

# New Zealand's international trade in services: A background note

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# **Abstract**

This research note draws together information on New Zealand's international trade in services and was prepared as background information for the Productivity Commission's inquiry into 'Boosting productivity in the services sector'.

Services account for an increasing share of international trade. Like goods trade, services trade can increase productivity through greater specialisation, agglomeration, competition and technological diffusion. There are importance differences, however, between the nature of services and goods trade. While goods trade typically involves the transportation of merchandise across borders, services trade often entails the cross-border movement of labour and investment.

Like other countries, the importance of international trade in services to New Zealand has grown over time. However, New Zealand's ratio of service trade to GDP remains low compared with other small OECD countries. Moreover, while the importance of New Zealand's commercial services trade has been growing, travel and transportation continue to account for a large share of New Zealand's services trade. New Zealand's services trade also remains focussed on traditional trading partners such as Australia and the United Kingdom, while Asia has become a more important part of New Zealand's goods trade. These factors suggest that there is plenty of scope for services to contribute to the New Zealand Government's goal of increasing the ratio of exports to GDP from 30% to 40% by 2025.

Trade liberalisation in services is more difficult than with goods due to the importance of labour and capital mobility and the associated behind-the-border restrictions. According to World Bank indicators, New Zealand has a low level of services trade restrictiveness, although there are some (unexplained) discrepancies between the World Bank indicators and relevant OECD Product Market Regulation indicators.

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# **Key points**

- Global trade in services has grown faster than trade in goods over the last few decades.
   Consistent with the increasing importance of global value chains, growth in world trade in producer services (such as computer and information services, financial services and other business services) has been particularly strong.
- The importance of services trade to New Zealand's economy has also increased over time. Service exports as a share of total exports have increased from 5% in 1951 to 23% in 2012. Service imports as a share of total imports have increased from 17% in 1951 to 25% in 2012.
- New Zealand's share of service exports to total exports is similar to the OECD level. However,
  if travel and transportation are excluded from service exports, New Zealand's services share of
  total exports falls below the OECD average. New Zealand's services imports as a share of
  total imports is similar to the OECD level whether or not transportation and travel are
  included.
- It is more relevant, however, to compare New Zealand to other small developed countries rather than the OECD average, and by this metric, New Zealand's ratio of services trade to GDP is low.
- OECD countries account for a greater share of world service exports than world goods
  exports, consistent with the notion that services trade gains prominence in economies as per
  capita incomes increase. While New Zealand accounts for about one-twentieth of a
  percentage point of world goods exports, it accounts for a slightly higher one-quarter of a
  percentage point of world service exports. New Zealand's share of world service exports has
  been decreasing over time, to about the same extent that the OECD's share has been
  decreasing.
- Travel and transportation are the major components of New Zealand's services export profile, accounting for about two-thirds of service exports, reflecting a large tourism sector and New Zealand's geographic isolation. Internationally, New Zealand's level of commercial services<sup>1</sup> (which includes producer services such as finance and communications) exports is low.
- Although New Zealand's level of commercial service exports is low, it is a growth area, with both the value of commercial service exports and its share of total service exports increasing over time.
- While New Zealand's goods trade has become more focussed on Asia, services trade is
  predominantly with traditional trading partners such as Australia and the United Kingdom.
  The focus on traditional trading partners is likely to reflect New Zealand's key investment
  relationships as well as less significant differences in regulatory settings and lower cultural
  barriers.
- Cross-border supply (mode 1) accounts for 86% of New Zealand's commercial service exports. The movement of natural persons accounted for 12% (mode 4), and overseas customers travelling to New Zealand accounted for 3% (mode 2). Although comparable international data are not available, the mode 1 share seems high, and it is possible that New Zealand's international connections and networks lack sufficient depth to facilitate trade via modes 2 and 4.
- Service exporting firms are, on average, larger, have higher levels of labour productivity and

<sup>&</sup>lt;sup>1</sup> Services excluding travel, transportation and government services n.i.e.

<sup>&</sup>lt;sup>2</sup> Data on mode 3 are not available.

are more likely to have some foreign ownership than other firms. Firms that export services tend to focus on fewer overseas markets than firms that export goods, which may suggest that the sunk costs of entering a new export market for services is higher than for goods.

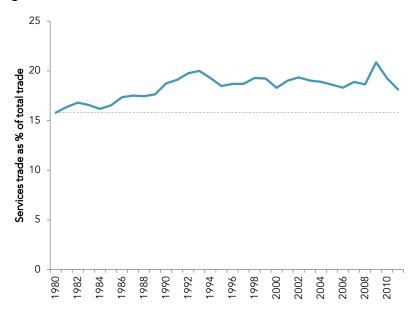
- While data on the sale of services through foreign affiliates are not available, FDI and ODI stocks can be used as proxies. New Zealand's level of ODI is low, and growing at a slower rate than FDI stocks. Australia is New Zealand's main source of FDI, as well as the main destination for New Zealand's ODI.
- International goods trade typically involves the transportation of merchandise across borders.
   In contrast, due to the proximity burden, flows of labour and foreign investment are potentially more important in services trade. The different modes of supply in services trade mean that behind-the-border factors will be even more important than in the case of goods.
- According to World Bank indicators, New Zealand has a low level of services trade
  restrictiveness. However, while New Zealand ranks favourably on modes 1 (cross-border
  trade) and 3 (foreign affiliates) services trade, it is closer to the OECD average for mode 4
  (movement of people). It is unclear why the World Bank mode 3 indicator ranks New Zealand
  favourably compared with other OECD countries while the OECD Product Market Regulation
  indicators rank New Zealand as having the most restrictive FDI regulations in the OECD.

# 1 Introduction

The nature of international trade has changed in recent decades. Traditionally, trade mostly entailed an exchange of goods. Now it increasingly involves the trade of tasks, where different bits of value are added in different locations, facilitated by advances in producer services such as transportation and communications. This has resulted in a boom in "offshoring" of not only manufactured goods, but also services.

Services are the fastest growing components of global GDP, and international trade and foreign direct investment in services have grown faster than in goods over the last couple of decades (Mattoo & Stern, 2008). The value of world services<sup>3</sup> trade in 2011 was \$US4.17 trillion, or 18% of total world trade, up from 15% in 1980 (World Trade Organisation, 2012) (Figure 1).<sup>4</sup> However, these figures are subject to substantial limitations and are likely to underestimate the true significance of services trade (see Box 1). The share of services increases to almost half of total trade if transactions are measured in terms of direct and indirect value-added content. That is, if trade is measured in terms of the value that is added by processing imported components into final products for export as opposed to measuring trade flows on the basis of the gross value of goods crossing the border (Escaith, 2008). If the sale of services by foreign affiliates of multinational firms is also added, the value of international trade in services rises further.<sup>5</sup>

Figure 1 World services trade to total world trade, 1980-2011



Source: World Trade Organisation

#### Notes:

- 1. Services trade excludes government services not included elsewhere (ie, is equal to the WTO definition of 'commercial services')
- 2. Total trade is equal to services trade (excluding government services n.i.e) and merchandise trade.
- 3. World trade is the sum of world exports and imports. While in theory these should be equal, there are slight discrepancies in measurement.
- 4. Data are based on extended Balance of Payments statistics, so only services trade between residents and non-residents are included. That is, sales of services through foreign affiliates (mode 3) and the stay of natural persons for more than a year are not included. Therefore, the contribution of services trade to total trade is likely to be underestimated.

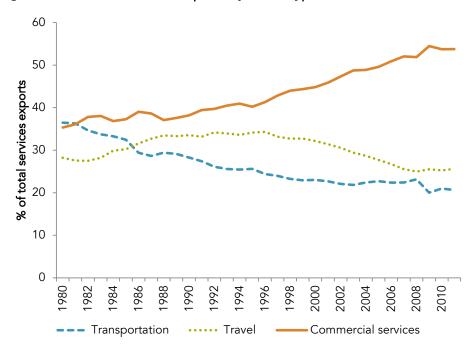
<sup>&</sup>lt;sup>3</sup> This refers to commercial services. The WTO definition of commercial services is total services excluding government services not elsewhere included. The WTO definition of 'other commercial services' is commercial services excluding transportation and travel. This differs slightly from the Statistics New Zealand definition of 'other commercial services', which also excludes insurance. Throughout this note the term 'commercial services' refers to either the WTO or Statistics New Zealand 'other commercial services' category.

<sup>&</sup>lt;sup>4</sup> These figures are based on extended balance of payments information, which does not include mode of supply 3 – that is, sales of services through foreign affiliates.

<sup>&</sup>lt;sup>5</sup> For countries that have foreign affiliates trade statistics (FATS) available, outward FATS was \$3.3 trillion in 2009 (World Trade Organisation, 2012).

Trade in commercial services has been a growth area internationally over the last few decades (Figure 2). Consistent with the increasing importance of global value chains, within the broad category of commercial services there has been strong growth in world exports of producer services over the 2000s, such as: computer and information services, financial and insurance services, royalties and licence fees, other business services, and communication services (World Trade Organisation, 2012).

Figure 2 World services exports by broad type, 1980-2011



Source: World Trade Organisation

#### Notes:

1. Commercial services consist of services excluding government services n.i.e, travel and transportation. Unlike the Statistics New Zealand definition of commercial services, it includes insurance services.

This note looks at the theory of international trade in services and what makes it different from trade in goods (Section 2). It then looks at the profile of New Zealand's international services trade, including high-level trends and how these compare with other countries (Section 3). Additional measures of services trade are examined, including foreign investment and trade in value-added (as opposed to gross value) (Section 4). Services regulation and trade liberalisation, including an initial examination of services trade restrictiveness indicators are also examined (Section 5).

#### Box 1 Services trade data: Measurement issues

Data on international trade in services are poor compared with data on trade in goods. This is because detailed data on goods trade flows exist because these flows are usually taxed. In addition, cross-border trade is not necessarily the most important mode of supply for services, and the sales of services by foreign affiliates (mode 3) are particularly hard to capture.

Most of the data in this note is based on Balance of Payments information, which excludes sales of foreign affiliates, and is therefore likely to underestimate the true value of services trade. Sales of foreign affiliates may be a large source of services trade. For example, analysis of firm-level data shows that the majority of the United States' international services transactions are through foreign affiliates sales (Christen & Francois, 2009).

Another limitation of traditional trade data is that it measures the gross value of traded goods

and services. In contrast, trade in value-added estimates the sources (by country and industry) of the value that is added in producing goods and services for trade. It recognises that the growing importance of global value chains means that a country's exports increasingly rely on significant intermediate imports. For example, a mobile phone exported by China may include United States design services and software programming services from France. Therefore, gross value in trade data may overestimate the importance of exports to GDP, particularly for countries that use a lot of imported inputs in order to produce exports. Gross value trade data may also underestimate the importance of services trade relative to goods trade, and value-added in trade data can also provide information on the value of services embodied in traded merchandise goods.

# 2 Differences between goods and services trade

The theory of why trade in services is economically beneficial is broadly the same as the theory behind the benefits of trade of goods: exploiting comparative advantage and gains from specialisation arising from increasing returns to scale or agglomeration effects and the cross-border diffusion of ideas and technology. However, services are intrinsically different in their nature from goods, leading to variation in the degree to which different services are tradable.

## 2.1 Proximity burden

What makes services trade different from goods trade? The traditional view is that services are subject to proximity burden. Since services are intangible, invisible and often require simultaneous production and consumption – that is, they are a flow and therefore cannot be stored – proximity of the customer and seller is more important than with goods trade. This proximity burden led to services being traditionally classed as 'non-tradable'.

Of course, in reality, the degree of tradability of services varies and improvements in technology have progressively weakened the proximity burden for some (but not all) services. For example, an architect's designs stored electronically are visible, tangible and storable, and can be delivered, for example, via e-mail. On the other hand, haircuts are the quintessential example of a locally delivered, non-tradable service.

While some services can be delivered remotely, others require the supplier to move to the buyer's location, or the customer to move to the supplier's location. The movement of the supplier could involve the flow of capital through foreign direct investment (FDI), or labour, or both (see Box 2). The proximity burden means that a local presence is often more important, and sometimes plays a different role than with goods trade. FDI tends to be important for services trade as it establishes local networks and proximity between buyer and seller, whereas in manufacturing, FDI tends to focus more on lowering costs of production by taking advantage of cross-country differences in factor costs (Fillat-Castejón, Francois, & Woerz, 2009).

<sup>&</sup>lt;sup>6</sup> Conway & Zheng (2014) examines the degree to which different services are traded domestically, providing an indication of services are, in principle, internationally tradable.

#### Box 2 GATS modes of supply

Services trade often requires the proximity of consumer and producer, implying that one of them must move to make an international transaction possible. Since the conventional definition of trade – where a product crosses a border – would miss a range of international transactions, the World Trade Organisation General Agreement on Trade in Services (GATS) recognises four modes of supply:

- Mode 1: Direct cross-border trade in services, ie, the supplier and consumer interact from a distance. For example, a New Zealand firm exporting software services to a customer in Australia via electronic means.
- Mode 2: Movement of the customer to the country of the provider (consumption abroad).
   For example, New Zealand exports education services when international students study in New Zealand.
- Mode 3: Sales of services through a foreign affiliate or branch (commercial presence). For example, New Zealand imports finance services from Australian banks.
- Mode 4: Movement of persons to provide services (presence of natural persons). For example, a New Zealand property developer importing architectural services from a United Kingdom firm where the United Kingdom employees move temporarily to New Zealand to work on the project.

# 2.2 What might the proximity burden mean for New Zealand?

The proximity burden is particularly relevant for New Zealand as a small economy that is distant from world markets. While global supply chains have become more fragmented, New Zealand is not as integrated into international markets as a number of other OECD countries are, and is often at the beginning or end points of a supply chain. This is consistent with New Zealand's high value added as a percentage of gross exports. That is, New Zealand's exports contain a low level of imported inputs compared with other countries (Figure 3).

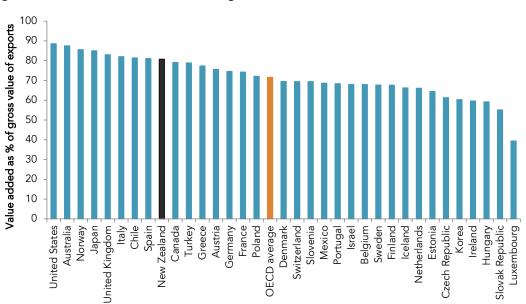


Figure 3 Value added in trade to gross value in trade, OECD countries, 2009

Source: OECD-WTO value added in trade database

Physical distance per se is potentially less important in services trade than goods trade, particularly for the services where the proximity burden has been mitigated or overcome by technological improvements. That is, while distance and the resulting transport costs matter for goods trade, it is not a barrier for services that are amenable to cross-border trade. Instead, the quality of communications technology is more important.

However, while physical distance may not be a barrier to mode 1 services trade, New Zealand's distance to markets is likely to have negatively impacted on its degree of international connectedness. <sup>7</sup> It is estimated that over half of New Zealand's productivity gap relative to the OECD average can be explained by weaknesses in its international connections, reflected in limited participation in global value chains and reduced access to large markets (de Serres, Yashiro & Boulhol, 2014). This lack of integration into the global economy may be particularly detrimental for service exports since they are likely to require deeper connections than goods exports. For example, reputational effects may be more important due to information asymmetries; the proximity burden may require, for instance, the establishment of a foreign branch; and the greater degree of regulatory heterogeneity across countries in services may increase the fixed costs of compliance.

The sunk costs of exporting may be a greater barrier for firms operating from a small, distant country (Simmons, 2004). New market entry incurs a variety of sunk costs, such as investment in market information, marketing, networks and distribution chains. Distance makes it more difficult to establish overseas networks and gather market intelligence. New Zealand's small domestic market also means that, in order to expand, firms may have to export earlier in their lifecycles than firms with a larger domestic customer base who are more able to achieve scale before incurring the fixed costs of exporting. While this argument can be made for both goods and services exporters, it may be more important for services exporters, as the fixed costs of exporting may generally be higher for services than for goods due to the need for deeper connections.

On the import side, New Zealand is not well integrated into global supply chains and distance acts as a barrier to information flows. These factors limit the opportunities for knowledge and technology transfer. The limited scale of our domestic market may also act as a deterrent to international businesses entering the New Zealand market. Given the fixed costs of exporting to a new market, international firms may be more reluctant to incur these costs for a relatively small market. This may limit import penetration and competition in local markets. This also highlights the importance of lowering these fixed costs, for example, through improvements in regulatory settings.

# 2.3 Why is services trade liberalisation different?

Trade liberalisation in services is more difficult than with goods. Foreign investment and labour mobility are important for services trade, meaning that domestic regulations in these areas are important. In addition, services industries are often highly regulated. These factors mean that cross-country heterogeneity of domestic regulations is particularly important for services, and these behind-the-border factors mean that simple trade liberalisation rules that work for goods trade are not options for services trade liberalisation (see Section 5 for further discussion of services trade liberalisation).

Different countries have developed different domestic regulations to respond to potential market failures in services industries and to achieve particular policy objectives leading to regulatory heterogeneity across countries. This heterogeneity is an important issue because the cost of complying with varying regulations across different jurisdictions is potentially high for a firm entering a new market. For example, the OECD has estimated that regulatory heterogeneity has a large impact on mode 3 (foreign affiliate) trade. If all countries either harmonised or recognised each other's regulations, the OECD estimates that total services mode 3 trade could increase by between 13% and 30% depending on the country. For New Zealand, this figure is estimated to be at the lower end of the scale (just under 20%), but this is still a significant amount (Nordås & Kox, 2009).

 $<sup>^{7}</sup>$  For a discussion of the extent of New Zealand's international connectedness, see New Zealand Treasury (2009).

# 3 Profile of New Zealand's services trade

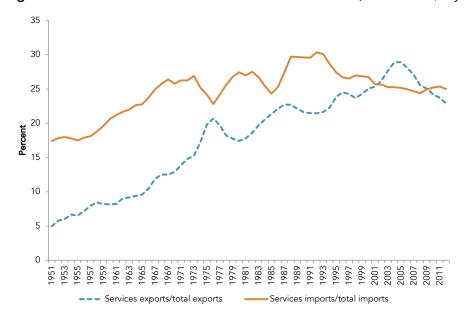
The section looks at the trends and patterns in New Zealand's international trade in services, compares New Zealand with other OECD countries, and takes a brief look at the characteristics of New Zealand's services exporters. Most of the data presented here is based on Balance of Payments information, which excludes sales of foreign affiliates (mode 3) and therefore underestimates the true value of services trade (see Box 1).

## 3.1 Aggregate trends over time

The importance of international trade in services to New Zealand has grown over time. While services trade accounted for just 5% of New Zealand's total exports in 1951, this had grown to 23% by 2012 (Figure 4). Given that services have become more prominent in the economy over time this increase in the services share of exports is unsurprising, but service exports have actually grown faster than services as a share of GDP. That is, the share of service exports to services GDP has increased over the last few decades from about 7% in 1972 to about 12% in 2010 (Figure 5b). The share of goods exports to goods GDP, however, has increased at a faster rate, from 33.5% in 1972 to 79% in 2010 (Figure 5a).

The share of service imports to total imports started from a higher level and has also grown, but to a lesser extent (from 17% of total imports in 1951 to 25% in 2012) (Figure 4). The growth of service imports has been a little slower than the overall growth of services as a share of economy over the 1972 to 2010 period, and service imports to services GDP has decreased from a high point in the early 1980s (Figure 5b). This decrease in the ratio of services imports to services GDP contrasts with the continual rise in the ratio of goods imports to goods GDP (Figure 5a). On the face of it, this decreased ratio for services imports indicates that the New Zealand services sector has been exposed to decreasing levels of international competition since the early 1980s.

Figure 4 New Zealand's services trade to total trade, 1951-2012, 3-year moving average

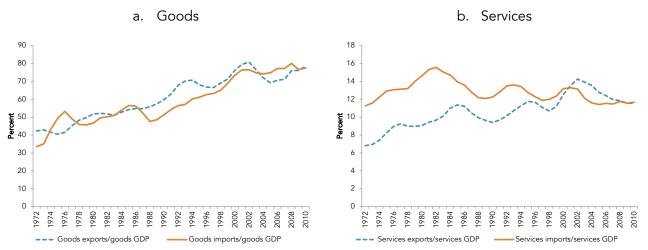


Source: Statistics New Zealand Balance of Payments

Notes:

 The data are compiled using the International Monetary Fund's Balance of Payments Manual 4<sup>th</sup> Edition (BPM4) prior to 1988 and the Balance of Payments Manual 5<sup>th</sup> edition (BPM5) post-1988. For the years where both BPM4 prior to 1988, and BPM5 post-1988.

Figure 5 New Zealand's trade to GDP for goods and services, 1972-2010, 3-year moving average



Source: Statistics New Zealand Balance of Payments; Statistics New Zealand National Accounts (Industry Benchmarks)

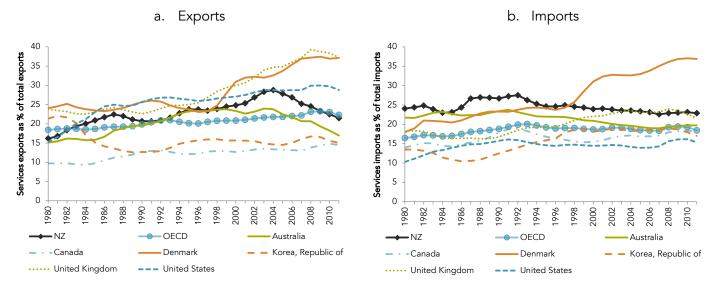
Notes:

1. 'Goods' GDP is primary plus manufacturing sector GDP.

Although the data are available over a shorter time period, New Zealand's services trade as a percentage of total trade can be compared with other OECD countries. For the OECD, service exports as a percentage of total exports have increased slightly over time, from about 18% in 1980 to 22% in 2011. New Zealand's level of service exports to total exports also has a generally upward trend, although it has decreased in recent years (possibly due to agricultural exports responding to high commodity prices), and is now similar to the OECD level (Figure 6a). Australia's service export share of total exports was similar to New Zealand's in the mid-1990s, but has been lower in recent years, possibly due to the minerals boom, which has had a much bigger impact on Australia's commodity prices than the increase in agricultural product prices has had on New Zealand. The United Kingdom, with its large financial services sector, has a high level of service exports to total exports, as does Denmark, reflecting its large volume of transportation exports (most likely due to Maersk). South Korea, with its focus on manufactured exports, is below the OECD level (Figure 6a).

For OECD countries, the share of service imports as a percentage of total imports has also increased slightly over time, from about 16% in 1980 to 18% in 2011. In contrast, the services share of New Zealand's imports has decreased from a high point in the late 1980s to early 1990s, but remains above the OECD level (Figure 6b). This decrease in the services share of New Zealand's imports was mainly due to much faster growth in goods imports rather than a decrease in the growth rate of service imports. Australia has also experienced a decreasing trend.

Figure 6 Services trade to total trade for selected countries, 1980-2011, 3-year moving average



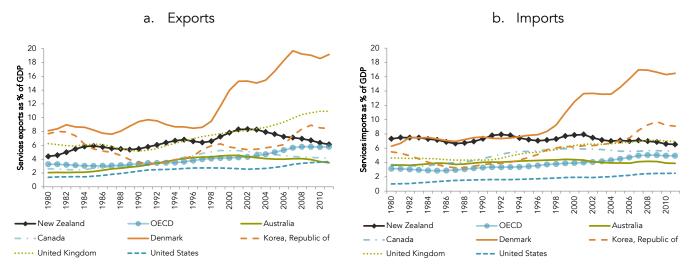
Source: World Trade Organisation

#### Notes:

- 1. Uses New Zealand's exports to/imports from the rest of the world. Likewise, the OECD figures are exports to/imports from each OECD country to the rest of the world.
- 2. Analysis is limited to the 25 OECD countries for which data are available for the entire 1980-2011 period. The 'OECD' series is a weighted average for the 25 countries.
- 3. 'Services trade' refers to 'Commercial services trade' as defined by the WTO. Commercial services are equal to services minus government services, n.i.e. It includes: transportation services, travel and other commercial services. Total exports (imports) are the sum of total merchandise trade and commercial services.
- 4. Data does not include mode 3 services trade. That is, local delivery of services through foreign affiliates. Thus, it is likely to underestimate the true share of services trade.

New Zealand's level of service exports to GDP is also similar to other OECD countries. For large countries, the service exports to GDP ratio tends to be lower relative to the OECD average than the ratio of service exports to total exports. For example, while the United States' share of service exports to total exports is above the OECD average, its share of service exports to GDP is below the OECD average because its large domestic market means that it does not trade as much as smaller countries (Figure 7a).

Figure 7 Services trade to total GDP for selected countries, 1980-2011



Source: World Trade Organisation and OECD

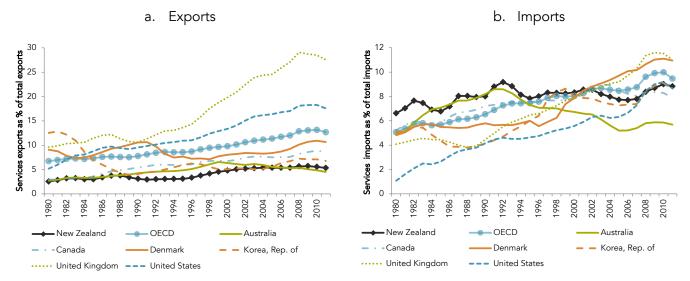
#### Notes:

- 1. Uses New Zealand's exports to/imports from the rest of the world. Likewise, the OECD figures are exports to/imports from each OECD country to the rest of the world.
- 2. Analysis is limited to the 24 OECD countries for which data are available for the entire 1980-2011 period. The 'OECD' series is a weighted average for the 24 countries.
- 3. 'Services trade' refers to 'Commercial services trade' as defined by the WTO. Commercial services are equal to services minus government services, n.i.e. It includes: transportation services, travel and other commercial services. Total exports (imports) are the sum of total merchandise trade and commercial services.
- 4. Data does not include mode 3 services trade. That is, local delivery of services through foreign affiliates. Thus, it is likely to underestimate the true share of services trade.

New Zealand's position relative to other OECD countries worsens if trade in services excluding travel and transportation is examined. New Zealand's ratio of services excluding travel and transportation to total exports is below the OECD average (5% versus 13% in 2011). New Zealand's level is similar to Australia's (4%). The OECD share has increased from about 7% in 1980 to 12% in 2011, while the New Zealand share increased from 2% in 1980 to 5% in 2011 (Figure 8a).

If attention is restricted to service imports excluding travel and transportation, New Zealand is still on par with the OECD in terms of the share of service imports in total imports (about 9% in 2011). However, New Zealand's share was comparatively high in 1980, and has grown more slowly than the OECD total, and much more slowly than countries such as the United States, Denmark and the United Kingdom (Figure 8b).

Figure 8 Services trade (ex. travel & transportation) to total trade, selected countries, 1980-2011, 3-year moving average



Source: World Trade Organisation

#### Notes:

- 1. Uses New Zealand's exports to/imports from the rest of the world. Likewise, the OECD figures are exports to/imports from each OECD country to the rest of the world.
- 2. Analysis is limited to the 25 OECD countries for which data are available for the entire 1980-2011 period. The 'OECD' series is a weighted average for the 25 countries.
- 3. 'Services trade' refers to 'Other commercial services' as defined by the WTO; that is, commercial services less travel and transportation. It comprises of: communication services, construction, finance and insurance services, computer and information services, royalties and licence fees, other business services and personal, cultural and recreational services.
- 4. Data does not include mode 3 services trade. That is, local delivery of services through foreign affiliates. Thus, it is likely to underestimate the true share of services trade.

New Zealand's total trade to GDP is lower than other small economies, and the same finding applies for services trade (Figure 9). Small economies have a limited domestic market but can increase the size of their effective market by trading, and as a result, small economies generally trade more than larger ones. However, New Zealand's service exports to GDP tend to be lower than other countries with similar GDP levels, particularly those in the regional trading blocs.

25 Netherlands Switzerland Sweden Services trade (ex. trade & transport) as % of GDP 20 Finland Iceland Denmark Norway UK Israel Germany Špain **⇔** Canada France Portugal Italy Japan Greece Australia Turkey 0 10 4 8 6 Log of GDP US\$PPPs billions

Figure 9 Services trade to GDP versus size of the economy, 2011

Source: OECD and World Trade Organisation

1. For readability, Ireland is excluded due to their high services trade to GDP ratio.

As is the case with goods, OECD countries' share of world service exports has decreased over time (Figure 10a). This decrease has occurred because the goods and service exports of countries like China and India have grown faster than the global average as they have become more integrated into the world economy. OECD countries accounted for about 77% of world service exports in 1980, but only 65% in 2011. Likewise, the OECD's share of services excluding travel and transportation has decreased from 79% in 1980 to 69% in 2011 (Figure 10b). For goods exports, the corresponding decline is from 62% in 1980 to 53% in 2011 (Figure 10c). Thus, OECD countries account for a greater share of service exports than goods exports, which is consistent with the fact that services tend to account for a larger percentage of GDP and trade in countries with higher per capita incomes (Figure 11). Likewise, New Zealand accounts for a slightly larger proportion of world service exports than world goods exports. New Zealand's exports account for about one-quarter of a percentage point of world service exports and about one-fifth of a percentage point of world merchandise exports. New Zealand's share of world service exports has also declined a little over time, to about the same extent as the OECD's share has declined (Figure 10a&b).

2000 1800

1600

1200

1000

800

600

400

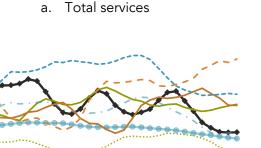
New Zealand

..... United Kingdom --- United States

Canada

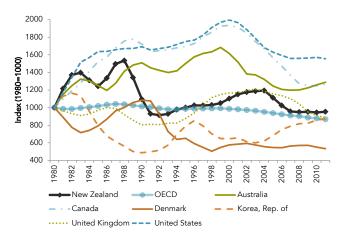
Index (1980=1000) 1400

Growth in share of world exports for selected countries, 1980-2011, 3-year moving Figure 10 average



Australia - Korea, Rep. of

#### Services excluding travel and transportation

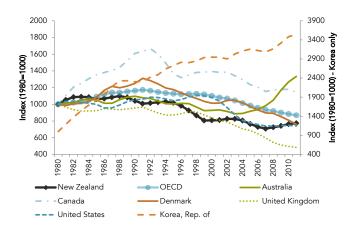




1994

OFCD

Denmark



Source: World Trade Organisation

#### Notes:

- 1. Uses New Zealand's exports to/imports from the rest of the world. Likewise, the OECD figures are exports to/imports from each OECD country to the rest of the world.
- 2. Analysis is limited to the 25 OECD countries for which data are available for the entire 1980-2011 period. The 'OECD' series is a weighted average for the 25 countries.
- 'Services trade' refers to 'Commercial services trade' as defined by the WTO. That is, commercial services are equal to services minus government services, n.i.e. It includes: transportation services, travel and other commercial services.
- 4. Data does not include mode 3 services trade. That is, local delivery of services through foreign affiliates.

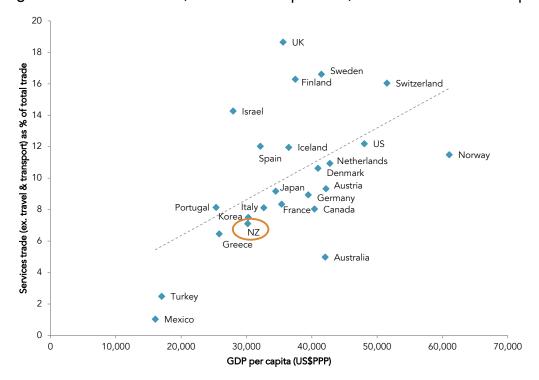


Figure 11 Services trade (ex. travel & transportation) to total trade versus GDP per capita, 2011

#### Notes:

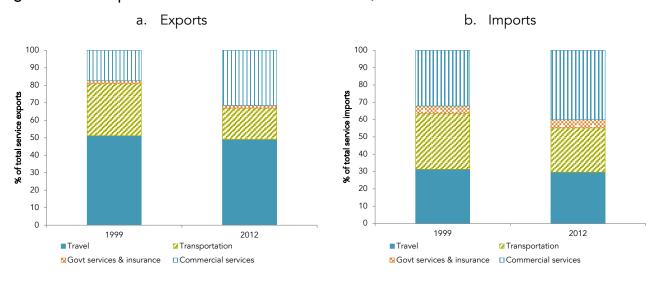
- 1. Services trade as a percentage of total trade is used on the vertical axis, rather than services trade to GDP to account for the fact that larger countries tend to trade less.
- 2. For readability, Ireland is excluded due to its high services trade to total trade ratio.

On the face of it, there appears to be plenty of scope for services to contribution to the Government's goal of increasing the ratio of exports to GDP from 30% to 40% by 2025 (Ministry of Business, Innovation & Employment, 2013). The ratio of services trade to services GDP has fallen further behind the ratio of goods trade to goods GDP. Moreover, New Zealand's ratio of services trade to total GDP is low compared with other small developed countries.

# 3.2 Composition of New Zealand's international trade in services

Travel and transportation are significant components of New Zealand's service exports. Travel accounts for almost half of New Zealand's service exports. Taken together, travel and transport account for about two-thirds of New Zealand's service exports (Figure 12a). Travel and transport are also the biggest components of service imports (30% and 26% respectively in 2012), but are less prominent than in service exports (Figure 12b). The importance of travel and transport in New Zealand's service exports and imports profile has been decreasing over time. For example, travel and transport accounted for 81% of New Zealand's service exports in 1999 (Figure 12a).

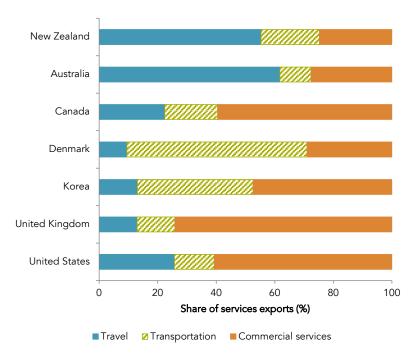
Figure 12 Composition of New Zealand's services trade, 1999 and 2012



Source: Statistics New Zealand Balance of Payments

The importance of travel and transportation in New Zealand's service export profile is unusual internationally. With the exception of Australia, travel accounts for a higher share of service exports in New Zealand compared with the other OECD countries examined, while New Zealand's commercial services account for a lower share of total service exports (Figure 13). Since commercial services include producer services, such as financial and communication services, these results are consistent with New Zealand's position as a small and distant country that is not well integrated into global value chains, with a focus on tourism exports.

Figure 13 Service exports by broad type for selected countries, 2011



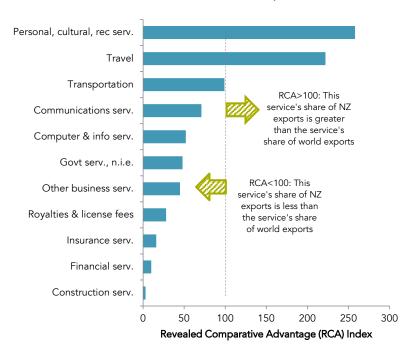
Source: World Trade Organisation

#### Notes:

- 1. 'Commercial services' refers to 'Other commercial services' as defined by the WTO. That is, 'commercial services' equals total services minus government services, n.i.e, transportation services and travel.
- 2. OECD average figures are not shown due to the limited number of countries with the necessary information.

The importance of travel to New Zealand's services export profile is also reflected in revealed comparative advantage analysis. New Zealand has a revealed comparative advantage in only two service export categories: travel and personal, cultural, and recreational services (Figure 14). In other words, New Zealand's share of world exports of travel and personal, cultural, and recreational services is greater than New Zealand's share of total world exports. A breakdown of personal travel suggests New Zealand has a very strong revealed comparative advantage in education-related travel (eg, spending by international students in New Zealand).





Source: Nesbit (2013)

#### Notes:

- RCA index is calculated as the ratio of New Zealand's share of world exports for a particular product to New Zealand's share of total world exports. A ratio over 100 means that the product's share of total New Zealand's exports is greater than the product's share of world exports, suggesting New Zealand has specialised in that product more than the average country.
- 2. Due to data limitations, the RCA for service exports should be interpreted as indicative only. This is because not all countries provide an export figure for each service category. If a large number of countries fail to report an export figure for a particular category, this under-coverage causes the RCA for reporting countries to be overstated. For example, the relatively low number of countries reporting data for the 'Personal, cultural and recreational services' category may partially explain New Zealand's large RCA index in this category.

Although travel and transportation remain the largest components of New Zealand's services trade, the importance of commercial services in both New Zealand's export and import profiles is increasing (Figure 12). Commercial service exports were about \$4.5 billion in 2012, accounting for 31% of total service exports, up from \$1.3 billion and 17.4% in 1999 (Figure 15). This increase is consistent with a worldwide trend, with global commercial services trade increasing in importance relative to global travel and transportation trade (Figure 2). Internationally, this increase in commercial services trade is likely to at least partly reflect an increase in the trade of producer services as global value chains become more important.

7,000 45 40 6,000 35 Nominal NZ\$millions 5,000 30 4,000 25 20 2 3,000 15 2,000 10 1,000 5 0 0 2012 666 - Exports (LHS) ····· Imports (LHS)

Figure 15 New Zealand's commercial services trade, 1999-2012

Source: Statistics New Zealand Balance of Payments

Exports share of total service exports (RHS)

Notes:

1. Commercial services are services excluding travel, transportation, insurance and government services.

Examining New Zealand's commercial services trade in more detail shows that other business services are responsible for a large part of the increase in commercial service exports and imports. Royalties and licence fees exports have also grown strongly, albeit from a low base. Financial services and computer and information services account for an increasing share of service exports and imports. Communications services' share of total service exports and imports has decreased over time (Figure 16).

Imports share of total service imports (RHS)

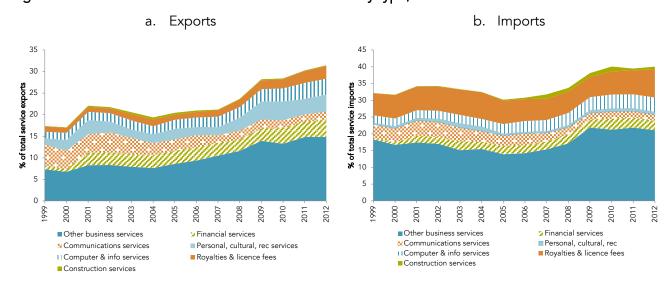


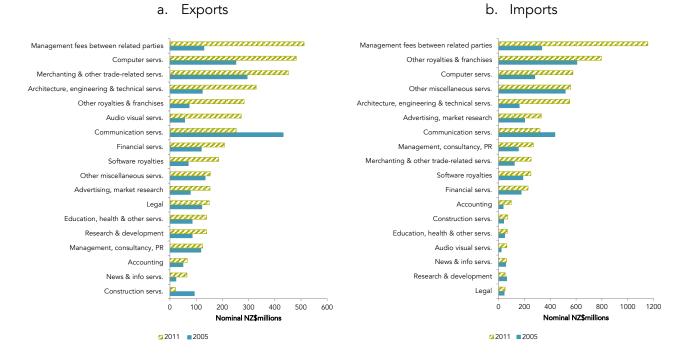
Figure 16 New Zealand's commercial services trade by type, 1999-2012

Source: Statistics New Zealand Balance of Payments

More detailed data on commercial services trade by type is also available, but for fewer time periods. New Zealand's top three commercial service exports are: management fees between related parties, computer services and merchanting and other trade-related services. New Zealand's top three commercial service imports are: management fees between related parties, other royalties and franchises and computer services. The nominal value of communication service exports and imports decreased between 2005 and 2011, as did exports of education, health and other services. The nominal value of all other exports and imports was higher in 2011 than 2005. Some exports categories

have experienced significant growth between 2005 and 2011, for example, the growth of audio-visual services reflects the increased production of movies and television series in New Zealand. Imports of management fees between related parties also increased substantially (Figure 17).

Figure 17 New Zealand's commercial services trade by detailed type, 2005 and 2011



Source: Statistics New Zealand Census of International Trade in Services and Royalties

Notes:

1. Commercial services are services excluding travel, transportation, insurance and government services.

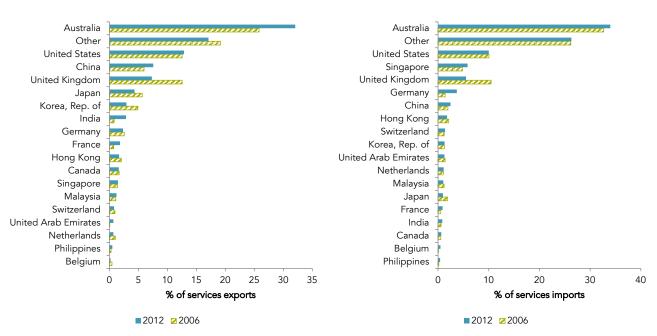
Exports and imports of management fees between related parties grew substantially between 2005 and 2011. Management fees between related parties occur when a business has an ownership stake in a subsidiary and provides services such as managerial and administrative services, accounting, IT services and charges royalties. Management fees cover a range of business services because these are often invoiced collectively, making it difficult to separate these into service types. This type of trade is linked to international investment and the increased integration of the global economy, with a greater presence of New Zealand companies overseas and foreign companies in New Zealand.

## 3.3 New Zealand's trading partners

While New Zealand's goods trade has become more focussed on Asia, services trade is predominantly with traditional trading partners. Australia accounts for the largest share of New Zealand's exports and imports of services (32% of exports and 34% of imports in 2012). While the United Kingdom is still a major services trading partner, its share of New Zealand's services trade has decreased over time (from 13% in 2006 to 7% in 2012 for exports, and from 10% to 5% for imports). The share of New Zealand's service exports going to Korea and Japan has decreased over time (Figure 18).

Figure 18 New Zealand's services trading partners, 2006 and 2012





b. Imports

Source: Statistics New Zealand International Trade in Services

#### Notes:

- 1. Figures are for total services (ie, commercial services, travel, transportation, insurance and government services).
- 2. 2006 is the earliest year that detailed country data are available.

Comparing New Zealand's services trade partners with its goods trade partners shows that Australia is the top destination for both New Zealand's goods and service exports. However, Australia accounts for almost a third of service exports, but only about a fifth of goods exports. A third of service imports originate from Australia, while New Zealand imports more goods from China than Australia (Table 1).

Table 1 New Zealand's top five trading partners for goods and services, 2011

	Service exports	Goods exports	Service imports	Goods imports
1	Australia (32%)	Australia (22%)	Australia (34%)	China (16%)
2	United States (13%)	China (15%)	United States (10%)	Australia (15%)
3	China (8%)	United States (9%)	Singapore (6%)	United States (9%)
4	United Kingdom (7%)	Japan (7%)	United Kingdom (6%)	Japan (6%)
5	Japan (4%)	Korea (3%)	Germany (4%)	Singapore (4%)

Source: Statistics New Zealand International Trade in Services and Overseas Merchandise Trade

If attention is restricted to commercial services (ie, services excluding travel, transportation, insurance and government services), the importance of traditional markets is more stark (Figure 19). In 2011, only 14% of commercial service exports went to Asia, with 36% going to Australia, 22% to the United States and 6% to the United Kingdom.

Australia United States of America 867 United Kingdom 248 Singapore Japan China United Arab Emirates France 60 Germany Canada O 500 1.000 1.500 2.000 NZ\$ millions

Figure 19 Top 10 commercial services export destinations, 2011

Source: Statistics New Zealand Census of International Trade in Services and Royalties Notes:

1. Commercial services exclude travel, transportation, insurance and government services

Why do trading relationships for New Zealand's services lag behind those for goods, with trade focussing on traditional partners, whereas goods trade is becoming more focussed on Asia? The focus on traditional trading partners, particularly for commercial services trade, is likely to reflect New Zealand's key investment relationships. For example, management fees to related parties are an important part of commercial service exports. Many New Zealand companies have subsidiaries in Australia, and there are many subsidiaries of Australian companies in New Zealand. This direct investment relationship often leads to trade in services between related enterprises.

In addition to the link between services trade and investment relationships, as discussed earlier, trade in services often requires more sophisticated relationships than trade in goods. For example, the proximity burden increases the importance of labour and capital flows over cross-border supply. Due to information asymmetries, reputational effects may be more important in services. In addition, regulatory heterogeneity poses a potentially large barrier to trade in services. The World Bank's Services Trade Restrictiveness Index (STRI) quantifies the restrictiveness of services trade policy of 103 countries.<sup>8</sup> The STRI ranks the services trade policies of emerging Asian economies such as India, China and Malaysia as more restrictive than those of OECD countries such as Australia, the United Kingdom and United States.<sup>9</sup> The lower regulatory barriers in countries such as Australia and the United States reflect not only the development of broadly similar regulatory frameworks in Anglo-Saxon countries, but also active efforts to reduce these barriers, particularly between Australia and New Zealand via the Single Economic Market Agenda. Evidence also suggests that cultural barriers are particularly important for services trade (Davies & Guillin, 2011), and this accords with the dominance of traditional partners.<sup>10</sup> A history of trade in goods with traditional partners may also

<sup>&</sup>lt;sup>8</sup> For details see Borchert, Gootiiz, & Mattoo (2012a).

<sup>&</sup>lt;sup>9</sup> Based on World Bank STRI overall indicator. The STRI measures restrictiveness on a scale of 0 to 100. A score of 0 is completely open, 25 is virtually open but with minor restrictions, 50 is major restrictions, 75 is virtually closed and 100 is completely closed. India's overall score is 65.7, China's is 36.6 and Malaysia's is 46.1. The OECD average score is 19.5, Australia's score is 20.2, United States' score is 17.7 and the United Kingdom's is 14.3.

<sup>&</sup>lt;sup>10</sup> Davis & Guillin (2011) analyses services FDI only. Although sales through foreign affiliates is not included in the data under discussion, it is reasonable to generalise the finding to other modes of services trade.

mean that many of the deep connections and networks required for services trade have already been established in these countries, while networks may be less developed in other countries.

## 3.4 Modes of supply

For the first time in 2011 Statistics New Zealand collected data on how commercial services are delivered overseas. The information covers modes 1, 2, and 4 (ie, mode 3 is not covered).

Cross-border supply accounts for 86% of commercial service exports. Although there is no available international data for comparison, this number appears high. It may be that New Zealand's international connections and networks lack sufficient depth to facilitate trade via modes 2 and 4. The movement of natural persons, such as New Zealand employees travelling to provide services overseas, accounted for 12% of commercial service exports, and overseas customers travelling to New Zealand accounted for 3% (Figure 20).

The majority of commercial service exports for all types of service involved cross-border supply. Some types of service, however, did have a lower proportion of mode 1 supply than others. Technical and professional services had a lower-than-average share of exports delivered via mode 1 and a higher-than-average share of exports delivered via mode 4. Intellectual property service exports were delivered entirely by cross-border supply (Figure 20).

Total Intellectual property Financial Other Trade & sales Business ICT Technical & professional Entertainment & recreation Miscellaneous 20 100 0 40 60 Share of service export (%) ☑ Presence of natural persons (mode 4) Cross-border (mode 1) Consumption abroad (mode 2)

Figure 20 Commercial service exports by mode of supply and type of service, 2011

Source: Statistics New Zealand Census of International Trade in Services and Royalties

# 3.5 Characteristics of New Zealand services exporters

Analysis of firm unit-record data finds that service exporting firms are larger in terms of the number of employees and sales, have higher levels of labour productivity and are more likely to have some foreign ownership than other firms. Similar results have been found for goods exporters. Firms that export both goods and services are even larger and are more profitable. The top 10% of 'service only' exporting firms account for 65% of total service exports, 39% of employment and over 50% of value-add (Saravanaperumal & Charteris, 2010).

Service export firms tend to focus on a narrower set of markets. The median 'goods only exporter' exported to three markets, compared with just one for 'service only exporters'. About 25% of all

<sup>&</sup>lt;sup>11</sup> 'Commercial services' are services excluding travel, transportation, insurance and government services.

service export receipts were generated by firms exporting to either one or two markets, compared with 4% for goods. It may be that the sunk costs of entering a new export market are higher for services than goods, so on average, service exporters focus on a smaller number of markets (Saravanaperumal & Plater, 2012).

# 4 Other sources and measures of services trade

Services trade may be more prominent than traditional data presented in Section 3 suggests. For example, traditional services trade data do not include sales through foreign affiliates (mode 3) and do not take into account that services are traded indirectly via goods trade.

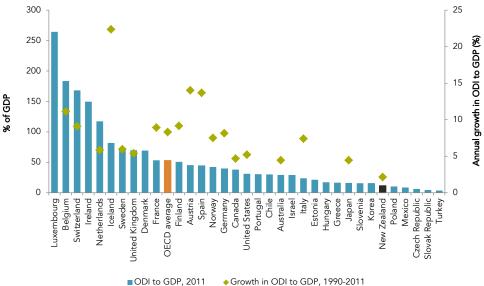
## 4.1 A proxy for foreign affiliates: FDI and ODI

Like most countries, New Zealand does not collect information on sales through foreign affiliates (mode 3 trade). However, foreign direct investment (FDI) and overseas direct investment (ODI) stocks can be used as proxies. They do have limitations, for instance, investment stocks do not measure sales, and it is not possible to know whether they relate to firms that sell goods, services or both. FDI and ODI stocks are used, rather than flows, because flows are more volatile and sales tend to be proportional to the capital stock (Nordås & Kox, 2009).

New Zealand has a low level of ODI compared with other OECD countries (Figure 21). The growth in ODI has also been relatively flat. Of the OECD countries with available data, New Zealand had the lowest growth rate in ODI stocks to GDP between 1990 and 2011 (Figure 21). In dollar terms, New Zealand's ODI stock has grown at an annual average rate of 3.4% from 2002 to 2012, whereas FDI stocks have grown at 5.8% (Figure 22). As mentioned previously, New Zealand's low level of ODI is consistent with its reliance on mode 1 for service exports, and is evidence of its lack of deep connections into overseas markets.

Australia is the main source of New Zealand's FDI, and the main destination for New Zealand's ODI. This is consistent with Australia being New Zealand's largest services trade partner, since services trade tends to follow investment relationships (Figure 22). Indeed, there is evidence that cross-border trade and FDI are complements in services trade (Fillat-Castejón, Francois, & Woerz, 2009), which potentially raises further concerns about New Zealand's low levels of ODI.

Figure 21 Overseas direct investment as a percentage of GDP, OECD countries, 2011

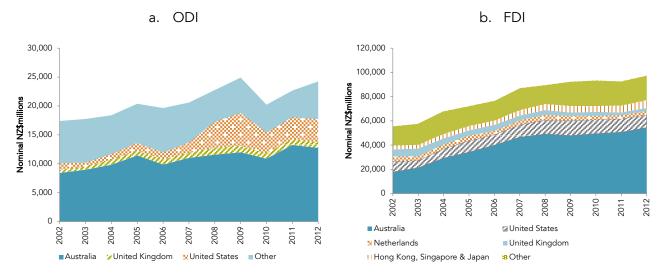


Source: OECD International Direct Investment database

Notes:

1. 'OECD average' is the simple average of ODI/GDP for the countries presented in the graph.

Figure 22 New Zealand's overseas and foreign direct investment by country, 2002-2012



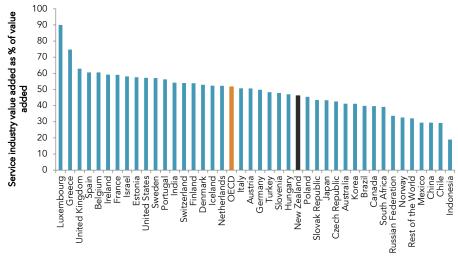
Source: Statistics New Zealand International Investment Position

## 4.2 Indirect trade in services (embodied services)

In addition to not capturing mode 3 transactions, traditional trade data does not capture the indirect trade of services via goods trade. For example, the domestic services sector contributed 38% and 22% of the total value of outputs of the primary sector and goods-producing sectors in New Zealand respectively in 2007. Likewise, exported goods will embody significant amounts of services inputs and it is estimated that 46% of the value-added of New Zealand's exports came from the services sector in 2009. This was below the OECD average (Figure 23), which may be due to the New Zealand's high level of exports of relatively unprocessed primary products.

 $<sup>^{12}</sup>$  Statistics New Zealand Input-Output tables for the year ended March 2007.

Figure 23 Domestic service industry value added of exports to total value added of exports, 2009



Source: OECD-WTO trade in value added database

# 5 Services regulation and trade liberalisation

This section takes a broad look at the regulation of services trade, including: the benefits of services trade liberalisation, what makes cross-border regulation of services different from goods and high-level measures of services trade restrictiveness.

The services sector is very heterogeneous and industry-specific characteristics are important. Different services play different roles in the economy, have very different market structures, and rely on different modes of supply in serving foreign markets. While industry-specifics are outside the scope of this note, given the diverse nature of the services sector, they play an important role in services trade and regulation.

#### 5.1 Potential benefits of services trade liberalisation

Many of the potential benefits of services trade liberalisation are similar to that of goods. Greater services trade can increase productivity through greater specialisation and agglomeration and by increasing the level of competition in the domestic market. Some services are cutting edge, ICT-intensive industries, and technology and knowledge transfer are areas for potential gains. Producers gain from access to larger markets and potentially higher prices, while consumers gain access to a wider variety of potentially higher-quality and/or lower-priced services.

The gains from liberalising services may be substantially greater than those from liberalising trade in goods. Despite accounting for a larger share of the output of OECD countries, services account for a smaller share of trade than goods suggesting there is much scope for increased services trade. In addition, the current levels of protection for services tend to be higher than for goods. Moreover, services trade liberalisation can also affect trade in manufactured goods. For example, financial services liberalisation can help allocate capital to sectors of comparative advantage and liberalisation of backbone services such as transport and telecommunications can reduce the transaction costs of exporters (Nordås, 2008). Table 2 summarises some of the empirical studies into the gains from services trade liberalisation.

While many estimates indicate that there are substantial gains from liberalising key service industries, it would be wrong to infer that these gains can be realised by mechanically opening up services markets. Liberalising services is more challenging than liberalising goods and a flawed reform program can

undermine the benefits of liberalisation (Mattoo & Stern, 2008). For example, if privatisation of state monopolies is conducted without creating conditions of competition the result may be a mere transfer of monopoly rents to private (possibly foreign) owners. Moreover, even though the overall benefits may be positive, there may be significant adjustment costs, and reforms would ideally be structured to mitigate these costs. Overall, managing reforms in services industries requires integrating trade liberalisation with careful attention to competition, regulatory and institutional frameworks.

Another important factor to consider is that the impact on services trade liberalisation appears to be non-linear. The international experience has been that until trade costs have reached a threshold level the trade response is quite modest. Consequently, going the last mile of services trade liberalisation, including lowering regulatory barriers, may have the largest impact (Nordås, 2008).

Table 2 Summary of a selection of studies into the impact of services trade liberalisation

Study	Description	Results
Robinson, Wang, & Martin (2002)	CGE model estimating direct and indirect (through inter-industry linkages) impacts of services trade liberalisation on welfare. Does not examine the temporary movement of labour.	Welfare gains from a 50% decrease in services sector protection would be five times larger than the gains from non-service sector trade liberalisation.
Walmsley & Winters (2005)	CGE model analysing the impact of allowing temporary access to foreign service providers	If OECD countries were to allow temporary access to foreign service providers equal to 3% of their labour force, the global gains would be over \$150 billion- more than the gains from the complete liberalisation of all trade in goods.
Dee & Hanslow (2000)	CGE model comparing the estimates of the gains from eliminating barriers to trade in services (for all modes of supply) with those from eliminating post-Uruguay barriers in agriculture and manufacturing.	The world is estimated to be more than US\$260 billion better off as a result of eliminating all trade barriers, with US\$50 billion from agricultural liberalisation, US\$80 billion from manufacturing, and US\$130 billion from services.
Borchert, Gootiiz, & Mattoo (2012b)	Cross-country econometric estimates of the relationship between services trade openness and levels of trade and foreign investment.	Restrictions on foreign acquisitions, discrimination in licensing, restrictions on the repatriation of earnings and inadequate legal recourse can reduce the expected value of sectoral foreign investment by \$2.2 billion over a 7-year period.
Mattoo, Rathindran, & Subramanian (2006)	Cross-country econometric estimates of the relationship between openness in the financial and telecommunications sectors and growth performance.	After controlling for other determinants of growth, countries that fully liberalise the financial services industry grew, on average, about one percentage point faster than other countries. If both telecommunications and finance industries were fully liberalised, both sectors grew, on average, 1.5 percentage points faster than other countries.
Francois & Woerz (2008)	Cross-country econometric study of the role of services as inputs into manufacturing, focussing on indirect exports of services through merchandise exports and on the interaction between service sector openness and patterns of manufacturing exports.	Greater openness in producer services implies better export performance by skill- and technology-intensive manufacturing industries. However, there is negative impact of more producer service imports on value added and exports in labour-intensive manufacturing industries.
Nordås & Kox (2009)	Cross-country econometric study of how domestic regulation affects trade in services through commercial presence and to what extent regulation, level and heterogeneity, has an impact on the choice of mode of supply for services industries.	If all countries in the study harmonised or recognised each other's regulations, total services trade through commercial presence could increase by between 13% and 30% depending on the country. For New Zealand, this figured is estimated to be at the lower end of the scale (just under 20%)

# 5.2 How does cross-border regulation of services differ from goods?

International goods trade typically involves the transportation of merchandise across borders. In contrast, due to the proximity burden, flows of labour and foreign investment are potentially more important in services trade. The different modes of supply in services trade (see Box 2) make the cross-border regulation of services more difficult as behind-the-border factors will be even more important than with goods trade.

As is the case for goods, restrictions on trade in services reduce welfare because they create a wedge between domestic and foreign prices, leading to a loss to consumers that is greater than the increase in producer surplus and government revenue. Since many services are inputs into production, the inefficient supply of such services acts as a tax on production and may prevent significant gains in productivity. As countries reduce tariffs and other barriers to trade in goods, effective rates of protection for manufacturing industries may become negative if they continue to be confronted with input prices that are higher than they would be if services markets were more competitive. Thus, goods liberalisation in the absence of services liberalisation could well result in lowering the effective protection for goods, highlighting the need for the services liberalisation to keep up with goods liberalisation (Mattoo & Stern, 2008).

Another factor that makes the cross-border regulation of services more difficult than the regulation of goods is that services tend to be highly regulated. The characteristics of many services give rise to market failures. For example, the existence of natural monopolies and network externalities in infrastructure services, such as telecommunications and transport. Problems of imperfect and asymmetric information are also of concern in services. For example, consumers may find it difficult and costly to assess the quality of service providers, such as doctors and lawyers. Therefore, many types of services are highly regulated, publicly provided, or produced by regulated monopolies. In contrast to goods, relatively few services are subject to simple discriminatory tariffs, instead regulatory heterogeneity across jurisdictions is a key issue. Barriers to trade in services arise from domestic regulations that often serve the dual purpose of responding to market failures (such as ensuring quality standards for medical practitioners) and protecting local suppliers from foreign competition. This lack of a simple metric such as tariffs means that identifying and measuring trade barriers in the services sector is complex. It also means that relatively simple rules for trade liberalisation that work for goods trades are not options for services trade liberalisation. Overall, barriers and impediments to services trade are less direct and transparent, and more discretionary in their application and therefore more difficult to measure (Copeland & Mattoo, 2008) resulting in a high degree of regulatory heterogeneity across jurisdictions.

#### 5.3 Measures of services trade restrictiveness

The World Bank's Services Trade Restrictions Index (STRI) contains information about policies that affect international trade in services. <sup>13</sup> It covers the supply of services through modes 1, 3 and 4 – cross-border trade, trade through a commercial presence, or through the presence of a natural person. It does not cover consumption abroad (mode 2) because this mode is particularly important in services like tourism, education and health, which are not covered by the database. The database is the only source of comparable information on barriers to international trade in services for such a large cross-section of countries. It includes 103 countries, and covers five industries: financial services, telecommunications, retail distribution, transportation and professional services (see Borchert, Gootiiz, & Mattoo, 2012a).

This note is a first-cut at analysing the World Bank's STRI database. It does not explore how specific policy settings are driving these results. It also does not examine the possible influences of data collection and measurement methods on the results. There is also little attempt to compare the World Bank's STRI figures with other relevant measures such as the OECD's Product Market Regulation (PMR) indicators relating to trade and investment. It should be noted, however, that there do appear to be differences between the World Bank's STRI and OECD PMR indicators. The most glaring difference is that the World Bank STRIs rank New Zealand as having the least restrictive policies for mode 3 services trade in the OECD, yet the OECD PMR indicators rank New Zealand's as having the highest barriers to FDI in the OECD. Although it is unclear why this difference exists, it may be that New Zealand's FDI screening programme is not picked up in the STRI measures.

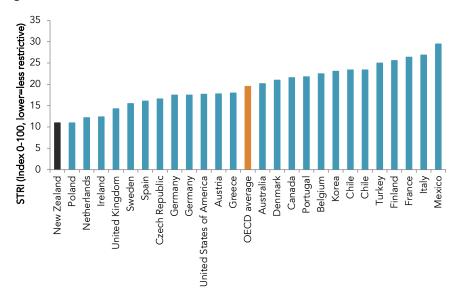
<sup>&</sup>lt;sup>13</sup> The OECD have also been developing a Services Trade Restrictiveness Index database (see www.oecd.org/trade/services-trade/towardsaservicestraderestrictivenessindexstri.htm), with more detailed industry breakdowns, but data were not yet available at the time of writing.

 $<sup>^{\</sup>rm 14}$  For details of New Zealand's OECD PMR rankings, see Conway (2011).

<sup>&</sup>lt;sup>15</sup> The description of the standardised measures for mode 3 in Borchert et al. (2012a) does not mention screening programmes.

Of the 26 OECD countries in the STRI database, New Zealand had the lowest overall index (along with Poland) – that is, has the least restrictive policies for international trade in services (Figure 24).

Figure 24 Services trade restrictiveness index: overall scores, OECD countries, 2008



Source: World Bank STRI database

#### Notes:

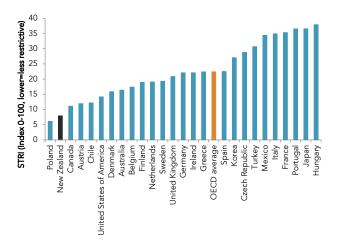
- 1. Based on overall STRI database for all available sectors (financial, telecommunications, retail, transportation and professional services) for modes 1, 3, 4. Mode 2, movement of customer to country of supplier is not covered by the index this mode is of greater importance for services such as tourism and education, which are not included in the index.
- 2. Based on 26 OECD with data available.
- 3. Restrictiveness is measured on a scale of 0 to 100. 0=completely open; 25=virtually open but with minor restrictions; 50=major restrictions; 75=virtually closed with limited opportunities to enter and operate; 100=completely closed.

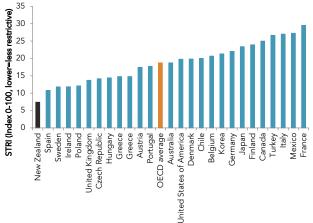
All OECD countries have greater restrictions around mode 4 (movement of natural persons) than mode1 (cross-border trade) and mode 3 (foreign investment). While New Zealand is ranked as the top performer for the overall mode 3 measure, and the second least restrictive country for mode 1, it is closer to the OECD average for mode 4 (Figure 25).

Figure 25 Services trade restrictiveness index: by mode, OECD countries, 2008

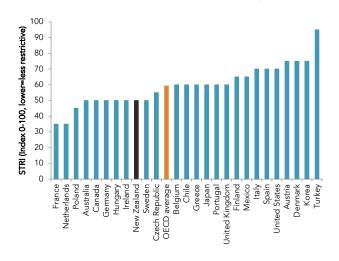
a. Mode 1: Cross-border trade

b. Mode 3: FDI





c. Mode 4: Movement of natural persons



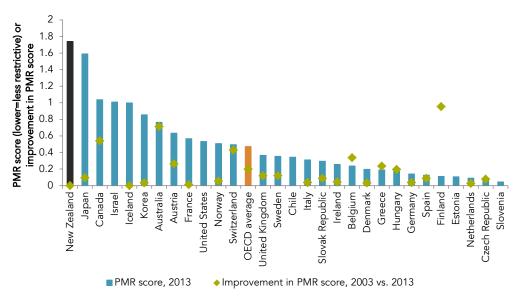
Source: World Bank STRI database

#### Notes:

- 1. Based on overall STRI database for all available sectors (financial, telecommunications, retail, transportation and professional services).
- 2. Mode 2, movement of customer to country of supplier is not covered by the index this mode is of greater importance for services such as tourism and education, which are not included in the index.
- 3. Based on 26 OECD countries with data available.
- 4. Restrictiveness is measured on a scale of 0 to 100. 0=completely open; 25=virtually open but with minor restrictions; 50=major restrictions; 75=virtually closed with limited opportunities to enter and operate; 100=completely closed.

As mentioned, the mode 3 STRI figures for New Zealand are at odds with the OECD PMR measure of FDI restrictiveness. New Zealand is ranked as the most restrictive of all the OECD countries and is also one of the few countries that did not improve its PMR FDI score between 2003 and 2013 (Figure 26). This PMR FDI score is due to the Overseas Investment Act 2005 which governs FDI into New Zealand. This Act requires that foreigners get consent before investing in sensitive land, significant business assets or fishing quotas. FDI is also an area of regulatory uncertainty. For example, in 2008, in response to an offer from the Canada Pension Plan Investment Board to buy 40% of Auckland International Airport, a new criterion of whether an investment will "assist New Zealand to maintain New Zealand control of strategically important infrastructure on sensitive land" was retrospectively introduced (for details see Conway, 2011).

Figure 26 PMR indicator of barriers to FDI, OECD countries, 2013



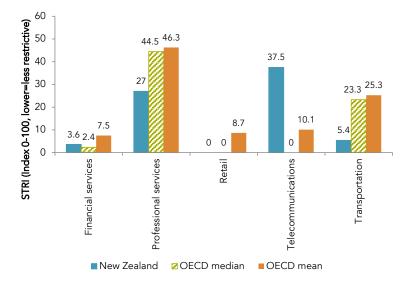
Source: OECD PMR database

Notes:

1. Data for the United States is for 2008 since 2013 data were not available.

Looking at the OECD average scores for the five individual industries covered by STRI, professional services have the highest level of restrictions (OECD average of 46.3), while financial services has the lowest (OECD average of 7.5). New Zealand ranks 15<sup>th</sup> out of 26 OECD countries for the level of restrictiveness in financial services trade. For retail, New Zealand is one of the 17 OECD countries that are considered to be completely open. New Zealand ranks as the least restrictive for professional services (along with Chile) and transportation. For telecommunications, New Zealand is one of only eight countries which are not considered completely open, with one of the highest levels of restriction in the OECD (equal with Mexico, and lower only than Korea and Canada) (Figure 27).

Figure 27 Services trade restrictiveness index: by sector, 2008



Source: World Bank STRI database

Notes:

- 1. Based on 26 OECD countries with data available.
- 2. OECD mean is the simple average of the 26 countries with available data.
- 3. Restrictiveness is measured on a scale of 0 to 100. 0=completely open; 25=virtually open but with minor restrictions; 50=major restrictions; 75=virtually closed with limited opportunities to enter and operate; 100=completely closed.

Information for some sub-industries is also available in the STRI database, which allows further examination of the two industries where New Zealand is not a top performer (financial services and telecommunications). In financial services, New Zealand's high score is driven by the insurance sub-industry (STRI of 9.2) whereas New Zealand's banking industry is considered completely open (STRI of 0). In telecommunications, New Zealand's fixed line score is 25 – ie, it is virtually open but with minor restrictions. Its mobile telecommunications score is 50 – ie, is considered to have major restrictions.

By the World Bank STRI measures, New Zealand's trade in services is less restrictive than other OECD countries. However, while New Zealand performs well overall, it is relatively restrictive in a few areas such as insurance and mobile telecommunications. The STRI measures also seem to be at odds with the OECD's PMR measures which rank New Zealand's barriers to FDI as the highest in the OECD. A more detailed comparison of the STRI and PMR may provide insights into what policy settings are driving the results, and why there are differences between the results for New Zealand from the STRI and PMRs in areas such as FDI restrictiveness. The OECD is also currently developing a set of service trade restrictiveness indicators and these will also shed further light on these issues.

# 6 Conclusion

This paper takes an initial look at New Zealand's international trade in services. It discusses some of the theory of services trade, including the differences between goods and services trade. It also takes an initial look at some of the data on New Zealand's services trade and cross-country indicators of services trade restrictiveness.

Services account for an increasing share of international trade. Like goods trade, services trade can increase productivity through greater specialisation, agglomeration, competition and the diffusion of knowledge and technology. There are importance differences, however, between the nature of services and goods trade. While goods trade typically involves the transportation of merchandise across borders, services trade often not only entails cross-border supply, but also the movement of labour and capital.

For a small, distant country like New Zealand, the proximity burden associated with the trade of many kinds of services may be particularly important. On the face of it, it seems that physical distance would be less important in services trade than goods trade. However, many services require proximity of buyer and seller, necessitating the establishment of a foreign branch or the temporary movement of labour. These trading arrangements are likely to require deeper connections with foreign markets than cross-border supply, suggesting that New Zealand's relatively low degree of integration into the global economy may be particularly detrimental for services exports.

The importance of foreign affiliates and labour movements to services trade also makes the liberalisation of services trade less straight forward than the liberalisation of goods trade. Cross-country differences in domestic regulation are particularly important for services, and these behind-the-border factors means that simple trade liberalisation rules that work for goods trade are not options for services trade liberalisation.

There are also more issues with data on trade in services than with data on trade in goods. However, an initial look at the available data shows that, like other countries, the importance of international trade in services to New Zealand has grown over time. New Zealand's services exports increased from just 5% of total exports in 1951 to 23% by 2012.

How does New Zealand's level of services trade compare with other OECD countries? New Zealand's percentage of service exports to both total exports and to GDP has increased over time and is about on par with the OECD average. New Zealand's percentage of service imports to total imports and to GDP is above the OECD average, despite a slight decrease over time.

Travel and transportation account for a larger share of New Zealand's service export profile than other OECD countries. New Zealand is below the OECD average for services exports excluding travel and transportation to total exports. Moreover, other small OECD countries are a better comparator for New Zealand since a large domestic market reduces the need to trade. Compared with other small countries, New Zealand's service exports to GDP are low.

While New Zealand's goods trade has become more focussed on Asia, its services trade is predominantly with traditional trading partners such as Australia, the United Kingdom and the United States. This focus on traditional trading partners is likely to reflect New Zealand's key direct investment relationships, which often lead to trade in services between related enterprises such as subsidiaries. As discussed, behind-the-border trade restrictions are very important for services trade. Trade in services also often requires more sophisticated relationships than trade in goods. Therefore, this focus may also reflect a combination of lower behind-the-border barriers and more established networks in countries such as Australia.

A preliminary look at the World Bank Services Trade Restrictiveness Index suggests that New Zealand has the least restrictive services trade policies in the OECD. However, while New Zealand performs well overall, it is relatively restrictive in a few areas such as insurance and mobile telecommunications. The STRI measures also seem to be at odds with the OECD's PMR measures which rank New Zealand's barriers to FDI as the highest in the OECD. A more detailed comparison of the STRI and PMR may provide insights into what policy settings are driving the results, and why there are differences between the results for New Zealand from the STRI and PMRs in areas such as FDI restrictiveness. The OECD is also currently developing a set of service trade restrictiveness indicators and these will also shed further light on these issues.

# References

- Borchert, I., Gootiiz, B., & Mattoo, A. (2012a). *Guide to the Services Trade Restrictions Database*. Policy Research Working Paper No. 6108. Washington, D.C. Retrieved from <a href="http://documents.worldbank.org/curated/en/2012/06/16441094/guide-services-trade-restrictions-database">http://documents.worldbank.org/curated/en/2012/06/16441094/guide-services-trade-restrictions-database</a>
- Borchert, I., Gootiiz, B., & Mattoo, A. (2012b). *Policy barriers to international trade in services: Evidence from a new database.* Policy Research Working Paper No. 6109. Washington, D.C. Retrieved on date from <a href="http://documents.worldbank.org/curated/en/2012/06/16441100/policy-barriers-international-trade-services-evidence-new-database">http://documents.worldbank.org/curated/en/2012/06/16441100/policy-barriers-international-trade-services-evidence-new-database</a>
- Christen, E., & Francois, J. (2010). *Modes of delivery in services*. Johannes Kepler University Economics Working Papers No. 2010-08. Retrieved on date from www.econ.jku.at/papers/2010/wp1008.pdf
- Conway, P. (2011). How to move product market regulation in New Zealand back towards the frontier. OECD Economics Department Working Paper No. 880. Retrieved from <a href="https://www.oecd-ilibrary.org/economics/how-to-move-product-market-regulation-in-new-zealand-back-towards-the-frontier\_5kg89j3gd2r8-en">www.oecd-ilibrary.org/economics/how-to-move-product-market-regulation-in-new-zealand-back-towards-the-frontier\_5kg89j3gd2r8-en</a>
- Conway, P., & Zheng, G. (2014). *Trade over distance for New Zealand firms: Measurement and implications.*New Zealand Productivity Commission Working Paper 2014/3. Available from <a href="https://www.productivity.govt.nz/research-papers-list">www.productivity.govt.nz/research-papers-list</a>
- Copeland, B., & Mattoo, A. (2008). The basic economics of services trade. In A. Mattoo, R. M. Stern, & G. Zanini (Eds.), *A Handbook of International Trade in Services* (pp. 84–129). Oxford: Oxford University Press.
- Davies, R. B., & Guillin, A. (2011). How far away is an intangible? Services FDI and distance. CESIFO Working Paper No. 3599. Retrieved from <a href="https://www.cesifo-group.de/portal/page/portal/DocBase\_Content/WP/WP-CESifo Working\_Papers/wp-cesifo-2011/wp-cesifo-2011-09/cesifo1\_wp3599.pdf">wp3599.pdf</a>
- de Serres, A., Yashiro, N., & Boulhol, H. (2014). *An international perspective on the New Zealand productivity paradox*. New Zealand Productivity Commission Working Paper 2014/1. Retrieved from <a href="https://www.productivity.govt.nz/working-paper/an-international-perspective-on-the-new-zealand-productivity-paradox">www.productivity-paradox</a>
- Dee, P., & Hanslow, K. (2000). *Multilateral liberalisation of services trade*. Staff Research Paper. Retrieved from <a href="https://www.pc.gov.au/research/staff-research/multilatlib">www.pc.gov.au/research/staff-research/multilatlib</a>
- Escaith, H. (2008). *Measuring trade in value added in the new industrial economy: Statistics implications.*MPRA Paper No. 14454. Retrieved from <a href="http://mpra.ub.uni-muenchen.de/14454/1/MPRA">http://mpra.ub.uni-muenchen.de/14454/1/MPRA</a> paper 14454.pdf
- Fillat-Castejón, C., Francois, J. F., & Woerz, J. (2009). *Cross-border trade and FDI in services*. The Vienna Institute for International Economic Studies Working Paper No. 50. Retrieved from <a href="https://www.wiiw.ac.at/modPubl/download.php?publ=WP50">www.wiiw.ac.at/modPubl/download.php?publ=WP50</a>
- Francois, J., & Woerz, J. (2008). Producer services, manufacturing linkages, and trade. *Journal of Industry, Competition and Trade, 8*(3-4), 199–229.
- Mattoo, A., Rathindran, R., & Subramanian, A. (2006). Measuring services trade liberalization and its impact on economic growth: An illustration. *Journal of Economic Integration*, *21*(1), 64–98.

- Mattoo, A., & Stern, R. M. (2008). Overview. In A. Mattoo, R. M. Stern, & G. Zanini (Eds.), *A Handbook of International Trade in Services* (pp. 3–47). Oxford: Oxford University Press.
- Ministry of Business, Innovation & Employment (2013). *The business growth agenda progress reports:*Building export markets. The Business Growth Agenda Progress Reports. Retrieved from www.mbie.govt.nz/pdf-library/what-we-do/business-growth-agenda/bga-reports/building-export-markets-bga-progress-report-august-2012.pdf
- Nesbit, S. (2013). *An updated look at New Zealand's comparative advantage*. Ministry of Business, Innovation and Employment Occasional Paper No. 13/02. Retrieved from <a href="https://www.mbie.govt.nz/about-us/publications/occasional-papers/2013-occasional-papers/13-02.pdf">www.mbie.govt.nz/about-us/publications/occasional-papers/2013-occasional-papers/13-02.pdf</a>
- New Zealand Treasury. (2009). *International connections and productivity: Making globalisation work for New Zealand*. New Zealand Treasury Productivity Paper No. 09/01. Retrieved from <a href="https://www.treasury.govt.nz/publications/research-policy/tprp/09-01">www.treasury.govt.nz/publications/research-policy/tprp/09-01</a>
- Nordås, H. K. (2008). *The impact of services trade liberalisation on trade in non-agricultural products*. OECD Trade Policy Working Paper No. 81. Retrieved from <a href="https://www.oecd.org/trade/services-trade/42128857.pdf">www.oecd.org/trade/services-trade/42128857.pdf</a>
- Nordås, H. K., & Kox, H. (2009). *Quantifying regulatory barriers to services trade*. OECD Trade Policy Paper No. 85. Retrieved from <a href="http://dx.doi.org/10.1787/5kgkcjgsm6kd-en">http://dx.doi.org/10.1787/5kgkcjgsm6kd-en</a>
- Robinson, S., Wang, Z., & Martin, W. (2002). Capturing the implications of services trade liberalization. *Economic Systems Research*, *14*(1), 3–33.
- Saravanaperumal, M., & Charteris, G. (2010). New Zealand commercial service exporters: First evidence from the prototype Longitudinal Business Database. Ministry of Foreign Affairs and Trade Economic Division. Retrieved from <a href="https://www.mfat.govt.nz/Trade-and-Economic-Relations/Trade-and-economic-analysis/0-first-evidence.php">www.mfat.govt.nz/Trade-and-Economic-Relations/Trade-and-economic-analysis/0-first-evidence.php</a>
- Saravanaperumal, M., & Plater, V. (2012). *Class of their own? New Zealand's goods and services exporters.*Paper presented at the New Zealand Association of Economists Conference, Palmerston North.
  Retrieved from <a href="https://www.nzae.org.nz/event/nzae-conference-2012/2012-nzae-conference-papers/">www.nzae.org.nz/event/nzae-conference-2012/2012-nzae-conference-papers/</a>
- Simmons, G. (2004). The impact of scale and remoteness on New Zealand's industrial structure and firm performance. In J. Poot (Ed.), *On the Edge of the Global Economy*. Cheltenham, UK and Northampton, MA, US: Edward Elgar.
- Walmsley, T. L., & Winters, L. A. (2005). Relaxing the restrictions on the temporary movement of natural persons: A simulation analysis. *Journal of Economic Integration*, *20*(4), 688–726.
- World Trade Organisation. (2012). *International Trade Statistics 2012*. Retrieved from www.wto.org/english/res e/statis e/its2012 e/its12 toc e.htm