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Trade policies for a small open economy: The case of Singapore*

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1 | INTRODUCTION

Singapore is a sovereign city–state that consists of one main island along with 62 other islets lying at one end of the Strait of Malacca in the centre of South-East Asia. Given its geographic location and limited land area and natural resources, Singapore's economic development has been heavily reliant on international trade and regional integration. Indeed, successive Singapore governments have actively participated in many regional and global free-trade agreements. Singapore has been a WTO member since 1995 and member of GATT since 1973. The seventh review of the trade policies and practices of Singapore under the WTO framework took place in 2016. This paper selectively discusses several main issues raised in the latest trade policy review as well as new developments and challenges that Singapore is facing in the global economy. As Singapore is a typical small open economy, reviewing its trade policies may provide important and useful lessons for other countries with similar macroeconomic characteristics.

The next section lays out the macroeconomic context and some main economic performance measures for the Singapore economy. Section 3 contains discussion and comments about the recent WTO Trade Policy Review. Further general discussions on some other important issues are presented in Section 4 and Section 5 concludes.

2 | MACROECONOMIC CONTEXT

Singapore's GDP has grown by an average of 9.5% annually since its independence in 1965. There are many factors that contribute to this long-lasting high rate of growth. One of them is international trade. Although there is still no consistently clear and strong empirical support for the positive effect from trade to economic growth, for the case of Singapore as well as several other

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emerging-market economies, international trade seems to have played a major role in their growth miracles.[1] Indeed, when looking back, we see the correlation between GDP growth and trade growth in Singapore is 0.67, suggesting a close relationship. Given Singapore's geographic location and small size, one can naturally conjecture the importance of international trade to its economy. Due to the limited land area, Singapore has very little natural resources. Even its fresh water supply has been dependent on its neighbouring country for a long time. When we look at the common measure of trade openness, the trade to GDP ratio, we see that for Singapore, this is over 300% since 1987.[2]

Although performing very well for several decades, Singapore's economy is now also facing some challenges. The GDP growth rate has dropped to 2% for the past 2 years as shown in panel (a) of Table 1. The recovery from the 2008 global financial crisis is also quite successful. Growth in 2010 was remarkably high at 15.2% (and GDP per capita growth of 13.2%). However, GDP growth in the last 2 years has dropped to around 2% and per capita growth rate has dropped to 0.7% for both 2015 and 2016. The optimistic side is that unemployment has dropped over the last 6 years and the inflation is very low, especially in 2015 and 2016.

Among the many potential factors behind the slowdown of growth, one immediate suspect is the poor performance of international trade. As discussed above, trade has played a crucial role in Singapore's growth. Indeed, the trade openness measure has decreased since 2011, especially in the past 2 years as shown in panel (b) of Table 1. The growth rate of Singapore's total trade of goods and services has turned negative for 2015 and 2016, −12.3% and −3.5%, respectively. When looking at trade performance more carefully, from 2010–16, we see that growth of trade in services surpasses the GDP growth, resulting in trade in services as a percentage of GDP rising.

TABLE 1 Selected macroeconomic indicators for Singapore, 2010–16

	Year						
Indicators	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Panel (a): macroeconomy							
GDP growth (%)	15.2	6.2	3.9	5.0	3.6	1.9	2.0
GDP per capita growth (%)	13.2	4.0	1.4	3.3	2.2	0.7	0.7
Inflation (CPI % growth)	2.8	5.3	4.5	2.4	1.0	-0.5	-0.5
Unemployment (%)	3.1	2.9	2.8	2.8	2.8	1.7	1.8
Manufacturing value added (% of GDP)	21.4	20.2	19.9	18.5	18.9	19.5	19.6
Services, etc. value added (% of GDP)	72.3	73.6	73.6	75.2	74.3	73.8	73.8
Panel (b): trade performance							
Trade (% of GDP)	373.4	379.6	371.0	366.0	362.3	329.9	318.4
Trade growth (%)	27.1	18.5	2.5	3.2	0.8	-12.3	-3.5
Trade in services (% of GDP)	85.5	86.2	89.3	94.8	101.5	102.1	102.8
Panel (c): other performance measures							
FDI, net inflows (% of GDP)	23.3	17.8	19.4	21.4	24.0	23.8	20.7
FDI, net outflows (% of GDP)	15.0	11.4	6.7	14.4	16.9	10.6	8.0

Note: Data are retrieved from World Bank as well as the Singapore Department of Statistics.

[1] See Frankel and Romer (1999) for discussion on the connection between trade and growth and Singh (2010), Falvey, Foster, and Greenaway (2012) for reviews of evidence.

[2] Data source is World Bank Open Data.

From panel (a) of Table 1, we see that the industrial structure of Singapore is quite stable with around 20% manufacturing and 74% in services over the past 6 years. The Singapore government is supportive of a strong manufacturing base and favours restructuring towards high value-added, capital-intensive industries. The authorities consider that the manufacturing sector has positive spillover effects to the rest of the economy, including improving resilience to global economic downturns. We will come back to this in Section 4 where we discuss global production networks.

There have been no major recent changes in Singapore's investment regime, and foreign direct investment (FDI) inflows have been relatively stable after the 2008 financial crisis. The few foreign investment restrictions are mainly in retail banking, legal services, broadcasting services and some government-linked companies. On the other hand, Singapore's FDI outflows have been quite volatile. This may be due to asymmetric recoveries from the crisis and policy uncertainties in other countries.

Overall, Singapore's economy has performed well for several decades despite several downturns due to regional or global crisis. And international trade has played an important role. Its economic performance exceeds that of Hong Kong SAR, a region sharing many similar characteristics with Singapore. Reviewing Singapore's trade policies can help better understand Singapore's past success in economic development, which may benefit other developing countries as well. Discussions on its potential problems and challenges can also help us understand sustainable growth of the Singapore economy.

3 | REVIEW OF TRADE POLICIES IN SINGAPORE

Singapore's trade policies have been quite transparent due. Regular notifications to WTO bodies and committees also ensure its policies are transparent and clearly transmitted on a timely basis. Most of the trade policy issues have been adequately discussed in the 2012 WTO Trade Policy Review for Singapore; in this section, we select several important issues to add further analysis.

3.1 | Trade policy uncertainty

International Enterprise Singapore (IE Singapore) is a government agency promoting trade and partnering Singapore companies in going global. According to the information provided by the IE Singapore, the economy currently has an extensive network of 20 implemented free-trade agreements (FTAs) with 31 trading partners. Merchandise trade with preferential trading partners accounted for about 80% of Singapore's imports and 74% of exports in 2014.

Almost all products enter duty-free under the applied MFN tariff, except for six tariff lines (beer and some spirits), which are subject to specific duties. On the other hand, only about 70% of Singapore's tariffs are covered by tariff bindings, with a simple average bound rate of 6.9%. Excise duties were increased in 2013–15 on tobacco products, alcoholic beverages and some petroleum products; the rates for motor vehicles remain unchanged.

As to import and export controls, the former is maintained by various administering agencies mainly for health, safety, security and environmental reasons, or under international agreements. The control regimes for goods subject to import prohibition and automatic or non-automatic licensing remain unchanged. Export controls are implemented mainly for health, safety, security or environmental reasons or to fulfil international commitments. Singapore does not apply export taxes. To promote exports, Singapore provides grants and tax incentives and subsidises insurance premiums to facilitate access to trade finance.

One of the main concerns raised about Singapore's trade policy is its uncertainty. Firstly, nearly 30% of Singapore's tariff lines are unbound. This creates huge uncertainty about the actual implemented tariff rate in practice. As shown by many researchers, policy uncertainly can have significant negative effect on economic activities. For instance, the recent work by Handley and Limão (forthcoming) has shown that for China and the USA, the reduced trade policy uncertainty lowered US prices and increased consumers' income by the equivalent of a 13 percentage point permanent tariff reduction. Similarly, trade policy uncertainty arising from unbound tariff lines in Singapore may also have significant negative effect on trade. Secondly, though not many, the Singapore government does provide an array of tax and non-tax incentive schemes. These can be very subtle. Information regarding budgetary expenditures, as well as revenue foregone (tax expenditures) related to Singapore's incentive schemes, is not readily available. This also creates some uncertainty which might negatively affect economic interactions with other countries.

3.2 | Regional and multilateral free-trade agreements

Singapore governments have been actively participating in a large number of free-trade agreements. Besides the 20 FTAs implemented, there are another three signed between Singapore and trading partners. The recently concluded FTAs with the European Union and Turkey, as well as the Trans-Pacific Partnership Agreement (TPP), are not yet in force.

With many free-trade agreements, there is naturally a potential problem arising from the different rules of origin. Aware of this potential barrier, Singapore does not apply any MFN rules of origin, and there is no certificate of origin requirement for such imports. However, preferential rules of origin requirements are contained in RTAs and FTAs that Singapore is party to. These different rules create the famous Spaghetti-bowl effect discussed by Bhagwati, Greenaway, and Panagariya (1998) that may actually hinder trade activities. Because every FTA sets its own geographic conditions of production, given integrated global production networks and global supply chains, rules of origin are hard to define clearly and often impossible to enforce. It also means higher administrative cost for both governments and firms. These fixed costs of trade are particularly significant for small and medium-sized firms, reducing their willingness to trade.

In the Asian context, we have seen a dramatic rise in FTAs since the beginning of the 21st century. In 2000, only three FTAs were in force, 9 years later, it was 37, with another 72 under negotiation. The growing regional economic integration combined with a lack of common economic institutions has led Asian countries to adopt pro-FTA trade policies. However, due to the high administrative costs and other complicate regulations, many firms trade without using the terms of FTAs. In a 2009 survey by Kawai and Wignaraja (2009), only 29% of Japanese exporting firms, 20.8% of Korean exporting firms and 20% of Philippine exporting firms were utilising relevant FTAs. The percentage of exporting firms using FTA preferences in Singapore is only 17.3%. Among the many reasons for not using FTA preferences, high administrative cost due to complicated rules of origin is identified as the second most important.

One possible solution to this is to achieve a multilateral free-trade agreement within the region, which is exactly what Singapore has been trying to do, TPP being one recent example. However, this may not be as simple as it sounds. Too many existing regional FTAs reduce the incentive to pursue a larger multilateral FTA. As Levy (1997) shows in a political economy context, with domestic distortions that asymmetrically distribute the gains from trade across different interest groups, those groups gaining disproportionately from regional FTAs will likely oppose multilateral FTAs. He also shows that bilateral agreements between countries with similar factor endowments

are more likely to have this effect. In this case, bilateral free-trade agreements cannot increase the potential support for a multilateral free-trade agreement.

Finally, as Singapore is a small economy, it would be more efficient to work with other countries in the Association of Southeast Asian Nations (ASEAN). It is well known in the literature that smaller economies tend to benefit more from international trade. To get more and larger countries to the negotiation table, small economies such as Singapore need to bring more and be able to offer more. Other ASEAN countries are Singapore's natural allies on the path to a broader multilateral FTA. Progress has been made, and integration within ASEAN has taken a step forward with the establishment of the ASEAN Economic Community (AEC) in 2015, which aims to create a single market with a free flow of goods, services and investment among its 10 member countries.

3.3 | R&D and intellectual property rights

Modern economic growth is based on research and development (R&D). This is particularly true for countries that have already accumulated high levels of physical and human capital. Singapore is one of them. The fundamental force for Singapore's future economic growth is R&D.

When looking back at Singapore's R&D record, expenditures of Singapore have grown at 8.0% annually from 2000–15. As a share of total GDP, the annual expenditure is quite stable around 2.1% since 2000. This is higher than that of the UK's 1.7% and lower than that of the US's 2.6% for the same period. With these expenditures, Singapore has accumulated patents at an annual growth rate of 13.6% from 2000–15. Based on these numbers, the return to the R&D expenditure in Singapore looks quite impressive.

More than 60% of Singapore's R&D activities are carried out by the private sector. And of all expenditures, the share spent in the manufacturing sector drops from 72.4% in 2002 to 53.6% in 2014. The R&D expenditure share of the services sector increased from 22.5% to 45.9% over the same period. As shown in Section 2, Singapore's sectoral output structure has been quite stable over the past decade. Thus, the R&D expenditure allocation across sectors, along with the growing exports of services, seems to indicate a revealed comparative advantage. Of course, this is just a simple correlation; more detailed data are needed to identify Singapore's true comparative advantage.

Chen and Shao (2017) have shown that given countries' endowment of research resources, mainly research manpower and research facilities, their comparative advantage in doing R&D across industries depends on the product cycle lengths of different industries. Countries with more research resources will have comparative advantage in those industries with shorter length of product cycles. As countries develop and accumulate their knowledge capital and research resources, comparative advantage in doing R&D and innovation shifts from industries with longer product cycles to those with shorter product cycles. Given Singapore's relatively high position in research resource endowment, its comparative advantage of R&D lies in those industries with short product cycles such as chips, electronics and other high-end manufacturing.[3] Although their empirical work is mainly about manufacturing industries, Singapore can explore more in its large services sector for its R&D comparative advantage. It may help to strengthen Singapore's comparative advantage in services exporting.

Recently, Singapore modified its patent regime from self-assessment to a positive patent grant system, whereby patent applications have to meet the patentability criteria of novelty, inventiveness and industrial applicability before a request can be made. This may help maintain a high-level

[3]See Chen and Shao (2017) for more details about the measure of product cycle.

standard for new patent applications. Other policies like removing restrictions, providing more research credit for small firms, providing training and help for new-tech start-ups have also been adopted by the Singapore government to promote innovation in its economy.

The last point we want to highlight is the market size effect for innovation. Many recent innovations have depended on interactions through social networks, which needs a large enough customer base to work. And the high level of fixed investments for many innovations also requires a large enough market to generate increasing returns to scale to justify the high fixed cost. For Singapore, due to its size, many innovations that depend on large customer bases would not arise unless something is done to better connect the Singapore market to neighbouring markets such as Malaysia and Indonesia.

3.4 | Ageing population and immigration

In 2015, Singapore's fertility rate ranked among the lowest in the world. This, together with rising life expectancy results in an ageing population. As shown in the panel (a) of Table 2, the percentage of elderly in total residents, as well as in total employment has been increasing over time. As a result, the old-age support ratio has been decreasing and old-age dependency ratio increasing. To achieve a sustainable system of social services, the government has recently strengthened social safety nets, for example retirement benefits through the Central Provident Fund (CPF) which is a mandatory savings scheme financed by contributions from employers and employees covering around 90% of the resident population. Support also includes a more progressive interest rate structure where Singaporeans with lower balances enjoy higher government-provided interest rates on CPF savings. In addition, to better support the elderly, the Silver Support Scheme provides a quarterly income supplement to the bottom 20% of Singaporeans aged 65 and above.

Meanwhile, immigration policy in Singapore has been revised often to address different issues. Over a long period, governments adopted an open-door policy. As shown in panel (b) of Table 2, the non-

TABLE 2 Ageing population and immigration in Singapore, 2010–16

	Year						
Indicators	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Panel (a): population							
Fertility rate	1.15	1.2	1.29	1.19	1.25	1.24	1.2
Elderly residents (65 years & over) (%)	9	9.3	9.9	10.5	11.2	11.8	12.4
Elderly residents in employment (%)	3	3.7	4.1	4.7	5.5	5.4	5.9
Old-age support ratio	7.4	7.2	6.7	6.4	6	5.7	5.4
Old-age dependency ratio	13.5	13.9	14.8	15.7	16.7	17.7	18.7
Panel (b): immigration							
Non-resident population (%)	25.7	26.9	28.1	28.8	29.2	29.5	29.8
Non-resident population growth	4.1	6.9	7.2	4.0	2.9	2.1	2.5
Population growth	1.8	2.1	2.5	1.6	1.3	1.2	1.3

Notes: Data are retrieved from World Bank as well as the Singapore Department of Statistics. Old-age support ratio is the number of residents aged 20–64 years per resident aged 65 years and over. Old-age dependency ratio is the number of residents aged 65 years and over per hundred residents aged 20–64 years. Gini coefficient and ratio of income for the 90th and 10th percentile are calculated using the household income from work (including employer CPF contributions) per household member after accounting for government transfers and taxes.

resident population has been increasing over time, though at a decreasing rate. The inflow of immigrants and foreign workers has helped alleviate manpower shortages and ageing. But, immigrants are blamed for the country's overcrowding and falling reliability of its public transportation system, increasing property prices, suppressed wage levels, increased competition for jobs and education, increasing income inequality and other social problems. In the future, immigration policies need to be carefully crafted to balance benefit from targeted immigrants and potential cost to the local community. To raise the quality of its foreign workforce and encourage businesses to reduce their reliance on manpower and increase their productivity, the government has raised the qualifying salary for new Employment Pass (EP) applications from S$3,000 to S$3,300 in 2014 and to S$3,600 in 2017.

3.5 | Other issues raised in the trade policy review

Other issues about state-owned enterprises and service sector restrictions are also raised in this trade policy review. In Singapore, government-linked companies (GLCs) are active in a range of sectors through the government's holding company Temasek, which manages its investments. Temasek receives no subsidies or special consideration from government. And Singapore has always notified the WTO that it does not maintain any state trading enterprises. Recent FTAs, for instance the TPP, have commitments on limiting a country's state enterprises' market power and any subsidies they receive.

Service sector restrictions of foreign investments are mainly in retail banking, legal services, broadcasting services and some GLCs. FDI inflows increased by an annual rate of 9.0% from 2000–16 and were mainly in financial and insurance services. These restrictions may be eliminated first among ASEAN countries through the ASEAN Framework Agreement on Services (AFAS) which provides for preferential services market access through incrementally improved packages of commitments. The services commitments made include new subsectors, higher foreign equity participation and fewer restrictions to trade. At present, ASEAN has concluded nine packages of commitments. All AFAS rules are consistent with international rules for trade in services provided by the General Agreement on Trade in Services (GATS) of the WTO.

4 | OTHER CHALLENGES IN THE NEW GLOBALISATION ERA

In this section, we discuss some other challenges that Singapore's economy is facing in the new era of globalisation. We start with a discussion on global value chains and finish with comments on recent developments in the TPP.

4.1 | Global value chain and regional production network

In recent years, global sourcing and multinational production are becoming more and more prevalent. Multinational firms and production fragmentation are common practices for many goods in manufacturing as well as services.[4] As intermediate inputs and final goods enter and exit country

[4]Actually as shown by Bernard, Jensen, Redding, and Schott (2016), much of international trade is dominated by a few "global firms," which participate in the international economy along multiple margins and account for substantial shares of aggregate trade. Analysing this kind of firms and attracting them to locate in Singapore can be very attractive and helping to boost the production and trade in Southeast Asia region.

borders multiple times, production becomes globally organised. This is why researchers and policymakers emphasise the value-added content of trade.[5] Countries should care more about value-added content, instead of gross trade volumes. Recently, the global value chain has been a hot topic in the trade literature. Under this new and changing context of global production network, how should a country's trade policies evolve? As shown in Blanchard, Bown, and Johnson (2016), the optimal tariff for final goods should be decreasing in the domestic content of foreign-produced final goods. They also provide strong empirical evidence for this prediction, showing that global value chains are already playing an important role in shaping trade policy.

Singapore is a hub for international shipping and trading. Based on the input–output table from the Organization for Economic Co-operation and Development (OECD), the domestic value-added share in Singapore's total gross exports is around 40% on average over the period 1995–2011.[6] This is quite low compared with other countries. One of the reasons is the high share of re-export in Singapore. As shown in Figure 1, the value-added content of gross exports for Singapore has been quite stable, with some drop from 2001–05 possibly due to China's accession into the WTO.

The Singapore government has biased their industrial policy towards high value-added and capital-intensive industries. This can help increase the value-added content of exports. However, given that global production chains happen more in manufacturing and Singapore only has a small manufacturing base, these policies may not turn out to be effective.

When looking at the Singapore's participation in South-East Asian production networks,[7] we see that the value-added contribution from Singapore is not high and over time not increasing despite the high growth of total exports from this region. The total growth of exports in goods and services by these South-East Asia countries has increased on average at an annual rate of 8.9% over the period of 1995–2011.

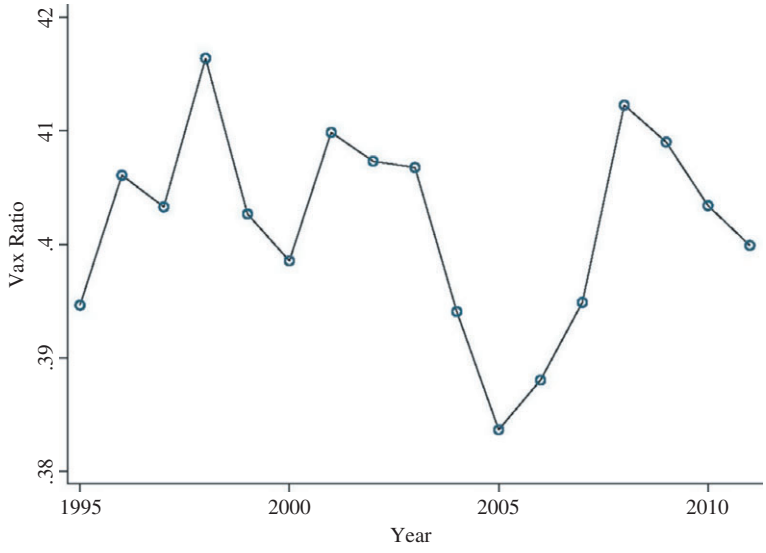

FIGURE 1 Value-added ratio in gross export for Singapore, 1995–2011 [Colour figure can be viewed at wileyonlinelibrary.com]

[5] See some pioneering work on value-added trade by Johnson and Noguera (2012, forthcoming).

[6] The time period is chosen according to data availability.

[7] Due to data limitation, we only observe the input–output tables for Brunei, Cambodia, Indonesia, Malaysia, Philippine, Thailand and Vietnam besides Singapore in South-East Asia region.

As shown in Figure 2, the share of value-added contribution by Singapore in other South-East Asia countries is around 0.85% if weighted by value-added or 1.08% if weighted by output. And this was stable before 2007 and decreasing after that.

We can also look at the share of value-added contribution by other South-East Asia countries in Singapore's production. As shown in Figure 3, this is also decreasing over the sample period. Both figures seem to suggest that there is still a lot of potential in regional value-added production networks within South-East Asia. Singapore and other ASEAN countries should work together to improve integration and in turn the aggregate efficiency of this regional production network in supplying the world economy.

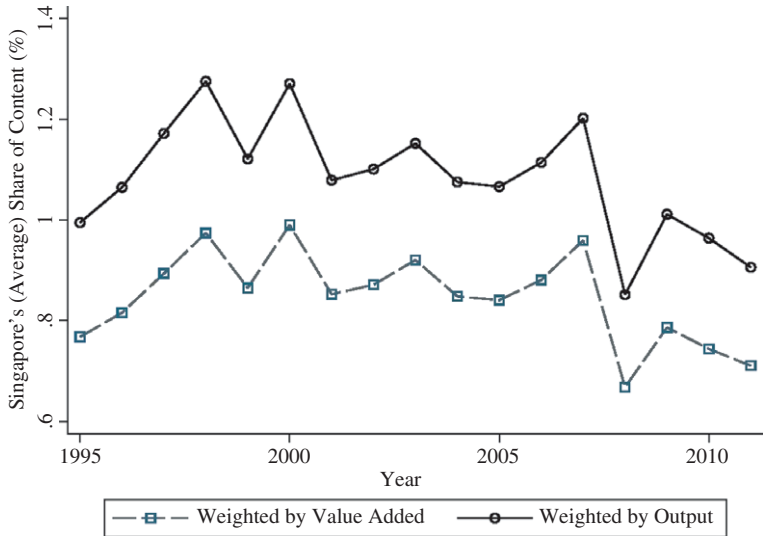

FIGURE 2 Value-added contribution of Singapore in South-East Asia Countries, 1995–2011 [Colour figure can be viewed at wileyonlinelibrary.com]

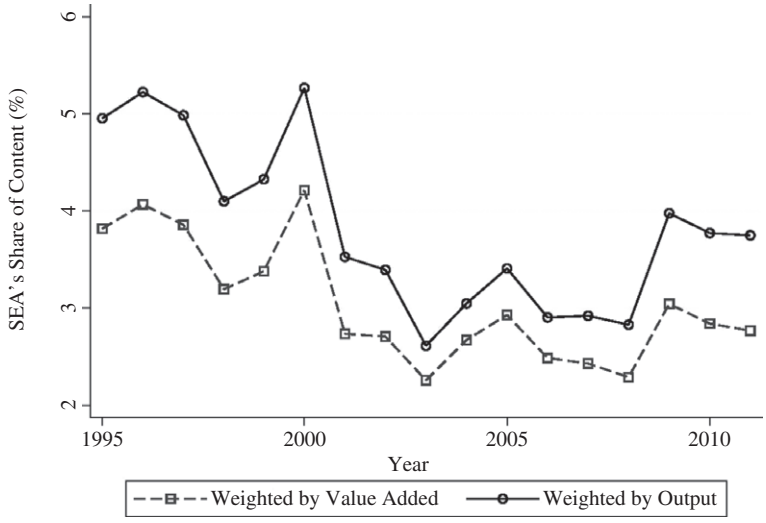

FIGURE 3 Value-added contribution of South-East Asia countries in Singapore, 1995–2011

Singapore has a huge geographic advantage in its location. According to Antràs and de Gortari (2017), different activities along the value chain have heterogeneous dependency on geography. In particular, geography matters more for more downstream activities. Given Singapore's location advantage, Singapore may better target these stages.

Finally, Heise, Pierce, Schaur, and Schott (2015) find evidence that trade policy uncertainty can lead to more frequent and long-term production linkages between suppliers and buyers across countries. As a result, to reinforce the global production connections across countries, government authorities should try to be as transparent and clear as possible when it comes to policies regarding global production organisations or global sourcing and off-shoring.

4.2 | The trans-pacific partnership

The TPP was grown from the Trans-Pacific Strategic Economic Partnership Agreement (TPSEP), a trade agreement between four Pacific Rim countries concerning a variety of matters of economic policy. The agreement was signed by Brunei, Chile, Singapore and New Zealand in 2005 and entered into force in 2006. It is a comprehensive trade agreement, affecting goods and services, rules of origins, technical barriers to trade, intellectual property, government procurement and competition policy. Among other things, it called for a reduction of 90% of all tariffs between member countries by 1 January 2006 and reduction of all trade tariffs to zero by 2015. The aim was to create a comprehensive, forward-looking trade agreement that set high-quality benchmarks on trade rules, and helped promote trade liberalisation and facilitate trade within the APEC region. The TPP is an enhanced agreement based on TPSEP but including 12 members: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, United States, Vietnam and Singapore. The TPP was considered to be a pathfinder for the proposed Free Trade Area of the Asia Pacific (FTAAP), an APEC initiative.

The TPP was concluded on 5 October 2015 after five and a half years of negotiation. Following a legal verification exercise by the parties, the text of the agreement was released to the public on 26 January 2016. It was signed by all parties on 4 February 2016. The TPP consists of 30 chapters, as well as numerous annexes and side letters on bilateral matters. The contents of the TPP go far beyond the standards drafted by the WTO. It includes agreements on trade in goods and services, customs and trade facilitation, technical barriers to trade, government procurement, new regulations for online commerce, treatment of foreign investors, far more comprehensive protection for intellectual property and environment, labour codes, an agreement for neutrality regarding state-owned enterprises, regulatory coherence; transparency and anticorruption; dispute settlement; and institutional provisions. Given the comprehensiveness of TPP, many researchers and think tanks believed it was going to help macroeconomic performance of member countries and may reshape the future trade cooperation and agreements.

However, in 2017, the current president of the United States removed the USA from the TPP and declared an end to the era of multinational trade agreements for the USA. With nearly a quarter of world GDP, the USA was a big player in TPP. Without it, the remaining countries only account for about 13.5% of the world economy. Nevertheless, the other 11 TPP countries agreed in May 2017 to revive the deal without US participation.

The TPP partners accounted for 22.0% of Singapore's total imports and 25.0% of its total exports in 2016.[8] Given its high dependency on trade, it is important for Singapore's economic development that the TPP can actually be implemented. And we believe this should be the

[8]Numbers are calculated using data from the Statistics of Singapore and including the US as a member.

direction that Singapore government pushes forward. Many researchers suspect that the actual implementation of TPP can be very hard, especially for those with poor domestic institutions. However, this type of cost is quite low for Singapore as it already has quite advanced institutions and very efficient government administration.

Additionally, the TPP is designed in a way that will allow interested parties to join the agreement along the way. To increase the influence of TPP and exert its positive spillovers to other agreements or other neighbouring economies, it eventually should bring in more players in the Pacific Rim. Within this region, China arises as a potential alternative to replace the USA. China, with nearly 15% of the world GDP in 2016, accounts for 13.1% of Singapore's total exports and 13.9% of its total imports in 2016.

Although there seems to be an antiglobalisation trend in many developed economies including the USA and UK, most trade researchers still hold the belief that global integration should bring positive gains for all countries. We believe the remaining member countries in the TPP should push hard for implementation of this comprehensive agreement, setting a successful example for deeper integration.

5 | CONCLUDING REMARKS

Singapore has been a model of development for decades as it has successfully developed into a high-income country with a GDP per capita of nearly US$53,000 in 2016. To a large extent, growth has been based on an open and transparent trade and investment regime given Singapore's geographic advantage. In this paper, we discussed the trade policies for a small open economy using Singapore as an example. We can see these polices have contributed to Singapore's outstanding economic performance over the past decades. We believe Singapore's experience may provide an excellent lesson for other small open economies.

Nevertheless, there are other problems and challenges facing the Singapore economy. The government is taking steps to restructure the economy towards innovation-led growth and a higher value-added exporting structure. Recently, the government created a Committee on the Future Economy with the task of charting a course for Singapore's economic transformation beyond 2016 and helping to pick future growth industries. We are optimistic about the future of Singapore's economic performance and its continuing leading role and model for other small open economies.

The review is far from an exhaustive discussion of Singapore's open economy policies. For instance, we left out exchange rate policy and monetary policy. As a regional financial services hub, exchange rate policy is playing a crucial role in Singapore's macroeconomic fluctuations. Due to the length limit and the trade policy focus of this review, other open economy policies are delegated to future research.

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