Boosting productivity in the services sector

1st Interim Report – Overview

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The New Zealand economy is largely services based. The services sector accounts for nearly three-quarters of gross domestic product and is tightly interlinked with the other sectors of the economy. Services, including service inputs to merchandise exports, account for over half of New Zealand's total exports. Services-sector productivity, therefore, strongly affects the productivity of the economy as a whole and the wellbeing of New Zealanders.

New Zealand's productivity performance is below par compared with its OECD peers. Reflecting this and the importance of services in the economy, 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.

This inquiry has two main aims:

- to build a better understanding of the services sector, its recent performance, and the role it plays in the New Zealand economy; and
- to identify opportunities to boost productivity in the services sector and contribute to New Zealand's overall productivity.

This interim report focuses on the first aim by assessing the role and performance of the New Zealand services sector. It investigates the productivity performance of the different service industries, the impact of the sector on the economy as a whole, and New Zealand's performance against that of other countries.

A second interim report will feature an in-depth examination of selected services-sector topics. The terms of reference specify that these topics should have the potential to significantly boost New Zealand's productivity performance, and to lead to concrete recommendations for government policy.

What are services?

Most people have an intuitive feel for the difference between a 'good' and a 'service'. For example, one way of defining a service is that it is something that can be bought and sold, but not carried. Another approach is to adopt sector definitions used by Statistics New Zealand. That approach classifies services as everthing produced outside the primary and goods-producing sectors.

While these definitions have practical advantages, the Commission has found that they have limitations when it comes to thinking about what is distinctive about services, and what policies might boost productivity in the sector. The Commission has found that looking at services from multiple perspectives presents a richer picture of the sector, its role in the economy and opportunities for improvement.

One perspective on services is that transactions between buyers and sellers of services have distinctive characteristics. These transactions concern intangible rather than tangible products, and/or involve a rental contract rather than a transfer of ownership. For example, the purchase of legal advice is a service transaction because it involves an intangible product. Hiring a car is also a service transaction because it involves a rental contract and not a change of ownership. The Commission has used this perspective and several others in this report.

Why does the productivity performance of the services sector matter?

Put simply, the productivity performance of the services sector matters because the sector is such a large proportion of the total economy. Even small improvements in the sector's productivity performance will show up in the performance of the economy overall.

But the influence of the services sector's productivity runs much deeper than its contribution to aggregate performance. The services sector is closely interconnected with other sectors of the New Zealand economy. Services feature extensively as inputs to the production of other goods and services. More services are purchased by firms, as inputs to their production, than by households.

The firms that constitute the primary and goods-producing sectors purchase sizeable amounts of services as inputs to their production. They spend nearly 40% more on market-provided services than they spend on wages and salaries.

The performance of the services sector also directly affects the wellbeing of New Zealand households. For example, reduced productivity growth in telecommunications providers could adversely affect the price and quality of communication – impairing the ability of New Zealanders to maintain and enhance interconnections between families, friends and communities.

The services sector's role in international trade

Service exports matter a great deal for New Zealand, as a small and isolated economy that relies on trade.

Services can be exported directly. For example, by delivering a service to an overseas client over the internet, or by a tourist travelling to New Zealand. New Zealand's direct exports of services, as a share of total exports, are similar to other developed economies. However, a large proportion of these services are transport, tourism and education. If these types of services are excluded from the comparisons, the share of GDP for the remaining service exports is comparatively low. This could suggest the existence of unexploited export opportunities for other service products. Alternatively, it may reflect an efficient outcome given New Zealand's comparative advantages, and its isolation, trade barriers and scale. Services can also be exported indirectly by New Zealand firms that have established a physical presence in other countries. Typically this requires outward direct investment (ODI). New Zealand's ODI (as a share of GDP) is small relative to that of other OECD countries. This suggests that New Zealand service firms have relatively little presence in overseas markets.

Another route by which services are exported indirectly is through their contribution to the production of exported goods. When such 'embodied' services are added to directly-exported services, service industries contribute a little over half of the value of New Zealand's exports. Inefficiencies in the production of services, and in the operation of service markets, increase the costs faced by goods exporters and reduce their international competitiveness.

How well has the services sector performed?

The productivity performance of New Zealand's services sector is below the average of a benchmark set of OECD countries.

The individual service industries are extremely diverse in their nature and performance. Big differences exist across New Zealand's service industries in both productivity levels and growth rates. Some information industries (eg, finance and insurance) are top performers, associated with high skill-levels and the use of information and communication technologies (ICTs). Other service industries such as retail trade, and accommodation and food services have generally had lower productivity levels and growth rates.

Service industries vary in workforce characteristics such as wage levels, skill levels, average age and experience. Variability in these characteristics is a benefit in that it creates employment opportunities that cater to the mixed composition of New Zealand's workforce. While growth in high-wage, high-skilled work is desirable, lower-skilled service industries also play an important role in society and in the career development of workers.

Preliminary research indicates a wide dispersion in productivity levels across firms in the same service industry, which is hidden when productivity statistics are aggregated. Some firms perform exceptionally well, while others perform poorly. This suggests that the forces of competition may be relatively subdued in some of New Zealand's service industries, as competition should encourage well-performing firms to expand and poorly-performing firms to exit.

Labour and multi-factor productivity (MFP) performance in service industries has mostly been below OECD averages for both levels and growth rates, in line with New Zealand's overall productivity performance.

Industry-level productivity comparisons between countries are challenging because of data and comparability issues. The Commission has drawn on research that compares New Zealand industries to those in Australia and the UK. This research found that some New Zealand service industries have higher productivity (levels and growth rates) than their UK and Australian counterparts, but the bulk do not.

Compared with the UK and Australia, New Zealand's service industries tend to have considerably lower levels of capital intensity. The picture for MFP is more varied – around half of New Zealand's service industries have higher MFP levels than their Australian and UK counterparts.

The positive productivity trends in some New Zealand service industries – such as information media and telecommunications – have not been strong enough to offset the weak performance of other service industries. As a result, New Zealand has not received the boost to its economy-wide productivity growth that the US and some other countries have achieved from their services sectors since the mid-1990s.

Overall productivity performance will suffer if low-productivity industries in an economy expand relative to high-productivity industries. A shift of employment into lower-productivity service industries and the expansion of these industries could thus be a contributor to New Zealand's disappointing productivity performance. The Commission's analysis of the overall shifts over time of output and employment towards low-productivity industries (including service industries) found that such shifts had only a minor negative effect on aggregate productivity growth. Most growth in aggregate productivity arose from growth within industries rather than from shifts in employment and output across industries.

What policy issues are relevant to boosting productivity in the services sector?

The diversity of services and service industries, along with classification difficulties, make it challenging to generalise about the services sector. There is also much diversity across firms within service industries. Generalisation is, however, valuable in framing thinking about the sector, its role in the economy and the efficacy of government regulation.

There is a complex web of services that are inputs to the production of goods, and goods that are inputs to the production of services. This web connects the primary, goods-producing and services sectors. Policy analysis should avoid the trap of treating the primary, goods-producing and services sectors as silos.

Strong domestic and international competition are important

Achieving scale, specialisation and competition among New Zealand firms are perennial challenges for New Zealand policy. Indeed, these challenges, and their implications for productivity, can be more acute for service firms given that many services are less easily traded over distance than the outputs of the primary and goods-producing sectors. This has implications for both domestic and international policy.

Many services are delivered face to face – which means that service providers need a physical presence in the local area where they provide the service. Because New Zealand's population is small and spread across a relatively large land area, the opportunities to benefit from competition and scale in these 'localised' service markets may be more constrained than in more densely populated parts of the world.

Improved transport and communications infrastructure can reduce spatial transaction costs, thereby increasing the ability of services to be traded over distance, which in turn can stimulate greater competition and scale economies. Thus, infrastructure provision and the regulation of transport and communication networks are important and relevant policy areas.

At the international level, the cost and quality of service inputs into goods exports affects their international competitiveness. Accordingly, policies to improve productivity performance in the services sector can have flow-on benefits for goods exporters. Competitive and efficient domestic service markets can help ensure that the services embodied in New Zealand's goods exports enhance rather than detract from those products.

Goods exporters often follow a 'make it, pack it, ship it' model. However, New Zealand firms that directly export services typically need deeper connections, better information and better networks than goods exporters. This is likely to be relatively more challenging for New Zealand firms, given their small scale and distant location. Exporting services by establishing a physical presence overseas can also present challenges for New Zealand firms. Reducing barriers to ODI could reduce the initial fixed costs faced by New Zealand firms that aim export services. This points to the importance of mutual recognition and other economic integration measures.

International trade stimulates competition by opening domestic service markets to a wider range of competitors. Barriers that inhibit service imports reduce the competitive pressure in parts of the services sector. They also slow the flow of new ideas and technologies into New Zealand. Policies should reflect the competition and innovation benefits that can stem from inward foreign investment.

Optimise regulatory settings

The extent of regulation varies between different service industries. Some industries face only generic regulations that apply across all industries, such as labour laws, while others are subject to industry-specific regulations.

When considering the effects of targeted and generic regulations on the services sector, an important question is: how close to optimal are the regulatory arrangements? Are there significant opportunities to boost efficiency, growth and innovation – and therefore wellbeing – by improving current arrangements? Answering these questions requires analyses that drill into the regulatory environment affecting individual industries and their component sub-industries. These would likely find examples of regulations that no longer (or never did) meet their goals, fail to provide an optimal trade-off between competing priorities, or could otherwise be improved.

Regulations designed to assist buyers and sellers to conduct service transactions – such as consumer protection laws and occupational licensing regimes – are particularly relevant. This stems from the complexity that is inherent in some service transactions. Information asymmetries between service providers and customers, and the inability to fully assess quality and delivery of some services before the transaction, contribute to this complexity. These traits can lead to difficulties in sorting out, and obtaining remedies to, any problems that subsequently arise with the service. While regulation can help to protect consumers from opportunistic suppliers, benefits need to be carefully assessed against costs.

ICT and innovation can boost productivity when effectively applied

Innovation – developing new products, making use of new products, or developing new processes or ways of doing something – is a vital way for New Zealand firms to lift productivity. This is as true for firms in the services sector as it is for those in the other sectors.

ICTs are particularly important to boosting productivity in the services sector. The provision of many services is limited by the need for the provider to interact directly with customers. ICTs are making distance less important for the delivery of some of these services, allowing them to be more easily traded.

Over the past decade New Zealand has invested in ICT at a similar rate compared with other OECD countries. However, ICT investment alone is not sufficient to generate productivity growth – equally important is how ICTs are put to work and applied within firms. It appears that many New Zealand firms are not extracting the full potential of these technologies. This points to the need for policy settings that encourage investment in complementary skills and capabilities. Developing the business systems and processes necessary to incorporate ICTs into firm practices are also important.

Which services-sector topics would benefit from in-depth analysis?

The next part of this inquiry is dedicated to formulating policy recommendations to lift productivity in the services sector. The terms of reference direct the Commission to focus on specific topics that are particularly relevant to the services sector (rather than attempting to cover the whole sector).

The terms of reference specify two main criteria to inform the selection of topics for in-depth analysis:

- 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.

These criteria, along with the Commission's analysis and suggestions from inquiry participants, were used to select the following three topics, of which the Commission ultimately intends to examine two.

- Improving occupational licensing in the services sector
- Stimulating services competition
- Addressing barriers to the successful application of ICTs

Improving occupational licensing in the services sector

Occupational licensing broadly aims to protect the public from the risks of an occupation being carried out incompetently or recklessly. The objectives of specific occupational regulations vary, but generally they are intended to protect customers by specifying minimum educational and professional qualifications that people must have in order to work in the occupation, specifying the types of services that a licensed provider can engage in, and setting and enforcing codes of conduct.

Occupational licensing regimes aim to mitigate a number of risks for customers, many of which are particularly common in the services sector, including:

- information asymmetries that arise from the complexities of some services;
- the intangible nature of many service transactions, which can increase the difficulty of assessing their quality; and
- the severity of consequences that are associated with some services.

For example, consumers of legal services generally have limited knowledge about legal matters, and hence are not in a good position to assess the skills or quality of a lawyer. Adding to this difficulty is the fact that most legal services are intangible, meaning that there is no physical product to examine. Moreover, poor quality legal advice could have severe consequences, and those consequences may not be apparent until some future time.

Protecting customers from the risks associated with services undertaken by professions generates benefits for the public. However, these benefits need to be clearly articulated, demonstrated, and balanced against the costs of occupational licensing. In addition to compliance and administration costs, applying entry restrictions to certain professions can reduce competition, creating adverse outcomes for customers. Entry barriers can also restrict flexibility in the workforce by reducing the scope for labour movements between professions to match changes in demand.

The Commission is interested in the influence of occupational licensing on service transactions between firms, and between firms and consumers. More specifically, how is the balance best struck between the costs and benefits of occupational licensing regimes in the services sector?

Stimulating services competition

Competition is an important factor that influences productivity. It creates incentives for firms to invest in productivity-raising actions such as adopting new innovations. It can also result in creative destruction, where the best-performing firms expand and poor performers exit the market.

Competition matters, to a varying extent, for all sectors in the economy. But the nature of some services can create particular barriers to competition. Many service transactions require a direct interaction between customers and the service provider, meaning that competition can be limited to the firms that are active within a specific local area.

The Commission is particularly interested in the role that consumers play in stimulating competition. Consumer perceptions of barriers to changing providers can have a dampening effect on competition.

Acquiring the knowledge necessary to make an informed decision about which provider offers the services that best meet their needs can be costly for consumers in the presence of information asymmetries. Furthermore, the transaction costs associated with switching providers for some services can deter effective competition. For example, until relatively recently, switching phone companies resulted in the inconvenience of changing to a new phone number.

The spread of the internet and other ICTs has increased the ability of consumers to drive competition to some extent. For example, prospective house buyers or tenants can now easily browse through multiple online listings, enabling them to search a much wider range of properties than if they had to visit each property in person.

Government has addressed search and switching costs through provision of information in some markets. For example, the 'What's my number' campaign provides consumers with information about their ability to switch electricity supplier, the ease of switching and the potential savings from changing supplier.

The Commission is interested in whether there is role for government, business or non-government organisations in stimulating greater competition by reducing search and switching costs in service markets.

Addressing barriers to the successful application of ICT

ICT use and productivity growth are positively linked. Benefits attributed to the use of ICTs include improved information and knowledge management, more effective management of processes, reduced coordination costs and improved communication. In addition, ICTs can deliver new services or new and better ways of delivering existing services.

The productivity potential associated with ICTs may be particularly pronounced for New Zealand, given its isolation from trading partners. For example, the internet can enable New Zealand firms to access larger markets, and expose domestic markets to increased competition.

The Commission is interested in identifying and addressing barriers to firms extracting the full benefit from ICT. One issue is whether the technical skills and broader human capital (including management capability) that are required to successfully harness technology are available to New Zealand firms. Another is whether there are regulatory or other constraints on the types of business models that New Zealand service firms can adopt that limit their ability to fully exploit ICT.

A further issue is whether regulatory or other barriers prevent the uptake of emerging technologies. For example, do concerns about privacy and security create a significant barrier to greater adoption of cloud computing?

The Commission is also interested in differences between the uptake and successful use of ICT in different parts of the services sector, and identifying any industry-specific barriers. Evidence from the US retail industry and Australian wholesale trade industry have shown a significant relationship between ICT investment and productivity growth. In New Zealand, these industries are both relatively poor productivity performers. Are there any barriers to the effective use of ICT in these industries? Could policy changes assist?

Next steps

The next part of this inquiry will focus on a detailed examination of two of the three topics outlined above. A second interim report will be published in January 2014, and include the Commission's draft analysis, findings and recommendations. Submissions are invited to help guide the choice of topics, along with suggestions towards refining the scope of these topics. Submissions commenting on the content of this report are also welcome, and will assist the Commission in preparing the final inquiry report.