra-generational funding of aged care costs, for example (St John and Dale, 2011). Their argument was that compulsory purchase of aged care insurance could be justified based on significant market failures in this area, given the practical difficulties of means testing support, and the large role that luck plays with a means-tested approach in determining how much someone can bequeath. Jonathan Boston and Judy Lawrence (2018) also argued for greater pre-funding of climate adaptation costs, based in part on an intergenerational equity argument that the costs of adaptation should be partly borne by those responsible for the pollution. And drawing on the argument from compounding returns, Robert MacCulloch has gone even further, advocating for a large-scale transition to a savings-based approach to welfare state functions, including health, in a variant of the Singaporean model (MacCullough, 2019).

The purpose of this article is not to offer a definitive blueprint for change, nor to offer a comprehensive assessment of the different options. The purpose rather is to contribute to the ongoing conversation about different reform options, by offering some additional reasons why we might want to consider greater use of individual and/or collective pre-funding in the future.

Such arguments are not decisive, and retaining our current tax-funded approach would have benefits such as simplicity and continuity, avoiding the risks inherent in any major reform. Yet, as outlined in the Treasury's 2025 long-term fiscal statement (Treasury, 2025a), retaining a tax-funded approach in the face of structural demographic change will inevitably result in much higher taxes, lower support, or both. The case for compulsory savings or similar mechanisms needs to be considered relative to that future counterfactual, not to today's unsustainable status quo.

An argument from a transnationalism perspective

While some welfare state expenditure is directed towards those in the middle of their lives, most is skewed towards young and old in the form of education, health, aged care and retirement spending. In a PAYGO system, each year's costs are met mostly by those in the middle of their lives, who pay most the tax (Wright and Nguyen, 2024).

For people who live their entire lives in New Zealand, this design can be considered an implicit intergenerational contract. Each generation during its working years funds the needs of generations above and below them, in recognition of the public investment made in them as children, and in expectation of having their own needs met later in life by subsequent generations.

However, most people who live in New Zealand do so for only part of their lives. By the age of 30, 25–30% of people born in New Zealand are living overseas, with annual investment in New Zealand-born emigrants being about $4 billion (Hughes and Crichton, 2025). These emigrants are replaced by migrants from other countries, with these migrants shouldering a large and disproportionate share of the tax burden. In 2024, the 32% of New Zealand residents born elsewhere contributed 38% of all personal tax (Hughes, 2026).

In these circumstances, a PAYGO system resembles rather less an intergenerational funding mechanism, and more a transnational one, in which foreign-born migrants are increasingly the ones funding the needs of younger and older New Zealanders. Where migrants stay permanently and benefit in old age from New Zealand's health, aged care and retirement systems, this may be appropriate as a (partial) intergenerational contract. Yet most migrants leave, either as a requirement of their temporary visas or because they choose to (ibid.).

The Australian Treasury has estimated the full life-course balance of taxes and expenditure for new arrivals relative to people born in that country (Varela et al., 2021). The authors show that the average migrant is a net contributor, and the average Australian-born is a net recipient. In other words, migrants subsidise the public entitlements of the native-born.

Similar modelling has not yet been produced in New Zealand, but the conclusions would likely be similar. This raises an obvious question of justice that I do not address here. It also raises practical questions about migration incentives. Fertility rates are falling rapidly across the world (United Nations, 2024), and we can expect competition for migrants to grow over time. For now, New Zealand has no trouble attracting as many highly qualified migrants as we want. But as populations continue to grow older around the world, retaining a PAYGO system where those of working age bear much of the burden could make New Zealand increasingly unattractive compared with countries with portable, contributory entitlements, for both New Zealand-born and foreign-born people considering their options. New Zealand could become especially unattractive if higher PAYGO taxes in future reduced growth and lowered net wages, as recent modelling by the Treasury (2025a) suggested they would.

With a PAYGO scheme, low fertility means the intergenerational burden of funding the welfare state is placed on an ever-shrinking pool of people over time.

The most highly qualified and highly paid people are the most internationally mobile and also pay the most tax (Hughes and Crichton, 2025; Wright and Nguyen, 2024). Keeping New Zealand attractive to such people is important in both fiscal and broader senses. For example, 33% of New Zealand's nurses and 42% of doctors are foreign-trained (OECD, 2025). Demand for healthcare professionals is only going to grow worldwide as populations grow older, likely exacerbating competition between countries. If a continued PAYGO approach lifted tax rates, especially higher in the income distribution, this could make it more difficult to attract and retain the people we will need in future, affecting the quality and availability of healthcare, not just the balance of tax and spending. The most productive countries may be able to sustain high net wages even with high tax rates, but New Zealand's productivity has long been among the lower half of the OECD.

An argument from changing fertility preferences

PAYGO welfare states like ours were established in the middle of the 20th century, when fertility rates were high and voluntary childlessness rare. In these circumstances, PAYGO systems are sustainable indefinitely, as each subsequent generation is larger than the one that preceded it. It is this insight that prompted Paul Samuelson's famous remark that a PAYGO welfare state is a 'ponzi scheme that works'. With child-rearing being almost universal, such a scheme can also be justified on the basis of solidarity, with each generation collectively choosing to bear the costs of raising a subsequent generation, and collectively benefiting from that successor generation's economic activity as adults.

The situation now is very different. The total fertility rate was 4.3 births per woman in 1961; in 2024 it was 1.52, and it is quite possible it will fall further in future. Voluntary childlessness is also becoming more common. Using data from the 2006 census, Boddington and Didham (2009) reported that childlessness at age 40 increased from about 8% of women born in 1935 to 15% for women born in 1965. Data from the 2023 census shows that childlessness at ages 40–44 had increased to 18% for women born between 1979 and 1983.

From a fiscal perspective, it is the interaction between low fertility and a PAYGO funding system that produces unsustainable finances. With a PAYGO scheme, low fertility means the intergenerational burden of funding the welfare state is placed on an ever-shrinking pool of people over time. The term 'ageing population' is misleading in this sense: the shifting ratio between young and old is being driven not so much by longer lifespans, but rather by a large fall in the number of children being created.

In redesigning our welfare state for the 21st century, low fertility is the main thing we need to adapt to, and potentially quite quickly if it continues to fall rapidly. Fertility could potentially increase again,

but in no society has fertility ever increased above 2.1 after falling below it (Runciman, 2025). This suggests that we are experiencing a permanent shift to a higher ratio of old to young, rather than a temporary surge associated with any one cohort.

There may be reasons to promote high or low fertility in general, but I do not consider these in this article. I am merely suggesting that welfare institutions should endeavour to be broadly neutral to fertility choices, and robust to both high and low fertility. And a PAYGO system is not neutral in that it is robust to high-fertility choices but not to low-fertility choices.

By contrast, the intra-generational nature of pre-funding is neutral to fertility choices between generations, in that levels of savings or levies naturally adjust to higher or lower fertility, without requiring other generations to change their tax paid or services received to maintain fiscal balance. Intra-generational funding is also neutral to diversity in fertility preferences within each generation, especially choices to have no children at all, by avoiding any implicit expectation that a generation has collective responsibility to raise a new generation.

Lower fertility also provides a counter-argument to the idea that shifting to pre-funding would be inequitable by requiring one generation to 'pay twice', making good their PAYGO obligations to an older generation while also saving for their own needs. Earlier generations with higher fertility rates incurred greater collective costs in raising the younger generations who then supported them in their senescence. Low fertility means more recent generations are implicitly avoiding much of these costs – especially members of more recent generations who have no children at all. Part of the additional cost of pre-funding future entitlements could be seen as a redirection of the savings associated with lower fertility rates, rather than a double payment.

An argument from secure prosperity

When thinking about our older years, two questions loom large. One is how to ensure that the economy we find ourselves living in is prosperous – i.e., well positioned to produce the goods and services that we need, including healthcare, aged care, and all the basics such as energy, food and so on. Nicholas Barr often emphasises that this as the fundamental question, noting that the future economy is one that both young and old will live in (Barr, 2021). Younger generations are those who will be providing most of the goods and services needed by themselves and by older generations, and so prosperity is in their interest as well.

When Australia introduced its compulsory savings system in 1992, it chose to call it the Superannuation Guarantee, implying that pre-funding future needs would offer greater security than is possible with a PAYGO system.

The second question is how people who will be old in future can guarantee themselves access to the goods and services they need. This question is really one of how to ensure that those of working age are willing to provide the goods and services needed by older people. In a pre-funded system, those of working age convert some of the income they earn across their lives into wealth by saving it (individually or collectively). They then draw down that wealth and/or use the capital income it provides to compensate younger people in future for the goods and services they provide.

A PAYGO system, by contrast, obliges younger generations to both supply and fund the goods and services needed, via their tax payments. There is a degree of insecurity in such an arrangement, in that future generations can choose to amend the scope of support they agree to fund at any time. This applies not just to superannuation, but also to health, aged care, and everything else funded by general taxes. An unsustainable policy arrangement is inherently unstable, undermining the security of support that people need to plan their retirement with confidence.

When Australia introduced its compulsory savings system in 1992, it chose to call it the Superannuation Guarantee, implying that pre-funding future needs would offer greater security than is possible with a PAYGO system. Both PAYGO and SAYGO systems come with risks, so it would be an exaggeration to say one system provides a guarantee that the other doesn't. For example, Barr and Diamond (2008) note that there are mechanisms available to reduce the value of pre-funded supports, even in individual accounts, such as changing tax treatment of returns and on consumption.

Cullen (2013) also noted that some guarantee of ongoing support can be provided in a PAYGO system by the growing electoral dominance of older age groups, who will be well placed to protect their interests at the ballot box. But guaranteeing a generation's share of economic production via electoral dominance may be self-defeating if that guaranteed share is of a less prosperous economy. The extent to which pre-funding may affect productivity via increasing national savings and investment is much debated, with no simple, unambiguous answer.[1] But there are several broader reasons to suspect that pre-funding might be more consistent with long-term prosperity in the face of demographic and climate change than PAYGO.

One is the transnational point already made. If older generations use electoral dominance to entrench a tax-based system that places a growing burden on younger generations, these younger generations can always vote with their feet. Younger New Zealanders can leave for other countries, and young prospective migrants can choose to go elsewhere. Since the most highly qualified are the most mobile and most in demand, this could reduce our

prosperity via a human capital, not just a physical capital, route.

Another is that PAYGO tends to slide into debt (borrow-as-you-go) when crisis strikes, because there are limited pools of savings and insurance funds to draw upon. For example, New Zealand was one of only a few countries to use a wage subsidy in response to the Covid-19 pandemic; many other countries drew upon unemployment insurance and savings funds instead. If successive crises overwhelm the ability to maintain surpluses in between, this can lead to ratcheting up of government debt. The interest payments on this debt are a subsequent drain on alternative uses, crowding out further investment we might wish to make in healthcare, for example. And if accumulated crisis debt crowds out the potential to use debt for other purposes, such as financing productivity-enhancing infrastructure and investments in human capital, this can hamper future prosperity.

Perhaps the most important point is that of Arthur Grimes and Shine Wu (2021), who reminded us of Adam Smith's observation that ultimately it is consumption that matters, not productivity. And income is what allows access to consumption. In an open economy, we can source the capital we need from overseas investment if we are not saving ourselves, and thus improve the economy's productivity. But to the extent that we rely on capital from elsewhere, we limit ourselves to the labour share of income accruing to productivity gains, with the capital share of income accruing to overseas owners of that capital. The more we save, in contrast, the more that capital income accrues to us. Furthermore, the more we save, the more we can diversify our sources of income, including by investing offshore. As much as we all might want higher productivity, there is no clear or obvious evidence that this can be guaranteed with different choices. Diversifying investment across different countries provides a hedge against continued disappointment in domestic productivity.

An argument from moral hazard and cost shifting

Many welfare state functions have been adopted as methods of pooling risk, generating individual security and reducing uncertainty by spreading costs across a large group. Superannuation protects against longevity risk (we know some of us will die younger than the average and others older, but not who among us will live a shorter or longer time). Collective healthcare guards against medical risk (we know many of us will experience serious illness, but not who or when). And so on. In this sense, many of our taxes can be thought of as insurance premiums by another name.

> Generations Y, Z and Alpha, perhaps some in Generation X too, should exercise their right to debate the obligations they wish to impose on one another and to accept, respecting but not feeling bound to continue the arrangements agreed to by earlier generations.

If this risk pooling were provided by private providers, their solvency and profitability would require an actuarial link between premiums and benefits guaranteed. Yet there is no such requirement in a PAYGO scheme, which allows for a great deal of implicit subsidisation (by younger generations) of the insurance coverage provided.

Not only this, but the subsidised insurance of, for example, health and retirement supports is supplemented by essentially free insurance in the face of many shocks and disasters, as discussed above. In recent decades, about 10% of GDP has been handed out each decade in response to disasters, covering wage subsidies, buyouts of earthquake and flood-affected properties, repair of uninsured local infrastructure, and so on (Treasury, 2025b). Given that core Crown revenue is typically less than 35% of GDP, without the accrual of regular surpluses, debt is often the only feasible mechanism to finance discretionary responses.

Especially given the need to adapt to climate change, such free insurance can create moral hazard, dulling incentives for local communities to make difficult changes to their land use patterns. This is not to say that there is no argument for socialising some of the costs of climate change. But pre-specifying and pre-funding any such commitments is more consistent with encouraging adaptation than is discretionary post hoc support. Pre-funding rather than debt financing such support is also more consistent with the polluter pays principle, to the extent we wish to adopt it for climate-related costs (Boston and Lawrence, 2018).

This tendency for PAYGO to slide into debt funding for unanticipated shocks also has the effect of shifting the cost of those shocks into the future. If the boundaries of the community were fixed and stable, this could be justifiable as a pragmatic approach to managing idiosyncratic and unpredictable risks. However, given the high levels of transnationalism and declining fertility rates discussed earlier, this approach creates the potential for those provided post hoc free insurance to benefit and then leave the country, with the costs of repaying the associated debt falling onto new members of the community (be they migrants or children).

An argument from social cohesion

The first four arguments all underpin the fifth, which is that continuing our PAYGO and debt-financed approach poses a growing risk to social cohesion, which is already falling.[2]

When New Zealand's welfare state was established last century, it was plausibly a mechanism to reinforce solidarity and

cohesion, in that nearly everyone contributed and everyone benefited, with the redistribution that took place within this general design justified by the widely shared egalitarian principles of the time. Yet that mechanism was established on foundations such as high fertility and a stable climate which have not endured. The welfare state still takes from most and most still benefit, but given changes in transnationalism, the climate and fertility levels, it also facilitates increasingly ad hoc redistributions that are hard to find a consistent, principled basis for (between foreign-born and New Zealand-born people, between high-fertility families and low-fertility families, between smaller generations and larger generations, and so on).

In these circumstances, it would be natural if people began to see the state less as a mechanism of positive-sum solidarity and security, and more a mechanism for zero-sum extraction by those with the appropriate influence. It would be natural, too, if younger generations felt insecure in the supports they can expect later in life, without a broadly agreed plan to keep government revenue and expenditure in balance over time.

Social cohesion is easy to take for granted, but its absence couldn't be more serious. The language of social capital reinforces that it is a type of wealth that underpins our prosperity as much as physical, natural and human capital do. There are close, mutually reinforcing connections between interpersonal trust, pro-social norms, effective governance and economic performance (Frieling, 2018). And in recent years, the long-measured slide in interpersonal trust in countries like the United States has been followed by a visible deterioration in governance, including a loss of fiscal control that will have serious consequences in the future.

France provides another important example of where there is increasing distrust, especially among the young, about whether the country is being governed in their interest. The rapid spread of the 'Nicolas' meme across Europe provides an insight into the kind of social tensions that can arise in a system that asks ever more of younger generations, with consequential impacts on governance and fiscal control (Economist, 2025).

The issues discussed in the Treasury's recent stewardship reports should be considered in this light as a serious warning not just about the government's finances, but about our future ability to resolve collective action problems for everyone's benefit. There is still time to act, but we have already waited many years. The longer we wait, the harder reform will become.

Conclusion

I have offered five reasons why we should take the idea of intra-generational funding seriously, not as a complete replacement for our existing tax-funded system, which has a central role in preventing hardship, but as a complement to it. As noted in the introduction, there are important counter-arguments and questions of detailed policy design that I have not had space to cover in this short article. But I contend that these counter-arguments and details are reasons to continue, not end, the conversation about contributory systems, which appears to be growing.

As Coleman (2025) notes, the potential for compulsory savings was closed off in 1976 by Robert Muldoon, and again two decades later by referendum. Yet an intergenerational compact can never be considered set in stone (Evans and Quigley, 2013). Coleman suggests that all those too young to vote in the 1997 referendum should have the right to revisit that decision as it applied to them. Generations Y, Z and Alpha, perhaps some in Generation X too, should exercise their right to debate the obligations they wish to impose on one another and to accept, respecting but not feeling bound to continue the arrangements agreed to by earlier generations. And such discussion would do well to take seriously the several arguments for moving away from such a heavy reliance on tax and debt.

1 Law and Scobie (2014) concluded that the introduction of Kiwisaver had not increased overall saving, merely redirected it. However, Law (2013) reported on modelling that suggested compulsory savings, if combined with means testing of NZ Super, could be expected to increase national savings. The extent to which national savings would then increase domestic investment depends in turn on the availability of international capital, plus any home bias in investment decisions.

2 Since the question was first asked in the General Social Survey in 2014, the percentage of adults with a score of 7/10 or higher for trust in other people in New Zealand has fallen each survey wave, from 68% in 2014 to 59% in 2023.

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Olga Filippova and Amanda Perera

Beyond Regulatory Reform: the missing role of incentives in New Zealand's earthquake-prone building policy

Abstract

This article examines recent reforms to New Zealand's earthquake-prone building (EPB) system and argues that, while the reforms improve proportionality and risk targeting, they do not adequately address persistent financial barriers to seismic remediation. International evidence shows that regulatory regimes addressing public safety risks are more effective when complemented by financial and institutional incentives that reduce upfront costs, liquidity constraints and capability barriers. The article concludes that the absence of incentives within the reformed EPB framework raises questions about whether timely and consistent compliance can be achieved for the highest-risk buildings.

Keywords earthquake-prone buildings, seismic risk management, financial incentives, New Zealand

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Seismic resilience has long been a policy concern in New Zealand, given the country's exposure to significant seismic risk arising from its existing building stock and the associated risks to life and safety. In response to persistent concerns about the effectiveness and workability of the earthquake-prone building (EPB) system, the government recently undertook a comprehensive review of the existing regulatory framework (Ministry of Business, Innovation and Employment, 2025). The review was led by the Ministry of Business Innovation and Employment, overseen by an independent steering group, and informed by contracted technical experts, external peer review and inter-agency consultation, with a broad remit covering regulatory design, implementation experience, cost–benefit considerations and barriers to compliance (Ministry of Business Innovation and Employment, 2024a). Following the findings of the review, Cabinet has agreed to implement a set of reforms that narrow the scope of the EPB regime and adjust compliance requirements.

The proposed reforms primarily seek to improve proportionality and reduce regulatory burden by refocusing the system on a smaller subset of higher-risk buildings. This includes limiting regulatory attention to buildings assessed as posing the greatest life-safety risk, alongside adjustments to mitigation requirements and statutory time frames to better align regulatory effort with risk (Cabinet Economic Policy Committee, 2025).

However, the reformed system continues to operate within a framework in which the cost of seismic mitigation is largely borne by building owners, despite the review's explicit recognition of cost as one of the key barriers to timely remediation (Ministry of Business Innovation and Employment, 2025). As a result, the policy response relies predominantly on revised regulatory obligations rather than enabling mechanisms as the primary means of improving compliance.

This article examines whether the absence of a structured incentive framework risks undermining the effectiveness of the reformed EPB system, drawing on Cabinet decisions, international experience, and New Zealand evidence relating to incentive-based approaches to seismic risk mitigation.

Why the earthquake-prone building system was reviewed

Despite more than a decade of regulatory reform, progress in reducing seismic risk across the existing building stock had remained slow and uneven, raising doubts about whether the system was delivering meaningful life-safety outcomes. The ministry review therefore examined how seismic risk is identified, measured and mitigated in practice; whether the EPB framework had been implemented and operationalised as originally designed; and how barriers to remediation, particularly financial and funding constraints, were influencing owner behaviour and compliance.

The review identified several structural issues that were limiting the effectiveness of the existing EPB system. While approximately 1,500 earthquake-prone buildings had been strengthened or demolished, progress with the remaining stock of around 5,800 buildings proved significantly more challenging. Remediation was often disruptive, beyond the financial means or technical capability of building owners, or simply uneconomic. In some cases, buildings were vacated or strengthened disproportionately to their actual risk due to misunderstandings of percentage of New Building Standard (%NBS) ratings. The review also found that buildings were being captured by the regime in ways not originally intended, including through the 'identify at any time' pathway.[1] Enforcement of remediation obligations was costly and impractical for territorial authorities, while heritage protections imposed additional constraints on feasible strengthening options.

Despite more than a decade of regulatory reform, progress in reducing seismic risk across the existing building stock had remained slow and uneven, raising doubts about whether the system was delivering meaningful life-safety outcomes.

Another key observation regarding the NBS-based EPB framework is its disproportionate impact on small and predominantly rural towns. These centres typically have small EPB inventories, low pedestrian activity, and building stock dominated by low-use assets, many of which already operate under structural economic pressure. In such contexts, the cost of seismic strengthening often exceeds local building values and adds a further layer of financial complexity for building owners (Beca Limited, 2025).

Cabinet-approved reform direction

Narrowing the scope to higher-risk buildings

Cabinet agreed to substantially narrow the scope of the EPB system by limiting its application to a defined subset of higher-risk buildings located in medium and high seismic risk zones, resulting in the exclusion of buildings in low seismic risk zones, such as Auckland, Northland and the Chatham Islands. Under the agreed reforms, EPB status will apply only to unreinforced masonry (URM) buildings and pre-1976 high-risk three-storey-and-above buildings of heavy construction, typically concrete. All buildings located in low seismic zones will be removed from the EPB system, and existing EPB notices in those areas will be revoked (Office of the Minister for Building and Construction, 2025). As a result, approximately 55% of currently designated earthquake-prone buildings (around 2,900 buildings) will be removed from the system. These changes are estimated to generate cost savings of approximately NZ$8.2 billion for building owners, including government agencies (ibid.).

The revised framework also departs from the use of seismic assessment and %NBS ratings for building identification, shifting instead to typology-based screening and identification of specific structural deficiencies. Although this approach is expected to reduce assessment costs and simplify implementation, it represents a trade-off between administrative efficiency and diagnostic precision. Simplified classification approaches may not fully capture building-specific vulnerabilities or atypical construction features, some of which are not externally apparent. As a result, there is a recognised risk that a small subset of seismically vulnerable buildings may not be identified for further assessment or intervention under a typology-focused regime.

Another significant change introduced by the reforms relates to how priority buildings are identified within the EPB system. Priority buildings are those considered to pose elevated risks to life safety or to have the potential to affect emergency response during an earthquake. Under the revised framework, priority status is limited to unreinforced masonry buildings with unsecured elements that could collapse onto high-traffic pedestrian or vehicle thoroughfares, and buildings whose collapse could obstruct critical emergency service routes. Priority status based solely on building use, such as hospitals or fire stations, has been removed from the EPB system (Cabinet Economic Policy Committee, 2025; Office of the Minister for Building and Construction, 2025).

Changes to mitigation requirements and time frames

Cabinet has agreed to replace remediation requirements based on minimum %NBS thresholds with mitigation obligations that vary according to the level and nature of seismic risk posed by each building. This approach aligns the EPB system more closely with international best practice and addresses longstanding problems associated with the interpretation and use of %NBS ratings (Office of the Minister for Building and Construction, 2025).

To improve workability and reduce compliance pressure, the reforms introduce greater flexibility in remediation time frames by allowing building owners to apply for extensions of up to five years, including for expired deadlines. At the same time, the use of the 'identify at any time' pathway has been significantly narrowed to apply only to a limited category of high-risk post-1976 multi-storey heavy-construction buildings in medium or high seismic risk zones.

Addressing financial barriers: what the policy settlement does not resolve

The Cabinet-approved reforms significantly reshape the EPB system by narrowing its scope, reducing mitigation requirements, and increasing flexibility in remediation time frames. In doing so, the reforms explicitly recognise that cost, complexity and owner capability have constrained compliance under the previous regime. However, while these barriers are addressed through reduced regulatory obligations, the policy settlement does not introduce incentives as an active mechanism to support remediation for buildings that remain subject to the system.

> Investments in seismic retrofitting … often produce public benefits that exceed private returns, meaning that government financial support for such interventions is unlikely to be inefficient or wasted.

For the smaller subset of higher-risk buildings still captured, particularly unreinforced masonry buildings, multi-storey heavy-construction buildings, and buildings in dense urban settings, the financial burden of seismic work remains substantial. Even under more proportionate mitigation requirements, retrofit projects can be costly, disruptive and technically demanding, especially for owners facing limited access to capital, fragmented ownership (multi-unit owners) or heritage constraints. In some cases, insurers and banks impose lending thresholds above regulatory minimums (e.g., around 67% of NBS), meaning that high remediation costs and restricted access to finance prevent some owners, particularly low-income and non-profit owner-occupiers, from undertaking seismic upgrades (ResOrgs & JCDR, 2025a). The reformed framework continues to rely primarily on regulatory obligation to prompt action, despite the review's acknowledgement that financial and capability barriers influence owner behaviour.

Cabinet's response to cost barriers is therefore largely indirect. Rather than enabling compliance through financial or institutional support, the reforms focus on reducing exposure by removing buildings from the regime, decoupling seismic work from other regulatory requirements,[2] and allowing longer time frames for compliance. While these measures lower overall system costs, they do not directly address the challenges faced by owners who remain within the EPB system and are still expected to undertake mitigation without targeted assistance. This creates an incentive gap within the reformed EPB framework. The system depends on regulatory obligation and flexibility to drive compliance but does not provide positive inducements, such as grants or concessional finance, to encourage or accelerate remediation. As a result, there remains a risk that delayed compliance will persist, particularly where owners face high upfront costs.

Importantly, the absence of incentives reflects a policy choice rather than an oversight. The review explicitly considered financial barriers to remediation, and the Cabinet papers recognise cost as a central implementation challenge. As part of the review process, the Ministry of Building, Innovation and Employment commissioned research into societal willingness to pay to mitigate the risk. This research found strong public prioritisation of life safety, a willingness to pay tax and a social licence for some tax-funded partial contributions to achieve improved seismic performance (ResOrgs & JCDR, 2025b). Despite this evidence, the adopted reforms stop short of incorporating incentives into the regulatory toolkit. This raises a critical question: whether narrowing scope alone is sufficient to achieve timely seismic risk reduction for the buildings that continue to pose the greatest life-safety risks.

Seismic strengthening generates benefits that extend beyond individual building owners to the wider economy and society. Investments in seismic retrofitting therefore often produce public benefits that exceed private returns, meaning that

government financial support for such interventions is unlikely to be inefficient or wasted. Empirical evidence demonstrates that natural hazard mitigation yields substantial social benefits, including reduced casualty losses, lower emergency response and recovery costs, and reduced non-market damage such as environmental degradation and damage to historic buildings (FEMA, 2011; Godschalk et al., 2009). These avoided losses accrue largely to the public sector and the community rather than being fully captured by property owners, resulting in positive externalities that justify public financial intervention. This rationale is particularly strong in the case of heritage buildings, where seismic retrofitting safeguards multiple forms of value beyond market returns, including cultural and symbolic value, social value, environmental value, and broader economic value associated with tourism and place identity (Giaretton et al., 2018; Mason, 2008). Despite these clear public benefits, significant economic barriers continue to inhibit seismic retrofitting of EPBs (Egbelakin et al., 2014).

Evidence from international experience and New Zealand

Incentive mechanisms

Grant funding

Direct grants aim to lessen the financial burden on building owners by contributing directly to a proportion of retrofit costs. These grants are typically used where the public safety benefits of seismic retrofitting are significantly greater than the private costs faced by owners, particularly for buildings that pose a high hazard to occupants or the public in the event of collapse.

In the United States, direct grant-based support for seismic retrofitting is primarily delivered through programmes supported by the Federal Emergency Management Agency (FEMA). FEMA-supported initiatives provide funding and technical guidance to state and local governments to enable seismic retrofitting in situations where private investment alone is unlikely to occur (FEMA, 1994). Empirical evaluations of FEMA-funded mitigation programmes indicate that seismic retrofit projects can deliver particularly strong life-safety and loss-reduction benefits (Rose et al., 2007). At the local level, some jurisdictions have complemented federal support with targeted grant schemes. For instance, the City of Berkeley has offered seismic retrofit grants covering both design and construction stages, with partial funding subject to capped amounts (Filippova et al., 2025).

In Japan, seismic retrofitting is supported through a formal cost-sharing framework in which retrofit costs are shared between the central government, local governments and building owners. Subsidy levels vary according to building importance and risk profile, with higher public contributions provided for priority buildings such as those located on evacuation routes or designated for emergency management purposes, and grant funding covering up to approximately 50% of retrofit costs. Similar approaches have been adopted in Taiwan, where the Private Building Seismic Weak-Storey Retrofit Program provides grants covering up to 45% of eligible retrofit costs, targeting buildings with identified structural vulnerabilities (ibid.).

Local government budget measures

Instead of directly financing retrofit works, local governments sometimes use indirect financial measures such as consent fee waivers, discounts and seismic rehabilitation rebate schemes to ease the financial burden faced by building owners. These measures focus on reducing administrative and transaction costs associated with seismic retrofitting, helping to improve the feasibility of compliance. For instance, fee waivers and permit discounts have been widely used in Californian jurisdictions with mandatory retrofit programmes to reduce indirect compliance costs for building owners (FEMA, 1994).

Moreover, seismic rehabilitation rebate schemes are used in some jurisdictions to reimburse retrofit-related costs after work has been completed. For example, under the City of Upland, California's URM ordinance, building owners were eligible for reimbursement of engineering and architectural design costs, council fees, and a capped proportion of construction costs, subject to specified percentage limits (ibid.; Filippova et al., 2025).

Development controls

Development control incentives, such as transfer of development rights (TDR), are used in some jurisdictions to offset the financial impacts of seismic retrofitting without direct public expenditure. For example, Seattle's TDR programme allows owners of constrained or vulnerable buildings to transfer unused development capacity to other sites, creating a market-based revenue stream that can support retrofit investment (FEMA, 1994; Filippova et al., 2025).

Property rates relief can operate as an indirect incentive by limiting the extent to which seismic retrofitting increases ongoing ownership costs.

While development controls and property rates relief are exercised by territorial authorities rather than central government, they remain directly relevant to the operation of the national EPB framework. The EPB regime is established through central government legislation, but its implementation is delegated to territorial authorities, which are responsible for maintaining the EPB register and enforcing remediation requirements (Ministry of Building, Innovation and Employment, 2024b).

Property rates relief

Property rates relief can operate as an indirect incentive by limiting the extent to which seismic retrofitting increases ongoing ownership costs. In California, Proposition 13 caps property tax rates and restricts the

reassessment of property values following improvements, meaning that building owners who undertake retrofit works are not exposed to significant increases in annual property rates. Although this mechanism was not designed specifically to incentivise seismic strengthening, it reduces financial uncertainty associated with retrofit investment and removes a potential disincentive to undertaking such work, particularly for long-held properties. By effectively locking in pre-retrofit rates, owners can capture long-term savings from their investment, improving the financial viability of seismic retrofitting over the life of the building (Filippova et al., 2025).

Personal tax credits

Personal tax credits are used in some jurisdictions to encourage private investment in the rehabilitation of existing buildings, including seismic retrofitting where this forms part of a broader upgrade programme. In the United States, the federal historic tax credit provides a 20% credit against federal tax liability for qualifying rehabilitation works undertaken on certified historic buildings. As an indirect incentive, the historic tax credit improves project feasibility by offsetting tax liabilities for income-producing properties (FEMA, 1994; Filippova et al., 2025).

Financing mechanisms

Financing mechanisms are used in some jurisdictions to address liquidity constraints associated with seismic retrofitting by enabling building owners to spread retrofit costs over time. Property-assessed financing loans, such as through the Property Assessed Clean Energy (PACE) scheme in the United States, provide upfront funding that is repaid through property-based assessments, reducing reliance on personal borrowing and allowing repayment obligations to transfer with the property rather than as personal loan obligation. PACE is a financing mechanism designed to support a wide range of building improvements permanently affixed to residential and commercial properties, including energy and water efficiency measures, renewable energy systems, and hazard-reduction upgrades. The primary purpose of PACE financing is to enable investments that generate environmental or hazard risk-reduction benefits while addressing liquidity and credit constraints faced by property owners (Liaw, 2024; Rose and Wei, 2020) we summarize the concerns raised after the programs have been implemented. Those concerns include consumer protection, audit after program implementation, and lien-related risks for lenders. We discuss those concerns and suggest measures to continue to grow PACE financing. The success of PACE programs will contribute to reducing carbon emissions, mitigating climate change and to achieving six of the seventeen United Nations Sustainable Development Goals (SDGs. PACE schemes were initially introduced to support energy efficiency and renewable energy investments, but their scope has since expanded in some jurisdictions to include seismic and resilience retrofitting (City of Los Angeles, 2023)the City in 2015 included seismic retrofits in the state's successful Property Assessed Clean Energy (PACE.

In addition, some jurisdictions have facilitated private lending consortiums or partnerships with financial institutions offering discounted or tailored loan products for seismic retrofits (FEMA, 1994; Filippova et al., 2025).

> While Heritage EQUIP has enabled 77 successful retrofit projects between 2016 and 2020, its overall reach has been constrained by capped funding levels, periodic application rounds and eligibility criteria.

New Zealand schemes

The Kaikōura earthquake response

The Kaikōura earthquake response provides a rare New Zealand example of a targeted seismic risk mitigation programme that achieved a high level of compliance within a short time frame. Following the 2016 Kaikōura earthquake, the government introduced the Hurunui/Kaikōura Earthquake Recovery (Unreinforced Masonry Buildings) Order 2017, which required the urgent securing of unreinforced masonry façades and parapets in affected areas. Rather than mandating full structural strengthening, the order focused on addressing the most hazardous building elements: those most likely to collapse onto public spaces during aftershocks (Tong et al., 2022).

To support compliance, the government established the Unreinforced Masonry Buildings Securing Fund, which provided grants covering up to 50% of remediation costs, subject to capped amounts. Territorial authorities complemented this financial support by waiving consent fees, providing technical guidance, and assigning dedicated case managers to assist building owners through the remediation process. Together, these measures reduced both cost uncertainty and capability barriers, particularly for smaller and less experienced owners.

Although initial uptake was slow, compliance increased sharply as deadlines approached, especially after councils adopted a more intensive, case-managed delivery approach. By the conclusion of the programme, all but one of the identified dangerous façades and parapets had been remediated, representing a very high compliance rate for a mandatory seismic intervention. Independent evaluations found that government funding was critical to this outcome, alongside active council facilitation and credible enforcement.

The Kaikōura experience demonstrates that incentives are most effective when combined with non-financial support measures. While grants reduced the direct cost burden, clear guidance, flexible retrofit options and sustained case management were equally important in enabling action.

Heritage grants

Heritage EQUIP was a targeted New Zealand government funding programme designed to support the seismic strengthening of privately owned earthquake-prone heritage buildings. The programme provided $12 million in funding to partially offset the costs of seismic retrofitting, with a particular focus on supporting regional heritage building owners located in medium and high seismic risk zones (Ministry for Culture and Heritage, 2024).

A key feature of Heritage EQUIP was the introduction of professional advice grants, which supported owners at the early stages of the retrofit process by covering up to 50% of the costs of professional services such as engineering and architectural advice. To encourage wider participation, regional applicants were eligible for increased support of up to 67% where neighbouring heritage building owners collaborated on joint projects. The programme also provided enhanced funding for construction works, with eligible regional owners able to receive grants covering up to 67% of seismic strengthening costs, assessed through three competitive funding rounds per year (ACE, 2019).

While Heritage EQUIP has enabled 77 successful retrofit projects between 2016 and 2020, its overall reach has been constrained by capped funding levels, periodic application rounds and eligibility criteria. As a result, it operated as a targeted and ad hoc incentive rather than a system-wide mechanism. This highlights both the potential effectiveness of grant-based incentives for overcoming retrofit barriers and their limitations within New Zealand's current seismic risk policy framework.

Wellington City Council's Heritage Resilience and Regeneration Fund provides targeted funding to support the conservation and seismic strengthening of heritage buildings where strengthening is unlikely to occur without financial assistance. The fund focuses on priority earthquake-prone areas in Wellington and also contributes to broader urban regeneration objectives. Funding is allocated across both conservation and strengthening activities, with approximately 15% reserved for conservation-specific work and the remaining 85% directed towards earthquake strengthening. Eligible strengthening support includes initial engineering assessments, detailed design, and grants towards the cost of strengthening works (Wellington City Council, 2025)

Residential earthquake-prone building loan scheme

The Residential Earthquake-prone Building Financial Assistance Scheme was introduced by the New Zealand government to address financial hardship faced by owner-occupiers required to remediate residential earthquake-prone buildings, particularly in high seismic risk areas such as Wellington. Under the scheme, it would provide below-market, deferred-repayment loans of up to $250,000 to eligible owner-occupiers who were unable to secure sufficient finance from commercial lenders (Office of the Minister for Building and Construction, 2020).

However, the loan scheme proved ineffective as a mechanism for providing financial support, with no apartment owners applying during its initial period of operation. Reporting on the scheme highlights that complex eligibility criteria, the requirement to demonstrate an inability to access commercial finance, and a general reluctance among owners to take on additional debt significantly limited uptake. This outcome suggests that, even where concessional finance is available, loan-based mechanisms may be insufficient to overcome behavioural, governance and risk-related barriers faced by owners of earthquake-prone buildings, particularly in multi-owner apartment contexts (MacManus, 2022).

Under the Unit Titles Act 2010, owners of multi-unit apartment buildings are collectively bound through the body corporate to maintain building insurance (s135(1)). This statutory obligation creates a non-discretionary requirement for insurance coverage, regardless of market affordability or risk pricing. However, in practice, apartment owners, particularly in high seismically active zones, have encountered escalating insurance premiums and increasing difficulty securing cover. For instance, some media reports indicate that insurance premiums have increased up to 320% for earthquake-prone apartment buildings (Campbell, 2020). In addition, insurers have, in some cases, indicated that the continuation of coverage may depend on whether seismic strengthening is undertaken within prescribed timeframes. These pressures have prompted some body corporates to collectively seek alternative insurance arrangements due to affordability concerns (Campbell, 2024). Insurance is mandatory, yet its availability and cost are increasingly contingent on seismic performance, while the scale of required retrofit investment simultaneously constrains borrowing capacity. These insurance pressures further undermine the effectiveness of loan-based support mechanisms for earthquake-prone apartment buildings.

> Outside the seismic policy context, extensive literature on energy efficiency demonstrates that cost-effective retrofit measures are often not adopted by private actors, even where lifetime savings exceed upfront investment costs.

Broader evidence on the role of financial incentives in regulatory policy

Where regulation alone is unlikely to achieve the desired outcomes, particularly in contexts where public benefits exceed private returns, incentive-based schemes

are widely used as complementary policy tools. Such approaches are commonly observed in regulatory frameworks addressing public safety, infrastructure provision and environmental protection.

Outside the seismic policy context, extensive literature on energy efficiency demonstrates that cost-effective retrofit measures are often not adopted by private actors, even where lifetime savings exceed upfront investment costs. This phenomenon is widely referred to as the energy efficiency gap. In response, governments commonly employ financial incentives to address market and behavioural failures that inhibit private investment. These incentives typically include rebates, grants, tax incentives and low-cost loans designed to ease high upfront costs and credit constraints associated with energy-efficient retrofits. Such measures are explicitly justified where private decision making leads to systematic under-investment relative to the social optimum (Allcott and Greenstone, 2012; Fan and Shi, 2025; Gillingham and Palmer, 2014).

Another policy domain in which financial incentives have been shown to play an effective role is environmental and climate regulation. These incentives commonly take the form of grants, soft loans and tax concessions, and are used to encourage private actors to undertake actions that generate broader public benefits. However, evidence suggests that the effectiveness of incentives varies across contexts and is influenced by micro-level factors, such as organisational capacity, access to finance and firm size. As a result, studies in this field emphasise that incentives are most effective when they are carefully designed and embedded within a wider policy framework, rather than applied in isolation (Clement and Hansen, 2003; Durmishi et al., 2025; Xiang et al., 2025).

Taken together, evidence from seismic retrofitting programmes, energy efficiency policy, and environmental and climate regulation shows that financial incentives are a well-established and widely accepted complement to regulatory frameworks in situations where public benefits are substantial and private costs are concentrated. Across these policy domains, incentives are not intended to replace regulation, but to address persistent barriers such as high upfront costs, credit constraints, information gaps and risk aversion that can limit compliance when regulatory obligations operate alone.

International experience and New Zealand evidence consistently show that where public safety benefits are high and private costs are concentrated, regulation is most effective when supported by incentives that reduce upfront costs, manage risk and address capability constraints.

Discussion

The Cabinet-approved reforms following the review of the EPB system represent a significant shift towards a more proportionate and targeted regulatory framework. By narrowing the scope of the system to higher-risk buildings and simplifying identification and mitigation requirements, the reforms are intended to reduce regulatory burden and improve clarity for building owners and territorial authorities. In this respect, the reforms respond directly to several structural weaknesses identified in the review.

However, a more focused and better-targeted EPB system does not eliminate the financial barriers faced by building owners. High-risk buildings that remain subject to the EPB regime, particularly unreinforced masonry and multi-storey heavy-construction buildings, may still require substantial retrofit works, whether full or targeted. While the reforms acknowledge cost as a key barrier, they do not introduce direct financial incentives to support these remediation activities; consequently, the fundamental issue of access to capital remains unaddressed. Instead, the Cabinet-approved measures aimed at lowering costs are primarily regulatory in nature. These include decoupling seismic remediation from additional Building Code upgrade requirements, limiting the seismic standard required when buildings undergo a change of use, and signalling further exploration of regulatory adjustments to reduce compliance complexity. Collectively, these measures reduce costs by removing ancillary regulatory triggers and preventing the escalation of remediation requirements, rather than by subsidising retrofit works or sharing costs with building owners. However, for some building owners, reduced regulatory retrofit requirements are effectively overridden by lender and insurer thresholds. This reinforces the need for financial incentives and/or access to capital mechanisms that operate independently of market-driven constraints.

Evidence from international experience suggests that regulatory reform alone is often insufficient to achieve timely and widespread retrofit compliance where private costs are high and public benefits are diffuse. Many jurisdictions combine mandatory seismic requirements with financial incentives to address cost, liquidity and capability constraints. Examples from the United States, Japan and Taiwan illustrate how grants, cost-sharing arrangements, and other incentive mechanisms have been used to complement regulation and improve compliance outcomes. New Zealand's own experience following the Kaikōura earthquake further demonstrates that when targeted regulation is combined with financial support and active facilitation, high levels of retrofit compliance can be achieved within relatively short time frames.

Against this backdrop, the absence of an incentive framework within the

Cabinet-approved EPB reforms appears to reflect a deliberate policy choice rather than an oversight. While the reforms significantly reduce the number of buildings subject to regulation and lower compliance costs through regulatory relief, they rely primarily on revised obligations and extended time frames to encourage remediation. As a result, the risk of delayed or incomplete compliance by owners of the remaining high-risk buildings may persist.

This risk is amplified by the fact that seismic strengthening generates benefits that extend significantly beyond individual building owners. While private owners capture gains relating to asset safety and continuity of use, evidence from heritage-led retrofit initiatives indicates that seismic remediation also produces wider economic, social and fiscal benefits at local and national scales, including urban revitalisation, employment, tourism activity and increased tax revenues (Whanganui Regional Heritage Trust, 2026a, 2026b). Where these public benefits exceed the private returns available to owners, reliance on regulatory obligations alone creates a risk of systematic under-investment. This multi-scale benefit structure reinforces the case for financial support mechanisms that share retrofit costs across building owners, territorial authorities and central government, particularly for high-risk buildings remaining within the EPB regime.

Conclusion

This article has shown that the recent Cabinet-approved reforms to New Zealand's EPB system represent a meaningful shift towards a more proportionate, risk-based regulatory framework. However, regulatory refinement alone is unlikely to resolve the core financial barriers faced by owners of the remaining high-risk buildings. International experience and New Zealand evidence consistently show that where public safety benefits are high and private costs are concentrated, regulation is most effective when supported by incentives that reduce upfront costs, manage risk and address capability constraints.

The absence of a structured incentive framework within the reformed EPB system therefore represents a significant policy gap. While the reforms reduce overall system costs, they do not provide mechanisms to actively enable compliance for those buildings that continue to pose the greatest life-safety risks. Without complementary incentives, there remains a risk that delayed or incomplete remediation will persist, undermining the objectives of the reform.

1 The 'identify at any time' pathway allows a territorial authority to require a building to be assessed as potentially earthquake-prone outside the standard profile-based identification timeframes, where the authority has reason to suspect that the building may be earthquake-prone (Ministry of Building, Innovation and Employment, 2017).

2 Decoupling seismic work from other regulatory requirements refers to reforms that allow seismic strengthening to be undertaken without triggering additional fire safety, accessibility or higher seismic upgrade requirements, particularly in the context of alterations and changes of use.

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'Special Treatment'

a 30-year case study exploring whether Pacific peoples as an ethnic minority are being privileged in public policy

Abstract

This article interrogates claims of 'special treatment' for ethnic minorities by examining the alignment between documented Pacific mental health need and 30 years of public mental health and Pacific health policy (alongside relevant estimates of appropriations). Using frequency analysis and close reading, it finds that despite longstanding and well-evidenced inequities, Pacific mental health is inconsistently addressed, rarely prioritised, and seldom supported through targeted investment. Analysis by governing party shows that both inclusion and prioritisation are generally lower under National-led governments. While Labour-led governments have adopted more inclusive rhetoric, this has not consistently translated into substantive policy action or resourcing. Overall, the study finds that claims of special treatment for Pacific peoples as an ethnic minority are supported by neither policy content nor investment.

Keywords public policy, mental health, Pacific peoples, equity, ethnic-specific policy, political discourse

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The biographies of the co-authors **Denise Kingi-Uluave, Philip Siataga, Malaetogia Jacinta Fa'alili Fidow, Tuaopepe Aba Fidow, Kava Fuavao, Sione Vaka,** and **Juliet Boon** are on page 58.

Introduction and background

Claims of 'special treatment' for minority groups recur regularly in political and electoral discourse in Aotearoa New Zealand, often mobilised by political actors to provoke controversy and shape public debate. 'Special treatment' – defined here as the explicit and measurable prioritisation of a minority group through differentiated policy attention, resource allocation, or strategic inclusion beyond that afforded to the general population – is most commonly invoked in relation to ethnic minorities and continues to feature centrally in contemporary debates about equity, identity and public investment. Such claims are not merely rhetorical; they shape public trust, influence electoral politics, and inform decisions about the allocation of limited public resources.

Under the current National–New Zealand First–ACT administration, rhetoric of 'special treatment' has once again re-emerged, evident in parliamentary debates over the Treaty Principles Bill and Regulatory Standards Bill, as well as in high-profile public commentary such as Kate Hawkesby's discussion of surgical waiting list prioritisation (Broadcasting Standards Authority, 2024). These arguments echo earlier political moments, including National Party leader Don Brash's 2004 Orewa speech (Brash, 2004). Yet despite the persistence and political salience of these claims, there is limited empirical analysis examining whether they are borne out in policy content or resourcing decisions.

What is well evidenced, however, are the enduring inequities experienced by ethnic minority communities – including Māori, Pacific and MELAA populations – across health, education, justice and social development, resulting in poorer outcomes and reduced opportunities (Ministry for Ethnic Communities – Te Tari Mātāwaka, 2024).

This article responds to the gap between rhetoric and evidence by examining the extent to which Pacific peoples – used here as a representative ethnic minority – have been prioritised within public mental health policy, as a representative policy domain. Drawing on a PhD study by the lead author (Tuesday, 2023), it presents a 30-year case study of public policy documents, including mental health strategies, Pacific health plans, and estimates of appropriations. Using document analysis, the article contributes an evidence-informed perspective to debates about equity and public policy.

Talavou o le Moana ... highlights the needs of Pacific youth, reflecting a higher rate of significant depression symptoms among Pacific youth (25.9%, compared with 19.6% for Pākehā), and increasing suicidal ideation and attempts.

A brief overview of Pacific peoples and their mental health needs

Pacific peoples in Aotearoa New Zealand are a young, rapidly growing and culturally diverse population, most of whom are New Zealand-born. The identities of this population group are shaped by strong cultural, linguistic and communal ties that span Moana-Nui-a-Kiwa/the Pacific region. Despite the many strengths and contributions of Pacific communities, they continue to face persistent inequities across key determinants of health and wellbeing, including a disproportionate burden of mental illness (Ministry for Pacific Peoples, 2018).

Te Rau Hinengaro, the 2006 New Zealand mental health survey, found that 25% of Pacific people had experienced a mental disorder in the past year and 46.5% across their lifetime, a significantly higher proportion than of the general population (20.7% and 39.5% respectively). The survey also found that only 25% of Pacific people with serious mental illness accessed any mental health service, compared with 58% of others, highlighting substantial unmet need (Foliaki et al., 2006). Although *Te Rau Hinengaro* is now two decades old, more recent findings from *Te Kaveinga* (Ataera-Minster & Trowland, 2018) suggest these disparities persist. Pacific peoples had higher Kessler-10 scores (14.6 vs 13.9) and were 1.2 times more likely to report moderate or high psychological distress. These disparities persisted across subgroups, including multi-ethnic and realm-nation Pacific populations. Alarmingly, 15% and 24% of Pacific people in this study did not know where to seek help for depression or anxiety respectively.

Talavou o le Moana (Veukiso-Ulugia et al., 2024) highlights the needs of Pacific youth, reflecting a higher rate of significant depression symptoms among Pacific youth (25.9%, compared with 19.6% for Pākehā), and increasing suicidal ideation and attempts. Findings from the Growing Up in New Zealand study also highlight that Pacific children experience more anxiety and depression symptoms and Pacific mothers experience higher rates of antenatal depression than their European counterparts (Morton et al., 2020; McDaid et al., 2019).

Approach

To develop this case study, the authors analysed a targeted set of public policy documents published between 1990 and 2022. The time frame captures developments since the Mason Inquiry into psychiatric hospital care (1987–89) and the first national mental health strategy (Mason, 1989; Ministry of Health, 1994), and the completion of data collection for the lead author's PhD in 2017.

The analysis focused on six key document types:

- public mental health strategies and action plans (mainstream and, where available, Pacific) (Crawley et al., 1995; Ministry of Health, 1994, 1997b, 2005b; Ministry of Health, 2006a, 2010, 2012, 2020a, 2021a, 2021b);

- Pacific health strategies and action plans (Ministry of Health, 2020b, 1997a, 2014; Te Whatu Ora | Health New Zealand, 2022; Ministry of Health & Ministry of Pacific Island Affairs, 2010; King, 2002);
- Vote Health appropriations (New Zealand Government, 2021a, 2022a; Te Kāwanatanga o Aotearoa, 2023a; Treasury, 1998a, 2001a, 2010a, 2019b, 2020a, 2019a);
- Vote Pacific Island Affairs/Pacific Peoples' appropriations (New Zealand Government, 2021b, 2022b; Te Kāwanatanga o Aotearoa, 2023b; Treasury, 1998b, 2001b, 2010b, 2019c, 2019a, 2020b).

These documents were selected to represent key avenues for Pacific mental health in public policy. While all strategies and action plans within the time frame were reviewed, only second-year estimates of appropriations were prioritised for each National- or Labour-led government term, allowing a manageable yet representative review.

A frequency analysis was conducted to assess the visibility of Pacific peoples and mental health: mentions of 'Pacific', 'Pasifika', 'Pasefika' and 'Pacifica' were counted in mainstream documents, while references to 'mental health', 'mental wellbeing', 'mental illness' and related terms were counted in Pacific-focused documents. Frequency counts – presented as average number of mentions per page – served as a proxy for attention, alongside close readings of content and tone.

This analysis was situated within a broader policy landscape, including relevant legislation, Māori health strategies, mental health workforce plans, consultation summaries, briefings to incoming ministers, budget speeches, and the Mental Health Commission's 'Blueprint' documents. For the purposes of this analysis, primary emphasis was placed on formal policy documents and estimates of appropriations, as together these provide the clearest line of sight between stated government priorities and how those priorities are operationalised through public spending. While briefings, speeches and other policy-adjacent texts inform context and intent, they do not carry the same directive or fiscal force.

Table 1: Number of mentions of 'Pacific' (and related terms) in mainstream, public mental health policy, 1990–2022

Name of Document	# of Mentions of "Pacific", "Pasitika", "Pasefika", or "Pacifica" AND # of Pages	Average # of Mentions of "pacific", "pasifika", "pasefika", or "Pacifica" per page
Looking Forward: Strategic Directions for Mental Health Services (1994)	Count: 2 Pages: 30	0.07
Moving Forward: The National Mental Health Plan for More and Better Services (1997)	Count: 65 Pages:74	0.87
Te Tāhuhu: Improving Mental Health 2006-2015 (2005)	Count: 6 Pages: 21	0.29
Te Kōkiri: The Mental Health and Addiction Plan 2006-2015 (2006)	Count: 40 Pages: 82	0.49
Mental Health and Addiction Plan (2010)	Count: 0 Pages:7	0.00
Rising to the Challenge: Mental Health and Addiction Service Development Plan 2012-2017 (2012)	Count: 21 Pages:69	0.30
COVID-19: Kia Kaha, Kia Māia, Kia Ora Aotearoa: Psychosocial and Mental Wellbeing Recovery Plan as at 15 May 2020 (2020)	Count: 39 Pages:42	0.93
Kia Manawanui Aotearoa: Long-term pathway to mental wellbeing (2021)	Count: 19 Pages: 76	0.25

Figure 1: Average number of mentions of 'Pacific' (and related terms) per page in mainstream public mental health policy, 1990–2022

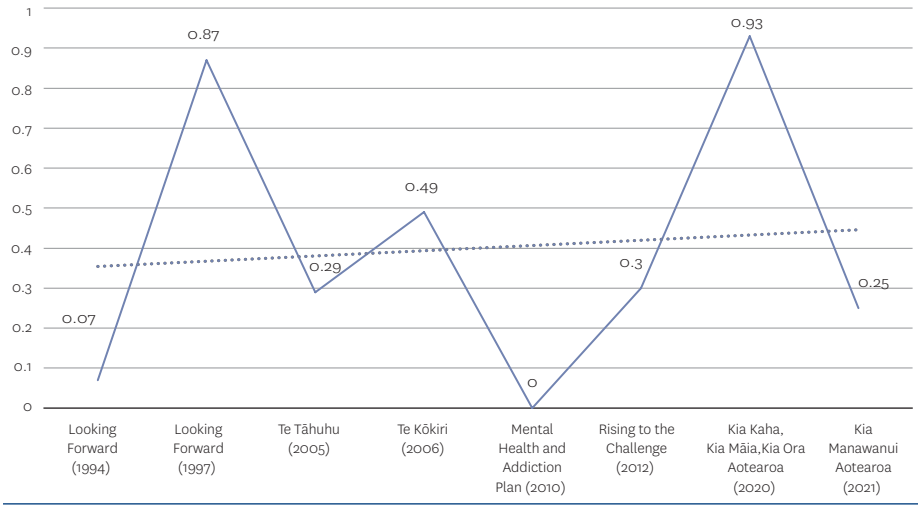


Figure 2: Average number of mentions of 'Pacific' (and related terms) per page in mainstream, public, National government-led mental health policy, 1990–2022

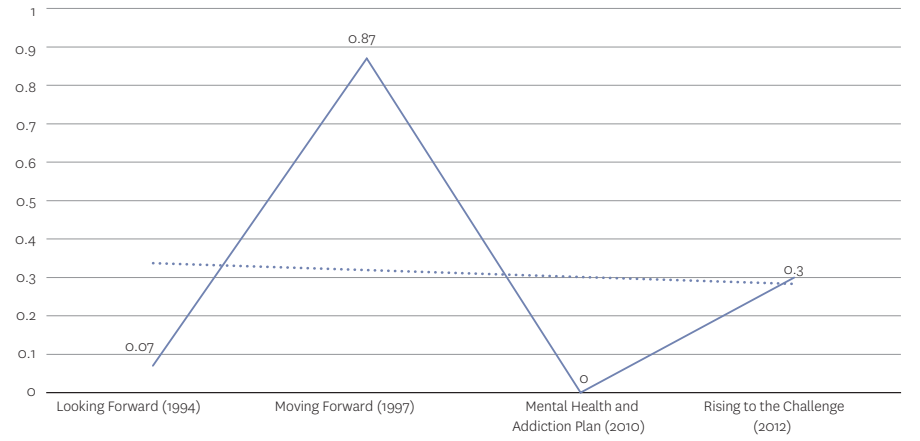


Figure 3: Average number of mentions of 'Pacific' (and related terms) per page in mainstream, public, Labour government-led mental health policy, 1990–2022

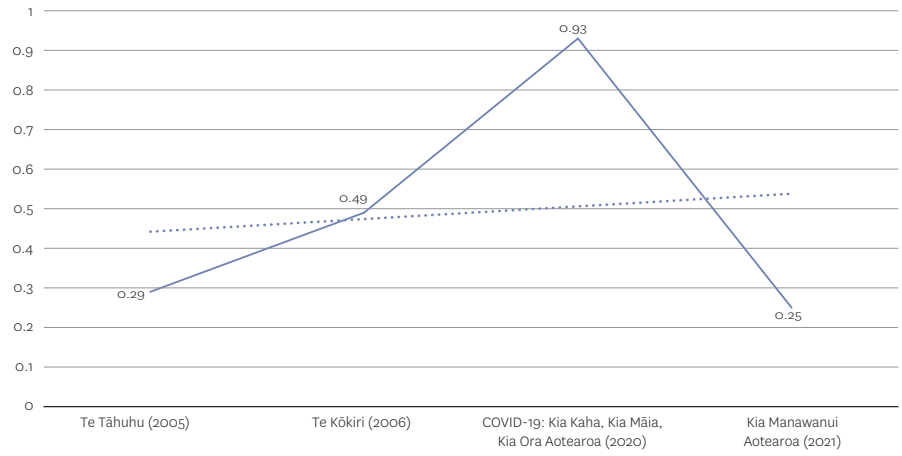
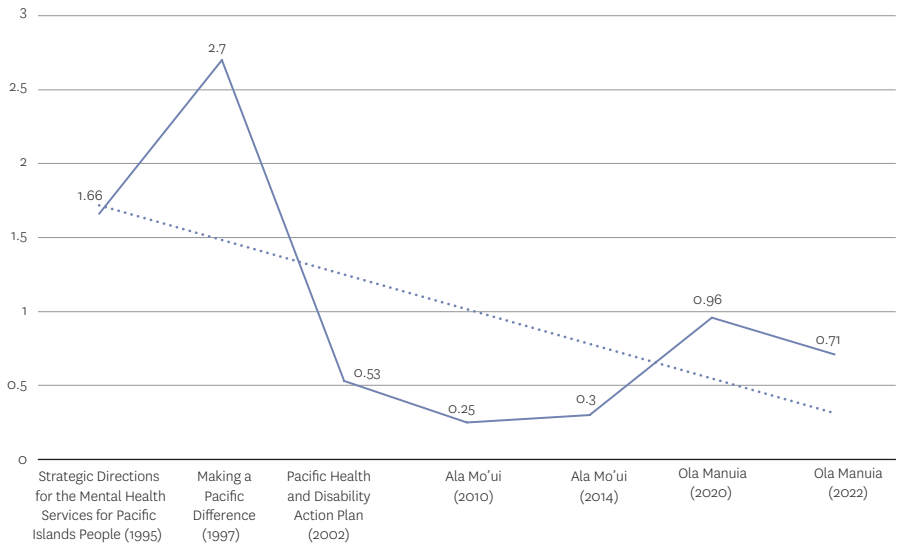


Table 2: Number of mentions of 'mental health' (and related terms) in public Pacific health policy, 1990–2022

Name of Document	#of Mentions of " mental health", "mental wellbeing", "mental well-being", "mental illness", and "mental distress"	Average# of Mentions of "mental health", "mental wellbeing", "mental well-being", "mental illness", and "mental distress"
Strategic Directions for the Mental Health Services for Pacific Islands People (1995)	Count: 93 Pages: 56	1.66
Making a Pacific Difference: Strategy Initiatives for the health of Pacific People in New Zealand (1997)	Count: 54 Pages:20	2.70
Pacific Health and Disability Action Plan (2002)	Count: 17 Pages: 32	0.53
Ala Mo'ui: Pathways to Pacific Health and Wellbeing 2010-2014 (2010)	Count: 8 Pages: 32	0.25
Ala Mo'ui: Pathways to Pacific Health and Wellbeing 2014-2018 (2014)	Count: 12 Pages: 40	0.30
Ola Manuia: Pacific Health and Wellbeing Action Plan 2020-2025 (2020)	Count: 46 Pages: 48	0.96
Ola Manuia Interim Pacific Health Plan July 2022-June 2024 (2022)	Count: 17 Pages:24	0.71

Figure 4: Average number of mentions of 'mental health' (and related terms) in public Pacific health policy, 1990–2022



Findings

Frequency

Mental health policy

Frequency analysis reveals a highly variable level of attention to Pacific peoples and their needs. This variability applies to both National- and Labour-led governments. Blue boxes reflect documents published under a National-led government, while pink boxes are those published under Labour.

This variability is not accompanied by a clear temporal trend. When analysed by leading party, a slight downward trajectory is observed in National government-led policies, while Labour government-led policies show a modest upward trend. This may be skewed by the increase in mentions of Pacific peoples in *Covid-19: Kia Kaha, Kia Māia, Kia Ora Aotearoa*, the Ministry of Health's Covid mental health recovery plan, reflecting the disproportionate impacts of Covid-19 on Pacific communities (Ministry of Health, 2020a; Royal Commission of Inquiry into Covid-19 Lessons Learned, 2024).

While the dataset is limited, and frequency analysis serves only as a proxy measure of attention, the analysis suggests that Pacific peoples have not received consistent or sustained attention in mainstream mental health policy over the past three decades.

Pacific health policy

Since 1997, a series of Pacific-specific health policies have been developed. While their existence may be interpreted as evidence of 'special treatment', this must be considered alongside the consistent development of health policies for other key population groups, including Māori, children, older adults and disabled people (Ministry of Health, 2023).

As with mainstream policy, frequency analysis of Pacific health policies shows a variable level of attention to mental health. Overall, attention to mental health in Pacific public health policy has declined over time. Analysis by leading party shows a sharp drop in average number of mentions in National government-led policies, reflecting the high baseline set by the two earliest documents. When these outliers are excluded, the downward trend flattens out. Labour government-led Pacific

health policy shows a moderate upward trend in attention to mental health; however, this is inconsistent.

Bearing the previously stated limitations in mind, this data underscores a lack of consistent attention to Pacific mental health.

Estimates of appropriations

Where policy statements articulate strategic intent, estimates of appropriations indicate whether – and to what extent – that intent is translated into funded action. Examining the two in tandem allows assessment not only of rhetorical prioritisation, but also of whether such prioritisation is substantively supported.

To avoid inflated counts, analysis of estimates of appropriations focused on mentions of Pacific peoples in Vote Health documents and on mentions of mental health in Vote Pacific Peoples documents. This approach reflects the expectation that each vote would naturally prioritise its respective domain.

No lines of appropriations related to mental health were identified in Vote Pacific Peoples documents. While Vote Health documents included some references to Pacific peoples, only one instance – in the 2019 budget – provided a direct line of sight to investment in Pacific mental health, via funding allocated to *Ola Manuia*, the government's Pacific health

Figure 5: Average number of mentions of 'mental health' (and related terms) in Pacific, National government-led public health policy, 1990–2022

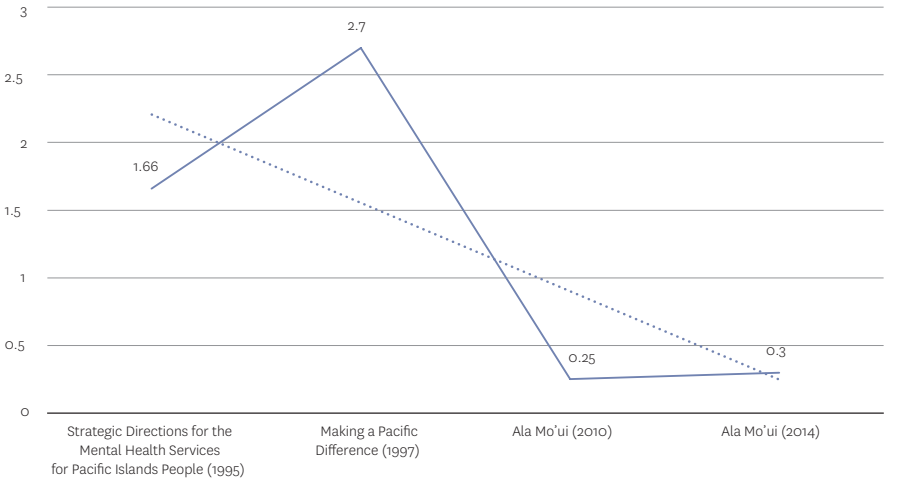


Figure 6: Average number of mentions of 'mental health' (and related terms) in Pacific, Labour government-led public health policy, 1990–2022

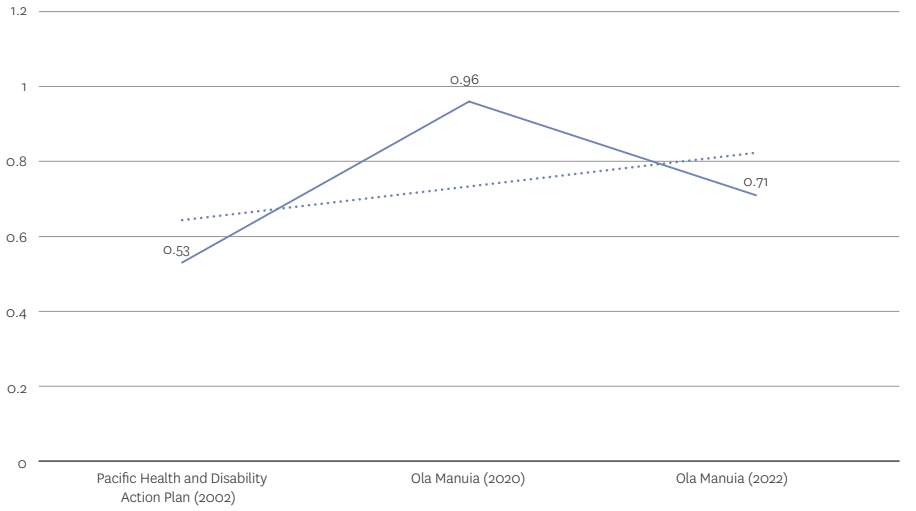
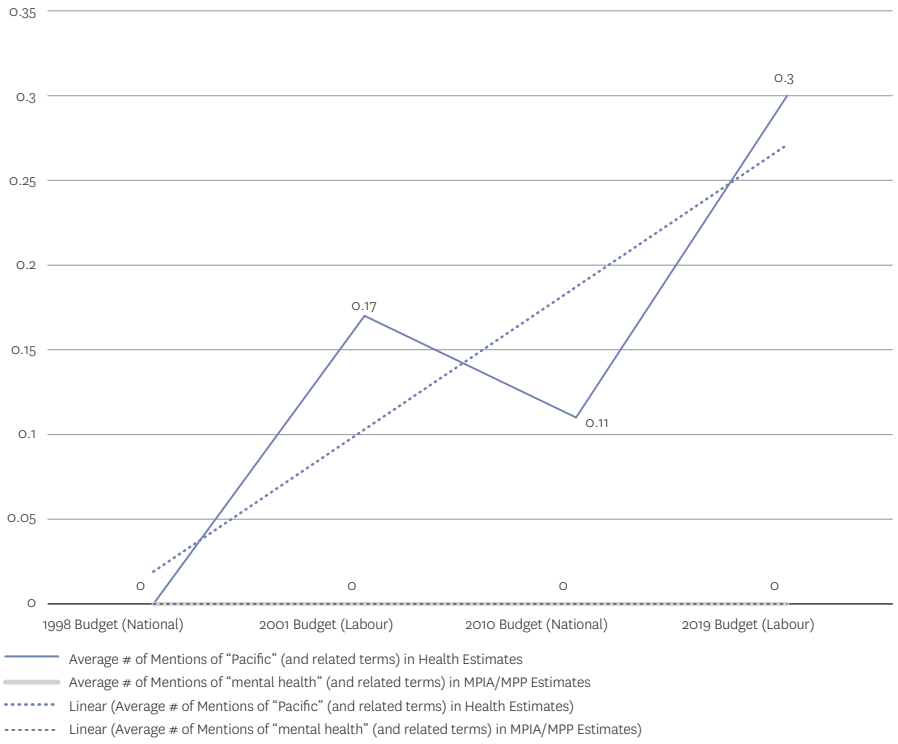


Table 3: Number of mentions of 'Pacific' and 'mental health' (and related terms) in second-year estimates of appropriations for Health and MPIA/MPP, 1990–2022

Government	# of Mentions of "Pacific", "Pasifika", "Pasefika", or "Pacifica"	Average # of Mentions of "Pacific", "Pasifika", "Pasefika", or "Pacifica"	# of Mentions of " mental health", "mental wellbeing", "mental well-being", "mental illness", and "mental distress"	Average # of Mentions of " mental health", "mental wellbeing", "mental well-being", "mental illness", and "mental distress"
National 1990-1993 National 1993-1996	Budget records not available online			
National 1996-1999 *1998 Budget*	Health Count: 0 Pages: 49	0.00	PIA/PP Count 0 Pages 22	0.00
Labour 1999-2002 *2001 Budget* Labour 2002-2005 Labour 2005-2008	Health Count: 11 Pages: 65	0.17	PIA/PP Count 0 Pages 15	0.00
National 2008-2011 *2010 Budget* National 2011-2014 National 2014-2017	Health Count: 1 Pages: 9	0.11	PIA/PP Count 0 Pages 4	0.00
Labour 2017-2020 *2019 Budget* Labour 2020-	Health Count: 36 Pages: 122	0.30	PIA/PP Count 0 Pages 18	0.00

Figure 7: Average number of mentions of 'Pacific' and 'mental health' (and related terms) in estimates of appropriations for Health and MPIA/MPP, 1990–2022



and wellbeing action plan, which includes mental health actions. Analysis by leading party was not undertaken for this dataset due to its limited size (Treasury, 2019b; Ministry of Health, 2020b).

Attention has increased in some budgets but remains inconsistent. Moreover, increased visibility has not translated into targeted investment in Pacific mental health, despite the evidenced need. This highlights a landscape where we are more likely to be seeing 'special mentions' than 'special treatment'.

Analysis of content and tone

Policy

During the mid–late 1990s both mental health and the specific health needs of Pacific peoples started to emerge as distinct areas of policy concern (in 1994 and 1997 respectively). This was evident in the establishment of public policy (as documented here), but also in the creation of Pacific-specific roles and portfolios within the Ministry of Health (Wakefield, 2018; Aumua, 2003). Despite this coincidence of focus, mainstream mental health policy has historically positioned Pacific peoples as peripheral. New Zealand's inaugural public mental health strategy (Ministry of Health, 1994) acknowledged deficiencies in mental health services and prioritised Māori, youth and those with severe psychiatric disabilities. Pacific peoples were grouped under 'other priority groups' alongside refugees and older adults, with no specific actions or research directives.

Strategic Directions for the Mental Health Services for Pacific Islands People (Crawley et al., 1995) was released the following year and presented findings from extensive community consultation. It articulated culturally grounded recommendations, including the establishment of a Pacific mental health council, culturally safe services and family support mechanisms. However, only a subset of these recommendations – those most compatible with existing institutional structures – were adopted in the next mainstream public mental health policy (Ministry of Health, 1997b). This selective uptake reflects a broader pattern of acknowledging Pacific perspectives but subordinating them to dominant policy logics.

Subsequent mainstream policies continued these trends. Pacific peoples, while referenced in most documents, have never been afforded a dedicated section in mainstream public mental health policy. Targeted points for Pacific peoples have not been consistently integrated across service domains, and Pacific inclusion has either been minimal or framed in ways that – as per their inclusion in the 1994 strategy – conflated Pacific needs with those of other minority groups, obscuring the distinct cultural and service needs of Pacific communities and Pacific diversity. This absence of direct inclusion is accompanied by limited evidence of consultation or engagement, and limited (if any) citation of Pacific-authored research (which might have served as an indicator of engagement). Even when Pacific priorities, approaches or values have been acknowledged, they have usually been positioned as potential sources of difficulty rather than as complementary frameworks or sources of insight. This contributes to an overall tone of cautious accommodation rather than genuine partnership, respect or care.

Rising to the Challenge: the mental health and addiction service development plan 2012–2017 (Ministry of Health, 2012) was the final mainstream public mental health policy released prior to the 2018 Pacific mental health inquiry (Ataera-Minster & Trowland, 2018) and then the onset of Covid-19. It exemplifies the discursive exclusion of Pacific mental health. Pacific peoples are grouped with refugees and disabled populations and there are no specific actions directed towards Pacific people's mental health needs, making it the least engaged mainstream mental health policy in terms of Pacific inclusion since 1994 and indicating no meaningful shift in 30 years. Wider features of the document, such as the policy's emphasis on efficiency – through key performance indicators, brief interventions and e-therapies – stand in contrast to the research available at the time about culturally appropriate care, wherein time, relationship and cultural congruence need to be prioritised.

The post-mental health inquiry and pandemic period saw the release of two mainstream mental health policies: *Kia Kaha, Kia Māia, Kia Ora Aotearoa* (Ministry of Health, 2020a) in 2020 and *Kia Manawanui Aotearoa* (Ministry of Health, 2021b) in 2021. The former was developed in direct response to the Covid-19 pandemic and adopted a broad equity lens that acknowledged the disproportionate risks

faced by Pacific communities. However, despite repeated references to Pacific peoples and a stated commitment to holistic wellbeing, the document did not include any actions specific to Pacific mental health. In contrast, *Kia Manawanui Aotearoa* marked a notable shift in both tone and intent. Drawing on the concept of 'pae ora' (healthy futures) and *Whakamaua*, the 2020 Māori health action plan (Ministry of Health, 2020c), it offered the most detailed articulation of Pacific health beliefs in any mainstream mental health policy to date. Pacific wellbeing was described as encompassing mental, physical, spiritual, family, environmental, cultural and ancestral dimensions, with values such as respect, reciprocity and collectivism explicitly acknowledged. While the policy remained aspirational and lacked clear implementation pathways, it did signal a more inclusive and culturally resonant discourse around mental health.

Public Pacific health policies – as opposed to public mainstream mental health policies – have offered more direct engagement, though not without limitations. *Making a Pacific Difference* (Ministry of Health, 1997a) both incorporated community consultation and acknowledged Pacific health beliefs, but privileged Western medicine over Pacific world views. Mental health was addressed briefly, with a focus on promotion, and recommendations from earlier consultations (e.g., Crawley et al., 1995) were largely omitted.

Despite increased attention to both Pacific peoples and mental health in other policy and policy-adjacent documents of this era, the focus on mental health in the *Pacific Health and Disability Action Plan* (King, 2002) was dampened by systemic and structural change. While the document acknowledged a range of health issues, mental health was not explicitly identified as a priority for Pacific peoples, and only two action points under the six priorities addressed it. This likely reflects that the 2001 health system reforms positioned Pacific health under the Clinical Services Directorate, while mental health was its own directorate, largely disconnected from Pacific health (Ministry of Health, 2005a; New Zealand Parliament, 2009). The document provided minimal engagement with Pacific cultural perspectives, incorporated no Pacific scholarship, and missed an opportunity to align with the Pacific-inclusive strengths of the Blueprint reports (Mental Health Commission, 1998, 2001) which had immediately preceded it (despite the recent, community-informed evidence in which these were grounded). Again, this likely reflects overarching government perspectives and values, rather than a lack of advocacy or insight from Pacific communities and policy actors.

The 2020–25 plan represented a high point in Pacific-led policy development, with clear evidence of community consultation, explicit prioritisation of Pacific mental health, and a dedicated section outlining culturally grounded actions.

Later policies, including the two *'Ala Mo'ui* documents (Ministry of Health & Ministry of Pacific Island Affairs, 2010; Ministry of Health, 2014), introduced more nuanced engagement with Pacific values, such as holism and the centrality of family. However, mental health remained a relatively peripheral concern, often addressed only in relation to broader mainstream strategies. The increasing emphasis on expert-led consultation also reduced visibility of community-driven priorities. The latter document focused more on equity but largely lacked specific actions for Pacific mental health; the only action provided is that 'DHBs will implement the Pacific specific actions in the Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017' (Ministry of Health, 2014, p. 14). As mentioned earlier in this section, no Pacific-specific actions are included in *Rising to the Challenge*.

The two Pacific health strategies that appeared latest in the review period – *Ola Manuia: Pacific health and wellbeing action plan 2020–2025* (Ministry of Health, 2020b) and its 2022 interim successor (Te Whatu Ora | Health New Zealand, 2022) – offered contrasting approaches to mental health. The 2020–25 plan represented a high point in Pacific-led policy development, with clear evidence of community consultation, explicit prioritisation of Pacific mental health, and a dedicated section outlining culturally grounded actions. It embedded mental health within a holistic, family-centred model of wellbeing, and acknowledged the importance of cultural values. The 2022 interim plan, however, marked a regression. While mental health remained listed as a priority, the scope of action narrowed significantly, with a focus limited to maternal mental health and research into Pacific models of care. Notably, issues such as youth mental health and access to services – highlighted in the plan's own statistical appendices and clearly identified as priorities for Pacific peoples in mental health research – were not addressed as action points. This shift, occurring in the context of health system restructuring, highlights the fragility of progress and risk of deprioritisation in times of institutional change.

Estimates of appropriations

The estimates of appropriations provide a detailed view of funding decisions, yet Pacific mental health remains largely invisible. The only identifiable reference to Pacific mental health investment appears in the second-year budgets in the 2019 Vote Health estimates (Treasury, 2019b), where funding for *Ola Manuia* – which includes mental health actions – is noted. Even here, the connection is indirect, and no specific

appropriation is identified. This is the only instance across the review period where a budget line provides a clear line of sight to Pacific mental health investment. Vote Pacific Peoples documents contain no references to mental health, highlighting that attention to this domain is not being provided through ethnic-specific channels either. Despite rhetorical progress, targeted investment remains lacking.

Discussion

This article set out to examine whether Pacific peoples, as a representative ethnic minority, have received 'special treatment' in public mental health policy – as a representative domain – over a period of 30 years.

The introduction and background highlighted the persistent and well-documented mental health inequities experienced by Pacific communities in Aotearoa New Zealand, including higher prevalence of mental disorders, lower access to services, and limited awareness of support options. There is clear evidence of need among this population to justify an ethnically targeted approach – or 'special treatment'. However, the findings show that, even when such evidence is present for an ethnic minority, such approaches are not.

Policy documents signal what governments claim to value, but estimates of appropriations reveal what governments ultimately choose to resource. In this sense, funding decisions act as a critical test of whether stated commitments – including to equity – are rhetorical or operational. As such, the findings challenge the notion of 'special treatment'. Across mainstream mental health policy, Pacific peoples have been inconsistently referenced, rarely prioritised, and almost never afforded dedicated actions. Even in Pacific-specific health policies, mental health has often been marginalised or addressed only in general terms. The absence of sustained, targeted investment – particularly in budget appropriations – further undermines claims of preferential treatment. Instead, the data points to symbolic inclusion without substantive prioritisation.

Government leadership does appear to influence the tone and frequency of Pacific references, with Labour-led governments generally offering more inclusive language and higher mention counts. However, this increased visibility has not reliably translated into action or funding that is clearly tagged for Pacific mental health. This pattern of vacillation – where attention fluctuates across administrations, and even within policy cycles – creates a fragile policy environment. Gains made under one government are not guaranteed to persist under the next, and promising initiatives may be diluted or abandoned during transitions or restructuring.

The notion of 'special treatment' is not supported by any of the data explored, and furthermore, where equity-focused rhetoric is present it has not been matched by resourcing.

This fragility is particularly evident in the contrast between *Ola Manuia*, the 2020–25 action plan, and its 2022 interim successor. The former demonstrated strong community engagement and a clear commitment to Pacific mental health, while the latter narrowed its scope significantly, omitting key areas such as youth mental health and access to services. Such shifts reflect the vulnerability of ethnic-specific priorities in times of institutional change, and the ongoing risk of Pacific mental health – a well-evidenced area of need – being deprioritised despite evidence of need.

It is important to acknowledge the limitations of this study. It focuses on one ethnic group within one policy domain, and while the findings are robust within this scope, they cannot be generalised across all ethnic minorities or policy areas. Further research is needed to explore whether similar patterns exist for other groups – such as Māori, disabled people or rural communities – whereby rhetorical gestures may indicate emphasis and attention, but resourcing does not. Additionally, while frequency analysis offers a useful proxy for attention, it cannot fully capture the depth or quality of engagement. The study's strength lies in its mixed-methods approach, combining quantitative trends with qualitative analysis of tone, content and context. This enables a more nuanced understanding of how Pacific mental health has been positioned, and how policy discourse has evolved over time.

Ultimately, the study highlights a very real and evidenced disconnect between need, rhetorical response and resource allocation. Despite persistent evidence of disproportionate mental health challenges among Pacific peoples, public policy has not consistently or adequately addressed these. The notion of 'special treatment' is not supported by any of the data explored, and furthermore, where equity-focused rhetoric is present it has not been matched by resourcing. Instead, Pacific mental health has been subject to passive inclusion, selective uptake and systemic avoidance. This raises critical questions about how equity is understood and operationalised in Aotearoa's public policy landscape, how the public perceives this, and how such perceptions can be weaponised in political discourse: when policy agendas are selectively framed, as in the case of discussion relating to 'special treatment', they risk fostering public narratives that may be categorised as disinformation – or even malinformation – particularly when they distort evidence to justify continued inaction or the reallocation of resources away from need.

In this context, what is the duty of care owed by members of Parliament and other policy actors? Where is the duty of care in ensuring that such communications do not cause harm, mislead the public, or perpetuate inequity? The analysis presented in this article underscores the importance

of accountability measures that ensure policy discourse remains aligned with evidence and responsive to the communities most affected. Ensuring that public communications accurately represent need is essential for maintaining trust and supporting evidence-informed investment. Accountability in policy discourse must include the integrity and accuracy of political communication.

Conclusion

In sum, this 30-year case study finds no evidence to support claims that Pacific peoples have received 'special treatment' in public mental health policy. Where attention has been given, it has often been rhetorical rather than substantive and rarely accompanied by targeted investment. What emerges instead is a landscape of 'special mentions', where Pacific peoples are acknowledged but not prioritised, and where equity remains more aspirational than operational. Addressing this gap requires not only better policy design, but a sustained commitment to accountability, and to being genuinely and comprehensively evidence-informed.

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Ryan Greenaway-McGrevy
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Regional Variation in Rental Price Inflation

Abstract

We constructed estimates of rental price inflation for the 53 urban areas of New Zealand over the past 25 years. Our estimates suggest that rental price inflation in many urban areas has been substantial over the past decade. These findings underscore the need for financial resources to be targeted at improving official statistical measures of housing prices at a more geographically refined resolution so that changes in the costs of living for a broader range of New Zealanders can be effectively communicated to the public, policymakers and researchers.

Keywords rents, housing costs, hedonic price index, regional price variation, quality-adjusted prices, double imputation

Housing costs in New Zealand are among the highest in the developed world. Tenants, in particular, spend a disproportionate amount of their income on housing: about one-quarter of tenanted households spend more than 40% of their disposable income on rent, the second-highest rate in the OECD. Moreover, rental costs disproportionately affect low-income households that are by definition the least well equipped to accommodate high living costs. More than half of tenants in the bottom fifth of the income distribution spend more than 40% of their disposable income on rent (OECD, 2024).

In addition, the proportion of New Zealand households that are tenants has been increasing over the past three decades. Home ownership has declined from 73.8% in 1991 to 66% in 2023 (Statistics New Zealand, 2020, 2024). Among middle-aged adults the declines are larger. The proportion of people aged 30–34 who lived in an owner-occupied home decreased from 59.1% to 51.1% over this period, while the proportion of those aged 35–40 declined from 68.1% to 59.2%.[1]

Rental costs, therefore, matter for a large and growing proportion of New Zealanders. Rental prices are consequently a primary indicator of the welfare of tenants. Statistics New Zealand calculates rental price indexes for the country as a whole and five broad regions (Auckland, Wellington, the rest of the North Island, Canterbury, and the rest of the South Island). However, one drawback of this high-level geographic aggregation is that any heterogeneity in rental prices within the broad regions is obfuscated. There is a

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need for measures of rental price changes at a finer geographic resolution in order to understand whether rental price increases at the broad regional level are informative of rental price increases among the various urban centres that constitute the regions.

This article responds to this need by producing measures of rental price inflation for the functional urban areas (defined below) of New Zealand. The resultant price indexes reveal significant rental price appreciation in many urban areas. Nominal rents in Rotorua, Gisborne, Napier, Whanganui and Invercargill more than doubled over the decade to 2024. Rents in Whangārei, Tauranga, Hastings and Kāpiti Coast increased by between 80% and 100%. Tokoroa experienced a substantial, 190% increase in its price index. Meanwhile, rents in metropolitan areas such as Auckland, Wellington and Christchurch have increased by between 30% and 60% over the same period. These metropolitan areas are notable for having implemented land use reforms to encourage housing supply over this time frame (Greenaway-McGrevy, 2024, 2026; Maltman & Greenaway-McGrevy, 2025)

> … rents in metropolitan areas such as Auckland, Wellington and Christchurch have increased by between 30% and 60% over the [decade to 2024.]

Our measure of rental price inflation is based on the Ministry of Business, Innovation and Employment dataset of rental bonds for new tenancies, which also forms the basis for Statistics New Zealand's rental price indexes. From this microdata we produce double-hedonic imputation price indexes for each of the 53 functional urban areas over the period 2000 to 2024. The hedonic imputation index (HII) is a constant-quality measure of price inflation. Measures of rental price inflation based on median or arithmetic average rents exhibit similar (albeit larger) increases to the hedonic rental price index, suggesting that the construction of the HII is not the driver of the regional heterogeneity.

We then estimate some exploratory reduced-form regressions that correlate variation in nominal rental price growth with a variety of explanatory variables, including population growth, dwelling growth, short-term rental stock, and indicators of changes in rental quality. Coefficients are generally insignificant in the multivariate regression, except for coefficients on changes to the dwelling stock, which are negative and statistically significant under robust regression methods that adjust for outliers. Although this pattern is consistent with the interpretation that urban areas with more responsive housing supply tend to experience lower rental price growth, it should be viewed as a conditional association rather than causal evidence, given that the explanatory variables are endogenous and jointly determined with the outcome. In the absence of stronger identification, these estimates are best interpreted as suggestive.

The following section describes the dataset and method for constructing hedonic rental price indexes. We then compare the rental price indexes of different urban areas, before providing our explanatory regressions explaining variation between urban rental prices. We conclude by arguing that additional resourcing be directed to measuring rental price changes at a higher geographic resolution than currently produced.

Measuring regional rental price inflation

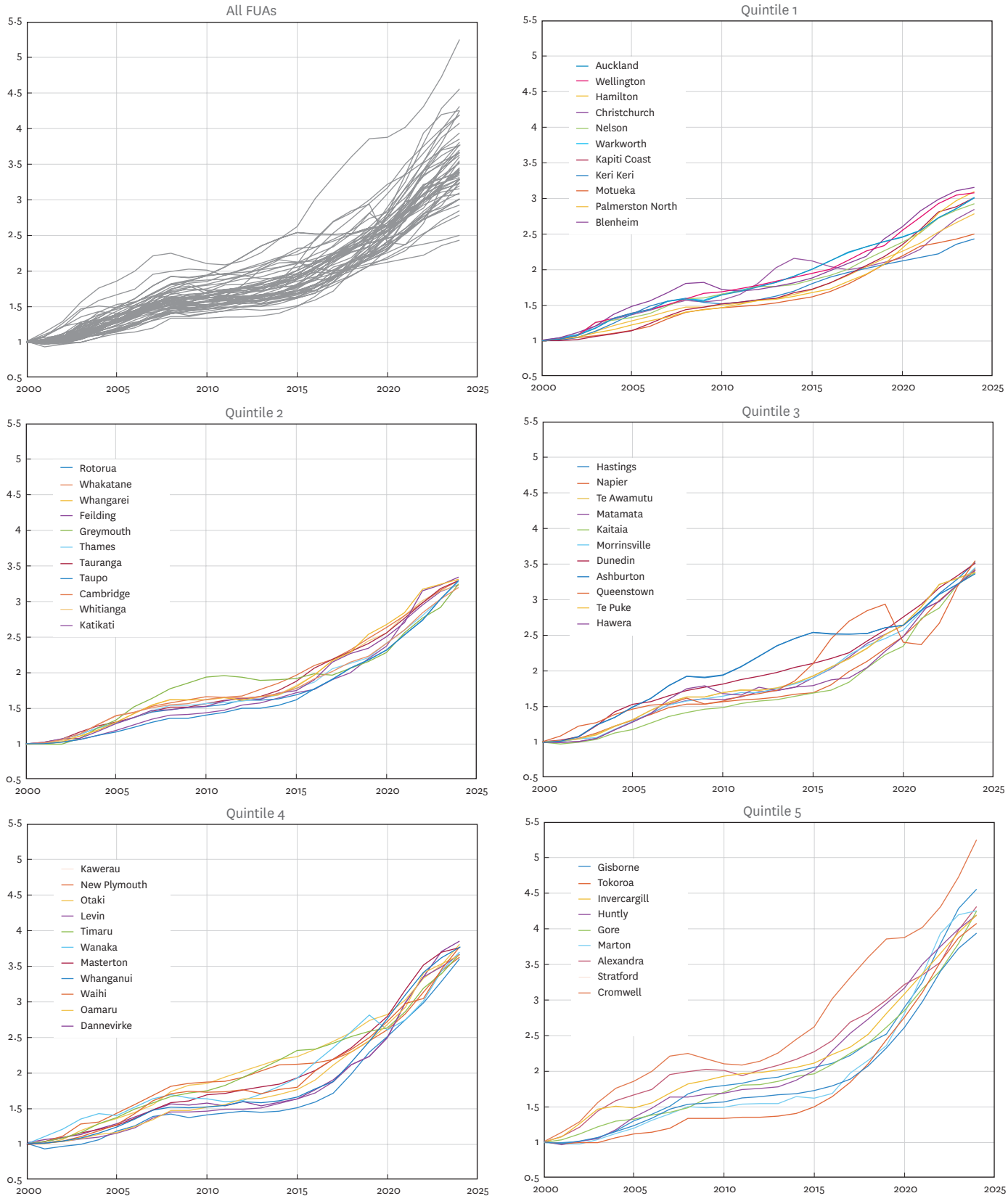
The dataset of new rental bonds administered by the Ministry of Business, Innovation and Employment provides the basis for our measures of rents. The dataset reports the weekly rent on new tenancies.

We use functional urban areas (FUAs) as the geographic unit in our analysis. FUAs are delineated by Statistics New Zealand based on commuting patterns from census data. They are analogous to commuting zones. Each FUA therefore corresponds to a spatial labour market: a worker residing in a given FUA is within a daily commuting distance of every employment location within that FUA. Neighbourhood housing markets are therefore likely to be highly integrated with the FUA. Conversely, regional administrative units such as territorial authorities often contain several different spatial labour markets, which are consequently likely to be subject to different economic shocks. Rents in the ministry's dataset are reported at a geographic resolution that is sufficiently granular (meshblocks) to allow the rental bond data to be assigned to functional urban areas. The dataset also includes information on the number of bedrooms, property type (house, apartment or flat), and whether the dwelling is private or state-owned. The individual bond data can be accessed in a Statistics New Zealand datalab.

Average rents (including medians and arithmetic or geometric means) can easily be constructed for each FUA. While straightforward and transparent, averages are known to provide poor measures of price inflation due to compositional shifts in the cross section of rental properties over each time period. Changes in average rental prices might therefore reflect changes in the characteristics of the rental properties in the sampled cross section in addition to average changes in rental prices of the housing stock over time.

We therefore construct price indexes that measure rental price changes on a quality-adjusted basis. Statistics New Zealand produces monthly rental price indexes using a time dummy hedonic model that is fitted to individual rental bond data over an eight-year sample window (Bentley, 2022). Because the model includes individual dwelling fixed effects, rental price changes are inferred from repeated tenancies within the sample window.[2] The method is consequently data-hungry: dwellings with a single tenancy in an eight-year period do not contribute to estimated inflationary

Figure 1: Double imputation hedonic rental price indexes by functional urban area, 2000–24



Source: authors' calculations using MBIE tenancy bond data
Quintiles based on index appreciation between 2000 and 2024. Fifth quintile is highest appreciation.

effects. This limits the method's applicability at more granular geographic resolutions. As previously observed, Statistics New Zealand reports rental price indexes at the broad regional level: Auckland, Wellington, the rest of the North Island, Canterbury, and the rest of the South Island. The low geographic resolution masks much of the heterogeneity in rental price trends that we document here.[3]

As explained, we use the double-imputation hedonic price index (or HII) to track quality-adjusted changes in rents. This method is often used to measure house price inflation and is preferred by

Table 1: Percentage changes in rental price measures by functional urban area, 2000– 2024

FUA	Hedonic imputation index	Median price	Mean price
Auckland	143.1	172.0	169.4
Hamilton	178.8	213.5	208.9
Tauranga	228.7	252.6	252.8
Wellington	149.9	182.6	176.8
Christchurch	184.8	211.1	214.2
Dunedin	251.6	268.8	267.7
Whangārei	223.1	262.5	253.4
Rotorua	215.8	245.5	242.8
Gisborne	294.3	320.0	312.4
Hastings	237.2	275.0	273.3
Napier	238.2	265.7	265.2
New Plymouth	263.1	296.7	288.6
Whanganui	276.8	292.0	286.6
Palmerston North	209.2	222.9	218.7
Kāpiti Coast	200.9	217.5	213.1
Nelson	192.3	222.2	217.1
Invercargill	319.2	331.8	328.9
Cambridge	230.4	271.4	269.4
Te Awamutu	239.1	268.8	259.7
Tokoroa	308.2	316.7	313.2
Taupō	229.8	242.9	248.3
Whakatāne	220.1	268.8	251.2
Feilding	224.0	267.7	258.9
Levin	267.3	278.6	285.4
Masterton	276.5	307.7	296.0
Blenheim	214.6	254.8	254.0
Greymouth	225.3	213.7	238.8
Ashburton	253.7	269.2	275.3
Timaru	267.6	260.0	274.7
Oamaru	281.8	273.9	264.7
Queenstown	255.2	300.0	319.2
Kaitaia	244.3	253.3	265.3
Kerikeri	207.4	230.6	246.0
Warkworth	200.0	220.0	218.9
Whitianga	231.4	273.3	254.9
Thames	227.3	250.0	238.5
Waihi	277.6	292.9	287.0
Huntly	319.8	303.8	326.8
Morrinsville	245.3	266.7	267.0
Matamata	241.4	280.0	263.1
Katikati	234.2	263.6	262.6
Te Puke	257.1	282.4	274.1
Kawerau	261.4	269.2	279.4
Stratford	356.0	358.3	366.8
Hawera	257.9	292.6	292.1
Marton	325.6	316.7	332.3
Dannevirke	285.5	291.3	304.4
Ōtaki	264.9	260.0	263.0
Motueka	207.8	212.5	224.1
Cromwell	425.2	450.0	436.8
Alexandra	331.8	345.8	358.3
Wanaka	270.7	344.4	293.1
Gore	325.5	350.0	340.6

statistical agencies such as Eurostat (Eurostat, 2013). The approach fits a predictive model of prices to the cross section of prices for each time period using the characteristics of the property as predictors. The fitted model can then be used to predict (or impute) unobserved prices in the period prior to observed prices, thereby generating repeated price observations on transacted prices. Under the double-imputation method, predicted prices also replace observed prices in the period of sale in order to reduce bias in the index. We provide more details on the method in the Appendix.

One drawback of the rental bond data is that there are few characteristics to condition on. We use the available observable attributes of the tenancies: the number of bedrooms, dummies for the housing type, and dummies for neighbourhood. We believe this approach yields the best method subject to the limitations of the dataset and the geographic resolution of our analysis. We use the statistical area two (SA2) unit of the dwelling as its neighborhood. Following Statistics New Zealand, we use only privately owned dwellings to compute rental price indexes.

Time period

The Ministry of Business, Innovation and Employment rental bond data is available from 2000 onwards. At the time of writing, the last available full year was 2024. Our price indexes therefore span 2000–24. However, much of our analysis will focus on the past decade (2015–24). This is for two reasons. First, it is the period where heterogeneity in rental price inflation becomes most apparent. Second, this period is mostly after Auckland and Lower Hutt enacted widespread zoning changes to enable increased housing supply, offering some variation in dwelling stock growth between different FUAs which aids identification of factors contributing to the significant regional rental price divergence that we document below. Lower Hutt constitutes parts of the Wellington FUA.

Regional trends in rental prices

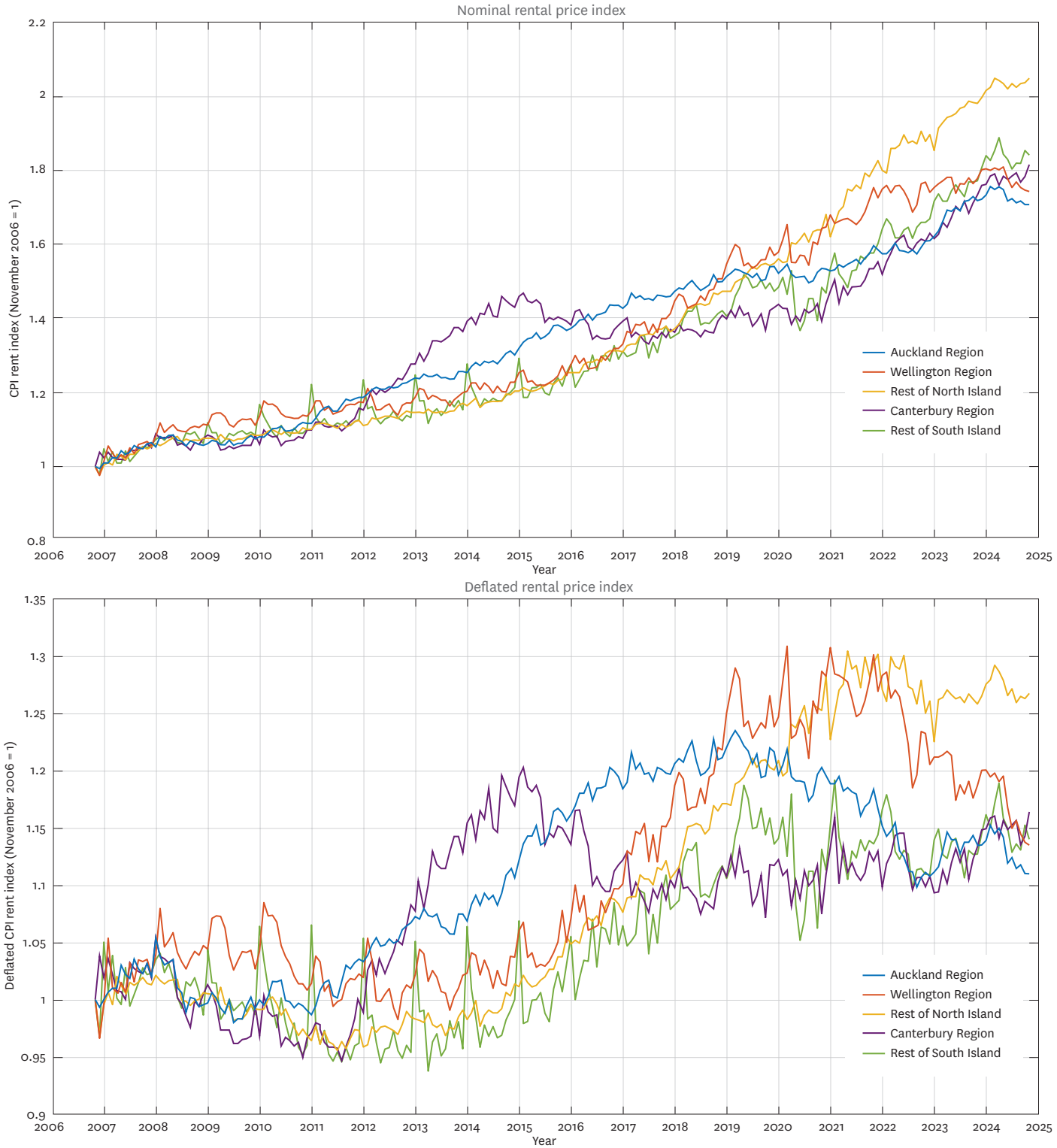
In this section we present the constructed price indexes over the period 2000–24. Figure 1 exhibits the indexes. To illustrate regional heterogeneity, we depict indexes

by quintiles based on appreciation between 2000 and 2024. Several interesting patterns emerge.

First, there is significant heterogeneity in rental price appreciation rates over the period. At the lower end of the distribution, nominal rents in Auckland increased by 143% over the 25-year period. At the higher end, nominal rates increased by 425% in Cromwell. Table 1 provides percentage changes in the indexes between 2000 and 2024.

Heterogeneity is present within the urban areas that constitute Statistics New Zealand broad regions, suggesting that these low-resolution geographic units can obfuscate substantial divergence in housing costs over time. For example, Gisborne and Tokoroa appear in the fifth quintile (appreciating by 294% and 308%), while Hamilton and Palmerston North appear in the first quintile (appreciating by 179% and 209%). However, all four urban areas are part of the 'rest of the North Island' region. The rental index for the broad region is unlikely to reflect changes in rental prices for any of these cities.

Figure 2: Statistics New Zealand rental price indexes by broad region, November 2006–November 2024



Source: Statistics New Zealand
Notes: Data begin in November 2006. Statistics New Zealand rent CPI is the flow-based measure. Regional CPI used to deflate rental price indexes.

Table 2: Percentage changes in Statistics New Zealand rental flow CPIs

Area	Stats NZ rent CPI % change		HII % change	
	Nov 2006– Nov 2024	Nov 2014–Nov 2024	2006–24	2014–24
Auckland region	70.6	29.9	-	-
Wellington region	74.1	41.6	-	-
Canterbury region	81.7	26.4	-	-
Auckland FUA	-	-	93.1	43.4
Wellington FUA	-	-	107.7	58.6
Christchurch FUA	-	-	100	32.1

Notes: Statistics New Zealand rent CPI is the flow-based measure; NII denotes hedonic imputation index.

Second, four of the six FUAs classified as 'metropolitan' by Statistics New Zealand (Auckland, Wellington, Hamilton and Christchurch) are in the bottom quintile. Cities within these urban areas implemented land use reforms to encourage housing supply. Auckland upzoned three-quarters of residential land under the Auckland Unitary Plan in 2016 (Greenaway-McGrevy & Jones, 2025), while Lower Hutt implemented a sequence of planning changes to encourage medium- and high-density housing from 2017 (Maltman & Greenaway-McGrevy, 2025). Christchurch City, Selwyn and Waimakiriri also made land use changes to encourage home-building after the 2010–11 Canterbury earthquakes. Tauranga and Dunedin, the two remaining metropolitan FUAs, appear in the second and third quintiles respectively.

Third, some of the urban areas exhibit substantial idiosyncratic variation. Christchurch rents exhibit substantial idiosyncratic variation from approximately 2011 onwards that is almost certainly due to the Canterbury earthquakes, which damaged 100,000 homes (approximately half the housing stock) and rendered approximately 7,000 dwellings uninhabitable (Paton & McClure, 2013). Subsequent land use reforms under the Land Use Recovery Plan 2013 enabled replacement through construction in geographic locations more resilient to earthquake risk. This idiosyncratic variation dominates the Canterbury region due to the size of Christchurch, making the price indexes unsuitable for smaller Canterbury towns. The effect of the Covid-19 pandemic is noticeable in Queenstown, with rents there rapidly declining between 2019 and 2022, before recovering: this pattern is almost certainly driven by Covid-19 and the closure of the border during the pandemic. The region is highly dependent on tourism and foreign workers.[4] The 'rest of the South Island' is unlikely to reflect this variation as Queenstown constitutes only a small proportion of the broad region.

For comparative purposes, Figure 2 presents Statistics New Zealand flow rental price indexes for the broad regions. Table 2 compares the percentage increase in the Statistics New Zealand indexes over the period available (2006–24) for Auckland, Wellington and Canterbury with that of the HIIs for the Auckland, Wellington and Christchurch FUAs. The HIIs generally exhibit a higher average rate of inflation. This is consistent with rents in urban areas growing faster than those in rural areas, as the broad regions encompass both urban and rural locations.

Potential causes of regional divergence in rental price inflation

In this section we discuss plausible mechanisms generating the divergence in house price appreciation since 2016.

Inelastic housing supply

Over the first two decades of the 21st century, New Zealand experienced a rapid increase in population without a commensurate increase in housing. Between the 2001 and 2018 censuses, the country's usually resident adult-aged population (persons aged 20 and over) increased by 32.4%, while the dwelling stock increased by only 24.5% – a shortfall of approximately 8 percentage points.[5] The undersupply of housing was most acute in the metropolitan centres. In Auckland, the nation's largest city, the adult-aged population increased by 42.2% compared with a 28.8% increase in dwellings, representing a shortfall of almost 14 percentage points. The ratio of adults to dwellings increased from 1.91 to 2.11, implying that one out of every five occupied dwellings had an additional adult living in it, on average.

As already noted, within the past decade, Auckland and Lower Hutt have enacted widespread zoning reforms to enable housing supply to respond to the increase in demand. In 2016, the Auckland Unitary Plan was made operative, which upzoned approximately three-quarters of residential land (Greenaway-McGrevy & Jones, 2025). Beginning in 2017, Lower Hutt enacted a series of zoning reforms to abolish parking minimums and enable medium- and high-density housing that culminated in nearly all residential-zoned land being upzoned. Both cities subsequently experienced a construction boom that has been attributed to these reforms (Greenaway-McGrevy, 2026; Maltman & Greenaway-McGrevy, 2025).

Notably, Auckland experiences lower rental inflation than other cities from 2016 until 2024, which has been attributed in part to its supply-side reform (Greenaway-McGrevy & So, 2024). Similarly, Wellington experiences lower inflation from 2018 onwards, which can be partially attributed to the Lower Hutt upzoning (Maltman & Greenaway-McGrevy, 2025). Thus, supply reforms can explain some of the regional variation in rental price changes over the past decade.

Housing supply elasticity also helps us understand how demand-side policies affect housing outcomes. Policies that stimulate demand are more likely to generate increases in rental prices when supply is inelastic. For example, Grimes and Aitken (2010) show that demand shocks have a larger impact on house prices in supply-constrained regions.

Rental housing policies

The sixth Labour government (2017–23) implemented several legislative changes that may have had an impact on rents over the past decade. Beginning in 2018, it introduced a series of bills to protect and enhance renters' rights, including the prohibition of letting fees and bidding for tenancies; limit tenant liabilities; restrict rent price increases (to every 12 months); and restrict cause to terminate tenancies.[6]

Legislation to enhance minimum health and safety standards was passed in July 2019.[7] Tax treatment of property investment also changed. From 1 April 2019, landlords could no longer offset property investment losses against other

sources of income when calculating their income tax liability (known as 'ring-fencing'), and their ability to claim mortgage interest as an expense on the rental property was phased out from October 2021, although this was subsequently reversed under the current National-led government. The Labour government also increased the accommodation supplement for low-income households in 2018, which may have increased rents, given the general inelasticity of housing supply in many urban areas. Hyslop and Rea (2019) show that increases in the accommodation supplement in central Auckland were partially passed through into higher rents.

Notably, these changes affected rental housing across the whole country. However, the policies may have generated the observed regional heterogeneity if they had a disproportionate impact on urban areas.

Airbnb

It is possible that the advent of Airbnb led to long-term rental housing stock being converted to short-term holiday accommodation. This reduction in rental housing supply would generate price increases in locations where housing supply could not expand to meet demand for rental accommodation. Note, however, that online holiday rental accommodation predates Airbnb. Bookabach started in 2000 and Bachcare was founded in 2003. Both Queenstown and Wānaka have a very high proportion of their housing stock in Airbnb listings.

Reduced-form regression

We estimated cross-sectional regressions of rental price growth between 2018 and 2023 on a variety of explanatory variables related to the potential causes listed below (Table 3). We choose these two years because they coincide with census years, the census being the source of most of our explanatory variables. Our explanatory variables are:[8]

- population growth: this is the log difference of FUA population between 2018 and 2023;
- dwelling growth: this is the log difference of dwelling growth between 2018 and 2023;
- the ratio of Airbnb separate dwellings to dwelling stock in the 2023 census;
- the change in the proportion of renting households reporting any dampness between the 2018 and 2023 censuses.

Before proceeding, we emphasise that these regressions are reduced-form and should be interpreted as descriptive. Rental price growth, population growth, dwelling growth, rental quality and short-term rental activity are jointly determined outcomes, and are therefore subject to simultaneity and omitted variable concerns. As such, the estimates cannot be given a causal interpretation and are only informative of conditional correlations.

We began with pairwise regressions between rental price growth and each explanatory variable, followed by specifications that include all covariates jointly. In the pairwise regressions, population growth, dwelling growth and Airbnb proportion are all negatively correlated with rental price growth. These unconditional correlations are consistent with multiple, jointly determined causal channels and therefore do not separately identify the underlying structural relationships. For instance, the negative relationship between rental price growth and population growth is consistent with higher rents discouraging in-migration, while the negative relationship between rental price growth and dwelling growth is consistent with supply expansions placing downward pressure on rents.

We next estimated multivariate specifications that include all explanatory variables jointly. Including these covariates allows us to estimate partial correlations between each explanatory variable and

Table 3: Regression results

Regressor	Non-robust regression					Robust regression				
Constant	0.387*	0.389*	0.442*	0.437*	0.433*	0.384*	0.384*	0.433*	0.431*	0.414*
	(0.022)	(0.015)	(0.025)	(0.022)	(0.035)	(0.022)	(0.016)	(0.026)	(0.022)	(0.035)
	[17.5]	[25.6]	[17.6]	[20.0]	[12.4]	[17.7]	[24.6]	[16.6]	[19.2]	[11.8]
Quality change	1.061				1.127	1.166				0.492
	(1.022)				(0.951)	(1.006)				(0.951)
	[1.039]				[1.184]	[1.159]				[0.517]
Airbnb proportion		-0.557*			-0.403		-0.541*			-0.007
		(0.185)			(0.316)		(0.190)			(0.316)
		[-3.017]			[-1.273]		[-2.849]			[-0.021]
Population growth			-0.639*		0.321			-0.590*		0.758
			(0.189)		(0.568)			(0.196)		(0.568)
			[-3.379]		[0.564]			[-3.002]		[1.335]
Dwelling growth				-0.923*	-0.933				-0.853*	-1.602*
				(0.241)	(0.581)				(0.248)	(0.581)
				[-3.830]	[-1.604]				[-3.444]	[-2.757]
Observations	53	53	53	53	53	53	53	53	53	53
R^2	0.021	0.151	0.183	0.223	0.265	0.028	0.139	0.151	0.189	0.217
Adjusted R^2	0.002	0.135	0.167	0.208	0.204	0.009	0.122	0.134	0.173	0.152

Notes: Standard errors in parentheses. * p<0.01, + p<0.05, # p<0.10. Robust regression implemented with RobustOpts in the fitlm MATLAB function, which down-weights observations with large outlier residuals. Dependent variable is the change in log rents between 2018 and 2023.

rental price growth, conditional on observed covariates, although it does not address the simultaneity concerns discussed above. In these specifications, the coefficient on dwelling growth remains negative and statistically significant under robust estimation, which down-weights the influence of outliers, while the coefficients on the other variables are insignificant. This pattern is consistent with the interpretation that, holding observed factors constant, FUAs with more responsive housing supply tend to experience lower rental price growth. However, given the joint determination of rents and housing supply, this result should be interpreted as a conditional association rather than evidence of a causal effect. Without stronger identification, these estimates should be interpreted as suggestive rather than causal.

Conclusion

There is a pressing need for rents to be measured at a finer geographic resolution than the broad regions currently offered by Statistics New Zealand. How can this be achieved? The hedonic rental price indexes proposed herein could be further developed to include additional explanatory variables if the Ministry of Business, Innovation and Employment rental bond data was matched to local council records on individual dwellings. This would enable the hedonic regression to incorporate a wider array of dwelling characteristics, potentially increasing the accuracy of the fitted rents that form the basis of the HII. Matching would entail further coordination between local councils and Statistics New Zealand to source the required datasets. Matching datasets may require recognition of different administrative practices in recording address information, perhaps requiring the application of fuzzy matching algorithms.

While regional price indexes tell us about differences in inflation rates between regions, they do not tell us about differences in price levels between regions. Price indexes tailored to measuring regional differences in rents and price levels more generally would be useful for understanding differences in the cost of living between locations.[9] This could be achieved as part of a broader programmatic focus on regional measurement of housing costs.

1 Disclaimer: These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which is carefully managed by Statistics New Zealand. For more information about the IDI please visit https://www.stats.govt.nz/integrated-data/.

2 Different window sizes result in substantial differences in measured inflation over the long run (see Bentley, 2022).

3 That said, the indexes are broadly reflective of the trends we document using other price index measurement methods. Rents in the 'rest of the North Island' have grown by about 50% over the past ten years.

4 47.7% of Queenstown's population was recorded as foreign-born in the 2018 census, compared with 27.4% for the country.

5 Authors' calculations based on census data obtained from https://www.stats.govt.nz/assets/Uploads/2018-Census-population-and-dwelling-counts/Download-data/2018-census-population-and-dwelling-counts-amended-5-3-2020.xlsx and https://nzdotstat.stats.govt.nz.

6 Residential Tenancies (Prohibiting Letting Fees) Amendment Act 2018, Residential Tenancies Amendment Act 2019 and Residential Tenancies Amendment Act 2020. [accessed 26 Feb 2026].

7 Residential Tenancies (Healthy Homes Standards) Regulations 2019. [accessed 26 Feb 2026].

8 See Greenaway-McGrevy & So, 2024 for more detailed information on the data sources.

9 Price indexes can measure differences in prices either between locations or over time (Biggeri & Ferrari, 2010). They cannot measure differences across both dimensions due to changes in the consumption basket of the representative household over time and space.

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Appendix Hedonic imputation index construction

The hedonic indexes are the same as employed by Greenaway-McGrevy and So (2024). The sample of rental bonds consists of apartments, houses and flats. Let $p_{i(t),t}$ denote the logged weekly rent of dwelling $i(t)$ in period t, and let $X_{i(t),t}$ be a vector of characteristics. The hedonic regression is

$$p_{i(t),t} = X'_{i(t),t}\beta_t + \varepsilon_{i(t),t}, \quad (1)$$

where $t = 1,...,T$ indexes time periods (years), and $i(t) = 1(t),...,n(t)$ indexes the cross sections observed in period t. We include the following observable characteristics in $X_{i(t),t}$: number of bedrooms, a dummy for apartment, a dummy for flat, and locational dummies (specifically, SA2 dummies). For each FUA, we fit 1 to the cross section of rents for $t = 1,...,T$, obtaining $\{\hat{\beta}_t\}_{t=1}^{T}$. For each observation $i(t)$ in period t, we use the estimated hedonic function to impute rents in period t as $\hat{p}_{i(t),t} = X_{i(t),t}'\hat{\beta}_t$, and $t-1$ as $\hat{p}_{i(t),t-1} = X_{i(t),t}'\hat{\beta}_{t-1}$. We then run the following regression

$$\hat{p}_{i(t),t} - \hat{p}_{i(t),t-1} = \delta_t + u_{i(t),t}, t = 2,...,T$$

The sequence $\{e^{\hat{\delta}_t}\}_{t=1}^{T}$ yields the hedonic imputation price index, where $\hat{\delta}_1 = 0$.

Dean R. Knight

Our constitutional ecosystem

distinctive features and dangerous foes

Abstract

Based on an address to Hāpai Public in Wellington in July 2025, this article discusses the evolving constitutional ecosystem in Aotearoa New Zealand, including its many sources and distinctive features. Having identified its various strengths and ongoing development, the article highlights several significant threats to current constitutional arrangements and the need for ongoing vigilance.

Keywords Aotearoa New Zealand, evolving constitutional ecosystem, distinctive features, strengths, threats

My invitation is to explain our constitutional ecosystem: to share how I think about our constitution, especially its distinctive features, and to identify some of the threats – dangerous foes – that might unsettle the delicate equilibrium within that ecosystem.[1]

Our constitution

An explanation of our constitution would be a quicker exercise if we were elsewhere in the world: beginning, and ending, with someone waving around a copy of the constitution. The United States, Australia, Canada, and almost all other countries in the world have constitutions we can point to and cradle in our hands. They have a formal master text; in other words, a sacred written document that describes the governmental infrastructure that wields public power and sets out the key rules which constrain that power.

There is also an industry of language that comes with those constitutions. 'Written or codified' speaks to the way rules are presented in the master text; that is, committed to writing. 'Supreme' speaks to two points: first, a hierarchy, the fact that the constitution sits above other laws and may allow laws to be struck down if inconsistent; and, second, judicial enforceability: if there is striking down to be done, it is almost always a job for the courts, and that shifts some of the power from the democratic branches to the judicial branch. 'Complete' speaks to the extent to which a constitution gathers up all its rules, as opposed to leaving some things out, leaving it to custom and practice or other elaboration. 'Entrenched' speaks to restrictions on how the rules can be changed – commonly only by a supermajority vote or referendum – and implicitly gives the courts the power to invalidate constitutional changes that fail to comply.

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But I do not want to use this vocabulary or these yardsticks to describe our constitution, because, by and large, these are things that our constitution is not. Our constitution is largely unwritten, inevitably incomplete, not supreme, and – except for a handful of key provisions – not legally entrenched. A comparative framing reinforces a deficit model and obscures much of the virtue of our constitutional way of doing things. That is why I think it might be better to think about our constitutional arrangements as an ecosystem, because our constitution lives, is dynamic and is shaped by those within it – both those people who wield power and those who keep them honest.[2] And it is an ecosystem that is distinctive to place and has its own indigenous story.

I recognise some of our local constitutional storytellers who have offered stories of our constitution. To be clear, though, my account of our constitution is not merely an echo of Sir Kenneth Keith's constitutional summary in the preface to the Cabinet Manual; however, Keith's account is an excellent and pithy summary (Keith, 2023). Nor is my explanation a reprisal of the conceptual architecture of our constitutional infrastructure as expounded by Joseph in *Joseph on Constitutional and Administrative Law* (Joseph, 2021); however, that text continues to be a reference for heavy constitutional queries. Nor do I adopt Harris's approach of jigsawing our constitution together through a series of high-level principles (Harris, 2018); however, I would like to acknowledge his recent passing and the great contribution he made to our constitutional kaupapa. And, finally, nor is my explanation an explicit advertisement for Palmer and Knight's recent volume in Hart's constitutional systems of the world series (Palmer & Knight, 2022); however, the contextual frame and realist's lens adopted therein is impossible for me to shake, obviously.

Rather, for present purposes, I would like to share a series of 'thought bubbles' – a handful of different ways to think about the distinctive character of our constitution.

Constitutional ecosystem

The first of those thought bubbles is thinking about our constitution as an ecosystem. This acknowledges that, despite the absence of a sacred master text, our constitution – and clearly we have one – still performs the functions of a constitution.

> … the recent *Ellis* case in the Supreme Court signals greater receptiveness to tikanga Māori and tikanga-ā-iwi in the shaping of common law rules, which is an example of how the equilibrium within our ecosystem is evolving.

As I nodded to earlier, there are two parts to the business of a constitution. There is the positive aspect: to 'describe and establish' the major institutions of government and to 'state' their principal powers; in other words, to 'constitute' government (Keith, 2023, p. 1). And there is the negative aspect: to 'regulate the exercise of those powers in a broad way'; in other words, to 'restrict or control' government (ibid.). It is clear that our constitutional arrangements both empower and constrain the business of the state. But, as I said before, our constitution takes dynamic form, is human-centred and operated and, perhaps paradoxically, both fetters political power and is conditioned by the politics it seeks to control.

Constitutional collision

Our ecosystem arises out of a collision – a constitutional collision. When explaining this to folk from abroad, I often enlist Justice Joe Williams' description of how our nation state was created by the collision between two sets of laws, metaphorically carried by two important seafarers (Williams, 2013). There was Kupe's law, the laws of iwi, hapū and whānau; that is, tikanga Māori, the rules brought by Māori when they travelled in their waka across the ocean and first settled this place. And there was Cook's law: the English common law brought by colonial settlers on their tall ships that then followed. The values and concepts of those legal systems are different – even if the different caricatures of each might be slightly over-egged – and hence the idea of collision. We can also recognise the role that te Tiriti o Waitangi/the Treaty of Waitangi plays in providing a point of contact for these laws. As Williams put it, te Tiriti is 'the mechanism through which these two systems of law would be formally brought together in some sort of single accommodation' (ibid., p. 7). In other words, te Tiriti is a means by which the relationship between the Crown and iwi/hapū can be expressed on an ongoing basis and the interaction between the different legal orders is to be mediated.

It is from this collision and mediation that our system of state law emerged: 'te tātai ture', as we might perhaps call it (Stephens, 2025). Williams also spoke of 'lex Aotearoa' as the third law, emerging from the two; however, it seems likely that he was dreaming of a future with the possible emergence of a more enlightened hybrid (Williams, 2013, p. 32). In any event, the balance between Cook's law and Kupe's law has evolved over time. We remember the dark times of strong hostility on the part of Cook's law to Kupe's. More recently, we can see some light from a new dawn and steps towards reconciliation. Among other things, the recent *Ellis* case in the Supreme Court signals greater receptiveness to tikanga Māori and tikanga-ā-iwi in the shaping of common law rules, which is an example of how the equilibrium within our ecosystem is evolving.[3]

The existence of two distinct – and interacting – legal orders also means the title of this address needs an asterisk. To be clear, when I am speaking of 'our' constitution, I am talking in terms of state law/te tātai ture as it manifests in Aotearoa New Zealand as a nation, recognising the

continuing operation of tikanga Māori as its own legal order and its distinctive constitutional kaupapa (Godfery, 2016).

Constitutional mimicry

Much of the British style of government came to be embedded in our ecosystem and much of the structural form of our arrangements mimics those British origins. That is our 'constitutional mimicry'. From the Palace of Westminster comes the idea of parliamentary government: where the political executive – ministers – are drawn from the legislature – the elected representatives. That shapes how we hold our governments to account, through interlocking links and chains of responsibility. Our ministers are responsible to the House of Representatives for what they do, and for what public servants do in their name or the King's. And the members of the House are ultimately responsible to us as electors. That is our style of democratic government – responsible government (Palmer & Knight, 2022, p. 62).

The question for us remains how far does that mimicry continue today? How much have we reshaped that style of government with indigenous tweaks and local initiatives? MMP is an obvious one. Or do we still cling to an idealised notion of Westminster government? And perhaps more so than Westminster itself, as it is distracted by the in-and-out of Europe?

Constitutional masquerade

One distinctive, institutional feature that continues in the name of Westminster government is our 'constitutional masquerade' (ibid., p. 9). By that I mean the difference between legal form and practical reality.

Most vividly, we see that in the frequent, formal allocation of power to the sovereign or governor-general. But, in reality – by dint of convention – that power is exercised according to the wishes of ministers. 'The King reigns but the government rules', as Keith puts it (Keith, 2023, p. 3). Here we also see the force of constitutional convention, which converts the King and governor-general from powerful emperors into puppets of democratic government; and rightly so.

We can also see the masquerade in the difference between the Executive Council and Cabinet. The Executive Council, at law, is the formal body advising the governor-general on what to do and what instruments to sign. But, in reality, we know Cabinet – which is entirely a creature of convention and has no formal legal status – has all the real decision-making power and the Executive Council is just a rubber-stamping process. We could go on. The machinery of government has lots of examples of where this masquerade happens and where we can see this difference between legal form and real power (ibid., p. 4). This is one of the reasons Matthew Palmer and I say our constitution can only be truly understood when viewed through the lens of legal realism (Palmer & Knight, 2022, p. 9).

> So many of our constitutional rules are reflected in conventions – arising from a sense that there is a right way to do things, and one especially evident from an established practice over time.

Constitutional potpourri

So far, I have been reflecting on the system, structure and institutions. Next, we might want to think about the particular rules within our constitution and where we find them.

Forgive the metaphor, but I sometimes think about a 'constitutional potpourri'. Think of a pot of colourful rose petals. The sources of our constitutional rules and norms are many and varied. Again, the lack of a sacred document means we do not have a single source. Take Keith, for example. He lists prerogative powers, statutes (both New Zealand and English or British), decisions of courts, the Treaty of Waitangi, and constitutional conventions (Keith, 2023, p. 2). A brief explanation of the character of those sources is needed.

Prerogative powers are the old powers and instruments of the sovereign that continue to survive today – the remnants of when the monarch used to rule personally. These include powers and instruments like the governor-general's power to appoint ministers, and various letters patent. Statutes include both ours and a handful of old British ones. Obviously, our Constitution Act 1986 is one of the most important. It is the 'principal formal statement' of our constitutional arrangements, in Keith's language (ibid., p. 1), or the 'premier constitutional statute' in Joseph's (Joseph, 2021, p. 31). But the content of the Constitution Act is only a partial sketch of our constitution. That Act describes some, but not all, of the different branches of government. For example, it does not constitute or describe the judicial branch; it only speaks to judges' independence (e.g., rare circumstances for removal from office and the non-reduction of their salaries) (Constitution Act 1986, ss23–24). Keith adds other legislation that has a constitutional feel: the Electoral Act 1993; the New Zealand Bill of Rights Act 1990; the Senior Courts Act 2016; and the Official Information Act 1982 (Keith, 2023, p. 1; Joseph, 2021, p. 31). Magna Carta 1297 (Imp) and the Bill of Rights 1688 (Imp) as carried here from England are also identified in the constitutional mix. Here, it is usual to note some emerging academic terminology. Constitutions with rules spread across a variety of statutes might be called 'multi-textual' constitutions (Albert, 2023). And there is something in that for us.

Court decisions, or the set of rules developed by judges when deciding individual cases – our 'common law' – generate important constitutional norms and expectations, even though the courts cannot strike down legislation like the Supreme Court in the United States or elsewhere. Some talk about the blockbuster *Fitzgerald v Muldoon* case in the 1970s as

our big constitutional case, when Robert Muldoon was told off for trying to abolish a statutorily mandated superannuation scheme by press release – a case that we still open with when teaching public law at law school.[4] Or the famous Lands case in the 1980s, as Lord Cooke and others opened the door to the renaissance of te Tiriti/the Treaty in state law.[5] But we might also include the Court of Appeal's discussion a few years ago of the 'no surprises' principle in Winston Peters' privacy-based claim against the attorney-general and Paula Bennett.[6]

The Treaty of Waitangi is also included in the list: it goes without saying – of course, as Keith notes – that te Tiriti is clearly a constitutional source. And it is an especially precious instrument, which touches the exercise of public power throughout the system nowadays.

Finally, constitutional conventions round out Keith's list of sources. So many of our constitutional rules are reflected in conventions – arising from a sense that there is a right way to do things, and one especially evident from an established practice over time. In the absence of canonical written rules, we rely so much on conventions that Matthew Palmer suggests we could describe our constitution as a 'customary' constitution (Palmer, 2006, p. 136). He has a point, perhaps; at least, if teamed with the earlier terminology of multi-textualism. That is, one authentic descriptor of our constitution might be a 'multi-textual and customary' constitution. In any event, conventions are everywhere. Conventions structure the judgement the governor-general makes about which leader to appoint as prime minister following an election. Or a public servant's obligation to tender free and frank advice (even if that is also nodded to in the Public Service Act nowadays) (Public Service Act 2020, s12(109b)). I think of conventions as 'binding constitutional practice'; in other words, they are a civic conscience. Importantly, conventions are not directly enforceable in court like formal rules; they are enforceable, instead, through moral suasion, condemnation, adverse political reaction and other cultural consequences. The point here might be that all countries rely on constitutional conventions to fill the gaps in their master text constitutions (but some did not realise how much so until a particular president in the United States – and others – started running roughshod over them). We have so many conventions that we have a written catalogue of many of them; namely, our Cabinet Manual (Cabinet Office, 2023; Aroney, 2015, p. 34). This manual is another one of our key constitutional sources, although not one in Keith's list. A good way to think about the Cabinet Manual is as a dictionary of existing practice and usage, largely reflecting and recording practice that has emerged over time (Kitteridge, 2006).

Matthew Palmer suggests … a rule is constitutional if it 'plays a significant role in influencing the generic exercise of public power'; he would add a postscript too: 'whether through structures processes, principles, rules, conventions, or even culture' …

Keith's list is, as I say, a traditional and pretty helpful list of sources. The other big constitutional books add a handful of other sources, like international law, law and custom of Parliament, academic writing on the constitution and so forth. But a shopping list – a subjective shopping list – has blind spots and needs to be continually added to. Today, especially in the light of the Supreme Court's ruling in the *Ellis* case, tikanga needs to be included in the list. And documents like the 'Statement of tikanga' presented to the court and the Law Commission's later *He Poutama* report should probably be identified as constitutional sources, as these documents are, no doubt, now canonical explanations of the way tikanga Māori speaks or should speak to state law.[7]

A better way to think about where we find our constitutional rules might be – as Matthew Palmer and I do in our book – to adopt a systemic approach working across each branch of government. Our focus is then on a branch's governing instruments; the interpretation of those instruments by whoever is charged with their enforcement; any common law generated within that branch, in the sense of formalised rulings of applicable norms and proper practice; and any conventions or constitutional practices binding as a matter of morality or conscience only (Palmer & Knight, 2022, pp. 12–14). And we might also need a rule of recognition to assess when something rises to the level of 'constitutional', although the definition of 'quasi-constitutional' is hotly debated by scholars (Albert & Colon-Rios, 2019). Again, Matthew Palmer suggests a robust one: a rule is constitutional if it 'plays a significant role in influencing the generic exercise of public power'; he would add a postscript too: 'whether through structures processes, principles, rules, conventions, or even culture' (Palmer, 2006, p. 137).

Working all that out, rules passed by the legislature are important and constitutional, at least those significantly influencing the generic exercise of power. And, correspondingly, the courts' interpretation of those rules is important too. But, as an example, the Public Service Act is also probably one of the most important sets of rules, though the interpretation and enforcement of those rules is left, for the most part, not to the courts but to the public service commissioner, and, perhaps, our political governors too. And both Cabinet and the public service commissioner also promulgate important guidance on the operation of the Cabinet and the public service, in forms such as Cabinet circulars and ethical codes. And, to complete the picture, I have already explained how conventions governing the executive are gathered up in the Cabinet Manual.

That is a long way of making a simple but important point. Each branch has rules and norms – expressed in different ways and interpreted by different folk – that do the work of a constitution.

Constitutional ordinariness

Ordinariness, constitutional ordinariness, contrasts with sacredness. We do not worship a rarified document containing engraved testaments. We see the constitution everywhere, hence the potpourri.

We also – generally, at least – reject the idea of hierarchy among our statutes. Rather than having constitutional rules that trump, we have a flat legislative structure. Parliament can make any law whatsoever through its ordinary processes. And it can similarly repeal any law, without impediment. The courts will recognise and enforce the law most recently passed by Parliament as the valid and operative law, even if it conflicts with a constitutional rule in an earlier statute.

That is one recital of parliamentary sovereignty – or the full power to make laws – in its strongest form (Palmer & Knight, 2022, p. 127). But there are a few glosses or exceptions. First, a handful of our electoral laws, along with the term of Parliament, are entrenched, so they must be changed in accordance with special processes (Electoral Act 1993, s268). These processes specify the 'manner and form' by which any change must be made; in our case, changes need to be made by public referendum or supermajority in the House. Second, the courts and the common law increasingly recognise the reality that there are some statutes which are more important, and inherently constitutional, such that they might be given some priority in the interpretative process if they conflict with ordinary statutes. For present purposes, resisting the temptation to dive into doctrinal details, it is sufficient to record that there is a range of judicial techniques that do this work. Third – and more controversial but not fanciful – is an argument that some law changes implicating especially precious aspects of our constitution might be beyond Parliament's ordinary law-making capacity. For example, some submitters, including me, before the Justice Committee on the Treaty Principles Bill speculated about whether amending or nullifying te Tiriti might lie beyond Parliament's ordinary competence; in other words, an exercise of constituent power by the *demos* – the people's special power to reconstitute the constitution – might be needed for any change to be effective.

The rule of law is especially prone to misuse as a slogan – or, as we sometimes call it in the academy, a 'floating signifier' – able to be loaded up with whatever meaning is convenient for any particular argument ...

Constitutional contestation

Thinking more about those constitutional rules, we might recognise that some of them are big woolly ideas that are not entirely prescriptive and lack the hard-edged character of rules found in master text constitutions. Think of the big ideas that animate our constitutions: parliamentary sovereignty (or legislative supremacy); rule of law; separation of powers; and even democracy itself. We know the gist of each of these concepts. But sometimes, when we drill deeper, parts become more and more contestable, the ideas often lack definitive meaning, or there is a lack of clarity about their outer limits. That is my 'constitutional contestation'.

The rule of law is especially prone to misuse as a slogan – or, as we sometimes call it in the academy, a 'floating signifier' – able to be loaded up with whatever meaning is convenient for any particular argument: anything from a basic requirement to rule by and through law, along with the idea that we are all subject to law; to an expectation that rules should be promulgated in a form that is capable of being obeyed; to an additional expectation that rules should be generated through democratic means; to an expectation that rules made also should respect fundamental human rights or other higher-order norms, either as divined by the courts or enshrined by legislatures (see generally Tamanaha, 2004).

Thus, we need to take some care. These big ideas provide us with some vocabulary and ways to reason about matters that are precious, albeit sometimes with content that is contestable. And they might not provide immutable solutions, especially when they come into conflict or sit in tension with each other.

Constitutional dialogue

We are bringing our constitution to life here, as we reject a documentary approach and speak of our ecosystem. Within that, there is a chorus of voices – dialogue between and within the different branches of government. Hence the idea of constitutional dialogue. This reminds us, again, that a constitution is a human habitation and a place for our community to have conversations about important matters. Here, I just want to acknowledge the existence of that chorus and to acknowledge the different tones of different branches. The branches speak with different voices (Palmer & Knight, 2022, p. 22). The executive branch speaks of policy and efficacy. The parliamentary branch speaks of priority and accountability. The judicial branch speaks of legality and fidelity. Or something like that.

The key point is that our actors have different concerns and express themselves in different voices, which makes dialogical conversations within our ecosystem sometimes challenging. And the practice of these constitutional conversations means constitutional 'discourse' might be a better linguistic descriptor – especially when branches talk past each other, when institutions are not listening to each other, or the when dialogue is discordant (Nathan, 2024).

Constitutional guardians

With that chorus, constitutional probity depends on key guardians or kaitiaki; that is, those who speak up for doing the right thing. These are our constitutional guardians. We are all familiar with the role the courts play in enforcing the rule of law and constitutionality. But dotted throughout our system are other guardians who also encourage, urge or demand constitutionally proper behaviour, whether it is the attorney-general or solicitor-general, the speaker or the clerk, the public service commissioner; or the now fashionably called 'fourth branch' institutions or, as I prefer, the integrity branch – the ombudsman, auditor-general and similar watchdogs (Knight, 2024).

Our constitution depends on the friction that these guardians create – enforcing rules, conventions or other expectations – in order to slow, constrain and control public power. Public servants also have a crucial guardianship role, manifest especially through the provision of free and frank advice and policy stewardship. Free and frank advice generates, we hope, pause and reflection on the part of our governors and slows the juggernaut of political expediency, through the friction of expert analysis from those with non-partisan competence.

Constitutional ebb and flow

The final point is about how our constitution changes: through constitutional ebb and flow. I have already nodded to a couple of instances of evolution. Our constitutional ecosystem evolves, typically incrementally and pragmatically, through changes in the rules across the full range of constitutional sources.

Statutes change in the ordinary way. Other than certain electoral provisions, legislative reform of the constitutional statutes generally does not need elevated mandates, even if that might still be desirable for reasons of legitimacy. The Cabinet Manual and standing orders change as a result of systemic review and in the light of experience. Conventions morph to address the unexpected or to shake off the old-fashioned and out of date.

Evolution, not revolution. And that is probably a fitting way to complete our metaphor of the constitutional ecosystem – an evolving ecosystem.

I worry about what we see on foreign shores, where political leaders of previously reliable democracies are openly hostile to the rule of law: engaging in unimaginable warfare against judges, proclaiming their own divine right to govern as they see fit …

Dangerous foes

I close by sharing some of my worries: dangerous foes that risk deleteriously unsettling the constitutional ecosystem and disrupting hard-fought for, and important, balances.

Civic illiteracy

My first worry is civic illiteracy. Thinking in terms of a constitutional ecosystem, I hope, reinforces the need for careful stewardship and kaitiakitanga towards our constitution by both the governors and the governed, something that can only be done with an appreciation of our constitutional ecosystem, its ingredients and their interaction. Or, perhaps more importantly, an understanding of power, probity, stewardship and citizenship. We have a way to go on that, as you know. A year or two ago, I might have added constitutional disengagement, but the flood of participation in select committee processes now belies that and perhaps now presents a different problem.

Rushed law-making

The checks and balances in our ecosystem take time to do their work. Legislative urgency and other forms of expedited or rushed law-making are like a bushfire, quickly ravaging everything around before anyone can notice or do anything meaningful. I am especially worried about how we break ministers' addiction to urgency – common to ministers of different political stripes. Cracking this addiction to urgency is hard but important. Add on top of this the current rigidity of coalition compacts and their prescriptive time frames: 100 days of action and quarterly action plans. Government by Gantt chart. These governing agendas should be scorned, if only because the time frames prescribed do not accommodate the sanitising effect of good governance and policy deliberation.

Mischievous hyperbole

Ill-founded attacks on our judges and other integrity institutions, claiming activism, overreach and stepping outside their constitutional lane, amount, in my view, to mischievous hyperbole, a worrying playbook imported from abroad. These inflated systemic claims do not survive close scrutiny, even if we might disagree with the odd judicial decision, as is inevitable. And these claims are designed to unsettle the relationship of mutual respect and comity between branches. These over-egged and mischievous claims have the worrying consequence of eroding the legitimacy of some of our most important constitutional bulwarks.

Rule against law

Relatedly, we have what we might describe as the rule against law. I worry about what we see on foreign shores, where political leaders of previously reliable democracies are openly hostile to the rule of law: engaging in unimaginable warfare against judges, proclaiming their own divine right to govern as they see fit, and, most worryingly, posturing as if they intend to ignore judicial rulings. We cannot let that

dangerous playbook start to seep into our ecosystem. Worryingly, though, we can perhaps begin to see some of our populist folk becoming emboldened by despotic behaviour elsewhere.

Institutional hollowing

I worry about institutional hollowing – again inspired by a foreign playbook – where some of our institutional guardians are weakening by the seeding of folk lacking the wisdom, courage or commitment to the kaupapa to deliver the probity our ecosystem needs. While there is no ideal or perfect mix, these appointments change the balance within the ecosystem in ways, I think, we will regret.

Disdain for expertise

I know only too well that there is a global and local attack on expertise – a rising disdain for expertise: open warfare against knowledge institutions, such as universities and our community of scholars; disregard for internal institutional competence within government. Because much of our ecosystem depends on dialogue and reason, disdain for expertise and counterviews weakens our ecosystem's antidotes to political expediency.

A rise of responsiveness

Finally, there is the rise of responsiveness within the public service. From outside, I detect a change in institutional balance, where responsiveness is now more valued over free and frank advice. Recent amendments to the Public Service Act point to a changing posture (Public Service Amendment Bill 2025). But I think that follows a strong cultural turn before. Again, while there is no magical prescription, reducing friction within the system – and the sidelining of neutral competence especially – seems to me to be very undesirable.

Conclusion

Aotearoa New Zealand's constitutional ecosystem – our dynamic and distinctive way of constituting and controlling government power – is precious. Nurtured and trusted, it performs admirably as a constitution, with a mix of strengths and weaknesses relative to master text constitutions. But, importantly, ongoing vigilance is needed to defend it against dangerous foes that risk unsettling the balance within.

1 This is a lightly revised version of an address to Hāpai Public: Institute of Public Professionals Aotearoa New Zealand delivered in Wellington in July 2025. Thanks to Theo Dawson for research assistance.
2 Compare Quentin-Baxter, 1980, p. 290: a constitution as 'a human habitation'.
3 *Ellis v R (Continuance)* [2022] NZSC 114, [2022] 1 NZLR 239. See also Law Commission, 2023.
4 *Fitzgerald v Muldoon* [1976] 2 NZLR 615 (HC).
5 *New Zealand Maori Council v Attorney-General* [1987] 1 NZLR 641 (CA).
6 *Peters v Attorney-General* [2021] NZCA 355, [2021] 3 NZLR 191.
7 *Ellis v R (Continuance)*, Appendix: Statement of tikanga; Law Commission, 2023, p. 12.

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Susan Walker and Robyn Simcock

Priorities For Public Investment

Related to Voluntary Biodiversity Credit Markets

Abstract

Nascent voluntary biodiversity credit markets (otherwise known as 'voluntary nature markets') operate globally and in Aotearoa New Zealand, promising sustained financial support for conservation initiatives from private investors. Voluntary biodiversity credit markets may operate independently of government, but their risks engage core government concerns, including protecting the public interest in a healthy environment. The optimal role of public investment in this context is contested. We suggest three priority areas for public investment: maintaining core conservation spending; investing in underlying spatial and ecological data; and promulgating and implementing regulatory safeguard mechanisms. Investment in avoiding or mitigating risks in market mechanisms should enjoy the same government attention as efforts to promote such mechanisms. Likewise, addressing the risks should be treated as core public infrastructure for any voluntary biodiversity market.

Keywords biodiversity credit market, public investment, nature market, voluntary market, conservation, market mechanisms

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The funding shortfall for conservation is becoming increasingly desperate, and the window of time to arrest declines in species and ecosystems is rapidly closing (UNEP, 2025). The case to boost investment in nature protection is powerful, including the economic case (WWF-New Zealand, 2024). New Zealand's internationally renowned biodiversity faces considerable threat, and mobilising efforts to address that threat have been significant nationwide. The efforts of government agencies (including councils), iwi and hapū, eco-sanctuaries, community conservation organisations (including catchment groups), private landowners and some businesses have been considerable. Thus far, however, the combined effort has struggled to stem the tide of loss, with a lack of sufficient resourcing and weak incentives being significant factors (Brown et al., 2015). The urgency of the biodiversity crisis continues, while funding falls shorter and shorter of what is required (WWF-New Zealand, 2026). The newly minted second implementation plan to support the Mana o te Taiao Biodiversity Strategy (Department of Conservation, 2026) promises little additional funding from public sources and an ever-higher reliance on private investment – assumed rather than secured.

Voluntary biodiversity credit markets for biodiversity (otherwise known as 'voluntary nature markets')[1] offer the prospect of additional funding for conservation, especially where conservation funding is tight. Not surprisingly, the allure of voluntary biodiversity credit markets has driven much discussion, debate and publicity, both in New Zealand and internationally. New Zealand's Ministry for the Environment has actively promoted the concept, including supporting and coordinating pilot programmes, releasing a suite of suggested integrity principles, and setting out the proposed role of government to support the 'scaling up' of investment (Ministry for the Environment, 2025).

Voluntary biodiversity credit markets promise many potential benefits, including biodiversity action on the ground that would not otherwise have occurred, enhanced opportunities for private land conservation, increased collaboration, spillover benefits from technological advances to support markets, and providing

A *biodiversity credit* is a certificate that represents a measured and evidence-based unit of positive biodiversity outcome that is durable and additional to what would have otherwise occurred (Biodiversity Credit Alliance, 2024).

Box 1 Integrity as a linchpin (with a focus on additionality)

Biodiversity gains that generate credits in a voluntary market must meet high integrity standards (World Economic Forum, 2025). Most important is that the gains are real and are additional. Further integrity issues may also arise where market activities and their objectives are inconsistent with te Tiriti o Waitangi obligations, tikanga, rangatiratanga and Māori data sovereignty (see Greenhalgh et al., 2026).

However, upholding integrity standards in a biodiversity credit market is extremely challenging. Determining whether actions are additional (i.e., the biodiversity gains would not have occurred anyway), ensuring permanence, and avoiding leakage (i.e., harmful activities moving elsewhere – see Wunder et al., 2025) can all pose challenges. Additionality poses especially tricky and non-trivial challenges for assessment because it involves predicting the future.

Buyers are likely to have trouble comparing the value of the biodiversity outcomes delivered and the longevity and security of different credits, especially where there are multiple different standards and frameworks in play. The complexity of biodiversity and the associated technical difficulties involved in measuring biodiversity make it difficult and costly to establish whether a conservation intervention has, in fact, made a positive difference to biodiversity on the ground. In addition, credits subject to rigorous monitoring to demonstrate positive biodiversity outcomes will likely be more expensive than those that are not, and thus potentially less competitive in a market where it is hard to distinguish what the 'true' gains are.

The inherent challenge of demonstrating 'additional and real' biodiversity gains combines in biodiversity credit markets with economic incentives for both buyers and sellers to favour less expensive credits. This can be seen where corporate buyers may be looking to enhance green credentials at low cost, and sellers have a financial incentive and the opportunity to select the cheapest land and/or the simplest conservation actions. In other words, biodiversity credit markets are vulnerable to 'adverse selection' (zu Ermgassen et al., 2023; Swinfield et al., 2024).

There is likely a direct relationship between the cost of a credit and the quality of the biodiversity gains delivered. Project proponents wishing to generate higher-quality credits that create more value for biodiversity and/or who invest in demonstrating that their credits have higher integrity are more likely to have higher-cost credits which are less competitive, simply because they involve more expensive actions. For example, the purchase of commercially valuable land that is truly at risk of development will be more expensive, but provide more value for biodiversity, than purchasing land at little risk of development. Similarly, the establishment of a new, permanently fenced sanctuary to exclude pests which requires long-term maintenance will be more expensive and valuable than trapping pests in an unfenced area where reinvasion is more likely.

Some potential implications for biodiversity where credits fail to maintain or meet integrity standards are:

- Protection of biodiversity that is under little threat of loss, or the creation of biodiversity elements that are already common. This risk emerges from cheaper or quicker actions that may make little difference to the status of biodiversity.
- Biodiversity gains are focused on actions that result in short-lived outcomes: e.g., predator control for birds where predator reinvasion and recovery are likely (and the permanence of gains is at risk).
- The harmful activity effecting biodiversity simply shifts elsewhere rather than ceasing (i.e., there is leakage; see Wunder et al., 2025)

The tensions and incentives in market mechanisms make integrity a linchpin of long-term success, especially where the gains are rarely comparable and the cost of conservation actions and value of biodiversity gains are highly variable. We highlight integrity as a matter of ongoing concern with market mechanisms which generate system-wide risks for conservation.

a means through which iwi and hapū can exercise kaitiakitanga. But internationally the promises of voluntary biodiversity credit markets have rarely been realised; many ventures have raised less funding than hoped and provided limited benefit for nature (Dempsey, 2025). Furthermore, upholding the integrity of voluntary biodiversity credit markets is particularly difficult (see Box 1). Therefore, there is justification to tread carefully and manage expectations in New Zealand.

Even if voluntary biodiversity credit markets result in few trades and make little difference to nature, they may still cause harm (Walker et al., 2025). Participants in markets may have little incentive or agency to take responsibility for the broader impacts of biodiversity credit markets on the public interest in a healthy environment. Government agencies often face competing critique as to their role and responsibility in this context. We highlight the role governments can take in providing assurance that public interest outcomes are achieved alongside commercial imperatives. We propose that clearly defining the role of governments in biodiversity credit markets will help to set expectations and to illuminate the potential risks that are not owned and are unlikely to be actively managed by market administrators and participants.

We focus on the ability of public investment to reduce the risk of biodiversity credit markets generating wider, system-level conservation risks. If unchecked, these risks could have long-term negative consequences for biodiversity and for the effectiveness and durability of a biodiversity credit market itself. We identify three areas where public investment can support safeguards for nature that may be compromised by market mechanisms. These include providing a robust conservation baseline, supporting better decision making around where and in what to invest, and lowering the potential risk of deceptive behaviour by market participants.

Table 1: Eight difficult problems for biodiversity credit markets

Markets predicated on damage and loss are risky for biodiversity.
Voluntary biodiversity markets may not attract substantial private investment.
Integrity principles for voluntary biodiversity markets will be difficult to meet.
Unintended and perverse outcomes are likely.
Adequate biodiversity currencies are neither simple nor easily measured.
Durable voluntary biodiversity markets will have high overhead and transaction costs.
New Zealand lacks appropriate underpinning biodiversity data and information.
Capacity and capability for designing and implementing a voluntary biodiversity market in New Zealand are poor.

Source: Walker et al., 2025

Table 2: Eight essential guardrails for biodiversity credit markets

1. Voluntary biodiversity credit markets are differentiated from biodiversity offset programmes and not used to compensate for harm to biodiversity.
2. Biodiversity credit funding is additional to sustained public investment in conservation.
3. Costs of participation in voluntary biodiversity credit markets are explicit and transparent.
4. High integrity standards protect market longevity.
5. National ecological information is improved, and guidance and advice are available to support projects.
6. Liability and consequences for non-delivery and reversals are clear from the outset.
7. Market oversight is sufficient to detect and address fraudulent claims and bad actors.
8. System stewardship supports oversight and monitoring of market transactions at scale.

Source: Greenhalgh et al., 2026

The state of play in biodiversity credit markets in New Zealand

In New Zealand, many conservation projects have experienced significant drops in funding in recent years, and there is an immediate need to address those practical resource gaps (Doole, 2024). Public spending has also substantially reduced (Parliamentary Commissioner for the Environment, 2025), despite ever more urgent conservation priorities as biodiversity loss continues apace because of ongoing environmental degradation (see, for example, Ministry for the Environment & Statistics New Zealand, 2025). Traditional funding sources such as donations, grants and contracts for services remain possible but can be time-intensive to secure and generally only provide short-term funding. Project proponents are sensibly looking for stable and enduring income streams, and the potential of voluntary biodiversity credits in that context has proved enticing, with a range of early experiments under way.

The experience in biodiversity credit markets is far more developed internationally than in New Zealand, and we drew on that experience in designing and assessing biodiversity credit markets to write two policy briefs, summarised in Tables 1 and 2. The first brief describes key problems that biodiversity credit market developers must tackle to ensure markets do not further harm biodiversity (Walker et al., 2025), and the second proposes a suite of guardrails to help guide the design and implementation of biodiversity credit markets (Greenhalgh et al., 2026).

The appropriate role of governments in biodiversity credit markets is a theme that has frequently arisen during discussions in New Zealand and elsewhere. Some commentators have suggested that governments have no role and should exit entirely or observe silently. Others have expectations of a significant interventionist role, in which governments set standards, manage transactions and undertake communications and marketing to promote the market. Still others expect significant public investment in market mechanisms themselves, even though many examples demonstrate that this may be a much less efficient way of achieving conservation outcomes than direct investment (Kedward et al., 2023). In voluntary markets for other environmental goods, such as carbon, governments are increasingly being asked to step in to clarify how these markets work alongside regulations or national commitments.

Here, we suggest that an approach midway between the 'hands off' and 'hands on' extremes may be sensible: government safeguards the broader long-term public interest in biodiversity and sets the expectations of how these markets operate,

Box 2 What is in and out of scope for biodiversity credit markets in this article

The term 'biodiversity credit market' has been used to describe a range of activities and mechanisms related to the use of private (and sometimes public) funding for conservation purposes. In this article, we are referring to additional biodiversity gains that generate credits for purchase by private investors on a voluntary basis.

This article does not consider non-voluntary actions, such as biodiversity offsets and compensation and other regulatory requirements, as candidates for a voluntary biodiversity credit market. We also note that many transactions that superficially resemble market activity are, in reality, traditional grants and sponsorship, and are better supported by complementary conservation mechanisms, not a market mechanism.

There are also cases where actions are taken to maintain existing areas of indigenous biodiversity, or to continue existing programmes (such as predator trapping), particularly at a small scale. These actions are likely to struggle to meet objective criteria for additionality. Again, these actions are likely better supported by complementary conservation mechanisms, not a market mechanism.

Credit markets are only one way that private and public support can be directed at conservation initiatives. Governments may play important roles in enabling complementary conservation mechanisms, alongside their role in biodiversity credit markets. This is an important rationale behind the need to maintain public investment in conservation actions.

while the mechanics of the market are left to market developers. We also suggest that public investment should be directed at least equally between efforts to mitigate and manage the risks associated with markets, and promoting market mechanisms and supporting their proliferation. Our focus is purely on voluntary markets (see Box 2); compliance markets would justify different interventions.

Three focus areas for public investment

Government at all levels, science institutions, universities, NGOs, private companies and other entities play different roles in addressing the potential risks associated with biodiversity credit markets. These roles include, for example, the development of integrity standards, registries, biodiversity measurement methodologies and monitoring models. Some roles, however, fall more naturally to government than others. We focus on three areas for public investment related to biodiversity credit markets, and these are where other parties are unlikely to have the means, incentives and/or authority to undertake the role substantially. These are:

- maintenance of existing public investment in conservation, including strategic oversight and prioritisation;
- procurement and maintenance of underlying spatial and ecological data to support quality decision making for those participating in biodiversity credit markets;
- promulgation, introduction and/or use of mechanisms to manage the risk of bad actors and fraudulent claims in biodiversity credit markets.

Focus area 1: Maintenance of existing public investment in conservation, including strategic oversight and prioritisation

Public investment is critical to conservation outcomes over the long term as it is inherently more stable than private investment, less vulnerable to the whims of the market and better able to account for distributional impacts of investment (Kedward et al., 2022). The case to maintain and increase public investment in nature is strong, particularly where synergistic objectives such as combating the impacts of climate change, reducing erosion and maintaining biodiversity are considered together.

Biodiversity credit markets, regardless of scale, may result in the pre-emptive withdrawal of public funding for conservation. Withdrawing or reducing public funding may have a variety of effects relevant to credit transactions, including undermining the additionality of new investment, compromising the value of credits sold, and missing important opportunities for cohesive and strategic conservation approaches at scale.

Potential new funding for conservation where there is a withdrawal of public monies ('cost shifting') presents a problem of simple arithmetic. Private or philanthropic sources intended to help bridge the funding gap will make little difference if public investment is reduced in response to their presence. It is therefore important that existing public investment is maintained and that private investment (actual or assumed) is not permitted to 'crowd out' public investment (Biodiversity Credit Alliance, 2025).

Conservation is increasingly multipolar, but not all participants have the same moral and regulatory authority, core intentions or obligations. Public agencies have a leadership role in protecting public goods and ensuring a strong foundation for further conservation investment. Cost shifting may not only undermine conservation but also tarnish any market as an investment prospect if investors do not see evidence of wider biodiversity gains.

Managing the risk of voluntary biodiversity credit markets displacing public investment requires strategic and holistic management, including, among other things, to:

- resist the temptation to shift the cost of conservation from the public to the market, particularly before additional expected income from market mechanisms materialises;
- maintain or increase conservation funding where needed so that the background state of biodiversity is not compromised;
- facilitate the conservation funded by credits being truly additional;
- recognise that the role of voluntary biodiversity credit markets is potentially small, and that these markets will often depend on either direct or indirect government resourcing;
- consider the introduction or expansion of complementary measures to support those actions/activities that do not 'fit' in a voluntary biodiversity credit market.

Focus area 2: Procurement and maintenance of underlying spatial and ecological data to support quality decision making for those participating in voluntary biodiversity credit markets

Voluntary biodiversity credit markets will build on the existing base of indigenous biodiversity in an area, and the data and expertise gained from previous (usually public) investments in conservation. This includes, but is not limited to, underlying data and evidence, fundamental information on species, ecosystems and restoration methods, and established species and ecosystem recovery programmes as models. Public investment could usefully be focused on establishing and maintaining the data collection systems and research and monitoring that would be needed to underpin high-quality decision making for markets and other conservation investment mechanisms. Such investment would also rely on support for the underlying science system that produces and retains the expertise necessary to achieve all of the above.

The parliamentary commissioner for the environment has pointed out that biodiversity data is held by multiple entities, including central government agencies, councils, public research organisations (formerly Crown research institutes), universities and private businesses. Datasets have variable availability, accessibility and usability, and are often collected and maintained without standard methodologies and in the absence of reliable technical guidance (Parliamentary Commissioner for the Environment, 2025). One of the benefits of improved and consistent spatial and ecological data is that it will support more robust decision making in voluntary biodiversity credit markets.

Public investment could be targeted towards the following types of initiatives:

- establishing, where necessary, and maintaining underlying ecological datasets across private as well as public land using common methodologies;
- providing a mechanism for project proponents to access this data to guide their investment decisions, and for buyers to gauge the value of credits;
- providing a mechanism for market developers to contribute data and information acquired through market activity into publicly held repositories following standard protocols;
- supporting research into cost-effective methods to restore and maintain biodiversity where few proven options currently exist (especially for higher-value biodiversity);
- supporting the recognition and protection of data sovereignty, including indigenous data sovereignty, in ways that do not allow market activity to compromise it.

As noted earlier, the success of the above initiatives would be reliant on sufficient scientific expertise and resourcing.

Box 3 Examples of areas where state intervention may be necessary

Actors in the market are making false and fraudulent claims that lead to local and wider-scale declines in indigenous biodiversity

Deceptive actions can be lucrative to undertake and expensive to stop, with the evidential threshold usually being quite high. Legal remedies to counter false claims can be brought about by regulatory agencies (e.g., the Commerce Commission) or through the provision of open standing. The latter enables third parties to also uphold market rules and seek legal remedies for breaches by market administrators or participants (MacIntosh et al., 2018). Ensuring legal remedies are fit for purpose provides an important backstop to market-based integrity settings. Where third parties may act in respect of these concerns, provisions like immunity from costs can support greater public interest outcomes.

There is misuse of the voluntary biodiversity credit market

Risks arise where mandatory obligations are orchestrated through voluntary mechanisms. Voluntary biodiversity credit markets are unlikely to operate with the rigorous scaffolding needed to support regulatory obligations. Placing controls on the interplay of voluntary biodiversity credit markets and these obligations limits the opportunity for the misuse of these markets: for example, not allowing voluntary biodiversity credits to be considered as offsets or compensation in regulatory processes.

There is an impact of land alienation on indigenous communities (e.g., restrictions on gathering food/rongoā/fibre resources from land when conservation becomes the over-arching objective)

While there are doubtless opportunities for indigenous communities to undertake their own projects in voluntary biodiversity credit markets, risks may arise where others do the same with effects on indigenous rights and interests. Conservation objectives can conflict with indigenous communities' aspirations for their whenua, and activities designed to generate biodiversity credits must carefully navigate this to avoid unjust outcomes for indigenous people. The requirement for accrual of benefits for indigenous communities is a common feature of biodiversity credit markets globally, but ensuring this occurs in practice can be fraught. Issues may arise where market activity cuts across obligations, including within Treaty of Waitangi settlements, where market activities are at odds with indigenous aspirations or where land of significance to indigenous communities (but not within their possession) is modified to meet market objectives. Depending on the circumstances, the government may be in a position to intervene in a way market administrators are not willing or able to.

Focus area 3: Promulgation and use of mechanisms to manage the risk of bad actors and fraudulent claims in voluntary biodiversity credit markets

Some voluntary biodiversity credit markets may have mechanisms to address fraud, but these are unlikely to match the potential of the state for both deterrence and sanction. Because integrity in voluntary biodiversity credit markets is especially difficult to demonstrate and sustain (see Box 1), there is a significant risk that opportunists will identify weak checks and balances as opportunities to derive commercial gain. Governments have powers that can be used to control the direct and indirect impacts

of bad actors and dubious transactions that other participants or observers will not have (e.g., anti-corruption mechanisms). Government action is needed especially where the implications of adverse behaviour spill outside the market and can harm public goods and vulnerable communities.

Market administrators are not usually regulators and are unlikely to have the regulatory or moral authority to successfully remove all bad actors. In some instances, it could be in the interests of market administrators to ignore or accept suspect claims to maintain market activity. Even where specific assurance and verification pathways are in place, incentives exist to limit their impact at place (Giles & Coglianese, 2025). Examples of issues in which the state may be best placed to intervene are set out in Box 3.

Legal remedies would need to be adequately resourced, supported by appropriate monitoring and surveillance strategies, and undertaken at sufficient scale and frequency to achieve both specific and general deterrence. The effectiveness of those strategies and interventions would need to be monitored and evaluated during general regulatory stewardship activities for all government agencies.

Summary and ways forward

Voluntary biodiversity credit markets are perceived to operate independently of governments, but their effects on public goods and on the rule of law can be significant (even if the market is small or unsuccessful). Therefore, we suggest that public investment in and around biodiversity credit markets requires careful consideration. While public spending on experimentation, knowledge exchange and promotion of the concept of biodiversity credits may be legitimate, governments also have broader responsibilities to manage the system-level consequences where they are adverse for biodiversity and communities.

Those two, somewhat competing, roles need strategic balancing to ensure that the wider public interest in a healthy environment is not compromised by an imbalance in public investment that promotes the concept of a biodiversity credit market without adequately safeguarding against its well-understood risks. In this article we have presented some suggestions for what governments might prioritise in relation to these markets. We consider that key aspects of a government's role are in ensuring that public investment is maintained, that the underlying evidence base for transactions is substantial and functional, and that legal remedies through which bad actors can be swiftly identified and excised from the market are provided and resourced.

1 Voluntary nature markets are a specific subset of 'environmental markets' or 'nature markets' which trade biodiversity credits on a voluntary basis. Carbon markets are also considered voluntary nature markets in New Zealand.

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