



## New Zealand's future productivity to 2050

Global trends, domestic factors, strategic choices

Consultation on a topic for a joint Long-term Insights Briefing

**DECEMBER 2024** 

# **More information** This document and further information about the work is available at mbie.govt.nz/ltib-future-productivity ISBN (online): 978-1-991316-44-8 **DECEMBER 2024**

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#### **Inviting your feedback**

The Ministry of Business, Innovation and Employment (MBIE) and the Ministry of Foreign Affairs and Trade (MFAT) are seeking written feedback on a proposed topic for their joint Long-term Insights Briefing (the Briefing) by 5pm on 31 January 2025.

You can make your submission by using the form provided at: www.mbie.govt.nz/ltib-future-productivity

- email to LTIB@mbie.govt.nz
- post to:

Economic Strategy and Insights
Ministry of Business, Innovation and Employment
PO Box 1473
Wellington 6140
New Zealand

Please include your name, the name of your organisation (if applicable) and email (or other contact details) in your submission. You may include information to support your views, for example references to research, facts and figures, or relevant examples.

Further information on how we intend to use your feedback and protect any private information are at the back of this document (Annex 1).

#### **Our questions**

**Question 1**: Do you agree that 'New Zealand's future productivity to 2050: Global trends, domestic factors, strategic choices' is a worthwhile topic for the joint MBIE-MFAT Briefing? Please explain why/why not.

**Question 2:** For this topic, are there particular questions you think the Briefing should explore?

**Question 3:** Which are the most important global trends that the Briefing should explore?

**Question 4**: Which are the most important domestic factors, including New Zealand's economic strengths, that the Briefing should consider?

**Question 5:** What are the most important interactions between global trends and/or domestic factors that the Briefing should explore?

**Question 6**: Is there any information, perspectives or methods that you recommend we include/use to develop the Briefing? Please provide details.

**Question 7**: Would you or the organisation you represent like to have more input into the development of the Briefing?

#### What is a Long-term Insights Briefing?

Departmental Secretaries/Chief Executives are required to publish a Long-term Insights Briefing ('Briefing') at least once every three years. This is a requirement in the Public Service Act 2020.

The purpose of the Briefing is to share:

- information about medium- and long-term trends, risks and opportunities that affect or may affect New Zealand and New Zealand society
- information and impartial analysis, including policy options for responding to these matters.

The Briefing is not government policy and is independent of ministers. It provides the chance to better understand and prepare for critical issues affecting our future.

Chief Executives select the subject matter for the Briefing. They do this by taking into account the purpose of the Briefing and those future trends, risks and opportunities that are particularly relevant to their department's functions.

Chief Executives must consult the public on the proposed subjects of their Briefings. This is the purpose of this paper. They must also consult the public subsequently on their draft Briefing.

The indicative timeline for the joint MBIE-MFAT Briefing is:

- December 2024 to January 2025: Consultation on the proposed topic
- February 2025: Start development of the Briefing
- ➤ March-May 2025: Engagement
- June 2025: Consultation on the draft Briefing
- September 2025: Completion of the Briefing
- October to November 2025: Select Committee hearing.

<sup>&</sup>lt;sup>1</sup> Further information on this requirement is available on the Department of the Prime Minister and Cabinet's website: <a href="https://www.dpmc.govt.nz/our-programmes/policy-project/long-term-insights-briefings">www.dpmc.govt.nz/our-programmes/policy-project/long-term-insights-briefings</a>

### Our proposed topic: New Zealand's future productivity to 2050: Global trends, domestic factors, strategic choices

The subject will explore how global trends, such as those related to geopolitics and technology, as well as New Zealand specific factors, including our economic strengths, might affect New Zealand's productivity performance over the next ten years, and through to 2050.

It will present strategic choices that should be considered, in the near term, say within the next four to five years, to improve New Zealand's productivity and associated outcomes such as living standards.

#### Why productivity?

Productive countries generally have wealthier populations, are better equipped to improve citizens' quality of life, and are more resilient in the face of economic challenges. As a measure for how efficiently inputs are converted into outputs, productivity is the biggest long-run determinant of wages and living standards.

#### New Zealand's productivity performance has lagged that of other advanced economies since the early 1970s

At an economy-wide level, New Zealand's labour productivity performance (as measured by output/GDP per hour worked) fell behind that of other advanced economies in the early 1970s. This marked the beginning of a long period of relative decline, with New Zealand's productivity levels continuing to diverge through to the mid-2000s.

Many factors have contributed to New Zealand's productivity performance, such as:

- low capital intensity (the amount of machinery and equipment per worker)
- low investment in research and development (R&D), innovation and managerial capability (knowledge-based capital)
- small population spread over a large geographic area, which means firms in many markets face weak competition and struggle to achieve scale
- distance from international markets, which means firms are not well connected internationally through trade and investment
- macroeconomic imbalances, such as low savings rate.

New Zealand's poor productivity performance reflects its structural composition, with a focus on low productivity sectors. Unlike other economies, our economy has not diversified to the same extent into new high-tech/knowledge-intensive export industries.

#### Since the early 2000s, many advanced economies, including New Zealand, have seen productivity growth slow and it is not clear why

There have been many explanations proposed for the slow-down, such as slowing diffusion of innovation and technology, and declining business dynamism (eg declining firm entry and exit, and increasing market concentration). <sup>2</sup> However, there is still much debate about how relevant these factors are, particularly in the New Zealand context.

#### Importantly, we don't know much about how New Zealand's productivity performance might change in the future

While we know much about New Zealand's past and current productivity performance, we have a more limited understanding of our likely future productivity performance. Our future productivity performance is likely to depend on the underlying drivers of our past and present performance, the impacts of global forces and trends and their interactions with New Zealand-specific factors, such as our geographic location and capabilities.

**Question 1:** Do you agree that 'New Zealand's future productivity to 2050: Global trends, domestic factors, strategic choices' is a worthwhile topic for the joint MBIE-MFAT Briefing? Please explain why/why not.

**Question 2**: Within this topic, are there particular questions you think the Briefing should explore?

#### Global trends, local impacts

There are many global trends that could affect New Zealand's future productivity performance. Below we outline four trends and their potential impacts on productivity that could be considered in the Briefing. These trends broadly align with those identified by the former New Zealand Productivity Commission (2024).<sup>3</sup> We are seeking feedback on whether these are the right trends to consider and if there are other trends we should explore.

#### Geopolitical change

We are seeing three 'Big Shifts' internationally that could fundamentally alter how New Zealand sees and shapes its place in the world:<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> The Treasury. (2024). *The productivity slowdown: implications for the Treasury's forecasts and projections*. <a href="https://www.treasury.govt.nz/publications/tp/productivity-slowdown-implications-treasurys-forecasts-and-projections">https://www.treasury.govt.nz/publications/tp/productivity-slowdown-implications-treasurys-forecasts-and-projections</a>.

<sup>&</sup>lt;sup>3</sup> New Zealand Productivity Commission. (2024). *Looking to the future: An enduring policy and research agenda to address Aotearoa New Zealand's productivity challenges.*<a href="https://www.treasury.govt.nz/publications/pcrp/looking-future">https://www.treasury.govt.nz/publications/pcrp/looking-future</a>. This report also considered social cohesion and public health as global trends that could impact on New Zealand's future productivity performance.

<sup>&</sup>lt;sup>4</sup> Ministry of Foreign Affairs and Trade. (2023). *Navigating a shifting world: Te whakatere i tētahi ao hurihuri*. <a href="https://www.mfat.govt.nz/en/media-and-resources/release-of-mfats-2023-strategic-foreign-policy-assessment-navigating-a-shifting-world-te-whakatere-i-tetahi-ao-hurihuri.">https://www.mfat.govt.nz/en/media-and-resources/release-of-mfats-2023-strategic-foreign-policy-assessment-navigating-a-shifting-world-te-whakatere-i-tetahi-ao-hurihuri.</a>

- A shift from 'rules to power': a period in which rules are more contested and relative power between states assumes a greater role in shaping international affairs.
- A shift from 'economics to security': with economic relationships being reassessed in a more securitised and less stable world.
- A shift from 'efficiency to resilience': where building greater resilience and addressing social and sustainability issues become more prominent drivers of economic behaviour.

A world with increased risk of conflict, geoeconomic fragmentation in response to geopolitical risks and rivalries, and the reconfiguration of supply chains and international connections, will likely weigh on New Zealand's economic growth in the long term.

New Zealand is one of the more exposed small advanced economies to global supply chain disruptions because of its geographic isolation, weak international connectivity, and lack of a domestic production base.<sup>5</sup> The product and market concentration of our trade profile could further increase vulnerability.

#### **Technology change**

The pace and scale of global technological developments are expected to increase in the period ahead, offering the potential to address problems including climate change and low productivity growth, but also creating new challenges and disruptions for communities, businesses, and governments. The global race for technological advantage closely intersects with growing geopolitical risks and rivalries.

Artificial Intelligence (AI) is an example of a technology that may have considerable effects on productivity in the coming years. Technological change tends to increase labour productivity over the long run. Yet in recent times, technological breakthroughs in information technology have not always been accompanied by the expected productivity growth.

In New Zealand, while technology has lifted productivity for some firms, its benefits have not been fully captured or shared broadly. Challenges we face that may negatively impact on our pace to adopt emerging technologies (relative to other advanced economies) include low absorptive capacity, limited international connectivity, and under-investment in R&D, both at a business and a government level.

#### Climate change

The physical effects from climate change—such as higher temperatures, sea level rise and extreme weather events—are already impacting economic and productivity performance. Impacts are expected to become more pronounced over time. Tipping points—such as ocean current convections—if reached, could have large and cascading effects. Physical climate impacts may create some opportunities to improve productivity, such as warmer temperatures improving yields of specific crops, but the

<sup>&</sup>lt;sup>5</sup> Skilling, D. (2022). Supply chains to the last bus stop on the planet: An international perspective on strengthening New Zealand's supply chain resilience. Wellington: Landfall Strategy Group. <a href="https://www.treasury.govt.nz/sites/default/files/2024-05/pc-inq-ier-supply-chains-to-the-last-bus-stop-on-the-planet.pdf">https://www.treasury.govt.nz/sites/default/files/2024-05/pc-inq-ier-supply-chains-to-the-last-bus-stop-on-the-planet.pdf</a>.

overall trend is negative. The burdens and benefits of climate change, mitigation and adaptation will not be distributed evenly between or within countries, likely contributing to global instability. Resource productivity, or the efficiency with which physical resources/materials are used, and recovery and reuse of resources, are becoming more important considerations for governments and businesses.

New Zealand's changing climate will likely negatively impact productivity due to disruptions to capital, supply chains and institutional stability, and reductions in labour productivity due to higher temperatures. The sectors most exposed to a changing climate are fisheries, agriculture, forestry, tourism, supply chains and energy.

New Zealand's transition to a low emissions economy could have either a positive or negative impact on future productivity performance, depending on how it is managed. Studies indicate that a more 'orderly' transition may lower productivity in some sectors in the short term, but is likely to have benefits to productivity in the medium to long term.

#### Demographic change

The global population is ageing. In 2018, the number of older people (aged 65 years and above) exceeded the number of young children (aged 5 years and below) for the first time. By 2050, the United Nations expects the number of older people to exceed that of adolescents and youth (aged 15 to 24 years). This trend is particularly pronounced in some advanced economies in Europe and East Asia. In contrast, some developing countries in South Asia, Latin America, the Middle East and North Africa will see larger working-age populations.

Consistent with the global trend in advanced economies, New Zealand's population is also ageing with the median age likely to reach 40 years in the early 2030s, up from 25.6 years in 1970.8 In addition, New Zealand faces specific demographic changes as its population is becoming more ethnically diverse. The Asian population is the fastest growing population group and is projected to be the largest non-New Zealand European ethnic group by the late 2020s.9

It is unclear how these global and New Zealand-specific demographic trends will affect our productivity performance. For example, the Treasury found that while ageing is expected to have a small negative impact on individual-level productivity due to a deterioration in cognitive abilities, it is difficult to make an overall assessment on the impact of ageing on labour productivity.<sup>10</sup>

<sup>&</sup>lt;sup>6</sup> New Zealand Productivity Commission. (2018). Low-emissions Economy. https://www.treasury.govt.nz/sites/default/files/2024-05/pc-inq-lee-productivity-commission-low-emissions-economy-final-report-final-2.pdf.

<sup>&</sup>lt;sup>7</sup> Bijnens, G., et al. (2024). *Occasional Paper Series: The impact of climate change and policies on productivity.* European Central Bank.

https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op340~0173592e52.en.pdf.

<sup>&</sup>lt;sup>8</sup> Statistics New Zealand. (2022). *National population projections: 2022(base)–2073.* <a href="https://www.stats.govt.nz/information-releases/national-population-projections-2022base2073/">https://www.stats.govt.nz/information-releases/national-population-projections-2022base2073/</a>.

<sup>&</sup>lt;sup>9</sup> Statistics New Zealand. (2021). *National ethnic population projections: 2018(base)–2043*). <u>National ethnic population projections: 2018(base)–2043 | Stats NZ</u>

<sup>&</sup>lt;sup>10</sup> Van Rensburg, M., et al. (2021). *Background Paper for the 2021 Statement on the Long-term Fiscal Position: The Economic Impacts of an Ageing Population in New Zealand*. The Treasury.

**Question 3:** Which are the most important global trends that the Briefing should explore?

#### Domestic factors, including economic strengths

As outlined above, global trends will interact with New Zealand-specific factors, including our geography, demography, culture, institutions, capabilities and economic strengths.

#### New Zealand has many economic strengths that have supported our productivity

Compared to other countries, New Zealand economic strengths include the following:11

- Persistent strengths in fundamental institutions (rule of law, low corruption), social capital and trust, natural environment and beauty, a climate conducive to agriculture and the reputation for being a constructive voice in international trade policy and international affairs.
- Strong capabilities in agriculture and biological sciences, and earth and environmental sciences. 12
- A comparative advantage in products directly or indirectly related to agriculture and international tourism, reflecting New Zealand's underlying strengths in these areas.<sup>13</sup>
- Close economic integration with our nearest, largest neighbour Australia through the Closer Economic Relationship / Single Economic Market agenda, which in turn has provided a platform for our economic relationships with the wider world.
- Unique strengths of Māori culture, Māori customary practices or behaviours (tikanga) and Māori knowledge (mātauranga).
- The values and culture of Pacific peoples and other diverse population groups.

How we build on these strengths to respond to the global trends will also determine our future productivity performance.

**Question 4:** Which are the most important domestic factors, including New Zealand's economic strengths, that the Briefing should consider?

https://www.treasury.govt.nz/publications/background/ltfs21-bg-economic-impact-ageing-population-nz#conclusion.

<sup>&</sup>lt;sup>11</sup> Pells, S. (2022). *New Zealand's areas of (economic) strength: A literature review*. Ministry of Business, Innovation and Employment. <a href="https://www.mbie.govt.nz/dmsdocument/18921-new-zealands-areas-of-economic-strength-a-literature-review">www.mbie.govt.nz/dmsdocument/18921-new-zealands-areas-of-economic-strength-a-literature-review</a>.

<sup>&</sup>lt;sup>12</sup> Ministry of Business, Innovation and Employment. (2021). *The Research, Science and Innovation Report – 2021*. Ministry of Business, Innovation and Employment. <a href="https://mbienz.shinyapps.io/research-science-innovation-report/pdf/research-science-and-innovation-system-performance-report-2021.pdf">https://mbienz.shinyapps.io/research-science-innovation-report/pdf/research-science-and-innovation-system-performance-report-2021.pdf</a>.

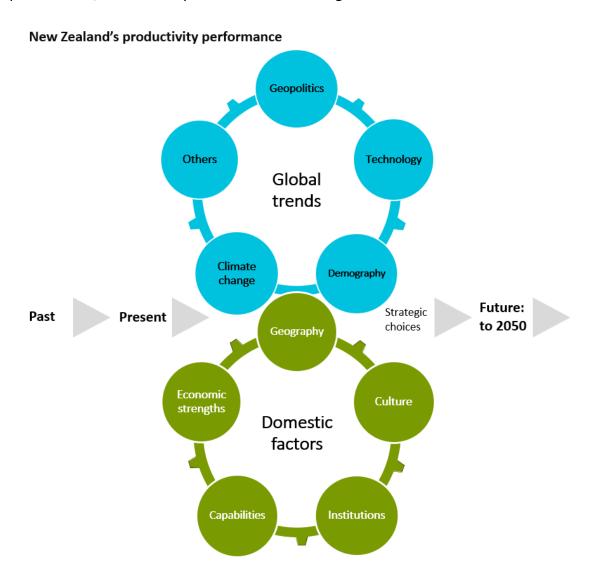
<sup>13</sup> Baigent, D. (2022). *New Zealand's Export Advantage: Composition and performance of New Zealand's comparative advantages from 1995-2018*. Ministry of Business, Innovation and Employment. <a href="https://www.mbie.govt.nz/dmsdocument/23289-nz-export-advantage-composition-and-performance-of-nz-comparative-advantages-from-1995-2018-pdf">https://www.mbie.govt.nz/dmsdocument/23289-nz-export-advantage-composition-and-performance-of-nz-comparative-advantages-from-1995-2018-pdf</a>.

#### Interactions of global trends and domestic factors

The Briefing will consider how global trends interact with each other and how they interact with domestic, New Zealand-specific factors, including our economic strengths (Figure 1). It is the combination of these factors that is likely to determine New Zealand's future productivity performance.

For example, geopolitical change and technological change are inextricably linked. As noted above, countries are adopting policies to protect their economic security by protecting their access to critical technologies and/or hindering access to these technologies by others. As also noted above, New Zealand's past and present productivity performance has been impacted by weak international connections through trade and investment and by the slow adoption of new technologies. Exploring the relationship between these historic trends and the global trends will build a more nuanced understanding of the implications for New Zealand's future productivity performance.

**Figure 1:** The Briefing will build understanding of New Zealand's future productivity performance, influenced by interactions between global trends and domestic factors.



Examples of the questions we propose to explore in this Briefing are as follows:

- How might global shifts and trends, in areas such as technology, geopolitics, demographics and climate change, influence New Zealand's productivity in the years ahead? Which one might be most impactful and how might they interact?
- How might the Australia-New Zealand Single Economic Market be harnessed to further drive productivity performance, including beyond the Trans-Tasman economic platform it provides into the wider—and rapidly integrating—region of Southeast Asia?
- How might New Zealand's past productivity performance and New Zealandspecific factors, such as our economic strengths, affect our future performance in the context of these global trends?
- Might New Zealand's productivity performance continue to lag, or could different patterns emerge?
- Which things distinctive to New Zealand (eg our economic structure, technological capabilities or Māori economy) might have the most important bearing (strengths or weaknesses) on productivity going forward?
- What are the choices that New Zealand could consider to strengthen productivity performance and the positive outcomes from this?

**Question 5:** What are the most important interactions between global trends and/or domestic factors that the Briefing should explore?

#### Strategic choices

There will be opportunities for the New Zealand government to shape and influence our productivity performance so that we are better able to address the challenges New Zealand will face over the medium to longer term. The Briefing will consider short- and long-term strategic choices for government, their pros and cons, and how other governments are responding. It will focus on policy domains related to the economy, trade and foreign affairs, and explore potential interventions in areas such as capital investment, science, innovation and technology, trade and international connections, and competition.

#### Scope and methods

The Briefing will use a mix of methods, indicatively:

- engagement with individuals and organisations to identify specialist and diverse perspectives about trends and their implications for productivity
- review of the existing evidence base (data and literature) on New Zealand's productivity, both retrospective and any forward-looking assessments
- review of existing international and/or New Zealand-specific evidence base on global trends and their potential future impact on productivity
- foresight techniques, to identify issues for more in-depth analysis and engagement, eg driver mapping, and to identify implications of trends, eg scenario analysis.

For the purposes of the Briefing, we will seek to understand productivity at the national, whole of New Zealand, level. In doing that, we may draw on evidence and insights about productivity at a worker, regional and firm level, and explore different facets or inputs to productivity, such as labour, capital and resources.

**Question 6:** Is there any information, perspectives or methods that you recommend we use to develop the Briefing? Please provide details.

#### **Next steps to develop the Briefing**

Following our consideration of the feedback on this consultation, MBIE and MFAT Chief Executives will confirm the subject of the Briefing, and the project team will progress the work to develop the Briefing. This will take place during the first half of 2025 and involve further engagement and analysis, and a second period of public consultation on a draft Briefing.

We will invite all individuals and organisations responding to the first consultation to contribute to the second public consultation on a draft Briefing. If you have further information you want to share with us ahead of this, please let us know.

**Question 7:** Would you or the organisation you represent like to have more input into the development of the Briefing?

#### Annex 1: Information use and privacy protection

#### Use of information

The information provided in submissions will be used to inform the Briefing. MBIE and/or MFAT may contact you directly if we need to clarify any matters raised in your submission.

#### Release of information

MBIE and MFAT intend to publish a summary of submissions received, plus the names of organisations/individuals that made a submission. Please indicate in your submission if you do not want your name published.

Submissions received are subject to requests under the Official Information Act 1982. Please set out clearly in the cover letter or e-mail accompanying your submission if you have any objection to the release of any information in the submission, and in particular, which parts you consider should be withheld, together with the reasons for withholding the information. MBIE and/or MFAT will take such objections into account and will consult with submitters when responding to any requests under the Official Information Act.

#### **Private information**

The Privacy Act 2020 establishes certain principles with respect to the collection, use and disclosure of information about individuals by various agencies. Any personal information you supply to MBIE and/or MFAT in the course of making a submission will only be used for the purpose of assisting in the development of the Briefing. Please clearly indicate in the submission template, cover letter or e-mail accompanying your submission if you do not wish your name, or any other personal information, to be included in any summary of submissions that we publish.

