Domestic services: the unsung heroes of our China export story.
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The link between Australia’s domestic services and the value they add to our export story is an important indicator of national prosperity that is often overlooked.

While services account for 20.9 per cent of Australia’s total exports, the broader domestic service sector is contributing a lot more to the production and export story than previously understood.

Research conducted by the University of Sydney and Westpac has taken a deep dive into the relationship between Australia’s service sector and export trade with China.

Using estimates built on 2015 Australian trade data and ratios constructed from the latest OECD Trade in Value-Added (TiVA) 2011 database, the findings reveal that in 2015, Australian domestic services accounted for 28 per cent of value added in Australia’s total export of goods and services to China, amounting to AUD$25.1 billion. This compares to AUD$9.8 billion worth of direct services to China in 2015, which is largely related to travel related services and education.

In other words, for each dollar worth of total Australian exports to China, 28 cents of the value added are contributed by domestic services.

These findings reveal three important insights for Australian business and trade.

1. The domestic services economy which comprises transport, storage, packaging, communication, financial intermediation, trade, business services, research, etc, collectively contributes more to Australian exports to China than our direct services exported.

2. Stronger bilateral relations and integration with China is translating to growth of higher value added service industries, leading to innovation and the transfer of service capabilities across industries.

3. More open trade with China has diversified Australia’s exports and domestic service sector, making it more competitive and resilient to the ever changing global trade landscape.

While we cannot underplay the importance of tourism, education and the growing demand for healthcare services, it is important to understand the bigger contribution coming from the service inputs into manufacturing, raw produce, minerals, food and livestock. Services such as quality controls, quarantine, transport, logistics, packaging, cold storage and anti-tampering technology come into this equation. This has important implications for Australia’s prosperity and fostering strong trade relationships with the growing economies in Asia.
Navigating the future of service exports to China.
The transition of China’s economy and its emerging middle class has led to a rise in demand for Australian goods and services\(^2\). In response, Australia is going through its own transition, colloquially referred to as the “mining to dining boom” which has seen a shift in focus from resources exports, to a more diversified export structure with a higher services component.

Rebalancing in China has also seen closer integration of Australian and Chinese consumer and producer markets. This is enhanced through the adoption of smartphones, e-commerce platforms and the Internet of Things which have led to the proliferation of innovation and disruption across China’s service industries.

Rather than disruption, in China they call it “Internet Plus\(^+\)\(^3\). The concept of “Internet Plus\(^+\)” captures China’s aims to integrate smartphones, cloud computing, big data, and the Internet of Things into many economic and societal domains.

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2. DFAT publication ‘Trade in Services Australia 2015’, p.36
Today’s Chinese consumers do everything on their phone. For example, two-thirds of China’s online payments happen on smartphones⁴. China’s online retail market is valued at roughly US$889 billion⁵, with almost 480 million digital buyers⁶. By 2017, China’s shoppers will be spending more than US$1.2 trillion online, up from US$670 billion in 2014, which is more than twice the US figure.

**Australia is yet to test the boundaries of China’s online retail market.**

The growth of emerging e-commerce platforms such as Alibaba and Tencent has given Australian business direct access to Chinese consumers.

In a short space of time, Australia already ranks fourth in sales volume through Alibaba, behind the United States, Japan and Korea⁷.

With 1,300 Australian brands already sold through Alibaba’s B2C Tmall and Taobao platforms⁸, Australia is yet to test the boundaries of this opportunity but it is clear that it will have a profound impact on the volume of Australia’s export trade and the value added service sectors that support it.

Australian services exports to China have grown 10 per cent per year over the last five years⁷. China is our largest export market for services at a value of approximately AUD$10 billion and accounting for 12 per cent of our total exports to China.

**Australian services exports to China have grown 10 per cent per year over the last five years⁷.**

The services sector is a key part of the Australian economy. It represents 70 per cent of Australia’s economic activity and according to DFAT accounts for 20.9 per cent of Australia’s total exports⁹.

Similarly in China, the contribution of services has doubled from 2010 to 2015 and now accounts for 51 per cent of GDP and 4.1 per cent of total imports¹⁰.

Rebalancing in China is a transition which increasingly fulfils its own services needs through domestic sources. For Australian companies looking to compete against home grown Chinese services becomes a question of innovation, connecting through digital and e-commerce platforms and finding sectors where one has a strong point of difference.

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Figure 1.  
The facts – Australia’s top services export markets 2013–2015 (AUD million)

<table>
<thead>
<tr>
<th>Rank</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>% share of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. China</td>
<td>7,064</td>
<td>8,214</td>
<td>9,840</td>
<td>14.9</td>
</tr>
<tr>
<td>2. United States</td>
<td>6,250</td>
<td>6,645</td>
<td>7,888</td>
<td>11.9</td>
</tr>
<tr>
<td>3. United Kingdom</td>
<td>4,203</td>
<td>4,607</td>
<td>5,012</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Source: DFAT publication ‘Trade in Services Australia 2015’, p.36.

Figure 2.  
Australia’s direct export to China.

Source: DFAT publication ‘Composition of Trade Australia 2015’.
Travel-related services are the celebrated heroes of our export story.
Education and other travel-related services account for 87 per cent of our services exports to China. Together they earn more export revenue than coal or other non-ferrous mining or food and beverage exports¹¹.

Services such as finance, health and aged care are growing from a relatively low basis and make up a much smaller share of our exports to China¹². These industries have considerable growth potential as new markets open up in China, but the realisation of this potential depends on pioneering Australian and Chinese companies to conceive and build these markets.

Our trade with China shows that direct services exports are only part of the story.

Compared to the overall volume of our trade in products, services exports to China still have a way to go before they are able to fully reflect the scope and diversity of services in our domestic economy.

As shown in our trade statistics, direct services exports are only the tip of the iceberg.

¹¹. DFAT, 2016, Composition of Trade Australia 2015
¹². DFAT, 2016, Composition of Trade Australia 2015
The unsung heroes of our export story are the domestic services.

Domestic services are value-added services embedded in our exports of goods and services, for example, as intermediates in agriculture, manufacturing and merchandise exports. These intermediates are the fastest growing component of world trade. To quantify the role of value-added services in our exports is difficult because of the lack of data.

Using estimates built on 2015 Australian trade data and ratios constructed from the latest OECD TiVA 2011 database, we estimate that Australian domestic services account for 28 per cent of the value added in Australia’s total export to China.

In other words, for each dollar worth of total Australian exports to China, 28 cents of the value added is contributed by domestic services.

By these estimates, in 2015 Australia generated AUD$25.1 billion worth of domestic value-added services included in our total exports to China. This compares to AUD$9.8 billion worth of direct services exported to China.

In 2015 Australia generated AUD$25.1 billion worth of domestic value-added services included in our total exports to China.

Transport, storage, communication, financial intermediation, trade, business services and research in total contribute more than double to our export volume than our direct services export.

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Figure 3. 
Australia’s export to China – domestic services in exports versus direct services exports.

Source: The University of Sydney estimate using data from OECD TiVA, and DFAT’s Composition of Trade report.

Figure 4. 
Value-added services embedded in goods exports versus direct services exports (AUD million).

Source: The University of Sydney estimate using data from OECD TiVA, and DFAT’s Composition of Trade report.
If we drill down to different industries, we find agriculture has the highest value-added services component with 27 per cent, followed by manufacturing with 26 per cent and goods export with 21 per cent.

The value-added services that contribute 27 cents to every dollar earned in agricultural exports to China relate to the infrastructure that provides inputs into rural production from seeds to animal feed, real estate to professional business and research services, transport to cold storage, insurance, finance, banking to mention the major ones. Among the disruptors in this area are digital agriculture services and precision agriculture with digital traceability of produce just one example of innovative technologies that have enhanced our export capabilities.

Agriculture has the highest value-added services component with 27 per cent.
Total Goods & Service Export.

$0.28 to every export dollar

- Wholesale & Retail: 8.7 cents
- Transport & Storage: 5.9 cents
- Finance & Insurance: 3.1 cents
- R&D and Business Services: 8.8 cents
- Community & Social: 1 cent

Source: The University of Sydney estimate using data from OECD TiVA, and DFAT's Composition of Trade report.

Agribusiness Export.

$0.27 to every export dollar

- Wholesale & Retail: 9.1 cents
- Transport & Storage: 5.3 cents
- Finance & Insurance: 4.1 cents
- R&D and Business Services: 8 cents
- Community & Social: 0.8 cent

Source: The University of Sydney estimate using data from OECD TiVA, and DFAT's Composition of Trade report.
Flow of services works to add value to Australian beef products sold in China.

The graph below is an illustration of the beef value chain, where flow of services, knowledge and information, finance, payment, and technologies works to add value to Australian beef products sold in China. These services can be grouped into 5 main categories:

- Wholesale and retail trade refers to business inputs that are necessary for production, such as basic materials, electrical and electronic goods, food and grocery, fuels, animal feeds, and motor vehicles and parts. It is the biggest service component for agribusiness exports.

Figure 5. Servicification of the beef value chain.

- Input Companies
  - Animal genetic materials R&D
  - Animal health and nutrition
  - Animal insurance and finance
  - Digital technologies

- Farmers
  - Farm planning services
  - Merchandise purchase
  - Renting of machineries

- Traders
  - Transport and handling
  - Market specification matching

Source: The University of Sydney illustration
The unsung heroes of our export story are the value-added services.

Transport & Storage
Transport and storage services refer to a diverse range of activities ranging from land, water and air transporting and storing freight to the movement of people, vehicle hire and the use of pipelines. Efficient and reliable transport and storage services enable firms to coordinate logistics on a real-time basis.

Finance & Insurance
Finance and insurance services can be defined as the propagation of financial products and services such as the demand and supply of financial assets and liabilities that satisfy the financial needs of individuals and businesses. They provide safety, economies of scale and liquidity for activities such as investment in innovation.

R&D and Business Services
R&D and business services include activities predominantly related to R&D and innovation, further activities provided by professional services firms such as legal, IT, accounting, design, and real estate. These services provide product differentiation, lower transaction costs and ensure that production networks function in a smooth and timely manner. It is the biggest service component for total exports.

Community & Social
Community and social services refer to public services provided by government, private and not-for-profit organisations, including health and community services, education and government administration and defence. They enhance social capital in the production network, creating more effective organisations and stronger communities.

Processors
- Quarantine and inspection services
- Processing and handling technologies
- Cold storage facilities
- Packaging technologies

Export Agents
- Temperature controlled logistics
- Container packaging technologies

Consumers in China

15.
Manufacturing Export.

$0.26 to every export dollar

- Wholesale & Retail: 8.4 cents
- Transport & Storage: 5.4 cents
- Finance & Insurance: 2.3 cents
- R&D and Business Services: 8.5 cents
- Community & Social: 1 cent

Source: The University of Sydney estimate using data from OECD TiVA, and DFAT’s Composition of Trade report.

Goods Export.

$0.21 to every export dollar

- Wholesale & Retail: 5.6 cents
- Transport & Storage: 4.1 cents
- Finance & Insurance: 2.9 cents
- R&D and Business Services: 7.5 cents
- Community & Social: 0.9 cent

Source: The University of Sydney estimate using data from OECD TiVA, and DFAT’s Composition of Trade report.
The unsung heroes of our export story are the value-added services. Crucial for our competitiveness in manufacturing exports, these services currently contribute 26 cents to every export dollar to China.

In manufacturing, professional services, research, real estate and renting of equipment contribute approximately the same proportion as the wholesale and retail chain which provides access to supplier networks, followed by finance, insurance and other financial services and then logistics. Crucial for our competitiveness in manufacturing exports, these services currently contribute 26 cents to every export dollar to China.

In overall goods exports, services account for one fifth of value-added. When it comes to goods exports, R&D and business services make up more than one third of the services contribution.

In summary, what we find is an elaborate services infrastructure in all major export sectors. Value-added services increasingly have a dynamic of their own as their contribution keeps rising even when merchandise exports are fluctuating as they currently are.

Our figures show that services interaction with China is deeper and our services industries are more embedded in our export structure than can be seen from the direct services exports alone.
Why is this important?

Australia’s natural advantages are service based. Our clean, green and healthy image with Chinese consumers is supported by big data capture, traceability and sophisticated infrastructure from farm to smartphone. The sophistication and improvements across our manufacturing sector as well as our resources exports have been led by digitisation and constant innovation in value-added services.\(^{14}\)

As a result, the increasing contribution of services to our exports makes our cooperation with China more resilient and less vulnerable to potential fluctuations in specific markets such as resources or education and tourism.

In an economic environment characterised by innovation and disruption, only services ensure adaptability, competitiveness and sustainability across all export industries.

1. **Adaptability:** Increasing the services component in production makes our merchandise exports more adaptable to innovation, market disruption and changing consumer demands. Services enable merchandise production and services provision to flexibly cater for changing consumer and producer demands.

2. **Competitiveness:** Building new competitive advantages in services reduces our reliance on resources-based comparative advantages. Services make Australian exporters more responsive to global competitors who rely on the scope and sophistication of their services. Sophisticated services create entry barriers to domestic industries.

3. **Sustainability:** A dynamic services sector enables the building and transfer of service capabilities across service industries, from domestic markets into export markets and vice versa. For an economy with limited resources, such as Australia, capacity building and facilitating spill-overs across industries are crucial for accessing new markets and integration in emerging supply and value chains.

These points are particularly important for remaining relevant to an economy such as China that is finding a new balance through innovation and consumption. Bearing in mind that China is not only a final market but also a conduit to global value chains, doing well in the China market will leave Australian exporters stronger and more competitive in global markets.

\(^{14}\) Productivity Commission, 2016, Digital disruption: what do governments need to do?

In summary, China’s economic rebalancing is generating greater demand for service intensive goods and products. The increasing ‘servicification’ of product value chains in Australia secures our reputation for quality consumer goods, high-end manufacturing, premium agricultural products, and tourism and education.

Our clean, green and healthy image with Chinese consumers is supported by big data capture, traceability and sophisticated infrastructure from farm to smartphone.

In recent years, the growing wealth among Chinese consumers and stronger trade ties with Australia has seen consumer and producer markets in these economies grow closer.

This research reveals that more Australian businesses are part of the China story than previously understood. As economic power continues to shift from west to east, Australia’s proximity and connectivity with China has broader implications for business, industry and society. This should build confidence in the economic value that comes with free trade with China.

Asia and particularly China as the world’s largest economy, is an important part of Westpac’s strategy in supporting our customers, in each region, with the two-way flow of trade, capital and people.

As these flows grow in volume and connectivity, the biggest opportunity evolving for our customers in China is happening right here in Australia.

To find out more about Westpac in Asia, visit www.westpac.asia/sydneyforum.
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