



Boosting productivity in the services sector

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Issues paper – April 2013

The New Zealand Productivity Commission

The Commission – an independent Crown Entity – completes in-depth inquiry reports on topics selected by the Government, carries out productivity-related research, and promotes understanding of productivity issues. The Commission aims to provide insightful, well-informed and accessible advice that leads to the best possible improvement in the wellbeing of New Zealanders. The Commission’s work is guided by the *New Zealand Productivity Commission Act 2010*.

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The issues paper

This paper aims to assist individuals and organisations to participate in the inquiry. It outlines the background to the inquiry, the Commission's intended approach and the matters about which the Commission is seeking comment and information.

This paper contains 23 questions to which responses are invited. However these questions are not intended to limit comment. The Commission welcomes information and comment on any issues that participants consider relevant to the inquiry's Terms of Reference.

The Commission is particularly interested in hearing about the experience of those purchasing services; and of those operating, and working in, service businesses.

Key inquiry dates

Receipt of Terms of Reference:	1 March 2013
Due date for issues paper submissions:	2 May 2013
First interim report (including draft Part A):	June 2013
Second interim report (draft Part B):	October 2013
Final report to Government:	28 February 2014

See section 5 for an expanded inquiry timeline.

Why you should register your interest

The Commission seeks your assistance in gathering ideas, opinions and information to ensure the inquiry is well-informed and relevant. The Commission will keep registered participants informed as the inquiry progresses.

You can register your interest by clicking on 'Subscribe' at www.productivity.govt.nz, or by emailing your contact details to info@productivity.govt.nz.

Why you should make a submission

Submissions provide information to the inquiry and help shape the recommendations made to the Government in the final report. Inquiry reports will quote or cite relevant information from submissions.

There will be three opportunities to make submissions to this inquiry. You may choose to make a submission in response to one or more of these opportunities.

How to make a submission

Anyone can make a submission. It may be in written, electronic or audio format. A submission can range from a short letter on a single issue to a more substantial response covering multiple issues. Please provide relevant facts, figures, data, examples and documentation where possible to support your views. Every submission is welcomed; however multiple, identical submissions will not carry more weight than the merits of the arguments presented. Submissions may incorporate relevant material provided to other reviews or inquiries.

Submissions may be lodged at www.productivity.govt.nz, or sent by email or post. An electronic copy of mailed submissions should be sent to info@productivity.govt.nz in Word or searchable PDF format if possible. Submissions should include your name and contact details and the details of any organisation you represent. The Commission will not accept submissions that, in its opinion, contain inappropriate or defamatory content.

The due date for submissions in response to this issues paper is 2 May 2013. Late submissions will be accepted; however lateness may limit the Commission's ability to consider them fully.

Postal address for submissions:

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What the Commission will do with submissions

The Commission seeks to have as much information as possible on the public record. Submissions will become publicly-available documents on the Commission's website. This will occur shortly after receipt, unless the submission is accompanied by a request to delay release for a short period of time, or marked 'in confidence'. The Commission can accept material 'in confidence' only under special circumstances. Please contact the Commission before submitting such material.

Other ways you can participate

The Commission welcomes feedback about its inquiry. Please email feedback to info@productivity.govt.nz or get in touch to arrange a meeting with inquiry staff. There will be opportunities to make further submissions and to meet with the Commission later in the inquiry. See section 5 for details.

Contents

The issues paper	iii
Commonly used terms	vi
1 What has the Commission been asked to do?	1
2 What are services?	3
'A stagnant sector marked by low productivity'?	6
3 Services are important to the economy	8
Role in the economy	8
Productivity	11
The link to wellbeing	15
4 Some important issues	16
Scale and competition	16
International trade in services	18
ICT in service industries	25
Low-productivity, low-wage service industries	26
Regulating service industries	26
Intangible assets and skills	27
5 What process will the inquiry follow?	29
List of questions	31
References	33
Terms of reference	36

Commonly used terms

Term	Description
agglomeration	Firms in related industries obtain <i>agglomeration economies</i> through locating near each other, reducing the costs of transporting goods, people and ideas.
ANZSIC	Australia New Zealand Standard Industry Classification.
economies of scale	Reduction of unit costs as the volume of production increases, due to large up-front or fixed costs being spread across all units.
goods	Merchandise produced and sold by businesses.
industry	A group of businesses that have the same main activity as classified within ANZSIC, eg, manufacturing.
goods-producing sector	The part of the economy consisting of the manufacturing, construction, electricity, gas, water and waste industries.
ICT	Information and communications technology.
intangible assets	Non-monetary assets which are identifiable but without physical substance, eg, reputation, brand recognition, human capital, patents and databases.
labour productivity	Average output per unit of labour input (usually taken to be an hour of work).
multi-factor productivity	The amount of output produced that cannot be attributed to changes in the level of labour or capital input. It captures factors such as advances in knowledge, and improvements in management and production techniques.
sector	Statistics New Zealand classifies productive activities in the economy into one of three sectors: primary, goods-producing and services.
service	An intangible activity produced and sold by businesses.
services sector	The part of the economy consisting of all the service industries.
sub-industry	A group of businesses within an industry that have more specific main activities. This term corresponds to subdivisions, groups and classes in ANZSIC. For example, 'textile, leather, clothing and footwear manufacturing' is a sub-industry of 'manufacturing'.
value-added	<p><i>Industry</i> value-added is the value of gross output of an industry minus the costs of inputs provided by other industries.</p> <p><i>Export</i> value-added is the gross value of exported goods and services minus the costs of imported inputs used in their production.</p>

1 What has the Commission been asked to do?

The Government has asked the Productivity Commission to undertake an inquiry into New Zealand's services sector and to identify opportunities to boost its productivity.

The New Zealand economy is largely services-based. The services sector produces around 70% of Gross Domestic Product (GDP). It provides a wide array of service products that are consumed by both private individuals and firms across the economy. Services-sector productivity, therefore, strongly affects the wellbeing of New Zealanders and the total productivity of the economy. Raising the level and growth of productivity in the services sector is fundamental to reducing the productivity gap between New Zealand and other high-income countries.

The inquiry will be conducted in two parts:

- An assessment of the role and performance of the services sector, considering productivity performance across different service industries, the impact of the services sector on the economy as a whole, and the performance of the New Zealand services sector relative to other countries (Part A).
- Drawing on Part A, a deeper assessment of some specific parts of the services sector, or important issues affecting the sector, giving rise to specific recommendations to improve relevant policy and regulatory settings (Part B).

The Commission will consider some specific criteria (see Box 7) and the views of interested parties in selecting the topics for deeper assessment.

The Terms of Reference direct the Productivity Commission to limit its consideration to market-provided services and therefore to exclude services provided by the public sector.

The inquiry includes a mix of broad assessment – to ensure important issues and connections are not overlooked – and in-depth assessment to ensure targeted findings and recommendations for consideration by the Government and other relevant parties.

The Commission welcomes feedback on how to maximise its effectiveness within the scope defined by the inquiry's Terms of Reference.

The full Terms of Reference is an important document to read for those interested in the inquiry. A copy can be found at the end of this issues paper.

Q1

Will the Commission's proposed approach to this inquiry deliver the best outcomes for New Zealand? How could it be improved?

Q2

What relevant publications and data sources should the Commission explore for this inquiry?

2 What are services?

One useful characterisation of services is those things you can buy or sell but cannot carry. Services are highly diverse. They include transport, communications, wholesale and retail trade, and financial, business, scientific and technical services. There is no single, widely-accepted definition of services, in part reflecting this diversity.

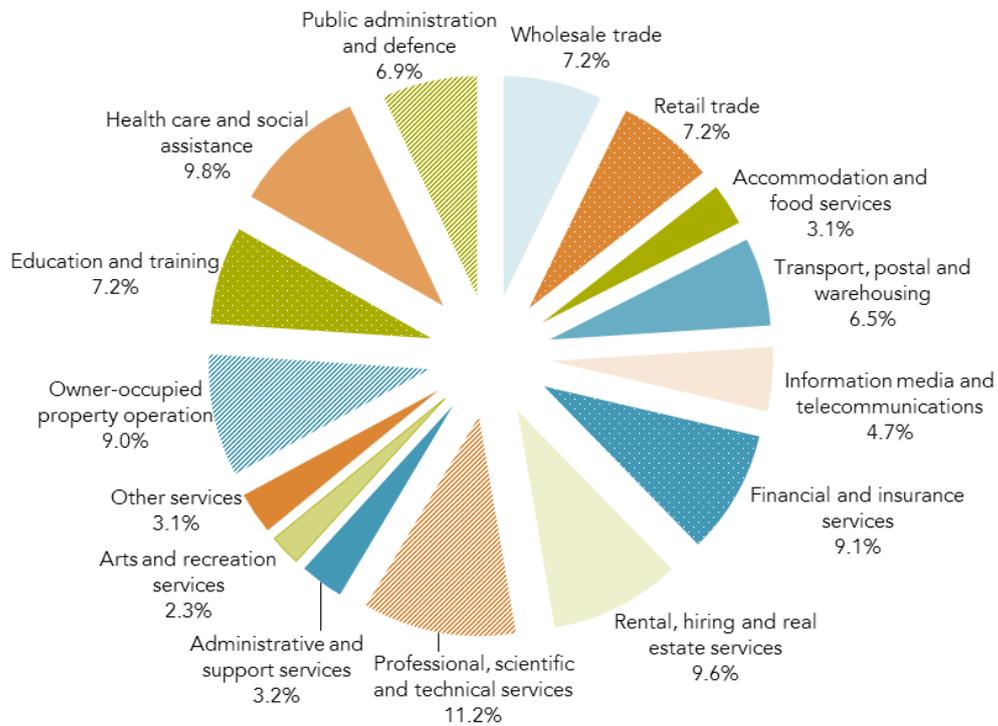
The boundaries between goods and services can be rather fuzzy. Goods are often sold bundled with services; for example, a photocopier sold with training and maintenance. Conversely services may be sold bundled with goods; for example, a broadband service sold with a 'free' Wi-Fi router.

Furthermore, services typically contribute to the total value of a good; for example, design, scientific and transport services. These goods can be thought of as 'embodying' those services. One striking example is Apple's iPad, for which components and labour contribute 37.5% of the good's value, with the remainder being service activities. While the iPad and most of its components are manufactured in China, the majority of the economic value-added occurs in the US as Apple keeps its high-wage activities – product design, software development and product management – in the US. (Kraemer, Linden & Dedrick, 2012)

The Commission will define service industries using the *Australia New Zealand Standard Industry Classifications 2006* (ANZSIC06) to make the best use of the statistics collected by Statistics New Zealand. Services are those industries that are neither 'primary industries' (ie, mining, agriculture, fishing and forestry) nor 'goods-producing industries' (ie, manufacturing, construction, electricity, gas, water and waste industries). The service industries defined in this way are shown in Figure 1, with slice sizes indicating contribution to New Zealand's GDP. Service industries in total account for around 70% of New Zealand's GDP.

Some international studies of the services sector have included some or all of construction, electricity, gas, water and waste. These industries will not be examined in the inquiry as they are classified as 'goods-producing industries' under ANZSIC06.

Figure 1. ANZSIC06 service industries (% of New Zealand’s GDP, 2010)



Source: Productivity Commission; Statistics New Zealand national accounts tables

Notes:

1. Industry outputs and GDP are measured in current prices.
2. Shares sum to around 70%, the total share of services in the economy. Provisional statistics for 2011 and 2012 give the share of services at around 71% of the total economy.
3. An estimate of the 'housing services' produced by owner-occupied properties is included in GDP. These services constitute about 9.0% of total economy output.

Box 1 explores retail trade as an example of a New Zealand service industry, and contrasts its productivity level and growth with that of the United Kingdom.

Box 1 **Quick portrait of a New Zealand service industry – retail trade**

Retail businesses typically purchase and on-sell finished goods to the public. The service functions of retailers include providing convenience, information, marketing, product assembly, finance, entertainment and other functions. Not all businesses with shop fronts are retailers, eg, travel agents, hairdressers and video rental stores.

The total value-added of the retail industry was \$8 757 million in 2010, representing 5% of value-added from all New Zealand industries¹. Retail employs 196 500 people, which is 10% of the workforce². The industry is only a small direct exporter (eg, online sales).

Productivity levels and growth

The retail industry in New Zealand has a relatively low level of labour productivity compared to other industries. This pattern also occurs in some other countries, and has been attributed to several factors, including low capital per worker, low skill requirements and extensive regulation of critical inputs (eg, planning, labour and trading regulations). Other factors affecting productivity include the size of firms and shops, uptake of technology and levels of competition.

New Zealand's retail industry has low labour and multi-factor productivity levels, compared with some other Organisation for Economic Cooperation and Development (OECD) countries. For instance, in 2004 labour and multi-factor productivity levels in New Zealand's retail industry were estimated at only 55% and 74% respectively of those in the United Kingdom (Mason & Osborne, 2007).

Labour and multi-factor productivity in the retail industry grew over the period between 1988 and 2010³, but at a lower rate than in some other OECD countries. For instance, between 1995 and 2004 New Zealand's retail industry had average annual labour productivity growth of 2.2% compared with 3.4% growth in the United Kingdom (Mason & Osborne, 2007).

The Terms of Reference direct the Commission to limit its consideration to market-provided services and therefore to exclude services provided by the public sector. The education and training, health care and social assistance, and public administration and safety industries are predominately provided by the public sector, though private provision plays an important role.

¹ 2010 dollars. Source: Statistics New Zealand national accounts tables.

² As at February 2012. Source: Statistics New Zealand business demography tables.

³ Source: Statistics New Zealand productivity tables.

Public hospitals and schools are clearly outside the scope of this inquiry. Market-provided services such as dentistry are in scope. Other services, such as early childhood education, are privately provided while receiving some level of government subsidy. The Commission is yet to decide where the boundaries of the inquiry with respect to the public/private split are most appropriately set.

Q3

Which activities within the following industries are provided in a market (non-government environment):

- **education and training;**
- **health care and social assistance; and**
- **public administration and safety?**

To what degree should the market-provided parts of these industries be included within the scope of this inquiry?

A decision to exclude an industry or service would not mean that the Commission considers it to be unimportant, nor would it exclude that topic from being the subject of a future inquiry.

'A stagnant sector marked by low productivity'?

Many 20th century assessments of the services sector were disparaging, describing service industries as 'sources of low-skill, low-wage jobs' that are 'part of a stagnant sector marked by low productivity growth and only limited opportunities for innovation' (Triplett & Bosworth, 2004, p. 1). It is this characterisation that led some to perceive the services sector's growing share of employment as a 'disease' (see Box 3).

But this characterisation is no longer useful. The negative characteristics ascribed to the services sector were probably true for certain industries or at certain points in time. However, the 21st century services sector is highly diverse, and some of its industries are the dominant drivers of economic growth. Box 2 further discusses some common misconceptions against the recent experience of New Zealand's services sector.

Box 2 Common misconceptions of New Zealand's services sector

Common misconceptions of the services sector include:

- *Services are low productivity.* Several of New Zealand's service industries have high levels of productivity and/or a history of strong productivity growth. For example, labour productivity in information, media and telecommunications grew at an average annual rate of 7.5% between 1988 and 2010, compared with economy-wide labour productivity growth of 2.1%. Transport, postal and warehousing, and financial and insurance services have also performed strongly, with average annual labour productivity growth of 3.6% and 4.1% respectively since 1988. (Conway & Meehan, 2013)
- *Service jobs are low waged.* There is a wide range of wage rates across service industries. Some offer high wages: public administration and safety and the financial and insurance service industries are the second and third highest paid (after mining). Services are also represented among lower-wage industries with accommodation and food services being New Zealand's lowest paid industry⁴.
- *Services jobs are low skilled.* The sector includes both high- and low-skill jobs, reflecting the broad range of service industries. Technological changes, particularly ICT innovations, have the potential to transform the nature of many of the industries featuring low-skill positions.
- *Services are low growth.* Services are growing strongly as a share of the total economy and as a share of employment. As far back as the early 1990s, the OECD observed that in countries like the United States, the 'fastest growing segments of the economy are sophisticated transactional services like communications, business services, finance and insurance' (OECD, 1992, p. 110). Some New Zealand service industries have seen significant employment growth; for example, the total number employed in professional, scientific and technical services increased from 87 000 in 2000 to 127 000 in 2012⁵.

⁴ Source: Statistics New Zealand LEED annual tables, 2011.

⁵ Source: Statistics New Zealand business demography tables.

3 Services are important to the economy

New Zealand has become a service-based economy, along with most other OECD countries. Services now account for about 70% of New Zealand's GDP and an even larger share of employment. Services are now approaching 80% of the economy in several high-income OECD countries including the US.

Role in the economy

The importance of services is illustrated by the growth in their output and employment over recent decades, which has outpaced growth in the other sectors of the economy. Output in the services sector grew at an average annual rate of 2.8% between 1972 and 2010, compared with 2.1% in the primary sector and 1.1% in the goods-producing sector (Figure 2)⁶.

The services sector's stronger growth in employment over recent decades increased its share of total employment. Services-sector wages and salaries account for 74% of total wages and salaries⁷.

The services sector has a significant impact on the other sectors of the economy. It provides inputs to the production of the other sectors of the economy. The services sector provided 44% and 27% of the value of total domestic inputs to production in 2007 in the primary and goods-producing sectors respectively⁸.

Services constitute a considerable proportion of New Zealand's exports and imports. Service trade accounted for just under one-quarter of New Zealand's total exports and imports in 2012⁹. The services sector also provides intermediate inputs into the exports of other sectors.

⁶ Source: Statistics New Zealand national accounts tables.

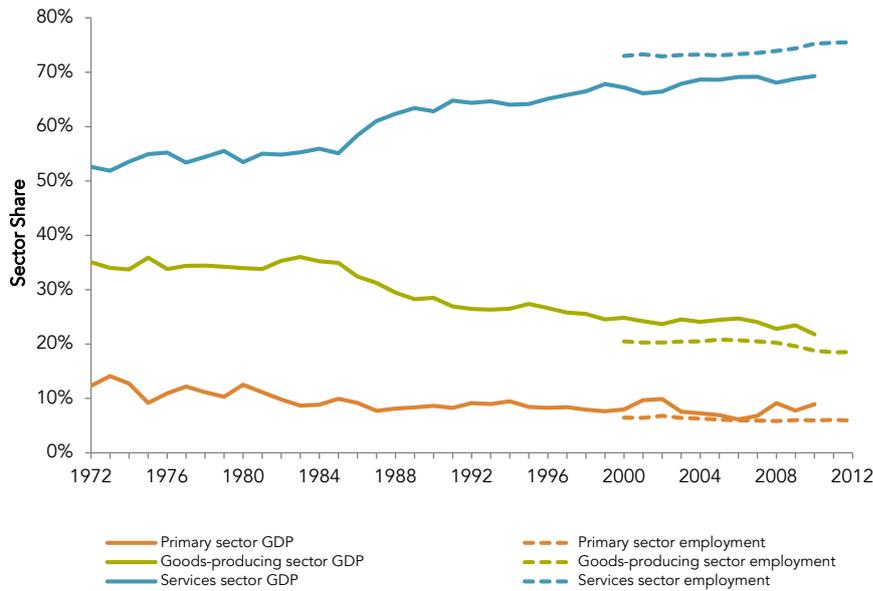
⁷ Source: Statistics New Zealand annual enterprise survey tables, year ended 2011.

⁸ Source: Statistics New Zealand input-output tables, year ended March 2007.

⁹ Source: Statistics New Zealand balance of payments tables. This understates the full extent of trade in services. The official data for New Zealand's services trade covers services supply modes 1, 2, and 4 only. See Box 6 for an explanation of the supply modes.

When these are accounted for, the services sector provided 46% of the value-added of New Zealand’s exports in 2009¹⁰.

Figure 2. Sector share of New Zealand GDP and employment, 1972-2012



Source: Productivity Commission; Statistics New Zealand national accounts and business demography tables

Services-sector productivity affects the performance of the other sectors. The prices and quality of the inputs provided by services-sector firms impact the costs, decisions and resource allocation of firms in other sectors. For example, a firm unable to obtain professional services of a particular type or quality at a reasonable price is faced with a decision: they can forgo the service, accept the consequences of lower quality or provide them in-house. The knock-on effects of the performance of the services sector propagate through the economy through these and other channels. (Box 3 describes several of those channels.)

Q4

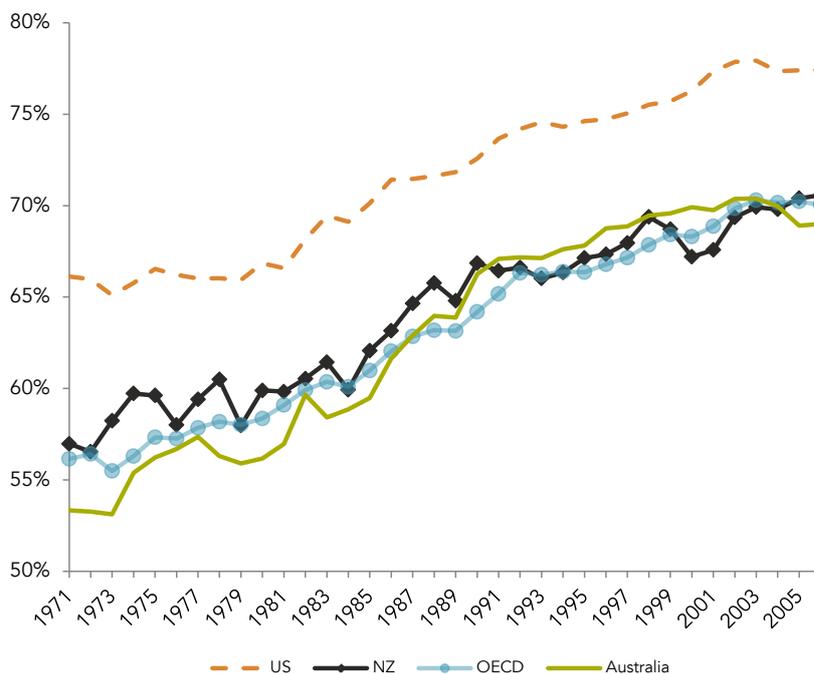
In your experience, do weaknesses and gaps in service industries handicap the performance of other industries? If so, how?

¹⁰ OECD value-added in trade database.

The increasing services-sector share of GDP and employment over time in New Zealand is apparent in Figure 2, as are the falling shares of the primary and goods-producing sectors. The services-sector share of GDP rose from around 53% in 1972 to 70% in 2010¹¹.

New Zealand's services-sector share has followed a similar path to that of Australia and the OECD average. Figure 3 shows its increasing share of GDP over time against some overseas comparators.

Figure 3. Services-sector share of GDP against overseas comparators, 1971-2006



Source: Productivity Commission; OECD structural analysis database

The rise of services in these economies reflects a number of forces at work:

- As incomes rise, consumers often get more value from consuming additional services (eg, dining out and beauty therapies) rather than additional goods. This occurs, in part, because goods predominate in meeting people's most basic needs such as nutrition, shelter and comfort.

¹¹ Productivity Commission; Statistics New Zealand national accounts tables.

- Higher incomes and increased specialisation have led to many services traditionally produced at home (eg, cooking) being increasingly bought and sold in the market. These, previously unmeasured, services now appear in the GDP as services-sector production.
- Increasing international trade and specialisation has encouraged goods production in lower-income economies and services production in higher-income economies.
- Increasing specialisation, facilitated by improvements in contracting, has meant that many intermediate services traditionally undertaken within goods-producing firms are increasingly bought and sold in the market (eg, accounting and IT services). The costs and output of such 'out-sourced' activities are more likely to be attributed to the services sector.

The inquiry will take account of these trends and their likely implications for economic performance and policy settings.

Productivity

The productivity growth of the services sector since 1988 has been stronger than that of the goods-producing sector, but less than that of the primary sector. Services-sector multi-factor productivity grew by 1.0% per year on average between 1988 and 2010. This growth was greater than that of the goods-producing sector (0.3% per year), but below that of the primary sector (1.5% per year). Similarly, services-sector labour productivity grew at a stronger rate than the goods-producing sector, but below that of the primary sector.¹²

Concerns about low productivity growth in the services sector contributing to lower productivity growth of the economy as a whole have been labelled 'Baumol's cost disease of services' (Box 3). The relatively good performance of New Zealand's services sector since 1988 suggests that these effects may not be particularly relevant here – at least at the aggregate level. However, some of these effects may apply to particular parts of the sector or the economy.

There are significant differences in productivity levels between New Zealand and other countries in some service industries. For example, in 2004 New Zealand's average multi-factor productivity level in the wholesale-trade industry was estimated to be 75% of that in the United Kingdom (Mason & Osborne, 2007).

New Zealand has experienced relatively low productivity growth in some service industries in recent decades. For instance, average labour productivity fell by 0.4% per year between 1995 and 2004 in the accommodation, restaurants and bars industry; by contrast, the United Kingdom's grew by 2.0% per year (Mason & Osborne, 2007).

¹² Source: Statistics New Zealand productivity tables.

Box 3 Baumol's cost disease of services

In the 1960s William Baumol identified a troubling consequence of different rates of productivity growth between different parts of the economy. Over time, industries with high productivity growth tend to shed jobs, lower their costs and prices, and end up as a smaller part of the overall economy. The converse will happen for industries with low productivity growth, leading to a fall in productivity growth for the economy as a whole.

Baumol's particular concern was cultural services; however he identified services in general as being prone to slower productivity growth than primary and goods production (Baumol, 1967). This was indeed the case in advanced economies at the time, and his concerns became known as 'Baumol's cost disease of services', or simply 'Baumol's disease'.

Nordhaus (2006) identified several variants of Baumol's disease. Which variants appear depends critically on how people's demands for different outputs respond as relative prices and their real incomes change. The main variants are:

- *Cost and price disease.* Costs and prices in 'stagnant' industries – ones with relatively low productivity growth – will generally grow relative to the average industry.
- *Stagnating real output.* Because of the rise in relative prices, real output in industries with low productivity growth will generally grow slowly relative to the overall economy.
- *Unbalanced growth.* Baumol often assumed that demand would be relatively unresponsive to price so that unbalanced productivity growth would lead to people spending a rising share of their incomes on the output of the stagnant industries. If, in addition, people's tastes led them to want more of these outputs as their incomes rose, this would reinforce the effect.
- *Employment and hours.* An industry with high productivity growth will experience higher employment and hours if the demand for its output increases strongly as price drops – but the opposite if the demand is unresponsive.
- *Aggregate productivity growth could decline.* If demand conditions lead to stagnant industries experiencing a rising share of national expenditure, output and employment, this will tend to reduce overall growth in productivity and living standards.

The Commission intends to investigate the extent to which these influences arising from service industries with low productivity growth affect the New Zealand economy.

This overall picture of services-sector productivity is mixed. Evidence of poor productivity levels and low growth rates of some service industries is concerning. The Commission intends to present an industry-by-industry analysis of the sector in its report on Part A of the inquiry.

New Zealand can learn much from other countries' experiences. Internationally, there has been considerable variation in services-sector productivity growth. The US has been a stellar performer over recent decades. Its services-sector productivity growth has outstripped that of the European Union. Box 4 describes the emergence of this performance gap between the US and Europe and how it explained much of the difference in overall productivity performance between the two regions.

Box 4 Productivity in services: comparing the US with Europe

US labour productivity growth (measured as GDP per hour worked) experienced a sharp increase in its annual average growth between 1973–1995 and 1995–2007. By contrast, European Union countries experienced an equally sharp slowdown (see table).

Table. Labour productivity: average annual growth rates

	Whole economy		Market services	
	1973–1995	1995–2007	1980–1995	1995–2005
United States	1.3	2.1	1.5	3.0
European Union ¹	2.7	1.5	1.4	1.0

Notes:

1. European Union (EU) for whole economy refers to the 15 countries constituting the EU before 2004. EU for market services refers to the same set of countries less Greece Ireland, Luxembourg, Portugal and Sweden.

A large volume of research has investigated why European productivity slowed and US productivity accelerated. The research found that service industries played a substantial role in this productivity growth divergence¹³, consistent with the figures in the right-hand columns of the table. US service industries such as retail and wholesale trade, transport services, and business services embraced the knowledge economy through capital investment in ICT and through new business and organisational forms facilitated by ICT. This has happened to a much more limited extent in Europe.

¹³ More specifically, this finding was for market-provided as opposed to government-provided services.

The higher productivity growth in the US came more from smarter use of skills and capital inputs (ie, from growth in multi-factor productivity) rather than from more intensive deployment of those inputs.

The productivity pickup in the US was fairly evenly spread across industries whereas productivity performance across industries in the EU was disparate, with business services suffering strongly negative growth between 1995 and 2005. Performance was also uneven across individual European countries. Suggested policy improvements for the EU have included:

- A more flexible approach to labour mobility and product markets within and across European countries to encourage innovation and technology transfer in service industries and allow resources to flow to their most productive uses.
- A truly single market in Europe for services as well as goods (not yet a reality despite its acceptance as a goal). A single market would be likely to raise the performance of many service industries in Europe through stronger competition and the realisation of scale advantages.

Source: Timmer, Inklaar, O'Mahony and van Ark (2011)

There is high variability in the productivity of service firms in the same industry in New Zealand. For example, in the business-services industry the multi-factor productivity of the 90th percentile firm was around 12 times that of the 10th percentile firm in 2009¹⁴. This appears to be a very high ratio; for example Syverson (2004) reports a figure of less than 2 times for the US manufacturing industry.

It is to be expected that firms providing differentiated services, or serving different market segments, would have different productivity levels. However such high variability suggests that there is significant scope for the lower performers to improve; for example through the spread of best practice. It is an open question as to whether such productivity gaps are the consequence of relatively low levels of competition, insufficient information available to the low performers about how they might improve, or other reasons.

Q5

What are the causes of the productivity gaps between firms in the same service industry or sub-industry? What can be done to reduce such gaps?

¹⁴ Productivity Commission; Statistics New Zealand LBD data.

Q6

What is the potential for improved productivity and growth in service industries that you are familiar with? What are the impediments to improved productivity and growth in those industries?

The link to wellbeing

Generally speaking, the higher the productivity of a country, the higher will be its average income and wellbeing. The Commission recognises that productivity may not always be a good measure of wellbeing. In some cases, a change that decreases measured productivity may result in an increase in the quality of a service. For example, extending the hours of a retail store may reduce measured productivity while increasing wellbeing through improved customer convenience. The Commission recognises that the ultimate purpose of increasing productivity is to improve wellbeing.

4 Some important issues

International studies of the services sector have raised many productivity issues. This section presents a selection of those issues that may be relevant to New Zealand. The Commission is interested in hearing about other relevant issues.

Scale and competition

Competition and economies of scale stand out as particularly important drivers of improvements in the productivity of service firms. Box 5 illustrates this for the US.

Box 5 **Scale, competition and productivity growth in US retail trade**

Productivity growth in the US retail trade sector experienced a significant acceleration around 1995. Labour productivity growth jumped from an average of 2.5% for the period 1979–1995, to 7.9% for 1995–2002 (McGuckin, Spiegelman & van Ark, 2005).

ICT investment was an important driver of this growth (McKinsey Global Institute, 2002), along with ICT's interaction with scale and competition. Doms, Jarmin and Klimek (2006) examined productivity growth in the US retail sector and found that larger chain stores made disproportionately higher investments, and that there was a significant relationship between IT investment and productivity growth at the firm level. Introducing new technologies and processes may give large retailers the necessary advantage to displace smaller less sophisticated retailers.

Stores that belong to retail chains tend to be more efficient than single-store retailers, and chains tend to invest more in information technology (Foster, Haltiwanger & Krizan, 2006). ICT investments have resulted in declining costs, and ultimately many of these efficiency gains are passed on to consumers in the form of lower prices.

The ability to specialise is also important, as is the ability to take advantage of the benefits from close proximity to related firms (agglomeration economies). However, the extent to which such efficiencies can be achieved in small economies may be limited. A small population and remoteness constrain opportunities for New Zealand firms to learn from direct competition, and benefit from agglomeration, specialisation and scale (McCann, 2009). This, in turn, may limit the potential for investment in new technologies and techniques, with implications for productivity performance.

Many services, by their nature, are produced and consumed at the same location (eg, haircuts, accommodation and restaurant meals). Such services are 'less amenable to transport' than services that can be produced and consumed in different locations (eg, information and media; insurance).

If demand for such services is geographically dispersed, then production must be as well. Under these conditions, markets fragment geographically into 'local services markets'. Each local market will have less scale, fewer opportunities for specialisation, and muted competition.

Figure 4 contrasts these two cases by showing the geographical concentration of employment in two service industries. Employment in cafes and restaurants is spread fairly evenly relative to population across the country – with hotspots corresponding to the tourist towns of Queenstown and Kaikoura. By contrast, employment in life insurance and superannuation funds is highly concentrated in Auckland and Wellington. Cafes and restaurants are generally located where people want to eat out – meaning they are relatively less amenable to transport, and are less able to take advantage of the avenues for productivity improvement available to life insurance and superannuation funds (ie, scale, agglomeration and specialisation).

Q7

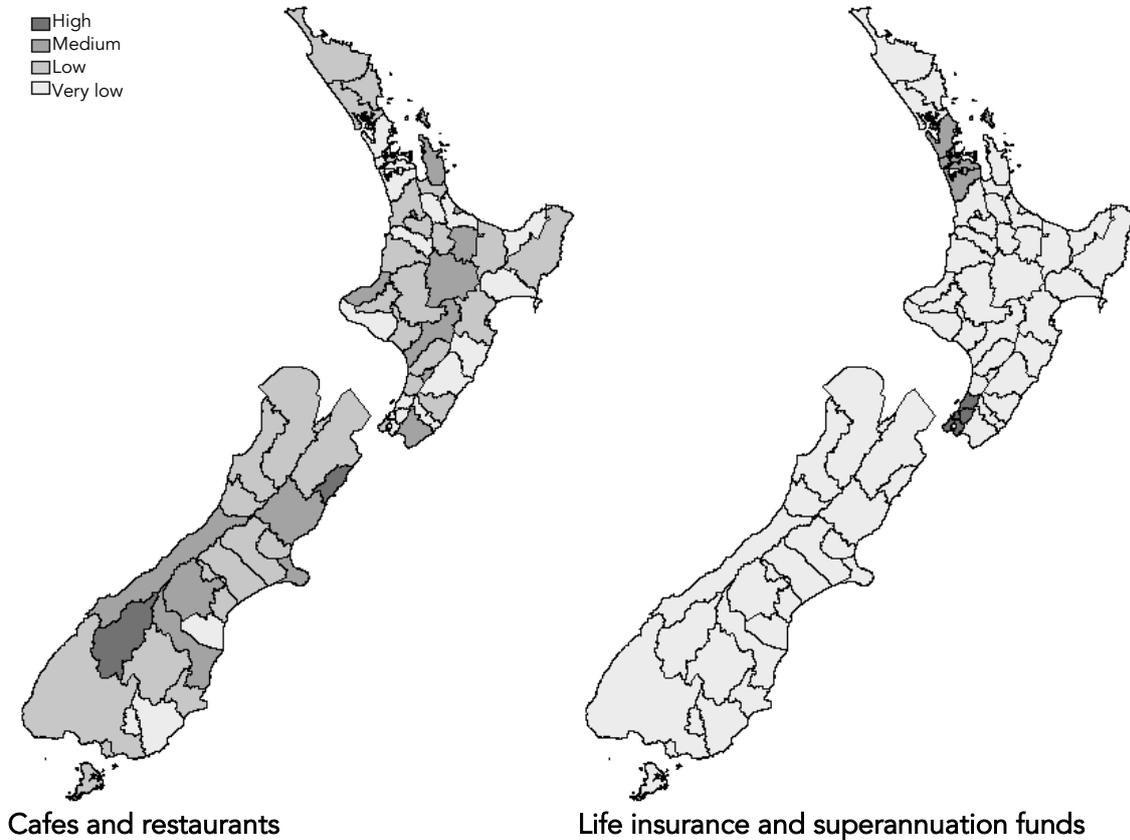
To what extent is there insufficient competition in New Zealand's service industries? In which industries? What are the impediments to competition in these industries?

Q8

What are the opportunities for productivity growth in service industries where production and consumption of the service happens in the same location, and demand is geographically spread out?

Q9

Are there service industries that perform less well than they could due to problems such as low levels of skills; or lack of specialised inputs, scale, appropriate infrastructure or opportunities for agglomeration? What are the impediments to improving productivity and growth in these industries?

Figure 4. Geographic concentration of employment in two service industries

Source: Productivity Commission; Statistics New Zealand longitudinal business database

Notes:

1. Regions are based on the 72 territorial local authorities as at 2000. The geographically-small authorities in Auckland and Wellington have been aggregated.
2. Regions are shaded based on location quotients that are ratios of the employment share of the industry in that region to the employment share of the same industry in New Zealand as a whole. The result reveals the degree of regional concentration in each industry.
3. 'High' means a location quotient of 2–5; 'medium' 1–2; 'low' 0.5–1; and 'very low' 0–0.5.
4. Data averaged over the years 2000-2010.

International trade in services

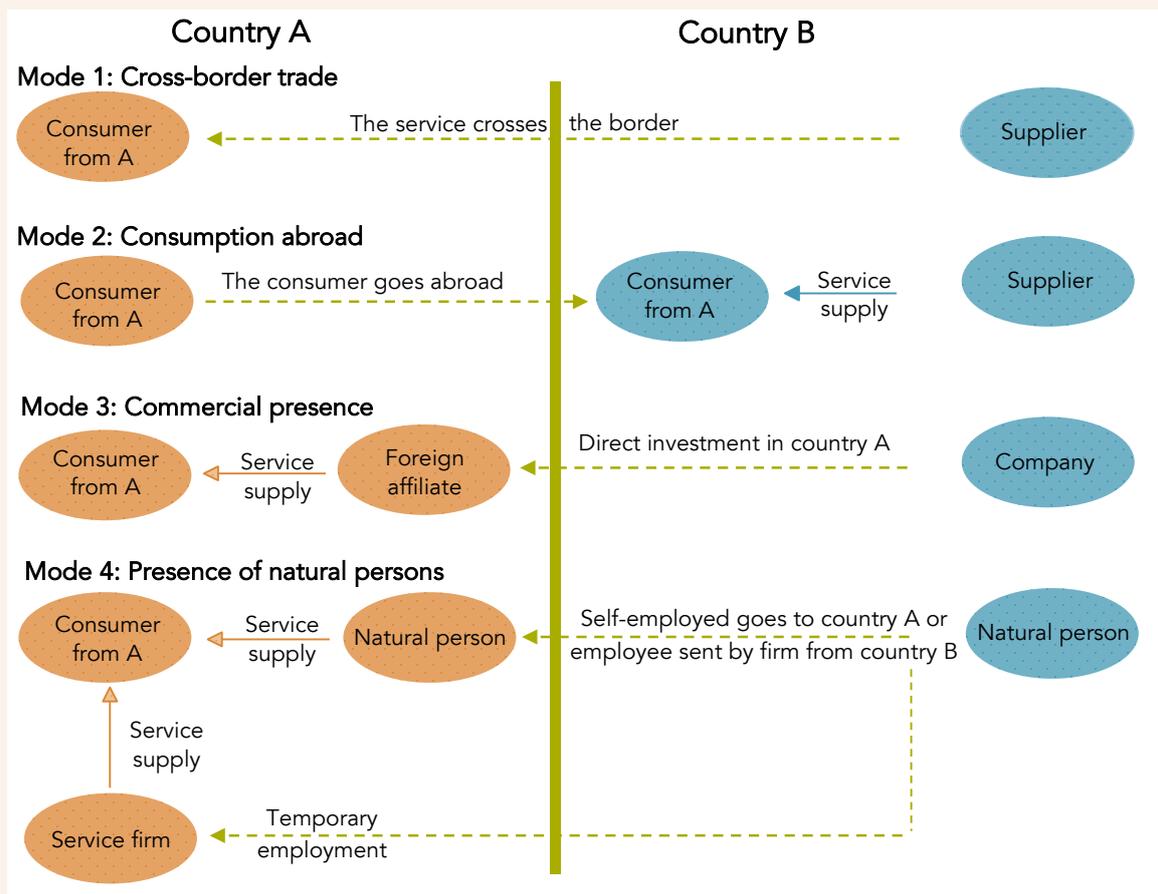
A common myth is that services are unable to be traded internationally. For some specific services this is true; however many other services are highly tradable. Furthermore, developments in information and communication technologies, globalisation of industry and reductions in barriers to the movement of people and capital, are increasing the extent to which services can be traded internationally (McLachlan, Clark & Monday, 2002). Box 6 describes the different modes by which services can be traded.

Box 6 Four modes of international services trade

The General Agreement on Trade in Services (GATS) classifies international services trade into four different modes. The Figure depicts these modes.

1. **Cross-border trade** where a service flows from the territory of one country to another, for example banking or architectural services provided over the internet.
2. **Consumption abroad** refers to situations where a consumer travels to another country to obtain a service, for example a tourist or international student.
3. **Commercial presence** involves a service supplier establishing a permanent presence in another country to provide the service, for example a hotel chain.
4. **Presence of natural persons** where an individual temporarily travels abroad to provide a service, for example consultancy services provided by an individual.

Figure. Modes of international service trade



Source: McLachlan, Clark and Monday (2002).

Official statistics for New Zealand's import and export of services do not capture mode 3 supply. Official trade statistics, such as the ones presented in this section, thus understate New Zealand's international services trade. Mode 3 'exports' contribute to New Zealand's Gross National Income and mode 3 'imports' contribute to GDP, but are not separately reported.

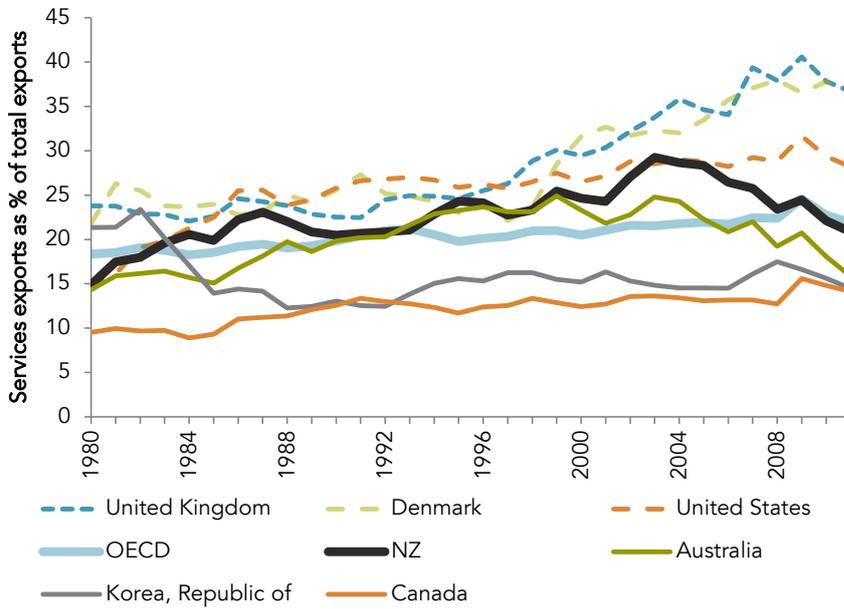
Internationally, services trade accounts for only a fifth of world trade, despite comprising around two-thirds of world output. Services trade as a share of total global trade has been fairly stable for decades, despite the services share of GDP increasing steadily over time (Nordås, 2010) and some reductions in services-trade barriers.

The services share of New Zealand's exports (Figure 5) and imports (Figure 6) are typically above the OECD average. However, this probably overstates both New Zealand's services trade and the extent to which the sector is exposed to the rigours of international competition for two reasons:

- New Zealand's overall international trade intensity is low for a small economy. This means that its services trade as a proportion of total trade may overstate services trade relative to GDP.
- Much of New Zealand's services trade is in travel and transportation. This is to be expected for a remote country with a relatively large tourism industry.

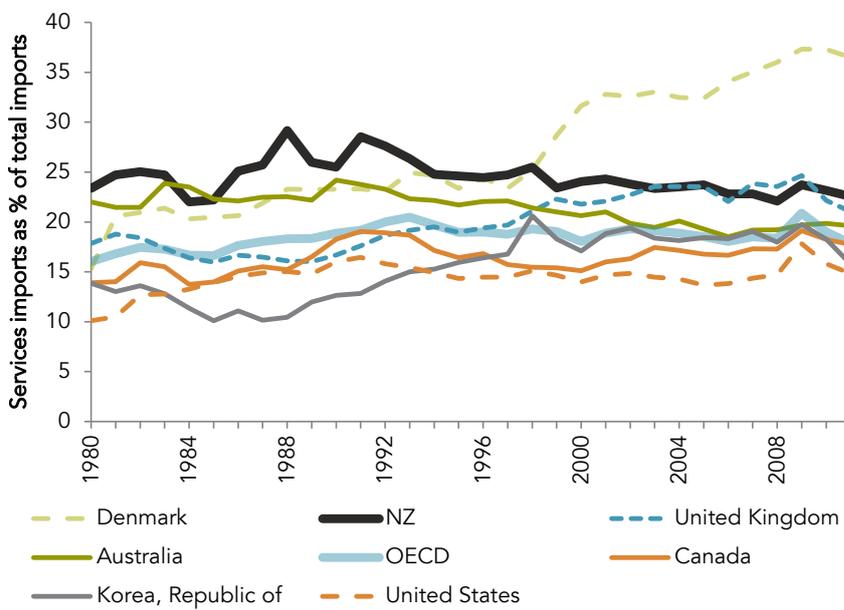
A more informative comparison is to exclude travel and transportation, and compare New Zealand's other service exports and imports as a share of GDP against comparable data for selected OECD countries and the OECD average. New Zealand's services exports, other than transport and tourism, are relatively low (Figure 7). By contrast, imports are more typical (Figure 8).

Figure 5. Service exports as a share of trade, 1980-2012



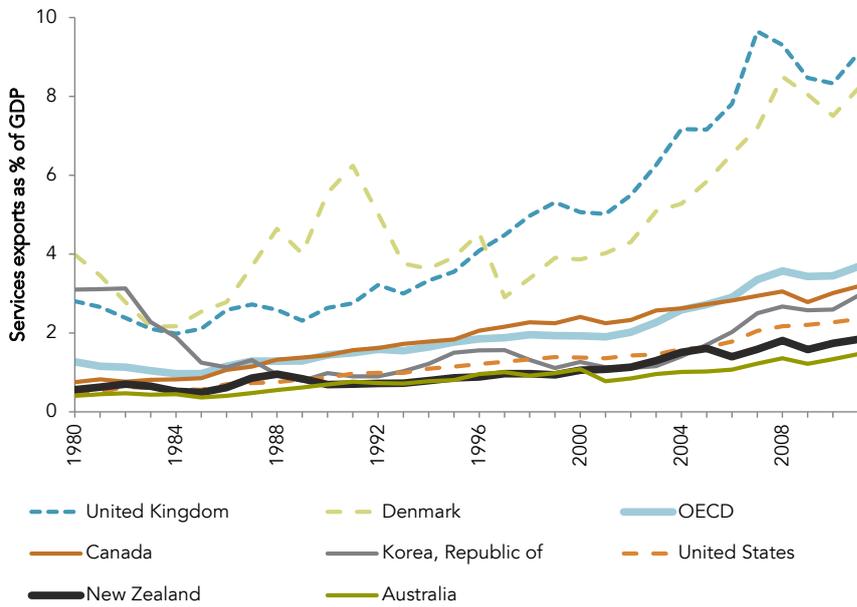
Source: World Trade Organisation (WTO) time series on international trade

Figure 6. Service imports as a share of trade, 1980-2012



Source: WTO time series on international trade

Figure 7. Services exports (excluding travel and transport) as a % of GDP



Source: OECD GDP tables; WTO time series on international trade

Figure 8. Services imports (excluding travel and transport) as a % of GDP



Source: OECD GDP tables; WTO time series on international trade

Competition, particularly against the world's best firms, drives productivity improvement and innovation in local firms. Openness to international trade enhances such competition.

The rise of the services sector may be increasing the overall proportion of the New Zealand economy that is not contestable internationally nor likely to achieve scale through international trade, with negative implications for the country's productivity performance.

Specifically, low imports of services would mean that intermediate and final consumers of services have little alternative than to purchase these service products from domestic suppliers. The reduced choice lessens the incentives for local service firms to improve productivity towards world-best practice. And firms behind best practice are not well placed to make the jump into exporting.

Services, by their nature, typically require greater customisation to individual consumers than goods. A firm exporting such services will therefore need more information about, and deeper connections into, its target market than one exporting goods. Exporting is likely to be relatively more challenging for New Zealand service firms, given small scale and large distances.

Q10

What are the barriers to the export of services? What are the economic impacts of those barriers? What can be done to reduce them?

New Zealand appears to be reasonably typical for service imports, relative to OECD comparators. The figures could, however, hide industries in which there are significant barriers to the efficient import of services.

Q11

To what extent are there barriers to the efficient import of services? What are the economic impacts of those barriers? What can be done to reduce them?

The Commission's joint study with the Australian Productivity Commission into *Strengthening trans-Tasman economic relations* found that remaining impediments to trans-Tasman commerce generally inhibited services trade more than goods trade. Importantly, the study found that impediments to capital, labour and information flows limit trade in services. (Australian Productivity Commission & New Zealand Productivity Commission, 2012)

However these barriers to international trade in services are typically less straightforward to overcome than barriers to trade in goods. Mode 3 supply is affected by restrictions on foreign investment and the regulatory arrangements for foreign business affiliates, including corporate tax. Supply via modes 2 and 4 is affected by restrictions on travel. Furthermore, mode 4 supply is affected by the terms and availability of working-visas, and by personal-tax rules.

Q12

What barriers exist to the cross-border movement of people that affect international trade in services? How do those barriers affect New Zealand service industries and the economy more generally? Are there opportunities to remove or reduce these barriers?

Q13

What barriers exist to cross-border investment in service industries? How do those barriers affect New Zealand service industries and the economy more generally? Are there opportunities to remove or reduce these barriers?

Regulation can impede trade in services if different countries operate different systems. Telstra (2012) identified 75 areas in which regulation differs between Australia and New Zealand. And this list is incomplete; it excludes much generic regulation such as labour laws.

Any firm planning to operate in more than one country needs the expertise and resources to understand and conform to all systems. Differences may mean that specific services have to be tailored for each country. Regulatory differences can thus create extra costs and barriers to entry, resulting in lower levels of competition, higher prices and reduced consumer choice.

Mutually-profitable, arms-length trading of goods can occur between any two countries. Extending this to services trade requires increasing levels of alignment across many dimensions, including services-product standards, occupational licensing, and accounting systems. Achieving this alignment requires behind-the-border changes to domestic policy settings. There is a natural trade-off between the benefits of alignment and the loss of independent policy-making aimed at meeting local preferences (Alesina & Spolaore, 2003).

International free-trade agreements are increasingly concerned with the removal of impediments to services trade (Australian Productivity Commission, 2010). New Zealand is a signatory of international agreements aimed at liberalising services trade, such as the General Agreement on Trade in Services and the Closer Economic Relations Services and Investment Protocols. Barriers to services trade and investment flows, and intellectual-property protection are central issues for the Regional Comprehensive Economic Partnership and Trans-Pacific Partnership agreements currently under negotiation.

Q14

How is trade in services affected by New Zealand's current international agreements? What features should negotiators seek or avoid in future agreements, and why?

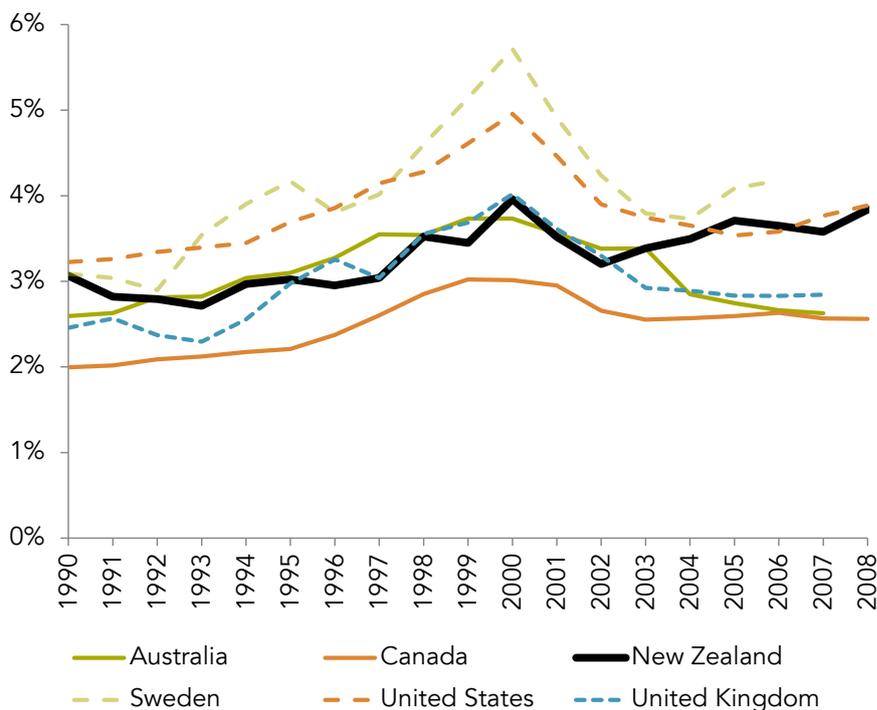
ICT in service industries

Information and communications technologies (ICTs) are important to services; both as the basis of service industries in their own right (eg, software) and in the contribution they make to other service industries. The observed growth in the numbers and penetration of ICTs in the 1970s and 80s without any corresponding increase in US national-level productivity measures became known as the ICT 'productivity paradox' (Brynjolfsson, 1993).

Later research found that ICT-producing industries, and those that use ICT intensively, accounted for all of the industry contributions to the US productivity 'revival' in 1995-2000 (Stiroh, 2002). ICT-intensive service industries such as retail, wholesale and finance made significant contributions. Interestingly, Europe did not experience this acceleration in the same industries (Box 4; Box 5), and further study has shown a dramatic variation in firms within the US (Sadun & Van Reenen, 2005).

New Zealand's ICT investment as a proportion of GDP was similar to some comparable high-income OECD countries over the period 1990-2008 (Figure 9). The Commission is keen to learn whether this investment is associated with a change in productivity.

Figure 9. ICT investment as a % of GDP, 1990-2008 (or latest available year)



Source: Productivity Commission; OECD GDP and non-residential gross fixed capital formation tables

The contribution of ICT to the productivity of New Zealand service industries is one area of interest to the Commission in the inquiry.

Q15

To what extent do New Zealand services businesses invest in, and make effective use of, ICT? What are the barriers to them doing so?

Low-productivity, low-wage service industries

A subset of service industries have low labour productivity together with generally low wages and skill requirements; for example retail trade, and accommodation and food services. These industries pose challenges for raising productivity.

Some people argue that the productivity of such industries could be improved by raising wage levels – the so-called theory of ‘efficiency wages’. Efficiency wages are set above the level required to attract workers to particular jobs. They are claimed to improve productivity through: encouraging extra effort in response to the fear of losing the higher wages; increasing worker morale; and/or reducing worker turnover.

It has also been argued that a market-driven or mandated rise in wages incentivises firms to lift productivity by, for example, investing in more, and more modern, capital equipment. Those unable to do so will be forced to close down. The resources released are then available for higher-productivity activities.

An alternative proposition is that low wages in these industries are a consequence of their low productivity and low skill requirements. Both propositions may have validity.

The Commission seeks input from inquiry participants on skills, training and wage levels in service industries.

Q16

What is the scope to raise productivity and wages in service industries that traditionally employ low-skill workers? How would this be best achieved?

Regulating service industries

Service industries perform a wide range of useful tasks in society. There is a public-interest argument for service-sector regulation in cases where market failures lead to inefficient levels, or quality, of supply. Such cases include natural monopolies, externalities and lack of information. There is a risk, however, that regulation can serve the interests of well-organised groups (including service providers), rather than the public. Regulation may – intentionally or

not – constrain innovation, competition or adaptation to changing circumstances, and thus have detrimental effects across the economy.

Some service industries are subject to extensive industry-specific regulatory regimes in New Zealand; for example, air transport and broadcasting. Service industries are also subject to non-targeted regulation (ie, regulation affecting all sectors). However, such regulation may impose higher costs on the services sector or particular industries within it. For example, it is possible that the *Holidays Act 2003* particularly affects some service industries.

A priority for the inquiry is to identify ‘concrete policy recommendations ... that maximise the impact on New Zealand’s overall productivity performance’. Much government policy is implemented by regulation. The Commission seeks to understand how current regulation affects New Zealand’s service industries, and where there are opportunities for improvement.

Q17

Are there non-targeted regulations that have a disproportionately negative impact on service industries? How can this situation be improved?

Q18

Which service industries are significantly affected by industry-specific regulation? Are there opportunities for improvement?

Intangible assets and skills

Intangible assets have become increasingly important as sources of innovation and productivity gains, and are particularly relevant for service firms. Intangible assets are non-monetary assets which are identifiable but without physical substance. They derive their value from intellectual or legal rights, or embodied knowledge. Examples include reputation, brand recognition, human capital, patents and databases.

Relevant policy issues include the financing of start-up firms based on intangible assets, the treatment of intangibles in corporate valuation and accounting frameworks, competition policy in the digital economy, and the design of intellectual-property frameworks for areas experiencing rapid technological progress (Andrews & de Serres, 2012).

Q19

Are there important issues relating to intangible assets in service industries that the Commission should investigate?

Managerial skills, an organisational culture that is amenable to change, and human capital more broadly are important for innovation and related productivity improvements in firms. Firms

need managers who can find and develop better ways of doing things, and employees with the ability to adapt. Policy settings may impact on the demand for these skills, as well as their supply.

Q20

What are the most important policy issues relating to management, organisational culture and employee skills in the services sector?

This section has canvassed a selection of issues: competition and scale, trade in services, the role of ICT, regulation, intangible assets, skills, and low-productivity, low-wage service industries. The Commission wishes to find out what other policy issues are relevant to productivity in the services sector.

Q21

What other policy issues have an important impact on productivity in the services sector?

5 What process will the inquiry follow?

The nature of this inquiry – both in terms of the subject matter and its two parts – lends itself to a different process than that which the Commission has used in previous inquiries.

Since Part A – the broad assessment of the services sector – will inform the selection of topics for Part B, the Commission intends to publish an initial draft of Part A and seek public submissions before making its final selection of topics. The topics chosen will be guided by the Part A analysis, public submissions and by the Terms of Reference (Box 7).

Box 7 'Critical for lifting productivity' – selecting topics for Part B

Part B of the inquiry will consist of detailed analysis of topics that are 'critical for lifting productivity in the relevant parts of services sector'. The Terms of Reference specify criteria to inform that selection:

- the potential to make a significant impact on New Zealand's overall productivity performance; and
- the ability to identify impediments to increasing productivity and lead to concrete recommendations for changes to government policy that can overcome those impediments.

In making its topic selection, the Commission will consider the importance of services to GDP and international trade, the possibility of drawing lessons from high-performing service firms and industries to lift productivity in low-performing ones, and the contribution of ICT to services-sector productivity.

The current thinking of the Commission is to choose two or three topics for Part B.

A topic might be the examination of a particular service industry, or a specific cross-industry issue important to the productivity of the services sector as a whole.

Q22

What topics should be considered for in-depth analysis in Part B of the inquiry? In what ways do they meet the criteria in the Terms of Reference?

Table 1 sets out the proposed timeline for the inquiry. Actual dates and deliverables may change as the inquiry process is fine-tuned.

Table 1. Proposed inquiry timeline

Date	Milestone
March-May	Initial research and analysis, and meetings with interested individuals and organisations.
2 May	Due date for issues paper submissions.
June	Release of an interim report on Part A and topic selection for Part B. This report will: <ul style="list-style-type: none"> - assess the role and general performance of the services sector (Part A), and present preliminary findings and recommendations arising from that assessment; and - propose specific topics to assess in greater depth (Part B), along with the rationale for proposing them.
July	Submissions on the interim report due.
July	Announcement of the topics chosen by the Commission for Part B.
July-August	Engagement with interested parties on the interim report.
October	Release of a second interim report, being the draft report on the topics chosen for Part B, including preliminary findings and recommendations.
December	Submissions on the second interim report due.
December-January	Engagement with interested parties on the second interim report.
28 February 2014	Final report provided to referring Ministers.

The Commission may openly test its thinking on specific issues through additional mechanisms, such as published research notes, discussion forums and expert roundtables.

The Commission welcomes requests to meet with interested parties throughout the process.

Q23

With whom should the Commission consult?

List of questions

What has the Commission been asked to do?

- Q1** Will the Commission's proposed approach to this inquiry deliver the best outcomes for New Zealand? How could it be improved?
- Q2** What relevant publications and data sources should the Commission explore for this inquiry?

What are services?

- Q3** Which activities within the following industries are provided in a market (non-government environment):
- education and training;
 - health care and social assistance; and
 - public administration and safety?
- To what degree should the market-provided parts of these industries be included within the scope of this inquiry?

Services are important to the economy

- Q4** In your experience, do weaknesses and gaps in service industries handicap the performance of other industries? If so, how?
- Q5** What are the causes of the productivity gaps between firms in the same service industry or sub-industry? What can be done to reduce such gaps?
- Q6** What is the potential for improved productivity and growth in service industries that you are familiar with? What are the impediments to improved productivity and growth in those industries?

Some important issues

- Q7** To what extent is there insufficient competition in New Zealand's service industries? In which industries? What are the impediments to competition in these industries?
- Q8** What are the opportunities for productivity growth in service industries where production and consumption of the service happens in the same location, and demand is geographically spread out?
- Q9** Are there service industries that perform less well than they could due to problems such as low levels of skills; or lack of specialised inputs, scale, appropriate infrastructure or opportunities for agglomeration? What are the impediments to improving productivity and growth in these industries?
- Q10** What are the barriers to the export of services? What are the economic impacts of those barriers? What can be done to reduce them?
- Q11** To what extent are there barriers to the efficient import of services? What are the economic impacts of

- those barriers? What can be done to reduce them?
- Q12** What barriers exist to the cross-border movement of people that affect international trade in services? How do those barriers affect New Zealand service industries and the economy more generally? Are there opportunities to remove or reduce these barriers?
- Q13** What barriers exist to cross-border investment in service industries? How do those barriers affect New Zealand service industries and the economy more generally? Are there opportunities to remove or reduce these barriers?
- Q14** How is trade in services affected by New Zealand's current international agreements? What features should negotiators seek or avoid in future agreements, and why?
- Q15** To what extent do New Zealand services businesses invest in, and make effective use of, ICT? What are the barriers to them doing so?
- Q16** What is the scope to raise productivity and wages in service industries that traditionally employ low-skill workers? How would this be best achieved?
- Q17** Are there non-targeted regulations that have a disproportionately negative impact on service industries? How can this situation be improved?
- Q18** Which service industries are significantly affected by industry-specific regulation? Are there opportunities for improvement?
- Q19** Are there important issues relating to intangible assets in service industries that the Commission should investigate?
- Q20** What are the most important policy issues relating to management, organisational culture and employee skills in the services sector?
- Q21** What other policy issues have an important impact on productivity in the services sector?
- What process will the inquiry follow?**
- Q22** What topics should be considered for in-depth analysis in Part B of the inquiry? In what ways do they meet the criteria in the Terms of Reference?
- Q23** With whom should the Commission consult?

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Terms of reference



Office of Hon Bill English

Deputy Prime Minister
Minister of Finance
MP for Clutha-Southland

1 March 2013

Mr Murray Sherwin
Chair
New Zealand Productivity Commission
PO Box 8036
The Terrace
WELLINGTON 6143

Dear Murray

TERMS OF REFERENCE FOR SERVICES SECTOR INQUIRY

The services sector accounts for a large proportion of New Zealand's output and employment, and has a significant impact on the everyday lives of New Zealanders.

Improving productivity in the services sector would contribute to a number of Government goals, such as increasing exports and lifting New Zealand's long run productivity growth rate.

We are therefore pleased to refer to you the Terms of Reference for a New Zealand Productivity Commission inquiry into Boosting Productivity in the Services Sector.

We wish you all the best as you commence the inquiry and look forward to your results.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Bill English'.

Hon Bill English
Minister of Finance

Boosting productivity in the services sector

Context

1. Services are often described as things you can buy or sell but cannot carry. From browsing the internet, dining out, buying and selling a home to receiving an education or medical treatment, services make up a wide and diverse range of activities that impact on the lives of all New Zealanders on a daily basis
2. The services sector stands out in New Zealand's economy, accounting for over 70 percent of registered businesses, national output and employment. Services make up a critical part of New Zealand's export revenue. In 2009, New Zealand's services exports were valued at \$12.7 billion and represented 22 percent of all exports. Travel and transportation services accounted for 77 percent of services exports.
3. Furthermore, services form a valuable input to many of New Zealand's exports. Nearly half of the value of New Zealand's exports can be attributed to value-added from the services sector.
4. Despite the clear importance of the services sector to the New Zealand economy, relatively little is known about the impact and drivers of service sector productivity. Measurement can be difficult, but overseas experience suggests that there is considerable variability in the degree to which countries have benefited from improved services productivity growth. In New Zealand, there has been considerable variation in productivity performance across the services sector.
5. Improving productivity in the services sector would contribute to a number of Government goals including to materially lift New Zealand's long-run productivity growth rate while maintaining our high rate of labour force participation, and to increase the ratio of exports to GDP to 40% by 2025.
6. Given the significance of the services sector to New Zealand's economy but the relatively small amount of study into the sector's productivity performance, the Government is commissioning a Productivity Commission Inquiry into Boosting Productivity in the Services Sector.

Purpose and Scope

7. The purpose of the inquiry is two-fold: to provide an overview of the role of services in the New Zealand economy and to provide policy options to lift productivity in the services sector.

A. The role of services in the New Zealand economy

8. This part of the inquiry should provide an overall assessment of the role and performance of the services sector in New Zealand. This assessment should:
 - a. describe the recent productivity performance of the services sector, including the extent to which employment has shifted from high to low productivity sectors;
 - b. assess the impact of the services sector on the New Zealand economy overall, including how it affects the performance of the primary and manufacturing sectors; and
 - c. assess the performance of the New Zealand services sector against the experience of OECD and other small open economies.

B. Policy options to lift productivity in the services sector

9. Given the diversity of industries within the services sector, policy recommendations and lessons for lifting productivity are likely to be better informed by looking at selected issues or parts of the sector in more depth.
10. Informed by part A above, this part of the inquiry should provide detailed analysis on a selection of issues that are critical for lifting productivity in the relevant parts of services sector. This analysis should lead to policy recommendations to lift productivity in those parts of the services sector.
11. The Commission should have regard to the following criteria when determining the issues or parts of the sector on which it will undertake more in-depth analysis:
 - a. whether the issues or parts chosen for further analysis have the potential to make a significant impact on New Zealand's overall productivity performance;
 - b. the extent to which the analysis will be able to identify impediments to increasing productivity in the services sector and lead to concrete recommendations for changes to government policy which can overcome those impediments.
12. In applying the criteria above, the Commission should take into account the following aspects when determining the issues or parts of the sector on which it will undertake in-depth analysis:

- a. The increasing importance of services to GDP, to global trade, and as a contributor to the Government's goal of lifting the ratio of exports to GDP to 40% by 2025.
 - b. The wide variation in the productivity performance of services subsectors and industries, and the ability to draw lessons from high performing subsectors (for example financial and insurance services) and to lift productivity in relatively poor performing subsectors (for example administrative and support services).
 - c. The importance of information and communications technology in other OECD countries as a contributor to strong productivity growth and as an explanation for differences in productivity growth across countries.
13. The Commission should seek views from interested parties when determining the services sector issues on which it will undertake in-depth analysis.

Other matters

14. Consideration of productivity in the services sector should be limited to market-provided services and therefore exclude study of services provided directly by the public sector. The Government has a wide programme underway to improve public sector productivity, detailed consideration of this sector is not possible within the time available to the Commission, and measurement issues in this sector also make analysis difficult.
15. The Commission should prioritise its effort by using judgement as to the degree of depth and sophistication of analysis it applies to satisfy each part of the Terms of Reference. In making this prioritisation, the Commission should emphasise the importance of making concrete policy recommendations in part B that maximise the impact on New Zealand's overall productivity performance.

Consultation requirements

16. In undertaking this inquiry the Commission should consult with key interest groups and affected parties.

Timeframe

17. The Commission must publish a draft report and/or discussion paper(s) on the inquiry for public comment, followed by a final report, which must be submitted to each of the referring Ministers by 28 February 2014.

Referring Ministers

Hon Bill English, Minister of Finance

Hon Steven Joyce, Minister for Economic Development

NEW ZEALAND
PRODUCTIVITY COMMISSION
Te Kōmihana Whai Hua o Aotearoa

