

Achieving New Zealand's Productivity Potential



GDP growth in New Zealand is relatively strong. But while the economy is growing there are weaknesses which have persisted for decades and which have made the going harder than otherwise. Fortunately, the economy is in a position where we can turn our minds to these areas of persistent weakness. With this objective in mind, this overview summarises key messages from the New Zealand Productivity Commission's view of New Zealand's long-run productivity performance (Conway, 2016).

Higher productivity expands a country's set of choices. Productivity is a major driver of income growth and there is evidence in New Zealand that wages increase more rapidly when labour productivity growth is at its strongest (Conway, Meehan & Parham, 2015). Productivity is not just good for incomes. For example, more productive use of natural resources allows the same level of output to be achieved at lower environmental cost. By delivering more for less, higher productivity can also potentially increase the time available for leisure (Conway & Meehan, 2013).

There is a large body of research on New Zealand's economic and productivity performance (for example, MBIE, 2016a). Indeed it is well over 50 years since Conrad Blyth began his work measuring New Zealand's productivity (Blyth, 1961). The Commission's view draws on insights from this existing body of work as well as bringing two new sources of evidence to the table.

The **first** is new research using firm-level micro-data (the Longitudinal Business Database (LBD)). This dataset is a rich resource for understanding New Zealand firms and can provide a uniquely detailed view of their behaviour and performance across a broad range of topics (Fabling & Sanderson, 2016). Over recent years there has been a focus on how micro-data can transform thinking on social policy in New Zealand. The data on the firm side can be just as powerful.¹

The **second** source of evidence is the Commission's inquiries over the last five years in areas as diverse as service sector productivity, land supply, international shipping and trans-Tasman economic integration. These inquiries are based on a mixture of economic research and extensive consultation and provide an excellent insight into the state of play in important policy areas.

¹ Since 2014 Productivity Hub agencies (the New Zealand Productivity Commission, Ministry of Business, Innovation and Employment, Statistics New Zealand and the Treasury) have been jointly undertaking research using the Longitudinal Business Database (LBD). While the Hub agencies retain their independent interests, they felt that collaborating in this way would help them make the most of the opportunities the LBD provides to advance understanding of New Zealand's productivity issues and to ultimately improve policy (Nolan, 2014). As well as research on key themes this collaboration has supported the production of "foundational work" (for example, helping to codify the previously tacit knowledge held by LBD experts) to build capability with these data (Productivity Hub, 2016).

New Zealand faces an unusual set of challenges and opportunities (Skilling, 2001; MBIE, 2016a). But there is no reason to think that small OECD economies like New Zealand cannot be successful, it is just that the path to success may be different to that of larger or more central economies. This poses challenges on many levels, including for economic research. Models and assumptions which may be appropriate in other economies are sometimes less relevant in New Zealand. This is why data like the LBD, which can give detailed insights into what is happening with New Zealand firms, are so important.

Nonetheless, no single document can answer every question related to an issue as complex and broad as New Zealand's productivity. The Productivity Commission's commentary on productivity is a "living document" – as we learn more we will update our view. Not all of the questions we raise are simple to answer and there are clear gaps in our understanding. But the analysis and data provide fresh insights on the roles of government and firms in improving New Zealand's productivity performance.

The big picture

By delivering "more for less", productivity improvements are a key driver of sustainable income growth and the most important source of cross-country differences in per capita incomes. But a society can also lift incomes by working harder – that is, by increasing hours worked per person – or by getting higher prices for its exports in international markets. In New Zealand the labour market has been one of the most successful in the OECD at lifting employment and the terms of trade has, until recently, been elevated. As a result, since the beginning of the global financial crisis, per capita income growth in New Zealand has been among the strongest in the OECD.

In contrast to an impressive labour market performance – and notwithstanding a lift in the 1990s following economic reform – New Zealand's long-run productivity performance has been relatively weak. This is the main reason why per capita incomes are still below the OECD average, despite strong recent growth. With labour force participation expected to decline given population aging – productivity improvements will become increasingly important in driving income growth. Accordingly, a key economic challenge facing New Zealand is to successfully transition from a development model based on working more hours per capita to one that is focused on generating more value from time spent at work.

Statistics New Zealand data show that over the last three economic cycles (Table 1) labour productivity growth in the measured sector has slowed.² When looking at industries and not just aggregate performance, some parts of the economy have had reasonably good labour productivity growth, particularly the primary, goods-producing and a few services industries. But other parts of the economy have performed poorly, particularly large parts of the service sector. This is significant given the large and increasing share of employment accounted for by services (Productivity Commission, 2014).

² Statistics New Zealand's estimates for the measured sector exclude industries in which the growth of outputs is difficult to measure (such as health, education and other government services). In 2007, the measured sector covered 74% of the economy. This measured sector is available on a consistent basis from 1996.

Table 1 Sources of economic growth (average annual growth %, 1996-2015)

Economic Cycle	New Zealand (Measured Sector)		
	Output	Labour Inputs	Labour Productivity
1997-2000	2.8	0.0	2.8
2000-08	3.5	2.1	1.3
2008-14	0.9	0.1	0.9
1996-2015	2.6	1.2	1.4

Source: Statistics New Zealand

Moving on from the idea of a 'paradox'

New Zealand's productivity performance has been described as a paradox. This is because a country in which policy settings in many important areas appear at or close to best practice should have had a better productivity track record. Indeed, OECD research estimated that New Zealand's broad policy settings should have generated GDP per capita 20% above the average for advanced OECD countries.³ In fact, New Zealand was 20% or so below average (de Serres, Yashrio & Boulhol, 2014).

More recent research has allowed us to move on from this idea of a paradox. To illustrate, recent research has challenged three conventional explanations of New Zealand's productivity performance.

The first explanation relies on industry structure. Yet this dimension of the problem can only explain around a quarter to a third of New Zealand's productivity gap with countries like Australia and the United Kingdom (Mason & Osborne, 2007; Mason, 2013). Even if New Zealand had the same industry structure as these other countries our productivity gap would still be substantial. So the challenge is greater than a potential concentration of activity in industries with low productivity.

The second explanation is a geographic one. Factors include New Zealand's distance from trading partners and our small domestic markets. While there is truth in this the focus could shift to investigating how New Zealand firms are able to counter the consequences of distance. This highlights the importance of factors like the "servitisation of manufacturing" and digitisation of production, which blurs the line between manufacturing and services (Ryu et al., 2012). In some areas of economic activity international trade is becoming less constrained by geography (for example, the potential for trading output down fibre-optic cables).

Finally, culture is sometimes cited as an explanation, particularly New Zealanders' supposed preference for the "three Bs" (bach, boat, and BMW). But more powerful insights could come from research that allows us to understand, for instance, what in the current environment leads to business owners and operators deciding to limit their ambition to existing markets or firm size. With firm-level research on topics like barriers to export success it is increasingly possible to understand these underlying drivers.

³ This is the average of OECD countries for which data are available from 1970 to 2010, namely: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, UK and USA (Conway & Meehan, 2013).

The global productivity slowdown: a firm-level perspective

There has been growing international interest in a firm-level analysis of productivity growth (OECD, 2015). This is partly in response to the global productivity slowdown. In particular, the global slowdown has sparked a debate between technological optimists (“we are seeing a temporary blip”) and technological pessimists (“this is a sign of things to come”). In turn, this has highlighted three key forces that shape an economy’s productivity growth experience: pushing out the technology frontier, technology diffusion and the reallocation of people, physical resources and finance from lagging to leading firms.

These three productivity drivers can be better understood using firm-level data. These data allow researchers to move beyond looking at the performance of the “average” firm and to understand the distribution of performance and productivity dynamics across firms (Bartlesman, Haskel & Martin, 2008; Iacovone & Crespi, 2010; OECD, 2015).

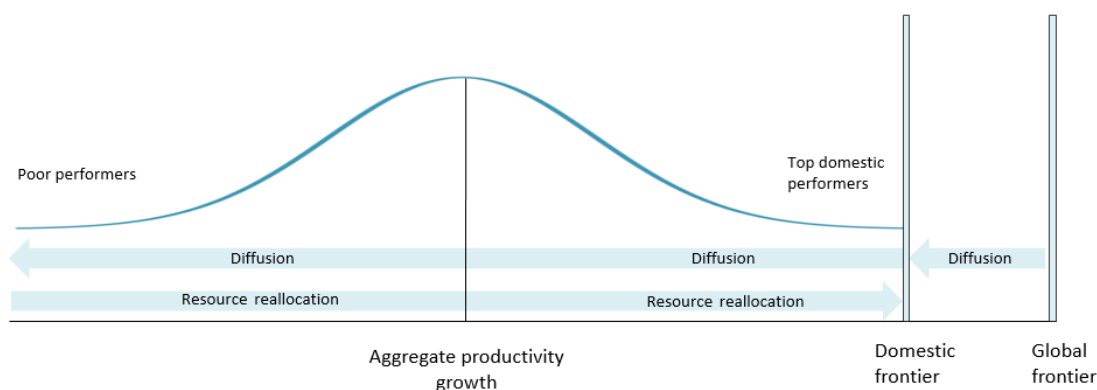
For example, technology diffusion occurs when leading New Zealand firms adopt new ideas and innovations developed by the world’s most productive firms operating at the global technology frontier. In turn, this paves the way for lagging New Zealand firms to adopt this technology, once adapted to local conditions.

But this is a sticky process and a lot can go wrong. During the 2000s, productivity growth for the world’s most productive firms was much stronger than for the laggards and substantial productivity gaps have opened up. Possible reasons include “winner takes all” dynamics and tacit knowledge that cannot be easily replicated. So while technological advance is happening at the global productivity frontier, the diffusion machine appears to be broken, especially across firms in the services sector (OECD, 2015).

Because technology diffusion is sticky, the reallocation of productive resources within the domestic economy is also a key productivity driver. Economies in which resources flow more easily from low-productivity to high-productivity firms enjoy higher aggregate productivity growth than economies in which allocation has stagnated across firms. This includes the ability of innovative firms to scale up while unproductive firms shrink and exit.

These drivers of firm productivity can be shown in the model in Figure 1. This model is stylised and so should not be seen as necessarily describing current firm productivity in New Zealand. The model shows the two key technology frontiers: the domestic one and the global one. There is a gap between the global frontier and the most productive domestic firms (the domestic frontier), and all the other firms in New Zealand can then be arranged by how close or far they are to the domestic frontier (giving a distribution of performance).

Figure 1 A stylised model of firm productivity



Source: Conway (2016) based on OECD (2015)

Characteristics of a low productivity equilibrium – disconnected and stuck

A few New Zealand firms operate at or close to the international productivity frontier. But firm-level data shows that the processes of diffusion and reallocation generally do not work as well as they could in New Zealand. Many domestic frontier firms are disconnected from the international frontier, laggard firms tend not to converge to the domestic frontier, and resources are stuck in a tail of small and unproductive firms.⁴

Even though there is significant potential for catch up in New Zealand – firms starting at a productivity disadvantage have greater scope for catch-up productivity growth – there is evidence that too few New Zealand firms are benefiting from new productivity-enhancing technologies and ideas developed at the global frontier.

While there are some very successful New Zealand firms, in most industries productivity growth in New Zealand's frontier firms has generally been well below that of global frontier firms. This suggests weak technology diffusion into the New Zealand economy and a lack of scale opportunities for high-productivity New Zealand firms.

In the domestic economy, there is some tendency for productivity spillovers from leading to lagging firms. However, these spillovers are less likely across firms in some service industries and the construction industry compared to firms in other parts of the economy. Many firms in these industries operate in small local markets insulated from competition and learning opportunities.

Another feature of firm dynamics in New Zealand is an impaired process of reallocation. From the perspective of the economy as a whole, the gains from an increase in a firm's productivity will be magnified when productive firms gain market share at the expense of less productive competitors. However, economies vary significantly in the degree to which this reallocation takes place. In New Zealand, although high-productivity firms are attracting more resources, a large share of employment and capital is still concentrated in firms with low productivity.

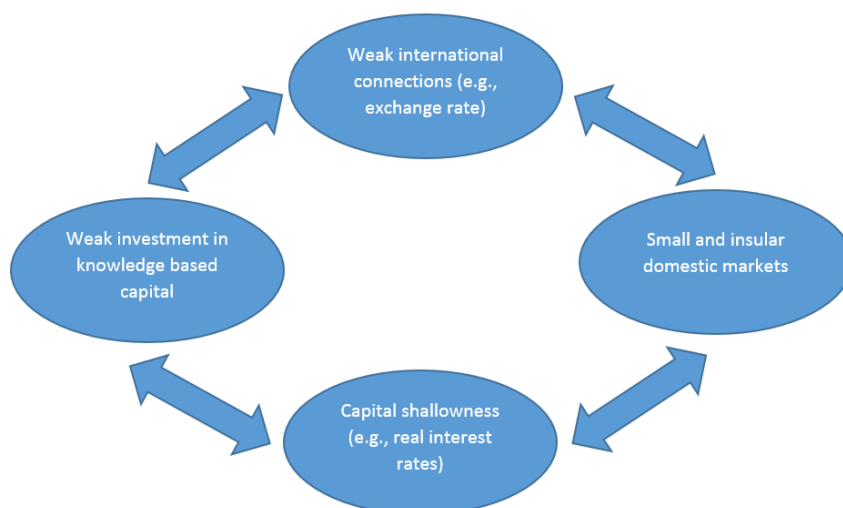
⁴ Frontier firms are defined as those with productivity levels in the top five percent of the distribution in each industry.

One indicator of impaired reallocation is a high proportion of small, old and unproductive firms who neither grow rapidly nor exit the market. Compared to other OECD countries, firms in New Zealand are born with few employees (Meehan & Zheng, 2015). If firms survive for ten years – which about 30% do – they exhibit slower growth than overseas counterparts. This is particularly the case for service-sector firms operating in small and insular regional markets.

This weak post-entry employment growth indicates a lack of “up or out” dynamics. In better connected or larger economies firms do not have much of a choice – they either grow or they exit in one way or another. Because this dynamic is less evident in New Zealand, there is a large share of small and old firms.

The next section of this paper discusses four important proximate causes of this impaired diffusion and reallocation in New Zealand: weak international connections; small and insular domestic markets; capital shallowness; and weak investment in knowledge-based capital. To some extent, these “economic drivers” keep the New Zealand economy in a low-productivity equilibrium (Figure 2).

Figure 2 Drivers of impaired diffusion and reallocation



Source: Conway (2016)

Driver 1: Weak international connections

In small economies access to international markets – through trade, investment, people and the flow of ideas – allows productive firms to grow and benefit from scale and specialisation while at the same time maintaining or even increasing competitive pressures. But as well as this, these international connections act as key channels for technology diffusion. This is particularly the case for firms that participate in global value chains (GVCs) – in which production processes are fragmented across countries.⁵

Compared to domestically focused firms New Zealand’s internationally connected firms have relatively high productivity levels and are larger than domestically-focused firms (Fabling et al., 2008). Exporting is also linked with innovation – over half of innovative businesses engaged internationally in 2011 compared with 27 per cent of non-innovators (Statistics New Zealand, 2011).

⁵ The global trading system has progressively expanded from a linear system connecting producers and consumers in different countries into a complex and sprawling producer network

However, despite being relatively open on paper, the New Zealand economy is not well connected internationally. Trade intensity (ratio of international trade to GDP) is low compared to similar-sized economies and New Zealand firms are poorly connected into global value chains (de Serres, Yashiro & Boulhol, 2014). Further, after a strong rise in the 1990s, the stock of foreign direct investment (FDI) as a share of GDP in New Zealand has grown more slowly than average and is now around the OECD median (Wilkinson & Acharya, 2013). And looking outwards, New Zealand firms have never been strong investors offshore.

Foreign-owned firms operating in New Zealand outperform domestic firms on almost all measures of performance, with higher capital intensity, higher average wages and higher labour productivity. But these results appear to reflect in large part foreign owners acquiring already high performing firms (Fabling & Sanderson, 2014). Acquired firms then exhibit relatively high growth in wages and output but do not appear to increase their productivity or capital intensity. There is also little evidence of positive productivity spill overs from foreign-owned to domestic firms.

As well as economic geography, there is also evidence that the exchange rate can make a difference. Fabling and Sanderson (2015) found that a 10% increase in the real bilateral exchange rate reduced average exports to that country by around 3% among committed exporters and slightly reduced the probability that firms began exporting to that country.

Driver 2: Small and insular markets

The challenge of remoteness to international markets and weak international connection is compounded by New Zealand's small domestic markets. A large share of employment is in firms that trade their output with customers located relatively close by. These locally-focused firms are mostly in services or construction, while firms in the primary and goods-producing industries are more likely to trade across the country in national markets.

Because the size of the market determines the size of the firm, New Zealand firms tend to be small and struggle to achieve economies of scale and specialisation. There is evidence that firms that operate nationally have better productivity outcomes than those that operate in smaller local markets. And, although only limited knowledge exists on competition in New Zealand, evidence suggests that small markets are also associated with weak competitive intensity.

Weak competition can also slow technology diffusion and hold back resource reallocation, particularly from the exit of unproductive firms. Resources get stuck rather than flowing to higher-productivity firms. Consequently a relatively long and persistent tail of productivity underperformance exists in New Zealand.

Driver 3: Capital shallowness

New technologies are often embedded in capital equipment. Hence, low investment in capital is likely to slow the diffusion of new technology into New Zealand. Across OECD countries, low capital intensity is associated with weak export growth – particularly exports of capital-intensive products – and a lack of export diversity. While firm investment choices may be consistent with the incentives they face, this may not necessarily lead to optimal aggregate investment. New Zealand business investment as a share of GDP is slightly below the OECD average.

But with low GDP per worker compared to leading OECD economies and fast population growth, investment per worker is likely to be lower still. In 2009 capital per hour worked in the market sector was estimated to be about 40% below that in Australia. This accounted for well over a third of the trans-Tasman gap in labour productivity (Mason, 2013). Earlier work had shown that capital per worker in New Zealand was well below that of the United Kingdom (Mason & Osborne, 2007).

There are a number of reasons for low capital intensity. First, long-term real interest rates are relatively high, contributing upward pressure to the cost of capital faced by firms and the real exchange rate. This suppresses investment and exacerbates the difficulties New Zealand firms face in accessing international markets, encouraging resources into the low-productivity non-tradable part of the economy. Although not well understood, high real interest rates may be related to an imbalance in the macroeconomy driven by strong migration-fuelled population growth in combination with low national savings.

In addition to macroeconomic conditions, the prevalence of small insular markets also suppresses investment because potential projects may not be large enough to fully exploit scale economies and justify investment. Because investment is often “lumpy”, firms selling their output into small insular markets generally operate at a lower level of capital intensity than firms serving larger more open markets. Fabling and Sanderson (2013) found that exporters’ entry to new markets is preceded by investment and capital deepening, which is consistent with a strategy of “gearing up” to serve a larger market.

The “off-the-shelf” cost of investment goods also appears high in New Zealand. In an exploration of the International Prices Comparison data, Gemmell (2014) reported that the price of investment goods – such as infrastructure and construction – was around 19% higher in New Zealand than the OECD average and 15% higher than in Australia. The cost of non-residential construction was estimated to be 22% above the OECD average. A weak productivity performance in the construction industry may be part of the explanation. The negative impact of a poorly performing construction industry extends well beyond the issue of housing affordability in major urban centres.

With a high cost of capital, a prevalence of small markets and firms, expensive capital and employment growth, it is not surprising that New Zealand firms opt to invest relatively little in capital and instead opt for labour intensive production methods.

Driver 4: Weak investment in knowledge-based capital

As well as investments in physical capital, investments in knowledge-based capital (KBC) are a major driver of productivity growth. KBC includes a range of intangible assets, such as software, research and development (R&D), product design, inter-firm networks and organisational know-how. Investment in intangible assets is rising and in several OECD countries even exceeds investment in physical capital (machinery and equipment). KBC is increasingly important in economies where new ideas and knowledge are key growth engines.

As well as being important in pushing out the technological frontier, KBC is also critical in helping lagging firms catch up. Adopting new technologies developed elsewhere requires hard work on the part of firms, including investing in the complementary assets and skills that are required to make the most of these technologies. If lagging firms

underinvest in these complementary assets they will struggle to adopt new technologies and lift productivity.

We do not know a great deal about KBC in New Zealand. The limited evidence suggests reasonable investment in some types of KBC, but with clear areas of underinvestment. For example, underinvestment in business R&D (BERD) and managerial capability negatively impact on the ability of firms to commercialise new ideas and absorb new technology created elsewhere.

As with investment in general, small markets are one explanation for low BERD and innovation in New Zealand – firms will be less likely to engage in risky and costly innovation when the final prize is a small New Zealand market (Wakeman, forthcoming). Consistent with this idea, New Zealand firms that operate in international markets innovate more than firms focused solely on the domestic economy. These internationally-connected firms also experience a larger productivity lift following innovation compared to domestically-focused firms.

As well as small markets, low BERD and weak commercialisation may also reflect weak firm capability. Getting innovation right is a major managerial challenge and the evidence is that management capability is relatively weak among New Zealand firms (Bloom, Sadun & van Reenen, 2016).

What would success look like?

In sketching out some of the broad policy considerations that might help in achieving New Zealand's productivity potential, it is useful to first consider what success could look like. Encouragingly, new opportunities for international engagement are opening up around knowledge-intensive products that can be traded down fibre-optic cables, and the global centre of economic gravity is also moving towards New Zealand's part of the world.

Most obviously, a successful New Zealand economy would be one in which the still substantial gaps in income and productivity vis-à-vis the more advanced OECD countries steadily close. This would require more global-productivity frontier firms to be operating in New Zealand, better diffusion of new technologies into and within the economy and greater competitive intensity to encourage productivity-enhancing resource allocation.

Achieving these objectives would mean increased international connection across New Zealand firms and much stronger growth in the tradables part of the economy as resources increasingly move towards globally integrated firms. The diversity of exports would continue improving as the economy progressively moves away from a "grow it-box it-ship it" strategy based on the agricultural sector and firms become increasingly integrated into high value-add parts of GVCs with fast-moving productivity frontiers.

New Zealand's science and innovation systems would increasingly produce and commercialise new ideas and technologies with high global visibility. And the skills system would be well integrated into the labour market and produce training well-matched to future jobs. New Zealand's macro imbalance would close, with the real interest rate premium falling, leading to less appreciation pressures on the real exchange rate.

Within the domestic economy, diffusion would improve, with firms and workers learning from frontier firms and lifting their productivity over time. New technology and ideas developed at the international and national frontiers would diffuse to lower-productivity firms in regional markets. More productive firms would grow and benefit from scale economies while poor performers would be more likely to shrink and exit as competition plays a bigger role in resource allocation. Capital intensity in the economy would increase.

Policy agenda

How could reform support a successful New Zealand economy steadily closing the income and productivity gaps with the rest of the world? Whereas the mid-1980s reforms enabled productivity-enhancing economic restructuring, the current challenge is to lock in dynamic gains from ongoing changes in technology and new opportunities for international connection.

This is not to say that New Zealand's broad policy settings are poor compared to other countries. Indeed, successive governments have improved important aspects of New Zealand's policy and institutional settings, which are often assessed as being highly supportive of productivity growth. For example, New Zealand ranks well in cross-country indicators of regulation and has a well-established monetary policy framework and relatively strong public finances. However, the productivity payoff from these policy settings has been disappointing. So while lifting productivity is a challenge in all economies, it is a particularly difficult one in New Zealand.

In some respects, New Zealand's policy challenge is different to what has been faced previously. With dramatic falls in the price of transmitting data over distance, a window of opportunity is opening for some firms to engage in new ways internationally. This trend is likely to continue given the "servitisation of manufacturing" and strong growth in digital products that can be marketed and delivered worldwide through fibre-optic cables. This is consistent with some promising signs in the New Zealand economy, such as increasing export diversity and a growing high-tech sector.

Building comparative advantage

Making the most of these new opportunities implies a reform agenda focused on skills, flexibility, openness and receptiveness to new technology. In addition to these important new challenges, some perennial concerns also remain. For example, how can policy facilitate scale and competition in a small and remote economy to improve resource allocation across firms?

In response to these challenges and opportunities, the Government has implemented a Business Growth Agenda (BGA) with the aim of building a more productive and competitive economy. The BGA is structured around six key themes: export markets, investment, innovation, skills, natural resources and infrastructure. In addition, there are three cross-cutting themes in the BGA: Māori economic development, regional economic development, and regulation.

The BGA is targeting key areas in which improvements in policy and performance would help break the economic feedback loops that have constrained New Zealand's long-run productivity performance. Importantly, the BGA is also subject to an annual refresh that helps encourage an evaluative culture, meaning that it can adjust in response to improving knowledge of the New Zealand economy.

There are a number of ways in which the BGA can be strengthened to help achieve its objectives of a more productive and competitive economy. To summarise, Table 2 outlines five broad policy areas in which some fresh thinking could help New Zealand firms build comparative advantage to make the most of new opportunities and improve their performance more generally. The table also includes an indicative research agenda that would help build an evidence base to support any policy changes in these areas.

While by no means a complete agenda, the suggested areas for reform are based on our current understanding of the broad reasons for New Zealand's generally poor long-run productivity performance. As knowledge of New Zealand's productivity issues improves, this list of associated policy considerations will naturally evolve. Much more detail on the rationale for these policy areas is given in Conway (2016).

Table 2 Broad policy considerations to improve productivity growth

Objective	Policy considerations	Research questions
Improve international connection	<ul style="list-style-type: none"> Emphasise digital products in a refreshed trade strategy Minimise "behind the border" trade barriers via improved international policy coherence (ongoing) Review tariffs and the FDI regime Reduce trade frictions at the border 	<ul style="list-style-type: none"> Assess the impact of CER/SEM on firm performance Develop understanding of promising areas for FDI
Lift the contribution of innovation and science	<ul style="list-style-type: none"> Focus on thematic research areas with high global visibility Consider other forms of innovation support (eg, prizes) Develop policies on digital technologies Encourage better links between researchers and firms Ensure policy does not overly punish failure Better match savings to productive investments 	<ul style="list-style-type: none"> Better understand the impact of innovation support on firm performance Research the impact of financial constraints on firm performance Assess to private-sector funding for innovation
Enhance labour market performance	<ul style="list-style-type: none"> Skills matching: ensure the education system is responsive to labour market trends (NZPC, 2016) Housing: ensure affordable housing in productive cities (NZPC, 2012; NZPC, 2015; NZPC 2016) Migration: target very high-skilled and well-connected migrants 	<ul style="list-style-type: none"> Better understand the impact of migration on the labour market and macro economy
Lift competitive intensity (services)	<ul style="list-style-type: none"> Reform the Commerce Act and give the Commerce Commission the power to do market studies (NZPC, 2014) Review occupational regulation with the aim of removing anti-competitive entry barriers and conduct regulation Reduce switching costs (NZPC, 2014) Remove the shipping exemption from the Commerce Act and improve the logistics chain (NZPC, 2012) 	<ul style="list-style-type: none"> Research spatial productivity and the impact of geography on competition Research the links between firm scale and competition Assess the impact of infrastructure on productivity
Build policy capability (regulatory stewardship)	<ul style="list-style-type: none"> Improve implementation of better regulatory management (NZPC, 2014) Enhance the use of evidence in policymaking 	

Notes: The list of policy considerations in this table are indicative and based on the broad constraints to lifting productivity described in Conway (2016). The references in the table indicate policy areas in which the Productivity Commission has previously done an inquiry. The "Research questions" column outlines associated research projects that would provide useful input into policy development. These research questions are a subset of the Productivity Hub's broader research agenda. More details on this agenda can be found in Productivity Hub (2016).

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