

ANALYSIS

Global value chains, border management and Australian trade

Nicholas Humphries September 2014



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EXECUTIVE SUMMARY

The globalisation of production is transforming international trade. This has profound implications for government policy, particularly in the area of customs and border protection. Without the right policy settings at the border, Australian industry will struggle to compete in an international trading system defined by Global Value Chains. Goods and services are increasingly produced 'in the world' rather than in single countries. Components, investment, know-how, ideas, and people cross borders multiple times before a finished good is produced.

For Australian business to compete in this environment the Australian Customs and Border Protection Service needs to further streamline its processes while still protecting Australia's borders. One way to do this is through the development of an Authorised Economic Operator program that separates high-volume low-risk trade from high-risk transactions. This will require a shift from control-based to trust-based regulation.

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The rise of global value chains (GVCs) has transformed the nature of international trade. International trade in the twentieth century was largely defined by goods made or extracted in one country and sold across a border into another. Today, goods and services are no longer produced in one country, but are 'made in the world', assembled from intermediate goods and services (and intellectual property) sourced from many countries. As a result, more than half of the world's manufactured imports are themselves *inputs* — primary goods, parts, components, and semi-finished products. More than 70 per cent of world services imports are intermediate services. Trade in intermediate goods and services now represents more than two-thirds of global trade.

This has led to an enormous increase in trade volume, complexity, and risk that poses major challenges for government policy and regulation. In particular, without the right policy settings it is difficult for any country to exploit opportunities for local industries to participate in GVCs, and all too easy to be left behind. This is especially true for those agencies charged with protecting and regulating borders. Traditionally, the focus has been on keeping illicit goods out and regulating the transfer of licit commodities. Today, when most products flowing along modern supply chains face few transparent border barriers, there is a need to further streamline border processes to ensure that industry can participate in the new forms of international commerce.

Greater streamlining of border processes in the interests of trade facilitation represents a major challenge for Australian Customs and Border Protection Service (Customs). Traditionally, Customs has been focused on regulating the border. However, as the nature of global trade changes, it will need to focus more on how its management of the Australian border can improve Australia's trade competitiveness. By addressing time and cost burdens that inhibit trade, Customs can be central to any strategy aimed at increasing Australia's participation in GVCs.

There is no single policy or initiative that guarantees successful GVC participation. The profound impact GVCs have had on international trade, taxation, and economic policy mean a whole-of-value-chain, whole-of-government approach is needed. This paper argues Customs should help achieve this aim through the development of an Authorised Economic Operator (AEO) program, as one element of a paradigm shift from control to trust-based regulation.

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INTERNATIONAL COMMERCE IN THE TWENTY-FIRST CENTURY

Production has been globalised. The 'made-here-sold-there' premise of twentieth century international trade has morphed into 'made-everywhere-sold-everywhere'.⁵ This new reality is best reflected by the concept of GVCs. GVCs incorporate all production activities. As much a network as a chain, they encompass cross-border flows of investment, know-how, ideas, and people. They include the design, production, marketing, logistics, distribution, and support required to bring a product or a service from its conception to its end use.⁶

The precursor to the GVC 'made in the world' phenomenon was the increased competition that followed decades of trade liberalisation policies at home and abroad. Trade policy reform drove companies to seek out comparative advantages and factor endowments at all stages of production. The rise of GVCs was then made possible by advances in information computer technology (ICT), and made profitable by the cost differences those ICT advances exploited. Now, production of goods and services is increasingly carried out "wherever the necessary skills and materials are available at competitive cost and quality."

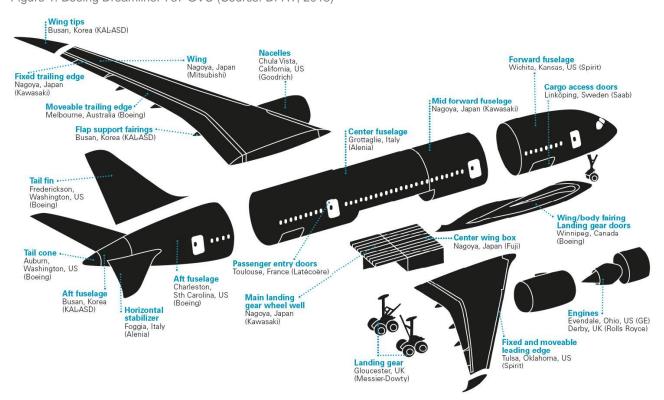


Figure 1: Boeing Dreamliner 787 GVC (Source: DFAT, 2013)

Of course, the fragmentation of production is not new. Some may argue that the GVC phenomenon is little more than ordinary international trade on steroids. The World Trade Organization (WTO) labels this 'nothing to see here' posture as "reductionist" and one that fails to comprehend the speed, scale, scope, depth, and breadth of today's global interactions. Despite slow growth rates in much of the world international trade is richer, more complex, and more interconnected than ever before. ¹⁰

The rationale behind trade in intermediate goods and services is not difficult to understand. At its simplest level, companies find it more efficient to source inputs from the most adept and cost-effective producers. Boeing's 787 Dreamliner is an excellent example. 11 It sources inputs from 22 factories across nine countries, including a factory in Melbourne (see Figure 1).

Those 22 factories are also supplied by a number of input producers, which in turn are supplied by others further down the value chain, and so on. Multinational corporations such as Boeing coordinate a "significant" percentage (estimated to be as high as 80 per cent) of GVC trade within their "networks of affiliates." The future success of Australian manufacturing rests on its ability to plug into such networks. For Australian manufacturers to compete globally, exporters require access to world-class intermediate goods and services — many of which are imported. Evidence shows that the capacity to import efficient inputs increasingly determines the export competitiveness of a country's products. 13 This makes the old mercantilist approach to trade and border administration of 'imports bad, exports good' completely counterproductive to economic growth and competitiveness.

Traditional methods for measuring trade are yet to catch up with new realities. In a trade environment defined by intermediate goods crossing borders multiple times, gross trade statistics do not accurately reflect where value comes from. Instead, the value of a product is attributed to the final country in the value chain. As former WTO director-general Pascal Lamy has explained: "the statistical bias created by attributing commercial value to the last country of origin perverts the true economic dimension of bilateral trade imbalances — this affects the political debate and leads to misguided perceptions." The now ubiquitous iPhone value chain (in Figure 2 below) provides a case in point. 15

Gross trade statistics attribute all \$US194.04 of the iPhone's imported value to China, when China's value-added actually accounts for only \$US6.54. Most of the iPhone's value derives from Korean, German, and American inputs. In this example, America is actually importing more of its own inputs than Chinese or German inputs — or approximately 12.5 per cent of the iPhone's imported value.

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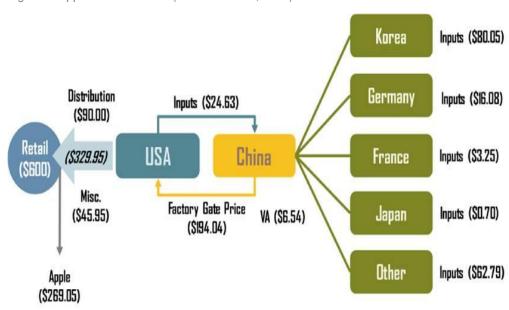


Figure 2: Apple iPhone 3 GVC (Source: OECD, 2011)

Australia will never win a race to the bottom on price and we should not seek to do so.

The fact that many Chinese exports to the United States contain such little Chinese value drastically reduces China's real trade surplus with the United States. In addition, while many of China's exports may end their journey in America, or Europe, or Japan, they contain value derived from inputs sourced from any number of countries, which, in turn, perverts the trade balances of source countries as well. The fact that this scenario plays out across the world all the time, involving any number of trade routes and value chains leads to the misguided perceptions, debate, and analysis to which Pascal Lamy referred.

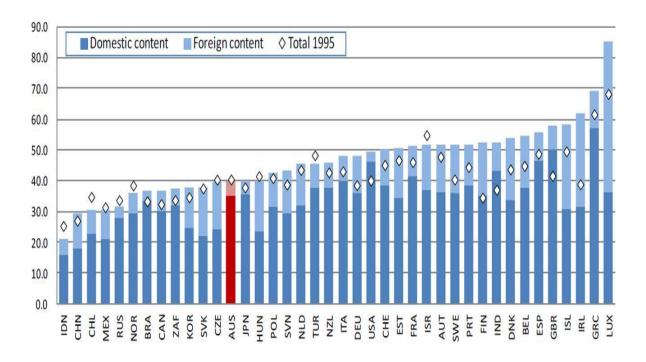
As a result, the Organisation for Economic Co-operation and Development (OECD) and the WTO recently developed estimates of trade flows in value-added. By these measures Australia has the second-highest rate of domestic value-added content of exports among OECD economies. This is positive, however approximately 40 per cent of Australia's domestic value-added exports derives from 'mining activities', which obscures just how much other industries rely on imported value to remain competitive.

A recognition of the importance of trade in value-added must inform Australia's trade policy. Australia will never win a race to the bottom on price and we should not seek to do so. Rather, the key to Australia's future prosperity is to gain a permanent seat at the high value-added head of the GVC table. To that end, the impact GVCs have on the service economy is a primary consideration.

Services are a part of almost every economic activity. A range of 'producer services', such as design, transport, logistics, communication, finance, legal, accounting, insurance, and other miscellaneous business services are needed to sustain GVCs. Services play a far more significant role in GVCs than previously thought, as it is the service inputs in the majority of GVCs where most value is added. Consequently, efficient and competitive services inputs have become as important to a country's export competitiveness and GVC participation as efficient manufactured inputs. 19

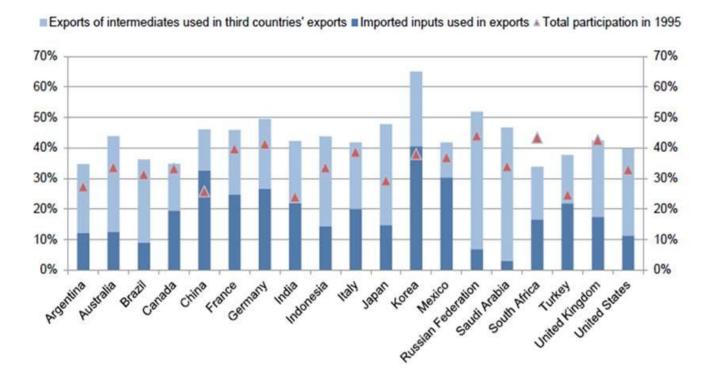
In Australia, approximately 40 per cent of exports measured in value-added originates from services — more than double the representation of services in gross trade statistics. However, this number is still below the OECD average of 48 per cent, despite Australia performing well in the OECD Trade Restrictiveness Index. In New Zealand, the United Kingdom, and the United States not only are percentages of value-added service exports considerably greater, but they have all increased (in some cases dramatically) since 1995. In contrast, Australia's percentage of value-added services exports has actually fallen. This is partly because Australian resource exports have experienced sustained growth, while services exports (much like manufacturing and agriculture exports) have remained flat due to the appreciation of the Australian dollar over this period. Services exports of exports in the period of the Australian dollar over this period.

Figure 3: OECD — Australia's percentage of value-added services exports (Source: OECD, WTO 2013)



It is estimated that continued liberalisation of services could result in an additional \$21 billion in Australian services exports, and an extra 100,000 Australian jobs. ²⁴ Considering Australia's highly sophisticated service economy, there are clearly still opportunities for greater GVC participation. However, the window of opportunity for Australian service providers to entrench themselves in GVCs throughout Asia's high-growth economies and beyond will not remain open forever. As Asian service providers increase their local capacity, and competition from other developed economies intensifies, Australia should do all it can to engender greater services GVC participation now, or face even greater challenges in the future.

Figure 4: OECD — Percentage of Gross Exports GVC Participation 1995 and 2009 (Source: OECD)



*The index represented in Figure 4 is calculated as a percentage of gross exports and has two components: the import content of exports and the exports of intermediate inputs (goods and services) used in third countries' exports.²⁵

SEIZING OPPORTUNITIES

Participation in GVCs leads to increased investment, productivity, economic growth, income, and employment — the greater the participation level, the greater the growth rate. While outsourcing and offshoring are often seen in the public debate as synonymous with job losses, evidence shows that in the longer-term, as economic adjustments are made, a positive relationship between imports and employment develops. Trade not only creates jobs — it creates good jobs. Australians employed in export industries are more likely to be employed on a full-time basis and earn, on average, 60 per cent more than those employed in non-export industries. As industry participation in GVCs increases, jobs will continue to be created through higher productivity and the attendant expansion of economic activity.

However, Australia's successful GVC participation is not guaranteed. Evidence suggests that Australia's trade performance has been idle for too long and competitors have leap-frogged our performance standards. Australia's natural disadvantages, including its distance from major global markets and the so-called 'headquarter' economies of Japan, Germany, and the United States, only serve to compound the challenge. As a result, it is critical that government policy levers are set to enable GVC participation. Otherwise Australia will fall behind as its exports struggle to compete against those from countries whose industries enjoy world-class price-quality ratios thanks to their own GVC participation.

Lean inventories and nimble exploitation of 'just-in-time' production opportunities are the keys to effective participation in GVCs. To achieve these efficiencies, producers must rely on coordinated movements of goods and services across a number of countries. ³¹ Government can help business to meet these challenges, under the broad rubric of "trade facilitation."

Trade facilitation is often divided into 'hard' or 'soft' categories. Hard trade facilitation involves improvements to infrastructure, such as expanding ports or building new roads. Policies and procedures for customs and border administration are categorised as soft trade facilitation. While it is generally believed that gains from hard trade facilitation reforms are greater, they are also much more expensive to pursue. In terms of trade cost reductions per unit of expenditure, reforms to customs and border administration and other soft measures are the 'low-hanging fruit' of trade facilitation, offering the greatest gains for the least cost. 35

Trade facilitation is receiving increased attention internationally because of the widespread economic benefits it creates. Recent studies by international organisations, including the OECD, WTO, World Economic

Australia's trade performance has been idle for too long and competitors have leapfrogged our performance standards. Forum and APEC, have found that trade facilitation reform can result in hundreds of billions of dollars in gains to the regional and global economy. A 2013 World Economic Forum report estimates that global GDP would increase by 5 per cent if every country's average border administration and transport and communications infrastructure were improved only halfway to world's best practice. The same report found that these improvements would have an impact on global GDP six times greater than the removal of all remaining import duties. 37

The WTO Agreement on Trade Facilitation, concluded in December 2013, was set to harness the growing international momentum for reform. Unfortunately, the prescribed 31 July 2014 deadline to adopt the necessary Protocol of Amendment was not met by WTO members. Despite this setback to multilateral comprehensive trade facilitation reform, the anticipated economic gains flowing from the Agreement are still within reach. Australia must now proactively pursue domestic trade facilitation reform to foster greater opportunity for GVC participation and help the Australian economy to reap the benefits of increased international competitiveness, income, and jobs.

AN OPPORTUNITY AND A CHALLENGE FOR CUSTOMS

The rise of GVCs poses major administrative and regulatory challenges for Customs. It is projected that by 2017 air cargo and sea cargo volume will rise by 85 per cent and 20 per cent respectively. Sompounding this challenge further is an increase in final product demand due to the emergence of Asia and high growth rates in new economies. This has implications for both Australia's trade performance and border protection.

Trade facilitation and border protection may appear to be mutually exclusive. The idea that a country can have open borders facilitating an open economy without inherently weakening its border protection seems counter-intuitive. However, the vast majority of trade and travel is entirely legitimate. The portion that is not legitimate is where Customs can most fruitfully focus its attention. But how? There are two ways to find a needle in a haystack: examine every straw, or shrink the haystack to a manageable size. By differentiating between high- and low-risk cargo, Customs can expedite clearance of low-risk cargo and allocate scarce resources to that which it deems to be high-risk. Given the sheer volume of trade, expediting the movement of regular low-risk cargo is "essential to the security function itself." Trade facilitation and border protection are not "antithetical" but "part and parcel of a single process."

The question then becomes how best can the twin goals of trade facilitation and border protection be achieved? One way is through the establishment of an Authorised Economic Operator (AEO) program. At its core, an AEO program is a partnership between government and

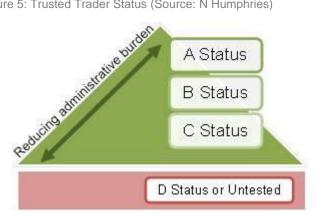
...how best can the twin goals of trade facilitation and border protection be achieved? industry within which private entities enjoy tangible trade facilitation benefits and, in return, provide information and assurances about the security of their supply chain. While the scale and scope of AEO programs may vary, they shift the regulatory focus from the border transaction itself to the entities and systems behind the transaction. They reduce transaction costs at the border for traders, and allow Customs to focus its resources on higher-risk movements of goods and people across the border.

Customs is currently engaged with industry in the co-design of an AEO program known as Trusted Trader. It is intended to be open to exporters and importers (who are increasingly the same entities), as well as other supply chain participants. To become a Trusted Trader a business would need to undergo a risk assessment that considers the entity, the goods being traded, and its supply chain.

However, the authorisation process should not (wherever possible) add yet another layer of regulation, but instead leverage the existing information and systems of partner agencies and departments (and the entity itself), such as the Office of Transport Security and the Department of Agriculture. 41 This would not only mitigate the confusing tradeinhibiting effect of multiple regulations, but also minimise accreditation expenses for those entities already certified in other supply chain security schemes.

Further, there is room for flexibility. A tiered approach to authorisation depending on risk assessments, compliance records, or entity size could apply. Moreover, for traders who see no advantage in authorisation, or do not meet minimum requirements, traditional control-based regulation could remain in place.

Figure 5: Trusted Trader Status (Source: N Humphries)



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An AEO accreditation could confer significant commercial advantages through trade facilitation benefits and branding opportunities. Further, as more operators become authorised, the more valuable authorisation becomes and the greater the cost (both commercial and reputational) if authorisation is revoked. To this end, Customs should promote its AEO program as widely as possible.

For an AEO program to work, government and will need to share responsibilities with the private sector. If Customs is to facilitate trade, then Trusted Traders need to become part of Australia's border protection network. Only then can a dynamic of partnership and shared responsibility move beyond rhetoric. Trusted Traders will need to secure their business and supply chains to help protect the Australian community from weapons, drugs, and biosecurity threats. Typically, this would include securing physical premises and IT systems, and performing background checks on employees. Should trust be breached, expulsion from the scheme would follow.

An AEO program can only succeed if operators recognise that the loss of trust and potential damage to their reputations far outweighs any gains they may derive from cheating the system. ⁴² By leveraging trust and reputation, Customs can develop an AEO program that minimises systemic risks such as moral hazard and adverse selection whereby an entity exploits its authorisation for an unfair commercial advantage or seeks accreditation with nefarious intent; as well as other opportunistic or criminal behaviours. ⁴³

While an AEO program is fundamentally an exercise in supply chain security, it could also be used as a tool to manage, for example, environmental and labour standards both domestically and internationally. In this context 'supply chain security' could be expanded to mitigate the risk of dangerous or problematic corner-cutting. Promoting good behaviour in the long term would raise standards across GVCs beyond supply chain security.

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HOW DOES THE ESTABLISHMENT OF AN AEO PROGRAM AID AUSTRALIA'S GVC PARTICIPATION?

Currently, the lack of an Australian AEO program means that Australian companies face higher import transaction costs than do companies in countries with AEO programs that have attached import benefits. Further, Australian companies have no way to demonstrate to their export markets that their supply chain security practices meet international AEO equivalent standards — standards that are increasingly "front and center as determinants of competitiveness." As a result, Australian companies are more likely to face delays at market ports, affecting the cost, timing, and reliability of Australian exports. Accordingly, foreign multinational companies concerned with reliability and costs — as well as their own supply chain security and AEO

equivalent status — are less likely to include Australian companies in their GVCs. This places Australian industry at a clear competitive disadvantage. After all, Australia's top ten import source countries, nine of its top ten export markets, and all but one of its bilateral Free Trade Agreement (FTA) partners have established AEO programs.⁴⁵

There is no time to waste in the establishment of an Australian AEO program, however to ensure its efficacy it must be widely embraced by Australian industry. The attached benefits must be "meaningful, measurable, and reportable." To that end, a key feature of an AEO would be to make it easier and cheaper for Australian companies to import. This is critical to their ability to participate in GVCs because efficient access to imports increasingly determines the competitiveness of their exports. 47

Potential import benefits from Australia's Trusted Trader program include reduced fees and charges, priority processing of trade advices and duty concession applications, simplified reporting and refund of duty procedures, 'head of the queue' treatment for inspection, and expedited cargo release. All these elements would reduce the trade costs for Trusted Traders. For example, following the introduction of an AEO program in Japan, clearance times for authorised cargo dropped by 60 per cent⁴⁸ and import permit processing times fell from 3.1 hours to 6 minutes. However, perhaps the most meaningful potential benefit for AEOs is deferred payment of duty, providing a massive cash flow benefit to trusted importers that would resonate broadly.

An AEO program also offers an opportunity to aggregate government services in a whole-of-value-chain approach aimed at increasing GVC participation. Government services could then be tailored to traders accordingly. For example, the aggregating impact of an AEO program could be harnessed to help small and medium enterprises (SMEs) expand their international trade footprint, and assist businesses of all sizes to maximise their international trade opportunities. This aggregation of services would also provide an environment for better collaboration within government itself by encouraging departments to ensure that their "interests are aligned, skill gaps closed, and structural constraints addressed." In particular, it might prompt border agencies to integrate with international 'single window' networks, and to acknowledge the human element of GVCs by extending trust-type benefits to travelers also.

The enhanced collaboration between government and industry following the development of an AEO program would provide a good environment for streamlining regulatory standards. The potential rewards of greater regulatory harmony were glimpsed earlier this year when a small food co-operative in northern New South Wales struck a commercial deal with Chinese regulators to carry out testing, quarantine and quality assurance

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protocols in Australia and China simultaneously. The end result was Australia's first-ever fresh milk export to China. 52

One potential criticism of an AEO program is that it would create an uneven playing field in favour of large corporations. SMEs have a lesser capacity to establish the supply chain security necessary to participate in AEO programs. To avoid this disadvantage, SMEs — of a certain size or with a certain trading footprint — could access benefits by using the services of authorised supply chain participants (including freight forwarders and customs brokers). 53 That said, the most typical path for SME entry into GVCs is to sell their goods and services to larger multinational firms that coordinate the vast majority of GVCs. 54 As a result, while SMEs may not participate directly in GVCs to the extent larger firms do, they still benefit greatly through indirect exporting meaning that their products may be sold domestically to larger firms which then incorporate their value into GVCs. 55 For example, in the United States, SMEs have created as much as 41 per cent of US valueadded exports, despite only being responsible for approximately 28 per cent of gross trade, due to indirect exporting.

THE NEW ZEALAND EXAMPLE

To understand the potential benefits of establishing an AEO program, Australia need only look at the example of New Zealand's Secure Exports Scheme. Secure New Zealand is home to more than 120 authorised exporters. In 2013, almost a third of all New Zealand exports originated from AEOs. Despite the fact that Australia has an FTA with the United States, New Zealand exporters (with no such agreement) are three and a half times less likely to see their cargo held up for examination on arrival at a United States port. Authorised New Zealand cargo is deemed 'low-risk' by the United States. Australian exporters are left looking like Australian travelers waiting in line at Heathrow Airport, waving passports with Her Majesty's request that that they be offered every assistance, while EU passport holders walk straight through.

One element of New Zealand's success has been the conclusion of AEO Mutual Recognition Agreements (MRAs) with the United States, Korea, and Japan. Mutual Recognition allows two or more customs administrations to "recognise each other's audits, controls and authorisations as equivalent and therefore provide reciprocal benefits to AEOs." In practice, this removes much of the Customs regulatory burden for exporters at foreign markets. Pursuing bilateral MRAs between countries with established AEO programs is a growing trend internationally but will do little to plug Australia into GVCs in and of itself.

Rather, Australia should look to pursue a large regional MRA as a part of one of the mega-regional trade agreements currently being negotiated — the US-led Trans-Pacific Partnership (TPP) or the Regional Comprehensive Economic Partnership (RCEP). RCEP is an ASEAN-

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centred proposal for a regional free trade area, which would initially include the ten ASEAN member states and those countries that have existing FTAs with ASEAN such as Australia, China, India, and Japan. It would offer a regional forum for pursuing an MRA agenda. Its 16 nations include economies at every stage of GVC participation. In addition, RCEP nations already account for 60 per cent of Australia's two-way trade, and 70 per cent of Australia's goods and services exports.

While pursuing a large regional MRA would be ambitious, it would do more to entrench Australia's GVC participation than a piecemeal country-by-country approach. It would also provide a tangible business outcome to the RCEP negotiations, and reduce the risk of multiple MRAs of differing scopes that create trade confusion rather than trade facilitation. Furthermore, pursuing a regional MRA agenda and a targeted bilateral strategy focused on headquarter economies is not a zero-sum game. However, it is vital that the positive agenda of AEO regional mutual recognition does not become contingent on the success of other regional (or global) trade facilitation reforms. An AEO regional mutual recognition network should be pursued on its own merits.

Figure 6: RCEP participating countries (Source: DFAT)

CONCLUSION

Successful participation in GVCs will involve more than trade facilitation reform. Also fundamental are the continued unilateral and multilateral liberalisation of tariff and non-tariff barriers (including in services and foreign direct investment) along with the right national policies for promoting skills development, education, innovation, and the creation of strategic infrastructure. The multidimensional nature of GVCs means that gains made on one front can all too quickly be negated by inertia on another. Ultimately, it will take a whole-of-government approach to ensure that Australia can realise the opportunities of a changing global trading system.

Nevertheless, better trade facilitation is a key step in improving Australia's export performance and mitigating the disadvantages of a high-cost economy, distance from economic and knowledge centres, and a persistently strong dollar. A small but integral part of this strategy is soft trade facilitation reform at the border to streamline trade and reduce the cost of conducting business internationally. Customs can be central to this strategy through the development of an AEO program.

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