



### Singapore Centre for Applied and Policy Economics

### Bilateral "WTO-Plus" Free Trade Agreements: The WTO Trade Policy Review of Singapore 2004

by

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Department of Economics SCAPE Working Paper Series Paper No. 2005/05 - Apr 2005 http://nt2.fas.nus.edu.sg/ecs/pub/wp-scape/0505.pdf

#### **BILATERAL "WTO-PLUS" FREE TRADE AGREEMENTS: THE WTO TRADE POLICY REVIEW OF SINGAPORE 2004**

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#### ABSTRACT

The World Trade Organisation's 2004 Trade Policy Review of Singapore (WTO-TPR Singapore 2004) depicts the small and outward-oriented economy as one of the most open country to international trade and investment. The review highlights the benefits of the outward-oriented strategy that has enabled the Singapore economy to weather recent external shocks such as the Asian financial crisis to the SARS and to the recent unfavourable conditions in the Middle East. In particular, the report commended Singapore's efforts on its liberalization of the services sector and its economic benefits to consumers and global trade. However, the WTO-TPR Singapore 2004 highlights several key areas of concerns: (a) the commitment to multilateral agreements with the rising number of bilateral free trade agreements signed by Singapore and (b) the lack of growth of total factor productivity, a key indicator for long-run efficiency of the economy. The paper addresses the above key concerns raised in the WTO's TPR of Singapore in terms of its commitment to global trade in terms of WTO-plus bilateral FTAs, which intends to support multilateral trading system, and its overall industrial strategies to raise its competitiveness.

The World Trade Organisation's 2004 Trade Policy Review of Singapore (WTO-TPR Singapore 2004) depicts the small and outward-oriented economy as one of the most open country to international trade and investment. The review highlights the benefits of the outward-oriented strategy that has enabled the Singapore economy to weather recent external shocks such as the Asian financial crisis to the SARS and to the recent unfavourable conditions in the Middle East. In particular, the report commended Singapore's efforts on its liberalization of the services sector and its economic benefits to consumers and global trade. However, the WTO-TPR Singapore 2004 highlights several key areas of concerns: (a) the commitment to multilateral agreements with the rising number of bilateral free trade agreements signed by Singapore and (b) the lack of growth of total factor productivity, a key indicator for long-run efficiency of the economy. The paper addresses the above key concerns raised in the WTO's TPR of Singapore in terms of its commitment to global trade in terms of WTO-plus bilateral FTAs, which intends to support multilateral trading system, and its overall industrial strategies to raise its competitiveness.

Section 2 discusses the overall development trends of the Singapore economy. Section 3 reviews the bilateral free trade agreements in terms of its implications for multilateral trading systems. The long-run growth strategies and the importance of productive performance of the economy are reviewed in section 4. Section 5 provides the conclusion.

## 2. Economic Performance of Singapore in 1999-2003: Emerging Services Sector

Since the Asian crisis in 1997, the growth of the Singapore economy has been lacklustre and volatile due to such events as the Asian financial crisis, the slowdown in the US and global economies, SARS, and the on-going war on terrorism. Over 1999-2003, Singapore's real output growth was at an average rate of 3.6% p.a. as compared to nearly an average of 9% in 1991-1997 (see Table 1). The volatility in output is also reflected in the rising unemployment, as unemployment rate had risen from 3.5% in 1999 to nearly 4.7% in 2003. However, the economy has shown some strong output growth in 2004, growing at a rate of 8.4% with unemployment rate falling to 4% (MTI, 2005). It has been forecasted that the economy will grow at the average potential output level of 3-5% for the coming years with an average unemployment rate of 3.5%.

In addition to the volatility in output, the structural adjustment of the economy to higher value-added activities also contributed to the slower growth in employment. Throughout this period, the services sector has led much of the growth, both in the terms of GDP and employment growth. The share of the service industries account for nearly a total of 64% of Singapore's gross value-added and 72% of employment growth respectively over the period of 1999-2002. With the emergence of low-cost competitors in the region and in China, there is a strong pressure for the Singapore economy to move to higher value-added activities to sustain its competitiveness. However, the Government believes that both manufacturing and services will form the "twin engines" of growth, where manufacturing is expected to contribute around 20% of GDP (Economic Review Committee, 2002).

Table 1. Key Macroeconomic mulcators. 1999-2005						
1999	2000	2001	2002	2003		
6.9	9.7	-1.9	2.2	1.1		
13.0	15.1	-11.6	7.8	2.8		
6.3	8.0	2.4	1.4	1.0		
-9.0	-0.7	-2.6	-10.8	-10.7		
23.1	26.8	23.7	25.8	26.3		
63.6	61.9	64.5	63.5	63.4		
7.9	6.3	6.1	5.4	5.0		
5.1	5.0	5.7	5.3	5.3		
Employment Share (%)						
21.0	20.8	18.8	18.2	17.9		
71.1	65.5	74.2	75.0	75.6		
6.9	13.1	6.1	5.9	5.6		
1.0	0.6	0.9	0.9	0.9		
3.5	3.1	3.3	4.4	4.7		
	1999   6.9   13.0   6.3   -9.0   23.1   63.6   7.9   5.1   21.0   71.1   6.9   1.0	$\begin{array}{c ccccc} 1999 & 2000 \\ \hline 6.9 & 9.7 \\ \hline 13.0 & 15.1 \\ \hline 6.3 & 8.0 \\ -9.0 & -0.7 \\ \hline \\ 23.1 & 26.8 \\ \hline 63.6 & 61.9 \\ \hline 7.9 & 6.3 \\ \hline 5.1 & 5.0 \\ \hline \\ 21.0 & 20.8 \\ \hline 71.1 & 65.5 \\ \hline 6.9 & 13.1 \\ \hline 1.0 & 0.6 \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		

Table 1: Key Macroeconomic Indicators: 1999-2003

Source: WTO TPW Singapore 2004

Services sector includes: Wholesale and Retail trade, Hotels and Restaurants, Transport and Communication, Financial Services, Business Services, other services

Despite the volatile global economy, Singapore's exports rose at an average rate of 4.8% in 1999-2002 and strengthened further by 12% in 2003. Manufactured exports in electronics goods still forms a significant component of its exports, where exports in office machines & telecommunication equipments and chemical products form nearly 42% and 17% of total domestic exports respectively (WTO-TPE Singapore 2004). In 1999, exports to China only accounted for 3.4% of total domestic exports, but it rose to nearly 10% in 2003. ASEAN is the key trading partner for Singapore as it absorbs nearly 25% of total domestic exports from Singapore. The major sources of imports for Singapore are from Malaysia (16.8%), the United States (13.9%), the European Union (12.5%) and Japan (12%). Trade in services grew at the rate of 7.7% on an average in 1999-2003 and the exports in financial and transportation services have been the most vibrant.

1999-2004 (%)							
Country	Share of gross	1999	2000	2001	2002	2003	2004
	value added						
Hong Kong	Manufacturing	14.6	14.4	13.7	13.0	12.1	11.3
	Services	85.2	85.4	86.2	86.8	87.9	88.6
	Other	0.2	0.2	0.1	0.2	0	0.1
Japan	Manufacturing	28.3	28.6	27.2	26.0	25.8	25.3
	Services	70.1	69.9	71.3	72.6	72.9	73.4
	Other	1.6	1.5	1.5	1.4	1.3	1.3
Korea	Manufacturing	40.2	40.6	39.1	38.4	39.2	40.8
	Services	54.5	54.3	56.1	57.6	57.1	55.9
	Other	5.3	5.1	4.8	4.0	3.6	3.3
Malaysia	Manufacturing	33.4	34.9	32.9	32.9	33.5	33.4
	Services	58.5	57.1	59.4	59.5	58.9	59.2
	Other	8.1	8.0	7.7	7.6	7.6	7.4
Taiwan	Manufacturing	33.1	32.3	30.7	30.9	30.1	31
	Services	64.2	65.5	67.3	67.2	68.0	67.3
	Other	2.7	2.2	2.0	1.9	1.9	1.7
Thailand	Manufacturing	40.9	41.9	42.1	42.3	43.4	44.2
	Services	49.6	48.9	48.7	48.1	46.3	46.4
	Other	9.5	9.2	9.2	9.6	10.3	9.4

Table 2: The Share of Services Sector to GDP in Selected Asian Countries:1999-2004 (%)

Source: Economic Intelligent Unit, Economist

The emergence of the services sector is also observable in other Asian countries. The share of the services sector is rising for all the selected countries in Table 2. Hong Kong and Japan tend to have the highest share of services sector of over 70% of GDP and Taiwan's share is rising to nearly 67% in 2004. The importance of services sector for GDP and its growth is also reflected in the two key countries in ASEAN, Malaysia and Thailand have nearly 60% and 46% share of services sector to GDP respectively for the period of 1999-2004.

#### **3.** Multilateral, Regionalism, and Free Trade Agreements

# **3.1 Bilateral "WTO-Plus" Free Trade Agreements: The Way Forward**

Singapore is a staunch advocate of free trade. Singapore's export-oriented strategy has carried the economy from Third-World status after independence to arguably First-World status in just over thirty years. The total annual value of trade has been about three times the country's GDP for the last 15 years. Besides being an avid supporter of multilateral trading system, and abiding by the practice of granting most-favoured-nation (MFN) treatment to all members of the WTO, Singapore is also actively involved in regionalization. This is reflected by its membership in the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation (APEC), and the Asia Europe Meetings (ASEM), which have further highlighted the fact that Singapore is an active proponent of international trade to enhance welfare. ASEAN has always been the important nexus for multilateral negotiations for APEC and WTO. However, one major and most notable change in Singapore's trade policy since the late 1990s is the decision to pursue bilateral freetrade agreements with it trading partners. As of March 2004, Singapore has signed FTAs with New Zealand, Japan, the European Free Trade Areas (EFTA) States, Australia, the United States; and currently in negotiating with Canada, Chile, India, Jordan, Mexico, and Korea. Under ASEAN, negotiations are also underway with China, India, and Japan, and Sri Lanka. The bilateral arrangements were preceded with equal and multi-track emphasize on regionalism and multilateral trading activities.

The recent rise in the number of bilateral agreements was due to two important events. The post-Asian crisis revealed significant divergence in the economic and financial restructuring among ASEAN countries, with Singapore taking a more proactive role in opening up with its economic liberalization policy especially in the services sector and on the other hand, ASEAN countries like Malaysia were adopting a semi-protected economic policy. This differential policy adoption by the ASEAN countries reflects large gaps in institutional quality, stages of growth and economic policies, thus policy divergence and lack of response in the recent WTO meetings (Sally, 2004). Further, there is a growing perception that WTO is a weak forum for open multilateral trading system since the early 1990s and it was accentuated by the collapse of the Doha agenda at the World Trade Organisation (WTO) Ministerial meetings in Cancun in September 2003. The above problems were further accentuated by the decline in the flow of FDI into the Southeast Asian region. The FDI flow into ASEAN dropped from US\$21.5 billion in 1997 to US\$13.1 billion in 1999 as compared to rising FDI into North-East Asia and especially China (Low, 2003).

The immediate benefit of the Singapore's Free Trade Agreements (FTAs) is that it increased the focus and diverted attention back to ASEAN and South-East Asian region, with backdrop of the strong global focus on North-East Asia and China. Second, it energized and raised the urgency for the other ASEAN countries to be become more proactive in open trading activities. The response from ASEAN especially Malaysia and Thailand is to seek their own FTAs to match the record number of FTAs signed by Singapore. Third, it highlighted the importance of services sector for continual growth of the Singapore economy and ASEAN countries.

However, given Singapore's strong integration and production network in ASEAN, the multilateral trading system and regionalism is still superior and the key for sustainable growth for the economy (Low, 2003). The importance of multilateral trading system is emphasized by the representative from Singapore in the WTO-TPR Singapore 2004: "Many in the WTO, as well as at APEC and ASEAN, believed that

FTAs could be complementary, and serve as building blocks, to the multilateral process. Singapore believed that FTAs could be building blocks if they were WTO-plus (going beyond WTO commitments), WTO-consistent (covering substantially all trade) and open to others prepared to make the same commitments..... Both could learn in the process, and as they got used to a higher level of liberalization, this could serve in multilateral negotiations."

The FTAs by Singapore are mostly based on services and goes beyond the GATS commitments that include financial services, business and professional services, telecommunications, education, and environmental services (WTO-TPR Singapore 2004). Trade in services is the main component of US-Singapore FTA, where there is substantial market access to the services sectors subject to a "negative list" that deals with sensitive government institutions and policy (PECC, 2003). Singapore's commitment to go beyond the WTO commitments are reflected by the FTAs with Australia and US, where the commitment to enact the competition law, to development intellectual property rights, customs provisions and to make provisions for trade and environmental issues (see Appendix Table A1).

Worthy of mention is the Integrated Sourcing Initiative (ISI) incorporated in the US-Singapore FTA, which an ingenious innovation to adopt rules of origin (ROO) taking into account the globalisation of manufacturing in a knowledge-based world economy. The ISI is a "new age" ROO guideline that applies to non-sensitive, globalized sectors, such as IT or electronics manufacturing. The ISI list includes 266 products that are already entering the US at zero tariffs, of which, 236 of the products are covered under the WTO ITA<sup>1</sup> list. Under the ISI, these products are conferred

<sup>&</sup>lt;sup>1</sup> The main gist of the ITA focuses on the key role that trade in IT products plays in the expansion of the world economy. It seeks to encourage the continued technological development of the IT industry on a world-wide basis, by binding and eliminating customs duties on covered products. All products covered under this agreement will be subjected to zero tariffs with the implementation through basic

Singapore origin, regardless of where they are made. Hence, as finished products, goods that are covered under the ISI list would enjoy the waiver of 0.21% Merchandise Processing Fee imposed by US if they are shipped to US through Singapore. However, if these goods are used as components in the manufacturing of final products in Singapore, it would help boost the Singapore content of the final products, thus making them more likely to meet the ROO requirement and qualify for the preferential tariff treatment. As such, given that there is no geographical limit in the application of the ISI, it may encourage investors to source these components from Singapore's neighbouring countries, given their close geographical proximity and strong industrial linkages to Singapore's manufacturing sector.

Commitment to promote competition by addressing anti-competitive practices through legislature is one of the key provisions in the US-Singapore and Singapore-Australia FTAs. This law is expected to apply to all activities including the private sector and Government Linked Corporations (GLCs) in all sectors, unless there are exclusions and exemptions for reasons of public policy and interest. Singapore has also engaged in efforts to improve corporate governance through voluntary Code of Corporate Governance for all listed companies. In specific, a Council on Corporate Disclosure and Governance was established in 2002 to prescribe and strengthen existing accounting standards, disclosure practices, and reporting standards in Singapore.

Due to the FTAs with Australia, European Union, New Zealand and United States, there are significant changes in the framework of intellectual property rights. For example, Singapore extends copyright protection to the life of the author plus 70 years, measures against the circumvention of technologies that protect copyright

staging in 2000 and extended staging in 2005. Another major aspect of the agreement covers the need to consult on non-tariff measures, the need to develop international standards for IT products and the need for an MRA of conformity assessment.

works, imposes protection of well known marks, and an extension of the patent term for pharmaceuticals because of the delays in marketing approval (WTO-plus TPE Singapore 2004). Further, Singapore has acceded to some international agreements regarding copyrights and marks (e.g. Madrid Protocol on 31<sup>st</sup> October 2000, Patent Cooperation Treaty, Trademark Law Treaty, UPOV convention in 1991, WIPO Copyright in 1991 and 1996, and Phonograms Treaty in 1996) that are due to be effective by the beginning of 2005.

The "new age" partnership agreement between Japan-Singapore FTA (JSEPA) goes beyond the WTO commitments (PECC, 2003). The ultimate goal of the FTA is to focus on the services sector liberalization and in the promotion of foreign direct investment between the two countries. In addition to reducing tariffs and non-tariff barriers (NTBs), JSEPA also cover issues such as regulatory reforms; facilitation of customs procedures; cooperation in science and technology, media and broadcasting, electronic commerce, advancing information and communication technology; movement of natural persons; and human resource developments. By including issues such as smoother trans-border flow of capital and labour, significant reductions in customs costs, and collaboration on education and training, the Japan-Singapore FTA can complement multilateral trade liberalization. The economic benefit of Japan-Singapore FTA to Singapore is projected to be around S\$69 million per year and leading to nearly \$\$330 million within the next 5 years (PECC, 2003). The estimated global returns from JSEPA is expected to exceed US\$9 billion annually and most of it is expected to accrue to Japan due to its pro-active approach to open up and reform its economy (Hertel et. al., 2001).

### **3.2** Is Bilateral "WTO-plus" Free Trade Agreements sufficient building block for multilateral liberalization?

Singapore strongly believes that bilateral "WTO-plus" FTAs are part of "competitive liberalization" and as building block for multilateral liberalization through the WTO (WTO-TPR Singapore 2004; Sally, 2004). In fact, the key component of the building block for multilateral trading arrangements is the role ASEAN plays in APEC and WTO. However, given that most of the WTO-plus FTAs by Singapore are mostly in the services, WTO-TPR Singapore 2004 highlights that it is not directly clear if the FTAs provide sufficient building blocks for strengthening ASEAN and thereby supporting multilateral liberalization.

Given the prominent FTAs with Australia, Japan, New Zealand and US, Singapore is very keen to open up its services sector for greater competition and thus enhance its global competitiveness in the services sector. Singapore has progressively liberalized its financial sector and the Monetary Authority of Singapore (MAS) has lowered its barriers in banking and insurance and also deregulated the securities market.

In the banking sector, Singapore has been implementing its liberalization policy since 1999 to open up the relatively closed domestic retail banking sector. In 1999, the 40% foreign shareholding restriction on local banks was lifted and the 70% limit on foreign ownership was removed for Stock Exchange Singapore (SES) members. In addition to the lowering the barriers for foreign ownerships, additional steps have been taken to strengthen supervision and corporate governance in banks. In the insurance sector, restrictions were removed on foreign investment and entry into the sector by insurance companies. The pace of liberalization is also reflected in telecommunications sector, where it was liberalized two years earlier than originally planned in 2000 (see <u>www.ida.gov.sg</u> under competition policy for further details). All direct and indirect equity limits in the telecommunications services have been lifted. This has resulted into a considerable increase in the number of service providers and telecommunication charges have been reduced.

Given its unilateral liberalization of its services sector, Singapore is more willing and keen to see progress in the GATS negotiations. However, the gap in liberalization of the services sector among the ASEAN countries tends to be quite diverse and incoherent. ASEAN countries comprising of Malaysia, Indonesia, Thailand and Philippines tend to take a more protected view in the post-Asian crisis liberalization of the services sector and thereby adopting a defensive and cautious approach to the GATS negotiation (Sally, 2004). Given its different policy stance on the services sector and with the large economic development gap, it is not very clear if there are any substantial gains for ASEAN. For instance, it is considered by some ASEAN countries that Singapore's FTA might be a back-door entry for its FTA partners to gain entry into the ASEAN Free Trade Area (AFTA) (Tongzon, 2003). Further, the US-Singapore FTA is considered by some as creating little direct benefit for the ASEAN countries, except for some provisions such as the Integrated Sourcing Initiative agreement (ISI) which allows components such as medical and ICT products produced by neighbouring ASEAN countries as being Singapore origin when they are used for production in Singapore (PECC, 2003; Tongzon, 2003). The rising number of FTAs signed by Singapore also raises important concerns on the "spaghetti bowl" effects in terms of overlapping FTAs with complicated provisions and rules of origins (Low, 2003, Sally, 2004).

However, the key reasons for WTO-plus bilateral agreements are political as well as economic. Participating countries must be willing to negotiate on key sensitive

sectors and reduce barriers in these sectors as opposed to excluding their "sensitive sectors" from negotiation agenda. The "competitive liberalization" argument for FTAs is based on sensitive trade and cross border issues that could not be dealt under the multilateral settings such as WTO, but it could be effectively negotiated in bilateral agreements. As Singapore demonstrated that it is willing to negotiate on key "sensitive sectors", other ASEAN countries must be prepared to negotiate on their "sensitive sectors" and realize the potential gains from more open trading systems (Elek, 2003). This will be crucial building block for WTO-plus FTAs to support multilateral trading system.

Multilateral and broader regionalism is still the first-best equilibrium as compared to bilateral and cross regional trading arrangements given the potential gains from larger and diverse market. Singapore is integrated in the South-East Asian region, and its production networks are entrenched and linked to the neighbouring ASEAN countries. The success of Singapore's trade and industrialization policy depends not only on its successful undertakings but also on the economic success of the neighbouring ASEAN countries. Therefore the success of WTO-plus FTA as a building block for multilateral trading system depends on the unified and coordinated framework for ASEAN to pursue a cohesive and credible trade policy. Given the rise of Northeast Asia with China as the next growth pole in the world, ASEAN is realizing the potential gains from unified and coordinated framework for trade negotiations. ASEAN as a group must consider its strategy to deal with trade proposals for ASEAN-China, ASEAN-US, ASEAN-India, and ASEAN-Japan trade agreements.

The importance of services sector for sustained growth of the ASEAN and East Asia could not be under emphasized. It is in the services sector that Singapore's

FTA framework could play an important role in the Southeast Asian region. Firstly, it has been observed that the demand for services is highly income elastic and that the demand for services increases concurrently as the income for Asian countries rises. Thus the demand for services such as education, health care, telecommunication services, and travel services are expected to expand faster than the demand for manufactured and agricultural goods as Asian countries experience continued growth in income and standard of living. Second, services activities are becoming an important source of export growth for the Asian countries. The services activities are becoming the faster growing cross-border and FDI activities in East and South-East Asia for the past decade. For instance, travel and tourism have traditionally been considered as the important source of external income for developing. However, with infrastructures in telecommunication and information technology, a growing number of Asian countries are becoming large exporters of services such as back-office processing, transaction processing, and developing information and software products. Thus the potential gains for the future growth of the ASEAN and Asian economies are enormous from the growth in services sector and also from the liberalization of the services. This is particularly evident in Malaysia and Thailand as the share of services sector to GDP is expected to rise higher than 60% in the next few years.

Given the potential gains in the liberalization of the services industries, there are also significant gains from international cooperation in key services activities across countries. For instance, regional networking and hubs activities in financial, transport and telecommunication activities might be of significant importance for ASEAN economies. However, the bilateral and multilateral cooperation in these areas is yet to be fully exploited among the Asian countries (Chin, 2001).

Services activities also affect production activities within and across regions. In particular, the producer services activities as intermediate inputs in production are growing in importance. Both telecommunication and information technologies have increased and allow for greater access of producer services in cross-border trading activities. Thus the quality and cost competitiveness of the services is key for the growth in the services industries in the region. Hence, regulatory reform and liberalization of services activities could be expected to reap substantial economic gains for the domestic economy.

## 4. Trade Policy and Industrial Strategy of Singapore: The Importance of Productivity (TFP)

Although, Singapore has weathered the recent external shocks such as Asian financial crisis, SARS, and the Middle-East crisis, WTO-TPE Singapore 2004 highlights the declining total factor productivity (TFP) as an important indicator of an economic efficiency since the mid-1990s. It suggests that the "longer term outlook may well be influenced by measures now being taken to deal with the developments in TFP growth as well as the structural changes taking place in the economy as a result of increased pressure from other low-cost regional producers" (WTO-TPE Singapore 2004).

From Singapore's perspective, FTAs encourage greater efficiency and productivity in domestic sectors, thereby enhancing its competitiveness in the world market. Recent study by Lee (2000) on the Japan-Singapore FTA suggests that TFP and spillovers plays an important role in reaping large gains from bilateral trading activities. Based on his simulation, increase in competition from open trading activities tends to raise efficiency and TFP leading to reductions in export prices and expansion of exports in both Japan and Singapore and the rest of the world. At the same time, greater intermediate and final demand of the two countries will expand

their demand for import from most of the trading partners. In this scenario, real GDP of Japan and Singapore in 2020 is expected to be 1.4 and 1.8 per cent higher than their baseline values respectively.

As opposed to the aggregated TFP measure, a more disaggregated TFP will provide a better sense of the productive improvements of the small-open economy. The disaggregated TFP by selected manufacturing and services industries is given in Table 3. The key industries of electrical & electronics and chemical (includes pharmaceutical and biochemical) products tends to indicate declining TFP growth after the post- Asian crisis. This must be a key concern for Singapore as these two industries tends to account for large share of output and exports for the manufacturing sector. One key factor for the declining TFP growth in these two sectors might be due to the structural adjustments to more technological intensive activities. The large capital investments in the chemical, biochemical and pharmaceutical industries in the late 1990s might account for falling TFP growth in these industries. There are strong positive signs from precision instruments and transport equipments industries that indicate strong TFP growth in 1997-2002.

	1990-1996	1997 - 2002	
MANUFACTURING			
Electrical and Electronics Product	7.6	-5.7	
Chemical Products	6.2	-16.2	
Machinery Products	10.3	3.8	
Petroleum and Petroleum Products	3.3	-7.1	
Precision Instrumentation	12.9	12.2	
Transport	4.7	10.9	
Fabricated Metals	2.5	-0.6	
Printing	6.1	-5.6	
Wearing Apparels	1.2	0.5	
Food and Beverage	9.5	-6.9	
Wood	4.9	5.1	

Table 3: Total Factor Productivity Growth of Selected Manufacturing and<br/>Services Industries in Singapore

Rubber and Plastic	3.4	2.8
Basic Metal	-3.2	-2.0
Other Manufactures	2.0	3.9
SERVICES		
Land Transport Services	2.8	-3.7
Water Transport Services (Ports, etc.)	-1.4	4.0
Air Transport Services	-2.1	8.7
Logistics Services (Storage and Warehousing)	1.2	12.1
Postal and Telecommunications	2.9	-8.8
Financial Services	2.9	-0.3
Insurance Services	1.3	-0.8
Business Services	-2.2	-1.4

Note: The data for the manufacturing industry is derived from Report on Census of Industrial Production, EDB, Singapore, various issues. The data for services industry is derived from the Report on Services, Department of Statistics, Singapore, various issues. All the variables are based to 1985 prices. The standard growth accounting framework is used to derive the TFP measure. The capital stock is derived by Perpetual Inventory Method.

Notwithstanding the importance of TFP growth for medium to long-term growth, the average TFP growth for the small-open economy tends to move in opposite direction with the structural adjustments in Singapore economy (Thangavelu, 2004). The negative relationship between capital accumulation and TFP growth suggests that there must be sufficient "gestation" or "learning-by-doing" effects in the economy before there are signs of positive TFP growth. In this case, the economy needs the lag periods to sufficiently learn new technologies and acquire technology specific skills, as economy structurally adjusts through large capital investments. In the period 1999-2003, Singapore was structurally adjusting to higher value-added activities in chemicals, biomedical, electronics, and telecommunication clusters with large investments in industrial and science parks. Given the vast improvements in quality of labour through education and skills, we could see significant improvements in productivity growth as human capital complements new technological changes through capital investments in next few years. The key services industries tend to produce higher TFP growth as compared to the key industries in the manufacturing sector. The key services industry of air transport, water transport, and logistics services tend to achieve a higher productivity growth in 1997-2002. However, the other key sector such as the financial services sectors tend show a falling TFP growth in the post-Asian crisis, again raising important concerns for productivity improvements in this sector. Transportation sector (including communication) accounts for nearly 11.1% of Singapore's GDP and provide an employment to nearly 10.6% of the Singapore's labour force. This is an important sector that is given high priority for potential growth area and a key component of Singapore's industrial strategy (WTO-TPE Singapore 2004). The strong productive performance of these services industries in 1997-2002 is encouraging and an indication of the competitiveness of the services sector.

As the economy matures and move into higher value-added activities, productive performance of the economy will be crucial for the Singapore economy to sustain its long-term growth in the global economy. Several key factors are already in place for improving the efficiency and productive performance of the economy. Firstly, if the competition policy is sufficiently implemented, there could be strong improvements in efficiency from greater competition from more open economic activities. The adoption and recognition of global standards on intellectual property rights will have significant impact on innovation and greater spillovers from foreign direct investments in the Singapore economy.

Though the Singapore government is well known to have played a pervasive and active role in economic development, it impact on the productivity of the economy is unlikely to be negative as that asserted by Fernald and Neiman (2003). Singapore's government linked companies (GLCs) and statutory board (SBs) are well

known to be competitively run and are generally surplus-generating enterprises. As the economy becomes more complex and that the competition intensifies across more industries and countries, the requirement of new management skill and mindset is recognized. Nonetheless, any shortcoming is not casually ignored. There are signification efforts made to privatize state monopolies and GLCs (e.g. telecommunication, power generation, Port Authority of Singapore) and engaging private sector managers to run state-owned companies. In fact, Competition Policy Legislation is targeted to be implemented by 2005 to ensure a competitive landscape that will be favoured by both the public and private sectors.

However, there are two key areas of importance for sustainable productive improvements for Singapore: development of strong small and medium size enterprises (SMEs) and human capital development. With the disinvestment of government linked corporations (GLCs) and with the introduction of the competition policy, there should be greater scope for small medium sized enterprises (SMEs) to compete in critical markets that were mainly dominated by GLCs. The industrial strategy for moving to higher value-added activities mostly focuses on multinational activities and GLCs to move the economy into key industries. In this process, SMEs are critically marginalized and "crowded-out" of the industrial development. The development of SMEs will be crucial for the next phase of growth for the Singapore economy and to reap the full-potential benefits of the FTAs through linkages and spillovers from open industrial activities.

The other important area of development is in human capital. Given that Singapore still have nearly 34% of its labour force with below secondary education, it is imperative that the workforce should be retrained and upgraded for the new growth areas in both the manufacturing and services sector. The aim of the Workers

Development Agency (WDA) is to enhance the productivity and employability of the workers through training, retraining, and retaining workers in the labour market.

#### **5.** Concluding Remarks

Strong domestic economy and cohesive external economy of ASEAN is the key component for Singapore's long-term sustainable growth. In the domestic arena, the government has adopted pragmatic macroeconomic policy and industrial strategies to liberalize the services sector and move the manufacturing sector to higher value-added activities. The disinvestment of GLCs with the introduction of competition policy, and also liberalizing the services sector such as financial and telecommunication sectors are policies that will improve the efficiency and competitiveness of the domestic economy.

The adoption of WTO-plus bilateral FTAs by Singapore is in the right direction for the changing regional and global conditions. Although, it is expected to provide potential gains, bilateral agreements are still the second-best solutions as compared to regionalism and multilateral agreements. Given that Singapore has taken a strong position in the WTO-plus bilateral FTAs, the full benefits of such an undertaking could only be attained if ASEAN see the potential benefits of the WTO-plus bilateral FTAs in services sector. Given that the services sector will be crucial for the next phase of growth, there might be a framework for cohesive and coordinated ASEAN to engage bilateral agreements with major trading partners.

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### <u>Appendix</u>

Agreement/ Sector	ANZSCEP	JSEPA	ESFTA	SAFTA	USSFTA
	Agreement between Singapore and New Zealand on a Closer Economic Partnership, in force since January 2001. To be reviewed biannually.	Agreement between Singapore and Japan for a New- Age Economic Partnership in force since November 2002. To be reviewed annually	Agreement between Singapore and EFTA states in force since January 2003. To be reviewed biannually.	Agreement between Singapore and Australia in force since July 2003. To be reviewed annually.	Agreement between Singapore and the United States in force since January 2004. To be reviewed annually.
Goods	Elimination of customs duties on date of entry into force.	Singapore eliminated all remaining customs duties on imports from Japan on entry into force. Based on a positive list. For most exports to Japan, tariff elimination is immediate. For the rest, tariff elimination is phased over a 3½ to 8-year period.	Elimination of duties on industrial goods on entry into force. Liberalization of duties on agricultural goods based on positive list and on agreements with each EFTA state; duties on processed agricultural and fish products to be liberalized based on positive lists with each EFTA state.	Elimination of customs duties on entry into force.	Based on a positive list. Singapore eliminated all remaining customs duties on imports from the United States on entry into force. For most exports to the United States, immediate tariff elimination, and a transition period of 3 to10 years for others.
Services	Based on a positive list and to be reviewed with the goal of free trade in services by 2010. Preferential treatment extended to non-parties engaged in "substantive business operations" in either of the parties. Singapore's commitments beyond GATS include professional, telecommunications financial, business, and transport services.	Based on a positive list; preferential treatment also extended to non- parties engaged in "substantive business operations" in either of the parties. Singapore's commitments beyond GATS include professional, telecommunication, financial, business, and transport services.	Based on a positive list and to be reviewed with the goal of eliminating substantially all remaining restrictions in services covered at the end of ten years. Singapore's commitments beyond GATS include professional, telecommunication, financial, business, and transport services.	Based on a negative list; exceptions to market access and national treatment listed in annexes. Preferential treatment extended to non-parties engaged in "substantive business operations" in either of the parties. Singapore's commitments beyond GATS include professional, telecommunication, financial, business, and transport services.	Based on a negative list, with exceptions to market access and national treatment listed in annexes. Singapore's commitments beyond the GATS-include professional, telecommuni- cations, financial, business, and transport services.
Contingency measures	No right to take safeguard measures against each others' imports; anti- dumping provisions are stricter than those applied under GATT Article VI.	May take emergency measures against each others' imports only during the 10- year transition period; anti- dumping measures to be in accordance with GATT Article VI.	May take emergency measures against each others' imports but not anti- dumping measures.	No right to take safeguard measures against each others' imports; anti- dumping rules are stricter than those applied under GATT Article VI.	Safeguard measures may be taken during the ten-year transition period; anti-dumping measures may be taken in accordance with GATT Article VI.
Intellectual property rights	WTO TRIPS Agreement provisions to apply.	WTO TRIPS Agreement provisions to apply. Cooperation on IPR matters, including	WTO TRIPS Agreement provisions to apply.	WTO TRIPS Agreement provisions to apply. Cooperation <i>inter</i> <i>alia</i> on enforcement	Singapore to accede to international conventions including WIPO

Agreement/ Sector	ANZSCEP	JSEPA	ESFTA	SAFTA	USSFTA
Competition	Commitment to creating and maintaining open and competitive markets; endeavouring to implement the APEC Principles to Enhance Competition and Regulatory reform. Parties also agreed to consult with each other in the development of any new competition measures.	through a Joint Committee.	Cooperation through consultations on eliminating anti- competitive business practices.	and education.	Copyright Treaty, WIPO Performances and Phonographs Treaty, and UPOV. TRIPS- plus provisions include extending copyright protection to life of author plus 70 years, measures against the circumvention of technologies that protect copyright works, protection of well-known marks, extension for unreasonable curtailment of patent term for pharmaceutical products due to delays in marketing approval process. Commits Singapore to enacting generic competition legislation by 2005 and ensuring that GLCs do not engage in agreements that restrain competition or in exclusionary practices that substantially lessen competition.
Investment	Provisions apply to all goods and those services listed in the parties' schedules.	Provisions apply to all goods and those services listed in the parties' schedules. Performance requirements are prohibited.	Provisions on investment do not apply to measures affecting trade in services and to investors investing in services (subject to a review after ten years).	Provisions apply to all goods and services (except where reservations have been listed by the parties).	Negative list for goods and services except those scheduled, and detailed investor-state dispute settlement provisions. Performance requirements are prohibited.
Government procurement	Single market between the two parties for procurement valued at over SDR 50,000.	Provisions of the WTO GPA apply. Procurement threshold of SDR 100,000.	Provisions of the WTO GPA apply.	Single market between the two parties.	Preferences up to S\$102,710 for goods and services for Ministries (S\$910,000 for statutory boards), and S\$11,376,000 for construction services

Agreement/ Sector	ANZSCEP	JSEPA	ESFTA	SAFTA	USSFTA
Others					Provisions on labour and environment.

Note: Details of rules of origin under these agreements are provided in Chapter III (Table III.3).

Source: WTO Secretariat, based on the texts of Singapore's bilateral FTAs.

ANZSCEP: New Zealand-Singapore Free Trade Agreement JSEPA: Japan-Singapore Free Trade Agreement ESFTA: European Union Free Trade Agreement SAFTA: Singapore-Australia Free Trade Agreement USSFTA: United States-Singapore Free Trade Agreement