

Chapter 3

The Pacific Islands Forum Countries

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A. Introduction

Signed in 1975, the Asia-Pacific Trade Agreement¹ (APTA) aims to promote regional cooperation and integration among developing countries in Asia and the Pacific. By 2001 the original APTA members included Bangladesh, China, India, the Republic of Korea, the Lao People's Democratic Republic and Sri Lanka. Mongolia is expected to become the seventh member of APTA soon. The Second Session of the APTA Ministerial Council, held in 2007, laid the foundations for future trade and investment integration of the Asia-Pacific region by desiring that APTA should aim to become a truly Pan-Asian and Pacific regional trade agreement to enable other countries in the region to also benefit through regional integration. A preferential regional trade agreement – the Pacific Island Countries Trade Agreement (PICTA) – among the 14 Pacific Islands Forum Countries (PIFCs) was signed in 2001 and entered into force in 2003. Of the 14 PIF members only 11 countries (the Cook Islands, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu) have ratified PICTA. Although PICTA was initially a trade in goods agreement, since 2004 PICTA members have agreed to include trade in services.

Economic cooperation between Asia and the PIFCs has been strengthened during the past three decades. Despite the global financial crisis in 2008, Asia and the Pacific are still seen as two active trading regions. World trade growth rates were 5.2% and 2% in 2011 and 2012, respectively,² while export growth rates of the developing Asia-Pacific region were 32% in 2010, 11.8% in 2011, and 6.3% in 2012. Import growth rates of the same region were 35% in 2010, 13.8% in 2011 and 7.7% in 2012.³ Total trade volume between seven Participating States of APTA and six PICTA countries (i.e., Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu)⁴ increased steadily from \$20 million in 1980 to \$121 million in 2000 and then hugely to \$1,636 million in 2012, with average annual growth rates of 13% during 1980-2000 and 26% during 2001-2012. On average, around 80% of trade between the Participating States of APTA and PICTA members is mainly contributed by exports from APTA to PICTA, while around 20% is contributed by exports from PICTA to APTA members, which is a large contribution given their small-scale

¹ When signed in 1975, the Agreement was known as the “Bangkok Agreement”. When the agreement was revised during the third round negotiations it was renamed APTA.

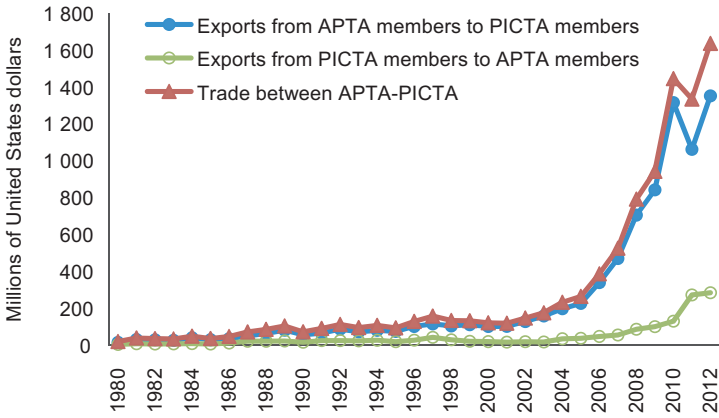
² WTO press release (10 April 2013), “World Trade 2012: Prospects for 2013”. Accessed on 17 January 2014 at www.wto.org/english/news_e/pres13_e/pr688_e.pdf.

³ *Asia-Pacific Trade and Investment Report 2012* and *Asia-Pacific Trade and Investment Report 2013*, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

⁴ These six PIF countries (WTO member countries in the Pacific) are considered in this study due to their noticeable trade with APTA members and the reasonably large size of their economies.

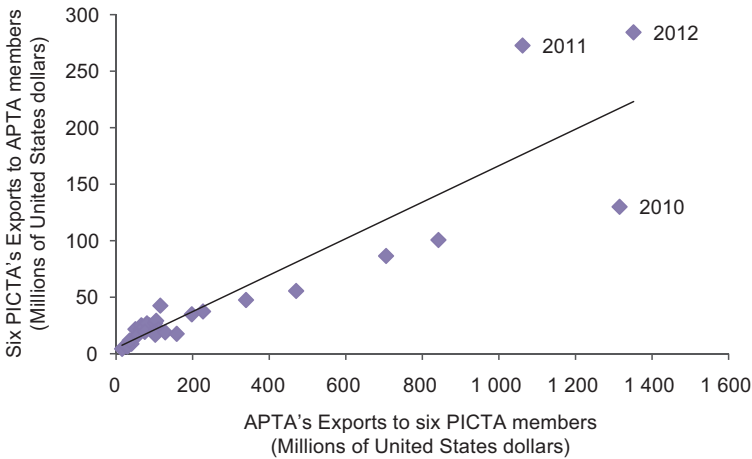
economies. Figure 3.1 shows that both directions of trade, i.e., exports from APTA to PICTA and from PICTA to APTA, have consistently increased since 1980. The scatter diagram in figure 3.2 shows that the two trends of exports are closely related.

Figure 3.1. Trade between Participating States of APTA and six PICTA members



Source: IMF Direction of Trade Statistics (DOTS) and authors' calculation.

Figure 3.2. Total exports from Participating States of APTA to six PICTA members vs. total exports from six PICTA members to Participating States of APTA



Source: IMF DOTS and authors' calculation.

Given the strong and increasing interaction between Asia and the Pacific, strengthening open regionalism or making efforts to consolidate the RTAs in the Asia-Pacific region seems necessary and possible. This study analyses the chances and challenges of extending APTA membership to PICTA members, with the focus on the trade aspect.

The rest of the paper is organized as follows. Section A explores the synergy between the APTA and PICTA. Section B analyses the benefits for PIFCs and Participating States of APTA with PIFCs' accession to APTA. Section C formulates strategy and modality for extending APTA membership to PICTA members. Section D explores the possibility and needs of expanding to include new areas of APTA cooperation with regard to PIFCs including cooperation with PICTA. The conclusion is contained in section E.

B. Synergy in trade between APTA and PICTA

Synergy between the APTA and PICTA is analysed through:

- (a) The historical perspectives of the two Agreements;
- (b) The 2-digit HS products that are being traded by Participating States of APTA and PIFCs at the country level;
- (c) Intra-subregional trade performance;
- (d) Inter-subregional trade performance and forecast;
- (e) Concessions offered by Participating States of APTA to identify items through which small PIFCs can enhance exports to Participating States of APTA.

1. APTA and PICTA

(a) APTA

Previously known as the Bangkok Agreement, APTA was signed in 1975 as an initiative of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). In 2005, the Bangkok Agreement was amended and renamed as the Asia-Pacific Trade Agreement following China's accession to the Agreement, in time for the first session of the APTA Ministerial Council held in Beijing in November 2005. APTA is the oldest preferential regional trade agreement among developing countries in the Asia-Pacific region. It is aimed at promoting economic development through the adoption of mutually beneficial trade liberalization measures that will contribute to intraregional trade expansion as well as economic cooperation and integration. As stated in APTA Article 2:

“The objectives of this Agreement are to promote economic development through a continuous process of trade expansion among the developing member countries of the United Nations Economic and Social Commission for Asia and the Pacific [ESCAP] and to further international economic cooperation through the adoption of mutually beneficial trade liberalization measures consistent with their respective present and future development and trade needs.”

Current members include Bangladesh, China, India, the Lao People’s Democratic Republic, the Republic of Korea and Sri Lanka. Mongolia is expected to join APTA after the successful conclusion of bilateral negotiations on tariff concessions with the current Participating States of APTA, pending Mongolia’s internal ratification process.

Important features of the APTA are:

- (a) APTA is a regional trade agreement with the longest effective implementation period in Asia and the Pacific;
- (b) Open to all developing member countries of ESCAP, APTA is a truly region-wide trade agreement spanning East Asia and South Asia, with the potential for expansion to other subregions, including Central Asia and the Pacific;
- (c) It is the first preferential trade agreement among developing countries in the region to adopt common operational procedures for the certification and verification of the origin of goods;
- (d) The Agreement offers an important opportunity for developing countries of the region to trade with three major Asian economies, i.e., China, India and the Republic of Korea, the markets of which have expanded despite the recent global economic crisis while their imports from the Asia-Pacific region have also increased;
- (e) APTA applies simple and common Rules of Origin with a minimum local value content requirement of 45% f.o.b. (35% for LDCs);
- (f) Special and differential treatment is allowed for countries with special needs, including LDCs.

Regarding the exchange of tariff concessions, the Fourth Round which is likely to be implemented in 2016 led to tariff concessions for more than 10,000 items, compared with 4,270 items under the Third Round. This Round will widen the coverage of preferences on total tariff lines for each member State and deepen the tariff concessions by at least 29% of the margin of preference (MoP) under APTA (ESCAP APTA Factsheet, 2014).

Table 3.1. Results of the Fourth Round: Deepening and widening of concessions

	Before the Fourth Round	After the Fourth Round
Number of products under concession	4 270 (587)	10 677 (1 259-Bangladesh) (1 251-Lao PDR)
Margin of preference (%) ⁵	26.80 (58.80)	31.46 (86.44-Bangladesh) (86.20-Lao PDR)

Source: ESCAP/APTA, ESCAP Secretariat.

Note: Numbers in parentheses refer to preferences accorded to LDCs under APTA.

⁵ The term “margin of preference” means the absolute difference between the most-favoured-nation rate of duty and the preferential rate of duty for like products, and not the proportionate relation between those rates (paragraph 4, Annex I, General Agreement on Tariffs and Trade).

Furthermore, APTA aims at comprehensively deepening trade cooperation and integration. In August 2011, the Participating States entered into the Framework Agreement on the Promotion and Liberalization of Trade in Services, following the Framework Agreement on the Promotion, Protection and Liberalization of Investment and the Framework Agreement on Trade Facilitation that were adopted in December 2009. All three Framework Agreements have been duly signed and ratified by all Participating States of APTA. The negotiations to undertake commitments were due to start after the Fourth Ministerial Council Meeting.

(b) PICTA

Intraregional trade integration endeavours among the PIFCs are fairly new and have a long way to go given the late initiation of the Forum. However, the implementation of PICTA has served as a fundamental tool for promoting intraregional trade for the Pacific. PICTA was signed in 2001 and it came into effect in 2003 as a preferential regional trade agreement among 14 PIFCs (the Cook Islands, Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu). While efforts have been forthcoming in aiding this regional trade integration process, it is not without flaws. Only seven countries (the Cook Islands, Fiji, Niue, Samoa, Solomon Islands, Tuvalu and Vanuatu) have implemented the necessary domestic arrangement and announced their readiness to trade under PICTA, while four countries (Kiribati, Nauru, Papua New Guinea and Tonga) have ratified the Agreement, and three countries (Marshall Islands, Federated States of Micronesia and Palau) have yet to sign the Agreement.

According to PICTA's Rules of Origin Manual (page 5):

“Origin is always accorded to goods that are wholly obtained or produced in the territory of a PICTA Party. In determining the origin of products that result from a process or further process of manufacture in a member country various methods are used. The value-added method is used in PICTA. Under this method, a product obtains origin status if a minimum 40% of its value is brought about as a result of processing in the territory of the PICTA Party.”

The tariff reduction phase-in periods for PICTA extend for as long as 10 years for the least developed members and 13 years for the three smallest PIFCs (Federated States of Micronesia, Marshall Islands, and Palau).

PICTA has evolved over time and has changed from its initial emphasis on trade in goods only. In 2004, the PICTA Trade Ministers agreed to broaden the free trade area among the PIFCs to cover trade in services (TIS), including temporary movement of labour, as part of the Agreement. This ushered in the way for official negotiations on TIS, which began in 2008; however, the progress has been slow since then.⁶

In advancing efforts further to formalize the PICTA TIS, studies on government procurement were finalized in 2010 and 2012. The Cook Islands, Federated States of Micronesia, Marshall Islands, Kiribati, Samoa, Tonga, Tuvalu and Vanuatu have signed the PICTA TIS with Solomon Islands, which joined the Agreement at a later date. The TIS agreement currently covers seven sectors:⁷

- (a) Financial;
- (b) Tourism;
- (c) Construction;
- (d) Business and professional services such as legal, computer-related services and accounting;
- (e) Environmental services such as refuse disposal;
- (f) Health;
- (g) Education, including vocational training.

Sectors where potential benefits for opening exist, but which face serious obstacles (e.g., political or contractual obligations), include (a) communications such as telecommunications and television, and (b) air transport. Sectors where government is clearly opposed to liberalization at present include: (a) distribution, such as wholesale and retail trade, which is usually reserved for locals, and (b) maritime transport.

Despite the many efforts to advance intraregional trade integration, the pace of adoption has been slow and is reflected in the relatively low trade volumes among the PIFCs. The only exceptions so far are Fiji and Vanuatu, from which a significant portion of exports (some 21% and 15% of GDP, respectively) are destined for other PIFCs. Among the PIFCs, Fiji has established a very competitive regional market for its manufactured products, especially food and cement exports, to the other islands while Vanuatu ships the greater portion of its beef and kava products to other PIFCs.

⁶ "In March 2008, Pacific Governments began negotiating the PICTA Protocol on Trade in Services (POTIS). This included the development of an inter-island labour mobility scheme known as *Temporary Movement of Natural Persons* (TMNP) programme. This two-tiered scheme would allow professionals to move freely amongst Forum island countries while movement of tradespersons and semi-skilled workers would be subject to a quota system. In 2009, Governments have been debating 'temporary' labour movement within the islands region, immigration quotas, the recognition of skills and qualifications and labour rights issues. These negotiations have fallen behind schedule as Governments are nervous that they don't understand the implications" (Pacific Trade Fact Sheet, 2009).

⁷ G. Zanamwe (2013), "Pacific trade agreements and barriers to trade", paper presented at the University of the South Pacific, Suva, Fiji, 22 April 2013.

Although Fiji and Vanuatu have managed to create strong linkages and expand their regional export markets, the overall level of trade among the PIFCs has been very limited. This low trade level is not particularly a result of inadequate trade policy but rather appears to be due more to a low degree of trade complementarity, i.e., demand for each other's goods is relatively small given the similarity in their products. This is particularly the case for smaller PIFCs that lack diversity in the export products they offer. Moreover, PIFCs' geography has not proven economically viable for trade as they are scattered over an area of about one-third of the Pacific Ocean, which increases transportation costs. For example, Fiji is farther away from Papua New Guinea than Australia, whereas Palau is much closer to Asia than to most other PIFCs. While the PIFCs share many common heritages, they are not "natural" trade partners.

2. Identification of products

The analysis of benefits of the PIFCs' accession to the APTA is examined by using the PIFCs' exports and imports data. Since the PIFCs are adopting different classification systems while the 4- or 6-digit harmonized commodity description and coding system (HS) is not available for some PIFCs, this study reports trade data at the 2-digit HS level where principal items traded by PIFCs were identified. The HS classifies all products into 99 chapters, which are further grouped in 22 sections. Codes at the chapter and section levels are reported in annex tables A1 and A2, respectively. The latest version of HS classification, with which exports of the most recent two years available are reported, adopted for Fiji, Papua New Guinea, Samoa and Tonga is HS2007; for Solomon Islands is HS1996; and for Vanuatu is HS2002. In this report, trade by product at the chapter and section levels covers two most recent years of 2011 and 2012 for all PIFCs under the study except for Vanuatu for which years 2010 and 2011 are available. Trade data at 2-digit level are extracted from the United Nations Commodity Trade Statistics database (COMTRADE).

(a) PIFCs' export products at the section and chapter levels

In the case of Fiji, the top five export products at the section level include: 5 – mineral products; 4 – prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes; 1 – live animals and animal products; 14 – natural or cultured pearls, precious and semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage; and 11 – textiles and textile articles. These five section-level items accounted for around 78% of total exports in 2011 and 2012. At the chapter level, the top eight product items accounted for around 77% of total exports in 2011 and 2012. These indicate that Fiji's economic structure is bit narrow even though it has most diversified industries among small Pacific Island States. Tables 3.2 and 3.3 provide details of Fiji's top eight chapter products and top five section items in 2011 and 2012, respectively.

Table 3.2. Exports by product section – Fiji

Section code	Product section	Exports (US\$, current)		i th sections/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
5	Mineral products	317 149 575	350 062 781	29.65	28.68	1.71	1.93
4	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	225 210 863	285 150 467	21.06	23.36	7.01	7.38
1	Live animals; animal products	154 753 448	181 022 832	14.47	14.83	7.67	7.71
14	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage	88 273 098	81 826 371	8.25	6.70	2.55	1.84
11	Textiles and textile articles	5 814	59 850 328	5.44	4.90	1.29	1.18

Sources: United Nations COMTRADE database and authors' calculation.

Table 3.3. Exports by product chapter – Fiji

Chapter code	Product chapter	Exports (US\$, current)		i th chapters/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
27	Mineral fuels, mineral oils and products of their distillation	313 192 460	339 619 985	29.28	27.82	1.88	2.10
3	Fish and crustaceans, molluscs and other aquatic invertebrates	146 078 413	172 707 086	13.66	14.15	25.56	26.16

Table 3.3. (continued)

Chapter code	Product chapter	Exports (US\$, current)		i th chapters/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
17	Sugars and sugar confectionery	81 109 190	106 084 560	7.58	8.69	25.00	29.23
22	Beverages, spirits and vinegar	76 891 790	97 053 762	7.19	7.95	11.81	12.40
71	Natural or cultured pearls, precious or semi-precious stones	88 273 098	81 826 371	8.25	6.70	2.55	1.84
19	Preparations of cereals, flour, starch or milk; bakers' wares	48 256 496	59 155 471	4.51	4.85	13.84	14.07
44	Wood and articles of wood; wood charcoal	35 796 829	39 168 160	3.35	3.21	4.92	4.73
62	Articles of apparel and clothing accessories, not knitted or crocheted	37 503 095	39 117 541	3.51	3.20	3.22	3.03

Sources: United Nations COMTRADE database and authors' calculation.

Papua New Guinea is the biggest economy in the Pacific region; its top five product sections include: 14 – natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage; 5 – mineral products; 3 – animal or vegetable fats and oils, and their cleavage products; prepared edible fats; animal or vegetable waxes; 2 – vegetable products; and 9 – wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork (table 3.4). These five product sections accounted for around 87% and 81% of total exports in 2011 and 2012, respectively.

Table 3.4. Exports by product section – Papua New Guinea

Section code	Product section	Exports (US\$, current)		7 th sections/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
14	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage	2 326 281 961	1 505 302 108	42.30	33.32	13.09	9.14
5	Mineral products	991 127 041	995 336 243	18.02	22.03	1.04	1.48
3	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	799 158 282	588 277 005	14.53	13.02	22.92	20.58
2	Vegetable products	437 754 118	293 669 221	7.96	6.50	3.08	2.37
9	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw of esparto or of other plaiting materials; basketware and wickerwork	241 032 378	268 624 911	4.38	5.95	6.21	8.45

Sources: United Nations COMTRADE database and authors' calculation.

In terms of the product chapter level, eight main product chapters (table 3.5) comprised around 90% of Papua New Guinea's total exports in 2011 and 2012.

Table 3.5. Exports by product chapter – Papua New Guinea

Chapter code	Product chapter	Exports (US\$, current)		i th chapters/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
71	Natural or cultured pearls, precious or semi-precious stones	2 326 281 961	1 505 302 108	42.30	33.32	13.09	9.14
26	Ores, slag and ash	748 897 522	726 749 481	13.62	16.09	9.21	12.10
15	Animal or vegetable fats and oils	799 158 282	588 277 005	14.53	13.02	22.92	20.58
44	Wood and articles of wood; wood charcoal	241 029 075	268 621 120	4.38	5.95	6.44	8.76
9	Coffee, tea, mate and spices	413 430 937	263 390 702	7.52	5.83	25.84	21.05
29	Organic chemicals	62 377	175 599 334	0.00	3.89	0.00	1.62
3	Fish and crustaceans, molluscs and other aquatic invertebrates	87 312 481	137 385 665	1.59	3.04	2.97	5.62
25	Salt; sulphur; earths and stone; plastering materials	33 117 500	136 472 171	0.60	3.02	2.45	12.33

Sources: United Nations COMTRADE database and authors' calculation.

With regard to Samoa, the top five export product sections (table 3.6) include: 16 – machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image, and sound recorders and reproducers, and parts and accessories of such articles; 5 – mineral products; 1 – live animals; animal products; 4 – prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes; and 3 – animal or vegetable fats and oils, and their cleavage products; prepared edible fats; animal or vegetable waxes. They accounted for 92.4% and 93.5% of Samoa's total exports in 2011 and 2012, respectively.

Table 3.6. Exports by product section – Samoa

Section code	Product section	Exports (US\$, current)		i th sections/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
16	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	33 181 091	36 729 913	50.07	48.26	2.10	1.97
5	Mineral products	11 922 814	17 634 414	17.99	23.17	1.04	1.56
1	Live animals; animal products	7 996 346	7 615 454	12.07	10.01	6.40	5.20
4	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	4 448 593	5 324 736	6.71	7.00	2.23	2.21
3	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	3 650 522	3 857 612	5.51	5.07	8.69	8.01

Sources: United Nations COMTRADE database and authors' calculation.

At the more specific chapter level, eight main export product chapters accounted for more than 90% of Samoa's total exports in 2011 and 2012. Details of these eight product chapters are summarized in table 3.7.

Table 3.7. Exports by product chapter – Samoa

Chapter code	Product chapter	Exports (US\$, current)		j th chapters/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	32 547 657	36 556 194	49.12	48.04	4.14	3.91
27	Mineral fuels, mineral oils and products of their distillation	11 902 132	17 632 598	17.96	23.17	1.15	1.75
3	Fish and crustaceans, molluscs and other aquatic invertebrates	7 737 486	7 613 442	11.68	10.00	21.85	18.50
15	Animal or vegetable fats and oils	3 650 522	3 857 612	5.51	5.07	8.69	8.01
22	Beverages, spirits and vinegar	2 316 916	2 822 696	3.50	3.71	5.74	5.78
9	Commodities not specified according to type	1 121 934	2 009 138	1.69	2.64	0.95	0.81
24	Tobacco and manufactured tobacco substitutes	139 366	1 721 636	0.21	2.26	0.93	9.64
8	Edible fruit and nuts; peel of citrus fruit or melons	612 881	691 474	0.92	0.91	1.87	1.70

Sources: United Nations COMTRADE database and authors' calculation.

In the Solomon Islands, where manufacturing industries are poorly developed, export products are mainly related to agriculture, forestry and marine resources. The top five product sections (table 3.8), which contributed to 93.2% and 94.7% of the country's total exports in 2011 and 2012, respectively, include: 9 – wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork; 14 – natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage; 1 – live animals; animal products; 3 – animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes; and 2 – vegetable products.

Table 3.8. Exports by product section – Solomon Islands

Section code	Product section	Exports (US\$, current)		j th sections/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
9	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	219 048 562	226 031 314	52.48	45.97	74.39	65.35
14	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage	59 059 149	113 357 704	14.15	23.06	4.38	6.32
1	Live animals; animal products	44 667 369	54 943 627	10.70	11.17	5.67	5.81
3	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	44 440 466	46 231 957	10.65	9.40	16.79	14.86
2	Vegetable products	21 876 983	25 140 724	5.24	5.11	2.03	1.86

Sources: United Nations COMTRADE database and authors' calculation.

At the more specific product chapter level, the top six chapters, which accounted for more than 96% of Solomon Islands' total exports in 2011 and 2012, are listed in table 3.9.

Table 3.9. Exports by product chapter – Solomon Islands

Chapter code	Product chapter	Exports (US\$, current)		<i>i</i> th chapters/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
44	Wood and articles of wood; wood charcoal	219 047 145	226 029 139	52.48	45.97	77.11	67.76
71	Natural or cultured pearls, precious or semi-precious stones	59 059 149	113 357 704	14.15	23.06	4.38	6.32
3	Fish and crustaceans, molluscs and other aquatic invertebrates	42 233 041	53 826 046	10.12	10.95	18.94	20.24
15	Animal or vegetable fats and oils	44 440 466	46 231 957	10.65	9.40	16.79	14.86
12	Oil seeds and oleaginous fruit	21 190 140	24 612 132	5.08	5.01	10.49	8.81
18	Cocoa and cocoa preparations	16 526 119	8 919 249	3.96	1.81	15.75	6.93

Sources: United Nations COMTRADE database and authors' calculation.

Tonga's top five product sections (table 3.10) include: 2 – vegetable products; 1 – live animals; animal products; 16 – machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles; 10 – pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard; paper and paperboard and articles thereof; and 17 – vehicles, aircraft, vessels and associated transport equipment. These product sections contributed to 91.4% and 88.7% of the country's total exports in 2011 and 2012, respectively.

Table 3.10. Exports by product section – Tonga

Section code	Product section	Exports (US\$, current)		1 st sections/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
2	Vegetable products	7 551 002	6 164 377	52.46	39.56	20.29	14.40
1	Live animals; animal products	4 756 135	4 757 726	33.04	30.53	17.52	15.87
16	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	31 362	1 308 615	0.22	8.40	0.01	0.34
10	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard; paper and paperboard and articles thereof	807 403	1 144 363	5.61	7.34	3.31	4.57
17	Vehicles, aircraft, vessels and associated transport equipment	11 087	454 255	0.08	2.90	0.01	0.29

Sources: United Nations COMTRADE database and authors' calculation.

At the more specific product chapter level, the eight major export product chapters accounted for around 90% of Tonga's total exports in 2011 and 2012 (table 3.11).

Table 3.11. Exports by product chapter – Tonga

Chapter code	Product chapter	Exports (US\$, current)		<i>i</i> th chapters/ total exports (%)		RCA	
		2011	2012	2011	2012	2011	2012
3	Fish and crustaceans, molluscs and other aquatic invertebrates	4 698 283	4 659 744	32.64	29.90	61.10	55.29
7	Edible vegetables and certain roots and tubers	2 577 728	3 328 297	17.91	21.36	50.81	63.61
12	Oil seeds and oleaginous fruits	3 999 468	1 965 502	27.79	12.61	57.45	22.19
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	806 930	1 143 885	5.61	7.34	18.89	27.37
84	Machinery and mechanical appliances; parts thereof	26 579	1 109 760	0.18	7.12	0.02	0.58
8	Edible fruit and nuts; peel of citrus fruit or melons	647 652	831 452	4.50	5.34	9.10	9.99
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	100	407 836	0.00	2.62	0.00	0.81
72	Iron and steel	219 780	357 949	1.53	2.30	0.56	0.92

Sources: United Nations COMTRADE database and authors' calculation.

In Vanuatu, the top five product sections (table 3.12) included: 2 – vegetable products; 3 – animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes; 1 – live animals; animal products; 4 – prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes; and 6 – products of the chemical or allied industries. These sections contributed to 89.2% and 91.9% of Vanuatu's total exports in 2011 and 2012, respectively.

Table 3.12. Exports by product section – Vanuatu

Section code	Product section	Exports (US\$, current)		<i>i</i> th sections/ total exports (%)		RCA
		2010	2011	2010	2011	2011
2	Vegetable products	12 422 379	20 112 072	26.90	31.66	12.24
3	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	10 168 579	17 051 710	22.02	26.84	42.33
1	Live animals; animal products	10 095 363	11 698 961	21.86	18.41	9.77
4	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	6 379 113	6 130 442	13.82	9.65	3.21
6	Products of the chemical or allied industries	2 122 696	3 415 031	4.60	5.38	0.59

Sources: United Nations COMTRADE database and authors' calculation.

At the chapter level, eight major exports (table 3.13) accounted for around 87% of the country's total exports in 2010 and 2011.

Table 3.13. Exports by product chapter – Vanuatu

Chapter code	Product chapter	Exports (US\$, current)		<i>i</i> th chapters/ total exports (%)		RCA
		2010	2011	2010	2011	2011
12	Oil seeds and oleaginous fruits	11 867 201	19 003 676	25.70	29.91	61.84
15	Animal or vegetable fats and oils	10 168 579	17 051 710	22.02	26.84	42.33
3	Fish and crustaceans, molluscs and other aquatic invertebrates	4 524 894	5 768 312	9.80	9.08	16.99
2	Meat and edible meat offal	5 179 361	5 509 614	11.22	8.67	12.58
32	Tanning or dyeing extracts	401 473	2 748 498	0.87	4.33	9.26
18	Cocoa and cocoa preparations	3 958 935	2 610 325	8.57	4.11	16.35
22	Beverages, spirits and vinegar	2 188 640	1 893 069	4.74	2.98	4.89
99	Commodities not specified by type	1 455 729	1 265 016	3.15	1.99	1.12

Sources: United Nations COMTRADE database and authors' calculation.

In summary, the strength of exports in the small PIFCs mainly relies on their natural resources such as minerals and forestry, marine resources and agricultural products due to the tropical climate. Furthermore, for most PIFCs which are studied here, up to eight product chapters comprised a significant portion of individual countries' exports, which further indicates the limited economic base and trade structure of these small island countries.

(b) PIFCs import products at the chapter level

Individual Pacific Forum Island countries' imports at the product chapter level in the available most recent year are summarized in annex table A3, while top 15 import chapters are presented in table 3.14. Since most PIFCs lack mineral resources and are subject to an under-developed economic structure, PIFCs' imports are mainly related to natural resources and manufactured goods. Import products are similar across PIFCs under study. Major import chapters include fossil fuel, machinery and mechanical appliances, electronics, equipment, vehicles, plastics, paper, iron and steel, cereals, etc.

Table 3.14. PIFCs' top 15 import chapters

Country (year)	Chapter code	Name of product chapter	Value (US\$)	Share (%)
Fiji (2012)	27	Mineral fuels, mineral oils and products of their distillation	687 599 686	30.52
	84	Machinery and mechanical appliances; parts thereof	179 697 466	7.98
	3	Fish and crustaceans, molluscs and other aquatic invertebrates	133 651 756	5.90
	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	119 810 415	5.32
	87	Vehicles other than railway or tramway rolling stock	84 926 643	3.77
	10	Cereals	80 899 533	3.59
	39	Plastics and articles thereof	75 054 355	3.33
	48	Paper and paperboard; articles of paper pulp, paper or paperboard	54 763 323	2.43
	73	Articles of iron or steel	39 463 721	1.75
	4	Dairy produce; birds eggs; natural honey	38 261 998	1.70
	15	Animal or vegetable fats and oils	34 880 994	1.55
	72	Iron and steel	31 987 639	1.42
	2	Meat and edible meat offal	30 202 434	1.34
	88	Aircraft, spacecraft, and parts thereof	29 820 340	1.32
	30	Pharmaceutical products	29 766 696	1.32

Table 3.14. (continued)

Country (year)	Chapter code	Name of product chapter	Value (US\$)	Share (%)
Papua New Guinea (2012)	84	Machinery and mechanical appliances; parts thereof	2 052 114 582	24.60
	27	Mineral fuels, mineral oils and products of their distillation	1 449 897 999	17.38
	87	Vehicles other than railway or tramway rolling stock	711 876 973	8.53
	73	Articles of iron or steel	589 362 151	7.07
	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	534 209 635	6.40
	10	Cereals	287 773 339	3.45
	39	Plastics and articles thereof	167 319 646	2.01
	88	Aircraft, spacecraft, and parts thereof	160 606 422	1.93
	40	Rubber and articles thereof	151 741 593	1.82
	2	Meat and edible meat offal	143 320 506	1.72
	90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	125 264 160	1.50
	99	Commodities not specified according to type	116 081 303	1.39
	72	Iron and steel	100 868 871	1.21
	28	Inorganic chemicals	97 692 871	1.17
	94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing	93 268 472	1.12
Samoa (2012)	27	Mineral fuels, mineral oils and products of their distillation	79 770 583	23.09
	2	Meat and edible meat offal	26 402 957	7.64
	84	Machinery and mechanical appliances; parts thereof	25 439 363	7.36
	83	Miscellaneous articles of base metal	18 036 771	5.22
	86	Railway or tramway locomotives, rolling-stock and parts thereof	13 162 318	3.81
	39	Plastics and articles thereof	12 820 385	3.71
	72	Iron and steel	12 621 916	3.65
	44	Wood and articles of wood; wood charcoal	12 337 595	30.57
	19	Preparations of cereals, flour, starch or milk; bakers' wares	9 156 078	2.65

Table 3.14. (continued)

Country (year)	Chapter code	Name of product chapter	Value (US\$)	Share (%)
	97	Works of art, collectors' pieces and antiques	8 510 721	2.46
	4	Dairy produce; birds eggs; natural honey	8 469 898	2.45
	16	Preparations of meat, of fish or of crustaceans	8 248 420	2.39
	47	Pulp of wood or of other fibrous cellulose material	6 577 897	1.90
	71	Natural or cultured pearls, precious or semi-precious stones	6 058 223	1.75
	11	Products of the milling industry; malt; starches; inulin; wheat gluten	6 047 965	1.75
Solomon Islands (2012)	27	Mineral fuels, mineral oils and products of their distillation	133 175 052	26.99
	84	Machinery and mechanical appliances; parts thereof	52 463 966	10.63
	10	Cereals	45 445 019	9.21
	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	29 200 241	5.92
	87	Vehicles other than railway or tramway rolling stock	23 681 111	4.80
	73	Articles of iron or steel	16 803 838	3.41
	39	Plastics and articles thereof	15 441 497	3.13
	19	Preparations of cereals, flour, starch or milk; bakers' wares	9 715 298	1.97
	49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	8 451 253	1.71
	72	Iron and steel	8 127 995	1.65
	2	Meat and edible meat offal	7 944 565	1.61
	48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	7 493 102	1.52
	17	Sugars and sugar confectionery	7 078 073	1.43
	40	Rubber and articles thereof	6 316 392	1.28
76	Aluminium and articles thereof	5 973 318	1.21	
Tonga (2012)	27	Mineral fuels, mineral oils and products of their distillation	47 390 494	23.79
	2	Meat and edible meat offal	19 986 221	10.03

Table 3.14. (continued)

Country (year)	Chapter code	Name of product chapter	Value (US\$)	Share (%)
	84	Machinery and mechanical appliances; parts thereof	15 512 211	7.79
	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	12 237 578	6.14
	87	Vehicles other than railway or tramway rolling stock	10 405 649	5.22
	19	Preparations of cereals, flour, starch or milk; bakers' wares	6 063 235	3.04
	16	Preparations of meat, of fish or of crustaceans	5 477 870	2.75
	94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing	5 177 999	20.60
	22	Beverages, spirits and vinegar	5 048 335	2.53
	73	Articles of iron or steel	4 920 585	2.47
	44	Wood and articles of wood; wood charcoal	4 819 175	2.42
	4	Dairy produce; birds eggs; natural honey	4 609 200	2.31
	48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	4 188 540	2.10
	39	Plastics and articles thereof	4 117 247	2.07
	11	Products of the milling industry; malt; starches; inulin; wheat gluten	3 967 960	1.99
Vanuatu (2011)	27	Mineral fuels, mineral oils and products of their distillation	51 169 458	18.23
	84	Machinery and mechanical appliances; parts thereof	18 191 984	6.48
	30	Pharmaceutical products	17 668 151	6.30
	83	Miscellaneous articles of base metal	17 264 809	6.15
	86	Railway or tramway locomotives, rolling-stock and parts thereof	15 600 346	5.56
	10	Cereals	10 867 549	3.87
	19	Preparations of cereals, flour, starch or milk; bakers' wares	8 584 437	3.06
	72	Iron and steel	7 799 990	2.78
	22	Beverages, spirits and vinegar	7 441 569	2.65
	16	Preparations of meat, of fish or of crustaceans	7 136 792	2.54
	39	Plastics and articles thereof	6 666 514	2.38

Table 3.14. (continued)

Country (year)	Chapter code	Name of product chapter	Value (US\$)	Share (%)
	2	Meat and edible meat offal	5 820 643	2.07
	93	Arms and ammunition; parts and accessories thereof	5 776 115	2.06
	47	Pulp of wood or of other fibrous cellulose material	4 902 939	1.75
	11	Products of the milling industry; malt; starches; inulin; wheat gluten	4 885 022	1.74

Sources: United Nations COMTRADE database and authors' calculation.

(c) Export products of Participating States of APTA at the chapter level

The Participating States of APTA have adopted different classification systems. The latest classification system adopted by Bangladesh is HS2002 and the most recent year data is 2007; for China and the Republic of Korea it is HS2012 and the most recent year data is 2012; HS2007 was used for India and Sri Lanka, and the most recent year data is 2012; for the Lao People's Democratic Republic, the Standard International Trade Classification (SITC 1) was used with the most recent year data of 1974; for Mongolia, HS2007 was used with the most recent year data of 2007. Analysis of trade volumes of individual Participating States of APTA at the chapter level are based on the above classifications and the most recent corresponding years. The Lao People's Democratic Republic is not covered in this analysis since data is available for 1974, which is too outdated to reflect the country's current trade activities. The major export chapters for Bangladesh, China, India, the Republic of Korea, Mongolia and Sri Lanka are detailed below.

Bangladesh's major export items are related to textile products including yarn, fabric, garment and footwear. Seafood is also an important foreign exchange earner. The top 10 chapter exports accounted for 90.5% of Bangladesh's total exports in 2007 (table 3.15).

Table 3.15. Bangladesh's top 10 export chapters in 2007

Chapter code	Product chapter	<i>i</i> th chapters, exports (US\$)	<i>i</i> th chapters/ total exports (%)	<i>i</i> th chapters RCA
61	Articles of apparel and clothing accessories, knitted or crocheted	4 734 698 171	36.02	304.26
62	Articles of apparel and clothing accessories, not knitted or crocheted	4 588 550 374	34.91	58.40
3	Fish and crustaceans, molluscs and other aquatic invertebrates	694 625 883	5.29	10.98
53	Other vegetable textile fibres; paper yarn and woven fabric of paper yarn	475 143 076	3.62	7.86
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	402 229 327	3.06	70.52
41	Raw hides and skins (other than fur skins) and leather	290 953 998	2.21	17.16
52	Cotton	225 596 661	1.72	5.22
27	Mineral fuels, mineral oils and products of their distillation	213 287 304	1.62	3.63
64	Footwear, gaiters and the like; parts of such articles	137 486 997	1.05	5.44
84	Machinery and mechanical appliances; parts thereof	135 057 129	1.03	1.89

Sources: United Nations COMTRADE database and authors' calculation.

China has a strong advantage in manufacturing goods. Major export items include machinery, equipment, electronics, optical and photographic items, textile products, vehicles, iron and steel. The top 20 export chapters accounted for 82.8% of China's total exports in 2012 (table 3.16).

Table 3.16. China's top 20 export chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, exports (US\$)	<i>i</i> th chapters/ total exports (%)	<i>i</i> th chapters RCA
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	487 322 000 000	23.79	180.88

Table 3.16. (continued)

Chapter code	Product chapter	i^{th} chapters, exports (US\$)	i^{th} chapters/ total exports (%)	i^{th} chapters RCA
84	Machinery and mechanical appliances; parts thereof	375 899 000 000	18.35	25.60
61	Articles of apparel and clothing accessories, knitted or crocheted	87 045 225 061	4.25	8.27
94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing	77 886 189 789	3.80	7.75
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	72 631 372 349	3.55	63.31
62	Articles of apparel and clothing accessories, not knitted or crocheted	61 224 359 527	2.99	25.43
73	Articles of iron or steel	56 156 107 196	2.74	8.26
39	Plastics and articles thereof	55 194 043 507	2.69	5.48
87	Vehicles other than railway or tramway rolling stock	55 117 129 196	2.69	10.94
64	Footwear, gaiters and the like; parts of such articles	46 811 268 181	2.28	3.52
71	Natural or cultured pearls, precious or semi-precious stones	45 451 331 581	2.22	20.68
29	Organic chemicals	40 408 414 266	1.97	3.55
89	Ships, boats and floating structures	38 819 903 672	1.89	54.45
72	Iron and steel	37 117 671 629	1.81	549.00
95	Toys, games and sports requisites; parts and accessories thereof	35 619 114 331	1.74	3.55
27	Mineral fuels, mineral oils and products of their distillation	31 017 956 925	1.51	5.46
42	Articles of leather; saddlery and harness	28 243 842 781	1.38	4.70
63	Other made up textile articles; sets; worn clothing and worn textile article	24 015 853 335	1.17	5.97
40	Rubber and articles thereof	22 151 606 649	1.08	3.13
76	Aluminium and articles thereof	18 641 304 490	0.91	2.69

Sources: United Nations COMTRADE database and authors' calculation.

India's export advantage relies on mineral fuels and products of their distillation, pearls and precious stones, organic chemicals, vehicles, machinery and equipment. Major export items include machinery, equipment, electronics, textile products, vehicles, pharmaceutical products, cereals, cotton, iron and steel, textile products etc. The top 20 exports at the chapter level accounted for 78.9% of India's total exports in 2012 (table 3.17).

Table 3.17. India's top 20 export chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, exports (US\$)	<i>i</i> th chapters/ total exports (%)	<i>i</i> th chapters RCA
27	Mineral fuels, mineral oils and products of their distillation	54 380 880 389	18.78	147.76
71	Natural or cultured pearls, precious or semi-precious stones	43 089 689 731	14.88	21.31
29	Organic chemicals	12 549 688 239	4.33	8.20
87	Vehicles other than railway or tramway rolling stock	12 199 644 703	4.21	8.77
84	Machinery and mechanical appliances; parts thereof	11 070 051 971	3.82	71.32
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	10 762 482 671	3.72	31.39
30	Pharmaceutical products	9 602 441 279	3.32	10.09
10	Cereals	8 729 057 244	3.01	5.77
52	Cotton	8 568 855 085	2.96	10.93
72	Iron and steel	7 699 795 258	2.66	3.74
73	Articles of iron or steel	7 677 705 928	2.65	25.49
62	Articles of apparel and clothing accessories, not knitted or crocheted	7 429 975 421	2.57	4.62
13	Lac; gums, resins and other vegetable saps and extracts	6 547 657 431	2.26	32.12
61	Articles of apparel and clothing accessories, knitted or crocheted	5 466 346 913	1.89	471.95
39	Plastics and articles thereof	4 936 165 623	1.70	2.75
89	Ships, boats and floating structures	4 124 615 242	1.42	5.28

Table 3.17. (continued)

Chapter code	Product chapter	i^{th} chapters, exports (US\$)	i^{th} chapters/ total exports (%)	i^{th} chapters RCA
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	3 973 042 154	1.37	4.69
3	Fish and crustaceans, molluscs and other aquatic invertebrates	3 282 148 106	1.13	4.43
26	Ores, slag and ash	3 200 779 010	1.11	3.26
2	Meat and edible meat offal	3 147 474 801	1.09	3.30

Sources: United Nations COMTRADE database and authors' calculation.

The Republic of Korea's major foreign exchange earners include machinery and equipment, vehicles, mineral fuels and products of their distillation, optical and photographic items etc. The top 20 exports at the chapter level accounted for 93.5% of the Republic of Korea's total exports in 2012 (table 3.18).

Table 3.18. Republic of Korea's top 20 export chapters in 2012

Chapter code	Product chapter	i^{th} chapters, exports (US\$)	i^{th} chapters/ total exports (%)	i^{th} chapter's RCA
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	119 084 000 000	21.74	165.30
87	Vehicles other than railway or tramway rolling stock	70 074 094 361	12.79	17.84
84	Machinery and mechanical appliances; parts thereof	58 979 883 076	10.77	20.97
27	Mineral fuels, mineral oils and products of their distillation	57 492 603 164	10.49	21.39
89	Ships, boats and floating structures	37 828 428 936	6.90	123.30
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	37 611 610 626	6.87	58.43
39	Plastics and articles thereof	28 381 150 285	5.18	15.61

Table 3.18. (continued)

Chapter code	Product chapter	i^{th} chapters, exports (US\$)	i^{th} chapters/ total exports (%)	i^{th} chapter's RCA
72	Iron and steel	25 375 016 539	4.63	9.43
29	Organic chemicals	23 284 736 423	4.25	17.28
73	Articles of iron or steel	12 467 431 128	2.28	3.51
40	Rubber and articles thereof	9 340 214 843	1.70	15.89
71	Natural or cultured pearls, precious or semi-precious stones	6 433 960 331	1.17	2.11
74	Copper and articles thereof	4 570 451 073	0.83	23.97
60	Knitted or crocheted fabrics	4 069 828 914	0.74	225.11
54	Man-made filaments	3 452 432 013	0.63	1.29
38	Miscellaneous chemical products	3 246 652 451	0.59	2.14
28	Inorganic chemicals	3 176 888 038	0.58	1.98
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	3 017 971 593	0.55	2.81
76	Aluminium and articles thereof	2 561 823 612	0.47	1.35
94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing	2 056 236 379	0.38	1.11

Sources: United Nations COMTRADE database and authors' calculation.

Mongolia's export advantage relies on natural resources and primary industry-related products. Major export chapters include ores, slag and ash, precious stones, wool and woven fabric, mineral fuels and products of their distillation, raw hides and skins and leather etc. The top 10 exports at the chapter level accounted for 97.2% of Mongolia's total exports in 2007 (table 3.19).

Table 3.19. Mongolia's top 10 export chapters in 2007

Chapter code	Product chapter	i^{th} chapters, exports (US\$)	i^{th} chapters/ total exports (%)	i^{th} chapter's RCA
26	Ores, slag and ash	1 085 912 150	57.56	475.32
71	Natural or cultured pearls, precious or semi-precious stones	234 879 946	12.45	21.55
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	193 054 534	10.23	23.13
27	Mineral fuels, mineral oils and products of their distillation	170 071 084	9.01	18.23
25	Salt; sulphur; earths and stone; plastering materials	45 263 540	2.40	53.44
41	Raw hides and skins (other than fur skins) and leather	42 050 790	2.23	16.75
74	Copper and articles thereof	22 067 619	1.17	3.79
2	Meat and edible meat offal	16 889 794	0.90	2.12
61	Articles of apparel and clothing accessories, knitted or crocheted	16 747 397	0.89	8.00
5	Products of animal origin, not elsewhere specified	7 154 459	0.38	0.72

Sources: United Nations COMTRADE database and authors' calculation.

Sri Lanka's major foreign exchange earners include textile products, coffee, tea and spices, rubber and articles thereof, pearls and precious stones, machinery and equipment, sea food, fruit and nuts, tobacco etc. The top 15 exports at the chapter level accounted for 86.1% of Sri Lanka's total exports in 2012 (table 3.20).

Table 3.20. Sri Lanka's top 15 export chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, exports (US\$)	<i>i</i> th chapters/ total exports (%)	<i>i</i> th chapters RCA
61	Articles of apparel and clothing accessories, knitted or crocheted	1 968 579 813	21.01	165.30
62	Articles of apparel and clothing accessories, not knitted or crocheted	1 812 190 416	19.34	27.69
9	Coffee, tea, mate and spices	1 646 335 474	17.57	33.25
40	Rubber and articles thereof	983 181 420	10.49	21.83
71	Natural or cultured pearls, precious or semi-precious stones	426 532 497	4.55	84.93
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	212 975 799	2.27	19.20
3	Fish and crustaceans, molluscs and other aquatic invertebrates	204 744 589	2.19	6.65
84	Machinery and mechanical appliances; parts thereof	144 718 774	1.54	2.96
53	Other vegetable textile fibres; paper yarn and woven fabric of paper yarn	116 746 703	1.25	4.60
8	Edible fruit and nuts; peel of citrus fruit or melons	99 705 336	1.06	1.50
89	Ships, boats and floating structures	97 095 914	1.04	9.96
24	Tobacco and manufactured tobacco substitutes	89 748 842	0.96	1.73
11	Products of the milling industry; malt; starches; inulin; wheat gluten	89 197 077	0.95	13.52
23	Residues and waste from the food industries	87 469 218	0.93	233.38
38	Miscellaneous chemical products	84 191 582	0.90	1.45

Sources: United Nations COMTRADE database and authors' calculation.

(d) Import products of Participating States of APTA at the chapter level

The top 20 import items of Participating States of APTA at the chapter level are reported below.

Bangladesh's major import items include machinery and mechanical appliances, mineral fuels and products of their distillation, electronics, cotton, animal or vegetable fat and oil, cereals, iron and steel, plastics, etc. The top 20 chapters accounted for 84% of Bangladesh's total imports in 2007 (table 3.21).

Table 3.21. Bangladesh's top 20 import chapters in 2007

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
84	Machinery and mechanical appliances; parts thereof	1 885 996 738	10.70
27	Mineral fuels, mineral oils and products of their distillation	1 842 299 401	10.45
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	1 618 430 426	9.18
52	Cotton	1 595 975 970	9.06
15	Animal or vegetable fats and oils	1 553 911 945	8.82
10	Cereals	1 015 856 544	5.76
72	Iron and steel	771 259 257	4.38
39	Plastics and articles thereof	686 072 180	3.89
87	Vehicles other than railway or tramway rolling stock	422 037 024	2.39
55	Man-made staple fibres	417 637 750	2.37
89	Ships, boats and floating structures	405 260 535	2.30
25	Salt; sulphur; earths and stone; plastering materials	393 247 790	2.23
31	Fertilizers	363 470 829	2.06
7	Edible vegetables and certain roots and tubers	346 556 582	1.97
17	Sugars and sugar confectionery	314 113 320	1.78
29	Organic chemicals	261 046 189	1.48
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	256 636 944	1.46
54	Man-made filaments	242 881 334	1.38
32	Tanning or dyeing extracts	209 675 003	1.19
28	Inorganic chemicals	193 102 289	1.10

Sources: United Nations COMTRADE database and authors' calculation.

China's major import items include electrical machinery and equipment, mineral fuels, mineral oils and products of their distillation, machinery and mechanical appliances, ores, slag and ash, vehicles, organic chemicals, etc. The top 20 chapter-level products accounted for 89.8% of China's total imports in 2012 (table 3.22).

Table 3.22. China's top 20 import chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	381 521 000 000	20.98
27	Mineral fuels, mineral oils and products of their distillation	313 067 000 000	17.22
84	Machinery and mechanical appliances; parts thereof	181 960 000 000	10.01
26	Ores, slag and ash	133 728 000 000	7.35
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	106 146 000 000	5.84
87	Vehicles other than railway or tramway rolling stock	70 596 738 786	3.88
39	Plastics and articles thereof	69 424 491 437	3.82
99	Commodities not specified according to type	68 769 065 391	3.78
29	Organic chemicals	60 864 293 432	3.35
74	Copper and articles thereof	54 516 254 759	3.00
12	Oil seeds and oleaginous fruits	38 582 565 291	2.12
72	Iron and steel	23 280 398 552	1.28
40	Rubber and articles thereof	20 651 789 490	1.14
52	Cotton	18 681 443 827	1.03
88	Aircraft, spacecraft, and parts thereof	17 612 975 043	0.97
47	Pulp of wood or of other fibrous cellulose material	17 247 791 923	0.95
38	Miscellaneous chemical products	15 316 420 385	0.84
44	Wood and articles of wood; wood charcoal	14 937 029 632	0.82
71	Natural or cultured pearls, precious or semi-precious stones	13 219 293 232	0.73
15	Animal or vegetable fats and oils	13 040 937 367	0.72

Sources: United Nations COMTRADE database and authors' calculation.

India's major import items include mineral fuels and products of their distillation, pearls and precious stones, machinery and mechanical appliances, electronics, organic chemicals, iron and steel, animal or vegetable fat and oil etc. The top 20 chapter-level products accounted for 92.2% of India's total imports in 2012 (table 3.23).

Table 3.23. India's top 20 import chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
27	Mineral fuels, mineral oils and products of their distillation	185 696 000 000	37.98
71	Natural or cultured pearls, precious or semi-precious stones	81 575 919 327	16.68
84	Machinery and mechanical appliances; parts thereof	36 226 292 311	7.41
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	29 649 046 028	6.06
29	Organic chemicals	15 243 284 886	3.12
72	Iron and steel	13 739 630 084	2.81
99	Commodities not specified according to type	12 029 277 958	2.46
15	Animal or vegetable fats and oils	11 003 560 370	2.25
39	Plastics and articles thereof	9 281 084 898	1.90
31	Fertilizers	7 876 499 337	1.61
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	6 877 255 201	1.41
26	Ores, slag and ash	6 484 201 406	1.33
89	Ships, boats and floating structures	6 158 533 105	1.26
28	Inorganic chemicals	5 541 654 399	1.13
87	Vehicles other than railway or tramway rolling stock	4 977 219 143	1.02
73	Articles of iron or steel	4 246 321 192	0.87
40	Rubber and articles thereof	3 885 303 027	0.79
38	Miscellaneous chemical products	3 615 722 896	0.74
25	Salt; sulphur; earths and stone; plastering materials	3 608 608 516	0.74
76	Aluminium and articles thereof	3 081 740 048	0.63

Sources: United Nations COMTRADE database and authors' calculation.

The Republic of Korea's major import items include mineral fuels and products of their distillation, electronics, machinery and mechanical appliances, iron and steel and their products, ores, slag and ash, organic chemicals, plastics, vehicles etc. The top 20 chapter-level products accounted for 87.1% of the Republic of Korea's total imports in 2012 (table 3.24).

Table 3.24. Republic of Korea's top 20 import chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
27	Mineral fuels, mineral oils and products of their distillation	186 191 000 000	35.84
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	66 864 997 149	12.87
84	Machinery and mechanical appliances; parts thereof	46 424 171 335	8.94
72	Iron and steel	23 822 002 958	4.58
26	Ores, slag and ash	18 915 134 288	3.64
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	18 608 272 355	3.58
29	Organic chemicals	14 353 633 404	2.76
39	Plastics and articles thereof	10 885 917 451	2.10
87	Vehicles other than railway or tramway rolling stock	9 347 245 059	1.80
73	Articles of iron or steel	7 802 535 174	1.50
38	Miscellaneous chemical products	7 234 909 598	1.39
74	Copper and articles thereof	6 627 485 050	1.28
28	Inorganic chemicals	6 007 634 282	1.16
76	Aluminium and articles thereof	5 551 709 607	1.07
10	Cereals	4 603 823 682	0.89
30	Pharmaceutical products	4 153 410 675	0.80
62	Articles of apparel and clothing accessories, not knitted or crocheted	4 006 493 060	0.77
71	Natural or cultured pearls, precious or semi-precious stones	3 891 704 280	0.75
70	Glass and glassware	3 839 898 735	0.74
40	Rubber and articles thereof	3 332 134 089	0.64

Sources: United Nations COMTRADE database and authors' calculation.

Mongolia imports a wide range of products. Major import items include mineral fuels and products of their distillation, machinery and mechanical appliances, vehicles, electronics, products of the printing industry, iron and steel and their products, plastics, cereal, sugars, optical and photographic items, products of the milling industry, rubber and articles thereof, paper and paperboard, edible preparations etc. The top 20 chapter-level products accounted for 84% of Mongolia's total imports in 2007 (table 3.25).

Table 3.25. Mongolia's top 20 import chapters in 2007

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
27	Mineral fuels, mineral oils and products of their distillation	569 300 538	26.89
84	Machinery and mechanical appliances; parts thereof	263 023 630	12.42
87	Vehicles other than railway or tramway rolling stock	192 435 663	9.09
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	156 232 011	7.38
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	118 343 083	5.59
73	Articles of iron or steel	96 394 739	4.55
72	Iron and steel	39 689 926	1.87
39	Plastics and articles thereof	36 997 416	1.75
17	Sugars and sugar confectionery	31 867 545	1.51
10	Cereals	30 948 548	1.46
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	29 827 653	1.41
11	Products of the milling industry; malt; starches; inulin; wheat gluten	28 872 992	1.36
40	Rubber and articles thereof	28 772 707	1.36
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	25 324 840	1.20
25	Salt; sulphur; earths and stone; plastering materials	25 021 581	1.18
94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing	22 931 197	1.08

Table 3.25. (continued)

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
24	Tobacco and manufactured tobacco substitutes	22 249 022	1.05
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	19 839 192	0.94
21	Miscellaneous edible preparations	19 714 433	0.93
68	Articles of stone, plaster, cement, asbestos, mica or similar materials	19 636 966	0.93

Sources: United Nations COMTRADE database and authors' calculation.

Sri Lanka's major import items include mineral fuels and products of their distillation, machinery and mechanical appliances, vehicles, electronics, fabrics and man-made staple fibres, cotton, pearls and precious stones, plastics and articles thereof, iron and steel, salt and sulphur, cereals, paper and paperboard, sugars, etc. The top 20 chapter-level products accounted for 80.9% of Sri Lanka's total imports in 2012 (table 3.26).

Table 3.26. Sri Lanka's top 20 import chapters in 2012

Chapter code	Product chapter	<i>i</i> th chapters, imports (US\$)	<i>i</i> th chapters/ total imports (%)
27	Mineral fuels, mineral oils and products of their distillation	3 829 995 951	21.41
84	Machinery and mechanical appliances; parts thereof	1 470 364 688	8.22
87	Vehicles other than railway or tramway rolling stock	1 354 675 645	7.57
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	1 069 541 086	5.98
60	Knitted or crocheted fabrics	671 757 118	3.76
52	Cotton	642 634 272	3.59
71	Natural or cultured pearls, precious or semi-precious stones	581 613 662	3.25
39	Plastics and articles thereof	570 666 912	3.19
72	Iron and steel	563 775 052	3.15
25	Salt; sulphur; earths and stone; plastering materials	476 208 753	2.66
10	Cereals	398 804 093	2.23
55	Man-made staple fibres	373 614 270	2.09

Table 3.26. (continued)

Chapter code	Product chapter	i^{th} chapters, imports (US\$)	i^{th} chapters/ total imports (%)
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	359 113 263	2.01
17	Sugars and sugar confectionery	345 482 908	1.93
73	Articles of iron or steel	331 469 342	1.85
30	Pharmaceutical products	321 992 701	1.80
31	Fertilizers	312 350 141	1.75
4	Dairy produce; birds eggs; natural honey	306 147 172	1.71
40	Rubber and articles thereof	265 662 928	1.49
58	Special woven fabrics; tufted textile fabrics; lace, tapestries; trimmings; embroidery	219 464 970	1.23

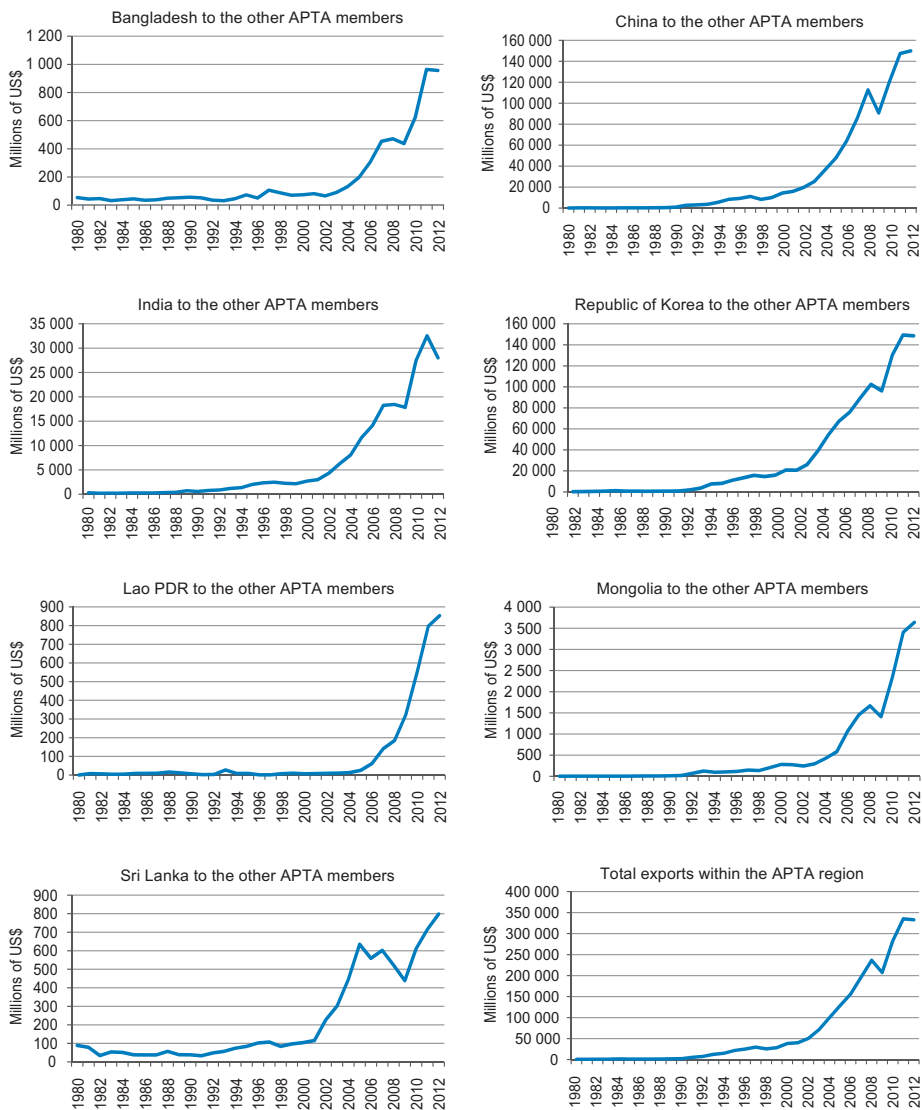
Sources: United Nations COMTRADE database and authors' calculation.

3. Intraregional trade performance

(a) Trade among the Participating States of APTA

Trade among the seven Participating States of APTA shares the same trend – exports from one APTA member to the other Participating States of APTA gradually increased from 1980 to the early 2000s and then dramatically increased thereafter with a brief decline in 2009 (figure 3.3). Total export volume among the Participating States of APTA increased from \$787 million in 1980 to \$38,341 million in 2000; from 2001 it increased at an average annual rate of 21%, and in 2012 total exports among the APTA Participating States reached \$333 billion. China, India and the Republic of Korea, due to their large-scale economies, are the three main trading partners, accounting for more than 95% of total exports within the APTA area; these three countries are also major import countries in Asia. The other four Participating States of APTA export relatively less, as their economies are relatively small-scale.

Figure 3.3. Exports by individual Participating States of APTA to the other six Participating States of APTA



Sources: IMF DOTS and authors' calculation.

(b) Trade among the PIFCs

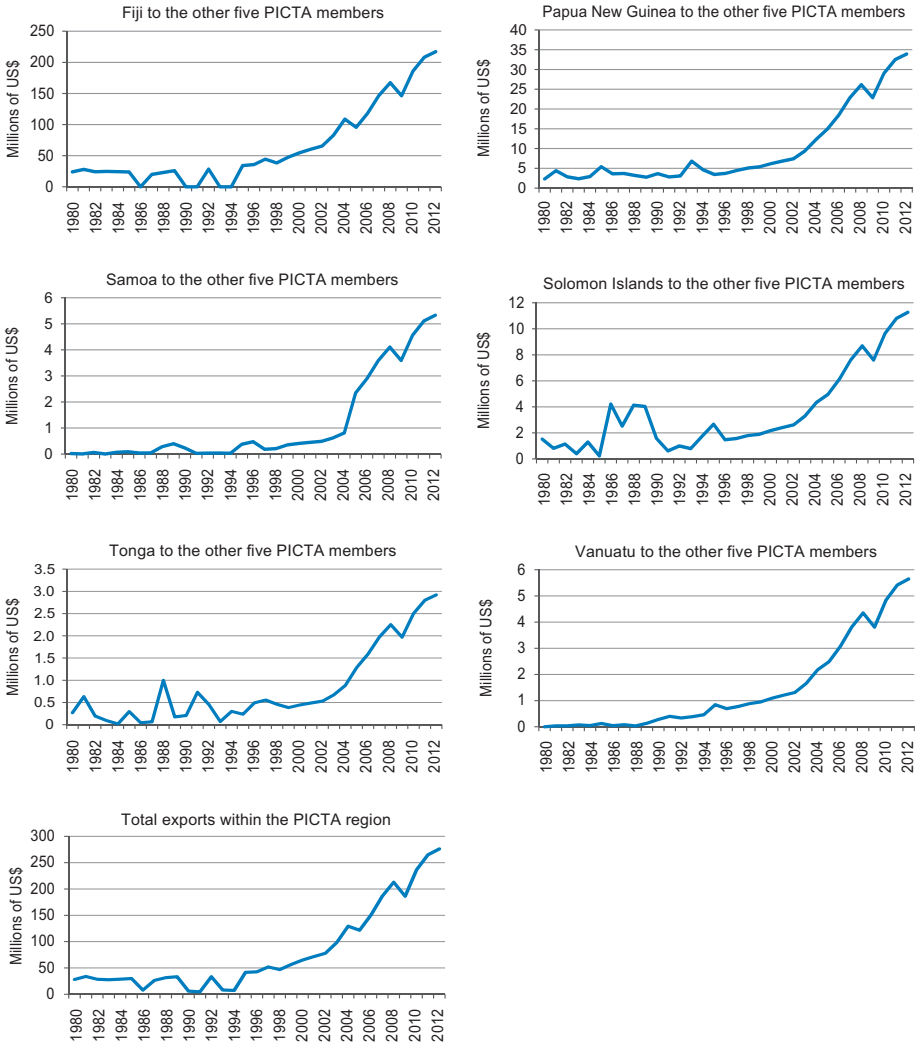
The progress in intraregional trade integration in PIFCs remains slow, which is reflected in the relatively low intraregional trade volumes among PIFCs. However, trade policy is not the main reason for this outcome. Intraregional trade among PIFCs has increased somewhat over time, but it still accounts for only a small share of total trade for most PIFCs. Fiji and Vanuatu are the only PIFCs from which a significant portion of their exports are to other PIFCs, amounting to around 21% and 15% of GDP, respectively. In the case of Fiji, some exports of manufactured goods, such as processed food and cement, are quite competitive in some other PIFCs, while in the case of Vanuatu, a large portion of that country's beef and kava exports are destined for other PIFCs. Papua New Guinea has small share of intraregional exports and imports, of around 1%.

The main reason for the low intraregional trade in the Pacific appears to be the low degree of trade complementarity, i.e., demand for each other's goods is relatively small given the similarity in the products those countries produce. This is particularly the case with smaller PIFCs, which have few goods to offer. Moreover, PIFCs are far away from each other, scattered around an ocean area of about one-third of the Pacific. For example, Fiji is farther away from Papua New Guinea than Australia, whereas Palau is much closer to Asia than to most other PIFCs. While PIFCs share many common heritages, they are not "natural" trade partners.

Trade among the six PICTA members shows the same trend – exports from each PICTA member to the other five PICTA members slowly increased from 1980 to the early 2000s; since then a rapid and consistent increase in exports has been recorded, similar to what happened to intraregional trade performance within the APTA region. Intraregional trade within the PICTA region experienced a brief decline in 2009 but then quickly recovered from 2010 (figure 3.4). Total export volume among PICTA members increased from \$28 million in 1980 to \$65 million in 2000. Since 2001, it has increased at 14% per annum, and in 2012 total exports within the PICTA framework reached \$276 million. Fiji, due to its relatively advanced manufacturing sector compared to the other PIFCs, is the biggest intraregional exporter, followed by Papua New Guinea and then the Solomon Islands. In 2012, Fiji's exports accounted for 79% of total exports within the six PIFCs, while Papua New Guinea and the Solomon Islands recorded 12% and 4%, respectively.

It is also interesting to note from figures 3.3 and 3.4 that, irrespective of being a large- or small-sized economy, either being part of APTA or PICTA, exports of seven Participating States of APTA and six PICTA member countries have shown very similar trends during the past three decades. This raises some interesting questions about the factors contributing to such similarity. Finding the answers would provide a very useful forecast of PICTA members' accession to APTA with regard to the benefits such accession could bring to both PICTA members and the Participating States of APTA.

Figure 3.4. Exports from individual PICTA members to the other PICTA members



Sources: IMF DOTS and authors' calculation.

4. Inter-subregional trade performance and potential

According to the *Asia-Pacific Trade and Investment Report 2011*, Asia and the Pacific was the only region in the world in 2010 that returned to its pre-crisis levels of exports and imports. This could be one of the reasons for promoting South-South trade. In order to identify the potential for exports by PIFCs to Participating States of APTA, the following aspects were examined:

- (a) Individual PIFCs' trade with individual Participating States of APTA;
- (b) Individual APTA Participating States' trade with individual PIFCs;
- (c) Time trends (with forecasts) of trade between PIFCs and Participating States of APTA.

(a) Trade of individual PIFCs with individual Participating States of APTA

Trade by PIFCs with Participating States of APTA is mainly reflected in their trade with four countries, i.e., China, India, the Republic of Korea and Sri Lanka (table 3.27). Exports by Fiji and Papua New Guinea to Participating States of APTA accounted for 2.37% and 13.96% of their total exports in 2012, respectively. Samoa's exports to Participating States of APTA amounted to just 0.001% in 2012. The Solomon Islands' exports to Participating States of APTA accounted for 43.03% of its total exports in 2012, of which exports to China comprised 40.35%. Tonga's exports to Participating States of APTA accounted for 7.56% of the country's total exports in 2012, mainly to the Republic of Korea. Vanuatu's exports to Participating States of APTA accounted for only 0.84% of its total exports in 2011.

With regard to PIFC imports from Participating States of APTA, Fiji's imports accounted for 11.9% of its total imports in 2012. The ratio was 9.17% in the case of Papua New Guinea, 10.5% for Samoa, 9.4% for the Solomon Islands and 6.84% for Tonga in 2012, and 9.5% for Vanuatu in 2011 (table 3.28).

Trade by PICTA members as a group with APTA has increased during the past three decades. In 2012 total exports from the six PICTA members amounted to \$872 million which accounted for 11.4% of the PICTA countries' total exports in 2012. Imports by the six PICTA countries from APTA Participating States totalled \$1,555 million which accounted for 9.7% of their total imports in 2012.

Table 3.27. PIFC exports to Participating States of APTA

Exporter	Destinations	Exports (US\$)	Exports (% of total exports)
Fiji, 2012	Bangladesh	0	0.00
	China	16 214 178	1.33
	India	5 761 543	0.47
	Republic of Korea	6 045 259	0.50
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	843 730	0.07
	APTA	28 864 710	2.30
	World	1 220 602 428	100.00
Papua New Guinea, 2012	Bangladesh	0	0.00
	China	302 113 039	6.69
	India	204 138 034	4.52
	Republic of Korea	122 771 043	2.72
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	1 173 303	0.03
	APTA	630 195 419	14.00
	World	4 517 686 274	100.00
Samoa, 2012	Bangladesh	0.0	0.00
	China	170	0.000004
	India	46 312	0.001025
	Republic of Korea	651	0.000014
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	0	0.00
	APTA	47 133	0.00
	World	76 101 616	100.00
Solomon Islands, 2012	Bangladesh	0	0.00
	China	198 368 864	40.35
	India	6 634 925	1.35
	Republic of Korea	6 458 478	1.31
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	82 963	0.02
	APTA	211 545 230	45.00
	World	491 677 002	100.00
Tonga, 2012	Bangladesh	0	0.00
	China	1 746	0.01
	India	14	0.00

Table 3.27. (continued)

Exporter	Destinations	Exports (US\$)	Exports (% of total exports)
	Republic of Korea	1 169 517	7.51
	Lao People's Democratic Republic	5 533	0.04
	Mongolia	0	0.00
	Sri Lanka	0	0.00
	APTA	1 176 810	8.00
	World	15 583 106	100.00
Vanuatu, 2011	Bangladesh	0	0.00
	China	256 543	0.40
	India	83 566	0.13
	Republic of Korea	197 918	0.31
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	0	0.00
	APTA	538 027	1.00
	World	63 531 915	100.00

Sources: United Nations COMTRADE database and authors' calculation.

Table 3.28. PIFC imports from Participating States of APTA

Importer	Destinations	Imports (US\$)	Imports (% of total imports)
Fiji, 2012	Bangladesh	199 205	0.01
	China	198 644 509	8.82
	India	39 274 918	1.74
	Republic of Korea	26 680 681	1.18
	Lao People's Democratic Republic	0	0.00
	Mongolia	2 727	0.00
	Sri Lanka	3 271 209	0.15
	APTA	268 073 249	12.00
	World	2 252 597 634	100.00
Papua New Guinea, 2012	Bangladesh	1 351 778	0.02
	China	574 783 704	6.89
	India	46 647 979	0.56
	Republic of Korea	140 957 468	1.69
	Lao People's Democratic Republic	1 847	0.00
	Mongolia	61 872	0.00
	Sri Lanka	801 426	0.01
	APTA	764 606 074	9.00
	World	8 340 687 556	100.00

Table 3.28. (continued)

Importer	Destinations	Imports (US\$)	Imports (% of total imports)
Samoa, 2012	Bangladesh	9 769	0.00
	China	34 151 067	9.88
	India	1 146 558	0.33
	Republic of Korea	1 007 295	0.29
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	5 948	0.00
	APTA	36 320 637	11.00
	World	345 515 175	100.00
Solomon Islands, 2012	Bangladesh	152 082	0.03
	China	41 905 367	8.49
	India	2 290 405	0.46
	Republic of Korea	2 095 579	0.42
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	5 118	0.00
	APTA	46 448 551	9.00
World	493 402 444	100.00	
Tonga, 2012	Bangladesh	4 906	0.00
	China	12 646 023	6.35
	India	658 474	0.33
	Republic of Korea	318 307	0.16
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	63	0.00
	APTA	13 627 773	7.00
	World	199 169 459	100.00
Vanuatu, 2011	Bangladesh	56 263	0.02
	China	19 431 924	6.92
	India	2 617 432	0.93
	Republic of Korea	4 474 911	1.59
	Lao People's Democratic Republic	0	0.00
	Mongolia	0	0.00
	Sri Lanka	125 416	0.04
	APTA	26 705 946	10.00
	World	280 646 739	100.00

Sources: United Nations COMTRADE database and authors' calculation.

(b) Trade by individual Participating States of APTA with individual PIFCs

Given the fact that the APTA economies are generally much larger than those of the PIFCs, trade with PIFCs accounts for a very small portion of total trade by APTA members. According to available data from the United Nations COMTRADE database, trade by the Lao People’s Democratic Republic and Mongolia with PIFCs is minimal. With regard to the other Participating States of APTA, Bangladesh’s exports to PIFCs accounted for 0.01% of its total exports in 2007. The ratios for China, India, the Republic of Korea and Sri Lanka in 2012 were 0.05%, 0.03%, 0.03% and 0.04%, respectively (table 3.29).

Table 3.29. Exports from APTA Participating States to PIFCs

Exporter	Destinations	Exports (US\$)	Exports (% of total exports)
Bangladesh, 2007	Fiji	12 739	0.0001
	Papua New Guinea	1 348 430	0.0103
	Samoa	0	0.0
	Solomon Islands	28 391	0.0002
	Tonga	0	0.0
	Vanuatu	14 227	0.0001
	PICTA	1 403 787	0.0
	World	13 142 952 925	100
China, 2012	Fiji	214 022 661	0.0104
	Papua New Guinea	640 096 825	0.0312
	Samoa	71 745 728	0.0035
	Solomon Islands	36 681 354	0.0018
	Tonga	20 159 614	0.0010
	Vanuatu	133 612 288	0.0065
	PICTA	1 116 318 470	0.0
	World	2 048 780 000 000	100
India, 2012	Fiji	38 934 856	0.0134
	Papua New Guinea	30 761 001	0.0106
	Samoa	1 399 335	0.0005
	Solomon Islands	1 259 402	0.0004
	Tonga	1 021 507	0.0004
	Vanuatu	3 508 507	0.0012
	PICTA	5 789 416	0.0
	World	289 565 000 000	100
Republic of Korea, 2012	Fiji	24 208 948	0.0044
	Papua New Guinea	116 681 553	0.0213
	Samoa	6 729 446	0.0012
	Solomon Islands	1 790 448	0.0003

Table 3.29. (continued)

Exporter	Destinations	Exports (US\$)	Exports (% of total exports)
	Tonga	464 646	0.0001
	Vanuatu	2 964 087	0.0005
	PICTA	152 839 128	0.0
	World	547 854 000 000	100
Lao PDR, 1974	Fiji	0	0.0
	Papua New Guinea	0	0.0
	Samoa	0	0.0
	Solomon Islands	0	0.0
	Tonga	0	0.0
	Vanuatu	0	0.0
	PICTA		0.0
	World	11 321 782	100.0
Mongolia, 2007	Fiji	0	0.0
	Papua New Guinea	0	0.0
	Samoa	0	0.0
	Solomon Islands	0	0.0
	Tonga	0	0.0
	Vanuatu	0	0.0
	PICTA	0	0.0
	World	1 886 552 768	100.0
Sri Lanka, 2012	Fiji	3 054 592	0.0326
	Papua New Guinea	789 084	0.0084
	Samoa	2 791	0.0000
	Solomon Islands	3 562	0.0000
	Tonga	3 170	0.0000
	Vanuatu	21 157	0.0002
	PICTA	3 874 356	0.0
	World	9 369 784 036	100.0

Sources: United Nations COMTRADE database and authors' calculation.

With regard to imports by APTA Participating States from PIFCs, Bangladesh's imports accounted for 0.02% of its total imports in 2007. The ratios for China, India, the Republic of Korea and Sri Lanka in 2012 were 0.06%, 0.03%, 0.05% and 0.01%, respectively. Mongolia imported goods worth \$242,710 from Papua New Guinea in 2007, accounting for 0.01% of its total imports (table 3.30).

Table 3.30. Imports by APTA Participating States from PIFCs

Importer	Destinations	Imports (US\$)	Imports (% of total imports)
Bangladesh, 2007	Fiji	0	0.0
	Papua New Guinea	996 295	0.0057
	Samoa	416	0.0000
	Solomon Islands	770 974	0.0044
	Tonga	0	0.0
	Vanuatu	1 297 618	0.0074
	PICTA	3 065 303	0.0
	World	17 622 872 861	100.0
China, 2012	Fiji	22 161 198	0.0012
	Papua New Guinea	642 259 331	0.0353
	Samoa	23 409	0.0000
	Solomon Islands	377 697 857	0.0208
	Tonga	370	0.0000
	Vanuatu	2 417 519	0.0001
	PICTA	1 044 599 684	0.0
	World	1 818 200 000 000	100.0
India, 2012	Fiji	1 289 370	0.0003
	Papua New Guinea	107 129 898	0.0219
	Samoa	358 318	0.0001
	Solomon Islands	20 119 229	0.0041
	Tonga	73 863	0.0000
	Vanuatu	5 504 406	0.0011
	PICTA	134 475 084	0.0
	World	488 976 000 000	100.0
Republic of Korea, 2012	Fiji	14 373 660	0.0028
	Papua New Guinea	206 986 020	0.0398
	Samoa	880 024	0.0002
	Solomon Islands	11 024 219	0.0021
	Tonga	3 151 049	0.0006
	Vanuatu	3 503 976	0.0007
	PICTA	239 918 948	0.0
	World	519 576 000 000	100.0
Lao PDR, 1974	Fiji	0	0.0
	Papua New Guinea	0	0.0
	Samoa	0	0.0
	Solomon Islands	0	0.0
	Tonga	0	0.0
	Vanuatu	0	0.0
	PICTA	0	0.0
	World	64 782 632	100.0

Table 3.30. (continued)

Importer	Destinations	Imports (US\$)	Imports (% of total imports)
Mongolia, 2007	Fiji	0	0.0
	Papua New Guinea	242 710	0.0115
	Samoa	0	0.0
	Solomon Islands	0	0.0
	Tonga	0	0.0
	Vanuatu	0	0.0
	PICTA	242 710	0.0
	World	2 117 033 711	100.0
Sri Lanka, 2012	Fiji	12 273	0.0001
	Papua New Guinea	1 158 709	0.0065
	Samoa	0	0.0
	Solomon Islands	4 673	0.0000
	Tonga	0	0.0
	Vanuatu	81 988	0.0005
	PICTA	1 257 643	0.0
	World	17 884 922 005	100.0

Sources: United Nations COMTRADE database and authors' calculation.

While trade data on Niue are not available from data sources mentioned in the current report, data on trade between each of the other seven PIFCs (namely the Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Palau and Tuvalu) and each of APTA Participating States are not consistently available for any point of time due to lack of trade between them. As per the Asian Development Bank (2013) reports with regard to trade between the above mentioned seven PIFCs and their major trading partners over 1995 to the most recent year that is available, it shows that PIFCs have been trading with Asian countries, such as Japan, Hong Kong, Taiwan, Singapore, Malaysia and Indonesia. These seven PIFCs' major export partners (i.e. trade partners that export to the PIFCs) which are Participating States of APTA include only China (exporting to Kiribati, Federated States of Micronesia, Palau and Tuvalu) and India (exporting to Tuvalu). These PIFCs' diversification of import partners (i.e. countries that import from the PIFCs) in the 2000s is seen from the expanded external markets which include some Participating States of APTA such as China (importing from the Cook Islands), India (importing from Nauru and Tuvalu), and Republic of Korea (importing from Palau). The development of diversification of PIFCs' trade partners is mainly due to the development of logistics and trade facilitation.

Overall, trade of APTA Participating States as a group with the six major PICTA countries has also been increasing over the last three decades. In 2012 the total exports from Participating States of APTA as a group were \$1,280 million which accounted for 0% of APTA Participating States' total exports in 2012; while APTA Participating States'

imports from the six PICTA countries were \$1,423 million which again accounted for 0% of APTA Participating States' total imports in 2012.

(c) Time trend analysis of trade between PIFCs and APTA Participating States

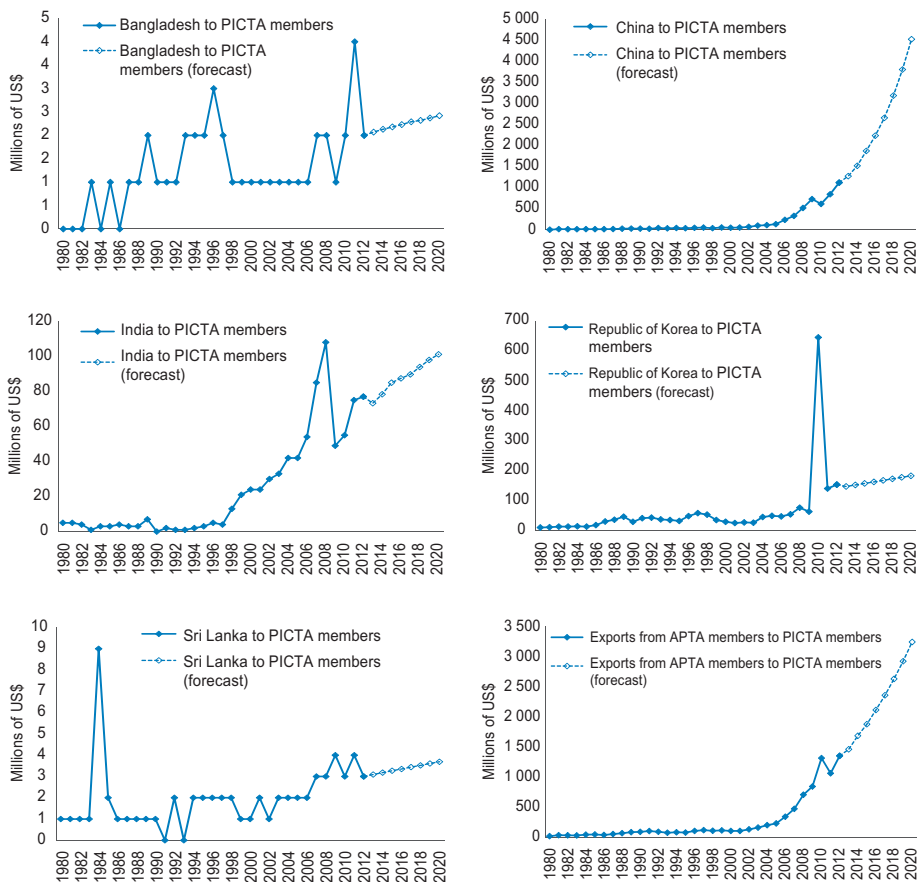
The trend analysis of trade between the PIFCs and the APTA Participating States is at the country-to-region level due to unavailability of trade data at the country-to-country level, particularly for trade between small PIFCs. Exports of goods from Asia to the Pacific are mainly manufacturing products, while export goods from the Pacific to Asia are mainly resource-based goods such as logs, minerals and fish. Similar to intraregional trade, the interregional exports between Participating States of APTA and PICTA members are mainly driven by economies of relatively large-scale such as China, the Republic of Korea and India in Asia, and Papua New Guinea and the Solomon Islands in the Pacific.

Apart from the Lao People's Democratic Republic, which does not have any record of exports to PIFCs, and Mongolia, which only exported to Papua New Guinea in three years (1985, 1990 and 1991), during the 1980s and 1990s, exports by the other APTA Participating States to PIFCs were, in general, increasing during 1980-2012. Bangladesh exported to all six PIFCs under study before the 2000s; after the 2000s, due to increasing exports by China and India to the Pacific, Bangladesh exported almost nothing to the other PIFCs except Papua New Guinea. Sri Lanka's exports to the PIFCs are consistently driven by demands from two major economies in the Pacific, i.e., Fiji and Papua New Guinea; Sri Lankan exports to the other PIFCs were erratic during 1980-2012. Exports by China and India to all PIFCs were strong and have shown dramatic increases since the early 2000s. The Republic of Korea is also an important trading partner of the PIFCs; that country's exports to the Pacific have slowly but steadily increased during recent decades, with Fiji and Papua New Guinea being two major importers followed by Samoa, Vanuatu, Solomon Islands and Tonga.

In general, Papua New Guinea – due to its relatively large-scale economy – and Fiji – due to its relatively advanced manufacturing and service sectors – are the two major importing countries in the Pacific region. Figure 3.5 shows exports from individual Participating States of APTA to major PICTA members as a whole, with the hollow dots representing forecast export volumes.⁸

⁸ Forecasts of exports for 2013-2020 are based on the following autoregressive model: $Exports_t = \beta_0 + \gamma Trend_t + \sum_{i=1}^4 \beta_i Exports_{t-i} + e_t$ where *Trend* is time trend and *i* is the order of lag. The order of lag varies from country to country, depending on overall goodness of fit of autoregressive models for individual countries.

Figure 3.5. Exports from individual Participating States of APTA to six PICTA members

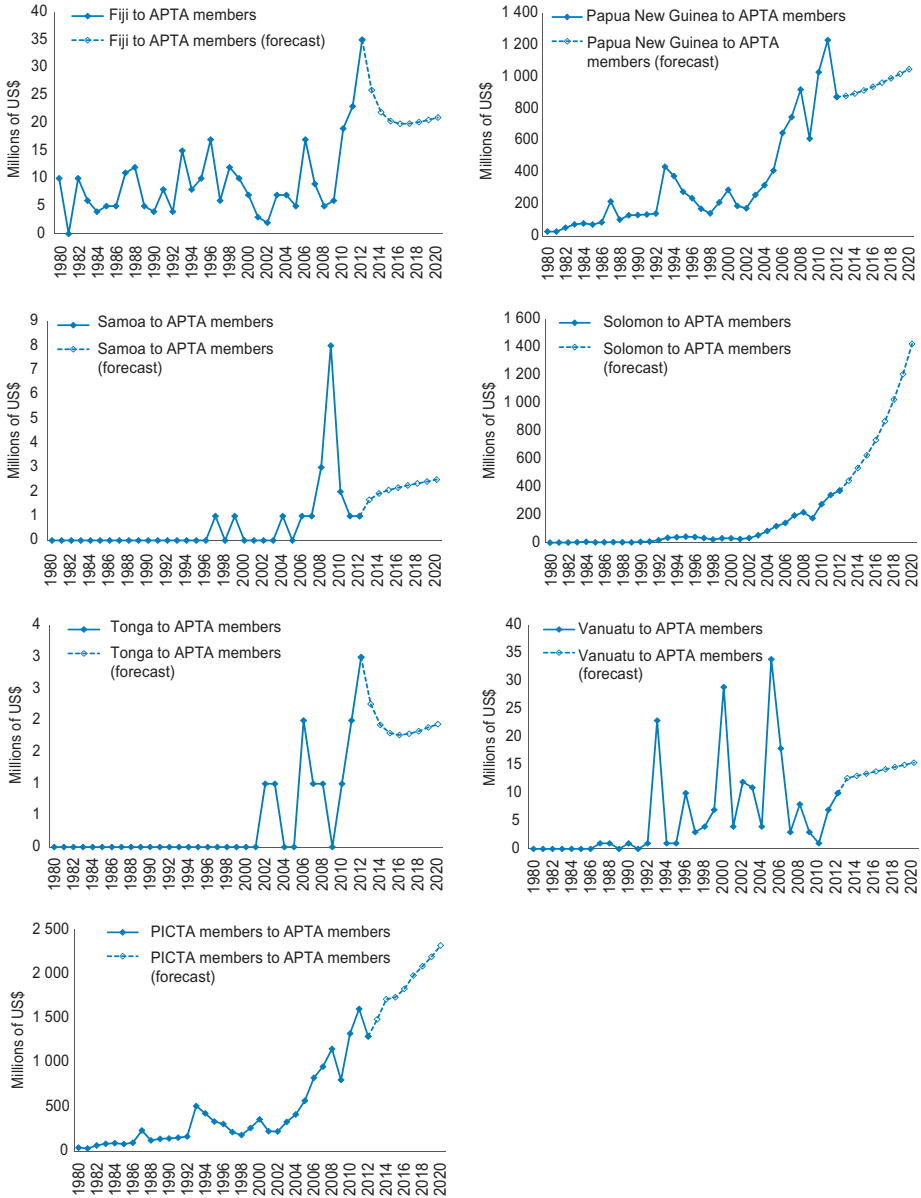


Sources: IMF DOTS and authors' calculation.

Figure 3.6 shows exports from individual major PICTA members to the Participating States of APTA as a whole. Inter-subregional exports from the PIFCs to Participating States of APTA increased during 1980-2012, and were mainly and consistently driven by resource-rich Papua New Guinea and Solomon Islands. Exports from Fiji, Vanuatu, Samoa and Tonga generally followed upward trends with sharp fluctuations. Total exports from six PICTA members to all Participating States of APTA increased from \$39 million in 1980 to \$359 million in 2000, followed by \$1,295 million in 2012, representing an average annual growth rate of 21% for the entire period. The growth of PICTA members' total exports to Participating States of APTA accelerated from 2000, with a sudden decline in 2009 due to the global financial crisis followed by a quick recovery in 2010. Trade diversion has led to changes in the PIFCs' major trading partners, such as New Zealand and Australia, due to geographical proximity. Fiji is the only PIFC that exports its agricultural products and

diversified manufacturing products to all Participating States of APTA. China, India and the Republic of Korea, due to their large-scale economies and income growth, are Fiji's three major export markets.

Figure 3.6. Exports from individual PICTA members to APTA Participating States



Sources: IMF DOTS and authors' calculation.

5. Concession lists of APTA Participating States

Participating States of APTA exchange tariffs concessions on a selected list of products. Each member has its own schedule of commitments for tariff concessions to other Participating States of APTA. The schedule of commitments has two components:

- (a) Items on which tariff concessions are given to all Participating States of APTA; and
- (b) Items on which tariff concessions are given only to LDC Participating States of APTA under the Special and Differential Treatment clause. This list is a non-reciprocal list in favour of LDC members.

At the end of the Fourth Round, the Participating States have given additional tariff concessions to the LDC members on 1,259 national tariff lines for Bangladesh and on 1,251 national tariff lines for the Lao People's Democratic Republic.

An analysis of each APTA member's schedule of concessions is made to compare: (a) global imports of APTA members; (b) imports from individual PIFCs of items for which concessions are available under APTA; (c) the Margin of Preference (MoP) available for the APTA Participating States; and (d) global exports by individual PIFCs.

Since data for 2011 or 2012 is unavailable for Bangladesh, the Lao People's Democratic Republic and Mongolia,⁹ plus the fact that these three Participating States of APTA are not significant trade partners with the PIFCs, the analysis in this section only focuses on trade activities in four Participating States of APTA, i.e., China, India, the Republic of Korea and Sri Lanka, for which data with HS2012 classification are available. Furthermore, since only Fiji, Papua New Guinea and Samoa in the South Pacific region use the HS2012 classification, the exports by these three PIFCs to China, India, the Republic of Korea and Sri Lanka are reported.

It should also be noted that global and bilateral trade values are available at the 6-digit level, while offer lists of China, India and Sri Lanka are at the 8-digit level, and the Republic of Korea's offer list is at the 10-digit level. The analysis which is done at the 6-digit level thus reflects a higher trade value than on the actual 8- or 10-digit because the 6-digit level subsumes the 8- or 10-digit levels in it and all the 8 or 10 digit HS may not have been included in tariff concessions.

(a) China

In view of the modality explained in the above context, it was found that at the 6-digit HS2012 level the total number of items for which China extends tariff concessions to Participating States of APTA is 2,191 items with an average MoP of 33.1%. Of these, in 2012 China imported 74 items from Fiji worth \$6.98 million, 30 items from Papua New Guinea worth \$59.45 million, and only one item from Samoa worth \$109.

⁹ In the United Nations COMTRADE database, the most recent year for which data are available for Bangladesh and Mongolia is 2007, while for the Lao People's Democratic Republic it is 1974.

**Table 3.31. Imports by China from Fiji based on the APTA
Fourth Round offer list, 2012**

(US dollars)

6-digit HS2012	Description	China's imports from world	China's imports from Fiji	Fiji's exports to world
030341	Frozen albacore or long-finned tuna	11 791 453	823 543	45 521 797
030342	Frozen yellow fin tuna	16 008 314	2 338 300	31 597 237
030349	Frozen tuna, n.e.s.	291 857	80 334	25 472 565
030232	Fresh or chilled yellow fin tuna	181 417 ^a	1 013 580	12 078 454
071490	Angelicae Sinensis	1 347 164	22 981	8 757 368
620342	Men's or boys' Arabian trousers, breeches of cotton	256 959 222	713	6 629 559
854449	Electric cable, not fitted with connectors	1 740 277 636	2 316	6 330 57
620119	Men's or boys' overcoats, etc. of other textiles	1 313 790	204	3 378 169
030239	Fresh or chilled tuna, n.e.s.	2 566 ^a	11 750	2 455 636
030354	Frozen mackerel	127 453 508	71 876	2 380 893
030229	Fresh or chilled flat fish (excl. halibut, plaice)	132 ^a	112 322	2 150 785
030243	Fresh or chilled sardines, brisling or parts	3 319 ^a	730 885	1 464 311
251200	Kieselguhr	5 223 584	1 301 091	1 301 091
271019	Lubricating oils	29 566 478 943	26	1 029 047
732690	Articles, iron or steel, n.e.s.	1 769 972 328	556	904 336
610910	T-shirts, singlets and other vests, knitted/crocheted, of cotton	180 073 727	3 599	889 428
620520	Men's or boys' shirts of cotton	191 643 814	1	712 215
210390	Gourmet powder	72 387 694	51	690 712
840999	Parts for marine propulsion engines, diesel	745 566 637	4 400	462 092
030343	Frozen skipjack or stripe-bellied bonito	100 665 883	47 622	454 325
121190	Radix Angelicae Sinensis, fresh or dried	91 651 240	1 006	445 478
030247	Swordfish, fresh or chilled	N/A	15 208	360 637
551599	Woven fabrics of synthetic staple fibres, n.e.s.	6 934 826	2 487	345 083

Table 3.31. (continued)

(US dollars)

6-digit HS2012	Description	China's imports from world	China's imports from Fiji	Fiji's exports to world
200990	Mixtures of fruit juices, unfermented,	16 405 722	43 026	340 911
321000	Paints and varnishes (incl. enamels, lacquers)	110 783 032	536	330 527
391740	Fittings for tubes, pipes and hoses, made from plastic	162 870 315	1 388	292 561
950790	Line fishing tackle (excl. of 9507.10-9507.30); fish landing nets, butterfly nets and similar nets; decoy birds (excl. of 92.08/97.05) and similar hunting/shooting requisites	29 645 550	3 632	284 402
841381	Pumps, n.e.s., in 84.13	250 673 303	4 762	240 632
640590	Footwear, n.e.s., with rubber, plastics, leather	4 547 706	1 237	206 578
200899	Seasoned laver	43 610 955	615	181 203
350699	Prepared glues and other prepared adhesives, n.e.s.	274 858 941	2 896	173 263
030319	Frozen Salmonidae, n.e.s.	22 427 690	93 090	172 697
380891	Mosquito smudges	130 279 672	11	170 572
844399	Machines for uses ancillary to digital printing	7 565 968 467	2 090	160 228
392390	Articles for conveyance or packing of goods	351 512 318	2 630	155 174
841451	Ceiling/roof fans, with a built-in electric motor	120 043 079	1 507	131 725
030281	Fresh or chilled dogfish and other sharks	15 713 ^a	25 221	124 239
340120	Soap in other forms	37 532 350	741	120 016
731815	Screws and bolts, with tensile strength of 800 Mpa	1 441 882 387	128	103 893
690810	Glazed ceramic tiles, cubes and similar articles, whether/not rectangular, the largest surface area of which is capable of being enclosed in a square the side of which is <7 cm	834 569	420	96 862

Table 3.31. (continued)

(US dollars)

6-digit HS2012	Description	China's imports from world	China's imports from Fiji	Fiji's exports to world
200989	Mango juice	13 559 412	27 129	95 584
820559	Tools for masons, watchmakers, miners and hand tools	65 070 873	1 073	88 540
030459	Other fish meat, fresh or chilled	115 169	85 560	86 361
401110	New pneumatic tyres, of rubber of a type	495 541 491	824	79 572
340290	Surface-active preparations, washing preparations	362 458 969	18	78 412
853931	Fluorescent lamps, hot cathode, for scientific or	35 146 114	1 763	78 073
854420	Co-axial cable and other co-axial electric conductor	285 844 728	589	71 072
848180	Electromagnetic directional valves	3 707 456 062	2 666	65 308
030339	Frozen flat fish (excl. halibut, plaice and sole)	135 415 919	6 589	53 504
250100	Pure sodium chloride	258 031 247	1 338	52 581
310210	Urea, whether or not in aqueous solution	71 348 930	44 134	44 134
691010	Ceramic sinks, wash basins, wash basin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures, of porcelain/china	46 809 575	4 023	41 210
851660	Electromagnetic ovens	220 355 580	79	36 885
841391	Parts of pumps for liquids	634 732 630	2 423	36 183
391990	Encapsulant reflective film	2 395 337 458	323	30 833
640419	Other footwear, with rubber or plastic soles and text	229 351 075	4 157	30 650
845011	Household/laundry-type washing machines (incl. machines which both wash and dry), each of a dry linen capacity not >10 kg, fully automatic	18 669 573	454	30 182

Table 3.31. (continued)

(US dollars)

6-digit HS2012	Description	China's imports from world	China's imports from Fiji	Fiji's exports to world
841950	Heat exchange units, non-domestic, non-electric	1 192 388 728	76	21 316
030233	Fresh or chilled Skipjack or stripe-bellied bonito	17 529	5 908	15 074
690100	Bricks/blocks etc., and ceramic goods of siliceous earth	5 739 422	4 542	14 491
850440	Static converters	6 267 473 627	4 747	12 184
960719	Slide fasteners other than those fitted with chain scoops of base metal	168 378 365	7 536	11 015
842420	Spray guns and similar appliances	128 819 329	26	7 071
401699	Parts or components of vulcanized rubber for machine	672 221 396	524	6 779
842139	Filtering/purifying machinery and apparatus for gases, other than intake air filters for internal combustion engines	846 545 887	12	6 599
853590	Electrical apparatus for switching/protecting electrical circuits/for making connections to/in electrical circuits, n.e.s., in 85.35, for a voltage >1 000 V	117 779 413	8	6 556
200939	Lemon juice of a brix value exceeding 20	4 380 941	2 687	4 924
851580	Other machines and apparatus, n.e.s, in 85.15	481 547 703	102	4 571
841330	Fuel/lubricating/cooling medium pumps for internal combustion piston engines	640 645 919	46	3 710
392049	Plate/foil/strip/sheet/film of PVC, not reinforced	90 846 581	132	1 934
551511	Woven fabrics, <85 per cent polyester staple fibres	28 538 127	506	1 706
841490	Air inlet on discharge valve plates	1 009 601 645	40	1 198

Table 3.31. (continued)

(US dollars)

6-digit HS2012	Description	China's imports from world	China's imports from Fiji	Fiji's exports to world
401039	Transmission belts/belting of vulcanized rubber,	175 841 497	28	812
848310	Diesel engine crankshaft for ship	1 145 792 853	108	148

Source: United Nations COMTRADE database.

Note: Data on APTA Participating States' imports from the world are obtained by using Participating States of APTA as reporters. Data on APTA Participating States' imports from the PIFCs and the PIFCs' exports to the world are obtained by using PIFCs as reporters.

^a Of the five items in the above list, China's imports from the world are less than China's imports from Fiji.

Table 3.32. Imports by China from Papua New Guinea based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by China from world	Imports by China from Papua New Guinea	Exports by Papua New Guinea to world
270740	Naphthalene	32 730 548	57 169 246	57 169 246
271019	Lubricating oils	29 566 478 943	120 609	7 077 869
842649	Caterpillar cranes	23 698 636	1 144 082	2 215 431
841480	Free-piston generators for gas turbine	1 819 923 630	134	1 018 623
740400	Copper waste and scrap	14 840 883 479	656 565	884 075
846721	Drills of all types	23 912 797	410	628 060
761699	Articles of aluminium, n.e.s., in Ch.76	422 195 550	31	325 161
870590	Radio communication vans	68 356 875	240 634	240 634
732690	Articles of iron/steel, n.e.s.	1 769 972 328	44 290	229 438
842539	Other pit-head winding gear; winches specially des	115 233 507	25 792	102 798
841459	Fans, other than table/floor/wall/window/ceiling/roof fans, with a self-contained electric motor of an output not >125 W	937 606 885	981	36 442
902410	Electronic universal testing machine	145 151 801	274	34 844
731815	Screws and bolts, with tensile strength of 800 Mpa	1 441 882 387	73	34 361
842720	Fork-lift trucks for containers	126 819 689	27 940	29 191
401699	Parts or components of vulcanized rubber for machine	672 221 396	21	17 631

Table 3.32. (continued)

(US dollars)

6-digit HS2012	Description	Imports by China from world	Imports by China from Papua New Guinea	Exports by Papua New Guinea to world
842420	Spray guns and similar appliances	128 819 329	406	16 020
841490	Parts of the pumps, compressors, fans and recycling hoods of 8414.10-8414.20	1 009 601 645	515	12 825
853710	Programmable controllers	3 562 317 349	3 420	3 420
841510	Air conditioning machines, window or wall types	27 974 977	2 523	2 785
851529	Electric machine/appliance for resistance welding of metal	11 385 716	2 389	2 389
847480	Rolling forming machines	313 845 632	2 340	2 340
854099	Parts of TV camera tubes	49 738 548	1 922	1 922
850431	Mutual inductors, capacity ≤ 1 KVA	739 277 596	31	1 719
846722	Chain saws	2 035 018	909	949
841370	Centrifugal pumps of rotational speed $\leq 10\,000$ r/min	888 784 714	312	712
846791	Parts of chain saws	17 314 733	78	405
845180	Machinery (excl. of 84.50) for washing/cleaning/wringing/dressing/finishing/coating/impregnating textile yarns/fabrics/made up textile articles and machines for applying the paste to the base fabric/other support used in manufacture of floor covering	229 063 620	391	391
841939	Breeze pottery blanks dryers	373 095 911	283	283
846799	Parts of self-contained electric motor of heading	199 869 141	135	152
850423	Liquid dielectric transformers, 10 MVA < capacity ≤ 220 MV	170 615 635	88	88

Source: United Nations COMTRADE database.

Table 3.33. Imports by China from Samoa based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by China from world	Imports by China from Samoa	Exports by Samoa to world
611190	Babies' garments, etc. of wool or fine animal hair	504 979	109	109

Source: United Nations COMTRADE database.

(b) India

The total number of items at the 6-digit HS2012 level for which India extends tariff concessions to Participating States of APTA is 3,334 with an average MoP of 34.55%. Of these 30 items were imported in 2012 by India from Fiji, worth \$3.07 million. Twelve items were imported from Papua New Guinea, worth \$203.46 million. Only one item was imported from Samoa, worth \$46,312.

Table 3.34. Imports by India from Fiji based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by India from world	Imports by India from Fiji	Exports by Fiji to world
940540	Searchlights and spotlights	95 679 669	3 029 576	3 216 154
711311	Jewellery with filigree work	62 531 072	2 735	2 507 620
720410	Waste and scrap of cast iron	71 135 224	21 196	801 936
442090	Wood marquetry and inlaid Wood	1 632 789	109	403 661
940330	Cabinet-ware	85 538 820	4 749	76 889
780199	Pig lead	188 610 846	8 025	8 253

Source: United Nations COMTRADE database.

Table 3.35. Imports by India from Papua New Guinea based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by India from world	Imports by India from Papua New Guinea	Exports by Papua New Guinea to world
260300	Copper ores and concentrates	4 884 536 823	95 567 597	406 233 440
261690	Gold ore and concentrates	4 498 997	59 505 677	308 464 469
180100	Cocoa beans, whole or broken, raw or roasted	76 560 513	129 228	83 920 415
440399	Wood, in the rough (excl. 4403.10-4403.92), whether/not stripped of bark/sapwood/roughly squared	1 203 371 651	3 282 351	63 097 568
440349	Teak wood in the rough	740 814 720	29 499 784	61 830 741
440722	Wood sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness >6 mm, of Virola, Imbuia and Balsa	85 427	3 378 437	15 017 270
261610	Silver ores and concentrates	N/A	3 283 890	12 051 158
720449	Other	3 189 924 244	8 732 197	10 206 469
440710	Wood sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness >6 mm, coniferous	62 055 109	11 154	3 551 571
440799	Wood (excl. of 4407.10-4407.95), sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness > 6 mm	22 162 839	15 981	2 861 260
720429	Waste and scrap of alloy steel other than stainless steel	87 146 701	15 393	1 323 324
810199	Other tungsten (wolfram) other than waste and scrap/wire/powder	6 152 641	41 131	41 131

Source: United Nations COMTRADE database.

Table 3.36. Imports by India from Samoa based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by India from world	Imports by India from Samoa	Exports by Samoa to world
030342	Yellowfin tuna (Thunnus Albacares)	75 589	46 312	46 312

Source: United Nations COMTRADE database.

(c) Republic of Korea

The total number of items at the 6-digit HS2012 level for which the Republic of Korea extends tariff concessions to Participating States of APTA is 2,796 items with an average MoP of 33.36%. Of these, in 2012 the Republic of Korea imported two items from Fiji, worth \$3,484, seven items from Papua New Guinea, worth \$19.41 million and only one item from Samoa worth \$214.

Table 3.37. Imports by the Republic of Korea from Fiji based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by Republic of Korea from world	Imports by Republic of Korea from Fiji	Exports from Fiji to world
840490	Condensers for boilers	11 744 468	1 676	17 047
848360	For aircraft	189 859 245	1 808	2 063

Source: United Nations COMTRADE database.

Table 3.38. Imports by the Republic of Korea from Papua New Guinea based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by Republic of Korea from world	Imports by Republic of Korea from Papua New Guinea	Exports from Papua New Guinea to world
090111	Not decaffeinated	382 460 536	946 073	254 015 383
390110	Linear low density polyethylene	174 565 582	13 406 700	41 788 922
710813	Other	342 722 223	5 007 368	11 577 131
440799	Rosewood	76 897 816	6 799	2 861 260
271012	Aviation spirit	20 543 697 777	3 776	131 281
271099	Other	9 957 329	29 585	73 354
401039	Other	26 041 883	8 808	9 214

Source: United Nations COMTRADE database.

Table 3.39. Imports by the Republic of Korea from Samoa based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by Republic of Korea from world	Imports by Republic of Korea from Samoa	Exports from Samoa to world
460219	Articles of rush	5 806 575	214	644

Source: United Nations COMTRADE database.

(d) Sri Lanka

The total number of items at the 6-digit HS2012 level for which Sri Lanka extends tariff concessions to Participating States of APTA is 143 with an average MoP of 28%. Sri Lanka has not imported any items from the PIFCs. However, Fiji, Papua New Guinea and Samoa exported 43 items to the world worth \$47.44 million in 2012. The possibility of exporting to Sri Lanka exists for Fiji, Papua New Guinea, Samoa and other PIFCs that are rich in marine resources.

Table 3.40. Imports by Sri Lanka from Fiji based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by Sri Lanka from world	Imports by Sri Lanka from Fiji	Exports by Fiji to world
283522	Phosphates of mono or disodium	140 241	–	173
283529	Phosphates (excl. polyphosphates), other	351 328	–	107 980
300320	Containing other antibiotics	108 776	–	24 688
330491	Powders, whether or not compressed, for cosmetic/toilet use	376 220	–	23 356
330530	Hair lacquers	160 731	–	13 639
340219	Organic surface-active agents, whether/not PURS (excl. of 3402.11-3402.13)	1 888 418	–	60 895
360610	Liquid or liquefied-gas fuels in containers, for lighters, = <300 cm ³	85	–	30 356
360690	Ferro-cerium, pyrophoric alloys; articles of combustible materials, n.e.s.	8 378	–	71 122
390110	Polyethylene having a specific gravity of less than 0.94	50 280 361	–	26 318

Table 3.40. (continued)

(US dollars)

6-digit HS2012	Description	Imports by Sri Lanka from world	Imports by Sri Lanka from Fiji	Exports by Fiji to world
390390	Other	4 256 336	–	289 937
670419	Wigs, false beards, eyebrows and eyelashes etc., of synthetic fibres – other	4 020	–	2 430
680790	Articles of asphalt or of similar material (excl. in rolls) – other	54 147	–	3 564
681490	Worked mica and articles of mica, n.e.s.	2 576	–	1 430
700210	Balls of glass, unworked	210	–	1 581
700239	Tubes of glass, unworked, n.e.s.	45 142	–	1 641
700420	Drawn/blown glass, in sheets, coloured throughout the mass (body tinted)/opacified/flushed/ having an absorbent/reflecting/ non-reflecting layer but not otherwise worked	247 143	–	112
701310	Glassware of a type used for table/kitchen/toilet/office/indoor decoration/similar purposes (excl. of 70.10/70.18), of glass-ceramics	60 689	–	793
721070	Painted, varnished or coated with plastics	22 918 672	–	2 059
831120	Cored wire of base metal, for electric arc-welding	827 252	–	10
847989	Other machines and mechanical appliances, other than machines and mechanical appliances for treating metal, incl. electric wire coil-winders/Mixing/ kneading/crushing/grinding/ screening/sifting/homogenising/ emulsifying/stirring machines	13 116 219	–	209 107
847990	Parts of machines and mechanical appliances having individual functions, not specified/incl. elsewhere in this chapter	2 387 568	–	19 434

Table 3.40. (continued)

(US dollars)

6-digit HS2012	Description	Imports by Sri Lanka from world	Imports by Sri Lanka from Fiji	Exports by Fiji to world
850940	Electro-mechanical domestic food grinders/mixers/juice extractors	11 089 678	–	14 249
850990	Parts of electro-mechanical domestic appliances	96 460	–	1 165
851010	Shavers with self-contained electric motor	204 425	–	1 143
851632	Electro-thermic hair-dressing apparatus etc. (excl. dryers)	227 653	–	2 028
851633	Electro-thermic hand-drying apparatus	61 664	–	254
900651	Cameras with a through-the-lens viewfinder (SLR), taking = <35 mm film	25 558	–	324
910229	Wrist-watches other than electrically operated, whether/ not incorporating a stop-watch facility (excl. with auto winding) other than with case of precious metal/metal clad with precious metal	53 905	–	815
910291	Pocket-watches and other watches (excl. wrist-watches), incl. stop-watches, electrically operated, other than with case of precious metal/metal clad with precious metal	11 254	–	11
910390	Clocks with watch movements (excl. of 91.04), other than electrically operated	9 051	–	581
910990	Clock movements, complete and assembled, other than electrically operated	28 897	–	1 898

Source: United Nations COMTRADE database.

Table 3.41. Imports by Sri Lanka from Papua New Guinea based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by Sri Lanka from world	Imports by Sri Lanka from Papua New Guinea	Exports by Papua New Guinea to world
390110	Polyethylene having a specific gravity of less than 0.94	50 280 361	–	41 788 922
847990	Parts of machines and mechanical appliances having individual functions, not specified/included elsewhere in this chapter	2 387 568	–	3 004 061
847989	Other machines and mechanical appliances, other than machines and mechanical appliances for treating metal, incl. electric wire coil-winders/mixing/kneading/crushing/grinding/screening/sifting/homogenising/emulsifying/stirring machines	13 116 219	–	1 600 040
340219	Organic surface-active agents, whether/not PURS (excl. of 3402.11-3402.13)	1 888 418	–	57 459
390950	Polyurethanes	6 144 641	–	45 572
390390	Other	4 256 336	–	23 922
831120	Cored wire of base metal, for electric arc-welding	827 252	–	3 878
340211	Anionic surface-active agents, (excl. soap)	14 742 003		1 865
850940	Electro-mechanical domestic food grinders/mixers/juice extractors	11 089 678	–	301
851633	Electro-thermic hand-drying apparatus	61 664	–	148

Source: United Nations COMTRADE database.

Table 3.42. Imports by Sri Lanka from Samoa based on the APTA Fourth Round offer list, 2012

(US dollars)

6-digit HS2012	Description	Imports by Sri Lanka from world	Imports by Sri Lanka from Samoa	Exports by Samoa to world
330491	Powders, whether or not compressed, for cosmetic/toilet use	376 220	–	218
340219	Organic surface-active agents, whether/not PURS (excl. of 3402.11-3402.13)	1 888 418	–	83

Source: United Nations COMTRADE database.

C. Benefits for PIFCs and Participating States of APTA with joint accession

1. PIFCs' benefits

The PIFCs' benefits from their accession to APTA are analysed based on the following points:

- The revealed comparative advantage to identify sectors that would benefit small Pacific island States in goods, through their market access to Participating States of APTA;
- Trade complementarity to measure overall complementarity level between PIFC exports and APTA Participating States' imports;
- A gravity model to examine the potential positive effects of PIFC accession to APTA.

(a) Revealed Comparative Advantage (RCA)

RCA values for all products of the PIFCs were calculated as follows:

$$RCA = \frac{A/B}{C/D}$$

where

A = PIC's exports to World in i^{th} sector

B = Total exports of PIC to World

C = World's exports to World in i^{th} sector

D = Total exports of World to World

The RCA index greater than unity (1.0) indicates the PIC's i^{th} sector is export competitive in the world market.

For the PIFCs, due to their small economy of scale, remoteness and high transportation costs of shipping goods to world markets, exports of goods are possible only when the produced goods are competitive in the world market. However, this may not be the case when it comes to exports to Asia and the Pacific, especially China and the Republic of Korea which are closer geographically and have large markets. Some products exported by the PIFCs have extremely high RCA values. Furthermore, export products with high competitiveness greatly coincide with those with high contributions to total exports. The PIFCs' top eight RCA value products at the chapter level are presented in table 3.43.

In the case of Fiji, the average RCA value in 2012 for product chapters with noticeable export volumes (the same for the other countries) was 1.88, suggesting that Fiji's products are, overall, competitive in the world market. The most competitive chapters in 2012 included: 17 – sugars and sugar confectionery (RCA = 29.23); 3 – fish and crustaceans, molluscs and other aquatic invertebrates (RCA = 26.16); 19 – preparations of cereals, flour, starch or milk; bakers' wares (RCA = 14.07); 22 – beverages, spirits and vinegar (RCA = 12.4); and 11 – products of the milling industry; malt; starches; inulin; and wheat gluten (RCA = 10.25).

The average RCA value in Papua New Guinea in 2012 was 2.17. Product chapters with the highest RCA values in 2012 included: 9 – coffee, tea, mate and spices (RCA = 21.05); 15 – animal or vegetable fats and oils (RCA = 20.58); 25 – salt; sulphur; earths and stone; plastering materials (RCA = 12.33); 26 – ores, slag and ash (RCA = 12.1); and 71 – natural or cultured pearls, precious or semi-precious stones (RCA = 9.14).

The average RCA value in 2012 in Samoa was 1.58. Product chapters with the highest RCA values in 2012 included: 3 – fish and crustaceans, molluscs and other aquatic invertebrates (RCA = 18.5); 24 – tobacco and manufactured tobacco substitutes (RCA = 9.64); and 15 – animal or vegetable fats and oils (RCA = 8.01).

The average RCA value in the Solomon Islands in 2012 was 4.71. Product chapters with the highest RCA values in 2012 included: 44 – wood and articles of wood, wood charcoal (RCA = 67.76); 3 – fish and crustaceans, molluscs and other aquatic invertebrates (RCA = 20.24); 15 – animal or vegetable fats and oils (RCA = 14.86); 12 – oil seeds and oleaginous fruits (RCA = 8.81); and 18 – cocoa and cocoa preparations (RCA = 6.93).

The average RCA in Tonga in 2012 was 6.66. Product chapters with the highest RCA values in 2012 included: 46 – manufactures of straw, of esparto or of other plaiting materials (RCA = 83.52); 7 – edible vegetables and certain roots and tubers (RCA = 63.61); 3 – fish and crustaceans, molluscs and other aquatic invertebrates (RCA = 55.29); 49 – printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans (RCA = 27.37); 12 – oil seeds and oleaginous fruits (RCA = 22.19); and 5 – products of animal origin, not elsewhere specified (RCA = 11.09).

The average RCA in Vanuatu in 2011 was 3.10. Product chapters with the highest RCA values in 2012 included: 12 – oil seeds and oleaginous fruit (RCA = 61.84); 15 – animal or vegetable fats and oils (RCA = 42.33); 3 – fish and crustaceans, molluscs and other aquatic invertebrates (RCA = 16.99); 18 – cocoa and cocoa preparations (RCA = 16.35);

13 – lac; gums, resins and other vegetable saps and extracts (RCA = 16.03); and 2 – meat and edible meat offal (RCA = 12.58).

The PIFCs' export competitiveness is evident according to the above data. It should also be noted that by comparing rankings of products by RCA and by *i*th product chapter's export share, Fiji's export competitiveness is reflected by export volumes.

Table 3.43. PIFCs' top eight RCA value chapter-level products

Country (year)	Chapter code	Description	RCA
Fiji (2012)	17	Sugars and sugar confectionery	29.23
	03	Fish and crustaceans, molluscs and other aquatic invertebrates	26.16
	19	Preparations of cereals, flour, starch or milk; bakers' wares	14.07
	22	Beverages, spirits and vinegar	12.40
	11	Products of the milling industry; malt; starches; inulin; wheat gluten	10.25
	44	Wood and articles of wood; wood charcoal	4.73
	07	Edible vegetables and certain roots and tubers	4.52
	05	Products of animal origin, not elsewhere specified	3.66
Papua New Guinea (2012)	09	Coffee, tea, mate and spices	21.05
	15	Animal or vegetable fats and oils	20.58
	25	Salt; sulphur; earths and stone; plastering materials	12.33
	26	Ores, slag and ash	12.10
	71	Natural or cultured pearls, precious or semi-precious stones	9.14
	44	Wood and articles of wood; wood charcoal	8.76
	16	Preparations of meat, of fish or of crustaceans	8.48
	18	Cocoa and cocoa preparations	7.09
Samoa (2012)	03	Fish and crustaceans, molluscs and other aquatic invertebrates	18.50
	24	Tobacco and manufactured tobacco substitutes	9.64
	15	Animal or vegetable fats and oils	8.01
	22	Beverages, spirits and vinegar	5.78
	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	3.91
	20	Preparations of vegetables, fruit or nuts	2.00
	27	Mineral fuels, mineral oils and products of their distillation	1.75
	36	Explosives; pyrotechnic products; matches	1.71

Table 3.43. (continued)

Country (year)	Chapter code	Description	RCA
Solomon Islands (2012)	44	Wood and articles of wood; wood charcoal	67.76
	03	Fish and crustaceans, molluscs and other aquatic invertebrates	20.24
	15	Animal or vegetable fats and oils	14.86
	12	Oil seeds and oleaginous fruits	8.81
	18	Cocoa and cocoa preparations	6.93
	71	Natural or cultured pearls, precious or semi-precious stones	6.32
	16	Preparations of meat, of fish or of crustaceans	5.81
	05	Products of animal origin, not elsewhere specified	4.13
Tonga (2012)	46	Manufactures of straw, of esparto or of other plaiting materials	83.52
	07	Edible vegetables and certain roots and tubers	63.61
	03	Fish and crustaceans, molluscs and other aquatic invertebrates	55.29
	49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	27.37
	12	Oil seeds and oleaginous fruits	22.19
	05	Products of animal origin, not elsewhere specified	11.09
	08	Edible fruit and nuts; peel of citrus fruit or melons	9.99
	24	Tobacco and manufactured tobacco substitutes	6.90
Vanuatu (2011)	12	Oil seeds and oleaginous fruits	61.84
	15	Animal or vegetable fats and oils	42.33
	03	Fish and crustaceans, molluscs and other aquatic invertebrates	16.99
	18	Cocoa and cocoa preparations	16.35
	13	Lac; gums, resins and other vegetable saps and extracts	16.03
	02	Meat and edible meat offal	12.58
	32	Tanning or dyeing extracts	9.26
	22	Beverages, spirits and vinegar	4.89

Sources: United Nations COMTRADE database and authors' calculation.

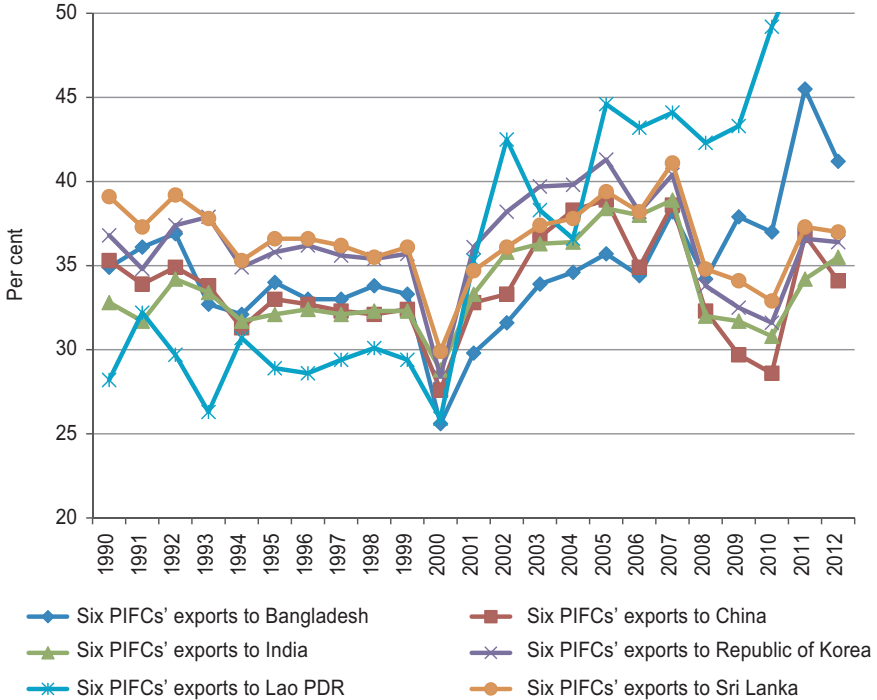
(b) Trade complementarity

Trade complementarity explains how much two trading partners coincide with each other's trade pattern. It can also explain trade volumes to some extent. In the sample, the Republic of Korea as the exporter turns out to be the most compatible trading partner in both the Asian and the Pacific subregions, with complementarity indices in 2012 of 61.4% with the other Participating States of APTA and 50.7% with PIFCs. China's complementarity indices in 2012 were 55.1% with other Participating States of APTA and 45.2% with PIFCs. Fiji's complementarity level is higher within the Pacific subregions (48.9% in 2012) than that with Participating States of APTA (34% in 2012), while Papua New Guinea's complementarity level is higher with Participating States of APTA (25% in 2012) than that within the Pacific subregion (19.8% in 2012).

Bilateral trade between three Participating States of APTA (Bangladesh, the Lao People's Democratic Republic and Sri Lanka) with the six PICTA members is rather limited in terms of trade value; however, the average complementarity level between the PICTA members as the exporters and Bangladesh, the Lao People's Democratic Republic and Sri Lanka as the importers is higher than those between PICTA members as exporters and China, India and the Republic of Korea as importers. Figure 3.7 shows the trends in complementarity levels between the six PICTA members as exporters and individual APTA members as importers. In general, the complementarity level between PICTA members and APTA members increased during 1990-2012, suggesting that the level of the export pattern of the Pacific subregion matches the import pattern of APTA Participating States in increasing during the past two decades. Furthermore, the six PICTA members' complementarity levels with Bangladesh, the Lao People's Democratic Republic and Sri Lanka are generally higher than those with China, India and the Republic of Korea, with indices in 2012 of 41.2%, 52.7%, 37%, 34.1%, 35.5% and 36.4%, respectively. This means that the trade profiles between the Pacific subregion as the exporter and Bangladesh, the Lao People's Democratic Republic and Sri Lanka as importers are more compatible than the trade profiles between the Pacific subregion as the exporter, and China, India and the Republic of Korea as importers.

A complementarity analysis itself suggests that the Pacific subregion has more favourable prospects for a successful trade arrangement with three Participating States of APTA (Bangladesh, the Lao People's Democratic Republic and Sri Lanka), with which current trade volumes are smaller. However, due to the effects of other factors such as the import country's market size, income level, infrastructure development and tariffs, China, India and the Republic of Korea remain the larger trade partners with the PIFCs. Therefore, a trade gravity model is employed here in analysing the benefits for the PIFCs and the existing Participating States of APTA following with the accession of PIFCs to APTA.

Figure 3.7. Complementarity level between six PICTA members as exporters and individual Participating States of APTA as importers



Source: World Integrated Trade Solution (WITS) database.

(c) Gravity model: PIFC exports

A standard gravity model with three-way error components is tailored to the circumstances in the PIFCs. The equation is estimated using data for 1990-2012 covering the six PIFCs as exporting countries and more than 100 countries as importing countries. The equation is estimated with the random effects estimator. All estimated coefficients have the expected signs with $R^2 = 0.47$.

$$\ln \hat{X}_{ijt} = 11.09 + 0.39 \ln GDP_{it} + 0.46 \ln GDP_{jt} - 1.92 \ln DIST_{ij} + 0.36 F_{ij} + 1.49 C_{ij} + 0.29 APTA_j$$

$$z = \begin{matrix} (7.03) \\ (0.99) \end{matrix} \quad \begin{matrix} (7.29) \\ \end{matrix} \quad \begin{matrix} (13.01) \\ \end{matrix} \quad \begin{matrix} (-14.14) \\ \end{matrix} \quad \begin{matrix} (3.97) \\ \end{matrix} \quad \begin{matrix} (3.24) \\ \end{matrix}$$

Where X_{ijt} stands for a PIC i 's exports to country j at time t ; GDP_{it} is the GDP of export country i at time t , and GDP_{jt} is the GDP of importing country j at time t ; F_{ij} is a dummy variable indicating if countries i and j are both signatories of the same preferential trade agreement ($F_{ij} = 1$ if both countries are signatories, and $F_{ij} = 0$ if they are not); C_{ij} indicates

if countries i and j share colonial ties, with binary values 1 and 0 indicating existence and absence of such ties, respectively; and $APTA_j$ is another binary variable with 1 indicating the trade partner is an APTA member and 0 otherwise. Other factors are found insignificant in the above panel framework. Annual data are obtained from the World Bank World Development Indicators database.

Focusing on the linkage between APTA and PIFCs, the binary variable $APTA_j$ shows a positive relationship with a factor of 0.29, suggesting that, given other circumstances remaining fixed or constant, PIFCs' exports to Participating States of APTA are 29% higher than their exports to other countries. Although such a positive effect is not statistically significant, it suggests that given favourable trade environments it is possible for PIFCs to export more to APTA Participating States.¹⁰

2. Potential benefits for APTA Participating States

Since PICTA has not exchanged the list of concessions to date, benefits for APTA Participating States are analysed by using the following methods:

- (a) The revealed comparative advantage to identify sectors that would benefit the Participating States of APTA in goods, through market access to PIFCs;
- (b) A gravity model to examine the possibility that PIFCs can import more from Participating States of APTA.

(a) Revealed Comparative Advantage

The Revealed Comparative Advantage (RCA) analysis for Participating States of APTA is based on the level of product chapter. Chapters with the 15 highest RCA values for each APTA member are listed in table 3.44. Specifically, Bangladesh has high RCA values in products such as other vegetable textile fibres, paper yarn and woven fabric of paper yarn, articles of apparel and clothing accessories, headgear and parts thereof, seafood, raw hides, skin and leather, cotton, live trees and other plants, fertilizers and footwear. The 15 chapters with the highest RCA indices are much greater than unity, suggesting that shares of these products' exports in Bangladesh's total exports in 2007 are much higher than those to the world in the same year. In 2007, the average RCA value in Bangladesh was 2.82.

¹⁰ Regarding the effects of other factors, remoteness is considered to be a major barrier to the export growth of PIFCs. Based on the estimated coefficient on distance, for each 1% increase in distance to an export market, the PIFC's exports decline by about 1.92%. The regression also shows that preferential trade agreements generally have a positive impact on bilateral trade. Colonial ties also have a positive impact on PIFC exports to their former colonial powers. The elasticity of the PIFC exports with regard to their GDP is quite low. The estimated coefficient indicates that, on average, with each 1% increase in the GDP of the exporting country, exports rise only by 0.39%. The elasticity of PIFC exports with regard to an importing country's GDP is considerably higher than the elasticity with regard to a PIFC's own GDP. This low elasticity probably reflects the fact that the PIFC's exports are mainly primary commodities, such as agricultural products and minerals.

China has significant comparative advantages in a number of products such as: umbrellas, walking sticks, seat sticks, whips and riding-crops; prepared feathers and down and articles thereof; manufactures of straw; silk; headgear and parts thereof; textile articles; articles of apparel and clothing accessories; articles of leather, saddles and harnesses; footwear; toys and games; woven, knitted and crocheted fabrics; and furniture, bedding, mattresses, cushions and similar stuffed furnishing. In 2012, the average RCA value in China was 1.35.

India has strong comparative advantages in products such as: lac, gums, resins and other vegetable saps and extracts; cotton; other vegetable textile fibres; paper yarn and woven fabric of paper yarn; carpets and other textile floor coverings; vegetable plaiting materials; textile articles; cereals; pearls, precious stones; coffee, tea and spices; man-made staple fibres; man-made filaments; silk; sugars; salt; sulphur; earths and stones; plastering materials; and articles of apparel and clothing accessories. In 2012, the average RCA value in India was 1.55.

The Republic of Korea's comparative advantages rely on products such as: ships, boats and floating structures; knitted or crocheted fabrics; man-made filaments; zinc and articles thereof; optical, photographic, cinematographic, measuring and checking tools; lead and articles thereof; iron and steel and their articles; electrical machinery and equipment and parts thereof; organic chemicals; textile fabrics; plastics and articles thereof; vehicles other than railway or tramway rolling stock; man-made staple fibres; and rubber and articles thereof. In 2012, the average RCA value in the Republic of Korea was 0.65.

Mongolia has high RCA indices in products such as: ores, slag and ash; wool, fine or coarse animal hair, horsehair yarn and woven fabric; salt; sulphur; earths and stone; plastering materials; raw hides and skins (other than fur skins) and leather; products of animal origin, not elsewhere specified; precious or semi-precious stones; sugars and sugar confectionery; meat and edible meat offal; carpets and other textile floor coverings; copper and articles thereof; and live animals. In 2007, the average RCA value in Mongolia was 3.15.

Sri Lanka has strong comparative advantages in exporting items such as: garments and clothing accessories; coffee, tea and spices; toys and games; seafood; man-made filaments; copper and articles thereof; articles of stone, plaster, cement or similar materials; products of the milling industry; and vegetable textile fibres. In 2012, the average RCA value in Sri Lanka was as high as 8.14.

Among the above products exported by Participating States of APTA, the six PIFCs' total 10 import products from the world include: chapter 27 – mineral fuels, mineral oils and products of their distillation (\$2,449 million); chapter 87 – vehicles other than railway or tramway rolling stock (\$859 million); chapter 85 – electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles (\$739 million); chapter 73 – articles of iron or steel (\$670 million); chapter 10 – cereals (\$431 million); chapter 39 – plastics and articles thereof (\$281 million); chapter 2 – meat and edible meat offal

(\$233 million); chapter 88 – aircraft, spacecraft, and parts thereof (\$197 million); chapter 40 – rubber and articles thereof (\$190 million); and chapter 90 – optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof (\$166 million). Participating States of APTA have comparative advantages in all 10 product chapters except in chapter 27.

Table 3.44. Revealed Comparative Advantage of APTA Participating States

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
Bangladesh (2007)	53	Other vegetable textile fibres; paper yarn and woven fabric of paper yarn	475 143 076	3.62	131.46	583 444
	61	Articles of apparel and clothing accessories, knitted or crocheted	4 734 698 171	36.02	28.24	28 607 063
	62	Articles of apparel and clothing accessories, not knitted or crocheted	4 588 550 374	34.91	27.78	51 383 194
	65	Headgear and parts thereof	67 439 373	0.51	13.02	4 460 262
	3	Fish and crustaceans, molluscs and other aquatic invertebrates	694 625 883	5.29	10.98	152 227 932
	63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	402 229 327	3.06	10.07	77 176 850
	41	Raw hides and skins (other than fur skins) and leather	290 953 998	2.21	9.76	1 464 019
	58	Special woven fabrics; tufted textile fabrics; lace, tapestries; trimmings; embroidery	98 585 574	0.75	7.55	5 758 157
	52	Cotton	225 596 661	1.72	4.68	24 727 669
	56	Wadding, felt and non-woven; special yarns, twine, cordage, ropes and cables and articles thereof	47 780 262	0.36	2.82	11 902 190
6	Live trees and other plants;	44 411 214	0.34	2.62	169 410	

Table 3.44. (continued)

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
Bangladesh (2007) (continued)	46	Manufactures of straw, of esparto or of other plaiting materials	5 289 035	0.04	2.33	607 115
	31	Fertilizers	70 152 432	0.53	2.03	66 008 111
	64	Footwear, gaiters and the like; parts of such articles	137 486 997	1.05	1.71	50 659 119
	55	Man-made staple fibres	39 677 997	0.30	1.41	33 036 308
China (2012)	66	Umbrellas, sun umbrellas, walking sticks, seat sticks, whips, riding-crops	2 825 464 777	0.14	6.24	3 861 348
	67	Prepared feathers and down and articles made of feathers or of down	5 277 906 348	0.26	6.03	1 134 329
	46	Manufactures of straw, of esparto or of other plaiting materials	1 791 025 438	0.09	5.83	607 115
	50	Silk	1 706 533 952	0.08	4.48	231 185
	65	Headgear and parts thereof	3 897 285 332	0.19	4.14	4 460 262
	63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	24 015 853 335	1.17	3.78	77 176 850
	61	Articles of apparel and clothing accessories, knitted or crocheted	87 045 225 061	4.25	3.67	28 607 063
	42	Articles of leather; saddlery and harness	28 243 842 781	1.38	3.32	15 940 179
	64	Footwear, gaiters and the like; parts of such articles	46 811 268 181	2.28	3.25	50 659 119
95	Toys, games and sports requisites; parts and accessories thereof	35 619 114 331	1.74	3.19	27 418 294	

Table 3.44. (continued)

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
China (2012) (continued)	58	Special woven fabrics; tufted textile fabrics; lace, tapestries; trimmings; embroidery	4 637 696 508	0.23	3.16	5 758 157
	60	Knitted or crocheted fabrics	11 219 348 051	0.55	3.16	8 645 509
	53	Other vegetable textile fibres; paper yarn and woven fabric of paper yarn	1 068 298 724	0.05	3.12	583 444
	94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing	77 886 189 789	3.80	2.98	129 668 570
	62	Articles of apparel and clothing accessories, not knitted or crocheted	61 224 359 527	2.99	2.91	51 383 194
India (2012)	13	Lac; gums, resins and other vegetable saps and extracts	6 547 657 431	2.26	32.12	1 273 911
	52	Cotton	8 568 855 085	2.96	7.81	24 727 669
	53	Other vegetable textile fibres; paper yarn and woven fabric of paper yarn	325 650 600	0.11	6.01	583 444
	57	Carpets and other textile floor coverings	1 350 669 487	0.47	5.49	3 668 629
	14	Vegetable plaiting materials; vegetable products, n.e.s.	62 214 538	0.02	5.37	670 271
	63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	3 973 042 154	1.37	4.26	77 176 850
	10	Cereals	8 729 057 244	3.01	4.24	431 527 838
	71	Natural or cultured pearls, precious or semi-precious stones	43 089 689 731	14.88	4.17	17 031 776
	9	Coffee, tea, mate and spices	2 694 022 369	0.93	3.44	24 491 433

Table 3.44. (continued)

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
India (2012) (continued)	55	Man-made staple fibres	1 996 788 470	0.69	3.26	33 036 308
	54	Man-made filaments	2 260 937 020	0.78	3.11	12 982 614
	50	Silk	163 529 712	0.06	3.04	231 185
	17	Sugars and sugar confectionery	2 185 227 922	0.75	2.58	58 518 640
	25	Salt; sulphur; earths and stone; plastering materials	1 727 188 521	0.60	2.48	82 095 689
	62	Articles of apparel and clothing accessories, not knitted or crocheted	7 429 975 421	2.57	2.48	51 383 194
Republic of Korea (2012)	89	Ships, boats and floating structures	37 828 428 936	6.90	7.65	75 582 401
	60	Knitted or crocheted fabrics	4 069 828 914	0.74	4.28	8 645 509
	54	Man-made filaments	3 452 432 013	0.63	2.53	12 982 614
	79	Zinc and articles thereof	1 038 688 391	0.19	2.32	1 736 949
	90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	37 611 610 626	6.87	2.10	166 701 782
	78	Lead and articles thereof	419 058 225	0.08	1.95	936 307
	72	Iron and steel	25 375 016 539	4.63	1.92	152 583 628
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers; parts and accessories thereof	119 084 000 000	21.74	1.78	739 069 166	

Table 3.44. (continued)

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
Republic of Korea (2012) (continued)	29	Organic chemicals	23 284 736 423	4.25	1.69	23 688 783
	59	Impregnated, coated, covered or laminated textile fabrics	1 330 523 955	0.24	1.69	9 585 182
	39	Plastics and articles thereof	28 381 150 285	5.18	1.61	281 099 998
	87	Vehicles other than railway or tramway rolling stock	70 074 094 361	12.79	1.60	859 776 067
	55	Man-made staple fibres	1 873 381 984	0.34	1.56	33 036 308
	40	Rubber and articles thereof	9 340 214 843	1.70	1.43	190 031 203
	73	Articles of iron or steel	12 467 431 128	2.28	1.29	670 610 050
Mongolia (2007)	26	Ores, slag and ash	1 085 912 150	57.56	88.64	989 983
	51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	193 054 534	10.23	83.54	3 270 840
	25	Salt; sulphur; earths and stone; plastering materials	45 263 540	2.40	10.96	82 095 689
	41	Raw hides and skins (other than fur skins) and leather	42 050 790	2.23	10.64	1 464 019
	5	Products of animal origin, not elsewhere specified	7 154 459	0.38	8.45	1 238 862
	71	Natural or cultured pearls, precious or semi-precious stones	234 879 946	12.45	6.28	17 031 776
	17	Sugars and sugar confectionery	5 804 738	0.31	1.79	58 518 640
	2	Meat and edible meat offal	16 889 794	0.90	1.55	233 356 820
	57	Carpets and other textile floor coverings	2 414 329	0.13	1.30	3 668 629
	74	Copper and articles thereof	22 067 619	1.17	1.12	13 753 935

Table 3.44. (continued)

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
Mongolia (2007) (continued)	1	Live animals	2 383 136	0.13	1.04	3 536 205
	27	Mineral fuels, mineral oils and products of their distillation	170 071 084	9.01	0.88	2 449 330 535
	61	Articles of apparel and clothing accessories, knitted or crocheted	16 747 397	0.89	0.72	28 607 063
	78	Lead and articles thereof	510 908	0.03	0.54	936 307
	12	Oil seeds and oleaginous fruit	2 632 145	0.14	0.48	15 019 305
	62	Articles of apparel and clothing accessories, not knitted or crocheted	1 812 190 416	19.34	360.84	51 383 194
Sri Lanka (2012)	71	Natural or cultured pearls, precious or semi-precious stones	426 532 497	4.55	43.77	17 031 776
	61	Articles of apparel and clothing accessories, knitted or crocheted	1 968 579 813	21.01	39.75	28 607 063
	9	Coffee, tea, mate and spices	1 646 335 474	17.57	36.56	24 491 433
	95	Toys, games and sports requisites; parts and accessories thereof	55 789 456	0.60	32.01	27 418 294
	3	Fish and crustaceans, molluscs and other aquatic invertebrates	204 744 589	2.19	31.04	152 227 932
	54	Man-made filaments	8 387 500	0.09	22.38	12 982 614
	19	Preparations of cereals, flour, starch or milk; bakers' wares	20 433 183	0.22	21.81	92 025 787
	40	Rubber and articles thereof	983 181 420	10.49	15.02	190 031 203
	88	Aircraft, spacecraft, and parts thereof	26 259 949	0.28	14.99	197 263 559

Table 3.44. (continued)

Country (year)	Code	Product chapter	i^{th} chapter exports (US\$)	i^{th} chapter/ total exports (%)	i^{th} chapters RCA	Imports by six PIFCs from world
Sri Lanka (2012) (continued)	74	Copper and articles thereof	16 533 280	0.18	12.17	13 753 935
	68	Articles of stone, plaster, cement, asbestos, mica or similar materials	23 274 272	0.25	10.06	31 989 324
	11	Products of the milling industry; malt; starches; inulin; wheat gluten	89 197 077	0.95	7.49	38 202 630
	64	Footwear, gaiters and the like; parts of such articles	12 330 506	0.13	6.30	50 659 119
	53	Other vegetable textile fibres; paper yarn; woven fabric of paper yarn	116 746 703	1.25	5.19	583 444

Sources: United Nations COMTRADE database and authors' calculation.

Note: The six PIFCs' total imports from the world are summed from Vanuatu's imports from the world in 2011 and Fiji, Papua New Guinea, Samoa, Solomon Islands and Tonga imports in 2012.

(b) Gravity Model: PIFC imports

Following a similar gravity model as that in section C.1(c), a gravity model is employed to explain the six PIFCs' imports during 1990-2012. The equation is estimated with the random effects estimator. All estimated coefficients have the expected signs with $R^2 = 0.48$.

$$\ln \widehat{M}_{ijt} = -8.86 + 0.66 \ln GDP_{it} + 0.61 \ln GDP_{jt} - 2.27 \ln DIST_{ij} + 0.37 F_{ij} + 0.70 C_{ij} + 0.19 APTA_j$$

$$z = (-6.33) (14.24) (22.08) (-18.34) (5.71) (1.57)$$

$$(0.67)$$

Where X_{ijt} stands for a PIC i 's imports from a country j ; GDP_{it} is the GDP of import country i , and GDP_{jt} is the GDP of export country j ; $DIST_{ij}$ is capital to capital distance between countries i and j ; F_{ij} is a dummy variable indicating if countries i and j are both signatories of the same preferential trade agreement ($F_{ij} = 1$ if both countries are signatories, and $F_{ij} = 0$ if they are not); C_{ij} indicates if countries i and j share colonial ties, with binary values 1 and 0 indicating existence and absence of such ties, respectively; and $APTA_j$ is another binary variable with 1 indicating trade partner is an APTA member and 0 otherwise.

Interpretation of the PIFCs' imports regression results is similar to the way described in section C.1(c) Remoteness (the distance factor) is still a major barrier to PIFC imports, preferential trade agreements generally have a positive impact on bilateral trade, and that colonial ties have a positive impact on PIFC imports. Participating States of APTA seem to have a slight advantage of exporting goods to the PIFCs as the latter's imports from Participating States of APTA are 19% higher than their imports from other countries. Although such advantage is not statistically significant, it points to a potential improvement in bilateral trade between PIFCs and APTA Participating States, provided favourable trading environments exist.

D. Strategies and modalities for PIFC accession to APTA

1. Challenges faced by PIFCs

The comparative advantage of the PIFCs is intrinsically linked to their economy size and remoteness. It is now widely accepted that because of the PIFCs' small market size, those industries that exhibit strong economies of scale, such as some manufacturing industries (e.g., electronics), face high cost structures in the PIFCs. This cost disadvantage is exacerbated by the PIFCs' remoteness, which makes transportation expensive, particularly with increasing fragmentation of production processes that require frequent and timely trade in (and hence transportation of) intermediate goods. In contrast, the economies of scale in agriculture are not as important as in manufacturing. Abundance of agricultural land and rainfall in most PIFCs appear to accord them considerable comparative advantage in agriculture. Additionally, the tropical climate conditions in the PIFCs provide some agricultural product differentiation from other countries, such as pawpaw, pineapples, bananas, okra and tropical flowers, both in terms of product variety and timing of supply. However, relatively high transportation costs associated with the bulky and perishable nature of many agricultural products weaken this advantage to some extent.

Table 3.45 shows the average time and cost involved in completing export and import procedures in selected countries of Asia and the Pacific. These trade facilitation indicators capture time and cost of behind- and at-the-border trade procedures, including time and official costs related to trade document preparation, customs clearance and technical control, terminal handling and inland transport. The cost measure does not include tariffs or trade taxes (ESCAP, 2013, p. 15). Compared to the Republic of Korea and Singapore, the PIFCs are slow in completing export and import procedures; costs to export and import also vary significantly among the PIFCs, with Vanuatu, Solomon Islands and Papua New Guinea facing higher costs. Reducing export time is expected to enhance exports of agricultural products and seafood in the South Pacific region. Much progress is still needed in cutting transaction costs. In particular, procedural improvements can be made to reduce the required number of days to import and export – a critical issue for the trade of time-sensitive goods such as perishable agricultural/food products (ESCAP, 2013a, p. 52).

Table 3.45. Time and cost to export and import

	Time to export (days)					Time to import (days)					Cost to export (US\$)					Cost to import (US\$)						
	2006	2009	2012	2013	2013	2006	2009	2012	2013	2013	2006	2009	2012	2013	2006	2009	2012	2013	2006	2009	2012	2013
Republic of Korea	12	8	7	7	7	12	8	7	7	7	780	767	680	665	1 040	747	695	695	1 040	747	695	695
Singapore	5	5	5	5	4	4	4	4	4	4	416	456	456	456	367	439	439	439	367	439	439	439
Fiji	24	24	22	22	24	24	24	23	23	23	573	654	655	655	570	630	635	635	570	630	635	635
Papua New Guinea	23	23	23	23	29	29	29	29	32	32	784	864	864	949	928	1 008	1 130	1 130	928	1 008	1 008	1 130
Samoa	25	25	25	25	28	28	28	28	28	28	800	690	690	690	775	775	775	775	775	775	775	775
Solomon Islands	24	24	24	24	20	20	20	20	20	20	1 056	1 011	1 030	1 070	1 238	1 194	1 037	1 037	1 238	1 194	1 237	1 037
Tonga	21	21	22	22	27	27	27	26	26	26	545	650	775	755	620	725	740	740	620	725	775	740
Vanuatu	26	26	21	21	30	30	30	20	20	20	1 790	1 472	1 690	1 690	2 170	1 337	1 690	1 690	2 170	1 337	1 690	1 690

Source: ESCAP, 2013a (p. 16).

Most problematic areas in conducting trade in developing countries in Asia and the Pacific, (including Bangladesh, China, Fiji, India, Indonesia and Nepal) are custom valuation, inspection and release of goods, tariff classification, technical or sanitary requirements, payment of fees and penalties, obtaining an import licence, submission of documents for clearance, and identification of origin of the goods (ESCAP, 2013, p. 27). Strengthening cooperation with trading partners and international institutions, by adopting advanced international systems as well as developing secure and integrated supply chains, are expected to improve sustainability and productivity of agricultural and marine products, reduce cross-border transportation costs, and reduce risks and time for exporting the PIFCs' perishable agricultural and food products.

2. Strategies and modalities

As most PIFCs face inadequacies in the above aspects related to trade, policy strategies should be developed for and implemented by the PIFCs to take the full advantage of their membership of the APTA. Governments of the PIFCs should explore means of economic development by looking into trade facilitation, trade in service, and investment.

ESCAP (2013a) provides a *Framework Agreement on Trade Facilitation* that includes the following strategies.¹¹

(a) Publication and administration of trade regulations

The PIFC Governments should make trade regulations publicly available and should implement the rules efficiently. The governing principles on transparency include:

- (a) Any trade-related laws, regulations, procedures, and documents should be made publicly available and easily accessible;
- (b) Enquiry points should be stabilized to answer questions on complex trade and customs rules, regulations, and procedures;
- (c) Reasonable intervals between publication and implementation should be put in place;
- (d) Mechanisms for prior consultation on new or amended laws and regulations with interested parties should be established;
- (e) An effective appeal mechanism should be put in place; and
- (f) Customs rulings should be provided in a timely manner and in advance of the relevant trade transaction upon the written request of an applicant who has provided all necessary information (ESCAP, 2013a, pp. 39-41).

(b) Trade procedures and documents

The PIFC Governments should adopt transparent trade procedures and documents. Trade procedures include commercial, transport, regulatory and financial procedures. Each procedure requires the exchange of information and documents between parties. Documents and data in either paper or electronic format are important, as they provide the means to

¹¹ These strategies are summarized from ESCAP, 2013b.

exchange information associated with all trade procedures. However, trade procedures and documents should not be used to create additional protection for domestic products (ESCAP, 2013a, p. 47).

(c) Product standards and conformance

The PIFCs should implement product standards that set out specific characteristics of a product such as size, shape, design, functions and performance, or the way it is labelled or packaged before it is put on sale. Standards that are imposed by government authorities, and which become mandatory, are often referred to as technical regulations or sanitary and phytosanitary measures. The objective of such regulations is most often to protect human safety and health, animal and plant life and health, the environment, and consumers against deceptive practices. Technical regulations are also issued in some countries to ensure quality or to promote trade and technical harmonization (e.g., standards on telecommunications equipment to ensure compatibility). While regulations and standards may clearly serve the public interest, it is important that they be designed to minimize any trade-restricting side effects. Inappropriate regulations and standards as well as inadequate conformity assessment procedures can result in high costs and inefficiencies for traders (ESCAP, 2013a, p. 69).

(d) Trade-related infrastructure and services

The PIFC Governments should make greater efforts to enhance trade-related infrastructure and services. The interplay between infrastructure and the services sectors provides an important part of the context in which import and export transactions take place. Efficient and effective reform in these areas can thus make a useful contribution to broader trade facilitation efforts. The following three sectors widely believed to have the closest links to trade:

- (a) Transport – the efficiency of ports, international transport links, and internal transport network directly influences the level of trade costs in goods markets;
- (b) Logistics – efficient freight forwarders, distributors, and other logistics service providers make it possible for importers and exporters to connect with each other at a minimum cost and with minimum delay. Logistics costs represent a significant portion of final consumer prices – more than 20% in most PIFCs;
- (c) Telecommunications – the performance of telecommunications affects the transaction costs associated with trading such as obtaining information on foreign market conditions and concluding deals with foreign buyers or sellers. Reforming infrastructure and services sectors should be undertaken with an appropriate regulatory framework (ESCAP, 2013a, pp. 87-88).

(e) Transit trade

Transit trade is a country's foreign trade that passes through a third country prior to reaching its final country of destination. At the time of crossing the border between one territory and the next, the differences in barriers result in additional costs and delays that reduce the competitiveness of the delivered goods. Two categories of issues related to

cargo in transit include: (a) protection of customs revenues and national security; and (b) the modalities of the physical movement of goods through the territory, e.g., commercial transport services regulations, traffic regulations and vehicle standards. These modalities constitute the basis for bilateral and regional transit agreements, together with customs-related provisions (ESCAP, 2013a, p. 111). As the PIFCs are trading with more than 100 countries, the PIFC Governments should follow the principles and good practices for transit facilitation that are set out in GATT/WTO Article V (Freedom of Transit), and Annex E of the WCO Revised Kyoto Convention as well as in the *Transports Internationaux Routiers*.

It is therefore important for the PIFCs to promote trade facilitation in the region. Trade facilitation covers a wide range of activities including import, export, transport facilities, payment, insurance and other financial procedures. In addition, to gain from tariff reduction, fast and predictable release of goods will also promote international trade and improve welfare gains to countries. The benefits of trade facilitation include: (a) reduction in cost and delay for trader; and (b) better control procedures and efficient allocation of resources for Governments. The main goal of promoting trade facilitation in the Pacific subregion is to reduce the high transaction costs and long transport time faced by most PIFCs as well as to improve the trading environment while maintaining effective levels of government control. The main focuses of promoting trade facilitation in the PIFCs include: (a) increasing infrastructure investment; (b) speeding up customs modernization and border crossing; (c) streamlining documentary requirements and information flows; (d) automation of electronic data interchange; (e) enhancing ports efficiency; and (f) developing the regulative, competitive, multimode and secure logistics and transport services.

Most PIFCs have benefited hugely from the development of the tourism industry. Further development and promotion of this service industry will help PIFCs to reduce their trade deficits. In order to benefit further from the increasing demand for tourism services from emerging Asian countries including China, India and the Republic of Korea, it is urgent for the PIFCs to attain technical and financial support to promote and liberalize trade in services. ESCAP (2011) provides a *Framework Agreement on the Promotion and Liberalization of Trade in Services among APTA Participating States*¹² that aims to (a) enhance cooperation in services among APTA Participating States in order to improve their efficiency and competitiveness, diversify production capacity, and supply and distribute services of their service suppliers within and outside the Participating States; (b) substantially reduce restrictions with a view to facilitating trade in services among Participating States; and (c) liberalize trade in services by expanding the depth and scope of liberalization beyond those under the General Agreement on Trade in Services (GATS) (ESCAP, 2011, Article 3).

As specified by ESCAP (2011), areas of cooperation include (a) establishing or improving infrastructural facilities; (b) joint production, marketing and purchasing arrangements; (c) research and development; and (d) exchange of information. APTA Participating States are urged to identify sectors for cooperation and formulate action plans, programmes and

¹² Abstracted from ESCAP, 2011.

understanding that will provide details on the nature and extent of cooperation (ESCAP, 2011, Article 4). Participating States are also urged to liberalize trade in services in a substantial number of sectors by: (a) gradually reducing existing discriminatory measures and market access limitations among Participating States; and (b) refraining from introducing new or more discriminatory measures and market access limitations (ESCAP, 2011, Article 5). The PIFCs, after their accession, expect to benefit from such a framework, because many of them will be granted consideration of special concessions as well as flexibility in the submission and implementation of all schedules of specific commitments, programmes and action plans (ESCAP, 2011, Article 6).

Apart from making efforts to promote and liberalize trade in goods and services, it is also important for the PIFCs to obtain foreign investment and enjoy benefits of technological advances. Many PIFCs have underdeveloped infrastructures including road and air transportation, sea transport systems, telecommunications, water and power supply systems, and sewage systems, health-care systems and investment regimes. These are fundamental hindrances not only to the social and economic development of the PIFCs, but also to attracting foreign investment. Meanwhile, effective infrastructure development in the PIFCs requires the inflow of foreign capital.

ESCAP (2009) provides a *Framework Agreement on the Promotion, Protection and Liberalization of Investment*. The objectives of this Agreement are to:

- (a) Substantially increase the flow of investment into Participating States;
- (b) Jointly promote Participating States as attractive investment destinations;
- (c) Strengthen and increase the competitiveness of the economic sectors of Participating States;
- (d) Progressively reduce or eliminate investment regulations and conditions that may impede investment flows and the operation of investment projects in Participating States;
- (e) Progressively strive towards a harmonized investment regime among all Participating States;
- (f) Promote the free flow of investments and transfer of technology among Participating States (ESCAP, 2009, Article 2).

ESCAP (2009, 2011 and 2013a) explores strategies of accession and areas of cooperation under APTA. The PIFCs would enjoy the benefits from the inter-subregional integration through the areas of trade and investment.

E. New areas of cooperation with PIFCs under APTA

This section examines the new areas of APTA Participating States' cooperation with the PIFCs by looking at the economy and trade structure of PIFCs, and new areas of cooperation.

1. Economic and trade structures of PIFCs

The PIFCs are mainly sea-locked and remote developing countries scattered around the South Pacific region. They are located far from all economies except Australia and New Zealand. The PIFCs are generally small in terms of economy and population. As shown in table 3.46, most of the PIFCs each have a population of less than 1 million while the population of Papua New Guinea, the largest PIFC, was 7.4 million in 2013, followed by Fiji and the Solomon Islands with populations of 0.86 million and 0.57 million, respectively. The PIFCs with the smallest populations are Nauru (0.01 million), Tuvalu (0.01 million), the Cook Islands (0.02 million) and Palau (0.02 million). The overall population of the PIFCs grew at an annual rate of 0.68% during 2008-2013. The highest population growth rates are seen in Papua New Guinea (2.7%), Vanuatu (2.3%), Solomon Islands (2.3%), Kiribati (2.2%) and Nauru (1.9%), while the lowest population growth rates are seen in the Cook Islands (-3.2%), Palau (-1.9%), Federated States of Micronesia (0.1%) and Tonga (0.2%). Low population growth in most PIFCs is, to a great extent, due to emigration.

With regard to economic size, Papua New Guinea is the largest economy in the Pacific with a GDP in 2012 of \$15,654 million, followed by Fiji (\$3,882 million) and the Solomon Islands (\$1,008 million). The smallest economies in the Pacific include Tuvalu with a GDP in 2012 of \$37 million, followed by Kiribati (\$176 million) and the Republic of the Marshall Islands (\$187 million). Moreover, the PIFCs countries are dispersed hugely in terms of income. The average per capita GNI in the region in the most recently available year was \$4,690. The Cook Islands has the highest per capita GNI of \$13,478, followed by Palau (\$9,860) and Tuvalu (\$5,650). The Solomon Islands and Papua New Guinea are seen as the lowest income PIFCs with a per capita GNI of \$1,130 and \$1,790, respectively (table 3.46).

The agriculture and fishing industries are important in most of the PIFCs, with their contribution to GDP ranged from about 10% in Samoa in 2011 to 39% in Solomon Islands in 2009; manufacturing industries are generally underdeveloped except for Fiji and Papua New Guinea, with that sector's contribution to GDP ranging from about 6% in the Solomon Islands in 2009 to 45% in Papua New Guinea in 2011. The tourism industry has become a significant GDP contributor to most PIFCs (except Papua New Guinea, due to its political and social instabilities), enabling the service sector to account for more than 55% of GDP in most PIFCs (in the case of Papua New Guinea, this sector's contribution was around 20% in 2011).

Table 3.46. Key PIFCs economic indicators

Indicator	Year	Cook Islands	Fiji	Kiribati	Republic of the Marshall Islands	Federated States of Micronesia	Nauru	Palau	Papua New Guinea	Samoa	Solomon Islands	Tonga	Tuvalu	Vanuatu
Total population (million)	2013	0.02	0.86	0.11	0.05	0.1	0.01	0.02	7.4	0.19	0.57	0.1	0.01	0.26
Average annual population growth rate (%)	2008-2013	-3.2	0.5	2.2	0.4	0.1	1.9	-1.9	2.7	0.8	2.3	0.2	0.5	2.3
Telephone lines (per 100 population)	2012	37.88	10.11	8.93	10.58	8.12	0	35.29	1.94	10.84	1.47	28.59	14.71	2.16
Cellular subscriptions (per 100 population)	2012	54.07	98.18	15.88	1.27	30.19	67.78	82.64	37.8	47.19	54.98	53.36	28.4	59.08
Internet users (per 100 populations)	2012	52.21	33.74	10.75	10	25.97	54	26.97	2.3	12.92	7	34.86	35	10.6
Per capita gross national income (current US\$)	2012	13 478 ^a	4 110	2 520	4 040	3 230	9 860	1 790	3 260	1 130	1 130	4 220	5 650	3 000
GDP (current US\$ million)	2012	275 ^a	3 882 ^b	176 ^b	187 ^b	327 ^b	228 ^b	15 654 ^b	677 ^b	1 008 ^b	472 ^b	37 ^b	785 ^b	
GDP growth (%)	2012	4.4	1.7	2.5	3.2	0.4	4.9	4.8	7.7	2.7	4.8	0.8	0.2	1.8
GDP growth (%)	2013	3.2	3.6	2	0.8	0.6	4.5	-1	5.1	-0.5	2.9	0.3	1.1	3.2
Agriculture value-added growth (%)	2013	3.1	2.6		12.4	6.6		-0.9	0.5	-3		0.3		2.2
Industry value-added growth (%)	2013	10.6	1.4		-1.3	-2.2		0.2	9.9	-4.5		-4.4		-22.2
Services value-added growth(%)	2013	2.7	1.6		1.6	-1		5.2	3.4	1.8		1.1		4.4
Gross fixed capital formation (% of GDP)	2013	15.3 ^a	22.7		33.5						14.8	33.4		24.1
Inflation rate (%)	2013	1.9	2.9	2	1.6	2.2	1.4	3	4	-0.2	6	0.2	2	1.4
Exports of goods and services (% of GDP)	2011		47.5 ^b					80.3 ^b	53.2 ^b	31.7 ^b	25.0 ^b	17.9 ^b		44.7 ^b
Imports of goods and services (% of GDP)	2011		58.1 ^b					72.9 ^b	50.2 ^b	58.9 ^b	47.9 ^b	60.6 ^b		50.3 ^b
Growth rate of merchandise exports (%)	2013	-24.4	-5	0.6	5.4	33.1	-29.8	-22.5	-12.9	-12.6	-9.4	36	15.5	-13.9
Growth rate of merchandise imports (%)	2013	7.4	34	-5.7	0.4	5	13.6	-1.1	-8.3	3.5	9.9	1.3	-5	2.8

Sources: Asian Development Bank, *Basic Statistics 2014*; ^a Data for 2011 – United Nations Statistics Division; and ^b Data come World Bank *World Development Indicators*.

Note: Data on Niue are not covered by the above three sources.

The PIFCs are generally open with regard to interaction with the world market. Palau's exports-to-GDP ratio (80.3% in 2011) is the highest in the Pacific region, followed by Papua New Guinea (53.2%), Fiji (47.5%) and Vanuatu (44.7%). According to available data, Tonga (17.9%) and Solomon Islands (25%) are the PIFCs with the lowest exports-to-GDP ratios. Most PIFCs are faced with a trade deficit due to their oil and food imports, and less developed manufacturing industries; the exception is Papua New Guinea, which has made trade gains due to its rich ore and precious stone resources. By country, Palau's imports accounted for 72.9% of its GDP in 2011 while the imports-to-GDP ratios in Tonga, Samoa, Fiji, Papua New Guinea, Vanuatu and the Solomon Islands were 60.6%, 58.9%, 58.1%, 50.2%, 50.3% and 47.9%, respectively (table 3.46). Economic and trade structures of the PIFCs suggest the existence of potential opportunities for them to develop their economies by improving their industrial sectors (and hence merchandise exports) and by further promoting their services sector development.

2. New areas of cooperation

Most PIFCs are less developed in the sectors of transport, logistics and telecommunications. These sectors are, at the same time, closely related to trade. With regard to airline regulations, it is believed that the provisions of bilateral air services agreements appear to have a significant impact on trade in air transport services. For maritime shipping services, removal of competition law exemptions would reduce maritime transport costs; improvements in logistics could increase the trade impacts of lowering remaining border barriers (ESCAP, 2013a, p. 93-94). Improving these sectors requires extensive technical skills and financial resources, which are lack in the PIFCs. While some industries of the above sectors in the PIFCs are in duopoly (e.g., telecommunications in Fiji) or even monopoly (e.g., telecommunication in the Solomon Islands), the first step that the PIFCs Governments should do to encourage competition is to follow a regulatory objective by using market-based mechanisms. Meanwhile, the PIFC Governments should design favourable policies to attract foreign capital, and initiative the process of negotiations with countries such as China and the Republic of Korea in order to pursue capital investment as well as technical support.

Apart from the above sectors, tourism is another prosperous area for international cooperation. Apart from their agriculture and natural resources sectors, tourism is one of the PIFCs' most competitive sectors. Tourist arrivals have been growing at an average rate of 6% per annum since 2000; this growth has also helped in attaining the PIFCs' trade integration with the rest of the world. However, the tourism industry, like the manufacturing sector, is faced with the challenge of exorbitant transportation costs given the geographic remoteness of the PIFCs. On the positive side, this remoteness also works to preserve the mystique of the PIFCs and has helped in maintaining their comparative advantage as evidenced by the impressive growth of tourism over the past decade in some PIFCs. Furthermore, sustained global growth of tourism presents a great opportunity for PIFCs, especially for creating linkages to the emerging Asian economies such as China, India and the Republic of Korea. These Asian economies could become a major source of tourism revenue in the PIFCs, if suitable conditions are created including providing more frequent, direct and affordable flights.

Apart from making efforts in promoting the quality of infrastructure (including air transport, domestic road infrastructure and the Internet) as well as the quality of goods and services such as food, souvenirs and land transport, the PIFCs still need to further explore the Asian markets. Some PIFC Governments, such as Fiji, have recently been making great efforts in overseas marketing. However, a more effective way of promoting tourism is through international cooperation between commercial parties. In particular, the PIFC Governments need to create necessary and enabling conditions for domestic and foreign investments, including facilitation of land leases for tourist infrastructure development. There may also be scope for intergovernmental or regional cooperation in overcoming the diseconomies of scale, such as introducing joint marketing.

Moreover, the PIFC exports consist mainly of primary commodities, especially agricultural, marine and mineral products. With the decline in agricultural production during the past decade, this trade pattern has been becoming increasingly difficult to sustain if natural resources are over-exploited. In such cases, it is essential for the PIFCs to pursue international cooperation from trading partners (e.g., China and the Republic of Korea, which are significant importers of PIFC marine and mineral products), in the implementation of product standards and conformance (as stated in section D above). Technical regulations on the size and quality of agricultural, marine and mineral products will not only increase value-added to PIFCs' export products, but will also help to sustain the PIFCs' natural resources. Yet, these regulations can only be effective if they are acknowledged both by exporting and importing countries.

F. Conclusion and policy advice

1. Main conclusion

The PIFCs' trade partners have become more diversified in the 2000s due to the development of trade facilitation among their trade partners and the development of global logistics. Participating States of APTA not only export to the Pacific region, but also considerably import from the PIFCs. Benefits that PIFCs can gain from their accession to the APTA can be further ensured with the promotion of trade facilitation and pursuit of cooperation between the two regions in developing areas such as transport, logistics, telecommunication, tourism and the primary sector. For PIFCs that do not have advantages of providing primary and manufacturing goods, providing tourism services of good quality can provide great potential for their trade and economic development.

Most Participating States of APTA are different from the PICTA member countries in terms of economic structure and the size of their economies. The PIFCs' accession to APTA is likely to benefit existing Participating States of APTA because:

- (a) Participating States of APTA have comparative advantages in most product items that PICTA member countries are importing;
- (b) The overall complementarity level between APTA Participating States' export products and PIFCs' import products is increasing;
- (c) Asian countries are the closest non-Oceanic trading partners for most PICTA member countries.

Such accession is also likely to benefit PICTA member countries because:

- (a) Tropical climate enables the differentiation of the PIFCs' agricultural products;
- (b) Marine and mineral resources endow the PIFCs with strong comparative advantages in their export products, which are in great demand by many Participating States of APTA;
- (c) The overall complementarity level is increasing between PIFCs' export products and APTA Participating States' import products;
- (d) The PIFCs are importing many products that are included in the offer lists of Participating States of APTA.

2. Policy advice

Recently, efforts have been made by ESCAP to establish trade facilitation in the Asia-Pacific countries. A number of projects have been undertaken by ESCAP to identify documentation and procedural shortcomings that restrict trade flow, and meetings, workshops and conferences have been conducted to promote greater collaboration between Governments and traders in order to address the challenges of trade facilitation.

The current Participating States of APTA and the PIFCs could pursue trade facilitation activities, particularly in the areas of customs procedures and addressing technical trade barriers under the APTA Framework Agreement of Trade Facilitation, which has been ratified by all Participating States of APTA. Actions that the PIFCs can take are:

- (a) Adoption of standard and consistent method of classification for easy comparison of goods;
- (b) Pursuit of integrated boarder management to improve coordination and organization of border agencies' activities, which are important to addressing the common challenge of facilitating movement of goods while adhering to strict boarder requirement;
- (c) Formation of joint committees between government agencies and the private sector on sharing the responsibility of border clearance from one side;
- (d) Introduction of a single submission point for all required documentation (i.e., a Single Window) in order to reduce clearance time. Countries should implement One-Stop Centres whereby all government ministries and institutions involved in goods clearance, including banks and insurance providers, are brought under one roof. The key objective of a One-Stop Centre is to improve efficiency in processing of clearance documents, which will promote trade efficiency and save trade costs both for Governments and for traders.

In addition, the level of customs automation such as the issuance of electronic certificate of origin could be significantly enhanced for the PIFCs. Customs automation will increase transparency in the assessment of duties and taxes substantially reduce customs clearance times and improve predictability, all of which will contribute to reducing trade costs by PIFCs' Government and traders.

Furthermore, goods traded under concessions require declaration of “originality”. Therefore, Participating States of APTA and PIFCs should cooperate in creating a Common Declaration Form which explicitly explains the Certificate of Origin requirements, export procedures in the country of origin and import procedures of the importing country. Such a form would be used for all transactions under the concession lists. In addition, Participating States of APTA should agree on custom valuation methods for all goods traded under concession lists.

Last but not least, there should be continuous professional development of PIFC managerial and operational customs staff in order to improve their competence. There should be uniform training for custom brokers prior to obtaining a licence. Further regular training sessions should be provided for agents with practicing certificates. Proper and uniform training should be provided for tax and customs officers. Sufficient communication facilities should also be provided for trade-related officials. The PIFCs do not have sufficient customs and tax officers; in the absence of an officer, other officers should be able to perform his/her tasks. National Governments should heavily invest in trade-related infrastructure in order to improve service deliveries. In many of the PIFCs, the telecommunications industry is still monopolized and communication costs are rather high. Substantial efforts should be made by the PIFCs to improve their transport, logistics and communication sectors.

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Annex

Annex table 1. Product chapter codes

Code	Product chapter
1	Live animals
2	Meat and edible meat offal
3	Fish and crustaceans, molluscs and other aquatic invertebrates
4	Dairy produce; birds eggs; natural honey;
5	Products of animal origin, not elsewhere specified
6	Live trees and other plants;
7	Edible vegetables and certain roots and tubers
8	Edible fruit and nuts; peel of citrus fruit or melons
9	Coffee, tea, mate and spices
10	Cereals
11	Products of the milling industry; malt; starches; inulin; wheat gluten
12	Oil seeds and oleaginous fruits
13	Lac; gums, resins and other vegetable saps and extracts
14	Vegetable plaiting materials; vegetable products n.e.s.
15	Animal or vegetable fats and oils
16	Preparations of meat, of fish or of crustaceans
17	Sugars and sugar confectionery
18	Cocoa and cocoa preparations
19	Preparations of cereals, flour, starch or milk; bakers' wares
20	Preparations of vegetables, fruit or nuts
21	Miscellaneous edible preparations
22	Beverages, spirits and vinegar
23	Residues and waste from the food industries
24	Tobacco and manufactured tobacco substitutes
25	Salt; sulphur; earths and stone; plastering materials
26	Ores, slag and ash
27	Mineral fuels, mineral oils and products of their distillation
28	Inorganic chemicals
29	Organic chemicals
30	Pharmaceutical products
31	Fertilizers
32	Tanning or dyeing extracts
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations
34	Soap, organic surface-active agents
35	Albuminoidal substances; modified starches; glues; enzymes
36	Explosives; pyrotechnic products; matches
37	Photographic or cinematographic goods

Annex table 1. (continued)

Code	Product chapter
38	Miscellaneous chemical products
39	Plastics and articles thereof
40	Rubber and articles thereof
41	Raw hides and skins (other than fur skins) and leather
42	Articles of leather; saddlery and harness
43	Fur skins and artificial fur; manufactures thereof
44	Wood and articles of wood; wood charcoal
45	Cork and articles of cork
46	Manufactures of straw, of esparto or of other plaiting materials
47	Pulp of wood or of other fibrous cellulose material
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans
50	Silk
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric
52	Cotton
53	Other vegetable textile fibres; paper yarn and woven fabric of paper yarn
54	Man-made filaments
55	Man-made staple fibres
56	Wadding, felt and non-wovens; special yarns, twine, cordage, ropes and cables and articles thereof
57	Carpets and other textile floor coverings
58	Special woven fabrics; tufted textile fabrics; lace, tapestries; trimmings; embroidery
59	Impregnated, coated, covered or laminated textile fabrics
60	Knitted or crocheted fabrics
61	Articles of apparel and clothing accessories, knitted or crocheted
62	Articles of apparel and clothing accessories, not knitted or crocheted
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags
64	Footwear, gaiters and the like; parts of such articles
65	Headgear and parts thereof
66	Umbrellas, sun umbrellas, walking sticks, seat sticks, whips, riding-crops
67	Prepared feathers and down and articles made of feathers or of down
68	Articles of stone, plaster, cement, asbestos, mica or similar materials
69	Ceramic products
70	Glass and glassware
71	Natural or cultured pearls, precious or semi-precious stones
72	Iron and steel

Annex table 1. (continued)

Code	Product chapter
73	Articles of iron or steel
74	Copper and articles thereof
75	Nickel and articles thereof
76	Aluminium and articles thereof
78	Lead and articles thereof
79	Zinc and articles thereof
80	Tin and articles thereof
81	Other base metals; cermet; articles thereof
82	Tools, implements, cutlery, spoons and forks, of base metal
83	Miscellaneous articles of base metal
84	Machinery and mechanical appliances; parts thereof
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles
86	Railway or tramway locomotives, rolling-stock and parts thereof
87	Vehicles other than railway or tramway rolling stock
88	Aircraft, spacecraft, and parts thereof
89	Ships, boats and floating structures
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof
91	Clocks and watches and parts thereof
92	Musical instruments; parts and accessories of such articles
93	Arms and ammunition; parts and accessories thereof
94	Furniture; bedding, mattresses, cushions and similar stuffed furnishing
95	Toys, games and sports requisites; parts and accessories thereof
96	Miscellaneous manufactured articles
97	Works of art, collectors' pieces and antiques
98	Project imports; laboratory chemicals; passengers' baggage personal importations by air or post; ship stores
99	Commodities not specified according to type

Source: United Nations COMTRADE database.

Annex table 2. Product section codes

Code	Name of product section
1	Live animals; animal products
2	Vegetable products
3	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes
4	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes
5	Mineral products
6	Products of the chemical or allied industries
7	Plastics and articles thereof; rubber and articles thereof
8	Raw hides and skins, leather, fur skins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)
9	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork
10	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard; paper and paperboard and articles thereof
11	Textiles and textile articles
12	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair
13	Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware
14	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coinage
15	Base metals and articles of base metal
16	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles
17	Vehicles, aircraft, vessels and associated transport equipment
18	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof
19	Arms and ammunition; parts and accessories thereof
20	Miscellaneous manufactured articles
21	Works of art, collectors' pieces and antiques
22	Other

Source: United Nations COMTRADE database.

Annex table 3. PIFC imports at the product chapter level, by country

Chapter code	Fiji 2012		Papua New Guinea 2012		Samoa 2012		Solomon Islands 2012		Tonga 2012		Vanuatu 2011	
	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)
1	1 821 330	0.08	1 431 041	0.02	114 564	0.03	7 906	0.00	39 256	0.02	122 108	0.04
2	30 202 434	1.34	143 320 506	1.72	26 402 957	7.64	7 944 565	1.61	19 986 221	10.03	5 820 643	2.07
3	133 651 756	5.93	15 700 186	0.19	950 593	0.28	395 090	0.08	537 428	0.27	644 635	0.23
4	38 261 998	1.70	38 440 041	0.46	8 469 898	2.45	3 490 607	0.71	4 609 200	2.31	4 643 544	1.65
5	146 193	0.01	948 473	0.01	33 772	0.01	3 748	0.00	67 754	0.03	38 922	0.01
6	17 092	0.00	102 360	0.00	15 699	0.00	1 527	0.00	19 838	0.01	12 894	0.00
7	26 537 131	1.18	9 336 204	0.11	2 827 045	0.82	1 347 537	0.27	702 088	0.35	2 055 764	0.73
8	7 787 944	0.35	9 785 262	0.12	751 366	0.22	551 633	0.11	427 451	0.21	910 445	0.32
9	6 854 063	0.30	12 002 023	0.14	862 130	0.25	3 772 235	0.76	369 727	0.19	631 255	0.22
10	80 899 533	3.59	287 773 339	3.45	5 791 019	1.68	45 445 019	9.21	524 718	0.26	10 867 549	3.87
11	4 953 034	0.22	16 515 721	0.20	6 047 965	1.75	1 832 928	0.37	3 967 960	1.99	4 885 022	1.74
12	4 601 437	0.20	9 644 407	0.12	103 728	0.03	192 193	0.04	201 480	0.10	276 060	0.10
13	293 515	0.01	904 354	0.01	21 717	0.01	34 556	0.01	473	0.00	19 296	0.01
14	13 838	0.00	634 766	0.01	1 020	0.00	19 206	0.00	465	0.00	976	0.00
15	34 880 994	1.55	53 048 996	0.64	2 945 515	0.85	2 539 567	0.51	1 044 051	0.52	2 064 572	0.74
16	18 080 535	0.80	42 904 423	0.51	8 248 420	2.39	4 957 372	1.00	5 477 870	2.75	7 136 792	2.54
17	15 333 342	0.68	25 366 361	0.30	5 328 826	1.54	7 078 073	1.43	2 403 940	1.21	3 008 098	1.07
18	4 106 387	0.18	4 035 241	0.05	307 302	0.09	513 280	0.10	451 240	0.23	1 116 886	0.40
19	9 960 672	0.44	48 546 067	0.58	9 156 078	2.65	9 715 298	1.97	6 063 235	3.04	8 584 437	3.06
20	13 650 820	0.61	45 864 590	0.55	1 529 215	0.44	1 688 249	0.34	1 136 089	0.57	2 342 320	0.83
21	15 289 352	0.68	57 863 087	0.69	4 853 721	1.40	2 922 923	0.59	2 631 437	1.32	3 157 858	1.13

Annex table 3. (continued)

Chapter code	Fiji 2012		Papua New Guinea 2012		Samoa 2012		Solomon Islands 2012		Tonga 2012		Vanuatu 2011	
	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)
22	16 158 693	0.72	55 131 052	0.66	3 098 751	0.9	4 924 168	1.00	5 048 335	2.53	7 441 569	2.65
23	11 700 031	0.52	36 177 896	0.43	1 230 704	0.36	2 378 178	0.48	862 100	0.43	1 178 543	0.42
24	1 876 234	0.08	9 705 678	0.12	69 845	0.02	4 322 804	0.88	1 510 567	0.76	3 594 878	1.28
25	11 939 265	0.53	53 360 973	0.64	5 315 643	1.54	4 905 214	0.99	2 251 672	1.13	4 322 922	1.54
26	11 738	0.00	959 421	0.01	767	0.00	5 511	0.00	10 002	0.01	2 544	0.00
27	687 599 686	30.52	1 449 897 999	17.38	79 770 583	23.09	133 175 052	26.99	47 390 494	23.79	51 169 458	18.23
28	8 381 138	0.37	97 692 871	1.17	925 949	0.27	3 778 540	0.77	159 104	0.08	512 694	0.18
29	5 663 473	0.25	16 967 643	0.20	239 075	0.07	436 277	0.09	115 459	0.06	266 856	0.10
30	29 766 696	1.32	65 632 750	0.79	3 310 235	0.96	4 972 138	1.01	1 936 938	0.97	17 668 151	6.30
31	11 917 966	0.53	50 074 003	0.60	58 919	0.02	3 363 417	0.68	519 083	0.26	74 723	0.03
32	9 672 433	0.43	35 375 638	0.42	2 255 260	0.65	2 776 828	0.56	1 326 827	0.67	3 118 492	1.11
33	24 873 756	1.10	17 672 217	0.21	3 181 753	0.92	1 883 076	0.38	1 426 960	0.72	3 064 929	1.09
34	12 029 020	0.53	27 733 379	0.33	4 843 708	1.40	3 366 886	0.68	1 067 014	0.54	1 675 330	0.60
35	4 665 501	0.21	11 633 358	0.14	490 386	0.14	560 140	0.11	183 639	0.09	433 974	0.15
36	6 018 690	0.27	10 957 468	0.13	126 531	0.04	3 455 384	0.70	120 572	0.06	115 749	0.04
37	2 737 625	0.12	12 864 586	0.15	633 396	0.18	86 487	0.02	83 590	0.04	377 222	0.13
38	16 469 179	0.73	61 222 118	0.73	1 335 898	0.39	1 682 667	0.34	1 470 715	0.74	543 697	0.19
39	75 054 355	3.33	167 319 646	2.01	12 820 385	3.71	15 441 497	3.13	4 117 247	2.07	6 666 514	2.38
40	25 409 867	1.13	151 741 593	1.82	2 930 632	0.85	6 316 392	1.28	938 974	0.47	2 435 338	0.87
41	1 435 291	0.06	15 908	0.00	6 753	0.00	3 763	0.00	2 304	0.00	801 133	0.29
42	4 531 610	0.20	9 212 333	0.11	175 588	0.05	817 888	0.17	401 627	0.20	1 546	0.00

Annex table 3. (continued)

Chapter code	Fiji 2012			Papua New Guinea 2012			Samoa 2012			Solomon Islands 2012			Tonga 2012			Vanuatu 2011		
	Value (US\$)	Share (%)	Share (%)	Value (US\$)	Share (%)	Share (%)	Value (US\$)	Share (%)	Share (%)	Value (US\$)	Share (%)	Share (%)	Value (US\$)	Share (%)	Share (%)	Value (US\$)	Share (%)	Share (%)
43	3 511	0.00	0.00	43 194	0.00	0.00	1 080	0.00	0.00	911	0.00	0.00	128	0.00	0.00	4 582 181	1.63	0.00
44	6 155 282	0.27	0.20	17 083 359	0.20	0.20	12 337 595	3.57	3.57	4 502 298	0.91	0.91	4 819 175	2.42	2.42	40 632	0.01	0.01
45	17 422	0.00	0.00	107 339	0.00	0.00	57 195	0.02	0.02	2 664	0.00	0.00	2 572	0.00	0.00	9 521	0.00	0.00
46	86 933	0.00	0.00	96 967	0.00	0.00	16 167	0.00	0.00	193 732	0.04	0.04	203 795	0.10	0.10	242	0.00	0.00
47	298	0.00	0.00	224 965	0.00	0.00	6 577 897	1.90	1.90	2 642	0.00	0.00	635	0.00	0.00	4 902 939	1.75	0.00
48	54 763 323	2.43	0.70	58 471 224	0.70	0.70	3 690 752	1.07	1.07	7 493 102	1.52	1.52	4 188 540	2.10	2.10	3 087 785	1.10	0.00
49	15 442 177	0.69	1.07	88 903 274	1.07	1.07	10 697	0.00	0.00	8 451 253	1.71	1.71	3 223 760	1.62	1.62	1 726	0.00	0.00
50	49 804	0.00	0.00	108 400	0.00	0.00	18 447	0.01	0.01	42	0.00	0.00	60 516	0.03	0.03	9 380	0.00	0.00
51	2 692 595	0.12	0.01	498 208	0.01	0.01	440 757	0.13	0.13	47 994	0.01	0.01	4 216	0.00	0.00	424 811	0.15	0.00
52	17 209 254	0.76	0.07	6 051 909	0.07	0.07	2 920	0.00	0.00	498 295	0.10	0.10	102 643	0.05	0.05	75 145	0.03	0.00
53	99 652	0.00	0.00	356 488	0.00	0.00	82 048	0.02	0.02	42 389	0.01	0.01	6 850	0.00	0.00	433 660	0.15	0.00
54	6 380 753	0.28	0.07	5 987 682	0.07	0.07	2 323 928	0.67	0.67	40 341	0.01	0.01	58 130	0.03	0.03	337 992	0.12	0.00
55	24 499 767	1.09	0.07	5 648 276	0.07	0.07	120 636	0.03	0.03	117 515	0.02	0.02	108 830	0.05	0.05	717 272	0.26	0.00
56	1 959 159	0.09	0.10	8 310 071	0.10	0.10	101 596	0.03	0.03	615 808	0.12	0.12	179 244	0.09	0.09	156 938	0.06	0.00
57	1 572 425	0.07	0.02	1 344 104	0.02	0.02	95 729	0.03	0.03	251 243	0.05	0.05	242 323	0.12	0.12	151 446	0.05	0.00
58	3 088 002	0.14	0.03	2 150 909	0.03	0.03	52 911	0.02	0.02	180 174	0.04	0.04	91 897	0.05	0.05	71 149	0.03	0.00
59	3 974 404	0.18	0.06	5 241 064	0.06	0.06	25 669	0.01	0.01	230 517	0.05	0.05	15 137	0.01	0.01	13 635	0.00	0.00
60	6 768 986	0.30	0.02	1 804 484	0.02	0.02	572 170	0.17	0.17	30 895	0.01	0.01	1 840	0.00	0.00	2 500 929	0.89	0.00
61	7 159 289	0.32	0.18	14 996 425	0.18	0.18	1 580 172	0.46	0.46	1 544 973	0.31	0.31	1 833 277	0.92	0.92	1 756 900	0.63	0.00
62	12 476 366	0.55	0.39	32 781 091	0.39	0.39	937 241	0.27	0.27	2 258 148	0.46	0.46	530 517	0.27	0.27	2 178 617	0.78	0.00
63	11 381 912	0.51	0.69	57 393 667	0.69	0.69	821 602	0.24	0.24	4 750 212	0.96	0.96	535 201	0.27	0.27	1 622 599	0.58	0.00

Annex table 3. (continued)

Chapter code	Fiji 2012		Papua New Guinea 2012		Samoa 2012		Solomon Islands 2012		Tonga 2012		Vanuatu 2011	
	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)
64	8 009 269	0.36	37 338 782	0.45	79 229	0.02	1 907 346	0.39	959 521	0.48	131 129	0.05
65	684 967	0.03	3 345 289	0.04	77 983	0.02	168 688	0.03	50 960	0.03	136 203	0.05
66	932 062	0.04	2 337 692	0.03	39 533	0.01	303 874	0.06	73 534	0.04	56 558	0.02
67	320 325	0.01	590 664	0.01	2 553 820	0.74	66 596	0.01	60 653	0.03	398 550	0.14
68	3 860 377	0.17	22 771 540	0.27	1 346 358	0.39	755 382	0.15	1 649 655	0.83	1 364 886	0.49
69	6 552 823	0.29	11 462 754	0.14	3 553 807	1.03	1 058 518	0.21	630 300	0.32	911 971	0.32
70	7 545 907	0.33	24 929 425	0.30	876 682	0.25	1 218 532	0.25	510 506	0.26	793 941	0.28
71	14 538 690	0.65	658 175	0.01	6 058 223	1.75	95 136	0.02	69 152	0.03	3 929 980	1.40
72	31 987 639	1.42	100 868 871	1.21	12 621 916	3.65	8 127 995	1.65	1 479 791	0.74	7 799 990	2.78
73	39 463 721	1.75	589 362 151	7.07	251 799	0.07	16 803 838	3.41	4 920 585	2.47	301 575	0.11
74	6 627 299	0.29	5 569 962	0.07	3 666	0.00	571 987	0.12	431 313	0.22	1 982	0.00
75	25 992	0.00	83 640	0.00	2 535 138	0.73	3 345	0.00	23 685	0.01	2 323 697	0.83
76	12 284 807	0.55	66 886 065	0.80	1 040	0.00	5 973 318	1.21	1 181 500	0.59	1 013	0.00
78	357 338	0.02	559 884	0.01	81 568	0.02	15 879	0.00	1 153	0.00	9 152	0.00
79	207 568	0.01	1 215 543	0.01	243 289	0.07	164 914	0.03	58 204	0.03	270	0.00
80	206 501	0.01	40 431	0.00	2 755	0.00	204 396	0.04	294	0.00	482	0.00
81	7 301	0.00	472 659	0.01	746 526	0.22	6 501	0.00	2 068	0.00	1 997 513	0.71
82	7 684 548	0.34	52 773 893	0.63	1 219 874	0.35	3 445 810	0.70	773 711	0.39	1 149 759	0.41
83	6 775 378	0.30	32 416 384	0.39	18 036 771	5.22	1 819 490	0.37	1 052 540	0.53	17 264 809	6.15
84	179 697 466	7.98	2 052 114 582	24.60	25 439 363	7.36	52 463 966	10.63	15 512 211	7.79	18 191 984	6.48
85	119 810 415	5.32	534 209 635	6.40	10 081	0.00	29 200 241	5.92	12 237 578	6.14	198 755	0.07

Annex table 3. (continued)

Chapter code	Fiji 2012		Papua New Guinea 2012		Samoa 2012		Solomon Islands 2012		Tonga 2012		Vanuatu 2011	
	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)	Value (US\$)	Share (%)
86	1 163 374	0.05	27 549 933	0.33	13 162 318	3.81	180 019	0.04	62 995	0.03	15 600 346	5.56
87	84 926 643	3.77	711 876 973	8.53	591 712	0.17	23 681 111	4.80	10 405 649	5.22	1 008 118	0.36
88	29 820 340	1.32	160 606 422	1.93	639 790	0.19	4 822 072	0.98	21 317	0.01	3 671 353	1.31
89	14 249 936	0.63	55 239 580	0.66	3 639 362	1.05	1 238 976	0.25	542 766	0.27	2 570 950	0.92
90	28 162 742	1.25	125 264 160	1.50	58 495	0.02	5 333 944	1.08	1 994 784	1.00	450 539	0.16
91	3 721 416	0.17	2 370 713	0.03	610 334	0.18	199 277	0.04	36 914	0.02	222 179	0.08
92	518 236	0.02	2 453 329	0.03	49 544	0.01	199 831	0.04	90 151	0.05	169 675	0.06
93	113 318	0.01	2 672 665	0.03	3 642 935	1.05	640 729	0.13	5 493	0.00	5 776 115	2.06
94	16 738 508	0.74	93 268 472	1.12	898 974	0.26	5 064 541	1.03	5 177 999	2.60	2 577 119	0.92
95	8 064 553	0.36	13 728 850	0.16	478 528	0.14	1 516 758	0.31	632 040	0.32	886 590	0.32
96	6 713 953	0.30	16 182 319	0.19	2 520	0.00	1 493 156	0.30	465 216	0.23	44 954	0.02
97	83 411	0.00	265 738	0.00	8 510 721	2.46	76 599	0.02	240 409	0.12	3 822 768	1.36
99	19 703 652	0.87	116 081 303	1.39		0.00	218 709	0.04	439	0.00		0.00
All	2 252 597 636		8 340 687 556		345 515 174		493 402 441		199 169 456		280 646 742	

Sources: United Nations COMTRADE database and authors' calculation.