INTRODUCTORY NOTE

COMMERCIAL SERVICES EXPORTS – WHAT WE KNOW AND WHY THAT MATTERS.

We have a collective ambition to push exports, by 2025, to 40% of GDP. We all know that is a big stretch.

We know that to get there all parts of the New Zealand economy need to contribute. No single sector, on its own, is going to be able to land that 40% target.

We have a reasonably good understanding around most parts of the export community – but one of the least well understood sectors is that relating to ‘commercial services’.

This report seeks to improve that understanding. Why is that improved understanding important?

Because this sector is dynamic, fast growing and largely weightless – and if we support it well, it has the potential to be an ‘above-the-line’ driver of export growth.

Whilst the primary sector is clearly going to be as important to NZ’s future as it has been to our past, globally trade in services has been growing faster than trade in goods and within the services sector the fastest growth sub-sector has been in the ‘commercial services’ space. That global trend-line is also apparent in NZ. In New Zealand commercial services (as a percentage of our total services exports) has grown from 13% in 1992, to 20% in 2005 to 30% today. Commercial services exports have grown at 8% pa over the period 2005-2011, faster than goods (which grew at a still impressive 7% over this period) and considerably faster than the rest of the services sector (largely tourism, education which contracted 2% over that period).

Reflecting the above it is important to better understand the components making up the commercial services export sector, where those companies are exporting to (this is a very different profile to our goods exports) and how those services are being sold into market (the vast majority via ‘mode 1’ i.e. directly out of NZ by phone, internet, email). This report provides that information.

In addition this report, importantly, examines the number/profile of NZ firms which simply export goods, or export just services and those which export both ‘goods and services’. That last category is a small group as a proportion of exporting firms (only 4%) but are disproportionately important in terms of both their share of exports (40%) and their defining characteristics – they are larger firms (and we know scale assists the ability to tackle offshore markets), they typically have higher levels of offshore investment (assisting with technology transfer and connectivity to market/global value
chains) and undertake higher levels of R&D (more innovative). These types of firms look to enjoy a real ‘export potential’ sweet spot.

Just as we know, in a world increasingly dominated by global value chains, that it is insufficient to think anymore in simplistic export/import terms, so the data in this report about these dynamic firms exporting both goods and services (termed ‘GSE’ firms) points to a need – both for analytical and trade policy purposes – to think less about ‘goods’ exports and ‘services’ exports separately but rather, increasingly, to think of a fusion of the two.

**NB:** Commercial services are defined as: total services excluding tourism, education-related travel, transport, government services and insurance. It captures, therefore – but is not limited to, services such as computer services, engineering, royalties and licence fees, accounting and legal services, audio-visual services and ‘merchanting’ (the latter = net income earn[ed from buying goods offshore and then on-selling them to third markets].

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CHARACTERISTICS OF NEW ZEALAND’S COMMERCIAL SERVICES EXPORTERS

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DISCLAIMER

The results in this paper are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand.

The opinions, findings, recommendations, and conclusions expressed in this paper are those of the author(s) not Statistics NZ or the Ministry of Foreign Affairs and Trade.

Access to the anonymised data used in this study was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business, or organisation and the results in this paper have been confidentialised to protect these groups from identification.

Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

The results are based in part on tax data supplied by Inland Revenue to Statistics NZ under the Tax Administration Act 1994. This tax data must be used only for statistical purposes, and no individual information may be published or disclosed in any other form, or provided to Inland Revenue for administrative or regulatory purposes.

Any person who has had access to the unit-record data has certified that they have been shown, have read, and have understood section 81 of the Tax Administration Act 1994, which relates to secrecy. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data’s ability to support Inland Revenue’s core operational requirements.

Statistics NZ confidentiality protocols were applied to the data sourced from the New Zealand Customs Services; the Ministry of Business, Innovation and Employment, New Zealand Trade and Enterprise. Any discussion of data limitations is not related to the data’s ability to support these government agencies’ core operational requirements.
This report provides an update to prior analysis (2010 and 2012) undertaken by ECO on the characteristics of NZ’s commercial services exporters. It draws on data from Statistics NZ’s 2011 International Trade in Services and Royalties Census (co-funded by MFAT) which contains information on NZ’s commercial services exporters. The earlier 2010/2012 work was only able to draw on 2005 data.

In 2011, NZ’s exports of commercial services were $4.0 billion – comprising 30% of total service exports. In general, NZ’s commercial services sector has been the key driver of growth in NZ’s total services exports, helping offset the contraction in exports of travel services\(^1\) and outstripping growth in our merchandise goods exports over 2005 to 2011 – making it a small but growing source of international revenue for NZ.

For the first time in 2011, Statistics NZ collected information on modes of supply. That is, on how NZ’s commercial services exports are delivered to the customer. Cross-border supply (Mode 1 – via the Internet, email or phone) was the most common way to export commercial services with 86% of NZ’s commercial exports delivered this way.

Looking at the performance characteristics of different exporter types in NZ, we found that it was those exporting both goods and services (GSEs) that exhibited above-the-line characteristics (compared to those that export goods only (GEs) and services only (SEs)), despite this group accounting for just 4% of all exporting firms.

Akin to our prior studies, GSEs were found to be bigger in size (have 315 employees on average), have a higher proportion of firms with foreign ownership (48%), have a higher proportion of firms undertaking R&D (45%), and have higher sales, profit and value-added than GEs and SEs.

The export markets GSEs operate in are also more diversified, with 42% of all GEs exporting to seven markets or more. On average, GSEs target more goods markets than GEs (7 vs. 4) and more services markets than SEs (4 vs 3). Asia is a key goods and services target market for GSEs and a greater proportion of GSEs export goods and services to the Middle East and Africa, South America, and Central America, than GEs or SEs.

GSEs have a greater emphasis in their export receipts on goods than services (with goods accounting for 91% of this group’s total exports receipts). Unlike in 2005, SEs exported a greater value of services than GSEs in 2011.

The increasing fragmentation of production across global value chains has further highlighted the importance of services (particularly, commercial services) in international trade. This has several implications for how national trade policy is formulated, especially for a small country like NZ.

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\(^1\) Exports of travel services covers goods and services acquired for personal use by foreigners travelling in NZ. Broadly, this includes tourism, education related travel and business travel.
INTRODUCTION

For NZ, as a small and geographically distant economy, the small size of our domestic market constrains the ability of NZ business to grow. Moreover, since the 1980’s, NZ’s economic performance has not kept pace with global changes — with our exports of goods and services having flat-lined at around 30% of GDP. This is within the OECD average, but well below the 40-50% of GDP for similar sized countries in the OECD. Against this backdrop, the Government’s Business Growth Agenda (BGA) has set the ambitious target of raising NZ’s exports as a share of GDP to 40% by 2025. The services sector is expected to play a key role in lifting NZ’s economic performance and exports given growing global demand for expertise and specialised services, as well as the lack of typical natural resource constraints in this sector.

It is common knowledge that services are a dominant driver of economic growth, both in developed and developing countries. The most recent World Development Indicators show that the services sector accounted for 70% of global GDP in 2012 and has grown at a faster rate than the agriculture and industry sectors since 2000. Moreover, global trade in services has been growing at a faster rate than trade in goods since the 1980s and in 2013, global services exports grew 5% to US$4.7 trillion. Global trade in services also demonstrated relative resilience in the latest financial crisis, experiencing a lower magnitude of decline and an earlier recovery from the crisis than world goods exports. Such resilience has led many countries to incorporate services trade into their post-crisis national growth (and trade) strategies.

The most dynamic services sectors between 2008 and 2013 were computer and information services — which grew by 9.1% on an annual average basis. It is in this sector that developing economies recorded the highest growth rates with 13% on average since 2008, compared with 7.5% for developed countries. However, despite services being increasingly traded internationally, exports of services continue to make up less than 25% of total world exports — highlighting the untapped potential between the size of the sector and its importance in exports.

In NZ, the services sector dominates the domestic economic landscape and accounts for over 70% of registered businesses, national output and employment. Services also make up a critical part of our export revenue, with exports of services valued at NZ$16 billion in 2013 — representing 25% of total exports of goods and services. Among services exports, travel and transport (i.e. NZ’s well-recognised service-sector leaders of tourism and international education) dominates with a combined share of approximately 72%. The remaining 27% is accounted for by commercial services. Commercial services refer to ‘professional’ services and are formally defined as total services excluding tourism, education-related travel, transport, government services and

“There is no such thing as a service industry. There are only industries whose service components are greater or less than those of other industries. Everybody is in service.”


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2 Industry includes manufacturing, mining, construction, electricity, water and gas.
3 Source: http://unctad.org/en/conferences/publicsymposium/2014/Pages/importance-of-services.aspx
6 NZ has experienced relatively low productivity growth in some services industries in recent decades. These are typically those that pay lower wages, have lower skill requirements, and use less ICT and other capital (e.g. retail trade and accommodation, and tourism industries).
insurance. It covers services such as computer services, engineering, royalties and licence fees, accounting and legal services, and audio-visual services to name a few. Also included in this category are lesser known services such as management fees between related parties and merchanting. The emergence of these lesser-known services reflects the changing nature of international trade—where there has been a shift toward global production systems and the fragmentation across value chains. Rather than trading goods that are solely produced in one country, the production of goods and services now occurs across a number of countries, involving a combination of intermediate inputs and services that are sourced globally. Services, in particular, play a prominent role in today’s trading environment as they are often used as intermediate inputs in the production of goods (think: freight and logistics services, insurance services, communications services). Such ‘enabling’ services are by and large commercial services, highlighting the importance/relevance of these service types.

Commercial services have experienced the fastest growth in world services trade, increasing from 35% of total services trade in 1983, to 54% in 2013 (comparable figures for NZ are 17% and 31%, respectively). Globally, exports of commercial services totalled US$2.5 trillion in 2013 with over half of total world commercial services exports originating from Europe (mostly from the EU). Asia’s share of commercial services exports was approximately 24%, whilst North America’s share was 18%. NZ’s share of world commercial services exports was around 0.14% in 2013. In general, NZ’s commercial services sector has been the key driver of growth in NZ’s total services exports, helping offset the contraction in exports of travel services and outstripping growth in our merchandise goods exports over 2005 to 2011—making it a small but growing source of international revenue for NZ.

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Data sourced from the WTO. According to Statistics NZ, commercial services exports comprised 27% of NZ’s total services exports in 2013.

Over 2012/13, there was a pickup in NZ’s exports of tourism—up 5.1% ($324 million)–slightly offsetting the decline in our commercial services exports (which declined by 8.5% or $398 million). Overall, NZ’s exports of services fell by 0.5% in 2013.
In 2010 and 2012, ECO undertook analysis⁹ on the characteristics of NZ’s commercial services exporters, drawing on 2005 data. Prior to this work, very little was known about the characteristics and performance of this sector in NZ – in striking contrast to the existing knowledge on NZ’s merchandise goods export sector. These papers found that firms that export both goods and services evidence above-the-line characteristics compared to firms that exported only goods or only services. Exporters of both goods and services are bigger in size, have a greater proportion of firms undertaking R&D, have a higher proportion of firms with some levels of FDI, and record higher levels of sales, profit and value-added.

The purpose of this paper is to update our prior analysis using results from the most recent, 2011 Census of International Trade in Services and Royalties (see Box 1 for further information). This will help determine whether former findings have remained consistent through time or whether any recent trends might be revealed.

Box 1: 2011 ITSS Census

The data for this study comes from Statistics NZ’s Longitudinal Business Database (LBD) which is a relational database linking a variety of administrative (i.e. tax) and survey-based data. As key component of the LBD, which is central to this study, is the International Trade in Services and Royalties Survey (ITSS). The ITSS collects information on commercial services trade (import and exports) by country and service category for the compilation of Balance of Payments and National Gross Domestic Product statistics. The ITSS survey is carried out on a quarterly basis and the ITSS Census is carried out approximately once every five years. The census is the most comprehensive source of information on service traders.

For the current analysis, we used results from the 2011 ITSS census (earlier analysis drew on results from the 2005 ITSS Census). Despite the limited timeliness, the 2011 data was chosen as the ITSS census results is the most comprehensive source of information on NZ’s services trade with the rest of the world. The 2011 census also differed from previous versions at it collected data on modes of supply for the very first time (explained further in the next section). Modes of supply statistics examine where and how an international service transaction takes place and is important as it has implications for free-trade policy. By analysing the mode of supply, trade negotiators can identify strengths and weaknesses within the service sector.

Part I provides a snapshot of NZ’s commercial services exporters in 2011, including information on modes of supply. Part II examines the performance characteristics of the different types of exporters, i.e. those that only export goods, those that only export services, and those that export both goods and services. The final section discusses the trade policy implications of ‘servicification’¹⁰ for the global economy and NZ.

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⁹ New Zealand Commercial Services Exporters: First evidence from the prototype Longitudinal Business Database (2010), and Class of their own? New Zealand’s goods and services exporters (2012).

¹⁰ ‘Servicification’ refers to the development where manufacturing firms buy and produce more services than before, and also the fact that such firms sell and export more services as integrated or accompanying parts of their goods.
PART I: NZ’S COMMERCIAL SERVICES EXPORTS

This section provides a snapshot of NZ’s commercial services exporters in 2011. Over this year, exports of commercial services accounted for 30% of NZ’s total services exports, compared with 20% in 2005. In general, exports of commercial services have steadily increased each census year (from 13% in 1992). More specifically, NZ’s value of commercial services exports grew at an annual average rate of 8% over the 2005-2011 period. This compares with a contraction of 2% per annum in NZ’s exports of travel services (including education-related and tourism), and an annual average growth rate of 7% in NZ’s merchandise exports over the same period.

WHERE AND WHAT DO WE EXPORT?

Of key interest from a trade negotiation and trade policy perspective are insights into: the markets we export to, the types of commercial services we export, and the firms engaging in services trade. Figures 1 and 2 summarise NZ’s key export markets by the number of firms exporting to that market and by the value of exports.

A key factor behind NZ’s strong growth in commercial services over 2005-2011 could be related to the dominance of Australia in our commercial services exports – a country that maintained robust economic growth during this period. In fact, in 2011, Australia was by far the single largest export destination in terms of both, the count of firms involved and by the value of services exported. Around 66% of services exporting firms exported their services to Australia, representing 36% of NZ’s total services export receipts. In terms of regions, the EU and North America were also important services export partners for NZ in 2011. Around 77% of NZ services exporting firms sent services to the EU and 42% exported services to North America. By value, 23% of NZ’s total services exports were destined for North America and 12% were sent to the EU. Moreover, in value terms, NZ exports to Australia, the US and the UK combined, represented 64% of total commercial services exports in 2011 (compared with 63% in 2005).
Figures 1 and 2 provide information on commercial services exports by count of firms and value of trade. Figures 3 and 4 shed light on the composition of NZ’s commercial services trade in 2011 (i.e. by type of service).

Figures 3 and 4 summarise exports by value of trade.

Note: A firm will be counted multiple times if it exports to multiple markets. Firm counts have been randomly rounded.
In 2011, NZ’s commercial services exporters were primarily concentrated in exporting computer services; followed by other business services (including management fees and other miscellaneous services); architectural, engineering and other technical services; and management consultancy and public relations services.

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12 Note: A firm will be counted multiple times if it exports multiple service types. Firm counts have been randomly rounded.
Figure 4: Services categories by value of exports

Other business services was by far the biggest services export category by value, accounting for 17% of total commercial services export receipts in 2011. The largest component of this category was management fees between related parties ($512 million or 13% of NZ’s total commercial services exports). Management fees refer to fees commonly charged by a parent company to its subsidiaries. An export of management fees means that NZ companies receive such fees from overseas subsidiaries. These fees can include charges for managerial and administrative services, charges for accounting, computer services and royalties.

Computer services and personal, cultural and recreational services (mostly audio visual services) were also big export earners in 2011. These categories comprised 12% and 10% respectively, of NZ’s total commercial services export receipts. Compared with 2005, exports of most service types rose in 2011, with exports of computer services, management fees, and royalties recording the most significant increases.
For the first time in 2011, Statistics NZ collected information on how NZ’s commercial services are provided to the customer, i.e. the mode of supply. There are four modes of supply as defined by the 2010 Manual of Statistics on International Trade in Services (MSITS). These are detailed in Box 2. The 2011 ITSS Census collected data on Modes 1, 2 and 4 only – with Mode 3 transactions being outside the scope of the survey.

**Box 2: Modes of Supply**

**Mode 1: Cross-border supply**, i.e. the service is delivered from NZ to the overseas customer. For example: An architecture firm in NZ provides plans and advice to clients in the foreign country through internet/phone/email.

**Mode 2: Consumption abroad**, i.e. the overseas customer travels to NZ to acquire the service. For example: Tourism services; foreign students travelling to NZ to study at a NZ educational institution; foreign residents travelling to NZ for medical treatment in NZ.

**Mode 3: Commercial presence**, i.e. when an enterprise established a foreign affiliate/subsidiary abroad in order to deliver services internationally. For example: A NZ engineering firm establishing a branch overseas to provide engineering services to those overseas customers.

**Mode 4: Presence of natural persons**, i.e. the NZ supplier travels overseas to deliver the services. For example: An employee of a NZ IT firm is sent to a country overseas to deliver IT services.

**Synthetic view of modes of supply:**

![Diagram showing Modes of Supply](source: MSITS, 2002.)
Cross-border supply (Mode 1) was the most common way to export commercial services in 2011, accounting for 86% of exports. This is when NZ companies provide services to foreign customers via the Internet, email or phone. The high proportion of commercial services being delivered via this mode highlights the importance of quality and cost-effective ICT connections.

Employees of NZ companies providing the service overseas (i.e. Mode 4), accounted for $463 million of exports (about 11% of total commercial services exports); whilst overseas customers travelling to NZ to receive the service (i.e. Mode 2) accounted for $105 million (3% of total commercial services exports).

Figure 5: Share of NZ total commercial services exports by modes of supply

However, this pattern differed slightly by service type: while most commercial services were delivered by the Internet, email, or phone, some industries required a physical presence to deliver the service (Figure 5 refers). In 2011, 28% of total technical and professional services (i.e. engineering, technical testing, R&D, mining, repair services) were delivered by employees of NZ companies temporarily working overseas (Mode 4), driven by New Zealand engineers working on overseas project sites. A significant proportion of miscellaneous services (i.e. education, health, conference and presentation services) were also delivered by employees of NZ companies working overseas (36%). This was driven by New Zealand teachers consulting and teaching overseas for less than one year.
Across most export destinations, cross-border supply (Mode 1) was the prominent mode of delivering services (see Figure 3). However, in some export destinations such as the UAE and Papua New Guinea, the value of commercial services export was weighted more towards NZ employees travelling to deliver the service (Mode 4). This reflects the importance of education services exports into the UAE and engineering and other technical services exports into Papua New Guinea.

Figure 7: Commercial services exports by selected export destinations and modes of supply
PART II: NZ’S GOODS AND SERVICES EXPORTERS

This section looks at the comparative performance of NZ’s goods and services exporters. Previous papers found that exporters that export both goods and services are better performing than goods only exporters and services only exporters. In examining the data, services exporters were identified if they had a non-zero response to the 2011 ITSS census, and merchandise goods exporters were identified if they had a positive export value in the 2011 June year. Firms were then classified as ‘services only exporters’ (SE), ‘goods only exporters’ (GE), and ‘goods and services exporters’ (GSE), if they were observed to export goods only, services only, or goods and services, respectively.

CLASS OF THEIR OWN?

Summary statistics of all exporting firms are outlined in Table 1. The majority of firms in the dataset are GEs, accounting for 84% of total exporting firms. SEs on the other hand, account for 12% of total exporting firms, whilst GSEs account for just 4% of all exporting firms. This is similar to findings from prior analysis, suggesting that the type of activity engaged in by NZ exporters has remained broadly unchanged over time with most NZ exporters selling goods only.

Table 1: Export receipts

<table>
<thead>
<tr>
<th>Type of exporter</th>
<th>Number of firms</th>
<th>Total goods export receipts</th>
<th>Total services export receipts</th>
<th>Total export receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual NZ$ millions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE</td>
<td>9,900</td>
<td>$27,941</td>
<td>-</td>
<td>$27,941</td>
</tr>
<tr>
<td>SE</td>
<td>1,452</td>
<td>-</td>
<td>$2,161</td>
<td>$2,161</td>
</tr>
<tr>
<td>GSE</td>
<td>483</td>
<td>$17,657</td>
<td>$1,831</td>
<td>$19,487</td>
</tr>
<tr>
<td>Total</td>
<td>11,835</td>
<td>$45,598</td>
<td>$3,992</td>
<td>$49,590</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of total firms</th>
<th>% of total export receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>84%</td>
</tr>
<tr>
<td>SE</td>
<td>12%</td>
</tr>
<tr>
<td>GSE</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Firm counts have been randomly rounded.

Close to 40% of all export receipts in the 2011 year (similar to the 2005 year), were from firms that exported both goods and services. The majority (91%) of export earnings received by these firms (GSEs) was from the export of goods, whilst only 9% of their receipts came from services exports. Nonetheless, in aggregate, GSEs services exports are a significant share of total NZ services export receipts (39%). However, unlike in 2005, the total export receipts received by GSEs for exporting services ($1.8 billion) were less than that received by SEs ($2.2 billion). The goods receipts of GSEs were not as significant relative to total goods export receipts – although, at just over 60% of the goods export receipts of GEs, it is still sizeable considering the number of firms in the GSE group.

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13 Equivalent numbers of the 2005 year are: GE (5,037 firms or 83% of total exporting firms), SE (780 firms or 13% of total exporting firms), and GSE (282 or 5% of total exporting firms).
We can also analyse the concentration of activity within the different exporter groups. Table 2 below reports on the number of firms and share of exports of the top 10, 25, 50, 75 and 90 percentiles of exporters (in terms of export value). This shows that there is a high concentration of activity within GEs as the top 10% of firms account for a whopping 92% (around $26 billion) of total exports receipts received by this group and over half of total export receipts of all groups of exporters. GSEs have a similar concentration (with the top 10% accounting for 92% or $18 billion of total GSE exports), albeit comprise a much smaller share of total export receipts of all goods and services (36%). The concentration of SEs, on the other hand, is more spread out – with the top 25% of SE exporters accounting for a lesser share (87%) of total SE export revenue than the respective shares of the top ten percentile of GEs and GSEs. However, across all groups, the top 75% of exporters account for the majority (roughly 100%) of export revenue of each group.

Table 2: Concentration of activity by top exporters

| Exporter by value of exports | GE | | | SE | | | GSE | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                             | Number of firms | Share of total GE exports | Share of total exports | Number of firms | Share of total SE exports | Share of total exports | Number of firms | Share of total GSE exports | Share of total exports |
| Top 10%                     | 990             | 92%              | 52%              | 144             | 69%              | 3%              | 48              | 92%              | 36%              |
| Top 25%                     | 2,475           | 98%              | 55%              | 363             | 87%              | 4%              | 120             | 97%              | 38%              |
| Top 50%                     | 4,950           | 99%              | 56%              | 726             | 97%              | 4%              | 240             | 99%              | 39%              |
| Top 75%                     | 7,425           | 99.8%            | 56%              | 1,089           | 99.6%            | 4%              | 363             | 99.9%            | 39%              |
| Top 90%                     | 8,910           | 100%             | 56%              | 1,305           | 100%             | 4%              | 435             | 100%             | 39%              |
| 100%                        | 9,900           | 100%             | 56%              | 1,452           | 100%             | 4%              | 483             | 100%             | 39%              |

Note: Firm counts have been randomly rounded.

This finding – that export activity is dominated by a few large firms – is not unusual, and is consistent with findings from our previous papers. In general, international trade is defined by a select number of very large firms and recent research from the World Bank on these export ‘superstars’ (i.e. large exporting firms) found that this remains true across both, developing and developed countries. In fact, the top 1% of companies often account for more than half, and sometimes nearly 80%, of total exports. According to the World Bank, superstar firms tend to dominate exporting activity because they are already successful at business. These firms are often born large and grow quickly (i.e. have scale) – implying they are already highly productive when they enter into exporting and do not take a long period of time learning before they become a superstar firm. Furthermore, the majority of superstars are foreign owned making them inherently different from smaller exporting firms and highlighting the role of multinational enterprises in exporting.
FIRM LEVEL CHARACTERISTICS

COVERAGE

Despite only accounting for a small share of all exporters, GSEs have a number of distinct characteristics that set them apart from GEs and SEs. In this section we consider the performance measures of each exporter type. To note, the employment, foreign ownership, R&D, sales, profit and value added measures are not available for all firms in the goods and services datasets. Therefore, the comparative statistics (averages and medians) are based on the observations for which data is available as opposed to an average or median across all firms. The coverage rate of the various performance measures across the different types of exporters is reported below in Table 3. Refer to the Appendix for a description of these measures.

Table 3: Coverage of firms across performance measures

<table>
<thead>
<tr>
<th>Type of exporter</th>
<th>Total count of firms</th>
<th>Employment</th>
<th>Foreign ownership</th>
<th>Research and development</th>
<th>Sales</th>
<th>Profit</th>
<th>Value added</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>9,900</td>
<td>64%</td>
<td>66%</td>
<td>12%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>SE</td>
<td>1,452</td>
<td>84%</td>
<td>90%</td>
<td>17%</td>
<td>53%</td>
<td>53%</td>
<td>54%</td>
</tr>
<tr>
<td>GSE</td>
<td>483</td>
<td>96%</td>
<td>99%</td>
<td>36%</td>
<td>64%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Total</td>
<td>11,835</td>
<td>68%</td>
<td>70%</td>
<td>13%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Note: Firm counts have been randomly rounded.

CHARACTERISTICS

Despite being small in number (4% of all exporting firms), GSEs account for a disproportionate share of total employment (refer to Table 4). GSEs employ, on average, four and a half times more employees than GEs and five times more employees than SEs. GEs and SEs are predominantly small, with around a half of all GEs and SEs having an employment count of less than 10. The number of GEs and SEs with more than 250 employees makes up a very small share, at just 4% of total GEs and 5% of total SEs. On the other hand, GSEs are more evenly spread among firm class sizes. They also have the greatest proportion of firms with more than 250 employees (17%). This result indicates that GSEs are inherently bigger in size and is consistent with our findings in previous papers. Moreover, this is also consistent internationally as other studies have also found that firms exporting

\[\text{Note that the sales, profit and value-added indicators are all sourced from the same dataset (Statistics NZ's Annual Enterprise Survey), hence the same coverage rate across the different groups of exporters. The relatively low coverage rate for these indicators is due to how the AES dataset was linked to the ITSS and merchandise goods datasets. This was done at the enterprise level to maintain consistency with how the other indicators were treated. Joining at the Group Top Enterprise (GTE) level would likely produce a higher coverage rate.}\]

\[\text{International trade in services: A portrait of importers and exporters, Breinlich & Criscuolo (2009), and A League of Their Own: Services Exporters within Goods Exporters, Dincer & Tekin-Koru (2014).}\]
both goods and services are consistently bigger than firms exporting only goods or only services. According to Dincer and Tekin-Koru (2014) this result remains robust even at the sectoral level.

Table 4: Characteristics by firm size

<table>
<thead>
<tr>
<th>Type of exporter</th>
<th>Average number of employees</th>
<th>Proportion of firms with Less than 10 employees</th>
<th>Proportion of firms with Between 10 and 49 employees</th>
<th>Proportion of firms with Between 50 and 249 employees</th>
<th>Proportion of firms with 250+ employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>69</td>
<td>48%</td>
<td>35%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>SE</td>
<td>60</td>
<td>50%</td>
<td>33%</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>GSE</td>
<td>315</td>
<td>28%</td>
<td>32%</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>Total</td>
<td>n/a</td>
<td>47%</td>
<td>35%</td>
<td>13%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Note: Firm counts have been randomly rounded. Proportions are calculated as the share of each respective exporter group.

In addition, GSEs are markedly different from GE s and SE s on measures of foreign ownership, sales, profit and value-added (see Table 5). Nearly half of all GSEs have some degree of foreign ownership, compared with just 16% of GE s and 42% of SE s. Of those that have foreign ownership, the average rate of foreign direct investment is just over 80% across all types of exporting firms. Although GE s currently dominate NZ’s exporting landscape (as evidenced in the previous section), it is reassuring to see that those exporters that export services (i.e. GSE s and SE s) have the highest proportion of firms with FDI. Going forward, this could be beneficial for NZ as World Bank research suggested that it is those firms with links to foreign capital that are export ‘superstars’ (i.e. remarkably larger and have the potential to generate higher export revenue) – highlighting the role of multinational enterprises in exporting.

The proportion of firms undertaking research and development is also higher among GSEs with approximately 45% of GSEs spending on R&D (noting that R&D coverage is relatively low).

Table 5: Performance of exporters, FDI and R&D

<table>
<thead>
<tr>
<th>Type of exporter</th>
<th>Proportion of firms with FDI</th>
<th>Average foreign ownership rate</th>
<th>Proportion of firms with R&amp;D</th>
<th>Average spend on R&amp;D</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>26%</td>
<td>80%</td>
<td>26%</td>
<td>$680,964</td>
</tr>
<tr>
<td>SE</td>
<td>42%</td>
<td>82%</td>
<td>23%</td>
<td>$1,242,884</td>
</tr>
<tr>
<td>GSE</td>
<td>48%</td>
<td>81%</td>
<td>45%</td>
<td>$1,872,923</td>
</tr>
<tr>
<td>Total</td>
<td>30%</td>
<td>n/a</td>
<td>28%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

This compares with just 26% of all GE s and 23% of all SE s. GSEs are also considerably bigger in terms of sales with mean sales of 7 times more than that of GE s and 14 times more than that of SE s. Similarly, GSEs have high levels of profit (3 times more than of GE s and 4 times more than that of SE s), and higher value-added (approximately 4 times the level of GE s and SE s). Note that both the average and median measures are reported, and the difference in magnitude between the two measures of centrality highlights the asymmetry in distribution (i.e. the presence of outliers) within these groups of firms.
Table 6: Performance of exporters, Sales, Profit and Value-added

<table>
<thead>
<tr>
<th>Type of exporter</th>
<th>Mean sales</th>
<th>Median sales</th>
<th>Mean profit</th>
<th>Median profit</th>
<th>Mean value-added</th>
<th>Median value-added</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>$28,853,703</td>
<td>$1,055,438</td>
<td>$2,045,923</td>
<td>$26,905</td>
<td>$6,742,770</td>
<td>$268,399</td>
</tr>
<tr>
<td>SE</td>
<td>$14,440,861</td>
<td>$1,318,695</td>
<td>$2,883,325</td>
<td>$91,680</td>
<td>$6,513,432</td>
<td>$517,000</td>
</tr>
<tr>
<td>GSE</td>
<td>$200,794,681</td>
<td>$22,431,483</td>
<td>$8,685,534</td>
<td>$1,206,000</td>
<td>$27,229,405</td>
<td>$5,641,628</td>
</tr>
</tbody>
</table>

**EXPORT MARKETS**

As shown in the previous section, the 2011 ITSS Census results suggested that the pattern of NZ’s trade in commercial services is very different to that of goods exports. NZ goods exports in value terms are concentrated in Asia, whereas services exports are relatively more focused towards Australia, North America and Europe – i.e. NZ’s more ‘traditional’ trading partners. This finding is not unusual as, in general, global services trade is concentrated in developed countries (like NZ’s traditional trading partners) with services having become an increasingly important component of these economies as they de-industrialised. Typically, developed countries also have larger stocks of intellectual property, financial and intellectual capital, whilst developing countries have comparative advantages in service sectors which are more labour intensive (e.g. tourism) given their relative abundance of inexpensive labour. The predominance of developed countries in services trade reflects the fact that most services are knowledge-based (e.g. business services, professional services, telecommunication services) – requiring high levels of human capital. Developing countries are also typically not as internationally competitive as developed countries in services trade due to their limited access to capital and typically higher barriers to trade.\(^{16}\)

In the case of OECD members, 76% of services exports, on average, go to other OECD countries and 79% of OECD services imports come from other OECD countries.\(^{17}\) The fact that developed countries tend to trade most with each other is a reflection of similar demand profiles and more integrated economies. For instance, linguistic and cultural differences are likely to have a more significant impact on services trade, compared to trade in goods. This is reflected in NZ’s trade in services profile as NZ services providers, not surprisingly, find Europe, Australia and North America easier to access for this reason. It is also reflective of more established trade linkages that NZ has with these countries/regions. Investment linkages are yet another reason, as the markets that we mostly engage in services trade with are those that we have well established direct investment linkages with. Trade in commercial services between NZ and Australia, for instance, complements Australia’s position as our most significant investment partner. Many NZ companies have subsidiaries or branches in Australia and there are many subsidiaries or branches of Australian companies in NZ. Once this direct investment relationship is established, there is often trade in services between related enterprises. In addition, Australia is relatively barrier free and is also considered an inexpensive ‘stopover’ for NZ exporters to develop and grow in before targeting third markets outside of Australasia.\(^{18}\)

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\(^{16}\) Source: *International trade in services. A scoping study of services trade and estimates of benefits from services trade liberalisation*, NZIER, 2005.  
\(^{17}\) Source: OECD Statistics, EBOPS Trade in Services for 2011.  
\(^{18}\) Source: *International trade in services. A scoping study of services trade and estimates of benefits from services trade liberalisation*, NZIER, 2005.
In this subsection we examine the export market profile of each exporter type. Table 7 summarises the number of export markets targeted by each type of exporter in 2011, and shows that GSEs overwhelmingly target more destinations than either GEs or SEs. For examples, 42% of GSEs export to more than seven markets, whilst the comparative figures for GEs and SEs are 13% and 8%, respectively. The majority of GEs (44%) and SEs (53%) send their products to just one destination. On average, GSEs were found to export goods to seven markets, compared to just four markets by a GE (refer to Table 8). However, the number of services markets targeted, on average, by this group of firms is not considerably different to that of a SE (four markets for GSEs vs. three for SEs). This is similar to findings from the 2012 paper.

Table 7: Concentration of activity by count of export destinations

<table>
<thead>
<tr>
<th>Count of export destinations</th>
<th>GE</th>
<th></th>
<th>SE</th>
<th></th>
<th>GSE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of firms</td>
<td>% of total GE export receipts</td>
<td>% of firms</td>
<td>% of total SE export receipts</td>
<td>% of firms</td>
<td>% of total GSE export receipts</td>
</tr>
<tr>
<td>1</td>
<td>44%</td>
<td>36%</td>
<td>53%</td>
<td>36%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>18%</td>
<td>10%</td>
<td>16%</td>
<td>10%</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>7%</td>
<td>9%</td>
<td>7%</td>
<td>12%</td>
<td>1%</td>
</tr>
<tr>
<td>4</td>
<td>6%</td>
<td>10%</td>
<td>5%</td>
<td>10%</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>5</td>
<td>4%</td>
<td>9%</td>
<td>6%</td>
<td>9%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>6</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>7+</td>
<td>13%</td>
<td>25%</td>
<td>8%</td>
<td>25%</td>
<td>42%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Table 8: Average number of markets

<table>
<thead>
<tr>
<th>Type of exporter</th>
<th>Average number of countries targeted by goods exporters</th>
<th>Average number of countries targeted by services exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>SE</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>GSE</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

In looking more specifically at export destinations, Figures 8 and 9 shows the proportion of firms exporting goods and services respectively, to particular markets. A firm can export to multiple markets in which case they would be counted multiple times. As can be seen, a greater proportion of GSEs than SEs are focused on sending services exports to Asian markets, as well as, to Oceania, the Middle East and Africa, and South America.
Asia is also a key goods target market among GSEs (unsurprising given the weight of this group towards goods exports), with a slightly greater proportion of firms exporting to Asia than GEs. Other key markets for goods among GSEs are: the EU, Oceania, Australia and North America, and they also have a relatively greater presence in markets such as the Middle East and Africa, South America and Central America.
PART III: TRADE POLICY IMPLICATIONS OF ‘SERVICIFICATION’

By examining the characteristics of NZ’s commercial services exporters, we have sought to establish how important services exporters are to the NZ economy on a variety of measures (e.g. as earners of export revenue, employers, recipients of FDI, contribution to economic growth). On these measures, it was those exporters that exported both goods and services that were high-performing. Therefore, given the linkage between goods and services – particularly, within the context of global value chains (GVCs) – this section looks at the implications of servicification for trade and trade policy.

Currently, servicification is not adequately captured in gross trade flows as these mask the important role played by services in creating goods. In gross terms, trade in services generally comprise less than one quarter of total trade, but when accounting for the value-added by services in the production of goods, we find that the service sector contributes over 50% of total exports in countries such as the US, UK, France, Germany and Italy. Moreover, the value created by services as intermediate inputs represents over 30% of the total value-added in manufactured goods. For NZ, in value-added terms, about 46% of our exports reflect services (just under the OECD average of 48%).

So what does this mean for trade policy?

- Firstly, servicification means that the focus should be on goods and services, not goods or services. One recommendation stemming from research on servicification by Sweden’s National Board of Trade is that manufacturing companies should be consulted and their needs considered in the formulation of services trade policy as they are both, consumers and suppliers of services. This supports New Zealand’s current approach to comprehensive, single undertaking trade agreements.

- Servicification also strengthens the case for unilateral liberalisation on services, goods and information flows. The increased use of services as inputs into production, as well as, the importance of imports for creating exports makes a strong case for trade liberalisation, as openness is essential when production is located in various countries.

- International research also suggests focusing on removing barriers to Mode 3 (commercial presence) and Mode 4 (movement of natural persons) services trade. These modes of delivering services are particularly important as they enable proximity to the consumer and therefore enable firms to offer bespoke solutions. With regard to Mode 3, barriers include restrictions on direct investment and local content requirements, whilst Mode 4 is even more restricted due to its links to sensitive issues such as immigration.

- Servicification has also given rise to new types of trade barriers, such as those related to the transfer of data across borders. Cloud computing, for instance, is changing the way that ICT services are being delivered around the world, but can be restricted by laws concerning personal data storage in certain countries. In fact, the NZ Productivity Commission’s recent Services Inquiry stated that “restrictions on data flows will have a disproportionately negative effect on smaller countries such as NZ, as they lack the scale to support a wide range of sophisticated, home-grown, digital services”. Their Report

recommended that the NZ Government give priority in international trade negotiations to data flows and other internet issues. Services trade negotiations should continue to seek opportunities for New Zealand companies to provide their services through distance delivery (Mode 1), taking advantage of the international connectivity provided by the internet and other technologies.

- And lastly, it is important that all service sectors are considered when crafting trade policy. Currently, only some service sectors have been identified as key interests in trade negotiations – mostly through input from services companies – and are therefore, addressed accordingly. For example: professional services, business consultancy, aviation services, agricultural support services, environmental services, telecommunications, financial services, ICT services and distribution. Going forward, it would be good to identify other key service areas (perhaps maintenance and repair services (often one of the first that manufacturing firms venture into), R&D services, rental and leasing services etc.), in order for negotiations to properly support servicification. This does however need to be set against advocacy for NZ’s other core services interests and areas where New Zealand has a strong competitive advantage.
CONCLUSIONS

Commercials services are an important component of world trade and the sector has the potential to play a key role in lifting NZ’s export and economic performance given the growing demand internationally for traded commercial services. Recently released data on the phenomenon of global value chains has also drawn attention to the changing nature of global trade, as well as, emphasised the interdependence between manufacturing and services as commercial services, in particular, are often used as intermediate inputs in the production of manufactured goods.

This paper provided an update to ECO’s previous papers on NZ’s commercial services exporters, drawing on 2011 data. Similar to findings arising from our previous papers, we found that exporters that export both, goods and services evidence above-the-line characteristics in terms of size, level of foreign ownership, spend on R&D, and level of sales, profit and value-added. GSEs also export to a more diversified group of markets than GEs or SEs.

Whilst the findings do not startle, they are encouraging. As the world becomes more globalised and interconnected, there is likely to be increased demand for commercial services. The nature of these services – i.e. for NZ, they are mostly traded via the internet, phone or email – means that we do not face the same geographical or resource constraints that we do with growing our merchandise exports. In this sense, the commercial services sector has considerable potential for NZ – useful in the context of the Government’s stretch-target to grow NZ’s exports to 40% of GDP by 2025.

The prevalence of GVCs and growth of internationally traded commercial services has important trade policy implications for NZ to consider. Most importantly, goods and services should not be isolated in policy formulation. It is also imperative for trade negotiations to consider barriers to specific channels of delivery, give priority to the rise of new trade barriers (such as data-flow issues), and consider every area of the services sector – not just those that have traditionally been focused on. Looking ahead, servicification is bound to continue at it’s already accelerated pace. As a result, various ideas for new, more rational, ways to negotiate have been floated such as negotiating in a ‘cluster approach’ – goods and services together – as seen in the Government Procurement Agreement in the World Trade Organisation, or even negotiating clusters of services only – to capture all service categories. However, it is also important to bear in mind that other factors, such as quality of institutions and having a high quality education and skills training system are also important in shaping the development of a country’s services sector.

Further work we can undertake to gain a deeper understanding of NZ’s commercial services sector includes: investigating whether GSEs permit a further reach into global value chains than GEs or SEs, what types of services are mainly exported by GSEs, undertake research on services trade restrictions in other countries, and interviewing key NZ commercial services exporters to better understand the nature of their business and what barriers they face when entering various markets. Along these lines, it would also be useful to investigate how comprehensive trade agreements such as the NZ-Australia Closer Economic Relations (CER) have enabled NZ commercial services providers to operate more easily in Australia (relative to other markets) and what learnings this has for future trade negotiations.
APPENDIX

DESCRIPTION OF PERFORMANCE MEASURES

Employment

The employment indicator is sourced from the Linked Employer-Employee Data (LEED). LEED provides statistics on filled jobs, job flows, worker flows, mean and median earnings for continuing jobs and new hires, and total earnings.

Foreign Ownership

The foreign ownership indicator is sourced from the Longitudinal Business Frame. The variable to identify the ownership rate of NZ enterprises by overseas companies ranges between 0 and 100. The indicator is based on the residential status of the immediate parent of the enterprise. For instance, if a NZ company is wholly owned by another NZ company, the variable is 0 – even though the ultimate parent is an overseas company.

R&D

R&D data is sourced from the Business Operations Survey (BOS). BOS is a sample of businesses in NZ, regardless of if they perform R&D or not. Therefore, some R&D activity is not collected by BOS but BOS goes to a wider selection of business, in industries not known to perform R&D. Thus, BOS provides a more detailed picture of the spread of business R&D across the NZ economy.

Sales, Profit, Value-added

The primary source of sales, profit and value-added is the Annual Enterprise Survey (AES). The target population for AES is all economically significant businesses operating within NZ. In total, AES is estimated to cover approximately 90% of NZ’s GDP.

20 Economically significant is defined as an enterprise that meets at least one of the following criteria: has a greater than $30,000 annual GST expenses or sales, has RMEs (rolling mean employment) greater than three, is in a GST-exempt industry, is part of a group of enterprises, is a new GST registration that is compulsory, special, or forced, is registered for GST and involved in agriculture or forestry.