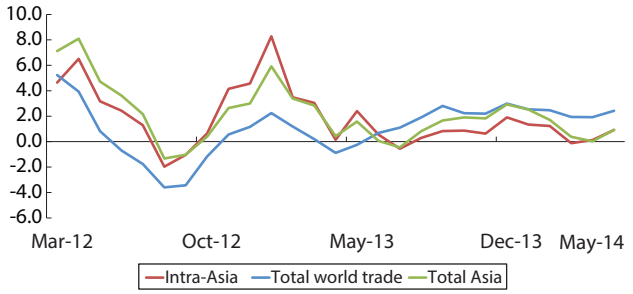
Update on Trade Integration

Asia's trade integration, after reaching high levels during the 2000s, has stabilized despite weaker intermediate goods trade, a growing shift in Japanese production to the region, and rising trade impediments. However, trade volume growth in emerging markets and developing economies is expected to slow in 2014 to 4.4%, down from 6.0% in 2012 and 5.3% in 2013.[14]

Growth in intraregional trade has stabilized.

Asia is not immune to the slowdown in global trade. In Asia (including Japan), trade growth has been moderate over the past 12 months. But Asia's trade—including growth of intraregional trade—fell below global trade growth in June 2013 and has remained there since **(Figure 3)**. Asia's trade barely grew in March and April this year before recovering somewhat in the second quarter. Asia's trade volume showed the same trend—with intraregional trade contracting 0.5% (y-o-y) in March 2014 from 3.4% in February 2014.[15] While intraregional trade has declined, intraregional foreign direct investment (FDI) has remained steady, with Japan's share in investment flows increasing **(Box 1)**. The declining growth of intraregional trade may be due to rising trade impediments **(Box 2)**.

Figure 3: Total trade growth—Asia (y-o-y, %)



Note: Growth rates are computed from the 3-month moving average of total trade.
Source: ADB calculation using data from *Direction of Trade Statistics,* International Monetary Fund.

Unilateral reform is needed to reap long-term benefits from the WTO Agreement on Trade Facilitation.

It is time Asian economies push trade facilitation reform to sustain their long-term trade growth. The protocol to insert the Agreement on Trade Facilitation (ATF) agreed at the Bali Ministerial Conference in December 2013 into Annex 1A of the World Trade Organization (WTO) Agreement was supposed to be adopted by 31 July 2014. Unfortunately, the deadline passed. Nonetheless, it remains possible for governments to "early harvest" the ATF, irrespective of the progress of international negotiations. Ultimately, trade facilitation can come from unilateral action or policies that reduce artificial trade barriers. The ATF should be regarded as a useful guide for reforms rather than an agreement with huge economic and legal impact.

Trade integration in Asia was unchanged in 2013, both by intraregional share and intensity; recent data show this has continued.

Although Asia's total trade growth rose during the first half of 2013, it reversed during the second half. Its trade shares, on the other hand, remained at 55% in 2012–2013. It stayed at that level for the first 5 months of 2014, even as intraregional trade growth

[14]Figures represent total import growth. Export growth in emerging markets and developing economies has slowed, but not as severely—4.6% (2012); 4.4% (2013); 3.9% (2014, forecast). See International Monetary Fund (IMF): *World Economic Outlook October 2014.*

[15]Trade volume is computed by selecting a base year value (Jan 2005) and estimating the trade value series using the growth rates from Central Planning Bureau (CPB) world trade monitor. Volume growth sales are computed from the y-o-y% change in trade volume index. Asia includes Bangladesh, Cambodia; the PRC; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Lao PDR; Malaysia; Pakistan; the Philippines; Singapore; Sri Lanka; Taipei,China; Thailand; and Viet Nam.

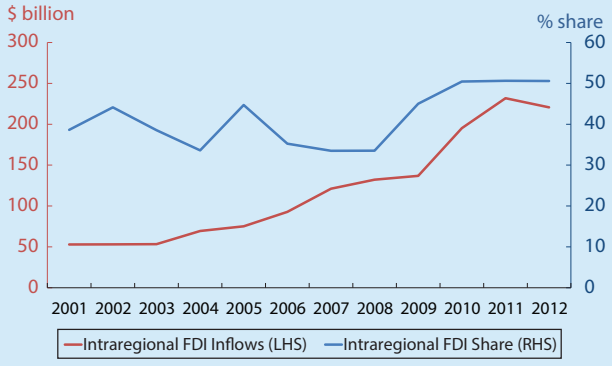
Box 1: Intraregional Foreign Direct Investment to Asia

Global foreign direct investment (FDI) inflows increased from $1.3 trillion in 2012 to $1.5 trillion in 2013, with about 30% going to Asia—from $439 billion in 2012 to $449 billion in 2013. Three-fourths of Asia's FDI inflows went to East Asia ($221.1 billion, or 49.2%) and Association of Southeast Asian Nations (ASEAN) ($125.4 billion, or 27.9%). The People's Republic of China (PRC)—including Hong Kong, China—took in 91% of East Asia's FDI, while Singapore, Indonesia, Thailand, Malaysia, and Viet Nam absorbed 92.8% of FDI going into Southeast Asia. India, Australia, and Kazakhstan received the majority of FDI going to the rest of region.

There were massive increases in average FDI inflows comparing 2001–2005 and 2011–2013 across Asian subregions. In East and Southeast Asia, the PRC (including Hong Kong, China), Indonesia, Malaysia, Singapore, and Thailand saw between two- and six-fold increases in FDI, while "frontier" economies like Cambodia, the Lao People's Democratic Republic, Myanmar, Mongolia, and Viet Nam saw much higher multiples. In Central Asia, FDI inflows increased markedly in Kazakhstan, the Kyrgyz Republic, Turkmenistan, and Uzbekistan. In South Asia, India's FDI inflows grew five-fold, while the Maldives and Nepal also experienced significant increases. Nonetheless, FDI growth in South Asia has been lower compared with other Asian subregions. In the Pacific and Oceania, FDI heading toward Australia also grew six-fold, while the remainder flowed into Papua New Guinea and Fiji. FDI flowing into other Pacific island economies remains patchy and sporadic.

Asia's intraregional FDI declined in 2012 to $221 billion from $232 billion in 2011, but remains about half of the total **(Box figure)**, with the remainder mostly sourced from the European Union and the United States. Hong Kong, China consistently ranks as top Asian investor (31.2% of intraregional FDI in 2012)—though the bulk of its investment goes to and from the PRC. Japan is the second largest Asian investor, contributing 22% in 2012, well above the 15.7% average share in 2007–2011. In contrast, the share of FDI flowing out of the PRC (excluding Hong Kong, China) declined to 19.1% in 2012 from an average 21.9% during 2007–2011. In 2012, FDI share from Hong Kong, China also declined—to 31.2% from 33.1%—while Singapore's share slid to 12.7% from 13.4%. The rest of Asian intraregional FDI in 2012 came from the Republic of Korea (2.9%), Australia (2.7%), Malaysia (2.0%), Indonesia (1.5%), and India (1.4%). The top five recipients of intraregional FDI in 2012 were the PRC (39.6%); Hong Kong, China (15%); Australia (7.9%); Indonesia (7.9%); and Singapore (7.7%). As the more industrialized Asian economies expand their search for lower-cost labor and higher local consumer demand, neighboring economies tend to benefit from FDI inflows. This will likely expand further with progress in inter-connectivity and integration generally across the Asian region.

Intraregional FDI Inflows—Asia



FDI = foreign direct investment, LHS = left-hand scale, RHS = right-hand scale.
Note: Asia includes 48 ADB member economies. Missing 2012 data were estimated using actual value from previous period.
Source: ADB calculations using data available from ASEAN Investment Statistics Database and UNCTAD Bilateral FDI Statistics.

Asian integration plays a key role in attracting FDI flows into the region, both from outside and intraregionally. This could prove a virtuous cycle. Moreover, should regional trade deals like the Regional Comprehensive Economic Partnership and the Trans-Pacific Partnership come to fruition, the potential to boost trade and investment across the region and globally will rise further.

In fact, by deliberate policy, intraregional FDI from Japan, the Republic of Korea, and the PRC has been increasing steadily over the years—particularly to ASEAN. Many target local or regional markets. The increase in Japanese FDI in ASEAN is notable. Their growing middle class and purchasing power makes the ASEAN market attractive. As a result, goods and products produced by Japanese firms operating in ASEAN are increasingly shipped directly from Japanese factories operating in ASEAN. This explains why the declining share of Japan in ASEAN's total trade does not reflect any drop in integration (see Figure 2). Since the PRC's accession to World Trade Organization in early 2000, trade between the PRC and ASEAN has increased dramatically, and the Republic of Korea-ASEAN trade has increased steadily as well, though slower. FDI from the PRC and the Republic of Korea has also increased. The combination of rising labor and other domestic costs (supply factors) and large populations with rising income (demand factors) are behind these trends. Thus, Asia's integration continues to be particularly strong in trade and investment. This will likely expand further as interconnectivity and integration deepens across Asia.

Box 2: **The Resurgence of Trade Impediments**

Many economies reacted to the 2008/09 global financial crisis (GFC) by implementing trade impediments—categorized as "red" measures by the Global Trade Alert (GTA), either "conventional" or "unconventional" **(Box table 1)**.[1]

Well-disguised, these measures did not fall under the World Trade Organization's (WTO) legal structure or were not sanctioned even if they distort comparative advantage.[2] Since they are unregulated, no redress is possible and they proliferate rapidly.[3] So far, their effects have been difficult to gauge.[4]

In 2009/10, the GTA published 414 "red" measures implemented by all economies **(Box figure)**. That nearly doubled in 2013/14. While "amber" and "green" measures also increased, they were insufficient to counter the protectionist sentiment.[5] In fact, over 75% of the measures set in 2009 have yet to lapse or unwind.[6]

Economies continue to find ways to restrict trade for idiosyncratic advantage. For example, large economies employ trade impediments to maintain favorable terms of trade at the expense of their trading partners, while small economies often succumb to strong business lobbies. In these cases, short-term political benefits are seen to outweigh the costs of trade impediments.[7] Underlying all these is a fear of global competition.

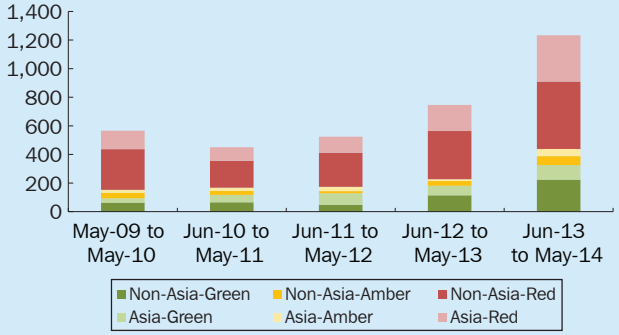
In late 2008, G20 leaders said they would "...refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing

1: Types of Trade Measures

Conventional	Unconventional
Consumption subsidy	Bail out / state aid measure
Export subsidy	Competitive devaluation
Export taxes or restriction	Intellectual property protection
Import ban	Investment measure
Import subsidy	Local content requirement
Quota (including tariff rate quotas)	Migration measure
Tariff measure	Non tariff barrier (not otherwise specified)
Trade defence measure (AD, CVD, safeguard)	Other service sector measure
	Public procurement
	Sanitary and phytosanitary measure
	State trading enterprise
	State-controlled company
	Sub-national government measure
	Technical barrier to trade
	Trade finance

AD = Antidumping; CVD = Countervailing Duty.
Source: ADB classification using Global Trade Alert.

Number of Trade-related Measures Implemented



Notes: **Green**—(i) found (upon investigation) not to be discriminatory, OR (ii) involves no further discrimination and improves transparency of a jurisdiction's trade-related policies. **Amber**—may discriminate against foreign commercial interests. **Red**—almost certainly discriminates against foreign commercial interests. Only implemented measures are included.
Source: ADB calculations using data from *Global Trade Alert*.

[1]The GTA defines red measures as measures that "almost certainly [discriminate] against foreign commercial interests".

[2]S. Evenett. *What Restraint? Five years of G20 Pledges on Trade, The 14th GTA Report*. p. 2. http://www.globaltradealert.org/sites/default/files/GTA14_0.pdf

[3]Ibid.

[4]Ibid, p. 3; "Initial assessments of recent government policies toward cross-border commerce underestimate the true extent of state intervention."

[5]GTA defines "amber" measures as those "implemented and may involve discrimination against foreign commercial interests". It defines "green" measures as those that (i) "[are] found (upon investigation) not to be discriminatory; or (ii) "[involve] no further investigation and [improve] the transparency of a jurisdiction's trade-related policies" While GTA tallies both implemented and planned, here we focus on implemented measures only.

[6]Evenett, op. cit., p.10.

[7]C. Bown. 2014. Trade Policy Instruments over Time. *The World Bank Policy Research Working Paper*. 6757. pp. 11–12.

WTO inconsistent measures to stimulate exports."[8] However, since this pledge, the G20 has only managed to implement measures skewed toward the GTA's "red" measures. In fact, the BRICS, the European Union, Japan and the US cover 60% of all G20 trade impediments implemented from 2009 to present.[9, 10] Still, of the 2,362 "red" measures implemented from May 2009 to May 2014, 840 (36%) were in Asia.

There are 1,481, or 62.7% of implemented "red" measures, affecting Asia. The impact, however, is much greater. A single red measure largely affects four economies on average. The impact on Asia was thus substantial. The People's Republic of China (PRC) was the most frequent target, while India imposed the largest number of measures **(Box table 2)**. Many "red" measures implemented by India were of the trade finance type.

One study examines were the impact of trade impediments on exports from Japan.[11] It finds that trade impediments lead to (i) retaliation from economies harmed and (ii) incentives for increasingly targeting the domestic market.

Other studies also attempt to explore the nexus between trade and harmful trade measures. Lin et al. discussed the link between antidumping petitions and exports from the PRC during the GFC, concluding that an increase in export volume leads to an increase in antidumping petitions directed at the PRC.[12] Eaton et al examined why global trade collapsed after the crisis, concluding that a drop in global demand for durables was responsible, and trade impediments contributed to the decline in trade in Japan and the PRC.[13]

2: Top Source and Most Affected Economy

Implementing economy	Number of Measures	Affected economy	Number of Measures
India[1]	271	PRC	1,121
PRC[2]	85	Republic of Korea	549
Indonesia[3]	78	Japan	499
Japan[4]	67	India	483
Australia	55	Thailand	462

PRC = People's Republic of China.
[1]270 red measures from India; one co-implemented by India and Nepal.
[2]84 red measures from PRC; one co-implemented by PRC and Croatia.
[3]76 red measures from Indonesia; one co-implemented by Indonesia and Japan; one co-implemented by Indonesia, Malaysia, and Thailand.
[4]65 red measures from Japan; one co-implemented by Japan and Indonesia; one co-implemented by Japan and the US.
Source: ADB calculations using data from *Global Trade Alert*.

One way to determine the link between trade impediments and trade in Asia is to examine how "red" measures are correlated with export growth. Using monthly export data from June 2009 to May 2014,the correlation between the number of "red" measures and Asia's export growth carries a coefficient of -0.28 at a 5% significance level. [14] This supports the notion that "red" measures are indeed inversely correlated with export growth.
The causation direction of export growth and "red" measures can be determined using a Granger causality test on the same dataset. The results indicate that export growth Granger-causes "red"measures, with a lag time of one period at a 5% level of significance.

This is consistent with Lin et al's study which found export growth resulted in an increase of antidumping petitions against the PRC, and not the other way around. This may also help explain why the PRC had the most "red" measures thrown its way—more than 1,000 "red" measures since 2009. PRC export growth rose as high as 48% in 2010.

[8]Declaration—Summit on Financial Markets and the World Economy. 15 November 2008. p. 4. https://www.g20.org/sites/default/files/g20_resources/library/Washington_Declaration_0.pdf

[9]Brazil, Russia, India, the People's Republic of China, and South Africa.

[10]Evenett. op. cit., p. 8.

[11]A. Shingal. The Impact of Cross-Border Discrimination on Japanese Exports: A Sectoral Analysis. In S. Evenett, ed. *The Unrelenting Pressure of Protectionism: The 3rd GTA Report.*

[12]F. Lin, H.C. Tang, and L. Wang. 2014. The Nexus Between Antidumping Petitions and Exports During the Global Financial Crisis: Evidence on the People's Republic of China. *ADB Working Paper Series on Regional Economic Integration.* No. 131. Manila: Asian Development Bank.

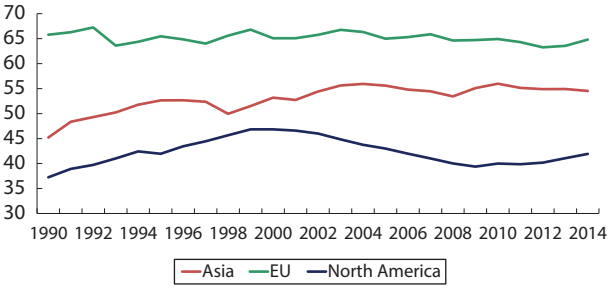
[13]J. Eaton et al. Trade and Global Recession. *NBER Working Paper Series.* 16666. Cambridge: NBER.

[14]Data for Taipei,China and Timor-Leste were obtained from IMF *International Financial Statistics*. Data for Japan and other developing Asia were obtained from IMF *Direction of Trade Statistics.*

fell below Asia's overall trade growth **(Figure 4)**. The flattening of intraregional trade flows are partly related to rising intraregional FDI (see Box 1). The slowdown in intraregional trade growth can be attributed to the declining share of intraregional trade in intermediate and capital goods. By contrast, intraregional trade share in primary goods continues to increase, while that of consumption goods remains steady.

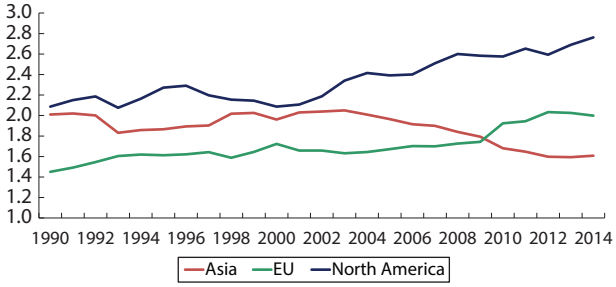
Asia's intraregional trade intensity (1.6) also did not vary much in the first 5 months of 2014 compared with 2013 **(Figure 5)**. However, from 2004–2013 intraregional intensity declined reflecting faster growth of the People's Republic of China (PRC's) global trade relative to Asia; altough this, too, has leveled off. Since 2009, Asia's trade intensity dipped below North America and Europe, consistent with Asia's increasing role as global factory since the global financial crisis (GFC) **(Figure 6)**. More importantly, Asia's trade intensity outside the region is below 1 suggesting weak extra-regional trade links.[16]

Figure 4: Intraregional Trade Shares—Asia, EU, North America (%)



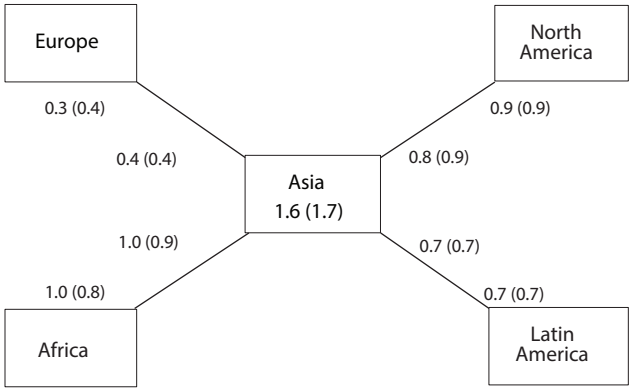
EU=European Union.
Note: EU refers to the aggregate of the 27 EU members. North America covers Canada, Mexico, and the United States. Intraregional trade shares are calculated as $100\cdot((X_{ii}+M_{ii})/(X_{iw}+M_{iw}))$, where $X_{ii}+M_{ii}$ refers to region *i*'s total intraregional trade and $X_{iw}+M_{iw}$ refers to region *i*'s total trade with world.
Source: ADB calculation using data from *Direction of Trade Statistics, International Monetary Fund.*

Figure 5: Intraregional trade intensity—Asia, EU, North America (%)



EU=European Union.
Note: EU refers to the aggregate of the 27 EU members. North America covers Canada, Mexico, and the United States.. Intraregional trade intensity is calculated as $((X_{ii}+M_{ii})/(X_{iw}+M_{iw}))/((X_{iw}+M_{iw})/(X_{ww}+M_{ww}))$, where $X_{ii}+M_{ii}$ refers to region *i*'s total intraregional trade, $X_{iw}+M_{iw}$ refers to region *i*'s total trade with world, and $X_{ww}+M_{ww}$ refers to total world trade. An index higher than 1 indicates higher intraregional trade bias relative to the region's world trade.
Source: ADB calculation using data from *Direction of Trade Statistics,* International Monetary Fund.

Figure 6: Asia's Trade Links in 2013 and 2010



Note: Numbers in parentheses indicate trade intensity for 2010. Trade intensity (or trade bias) is the ratio of the trading partner *j*'s share to a country/region *i*, and the share of world trade with the same trading partner. It is calculated as $(T_{ij}/T_i)/(T_j/T_w)$, where T_{ij} is the dollar value of total trade of *i* with *j*; T_i is the dollar value of total trade of *i* with world; T_j dollar value of total trade of *j* with world; and T_w total world trade.
Source: ADB calculation using data from *Direction of Trade Statistics,* International Monetary Fund.

[16]When the indicator is 1, the level of intensity is neutral.

Subregional trade links are key to understanding trade integration in Asia. East Asia's trade is well-connected with the rest of Asia.

East Asia's intra-subregional intensity is 1.5—almost the same as for Asia as a whole **(Appendix 2)**.[17] This implies that Asia's intraregional trade intensity is largely influenced by East Asia, which includes Asia's two largest traders—the PRC and Japan. East Asia's trade is well linked to other subregions. It is interesting that the linkage between East and South Asia is low. East Asia's external trade intensity is neutral except for its link with Europe.[18]

Intra-subregional trade integration in Southeast Asia is extremely high.

Southeast Asia holds a high degree of intra-subregional intensity (3.5), far above those of East and South Asia. This bodes well for the ASEAN Economic Community (AEC). Its trade is well-linked to other subregions (trade intensity with the rest of Asia is 1.6–1.7). Southeast Asia's trade is well-linked with both East and South Asia. However, as a result, Southeast Asia's trade linkage outside Asia is relatively weak.

South Asia's trade link with the rest of Asia is relatively low; that with East Asia is particularly weak.

South Asia's inter-subregional trade share and intensity has been declining, suggesting the region remains relatively isolated from the rest of Asia. This implies that Asia's regional value chains have not fully developed in South Asia; even as India works to intensify trade with East and Southeast Asia to join its production network. In contrast, South Asia's trade links with Africa are strong, primarily due to India's close economic and cultural ties to specific African economies—particularly in East Africa. Trade with other African countries has been increasing as well. But its trade links with Europe, North America, and Latin America remain weak.[19]

Over time, Central Asia and the Pacific have increased trade links with the rest of Asia.

Central Asia's intra-subregional intensity is high, but has declined over the past decade. Its inter-subregional trade intensity with the rest of Asia is low but rising; consistent with its increasing trade shares with other subregions, particularly with East Asia. Trade with Europe has also been rising.[20]

Similarly, intra-subregional intensity of the Pacific and Oceania is high but has been declining over time. Its inter-subregional trade intensity with the rest of Asia is also stable; suggesting that trade links between Pacific and Oceania and Asia remain strong. This is consistent with the rising trade share of Pacific and Oceania with Asia; particularly Southeast Asia (see *Macroeconomic Interdependence between the Pacific Developing Member Countries and Asia*, page 34).

In summary, trade integration in Asia is high and remains stable, despite Asia's slowing trade growth. Regional trade has benefitted from the strong linkages across subregions.

For instance, trade to the rest of Asia from Central Asia, South Asia, and the Pacific has been expanding. This reflects the expanding regional production network in Asia. The rebalancing of domestic demand has also supported the expansion

[17]The first diagram in Appendix 2 ("Between Subregions") describes the level of trade integration within each subregion and trade linkages between subregions (Asia's intra- and inter-subregional trade links). Subsequent diagrams describe each Asian subregion's trade links outside Asia.

[18]The low intensity with Europe is a common feature of all Asian subregions, except Central Asia.

[19]An African Development Bank report suggests that India's duty-free tariff preferential schemes for developing economies—announced in 2008—have had positive impact on India-Africa trade. See AfDB. 2011. India's Economic Engagement with Africa. *Africa Economic Brief.* 2(6).

[20]However, the intensity between the Caucasus economies and East Asia is very low (below 0.5), while the intensity between Central Asia (such as Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan) and East Asia is high (slightly higher than 1). See ADB. 2014. *Asian Economic Integration Monitor April 2014*. Manila.

of intraregional trade in primary goods, while consumer goods trade in the region stabilized. Going forward, strong regional demand and the arrival of the AEC can further strengthen regional cooperation, although some subregions will remain more connected to Asia than others.

Cooperation on Trade Policy: Asia's FTAs

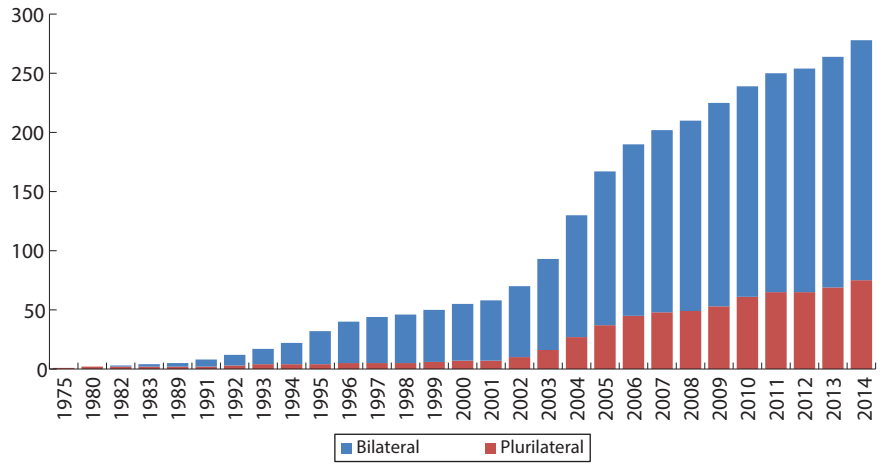
Since 2000, the number of free trade agreements (FTAs) involving at least one Asian economy has increased by an average of 15 each year.

From 55 FTAs in 2000, there were 278 as of July 2014. Of these, 144 have been signed, 119 are in effect; 69 are being negotiated, and 65 have been proposed. Close to three-quarters are bilateral FTAs, while 75 are plurilateral (involving more than two economies) **(Figure 7)**. Within Asia, FTAs involving ASEAN+6 economies—the 10 ASEAN members plus Australia, the PRC, India, Japan, the Republic of Korea, and New Zealand—increased at an even faster rate than Asia's FTAs. They have grown more than 10-fold from 17 in 2000 to 200 as of July 2014. To date, ASEAN+6 economies account for 72% of Asia's FTAs **(Figure 8)**.

The vast majority (141) of ASEAN+6 FTAs are also bilateral. Only one-third (43) of these involves two ASEAN+6 economies; the rest are with economies outside the group; 73 FTAs involve an ASEAN+6 economy and a trading partner outside Asia. The growing importance of non-Asian trading partners is mirrored in the membership of plurilateral FTAs.

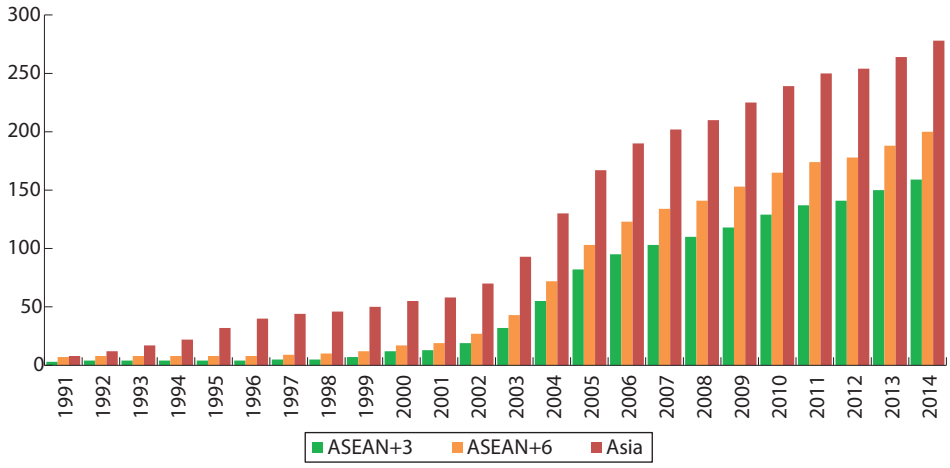
Singapore, India, and the large economies of East Asia—the PRC, Japan, and the Republic of Korea—continue to lead in new FTAs **(Figure 9)**. Expanding FTA work in key Southeast Asian economies—Thailand, Malaysia, and Indonesia—have also contributed to the rise. As of July 2014, Singapore had the most number with 40 FTAs, of which 21 are currently in effect. India came in second with a total of 37 FTAs (13 in effect), followed by the Republic of Korea with 33 FTAs (10 in effect). Timor-Leste is the only developing Asian economy without an FTA.

Figure 7: FTAs by Scope—Asia (cumulative, selected years)



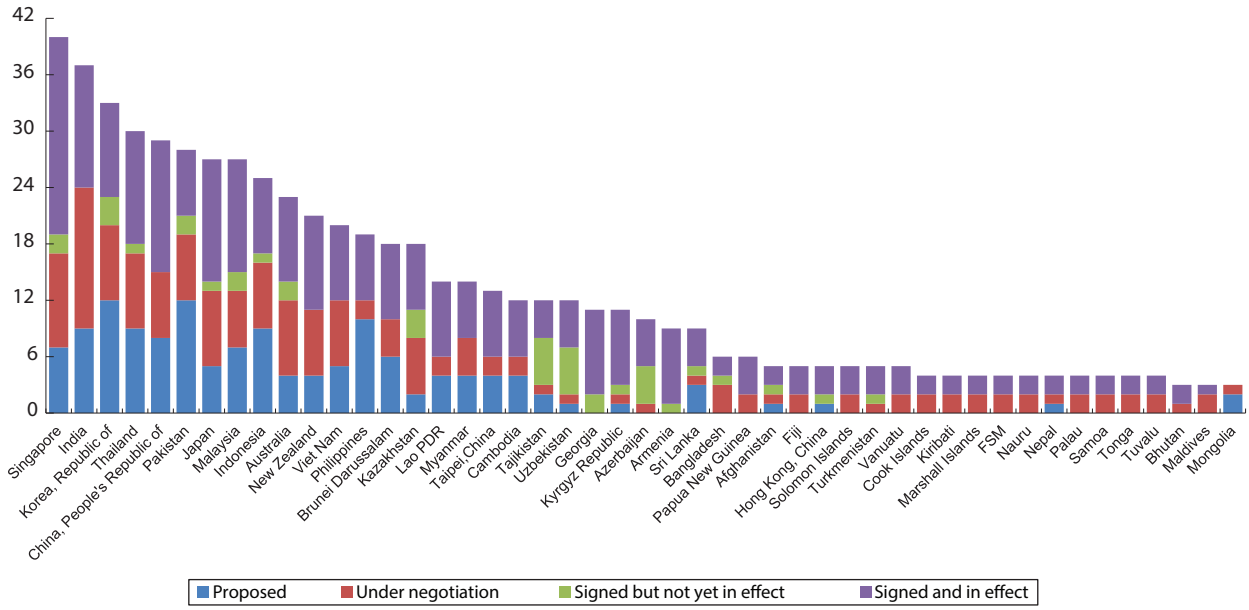
FTA= free trade agreement.
Notes: **Bilateral** refers to a preferential trading arrangement involving only two parties. **Plurilateral** refers to a preferential trading arrangement involving more than two parties. Data as of July 2014.
Source: *Asia Regional Integration Center FTA Database,* ADB.

Figure 8: FTAs—Asia, ASEAN+3, and ASEAN+6 (cumulative, selected years)



ASEAN+3 = ASEAN plus the People's Republic of China, Japan, and the Republic of Korea; ASEAN+6 = ASEAN plus Australia, the People's Republic of China, India, Japan, the Republic of Korea, and New Zealand; FTA= free trade agreement.
Note: Data as of July 2014.
Source: *Asia Regional Integration Center FTA Database,* ADB.

Figure 9: FTAs by Economy—Asia (2014)



FSM = Federated States of Micronesia; FTA = free trade agreement; Lao PDR = Lao People's Democratic Republic.
Notes: **Proposed** = the parties consider an FTA; governments or relevant ministries issue a joint statement on its desirability or establish a joint study group/joint task force to conduct feasibility studies. **Under negotiation** = the parties, through relevant ministries, negotiate the contents of a framework agreement that serves as a framework for future negotiations, or declare the official launch of negotiations, or start the first round of negotiations. **Signed but not yet in effect** = the parties sign the agreement after negotiations have been completed, but the agreement has yet to become effective. **Signed and in effect** = FTA provisions become effective, after legislative or executive ratification. Data as of July 2014.
Source: *Asia Regional Integration Center FTA Database,* ADB.

Against the backdrop of proliferating bilateral FTAs, "mega-regional" FTAs could help consolidate bilateral FTAs, any early agreement remains remote. For now, unilaterally multilateralizing preferences can address multiple rules of origin, maximize trade creation, and eliminate trade diversion.

Examples of "mega-regional" FTAs being pursued in the region include the Regional Comprehensive Economic Partnership (RCEP) involving ASEAN+6 economies, and the Trans-Pacific Partnership (TPP) involving 12 Asia-Pacific nations. In addition to these, a Trans-Atlantic Trade and Investment Partnership involving the US and the EU, and a Japan-EU FTA are also on the table. The rise of mega-regionals suggests that the world trading system is morphing into more of a "jigsaw puzzle" than the traditional "spaghetti bowl" of tangled bilateral FTAs.

"Mega-regional" agreements carry the potential of consolidating many bilateral FTAs as well as pushing forward with an ambitious trade reform agenda. However, negotiations are much more difficult such that the prospects for either the TPP or RCEP being concluded anytime soon remain remote.
After TPP trade negotiators spent more than a week in Viet Nam for their 21st official meeting, the signs are the talks did not break any new ground. The meeting was part of a final push to reach agreement in time for US President Barrack Obama's visit to Asia for APEC's Beijing Summit in November. Without "fast-track" assurance from the US to get the agreement through its legislature, it is unlikely other members will sign on. Rather, the Republic of Korea will likely announce it will join negotiations—a far cry from announcing the TPP's completion. This would set the scene for another long delay. Indeed, both Australia and New Zealand trade ministers have said publicly a conclusion in 2014 is highly unlikely.[21]

The RCEP does not seem to be doing any better. The five rounds of negotiations so far have shown little progress—even as its self-imposed 31 December 2015 deadline edges closer. The Joint Media Statement following the 2nd RCEP Ministerial meeting in Myanmar in August 2014 did not provide any details relating to progress, except to say that they "remain optimistic".

Several experts stress that should these "mega-regionals" be concluded anytime soon, even in a compromised form, any breakthrough should be multilateralized—extended to nonmembers in a nondiscriminatory manner. If negotiations drag on with little to show, economies might very well take matters into their own hands—as they always have before. Short of resurrecting the WTO Doha Round, unilaterally multilateralizing preferences is the only way to salvage something from the process.

By multilateralizing the many FTA accords, economies would do away with having to administer multiple rules-of-origin. They can maximize trade creation and eliminate trade diversion, enhancing welfare in the process.

Among TPP members, for instance, two-thirds of their imports—80% if the US is excluded—are already covered or about to be covered by FTAs. Within RCEP, more than one-third of imports are already covered with another one-third about to be through ongoing negotiations.[22] Therefore, expanding preferences to remaining economies would not encounter much resistance from FTA partners—not just because trade volumes are small, but also because existing preferences have already been significantly eroded.

[21] J. Menon. 2014. TPPing Over? *VoxEU*. 1 July.

[22] J. Menon. Forthcoming. From Spaghetti Bowl to Jigsaw Puzzle? Fixing the Mess in Regional and Global Trade. *Journal of the Asia and the Pacific Policy Studies.*

Update on Financial Integration

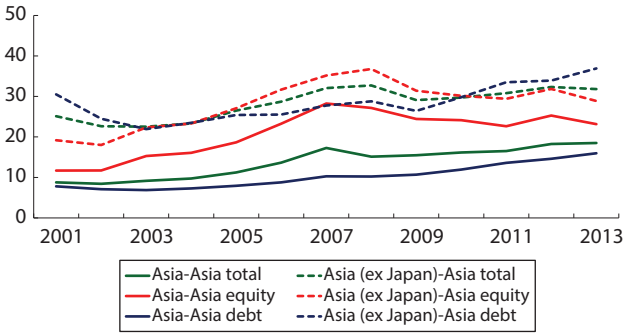
The share of Asian intraregional portfolio investments was up marginally in 2013; portfolio investment activity was relatively more timid, with investors preferring to hold more of the region's debt but less of its equities.

In 2013, total intraregional portfolio investments marginally rose to 18.5% from 18.3% the previous year, with regional investors preferring to hold more debt instruments. The so-called "taper tantrum" that hit Asian markets beginning in May 2013 pushed Asian investors to tweak their portfolio composition—intraregional debt rose from 14.6% to 16% of total debt holdings while intraregional equity holdings fell from 25.3% to 23.2% **(Figure 10)**.

In terms of growth, outstanding intraregional investments grew only 4.6% in 2013, a sharp contrast to the 23.3% growth in the previous year. Still, the slowdown is broad-based. Asia's total cross-border investments—within and outside the region—grew a mere 3.2% from 11.6% in 2013. With the ensuing market overreaction from the "taper tantrum" that drove equity prices down in the region, investors seemed to prefer to hold non-Asian equities (e.g. US and European equities). Intraregional equity holdings grew only 0.4%, compared to 12.7% growth in non-Asian equity holdings.[23] By contrast, debt appeared to be the regional instrument of choice for Asian investors as uncertainties heighten. Data show that intraregional debt holdings grew 9.1%, while non-Asian debt holdings contracted 2%.[24]

This trend has several implications. First, it demonstrates the relative openness of Asian financial markets. Second, it points to the need to harmonize the regional market to enhance intraregional flows, strengthen the domestic investor base, streamline regulations and augment market liquidity. More specifically, numerous initiatives aim to deepen domestic financial markets, gradually liberalize financial regulations, increase information sharing, and foster greater access—through more efficient platforms and market-friendly institutions.[25] Moreover, developing Asia's local currency bond markets has been a priority over the past decade, to better channel domestic savings into long-term investment; improving market efficiency and liquidity can be helped by reestablishing securitization markets, fostering financial literacy, and facilitating greater cross-border bond transactions, among others.

Figure 10: Portfolio Holdings—Asia (% share)



Notes: The data refer to the reporter economy's cross-border holdings of portfolio securities owned by the partner economy as a share of the reporter economy's total cross-border portfolio securities holdings. The data DO NOT include reporting economy's holdings of securities issued by domestic issuers. Reporting economies subsumed under Asia includes Australia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; New Zealand; the Republic of Korea; Malaysia; Pakistan; the Philippines; Singapore; Thailand; and Vanuatu. Partner economies subsumed under Asia include all ADB member economies.
Source: Asia Regional Integration Center, ADB based on data from *Coordinated Portfolio Investment Survey,* International Monetary Fund. Accessed 24 September 2014.

[23] During the period, Asians' investments in US equities grew by 14.4% while their investments in eurozone securities grew by 15.1%.

[24] Within the region, Asians are largely attracted to PRC securities, which now account for over 43% of the Asia's intraregional equity portfolio—a percentage lower than last year but a huge leap from just roughly 14.7% in 2001—and 31% of the region's intraregional debt holdings, which is almost 12 percentage points higher than in 2012 and about 7 times its share in 2001.

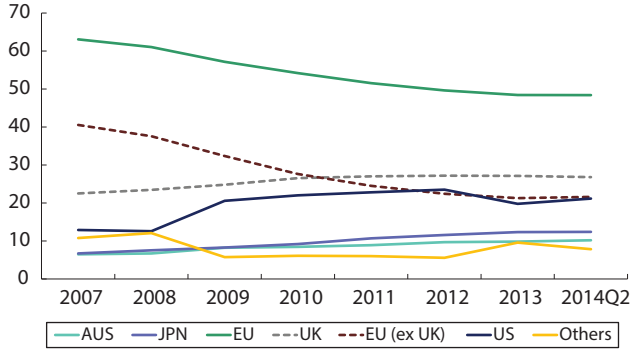
[25] From 2004-2013, stock market capitalization ballooned by a factor of 9 in the PRC, by a factor of 4 in ASEAN-4 (Indonesia, Malaysia, the Philippines, and Thailand) and by a factor of 3 in newly industrialized economies (Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China). Outstanding local and foreign currency bonds also rose by a factor of 8 in the PRC and by a factor of 3 in NIEs and ASEAN-4.

Outstanding credit from Australian and Japanese banks continues to rise steadily—underpinned by Asia's resilient growth—along with more erratic lending growth from European and US banks.

Combined credit flows to Asia from the two rose above $66 billion in the first half of 2014 while their combined share in the outstanding foreign claims in Asia rose to 22.6% in 2014Q2 from 22.2% in 2013 **(Figure 11)**. By end of 2014Q2, Asia's share in Australia and Japan's cross-border lending reached 59.1% (56.8% in 2013) and 17.0% (16.5% in 2013), respectively. Japanese bank lending was strong in East and Southeast Asia since the start of the year, while Australian lending remained focused on New Zealand.

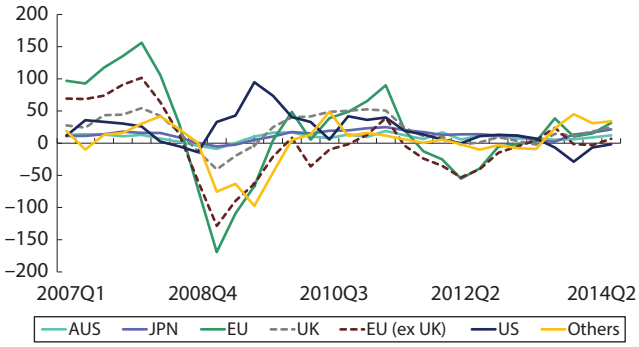
While Asian lending from US and European banks—which when combined hold nearly 70% of Asian banks' debt—has slightly picked up by end-2013, credit flows from Australian and Japanese banks to Asia appear to have been less erratic than the flows coming from the US and European banks **(Figure 12)**. On the one hand, recent episodes of financial difficulties in G2 economies had great influence on the foreign operations of their domiciled banks. On the other hand, Australian and Japanese banks have capitalized their regional operations on relatively stable local conditions, ample liquidity as well as proximity. Recently several ASEAN economies have initiated bank liberalization measures in anticipation of further ASEAN banking system integration. These have resulted in more lending activity—in the first half of 2014, Australian and Japanese banks lent over 6 times the lending released in the first half of 2013. New data also suggest that banks from non-traditional lenders such as India, the Republic of Korea, Canada, and Chile are also lending more to Asia. In the last 4 quarters, these economies accounted for more than a third of cumulated foreign bank net lending in Asia—surpassing the combined total of Australian and Japanese banks, and even flows from Europe. The entry of foreign banks in the region is a positive development considering they could push domestic banks to improve service capabilities and financial stability.

Figure 11: Outstanding Foreign Bank Claims in Asia (% share)



AUS = Australia; EU = European Union; JPN = Japan; UK = United Kingdom; US = United States
Source: ADB calculations using data from Bank for International Settlements (Table 9D). Data accessed on 21 October 2014.

Figure 12: Foreign Bank Lending Flows in Asia (4-quarter moving average, $ billion)



AUS = Australia; EU = European Union; JPN = Japan; UK = United Kingdom; US = United States.
Notes: Flows are calculated as the quarter-on-quarter difference in outstanding claims.
Source: ADB calculations using data from Bank for International Settlements (Table 9D). Data accessed on 21 October 2014.

Asian capital markets are now increasingly influenced by developments regionally.

Traditionally, Asian capital markets take their cue from more mature markets of advanced economies. This is not surprising given their importance as markets for Asian financial products and as investors in the region. However, as the region continues to integrate, the importance of Asian economies on each other has also grown. This suggests Asian capital markets are becoming increasingly influenced by regional developments.

To examine this, we estimated a vector autoregression (VAR) model for the PRC, the "Newly Industrialized Economies" (NIE-3),[26] and selected ASEAN economies (ASEAN-4).[27] Using month-on-month differentials in 5-year government bond yields and main equity indexes, aggregate indicators for each asset were created for both groupings.[28] The movement in US capital markets was taken as proxy for global shocks, while the movements in Japanese capital markets as proxy for regional shocks. Thus, each estimated VAR model consists of three variables: the US, Japan, and each of the following: the PRC, NIE-3 and ASEAN-4.

As the pace of financial integration accelerated after the GFC, the sample is divided into two periods—2005–2009 and 2010–2014—to see if there has been a change in the influence of global and regional factors on the region's financial markets since the global crisis.

VAR results suggest there has been some reduction in US influence on the region's equity and bond markets since the global financial crisis; while Japan's influence over the region's bond markets appear to have increased.

Variance decomposition—which shows the share of stock and bond returns due to global shock (US), regional shock (Japan), and domestic shock—shows that there has been a shift away from US influence in the region's equity markets, except for the PRC **(Table 3)**. For ASEAN-4 and the NIE-3, there was a clear decline in US influence. But Japan's influence is also declining, while there has been a rise in the influence of domestic factors. The PRC displays a different trend, however—there was an increase in US and Japanese impact over the two periods. This likely reflects the impact of the PRC liberalizing

[26]Hong Kong, China; the Republic of Korea and Singapore.

[27]Indonesia, Malaysia, the Philippines and Thailand.

[28]Group indicators were calculated as simple weighted (end-of-period) averages of the bond yields and equity indexes of economies subsumed in each group using the outstanding local currency government bonds and equity market capitalization, respectively, as weights.

Table 3: VAR Analysis: Share of Growth Variance Due to Each Economy (%)

10-month average	US	Japan	ASEAN-4	NIE-3	PRC
Equity indexes					
ASEAN-4					
2005-2009	47.8	14.4	37.8	–	–
2010-Aug 2014	21.7	7.5	70.8	–	–
NIE-3					
2005-2009	47.3	5.4	–	47.2	–
2010-Aug 2014	40.9	4.0	–	55.1	–
PRC					
2005-2009	20.1	2.6	–	–	77.2
2010-Aug 2014	25.5	2.8	–	–	71.8
Bond yields					
ASEAN-4					
2005-2009	21.4	1.2	77.5	–	–
2010-Aug 2014	22.8	13.1	64.1	–	–
NIE-3					
2005-2009	29.8	9.2	–	61.0	–
2010-Aug 2014	25.4	23.2	–	51.5	–
PRC					
2005-2009	25.0	12.9	–	–	62.1
2010-Aug 2014	4.6	4.2	–	–	91.2

PRC = People's Republic of China; US = United States of America; VAR = Vector Autoregression.
ASEAN-4 includes Indonesia, Malaysia, the Philippines, and Thailand.
NIE-3 includes Hong Kong, China; the Republic of Korea; and Singapore.
Notes:

1. The values are based on the estimated VAR model. Cholesky orderings are as follows: US, Japan, followed by either ASEAN-4, NIE-3, or the PRC. Equity indexes for ASEAN-4 and NIE-3 are weighted according to equity market capitalization; bond yields for ASEAN-4 and NIE-3 are weighted according to outstanding local currency government bonds. Horizontal values sum to 100.
2. Equity indexes used are as follows: S&P 500 Index, Nikkei 225 Index, Jakarta Stock Exchange Composite Index, Bursa Malaysia Kuala Lumpur Composite Index, Philippines Stock Exchange PSEi Index, Stock Exchange of Thailand SET Index, Hong Kong Hang Seng Index, Korea Stock Exchange KOSPI Index, Straits Times Index and Shanghai Composite Index.
3. Bond yields used are as follows: Average buying rates of government securities dealers 5-year bond yields (from Monetary Authority of Singapore) for Singapore and 5-year generic/benchmark government bond yields (from Bloomberg) for the rest of the economies.
4. Data frequency is monthly using the end-of-period values. Time series starts in January 2005 until August 2014 except for the bond yields series of PRC which starts in November 2005.

Source: ADB calculations using data from *AsianBondsOnline,* Bloomberg, Monetary Authority of Singapore and World Federation of Exchanges.

some stock market restrictions—allowing greater foreign participation. Still, domestic factors continue to dominate PRC's equity movements.

In bond markets, for both ASEAN-4 and the NIE-3 there is little change in US influence since the GFC. And while domestic factors remain the major source of variance, this share has declined, while there has been a substantial increase in the influence of Japan's markets on the region's bonds. This suggests that Japanese investors may have been investing more in the region's bond markets, given low prevailing bond yields outside the region. On the other hand, the PRC's bond markets show a growing influence of domestic factors, in line with the limited foreign participation allowed in its capital markets. This is also consistent with the PRC's monetary policy, which has taken a different path from that of the US or Japan.

Developments on Infrastructure Connectivity

Regional cooperation remains critical for increasing new infrastructure, but the substantial gap between what is needed and what is in the pipeline is widening. Innovative mechanisms are urgently needed to help mobilize public finance, attract greater private sector participation and tap new sources of long-term capital.

Inadequate investment in infrastructure continues as a major barrier to sustainable and inclusive economic growth in developing Asia. Physical connectivity through roads, rails, and ports is essential for efficient, reliable, and low-cost logistics for international trade and investment. Following the 1997/98 Asian financial crisis (AFC), many economies in the region used economic cooperation and integration initiatives in part to expand markets beyond traditional trading partners in Europe and North America. By the time the GFC hit, over half of Asian trade was with other Asian economies. Asia's intraregional trade and investment was strong enough to help shield the region from excessive fallout, while domestic stimulus pulled affected economies quickly out of recession. Although much of the stimulus came through infrastructure investment, it hardly slowed the widening infrastructure gap in most economies. Substantial deficiencies in both the quality and quantity of multimodal infrastructure across Asia persist because of a shortage of investment—which has yet to return to pre-1997 levels. From 2011 to 2013, the time required to export or import increased in Asia, underscoring both physical and behind-the-border deficiencies. Further, the benefits of connectivity have been unevenly spread. In subregions where transport is good—such as East Asia—trade has expanded rapidly. But in subregions where connections are poor, trade remains low and economic growth has lagged.

In most Asian economies, public and private infrastructure investment accounts for less than 3% of GDP per year—some as little as 1%—against a range of 2% to 5% before the AFC. For example, the five largest ASEAN economies attracted $38 billion in private infrastructure finance in 1997 but only some $25 billion in 2010. The level of public spending has also fallen. Average annual budget expenditures on infrastructure in ASEAN dropped from about 6% of GDP during 1980-2009 to the current level of only about 4% of GDP. The result has been a widening gap. For example, road density in Asia today is roughly 12.8 kilometers (km) of road per 1,000 people. For ASEAN it is 10.5 km. By comparison, Latin America has 14.4 km with Organisation for Economic Co-operation and Development (OECD) economies at over 200 km.

Adequate infrastructure connectivity is critical for economic competitiveness, and is a major factor determining where investors locate and what they produce. Extensive and efficient transportation are the links of supply chains—connecting people and firms to markets, whether buyers/importers or sellers/exporters. Aside from access to markets, it creates jobs and boosts business opportunities. It helps narrow the development gap—nationally and subregionally—promoting inclusive and sustainable growth. Improved transport infrastructure reduces costs, particularly for Southeast Asian supply networks catering to East Asian manufacturers across major product lines such as garments,

automobiles, and electronics. Given Asia's largely liberalized trade regimes, narrowing the infrastructure gap would do more to reduce trade costs and increase volumes than eliminating remaining tariff barriers. Furthermore, with large segments of Asia's poor living in remote or isolated areas, they would benefit greatly from improved access to industrial centers as well as to health and educational services.

Economic integration, particularly in East Asia, has largely been driven by the private sector. The rapid growth of regional production networks and supply chains increased demand for distribution structures requiring complex logistics. Cross-border infrastructure complements the region's value chains and widens scope for economies of scale. One of the most daunting challenges, however, is finding the proper mix for sharing costs, benefits, and risks between governments and private sector participants.

Since the 1950s, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has promoted the Asian Highway (AH) and Trans-Asia Railway (TAR) initiatives to develop an intermodal regional land transportation network. The plan is to link capital cities and major industrial and agricultural centers as well as connections to major river ports, seaports and airports, container terminals and depots, and tourist attractions. But implementation has only started the past decade. The Intergovernmental Agreement on the AH Network became effective only in 2005; the Intergovernmental Agreement on the Trans-Asian Railway Network in 2009. The AH agreement provides a framework for coordinating international highway development, while the TAR agreement is an indicative planning tool to determine investment requirements and help facilitate loan negotiations with financial institutions. The AH network currently covers some 141,000 km of roads passing through 32 member economies. The TAR network comprises 117,500 km of rails serving 28 member economies. Significant transport gaps remain, particularly between least developed economies, landlocked economies, and Asia's maritime transport network. UNESCAP estimates unfunded AH investments at about $18 billion covering 25,587 km, and $24 billion for 8,169 km missing links for the TAR. UNESCAP has been working with its members to identify financial resources for developing the multimodal network.

Parallel to UNESCAP, ADB has been promoting infrastructure connectivity through its support to major subregional programs. For the Central Asia Regional Economic Cooperation (CAREC) and Greater Mekong Subregion (GMS) programs, infrastructure connectivity is a backbone for both linking individual member economies and the subregions themselves. Trade in CAREC and GMS have increased dramatically since 1990 **(Table 4)**.

Unlike traditional regional cooperation programs, CAREC and GMS focus on transforming transport corridors into economic corridors rather than tariff reduction. Economic corridors require a higher level of integrated regional planning than transport corridors, as they link production, trade, and other development opportunities. An economic corridor

Table 4: Trade in CAREC and GMS ($ billion)

Subregion	1990	2013
Intra-subregional		
CAREC	1.1	163.1
GMS	4.0	369.7
Inter-subregional		
CAREC	73.4	1,816.9
GMS	98.4	2,048.9
Total Trade with Asia		
CAREC	74.5	1,979.9
GMS	102.4	2,418.6
Total Trade with the World		
CAREC	130.4	4,458.7
GMS	179.8	4,997.6

CAREC = Central Asia Regional Economic Cooperation; GMS = Greater Mekong Subregion.
Notes: Data refer to total trade, which is exports plus imports. CAREC includes Afghanistan, Azerbaijan, the People's Republic of China, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. GMS includes Cambodia, the People's Republic of China, the Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam.
Source: ADB calculations using data from *Direction of Trade Statistics,* International Monetary Fund.

covers a smaller, defined geographic space, usually straddling a central transport artery such as a road, or railroad. It requires more sophisticated bilateral rather than multilateral initiatives, focusing on strategic nodes particularly at border crossings between two economies. The ability of economic corridors to deliver benefits and support sustainable, inclusive growth depends to a large degree on the state of physical infrastructure. But it also pivots on "soft" infrastructure issues, such as trade facilitation, customs, and security.

Since its start in 1992, GMS has mobilized more than $15 billion, mostly for loan-financed projects. The great majority has supported transport and energy projects. As a result, most GMS members have seen a major increase in the length and quality of roads, with road density more than doubling in some cases. In 2008, the Economic Corridors Forum was established to support the GMS shift from transport corridors to economic corridors. The near completion of the transport component of the three main GMS economic corridors—East–West, North–South, and Southern—is nearly complete. The 2012–2022 GMS strategic framework is anchored on the corridor-development approach, with greater emphasis on feeder roads and multimodal transport, including railways. There is a broad, long-term strategy for connecting railways together with a plan for coordinating railway development across the subregion.

CAREC was established in 2001, with the primary objective of connecting landlocked members with each other and to neighboring markets. Over 120 priority regional projects worth over $19 billion have been completed—over 75% for the roads and railways that form part of CAREC corridors. During its first decade, 4,000 km of roads and 2,240 km of railways were improved. The CAREC Transport and Trade Facilitation Strategy 2020, endorsed in late 2013, targets 11,600 kilometers of new or upgraded roads and railways, further eases cross-border procedures for goods and people, and promotes commercial activities along CAREC corridors by 2020.

Despite the wide range of regional economic initiatives promoting infrastructure connectivity in Asia, the gap between supply and demand for high-quality transport infrastructure continues to widen. From 2010 to 2020, Asia will need to invest $8.22 trillion in national infrastructure for energy, transport, telecommunications, water, and sanitation. Over the same period, about $320 billion is required for more than 1,200 regional infrastructure projects; the transport sector accounts for 52%, or $165 billion ($131 billion for rail, $34.3 billion for road).[29]

Funding—both public and private—is the main obstacle. Despite potentially high socio-economic rates of return, infrastructure projects, particularly in developing economies, are rarely financially viable without government guarantees or financial incentives. Frequently, expected revenues from tolls and fees do not cover the high construction and recurring management and maintenance costs. Most infrastructure projects have payback periods ranging from 15 to 25 years, which precludes most investors looking for short-term funds. For most of developing Asia, local financial markets cannot provide adequate levels of long-term local currency financing (for example, local project finance). And domestic investors with longer-term investment horizons and an appetite for infrastructure assets (such as pension funds and infrastructure funds) are few or nonexistent. Moreover, cross-border investments are considered more risky and complex compared with national projects. Uncertainties persist on how to recover costs or resolve commercial disputes, or how to harmonize different domestic policies and regulations. There is also the added challenge of a lengthy gestation process, which exposes investors to exchange rate and liquidity fluctuations, along with political risks. There is also the risk of time and cost overruns, which can be substantial. Consequently, only a small fraction of the already limited infrastructure financing in Asia has gone to regional projects.

Closing Asia's investment gap for infrastructure connectivity requires mobilizing additional public finance, attracting much greater private sector participation, and tapping new sources of long-

[29] B. Bhattacharyay. 2010. Estimating Demand for Infrastructure in Energy, Transport, Telecommunications, Water and Sanitation in Asia and the Pacific: 2010 – 2020. *ADBI Working Paper Series.* No. 248. Tokyo: Asian Development Bank Institute.

term capital. Asian governments have used several innovative mechanisms to finance infrastructure investment, some of which are further discussed below.

Options to mobilize additional public financial resources

- *Fuel levies* are being used in economies as diverse as India and the Lao People's Democratic Republic (Lao PDR) to finance new roads. Fuel funds are a relatively transparent financing source. Because they target fuel consumers, they can be part of government reforms to reduce pollution and greenhouse gas emissions.

- *Land value capture mechanisms* target the additional value accrued to land and real estate arising from government projects and public measures such as transport infrastructure development. This added value can be captured through the relevant financial mechanisms. For example, many cities in the PRC finance 50% or more of their urban infrastructure investments through a combination of leasing and borrowing against land values. The Hong Kong Mass Transit Railway, a major property company in Hong Kong, China, used profits from new housing built along its urban railway lines to pay for the construction of new lines.

Financial support to attract greater private sector participation

- *Viability gap fund mechanisms* can be either one-off government grants or other forms of capital subsidies designed to make infrastructure projects commercially viable for private sector developers. Viability gap fund mechanisms are usually used during construction. In India, they have been used for national build-operate-transfer highway projects. They are also being developed in Indonesia and the Philippines to support infrastructure projects under the Public-Private Partnership (PPP) program.
- *Direct government payments* are used in projects where user-charging schemes are inappropriate. The government may step in to provide the requisite revenue from public funds. One system uses shadow tolls—tolls that could have been charged to users but are instead paid to the concessionaire by the government. Another system uses *availability payments,* where the government commits to paying the private sector for services on a "no service, no fee" basis. The government signs a long-term agreement to purchase private sector services.

- *Sovereign guarantees* assume part of the project risk by assuring the private sector of a revenue stream. The government can also assume obligations to repay private sector loans should legitimate problems arise. These guarantees can be offered through a "minimum traffic revenue guarantee". For example, the public sector partner in a toll road project can guarantee revenues for a minimum number of vehicles at an agreed toll level. Another arrangement is through a *default guarantee,* under which the government agrees to cover the potential liabilities of the company (or special purpose vehicle) responsible for implementing the PPP project with regard to the lenders to enhance the company's creditworthiness.

Regional funds for infrastructure financing

The *ASEAN Infrastructure Fund (AIF)* was established to better mobilize regional private savings and foreign exchange reserves to finance viable infrastructure projects, including those involving PPPs. For example, ASEAN members currently hold over $700 billion in reserves.

In 2010, ASEAN members and ADB began collaborating to set up the AIF. The shareholders' agreement was signed in 2011 and the AIF was incorporated in Malaysia in 2012. The AIF's capital structure includes both equity and debt. ASEAN economies contributed about $335 million in equity with ADB adding $150 million. Also, some $162 million will be raised as "hybrid capital". By 2016, the AIF is expected to have a total capital of $647 million. ADB is AIF administrator, co-financier, and provides technical support.

ASEAN members endorsed several strategic principles to prioritize projects for AIF investments. Projects must show (i) demonstrated potential to further regional cooperation and increase benefits to ASEAN in general (for example through greater cross-border investments and trade), and (ii) demonstrated scope for private sector participation, including prospects for PPPs.

The AIF is structured to issue debt once it establishes at least high-investment grade ratings based on a solid track record. Debt will be issued after requirements of debtholders regarding safety, certainty of returns, and liquidity are satisfied. This would allow central banks to invest in AIF debt and, thereby, channel their foreign exchange reserves into ASEAN infrastructure projects.

The AIF began lending in 2013 with a $25 million loan for power distribution in Indonesia. A pipeline of around $1 billion in projects is planned for the next 3 years. Myanmar is slated to become an AIF shareholder in 2014. Thus all 10 ASEAN members will hold AIF equity.

Aside from the AIF, other regional financing initiatives can help augment resources for infrastructure financing in the region. The 6th BRICS (Brazil, Russia, India, PRC, and South Africa) Summit held in July 2014 ended with an agreement to launch the $100-billion New Development Bank (NDB)—to be based in Shanghai, PRC. India will lead operations for the first 5 years, followed by 5-year terms for Brazil and Russia. A memorandum of understanding establishing the Asian Infrastructure Investment Bank (AIIB) was signed by 21 economies in October with proposed operating capital of $100 billion. Aside from the PRC's $50-billion contribution to the AIIB, it has also pledged $40 billion to establish a Silk Road Fund. Also in October, the World Bank Group launched a new Global Infrastructure Facility—which will work with AIIB, NDB, and ADB, among others—to boost investment in bankable infrastructure projects in emerging and developing economies.

Update on Labor Mobility

The challenge of managing migrant labor

Intraregional travel and labor mobility helps define and shape regional cooperation and integration. It fosters economic, cultural, and knowledge exchange that ultimately benefits both source and host economies. Migrant workers boost labor productivity in host economies, while remittances support household investment and consumption back home, often adding significantly to economic growth. Asia has benefitted greatly from rising migration trends. Still, while migration brings many benefits, it also produces major challenges.

Estimates for 2013 show the number of Asian migrants living within the region increased since 2010, accounting for 35% of total Asian migrants **(Figure 13)**. There is also a growing trend of Asian migrants moving within their own subregions. Between 2010 and 2013, the number of intra-subregional migrants increased for Central Asia, East Asia, and Southeast Asia, but decreased for South Asia and the Pacific. Southeast Asia had the highest number of intra-subregional migrants (6.5 million) in 2013 **(Table 5)**.

Southeast Asia and East Asia have the highest shares of intra-subregional migrants to total

Figure 13: Intra-subregional Migration Share—Asia
(% of total)

Note: See Table 5: Migrant Matrix, 2013 ('000s) for the country composition.
Source: ADB calculations using data from *Trends in International Migrant Stock,* Department of Economic and Social Affairs, United Nations; and *Global Bilateral Migration Database,* World Bank.

Table 5: Migrant Matrix, 2013 ('000s)

From\To	Asia	Central Asia	South Asia	East Asia	Southeast Asia	The Pacific	Oceania	European Union	North America	Middle East	World
Asia	**27,646**	**5,175**	**7,385**	**6,392**	**8,648**	**46**	**2,781**	**6,708**	**14,159**	**18,600**	**78,389**
Central Asia	4,854	3,467	1,158	65	161	3	73	2,111	856	5,363	20,840
South Asia	8,114	1,583	5,354	152	1,019	6	595	1,904	3,094	10,402	24,313
East Asia	6,218	31	248	5,001	934	4	885	1,191	5,073	27	13,837
Southeast Asia	8,420	94	613	1,173	6,513	27	908	1,491	4,994	2,808	18,836
The Pacific	39	0	12	0	20	7	319	10	142	0	564
Oceania	**133**	**0**	**7**	**45**	**63**	**17**	**664**	**268**	**140**	**10**	**1,244**
European Union	**513**	**258**	**73**	**99**	**77**	**6**	**2,779**	**17,746**	**6,318**	**1,911**	**33,872**
North America	**390**	**0**	**53**	**251**	**81**	**4**	**176**	**967**	**15,063**	**205**	**17,503**
Middle East	**456**	**115**	**297**	**8**	**36**	**0**	**386**	**8,836**	**2,162**	**12,292**	**25,343**
World	**35,925**	**10,488**	**8,166**	**7,673**	**9,498**	**100**	**7,601**	**50,846**	**54,173**	**35,884**	**231,522**

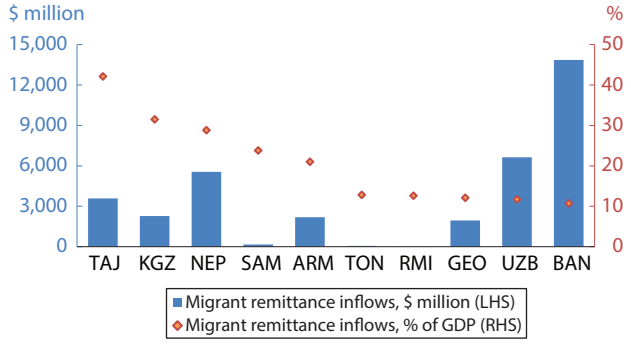
Notes:
1. Zeroes indicate values less than one thousand.
2. Central Asia includes Afghanistan, Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.
3. South Asia includes Bangladesh, Bhutan, India, the Maldives, Nepal, and Sri Lanka.
4. East Asia includes the People's Republic of China; Hong Kong, China; the Republic of Korea; Japan; Macao Special Administrative Region; and Mongolia.
5. Southeast Asia includes Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.
6. The Pacific includes the Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.
7. Oceania includes Australia and New Zealand.
8. European Union includes Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.
9. North America includes Canada, Mexico, and the United States.
10. Middle East includes Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, South Sudan, State of Palestine, Sudan, Syria, Tunisia, Turkey, United Arab Emirates, and Yemen.

Source: ADB calculations using data from *Trends in International Migrant Stock,* Department of Economic and Social Affairs, United Nations.

migrants, but also have strong migrant links outside Asia. For East Asia, intra-subregional migration accounts for 36% of total migration, while 37% of migrants go to North America. In Southeast Asia, intra-subregional migration accounts for 35% of total migration, while a combined 42% of migrants go to North America and the Middle East. While Central Asia posted the biggest increase in intra-subregional migration, from 1.25 million in 2010 to 3.5 million in 2013, migrants from the subregion predominantly (30%) go to the Russian Federation. The number of South Asia's intra-subregional migrants decreased by more than 2 million between 2010 and 2013, while migration to Middle East economies nearly doubled from 5.6 million to 10.4 million in the same period, accounting for almost half of South Asia's 24 million migrants in 2013.

Wide disparities in income and employment opportunities are the primary drivers behind migration. The diversity of economies within each subregion likely contributed to the growing intra-subregional migration trend. In Southeast Asia, for example, middle- and high-income economies like Singapore, Malaysia, and Thailand enjoy strong economic growth and relatively low unemployment, attracting migrant workers from low- and lower-middle-income economies like Cambodia, the Lao PDR, and Myanmar. More established subregional groups such as ASEAN, GMS, and CAREC may have also provided impetus for intra-subregional migration through shared economic programs and harmonized standards.

Figure 14: Net Remittance Inflows-Top 10 based on % of GDP (2013)



ARM = Armenia, BAN = Bangladesh, GEO = Georgia, KGZ = the Kyrgyz Republic, LHS = left-hand scale, NEP = Nepal, RHS = right-hand scale, RMI=Marshall Isalnds, SAM = Samoa, TAJ = Tajikistan, TON = Tonga, UZB = Uzbekistan.
Source: ADB calculations using data from *Annual Remittances Data*, World Bank.

Many Asian economies rank high on the list of remittance inflows recipients, reflecting the growing importance of Asia as a net labor exporter. India, the PRC, the Philippines, Pakistan, and Bangladesh are the region's top remittance earners, jointly accounting for almost 40% of global remittances in 2013. Many Asian economies rely heavily on remittances, which heightens vulnerability to regional or global economic shocks. Tajikistan, the Kyrgyz Republic, Nepal, Samoa, and Armenia have relatively low levels of remittances compared with other Asian economies, but their economic impact is much greater **(Figure 14)**. Remittances of top-earning economies like the Philippines and Sri Lanka account for 10% of GDP, but still surpass their revenues from exports of goods and services.[30]

Generally, structural factors such as the number of migrants, their skill-set and diverse host economies tend to stabilize remittance inflows despite volatility of economic conditions or geopolitical tensions. However, when more narrowly defined, a change in conditions can have dramatic impact. For example, for Tajikistan and other Central Asian economies that primarily rely on a single host—Russia—changes in the economic and geopolitical situation may have a stronger impact on labor mobility and remittances. Russia's economy, driven by oil revenues, and a declining domestic labor force have attracted millions of migrants from Central Asia, many working in low- and middle-skill jobs in construction, trade, and agriculture. The ongoing Ukraine crisis will likely affect Russian oil prices and exchange rates—the two main determinants of remittance value—assuming migrant labor demand remains unaffected. But the addition of stricter immigration policies, such as the proposed initiative to revoke work permits of migrants who fail to find jobs within 2 months of arrival, will likely curb remittance flows.[31] This will hurt Tajikistan and the Kyrgyz Republic the most, as remittance inflows financed more than half of these economies' merchandise trade deficits.[32]

Managing new issues in labor mobility

The AEC will help accelerate structural change, creating new opportunities and challenges that will ultimately affect labor mobility. By 2025, closer ASEAN integration could boost aggregate output by as much as 8% and add some 14 million jobs.[33] However, distributing these benefits across economies, sectors, or skill groups will vary. Labor migration within ASEAN will continue to be largely low- and middle-skill workers, primarily in manufacturing, construction, fishing and domestic help. Until now, much of this migration has involved undocumented workers and—like in Europe and North America—presents as much of a political challenge as it does an economic one. Despite being controversial, managing these migrant flows will likely grow in importance in the years to come.

[30]Remittances of Sri Lanka and the Philippines in 2013 are over 50% and 38%, respectively, of their revenues from exports of goods and services. Source: World Bank. 2014. http://www.worldbank.org/en/news/press-release/2014/04/11/remittances-developing-countries-deportations-migrant-workers-wb

[31]World Bank. 2014. *Migration and Development Brief 22.*

[32]D. Trilling. 2014. Tajikistan: Migrant Remittances Now Exceed Half of GDP. *EurasiaNet.org.* 15 April.

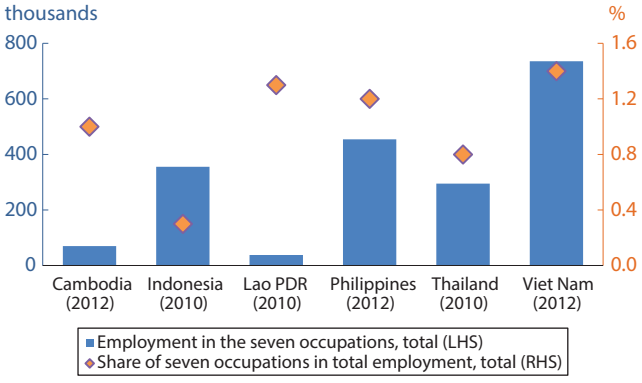
[33]ILO and ADB. Forthcoming. *ASEAN Economic Community 2015: Managing Integration for Better Jobs and Shared Prosperity.* Bangkok: International Labour Organization.

ASEAN mutual recognition arrangements

For now, current policies managing migration in ASEAN have been largely confined to higher-skilled workers. Free movement of skilled workers is driven by the ASEAN Framework Agreement on Services (AFAS) and mutual recognition arrangements (MRAs), which have been completed for eight occupations—engineering, nursing, architecture, surveying, medicine, dentistry, accountancy, and tourism. Still, implementing AFAS and MRAs has been slow.

MRAs vary in approach to establishing the professional skills and experience required. Implementing regional MRAs remains difficult, primarily because they do not guarantee access to labor markets. Also, while each ASEAN member has existing policies and regulations that still impose significant, explicit restrictions on the movement of skilled workers. Latest national data show that seven of the eight occupations covered by MRAs (excluding tourism) account for only 0.3%-1.4% of total ASEAN employment **(Figure 15)**. The impact of ASEAN initiatives is limited in the short term. But greater benefits can be accrued over the long run if MRAs are expanded to cover a wider list of skills and qualifications.

Figure 15: Employment in Occupations Covered by MRAs—Selected ASEAN Economies



Lao PDR = Lao People's Democratic Republic, LHS = left-hand scale, MRAs = mutual recognition arrangements, RHS = right-hand scale.
Source: Asian Development Bank and International Labour Organization. 2014. *ASEAN Economic Community 2015: Managing Integration for Better Jobs and Shared Prosperity.* Bangkok: ILO Publications.

Labor mobility between Cambodia and Thailand

The political and economic conditions in host economies affect labor mobility, and ultimately impact source economies. Economic slowdowns or a major change in labor policy in host economies may force migrant workers to return home, leaving source economies bearing potentially heavy economic and social costs. The impact is greater for economies whose overseas workers constitute a large proportion of the population, and are thus also highly dependent on remittances. Cambodia is the most recent example of an ASEAN member affected by tighter migration policies elsewhere. In June 2014, an estimated 200,000 Cambodian migrant workers fled Thailand in fear of a government crackdown against undocumented migrant workers.[34]

An estimated 750,000 Cambodians are living in Thailand—about 20% of total migrants in Thailand and almost 67% of total migrants from Cambodia. However, this represents a fraction of the actual number of Cambodians in Thailand. There are an estimated 800,000 Cambodian undocumented workers in Thailand.[35] The immediate impact of the exodus was felt by both economies. As thousands of Cambodians were left without jobs and stranded at the border, the Cambodian government has been providing aid and transport, and is being pressured to provide employment for the returnees. However, outstanding debt and the lack of job opportunities back home are keeping migrant workers away from their provinces. Much unskilled work available in Cambodia is considered vulnerable—such as unpaid family work and work in informal sectors.[36] Many of these Cambodian migrants would prefer to find employment overseas where income is higher.

In Thailand, the exodus of foreign workers has already created problems for some labor-intensive sectors. The exodus has affected construction—

[34] *The Economist.* 2014. *Migrant workers in Thailand: The Exodus.* 21 June.

[35] *The Wall Street Journal.* 2014. Cambodian Workers Flee Thailand After Army Crackdown. 21 June.

[36] ILO. 2012. The challenge of getting a job in Cambodia. 19 July. http://www.ilo.org/global/about-the-ilo/newsroom/features/WCMS_185074/lang--en/index.htm

where typically more than half are foreign workers, mostly from Myanmar and Cambodia. Thailand's low unemployment rate (1%) and an aging population have made the economy dependent on foreign labor.

This anecdotal evidence emphasizes the need for both host and source economies to cooperate to better manage and work toward resolving the issue of illegal migrant workers and worker protection. A cooperative regional approach is needed to begin managing these migrant flows while ensuring the benefits of labor mobility outweigh its costs. Strengthening regional cooperation will likely involve renewed commitment to international labor standards, harmonization of labor policies and systems, improving and sharing labor market information and analysis, and facilitating tripartite dialogue to improve monitoring systems and design, along with implementing labor market policies.

Macroeconomic Interdependence between Pacific Developing Member Countries and Asia[37]

Asia's robust economic growth and growing middle class offer new demand for Pacific goods and services exports.

In the last 3 decades, Asia has recorded strong economic performance which has raised the standard of living across the region and lifted millions out of poverty. During the recent GFC, growth in the region has slowed somewhat; although it remains one of the highest in the world. It is expected that the high economic growth in the region will continue. By 2030, the combined size of Asia will be four times larger than its size in 2010. In the same period, the size of Asia's middle class would have grown to around 2.6 billion.

ADB's Pacific developing member countries (DMCs) have traditionally been viewed as isolated economies with little connection to Asia. However, in the last decade, links to Asia strengthened as large Asian markets—the PRC, India, Japan, the Republic of Korea, and Southeast Asia—grow in importance. A cursory analysis of key economic links—trade flows, FDI, tourism, labor movements and remittances, and official development assistance (ODA)—show interdependence between Pacific DMCs and Asia has strengthened over the years. Pacific goods trade continues to shift from the US to Asia. For many Pacific DMCs, Asia—including Australia and New Zealand (Oceania)— is now the biggest trading partner, with the PRC and Southeast Asian share of Pacific DMCs' trade increasing, while Oceania's declining **(Table 6)**. Trade in services—mostly tourism-related—has benefitted from more flights and better marketing, although more needs to be done. ODA also continues to rise as key Pacific DMC partners increasingly work together to strengthen the region's capability and resilience. More so, as seasonal employment programs in Australia and New Zealand improve and expand, temporary labor migration from Pacific DMCs is growing. Migrants to the Pacific coming from South and Southeast Asia have also increased markedly. Inward remittances help boost economic growth and build resilience against vulnerabilities.

Extremely diverse in economic size, population, level of development, and resource endowment, the intensity of economic links with Asia and how they change varies across Pacific DMCs **(Box 3, Table 7)**. For instance, while links between resource-exporting Pacific economies with Asia did not change much, small-island economic links with Asia have strengthened over the last decade **(Figure 16)**.

[37] This section draws heavily from *Leveraging the Benefits of Asia's Growth and Integration for Pacific Economies*, a forthcoming study of the Asian Development Bank Institute (ADBI) and ADB's Pacific Department (PARD).

Table 6: Trade Share—Pacific DMCs (% of total trade)

	1990	1995	2000	2005	2010	2011	2012	2013
Group 1								
Asia	63.1	73.9	73.0	76.1	79.0	78.1	75.7	73.3
Southeast Asia	4.4	7.6	8.6	19.7	19.6	25.1	24.1	20.5
PRC	1.6	1.7	1.1	2.4	5.2	7.8	9.1	13.6
Japan	17.5	10.5	6.9	5.7	5.5	4.8	5.4	5.1
Australia	20.0	31.2	33.2	22.9	13.3	13.5	12.1	10.0
New Zealand	13.8	13.3	9.1	15.0	9.9	11.1	10.0	9.6
European Union	14.0	11.1	7.8	6.8	2.5	4.1	2.3	9.7
United States	9.5	9.0	13.0	8.7	6.4	5.0	7.8	5.6
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Group 2								
Asia	76.1	74.1	67.6	64.1	66.1	68.0	67.6	66.2
Southeast Asia	8.7	9.9	11.4	10.6	12.2	15.5	14.7	14.2
PRC	1.1	1.8	5.2	5.8	8.8	7.8	7.6	9.1
Japan	21.0	18.3	9.2	7.3	7.9	6.0	7.8	6.0
Australia	35.6	34.0	34.9	34.8	31.5	32.6	32.1	30.0
New Zealand	2.3	2.3	1.8	1.9	1.2	1.1	1.2	1.3
European Union	15.1	12.4	7.9	6.8	6.2	7.4	8.4	6.3
United States	6.0	2.3	1.6	1.6	2.0	2.3	2.5	1.7
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All Pacific DMCs								
Asia	71.1	74.1	69.4	68.1	69.2	70.0	69.2	68.0
Southeast Asia	7.1	9.2	10.5	13.6	13.9	17.4	16.6	15.7
PRC	1.3	1.8	3.9	4.7	8.0	7.8	7.9	10.2
Japan	19.6	16.1	8.5	6.8	7.4	5.8	7.3	5.8
Australia	29.5	33.2	34.3	30.8	27.2	28.8	28.1	25.2
New Zealand	6.8	5.5	4.2	6.3	3.2	3.1	3.0	3.3
European Union	14.7	12.0	7.8	6.8	5.3	6.8	7.2	7.1
United States	7.4	4.2	5.4	4.0	3.0	2.9	3.6	2.6
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DMCs = developing member countries, PRC = People's Republic of China.
Notes: Group 1 includes Fiji, Samoa, Tonga, Vanuatu. Group 2 comprises of Papua New Guinea and Solomon Islands. Does not include the Cook Islands, Timor-Leste, and Group 3 economies (Kiribati, the Republic of Marshall Islands, the Federated States of Micronesia, Nauru, Palau, and Tuvalu).
Source: ADB calculations using data from *Direction of Trade Statistics,* International Monetary Fund.

Over the past 2 decades, Pacific DMC trade has reduced dependence on US markets, diversifying toward Asia and other parts of the world; although the Pacific's structural imbalance with Asia has not changed.

Since 2000, the value of Pacific DMC goods trade with Asia has more than tripled—from $4.4 billion (2000) to $17.3 billion (2013)—though its share of total Pacific DMC trade remained relatively stable at about 70%. Excluding Australia and New Zealand, the share increased from around 30% in 2000 to close to 40% in 2013. However, the increase in goods trade has been limited to a few economies and a few commodities. Based on the country groups as defined in Box 3, the value of goods trade with Asia rose three-fold for Group 1 countries from 2000, to $4.5 billion in 2013; for Group 2 it rose 3.5 times to $12.8 billion in 2013 (data for Group 3 is unavailable).

Box 3: **Economic Conditions of Pacific DMCs**

Pacific DMCs can be grouped into many categories, but the Asian Development Bank Institute-Pacific Department (ADBI-PARD) study uses three broad categories of Pacific economies based on what drives the economy and what economic constraints they face. The first group includes countries with relatively diversified economies with some capacity for self-sustained growth—the Cook Islands, Fiji, the Federated States of Micronesia, Palau, Samoa, Tonga, and Vanuatu. These economies are largely dependent on tourism, with agriculture, fisheries, and basic industry also playing a role in several. They have relatively strong gross domestic product growth, but are highly vulnerable to natural disasters and economic shocks, such as the global financial crisis of 2008/2009.

The second group includes those with resource-based export economies—Papua New Guinea, Solomon Islands, and Timor-Leste. These economies have benefitted from the recent commodity boom, but began structural transformation late.

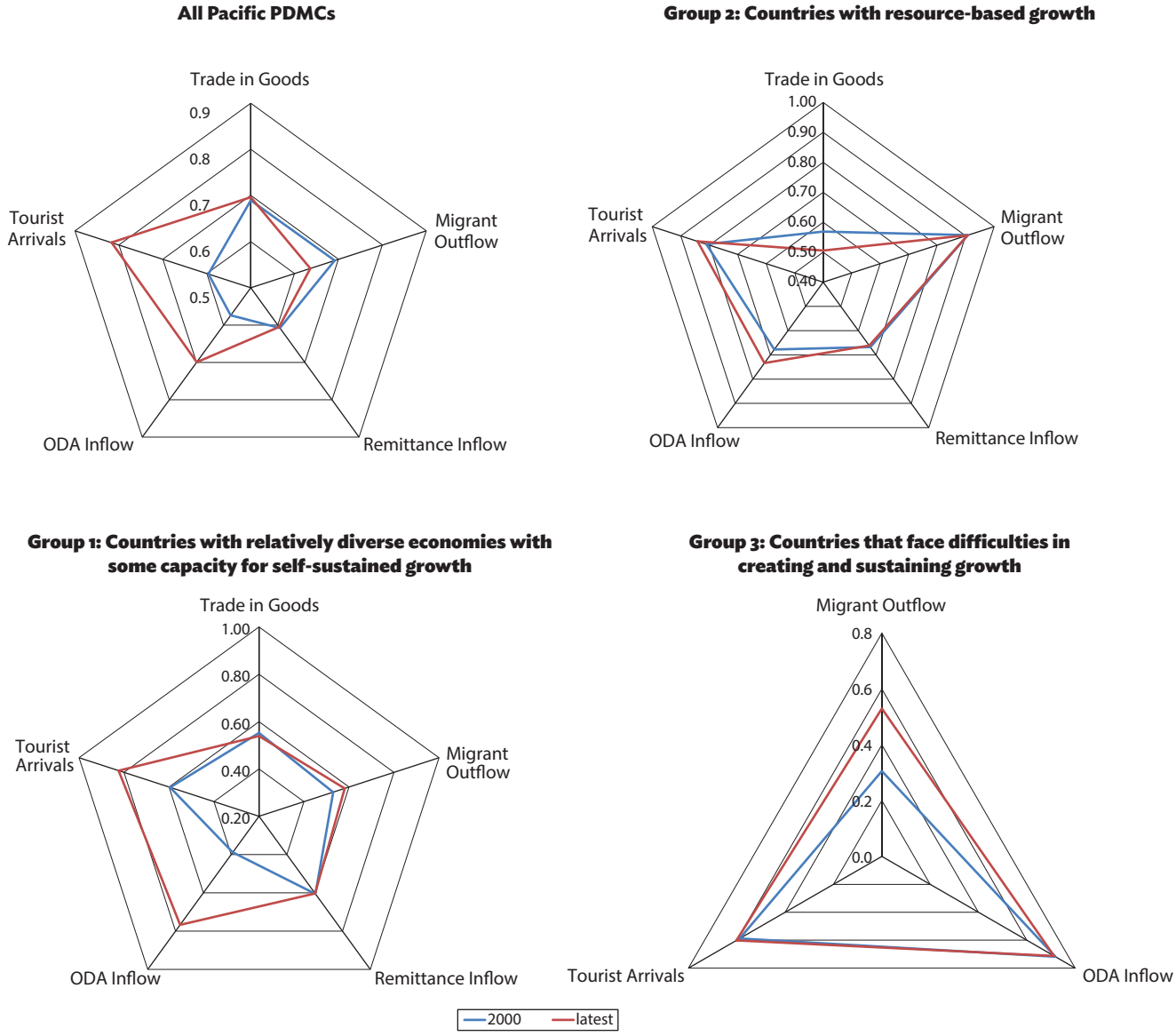
The third category comprises relatively remote small island economies with difficulties in generating and sustaining growth—Kiribati, the Republic of the Marshall Islands, Nauru, and Tuvalu. These economies—with limited land but large fishing grounds—have few natural resources and are heavily dependent on foreign aid.

Table 7: Basic Economic Indicators—Pacific DMCs

	Population			**Real GDP growth** (%)		**Real Per Capita GDP**	
Economies	**2013 level** (thousands)	**Average growth rate 2000-2013**	**Land Area** (square kilometers)	**Average growth 2000-2007**	**Average growth 2008-2013**	**2013 level** ($)	**Average growth 2008-2013**
Cook Islands	13.9	-1.0	240.0	3.9	0.5	17,563.7	2.7
Fiji	859.2	0.5	18,270.0	1.2	2.0	3,306.4	2.7
Kiribati	108.8	2.0	810.0	2.5	1.7	1,466.0	-0.5
Marshall Islands	56.1	0.6	180.0	2.8	1.5	2,777.3	0.6
Micronesia	103.0	-0.3	700.0	0.7	-0.1	2,308.7	0.2
Nauru	10.5	0.3	20.0	-13.6	13.2	4,079.9	11.0
Palau	20.9	0.7	460.0	8.1	-0.4	9,531.0	-1.0
Papua New Guinea	6,917.7	2.2	462,840.0	2.2	7.4	936.0	5.1
Samoa	184.5	0.4	2,840.0	4.5	0.6	2,550.3	0.3
Solomon Islands	578.0	2.5	28,900.0	8.3	5.4	1,114.8	2.3
Timor-Leste	1,176.7	2.1	14,870.0	15.0	11.2	1,060.1	8.4
Tonga	104.3	0.4	750.0	0.6	2.1	4,343.4	1.7
Tuvalu	10.9	1.0	30.0	14.0	2.8	3,198.2	3.1
Vanuatu	256.7	2.3	12,190.0	3.1	2.9	2,503.3	0.6

DMCs = developing member countries, GDP = gross domestic product.
Note: Real per capita GDP average growth for 2008-2013 is based on local currency units.
Source: ADB calculations using data from the *Asian Development Outlook* and *Pacific Economic Monitor Database*, ADB.

Figure 16: Integration of Pacific DMCs with Asia[1]



Group 1 = the Cook Islands, Fiji, the Federated States of Micronesia (FSM), Palau, Samoa, Tonga, Vanuatu; Group 2 = Papua New Guinea, Solomon Islands, Timor-Leste; Group 3 = Kiribati, the Republic of Marshall Islands, Nauru, Tuvalu; ODA = official development assistance; and Pacific DMC = Pacific developing member country.

[1]Measure of integration of the Pacific DMCs with Asia (sum of Pacific's intra-subregional and inter-subregional shares). Indicators are defined as follows:

Trade in goods—Asian share of total Pacific's trade. Does not include the Cook Islands, the FSM, Palau, Timor-Leste, and all Group 3 economies as data unavailable.

Remittance Inflow—Share of total inward remittances sourced from Asia. Does not include Cook Islands, FSM, Palau, Timor-Leste, and all Group 3 economies as data unavailable.

ODA Inflow—Share of total official development assistance (ODA) disbursed from Asia to Pacific DMCs.

Migrant Outflow—Share of total Pacific DMC migrants residing in Asia—excludes Timor-Leste (independence in 1999 distorts migration data between Timor-Leste and Indonesia. Does not include the Cook Islands, the FSM, and Vanuatu, and Timor-Leste as data unavailable.

Tourist arrivals: Share of total tourist arrivals from Asia. Does not include FSM, Palau, and Nauru as data unavailable.

Source: ADB calculations using data from *Direction of Trade Statistics and World Economic Outlook April 2014,* International Monetary Fund; CEIC; and World Tourism Organization Tourism database, United Nations.

As a subregion, Pacific DMCs have very limited supply-side capacity and imports most goods from Asia. They also have a very narrow export base, mainly unprocessed primary commodities. Thus, the region consistently posts trade deficits with Asia. This structural imbalance between the Pacific DMCs and Asia has not changed, despite the increasing integration of the Pacific with Asia.

Pacific DMCs trade very little among themselves. They hardly trade with Central and South Asia. But trade with East and Southeast Asia—primarily the PRC—has been rising significantly. Trade with Oceania—still the Pacific DMCs' largest trading partner—has been declining. More recently, to increase trade with Asia, Pacific DMCs have been expanding the number of trading partners and deepening bilateral trade relations with Asia. Currently, 14 of the 16 Pacific Island Forum members—including most Pacific DMCs—completed Pacific Island Countries Trade Agreement (PICTA) negotiations, which will create a free-trade area by 2021. It remains unclear whether the subregion will benefit from PICTA given their small size and similarities in export baskets.

Trade in services, mostly tourism-related, is a key part of Pacific DMCs. From 2000 to 2011, total tourist arrivals in Pacific DMCs more than doubled—from 634,000 to 1.3 million. Asian tourists heading to Pacific DMCs accounted for over 80% of total tourist arrivals in 2011, up from 61% in 2000. Most of the increase came from Oceania, which accounted for some 65% of Pacific DMC total tourist arrivals. Arrivals from East and Southeast Asia also increased markedly—from the PRC, in particular, from 0.4% of total arrivals in 2000 to 3.0% in 2011; and from 1.4% to 3.3% for Southeast Asia.

Tourism receipts have also grown strongly, although its share continued to shrink as a proportion of GDP. For instance, while receipts rose from $645 million in 2003 to over $1.1 billion in 2012, as a proportion of GDP it declined from 8% in 2003 to an average of 6.3% in 2010–2012. The limited number of direct flights to Pacific DMCs is a key constraint to expanding tourism. For instance, economies with direct flights to Pacific DMCs have about double the number of tourists compared with economies without direct flights. Further, of the 168 possible bilateral tourism routes to Pacific DMCs, only 35 have matching bilateral flight connections. Thus, investment in tourism infrastructure—including the provision of reliable, high-speed internet and phone connections—could help boost tourism in Pacific DMCs.

FDI inflows to Pacific DMCs are quite volatile and limited to a few economies and sectors.

During 2003–2012, FDI averaged 4.6% of GDP in Pacific DMCs. However, they have fluctuated significantly year to year. Sharper falls, particularly for FDI coming from Asian investors, were recorded during the global financial crisis of 2008/09 and after the 2009 eurozone debt crisis. FDI has been largely concentrated in Fiji, Papua New Guinea (PNG), the Republic of Marshall Islands, and the Solomon Islands. FDI inflows are also concentrated in few sectors—mining and quarrying, construction, tourism, and some manufacturing. For instance, investments in PNG were mostly related to construction of its new liquefied natural gas pipeline, infrastructure, and property development. Investment in Fiji, on the other hand, mostly comes from India and is centered on its sugar industry. Japan tops Asian investors in Pacific DMCs in fishing, hotels, logging, and minerals. Investors from Taipei,China; Hong Kong, China; Malaysia; Singapore; and more recently the PRC are growing. Malaysia invests in PNG in logging, oil palm, and a range of services, while the Republic of Korea is investing in agricultural processing, fishing, mining, and timber processing.

Pacific DMCs proportionately receive large amounts of ODA to help overcome their unique geographic, economic, and environmental challenges.

ODA from Asia comprises a large portion (around 70%) of total aid received by Pacific DMCs. Australia provides the most, although aid from Japan, New Zealand and the PRC have also grown more significant recently. The US (under the

Compact of Free Association) also grants financial and technical assistance to three North Pacific economies—the Federated States of Micronesia, the Republic of Marshall Islands, and Palau. ADB's contribution also increased markedly—from $35 million in 2000 to $115 million in 2012. Most foreign aid goes to PNG, Solomon Islands, Tonga, and Timor-Leste. Aid flows help strengthen the capability of Pacific DMC governments to design better policies and strengthen institutions. On average, per capita aid to Pacific Island Forum developing economies are over three times the average per capita aid for all developing economies. Eight Pacific island economies rank among the top 20 most aid-dependent nations in the world.

For many Pacific DMCs, labor migration is an increasingly important source of livelihood.

The number of Pacific DMC migrants going to Asia rose from 202,000 in 2000 to over 300,000 in 2013.[38] A large proportion travel to Australia and New Zealand, taking advantage of seasonal work schemes designed for Pacific unskilled and semi-skilled workers. Skilled labor, mostly geologists and miners in PNG and skilled seafarers from Kiribati and Tuvalu also contribute.[39] As a result, remittance inflows have become a stable and significant source of income for several Pacific DMCs. Samoa is the leading recipient of remittances among Pacific DMCs (19% of GDP in 2012), followed by Tonga (11%) and Fiji (4%). These shares have declined slightly since 2010, but still rank as one of the highest among developing economies.

Microeconomic reforms in Pacific DMCs are needed to enhance the business environment, promote private sector development, and further open up trade and investment to tap into Asia's dynamic growth.

As the "Asia Century" unfolds, the Pacific can continue to contribute its various natural resources to join Asia's solid economic reemergence. However, nonstructural constraints should be removed to promote private business, especially small and medium enterprises (SMEs). Pacific DMCs need to promote greater competition by privatizing state-owned enterprises, expanding financial access of SMEs, and developing an appropriate regulatory environment. They also need to improve air transport, invest in telecommunications infrastructure, improve customs procedures, and invest in logistics networks to reduce trade costs. The quality of basic learning and skills-training also require upgrading through improved public educational facilities. Investment in technology and innovation can also help the region increase value-added by focusing more on niche goods and services markets. For those comprised of atolls and coral islands, developing comparative advantage in eco-tourism could provide vast opportunities, along with demonstrating green technologies and adaptation programs. Asia's growing middle class will also expand opportunities to boost tourism and increase capital flows (including ODA) into Pacific DMCs. All would benefit from implementing these reforms and fostering closer and continued regional cooperation in trade, investment, and development assistance.

[38]This does not include Timor-Leste "migrants" that remained in Indonesia after independence, which rose from 729 in 1990 to 142,028 in 2000, falling to about 20,000 in 2013.

[39]In 2007, New Zealand launched a Recognized Seasonal Employer (RSE) scheme for temporary employment of migrant workers for seasonal activities, particularly fruit picking. An annual limit of 5,000 visas was set. In August 2008, Australia announced a Pacific Seasonal Worker Pilot, involving temporary migrants from Kiribati, PNG, Samoa, Tonga, and Vanuatu to work in horticulture. An annual visa quota of 2,500 was announced for the pilot. In August 2012, the Program was made permanent with a total of 12,000 worker limit over the next 4 years.