

ASIAN ECONOMIC INTEGRATION MONITOR

NOVEMBER 2014



ASIAN DEVELOPMENT BANK

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Abbreviations and Acronyms

ADB ADO AEC AEIM	Asian Development Bank Asian Development Outlook ASEAN Economic Community Asian Economic Integration Monitor	GDP GFC GMS GTA	gross domestic product global financial crisis Greater Mekong Subregion Global Trade Alert
AFAS AFC AH	ASEAN Framework Agreement on Services Asian financial crisis Asian Highway	IMF	International Monetary Fund
AIF	ASEAN Infrastructure Fund Asian Insfrastructure Investment Bank	Lao PDR LHS	Lao People's Democratic Republic left-hand scale
APEC ARIC	Asia-Pacific Economic Cooperation Asia Regional Integration Center	LPI	logistics performance index
ASEAN	Association of Southeast Asian Nations (Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia,	MFI MIP MRA	monetary and financial institution macroeconomic imbalance procedure mutual recognition arrangement
	Myanmar, the Philippines, Singapore, Thailand,		New Development Park
ASEAN+3	ASEAN plus the People's Republic of China,	NIE-3	Newly Industrialized Economies (Hong Kong,
ASEAN-4	Japan, and the Republic of Korea Indonesia, Malaysia, the Philippines, and	ODA	China, the Republic of Korea and Singapore) official development assistance
ASEAN+6	Thailand ASEAN+3 plus Australia, India and New	OECD	Organisation for Economic Co-operation and Development
ATE	Zealand Agreement on Trade Encilitation	OREI	Office of Regional Economic Integration
	Agreement on made racintation	ΡΙCΤΑ	Pacific Island Countries Trade Agreement
BOP	Balance of payments	PNG	Papua New Guinea
BRICS	Brazil, Russia, India, the People's Republic of China and South Africa	PPP PRC	public-private partnership People's Republic of China
CAP CAREC	Common Agricultural Policy Central Asia Regional Economic Cooperation	q-o-q	quarter-on-quarter
CMIM CPIS	Chiang Mai Initiative Multilateralization Coordinated Portfolio Investment Survey	RCEP RCI	Regional Comprehensive Economic Partnership regional cooperation and integration
DMC	developing member countries	ROW	rest of the world
ECB	European Central Bank	saar	seasonally adjusted annualized rate
EDC ESRB	eurozone sovereign debt and banking crisis European Systemic Risk Board	SME	small and medium enterprises
EU	European Union	TAR	Trans Asia Railway
eurozone	Austria, Belgium, Cyprus, Estonia, Finland,	TPP	Trans-Pacific Partnership
	France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Malta, the Netherlands, Portugal,	VAR	vector autoregression
	Slovakia, Slovenia, and Spain	UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
FDI FSM	foreign direct investment	US	United States
FTA	free trade agreement	WB	World Bank
FY	fiscal vear	WEO	World Economic Outlook
		WTO	World Trade Organization
G3	Group of Three (eurozone, Japan, and the United States)	V-0-V	vear-on-vear
G20	Group of Twenty (Argentina, Australia, Brazil, Canada, the People's Republic of China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, Russian Federation, Saudi Arabia, South Africa, Turkey, the United	,	
	Union)		

HIGHLIGHTS

Regional Economic Update

- The external recovery has been tentative this year after G3 economic growth slipped during the first half—the better United States (US) growth outlook has yet to benefit Asia, there is some uncertainty over Japan's prospects, and the eurozone economy continues to struggle.
- Developing Asia's resilient growth is partly due to stronger domestic and regional demand; although it varies across subregions—rising gross domestic product (GDP) growth in South Asia is offset by a slowdown in Southeast Asia and Central Asia, while East Asia's growth is flat.
- There are five downside risks to the outlook:

 (i) delays in planned reforms in the region;
 (ii) the impact on developing Asia of a faster People's Republic of China (PRC) slowdown;
 (iii) increasing corporate sector external debt;
 (iv) weaker recovery in advanced economies, particularly Europe; and (v) capital outflows or financial volatility from early US monetary tightening.
- Taken together, these risks underscore the reasons why Asia's policymakers must continue their national agenda for structural reform, while keeping macroeconomic fundamentals strong.

Progress in Regional Cooperation and Integration

- Despite tepid global growth, Asia's regional integration continues to deepen, with crossborder trade and investment flows, holdings of Asian financial assets, and migration and tourism stable or growing; regional cooperation between governments also continues to strengthen.
- 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; policies that strengthen domestic and regional demand are increasingly important.

- "Mega-regional" trade agreements could help consolidate many bilateral free trade agreements (FTAs), although any early agreement remains remote; for now, unilaterally multilateralizing preferences can address multiple rules of origin, maximize trade creation, and eliminate trade diversion.
- Asian financial assets continue to draw investors from both within and outside the region; the share of intraregional financial assets continues to grow, with investors expanding debt holdings while reducing their share of equities.
- In addition to utilizing domestic resources through tax revenues, including through publicprivate partnership, developing Asia's local currency bond markets has been a preferred choice to finance 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.
- Intraregional bank lending to Asia continues to strengthen with increased lending from Australia, Japan, and other non-traditional Asian lenders providing greater liquidity and buffers to cope with possible financial market volatility; US and European bank credit also rose, but are more erratic compared with Australia and Japan.
- 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 additional sources of long-term capital, including new regional financing initiatives.

• The rise in labor mobility across Asia strengthens the region's economic and cultural ties; though difficult and sensitive challenges remain that could be managed through closer regional cooperation.

Macrointerdependence between the Pacific Developing Member Countries and Asia

- Asia's robust economic growth, open trade, and growing middle class offer new demand for the Pacific's exports; nonetheless, microeconomic reforms are needed to enhance the business environment, promote private sector development, and further open trade and investment to tap into Asia's dynamic growth.
- The Pacific and Asia have strengthened economic ties over the past decade with Pacific goods trade shifting from the US to Asia; the share of PRC and Southeast Asia is increasing while that of Australia and New Zealand is declining. Trade in services—mostly tourism-related—has benefitted from more flights and better marketing, although more could be done.
- FDI has been extremely volatile, well below official development assistance flows, and is more often directed toward resource extraction concentrated in a few Pacific economies; labor migration is a key source of livelihood, with remittances a sizeable portion of GDP.

Special Chapter: Regional Financial Integration and Crisis in Asia and Europe—A Comparative Analysis

• The impetus for European integration grew out of political necessity—it followed a more institution-based structure where some sovereignty was exchanged for the regional core and procedures. Asia's integration has been market-driven, pragmatic, bottom-up, with institutions designed primarily to harmonize rules and regulations; provide surveillance and financial safety nets; and facilitate the gradual opening of trade, investment, finance, and people mobility.

- Prior to the eurozone crisis, low real interest rates in the Periphery attracted capital flows from the Core. Prior to the Asian financial crisis (AFC), the biggest impetus for capital flows was investor overconfidence in the region's economic prospects. However, the underlying cause of Europe's crisis and the AFC was the same massive private capital flows directed toward unproductive investment led to vulnerability and eventual crisis. In Europe, integration preceded crisis; in Asia, crisis spawned deeper integration.
- For Asia and Europe, macroprudential policies must be strengthened to better manage the size, composition and direction of capital flows and to mitigate systemic risk: while asset-side macroprudential tools may help reduce the risk of financial instability, a new set of better targeted macroprudential policies are needed to limit the systemic nature of crisis, for example, when capital flows expand non-core bank liablities.
- The future path of integration in Asia will likely be different than in Europe. Asia will continue to strengthen efforts to harmonize rules and regulations especially in the financial sector, and to further unilateral trade and investment liberalization supported by infrastructure connectivity. Regional arrangements and initiatives such as the ASEAN Economic Community and FTAs will lend further push to such liberalization. Managing the region's diversity remains an important goal, and strengthening national economy by cooperating with other economies is always Asia's approach of integration.

EXECUTIVE SUMMARY

As in the previous volumes, the November 2014 Asian Economic Integration Monitor (AEIM) begins with the summary of developing Asia's macroeconomic outlook. It examines the progress and recent trends of Asian integration. And in this issue, we delve into a comparative analysis of how economic integration has developed in Asia and Europe, and posit what the future may bring.

Overall, developing Asia has continued to exude economic resilience and growth—even during the 2008/09 global financial crisis (GFC) and its corresponding market volatility. Slowing demand from advanced economies only accented the need for Asia to rebalance its sources of growth more toward domestic and regional demand. The rising trend in cross-border trade flows, investment, financial assets, and people has clearly bolstered Asia's economic strength as it has deepened integration. Governments and the private sector continue to band together in pursuing regional cooperation and integration (RCI) when it supports the national or corporate agenda.

For developing Asia's more open economies, external conditions always matter. Europe's slowing growth continues to affect the region; while Asia awaits expected benefits from the recent, still ongoing United States (US) recovery. The region's economies have responded relatively well to these shifting external conditions. Domestic and regional demand helped the region's economic output expand a projected 6.2% this year (compared with 6.1% in 2013) (see Regional Economic Update, page 10). But Asia's diversity means performance varies across subregions—with stronger growth in the Pacific (5.3%) and South Asia (5.4%)—mostly driven by India—steady growth in East Asia (6.7%) despite a managed slowdown in the People's Republic of China (PRC) (from 7.7% to 7.5%), and a slowdown in Southeast Asia (from 5.0% to 4.6%). Assuming growth in advanced economies improves as forecast—and Asia mitigates downside risks growth is expected to rise to 6.4% in 2015.

Aside from the risk of slower growth in Europe (from economic stress or geopolitical conflict) any faster slowdown in the PRC can also hurt prospects across the rest of Asia. Indeed, during the last few years interdependence between the PRC and the rest of Asia has been steadily rising, given strong production networks and the PRC's high demand for primary inputs.¹

Another widely discussed risk involves the impact of normalizing (US) monetary policy. With the US Federal Reserve's intentions clarified through frequent dialogue with the region's authorities—and the end of US quantitative easing as planned—the probability of any surprise has been reduced. This gives Asia's policymakers the opportunity to better prepare for possible capital outflows. Nonetheless, given the significant impact of ultra-easy money policy on capital flows, risks associated with flow reversals and volatility remain.

Still, Asia's growth as a region remains highest in the world. And while domestic demand remains strong, regional demand adds further impetus, strengthening the region's resilience. As a share of the total, intra-Asian trade remains high (54%), as does cross-border foreign direct investment (FDI) (51%) **(Table 1, Figure 1)**.

Within subregions, trade integration is lowest in South Asia (6%), Central Asia (7%), and the Pacific and Oceania (7%). But their trade share with the rest of Asia is much larger, especially in the case of the Pacific and Oceania (63%)—and it continues

¹Taking into account the direct and indirect effects of trade in intermediate goods—and based on a series of international inputoutput tables—the coefficient of interdependence (CoI) between the PRC and selected Asian economies increased from less than 1.9 before the onset of the 1997/98 Asian financial crisis (AFC) to 2.6 after the GFC. The trade link goes beyond traditional exports of primary goods and commodities to—and consumer goods imports from—the PRC. An example is the PRC's efforts to cool down excessive growth in real estate. The sector has strong backward linkages not just domestically but with the rest of Asia as well. Thus, each time an attempt is made to ease the sector's growth, construction suffers, hurting capital-goodsexporting economies—notably Japan and the Republic of Korea. The inter-economy multipliers of real estate and construction are among the highest in the region.

Table 1: Progress in Regional Integration

	Produ	ction N Tra	Networks ade	and	c	Capital	Markets		Macroe Lir	conomic 1ks		Miar	ation	
	Intra- subregional s FDI (%)		Intra- subregional Trade (%)		Intra- subregional Equity Holdings (%)		Intra- subregional Bond Holdings (%)		Intra- subregional Output Correlations		Intra- subregional Tourism (%)		Migrant to Population Ratio (%)	
Subregions	201	2	201	4	20 1	3	201	13	2008	-2013	201	2	20	13
ASEAN+3 ¹ and Hong Kong, China	53.91	V	45.37	V	20.57	▼	11.04		0.47		80.67	▼	0.61	
Central Asia	0.63	▼	6.95		0.83		-		0.21		31.46		1.26	▼
East Asia	54.67		33.53	▼	15.43	▼	7.89		0.52		70.05	▼	0.29	
South Asia	0.82	▼	5.51		-		1.57		0.22		12.07		0.63	▼
Southeast Asia	16.22	▼	24.24	▼	8.63	▼	11.00		0.42		70.05		1.04	
The Pacific and Oceania	4.84		6.74	▼	5.84	▼	3.16		0.08		20.57	▼	2.64	
	Inte subreg FDI (r- ional %)	Inte subreg Trade	er- ional (%)	subreg Equ Holding	ional ity gs (%)	subreg Boi Holdin	jional nd gs (%)	subre Out Correl	gional put ations	Inte subreg Tourisr	er- ional n (%)	Migra Popul Ratic	ant to lation o (%)
Subregions	201	2	201	4	201	3	201	13	2008-2013		2012		2013	
ASEAN+3 ¹ and Hong Kong, China	3.71		10.08		4.10	•	5.47	•	0.30		4.87		0.13	
Central Asia	21.57		28.78	▼	11.96	▼	13.95		0.26		3.62	▼	0.08	
East Asia	6.99	▼	18.38		3.68	▼	6.22	▼	0.35		13.45		0.13	
South Asia	16.10	▼	29.42	▼	-		19.30	▼	0.29		36.26		0.12	
Southeast Asia	32.67		44.02		33.49	▼	20.93	▼	0.33		22.60	▼	0.45	
The Pacific and Oceania	33.52		62.76		10.31	▼	4.45		0.20		43.02		0.39	
FDI (%) Trade (%)		(%)	Equ Holding	ity gs (%)	Boı Holdin	nd gs (%)	Out Correl	tput ations	Touris	n (%)	Migra Popul Ratic	ant to lation o (%)		
TOTAL	201	2	201	4	201	3	2013		2008-2013		2012		2013	
Asia ²	50.58		54.47	V	23.16	•	15.97		0.28		78.72	•	0.77	

TOTAL	201	2	201	4	201	3	201	13	2008	-2013	201	2	20	13
Asia ²	50.58	▼	54.47	▼	23.16	▼	15.97		0.28		78.72	▼	0.77	
ASEAN+3 ¹ and Hong Kong, China	57.62	▼	55.45	•	24.68	V	16.51		0.36		85.54	•	0.74	
Central Asia	22.20		35.73	▼	12.79	▼	13.95		0.25		35.08	▼	1.34	▼
East Asia	61.66	▼	51.91	▼	19.12	▼	14.12		0.37		83.50	▼	0.43	
South Asia	16.92	▼	34.92		-		20.86	▼	0.28		48.32		0.75	▼
Southeast Asia	48.89		68.26		42.13	▼	31.92	▼	0.35		92.65	▼	1.49	
The Pacific and Oceania	38.36		69.49	▼	16.15	▼	7.60		0.18		63.59		3.02	

▲ = increase from previous period; ▼ = decrease from previous period; - = data unavailable.

Note: Data calculated for Asia unless otherwise noted. 2014 data until end of June 2014.

¹ASEAN+3 includes ASEAN member countries (Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam) plus the People's Republic of China; Japan; and the Republic of Korea.

²Total Asia equals total intra-Asia (using intraregional data).

Trade—national data unavailable for Bhutan, Kiribati, Nauru, Palau, Timor-Leste, and Tuvalu; no data available on the Cook Islands, the Marshall Islands, and the Federated States of Micronesia.

Equity holdings—based on investments from Australia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; Malaysia; New Zealand; Pakistan; the Philippines; Singapore; Thailand; and Vanuatu. Data unavailable for Azerbaijan, Bhutan, the Federated States of Micronesia, Palau, Samoa, Tonga, Turkmenistan, and Tuvalu.

Bond holdings—based on investments from Australia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; Malaysia; New Zealand; Pakistan; the Philippines; Singapore; Thailand; and Vanuatu. Data unavailable for Azerbaijan, Bhutan, the Federated States of Micronesia, Palau, Samoa, Tonga, Turkmenistan, and Tuvalu.

Output correlations—based on simple averages of 3-year rolling bilateral correlations of annual growth rates (difference of natural logarithms) of gross domestic product series in constant prices. Data unavailable for Afghanistan, the Cook Islands, the Marshall Islands, the Federated States of Micronesia, Myanmar, Nauru, Palau, Timor-Leste, and Tuvalu. 2008–2013 average compared with 2000–2007 average.

Migrant to population ratio—share of migrant stock to population in 2013 (compared with 2010).

Source: ADB calculations using data from ASEAN Secretariat; Asia Regional Integration Center, Asian Development Bank; CEIC; Coordinated Portfolio Investment Survey, International Monetary Fund; Direction of Trade Statistics, International Monetary Fund; Organisation for Economic Co-operation and Development; Trends in International Migrant Stock, Department of Economic and Social Affairs; United Nations; United Nations Conference on Trade and Development; United Nations World Tourism Organization; and World Economic Outlook Database April 2014, International Monetary Fund.

Figure 1: Regional Integration Indicators—Asia

(intraregional as % of total)



FDI = foreign direct investment, RHS = right-hand scale. Notes:

FDI—Data start from 2001.

Trade—national data unavailable for Bhutan, Kiribati, Nauru, Palau, Timor-Leste, and Tuvalu; no data available on the Cook Islands, the Marshall Islands, and the Federated States of Micronesia.

Equity holdings—based on investments from Australia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; Malaysia; New Zealand; Pakistan; the Philippines; Singapore; Thailand; and Vanuatu. Data start from 2001.

Bond holdings—based on investments from Australia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; Malaysia; New Zealand; Pakistan; the Philippines; Singapore; Thailand; and Vanuatu. Data start from 2001.

Source: ADB calculations using data from ASEAN Secretariat; Asia Regional Integration Center, ADB; CEIC; Coordinated Portfolio Investment Survey, International Monetary Fund; Direction of Trade Statistics, International Monetary Fund; Organisation for Economic Cooperation and Development; United Nations Conference on Trade and Development; and United Nations World Tourism Organization.

to rise. With its ever-expanding open trade system and middle class, Asia offers huge market potential for many Pacific island countries. The constraint, however, is mostly on the domestic supply side (infrastructure, human capital, and technology, among others). One-third of Central and South Asian trade is with other Asian economies, and this too is expected to increase. During the last several years, India has intensified efforts to expand trade with East and Southeast Asia and to join their production network. The new government appears eager to boost those efforts. And Myanmar's continued opening offers a natural conduit for *inter*subregional integration to take off. For now, Asia's largest intra-subregional trade is within ASEAN+3 (45%).² ASEAN itself has strong trade links with the rest of Asia (44%), while intra-ASEAN trade has been stagnant for some time (below 25%). However, with the ASEAN Economic Community's (AEC) 2015 milestone, both ASEAN's intra- and inter-regional trade will likely increase in the coming years.

But looking at only the volume of cross-border trade may miss the bigger integration trend, as trade flows closely interact with FDI. By deliberate policy, FDI from Japan, the Republic of Korea and the PRC heading to the rest of Asia—particularly ASEAN has been increasing steadily. Many investments target local or regional markets. Japanese FDI in ASEAN is an important example. The fast-growing middle class and its strong purchasing power makes the ASEAN market a favorite. So, increasingly, goods and products produced by Japanese firms are no longer imported from Japan, but produced and marketed within ASEAN itself. This explains why Japan's share of total ASEAN trade is declining (Figure 2). On the other hand, since the PRC's accession to the World Trade Organization in early 2000, trade between the PRC and ASEAN has increased dramatically. Republic of Korea-ASEAN

Figure 2: Trade share with Southeast Asia—PRC; Hong Kong, China; Japan; and the Republic of Korea (%)



PRC = People's Republic of China.

Note: Trade share is calculated as $(t_{ij}/T_{iw})^*$ 100, where t_{ij} is the total trade of ASEAN with economy "j" and T_{iw} is the total trade of ASEAN with the world. 2014 covers trade values from January-May. Source: ADB calculations using data from *Direction of Trade Statistics*,

International Monetary Fund (IMF).

²ASEAN+3 comprises the Association of Southeast Asian Nations (ASEAN)—Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam—plus the PRC; Japan; and the Republic of Korea. Hong Kong, China was included in the analysis due to its strong ties with the PRC. trade has also increased steadily though more slowly. FDI from these two economies has also increased. The combination of, for example, 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.

Cross-border flows of financial instruments, on the other hand, remain small if rising. Bank credit flows within the region continue to grow—particularly lending from Japanese and Australian banks. After several years of deleveraging, European banks have resumed strong Asian lending. And lending from US, Canadian, and Latin American (Chilean) banks are also rising. Asia's strong economic prospects against low returns in other economies are driving this trend.

For those flowing through capital market, intra-Asian equity flows are slightly less than a guarter of the region's total—and have been fluctuating, largely in tandem with the increased volatility in global equity markets. In debt markets, on the other hand, intra-Asian investments continue to grow, although the level remains small (16%). Indeed, the region's financial markets have always been integrated more globally than regionally-US investors dominate equities; European investors debt markets. This has several important implications. It shows how open Asian financial markets are-despite remaining controls in economies like the PRC. And it highlights the need to harmonize regional markets further to attract more intraregional flows, strengthen the domestic investor base, and streamline regulations and policies to augment market liquidity.

The main objective is still to use Asia's growing liquidity for investments within the region. The demand for infrastructure financing (hard and soft) is huge, and bank capacity to finance these massive amounts is increasingly limited—even without Basel III rules. This is in addition to the standard financial integration benefits, like creating greater opportunities and diversification for savers and investors, efficiency, policy discipline, and risk sharing. Better risk sharing is particularly important in Asia. The emergence of institutions focusing on infrastructure financing—regionally and globally can further strengthen resources needed for infrastructure development. The recent "New Silk Road" strategy proposed by the PRC could also foster greater cross-border trade flows and deepen RCI through trade, investment, energy, as well as infrastructure.³

The continued increase of intraregional migrant flows is another important integration trend. In particular, migration from Central and South Asia to other Asian economies has been increasing. But in terms of the ratio of migrants to population, the Pacific and Oceania continues to have the highest (2.6% intra-subregionally, and more than 3% intra-Asia). Southeast Asia ranks second. Job opportunities and income differentials remain the dominant reason, with remittances offering a means to spread risk and mitigate income shocks. As anywhere in the world, foreign worker migration always poses difficult and sensitive challenges. It requires closer cooperation between source and host economies.

Tourism is another important indicator of regional integration—boosting economic and cultural ties. More than three guarters of region's tourists travel within Asia. Southeast Asia is the most Asia-centric, where more than 90% of tourist flows come from within Asia. The April AEIM highlighted the risk of heightened geopolitical tension on the region's tourism—given the decline in bilateral tourist arrivals between the PRC and Japan during 2010-2013. Japanese tourist arrivals in the PRC from January to September this year compared with the same period last year shows a continuing decline. But PRC tourist flows to Japan has started to increase again. Regional cooperation in tourism can help maintain high tourist flows, which is important for people-to-people contact and building mutual

³But making financial resources available does not necessarily translate into infrastructure development. The persistently low spending on infrastructure during the period of massive capital inflows (driven by ultra-easy monetary policy in advanced economies) has clearly underscored the disconnect between fund availability and infrastructure spending. Therefore, a better way must be found to channel liquidity into infrastructure investment. Strengthening sources of public finance through taxes and other means should be accompanied by better use of private resources—through publicprivate partnerships (PPPs) for example.

understanding, holding benefits far beyond pure economics.

To summarize, amid slowing global growth and an uncertain global environment, Asia's economic integration continues to increase. This has helped strengthen the region's resilience by cushioning the slowdown in external demand. Continued efforts to harmonize rules and regulations across economies have played some role, but market-driven private activity-facilitated by unilateral liberalizationremains the dominant force behind the trend. This is precisely what distinguishes Asia's integration process from Europe's. The two regions pursued and continue to pursue integration for different reasons. The impetus for European came almost as a political necessity. It grew to follow a more institution-based structure where some sovereignty was given up for the regional good. This is far from what Asia's integration is all about. To gain better understanding of the difference, a special chapter in this issue focuses on the comparative analysis of how economic integration has developed in Asia and Europe. The main chapter highlights follow.⁴

Unlike Europe, Asia's institutions for regionalism are primarily designed to harmonize rules and regulations; and to facilitate the gradual opening of trade, investment, finance, and people's mobility. Progress on all of these must jive with national policies, which evolve to match the times. Because of Asia's sharp diversity, integration must also account for different levels of development. Capacity building, especially for weaker partners, is always a high priority—to promote convergence and to ensure regional initiatives benefit all. Another feature is how institutions emerge, with an eye to minimize the costs of integrationincluding crisis management. For example, the ASEAN+3 Macroeconomic Research Office, which conducts and manages macro-financial surveillance in support of the Chiang Mai Initiative Multilateralization (CMIM), a regional safety net, provides crisis prevention and crisis management,

respectively. This illustrates Asia's integration process as pragmatic, less ideological, and not based on any fixed set of beliefs.⁵

In Europe, from the beginning it was clear that easing intraregional trade meant that European policymakers would try limiting exchange rate fluctuations—particularly between its relatively small and open economies. Over the decades, the process eventually led to monetary union and the adoption of the euro (introduced in 1999, it completely replaced old currencies in 2002).

Studies show intraregional exchange rate stability has a positive effect on intraregional trade. This also holds for Asia. But for reasons described earlier, there is no attempt to formally cooperate on exchange rates. Having said that, the increasing use of PRC renminbi in cross-border trade and settlement could—over time—reduce some problems associated with exchange rate instability. But even this is happening without any collective regional policy.

The euro's introduction does not appear to have boosted intraregional trade significantly. This is in contrast with many early studies that pointed to the expectation of a large increase in intraregional trade. After the adoption of euro, the share of total cross-border trade within the eurozone in fact decreased slightly or remained relatively flat (see Special Chapter: Regional Financial Integration in Asia and Europe—A Comparative Analysis, page 40). Interestingly, there was also no marked difference in the level of intra-regional trade between Asia-11 and the eurozone, in both cases below 50%.⁶ In the case of total Asia and European Union, the figures are 54% and 64%, respectively. If there is one significant trend since the euro was adopted, it is in geographical trade patterns—the fast-growing trade deficit in the South against huge surpluses in the North. Post-GFC, the North's surplus continued dominated by Germany—while the South's deficit

⁴This summary is based on joint-research conducted by ADB and Bruegel, a European think-tank, analyzing the process and impact of integration in Europe and Asia. Bruegel produced two reports: "Background and Progress of Economic and Financial Integration in Europe" and "Challenges, Lessons and Policy Considerations from European Economic and Financial Integration."

⁵I.J. Azis. 2014. Integration, Contagion, and Income Distribution. In P. Nijkamp, A. Rose, and K. Kourtit, eds. *Regional Science Matters*. Berlin: Springer.

⁶Asia-11 includes which inlcudes the People's Republic of China; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

gradually declined. This has some impact on global trade, and hence possible repercussions for Asia.⁷

While this was happening, Asia's trade integration was growing steadily—as was intraregional FDI reflecting the strength of the region's production network. And this occurred without monetary union or single currency. A combination of strong supply chains exploiting each economy's comparative advantage—and good growth prospects supported by prudent macroeconomic policies and unilateral trade liberalization—all back this trend.

Europe's monetary union also led to a surge in capital flows, the biggest portion heading South.8 Diverging inflation rates between economies and converging capital returns or yields implied lower real interest rates in the South-even if the dispersion of interbank lending rates remained high, similar to Asia (see Special Chapter: Regional Financial Integration in Asia and Europe—A *Comparative Analysis*, page 40).⁹ The ample liquidity helped push growth. But with most credit ending up in real estate and consumption—not in productive sectors—bubbles appeared. When they burst, crisis erupted and growth stalled. The accumulated debt amplified the impact, making the problem more difficult to solve. This was in fact similar to what happened in Asia before the 1997/98 Asian financial crisis (AFC). Before 1997, massive capital inflowsmostly short-term and unhedged—also wound up in unproductive sectors like housing and real estate, creating asset bubbles. The AFC started when these bubbles burst, and the double currency and maturity mismatch aggravated the crisis impact.

Capital flows in Europe largely originated from within the region—from the North—although a

⁸Intraregional portfolio flows are significantly higher, nearly 60%, compared with less than 20% in Asia.

significant amount was actually raised outside, including the US.¹⁰ In Asia, especially in economies most severely affected by the crisis—Indonesia and Thailand—the largest lending source was Japanese banks. But the sources varied for other Asian economies , from banks and nonbanks outside the region. Another similarity is, in both cases, capital flows came largely through debt, not equity. In Europe, flows were intermediated through the wholesale banking market, whereas in Asia they were either channeled directly to corporate borrowers or through corporate-owned banks.

But in financial integration, there is a fundamental difference between the two regions. Unlike in Europe, where low real interest rates in the South attracted most capital flows, the biggest impetus for inflows to Asia at the time was investor overconfidence in the region's economic prospects. Relatively good macroeconomic performance and stability was a further incentive. Thus, in Asia's case, the increase in capital inflows had less to do with regional financial integration. In fact, it was the crisis itself that led to further integration and cooperation—opposite from the eurozone sequence. Realizing the importance of avoiding the double mismatch and to provide alternative short-term liquidity if crises occur, ASEAN+3 policymakers became determined to develop stronger bond markets in the region through the Asia Bond Markets Initiative—thus fostering financial integration—and supplying emergency liquidity through the CMIM. In other subregions, providing financial safety nets through regional cooperation has also been broached (for example in South Asia) or is currently being discussed (in Central Asia).

Another similarity was in risk-sharing. To the extent most capital flows were in debt rather than equity, risk sharing in both cases was limited. Since risks in Europe are concentrated in just a few economies —not shared—it is difficult to revive the economy from a crisis even with an integrated union. In lessintegrated Asia, selecting and implementing crisis response policies was entirely a national affair.

⁷The widely discussed global imbalances that preceded the GFC were characterized by a huge deficit in the US current account and large surplus in the PRC. Some argued this is one of the reasons the major 2008 shock was inevitable. With constant efforts to rebalance given the huge impact of such a major crisis, both the US deficit and PRC surplus have declined markedly since. Yet, overall global imbalances continue, with Germany now holding the world's biggest surplus.

[°]Cross border retail banking did not expand much in Europe despite the monetary union. Most lending has been through wholesale banking. Cross-border ownership of banks is also limited, and mergers rare.

¹⁰I.J. Azis and H.S. Shin. Forthcoming. Managing Elevated Risk: Global Liquidity, Capital Flows, and Macroprudential Policy—an Asian Perspective. Berlin: Springer.

Clearly, however, the underlying process of Europe's crisis and the AFC was the same—massive private capital flows directed toward unproductive investment led to vulnerability and eventual crisis. The risks associated with financial vulnerability and excessive reliance on government support, directly or indirectly (moral hazard), were clearly overlooked.

On this basis, the future path of integration in Europe and Asia will be different. Europe will likely focus more on further strengthening regional institutions—especially on financial safety nets, the banking union, and fiscal policy. This is to ensure recovery from current difficulties and a better working monetary union presaging full economic integration. Asia, on the other hand, will likely continue efforts to harmonize rules and regulations—especially in the financial sector—and further unilaterally liberalize trade and investment. Regional arrangements and initiatives—like the AEC, free trade agreements, and infrastructure connectivity—will further drive liberalization. Strengthening the national economy by cooperating with others will continue as Asia's approach of integration. And managing the region's diversity will remain an important goal.

REGIONAL ECONOMIC UPDATE

External Economic Environment and Regional Outlook

The external recovery has been tentative this year after G3 economic growth slipped during the first half the better US growth outlook has yet to benefit Asia, there is some uncertainty over Japan's prospects, and the eurozone economy continues to struggle.

In the United States (US), growth in gross domestic product (GDP) rebounded in the second quarter (based on quarter-on-quarter seasonaly adjusted annualize rate [q-o-q, saar]) after an unusually severe winter led to a contraction in the first guarter; while first estimate for third guarter growth came in well above market expectations. The strong growth is expected to continue as industrial production, manufacturing, and consumer confidence indexes continue to rise along with a pickup in housing starts. In Japan, GDP shrank in the second quarter (q-o-q, saar)—wiping out the first quarter's gain-following the implementation of April's value-added tax rate hike. Recent indicators point to weaker-than-expected economic growth, which prompted the Bank of Japan to expand its quantitative easing program. Growth in business investment could support 2015 growth, but private consumption—pending the second sales tax hike will continue to be constrained. In the eurozone, on the other hand, declining investment and a drop in inventories kept GDP growth unexpectedly flat in the second quarter (q-o-q, saar). Monetary authorities responded by cutting policy interest rates and buying private sector securities. Despite the loose monetary policy, recent economic data suggest a limited recovery as growth in industrial production and retail sales remains sluggish.

Developing Asia's resilient growth is partly due to strong domestic and regional demand, although it varies across subregions.

In aggregate, GDP growth in developing Asia, after 6.1% growth in 2013, will increase marginally to 6.2% in 2014 and 6.4% in 2015 **(Table 2)**. The rising GDP growth in South Asia is offset by a slowdown in

Table 2: Regional GDP Growth¹ (y-o-y, %)

				Fore	cast ⁹
	2011	2012	2013 ⁸	2014	2015
Developing Asia ²	7.4	6.1	6.1	6.2	6.4
Central Asia ³	6.8	5.6	6.5	5.6	5.9
East Asia ⁴	8.2	6.6	6.7	6.7	6.7
People's Republic of China	9.3	7.7	7.7	7.5	7.4
South Asia ⁵	6.4	4.6	4.7	5.4	6.1
India	6.7	4.5	4.7	5.5	6.3
Southeast Asia ⁶	4.8	5.7	5.0	4.6	5.3
The Pacific ⁷	9.4	6.1	5.0	5.3	13.2
Major Industrialized Econor	nies				
eurozone	1.6	-0.7	-0.4	0.8	1.0
Japan	-0.5	1.5	1.5	1.0	1.4
United States	1.8	2.3	2.2	2.1	3.0

'Aggregates weighted by gross national income levels (Atlas method, current \$) from *World Development Indicators*, World Bank.

²Refers to the 45 developing members of the Asian Development Bank.

³Includes Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.

⁴Includes the People's Republic of China; Hong Kong, China; the Republic of Korea; Mongolia; and Taipei,China.

⁵Includes Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. Data for Bangladesh, India, and Pakistan are fiscal-year. For India, fiscal year is from April of the specified year through the following March. For Bangladesh and Pakistan, fiscal year is from July the previous year through June of the specified year.

⁶Includes Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. Excludes Myanmar as weights unavailable.

⁷Includes the Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu. Excludes Nauru as weights unavailable.

⁸ADB estimates except for the People's Republic of China, India, eurozone, Japan, and the United States which are actual values.

⁹ADB forecasts from Asian Development Outlook Update September 2014. Source: ADB calculations using data from various issues of the Asian Development Outlook, Asian Development Bank; and CEIC. Southeast Asia and Central Asia, while growth is flat in East Asia. South Asian economies are performing better than expected, led by India—where a popular government has committed to begin implementing long-delayed reforms. On the other hand, Southeast Asian economic expansion moderated on slower investment and consumption growth; while the slowdown in demand from the Russian Federation is dragging down growth in Central Asia. In East Asia, growth in the People's Republic of China (PRC) and Hong Kong, China is gradually easing, offset somewhat by expected upswings in the Republic of Korea and Taipei, China.

Economic growth in the PRC will continue to moderate gradually, in line with government rebalancing efforts; growth prospects across the rest of East Asia remain mixed.

In the PRC, GDP growth moderated to 7.3% in the third quarter on sluggish property market and weaker consumer demand and industrial production. Targeted measures to sustain investment are expected to help the PRC attain its official growth target of 7.5% in 2014, before easing somewhat to 7.4% in 2015. For the rest of East Asia, the outlook is mixed. In the Republic of Korea, consumer and investor sentiment dampened second quarter GDP growth following the tragic ferry disaster. But strong global demand for manufactures is expected to boost growth through 2015. Taipei, China's GDP growth rose in the second guarter on robust domestic demand and higher exports. Yet growth in Hong Kong, China slowedmainly due to a contraction in fixed investments.

Better-than-expected growth across most of South Asia boosts the growth outlook, supported by stronger exports, rising remittances, and easing inflation.

In India, economic outlook improved as reforms initiated this year boosted the business environment. Sri Lanka's economy is showing robust growth, benefitting from a favorable monsoon, industrial expansion, and benign inflation. Elsewhere in the region, a substantial uptick in public investments, export receipts and overseas worker remittances should bolster economic prospects in Bhutan, Nepal, and Pakistan.

Most Southeast Asian economies will ease this year, though mainly due to temporary domestic factors; but is expected to bounce back in 2015 on recovery of exports and investments.

Indonesia's interest rate hikes last year continued to drag domestic demand, while restrictive mining policies and lower commodity prices led to weaker exports. GDP growth decelerated to a fresh 5-year low of 5.0% in the third quarter. In Singapore, the benign economic outlook is expected to continue with a tight labor market and ongoing domestic restructuring. In the Philippines, after 2 years of strong growth, the expansion is moderating on lower government spending; however, recent data on exports and remittances indicate growth could surprise on the upside. Thailand's GDP growth is also forecast to slow this year due to political events; but latest data show it avoided a technical recession—the change in government boosted economic sentiment. Meanwhile, Malaysia's growth outlook has improved on stronger domestic demand, which buoyed GDP growth in the first half.

Growth in Central Asian economies is declining as the spillover from slower growth in the Russian Federation hurts their trade and remittances; along with a sharp industrial slowdown in Kazakhstan.

The economic slowdown in the Russian Federation—due to political tensions—is dragging down export demand in most Central Asian economies—most notably Turkmenistan and Armenia. Remittances from the Russian Federation also fell sharply, hurting Uzbekistan and Tajikistan most. Kazakhstan's 3.8% first quarter growth was its slowest quarterly growth since the 2008/09 global financial crisis, prompting the government to launch a \$5.5 billion stimulus program for 2014 and 2015.

Economic growth in the Pacific will increase somewhat, led by its largest economy, Papua New Guinea.

Papua New Guinea will drive the subregion's growth in 2015 as it starts its first full year of liquefied natural gas exports. Some economies are expected to grow stronger in 2014 on fiscal stimulus tied to large infrastructure projects. Reconstruction and rehabilitation should fuel growth in Nauru, Tonga, and Samoa; while getting delayed infrastructure projects off the ground in Kiribati, the Marshall Islands, Tuvalu, and Vanuatu should raise 2014 growth in these economies. However, the overall growth forecast for 2014 for the subregion was dragged down by the damage caused by torrential rains in the Solomon Islands in early 2014, disappointing business activity in Timor-Leste, and a downturn in construction and tourism in Palau.

Risks to the Outlook and Policy Issues

There are five downside risks to the outlook: (i) delays in planned reforms; (ii) the impact on developing Asia of a faster PRC slowdown; (iii) increasing corporate sector external debt; (iv) weaker recovery in advanced economies, particularly Europe; and (v) capital outflows or financial volatility from early US monetary tightening.

Any delay in planned domestic structural reforms could leave economies more exposed to potential shocks—both external and internal. As governments in developing Asia adjust policies to reduce structural bottlenecks, boost productivity, promote private investment, and lift consumer spending, they could be hindered by lackluster external demand, a slowdown in remittances, or capital flow reversals, for example. Thus, continuing the domestic reform agenda is critical, particularly given the expected tightening of global liquidity and geopolitical uncertainty tensions. A faster-than-expected slowdown in the PRC economy could hurt prospects for the rest of developing Asia, especially those with strong trade links to the PRC, such as Hong Kong, China; Indonesia; the Republic of Korea; Myanmar; Thailand; and Viet Nam. There could also be direct or indirect effects through financial channels. The region's equity markets and currencies could weaken should investor confidence fall alongside slower PRC growth.

Asia's corporate sector external debt is rising, increasing vulnerability to external shocks. International debt securities issued by nonfinancial corporations increased from \$271.4 billion in December 2012 to \$311.9 billion in March 2014.¹¹ During the same period, net external assets of Asian banks held by corporations increased 10% to \$1.9 trillion, with over 80% denominated in foreign currency.¹² Continued US dollar appreciation due to the US recovery would increase this vulnerability.

Advanced economies are also showing differentiated growth prospects. The US recovery is back on track after a poor first quarter performance, although the impact on Asia is yet to happen. But sluggish external demand and domestic weakness particularly in the labor market—could pose risks to the recovery in Japan. A key risk, however, comes from Europe, where the feeble recovery in the eurozone stalled further in the second quarter with limited options for a rebound in the coming quarters.

Finally, while pace of US monetary tightening may still surprise markets, they would likely have a modest impact on Asia. The US Federal Reserve could tighten monetary policy sooner than anticipated, but it would come from a sustained jump in US growth, which would benefit the region's exports. A US interest rate shock may prompt developing Asia's policymakers to raise interest rates to forestall large capital and exchange

[&]quot;Based on data from the Bank for International Settlements. Includes issuers by nationality from Australia; the People's Republic of China; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; New Zealand; Singapore; Taipei, China; and Thailand.

¹² Includes Australia; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; Singapore; and Taipei,China.

rate movements, though this would increase the domestic cost of capital and limit the scope for growth.¹³ However, model simulations suggest that policy response in the region remains adequate to avoid these disruptions and should not derail growth.

Taken together, the risks underscore the reasons why Asia's policymakers must continue with their national agendas for structural reform, while keeping macroeconomic fundamentals strong.

Asia's experience with the Asian and global financial crises and contagion makes the case for using macroprudential policy in support of sound macroeconomic policy—including effective financial regulation and supervision. Macroprudential policy should help safeguard financial stability—in particular when dealing with the credit and asset price cycles driven by global capital flows. Regional cooperation on macroprudential policy could also address possible policy spillovers—for example, the side effects these policies can have on capital flows that might increase vulnerability of other economies in the region.

¹³See ADB. 2014. Asian Development Outlook Update. Manila.

PROGRESS IN REGIONAL COOPERATION AND INTEGRATION

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 guarter. 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).

¹⁴Figures 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.*

¹⁵Trade 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.

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

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,



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. 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.

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

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

²S. 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 ³Ibid.

4lbid, p. 3; "Initial assessments of recent government policies toward crossborder commerce underestimate the true extent of state intervention."

⁵GTA 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.

⁶Evenett, op. cit., p.10.

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

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*. 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." 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

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

¹⁰Evenett. op. cit., p. 8.

"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.*

¹²F. 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.

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

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		
Japan⁴	67	India	483		
Australia	55	Thailand	462		

PRC = People's Republic of China.

¹270 red measures from India; one co-implemented by India and Nepal. ²84 red measures from PRC; one co-implemented by PRC and Croatia. ³76 red measures from Indonesia; one co-implemented by Indonesia and Japan; one co-implemented by Indonesia, Malaysia, and Thailand. ⁴65 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 Grangercauses "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.

¹⁴Data 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.*

⁸Declaration—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

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 $100 \cdot ((X_{ii} + M_{ii})/(X_{iii} + M_{iii})))$, where $X_{ii} + M_{ii}$ refers to region *i*'s total intraregional trade and $X_{iii} + M_{iii}$ 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 $((X_{ii}+M_{ii})/(X_{iw}+M_{iw}))/((X_{iw}+M_{iw})/(X_{ww}+M_{iw}))$, 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 $(T_{ij}/T_j)/(T_i/T_w)$, 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 *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.

¹⁶When 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 wellconnected 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 intrasubregional intensity (3.5), far above those of East and South Asia. This bodes well for the ASEAN Economic Community (AEC). Its trade is welllinked to other subregions (trade intensity with the rest of Asia is 1.6–1.7). Southeast Asia's trade is welllinked 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 intersubregional 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

¹⁷The 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.

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

¹⁹An 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). ²⁰However, 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.



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 "megaregionals" 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.

²¹J. Menon. 2014. TPPing Over? VoxEU. 1 July.

²²J. 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



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. 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.

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

²⁴Within 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.

²⁵From 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



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

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.

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 guarters, 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.

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.

AUS = Australia; EU = European Union; JPN = Japan; UK = United Kingdom; US = United States

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

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

²⁷Indonesia, Malaysia, the Philippines and Thailand.

Table 3: VAR Analysis: Share of	Growth	Variance I	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:
- 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.

²⁸Group 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.

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 guickly 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 investmentwhich 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	1	
CAREC	74.5	1,979.9
GMS	102.4	2,418.6
Total Trade with the	World	
CAREC	130.4	4,458.7

GMS179.84,997.6CAREC = 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, longterm 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, crossborder 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-

²⁹B. 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-operatetransfer 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 intrasubregional 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.

 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 intrasubregional 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 intrasubregional 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 lowermiddle-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

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

³⁰Remittances 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/pressrelease/2014/04/11/remittances-developing-countries-deportationsmigrant-workers-wb 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.

³¹World Bank. 2014. Migration and Development Brief 22.

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

³³ILO 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—

³⁴The Economist. 2014. Migrant workers in Thailand: The Exodus. 21 June. ³⁵The Wall Street Journal. 2014. Cambodian Workers Flee Thailand After Army Crackdown. 21 June.

³⁶ILO. 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 Asia³⁷

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 tourismrelated—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)**.

³⁷This 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	(% 0	f total	trade)
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	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 selfsustained 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.

	Рори	lation		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	

Table 7: Basic Economic Indicators—Pacific DMCs

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 Asia¹

All Pacific PDMCs

Group 2: Countries with resource-based growth



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.

¹Measure 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 semiskilled 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.

³⁸This 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.

³⁹In 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.

SPECIAL CHAPTER: REGIONAL FINANCIAL INTEGRATION AND CRISIS IN ASIA AND EUROPE—A COMPARATIVE ANALYSIS

The European Union (EU) represents the most advanced stage of regional financial integration in the world today. From its first formal agreement signed in 1951—the six-member European Coal and Steel Community—Europe has developed into an extremely tight 28-member regional political, economic, and financial union.⁴⁰ Moreover, the EU experience in creating its extensive structure provides by far the richest source of information about regional financial cooperation and integration.

The policy process driving integration has been very different in Europe and Asia. While EU economic and financial integration is more advanced, both can draw policy lessons from each other. This includes lessons learned from the 1997/98 Asian financial crisis (AFC), and the 2009 eurozone sovereign debt and banking crisis (EDC). In this special chapter, we compare integration between Europe and Asia based on joint-research with Bruegel, a European think-tank, by focusing on financial integration. Given varying levels of development in the two regions, the challenges and policy repercussions may be different. But the common goal remains an efficient, inclusive, and stable financial system.

The analysis first summarizes drivers of economic integration in Europe and Asia. Then financial integration and development are discussed. The third section discusses crisis lessons related to capital flows and financial integration. Building on that, the case for macroprudential policy is presented at the last section.

Drivers of Economic Integration

European regionalism emerged from the experience of two world wars and the imperative of preventing future conflict. Coordinating Europe's economies was the basis of Jean Monnet's pre-war vision of a united and peaceful Europe. But it was the far more encompassing 1958 Treaty of Rome that triggered the integration process—as manufactured goods was added to the free movement of steel and coal. In 1962, the Common Agricultural Policy (CAP) was established to manage Europe's market for agricultural products. Europe adopted an approach that focused on 'setting institutions and procedures' to integrate economies.

Asia's regionalism is much more modest in scope and ambition. After World War II, as economies in the region gained independence, national identity was paramount. This explains why Asia remains cautious over creating strong supranational institutions for economic and political integration. Market-driven private activities facilitated by unilateral liberalization and deepening value chains dominate the drive toward integration. Emphasis is on access and harmonizing rules and regulations across economies. Institutions in Asia were primarily established to promote market activities and to prevent or manage crisis.

Despite the historical differences, intraregional trade was a key driver of economic integration in both Europe and Asia. In Europe, after the Bretton Woods system ended in 1971, policymakers began a process of limiting exchange rate fluctuations, particularly between their relatively small, open economies.⁴¹ This was expected to promote trade, support CAP, reduce transaction costs, and thereby deepen the single market. Between 1980 and 1999, Europe's customs union and deepening single market brought a significant increase in intra-EU trade.

⁴⁰In this Special Chapter, Europe and the EU are used interchangeably. In general, the discussion refers to the EU15—Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom—because these countries represent the heart of European integration.

⁴¹This started the bumpy ride toward the 1992 Treaty of Maastricht—the basis for the 1 January 1999 monetary union and euro launch.

Figure 17: Intra-regional Trade—European Union, eurozone, Asia, and Asia-11 (share in total trade, %)



Asia-11 = the People's Republic of China; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand; and EU=European Union. Note: Both the EU and the eurozone are in changing composition. EU: data for Croatia and Slovenia (1980 to 1992), and for Estonia, Latvia and Lithuania (1980 to 1991) are not available. Eurozone: data for Estonia and Latvia (1980 to 1991), and for Slovenia and the Slovak Republic (1980 to 1992) are not available.

2014 data for Asia and Asia-11 is up to May.

Source: ADB and Bruegel's calculations based on *Direction of Trade Statistics*, International Monetary Fund.

However, since the 1999 monetary union and full adoption of the euro in 2002, growth in intra-EU trade first stagnated and then decreased **(Figure 17)**. Interestingly, there seems to be no marked difference in intraregional trade between Asia-11 and the eurozone—both below 50%.⁴² In the case of Asia and the EU, the figures are 54% and 64%, respectively. The most significant trend after the euro's introduction was the emergence of structural divergence between groups of EU economies—a fast-growing trade deficit in the Periphery and huge surplus in the Core; with the Core's rising share of manufacturing production.⁴³

In Asia, despite diverse stages of economic development, integration has been largely driven by market forces. No 'heavy' institutions were established, let alone a monetary union. Growth in

Figure 18: Interest Rate Dispersion—Asia-11 and eurozone



Notes: Series refer to coefficient of variation of the average interbank lending rates in Asia and coefficient of variation of MFI interest rates on new euro-denominated loans to eurozone non-financial corporations. Asia-11 is comprised of the People's Republic of China; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand. Time series data is from 1 January 1997 to 31 July 2014 unless otherwise stated. Series used are Chibor 1D (PRC), Hibor overnight (HKG), NSE IOR Overnight (IND; from 12 June 1998), JIBOR Overnight (INO), BoJ Unsecured Call Rate Overnight (JPN), Call Rate Overnight-All Trades (KOR), KL IOR Ave Overnight (MAL; from 2 Jan 1997), ABS Swap Offer Rate Overnight (SIN; from 20 March 2000), Interbank Call Rate Overnight (PHI), Interbank Call Rate Overnight (TAP), and BIBOR Fixings Overnight (THA; from 30 May 2002). Source: European Central Bank and ADB calculations using data from

Bloomberg, CEIC, and national sources.

intraregional trade came from private sector-driven regional production networks—multinationals seeking greater efficiency by exploiting each economy's comparative advantage. These networks were also supported by foreign direct investment (FDI), particularly from Japan to the People's Republic of China (PRC) and Southeast Asia. After 1990, Asia's intraregional trade grew rapidly until interrupted by the AFC. It grew steadily from recovery to 2004, slowly decreasing through the global economic crisis (GFC), before rising again afterward. So it appears intraregional trade tends to increase after a crisis.

Financial Integration and Financial Development

Macro-financial condition was extraordinarily benign from 2000 to 2008 during the so-called 'great moderation'. Both Asia and Europe saw regional financial integration deepen. The coefficient of variation of cross-country money market rate differentials in Asia-11 dropped considerably after 1999 **(Figure 18)**. There was a spike in 2008/09 attributed to GFC-induced

⁴²Here, "Asia" generally refers to "Integrating Asia", which includes the People's Republic of China (PRC); Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Malaysia; the Philippines; Singapore; Taipei, China; and Thailand (ADB 2008).

⁴³The EU 'Core' includes Austria, Belgium, Finland, Germany, Luxemburg, and the Netherlands; the 'Periphery' includes Cyprus, Greece, Ireland, Portugal, and Spain.

market volatility but have moderated since then. For Europe, the coefficient of variation for monetary and financial institution (MFI) interest rates on new euro-denominated loans to nonfinancial eurozone corporations stayed low until the GFC spike, and continued upward as the eurozone crisis deepened.

In Europe, financial integration was unequal across financial intermediation channels. For example, on one hand, the interbank market rapidly integrated after the euro's introduction. On the other hand, retail banking remained largely fragmented along national lines, as were bank mergers. In general, EU corporate bond and equity markets also remained fragmented along national lines, despite increased efforts to deepen integration. But integration advanced significantly in terms of debt flows, allowing some economies to finance their large current account deficits (this also explains why risksharing via the financial system remained limited).

It is fair to say the euro's introduction advanced financial integration beyond what would have happened without a common currency. Since the euro, for example, Europe's cross-border capital flows rapidly increased for three basic reasons:

- (i) market complacency: risk aversion dropped and spreads narrowed considerably;
- (ii) policy complacency: the policy structure for macroeconomic stability and crisis prevention could not identify the risks posed by the buildup of macro and financial imbalances; and
- (iii) institutional upgrading: electronic-trading platforms were installed for sovereign bonds, the euro adoption, and single payment systems while regulatory frameworks continued to converge.

This made financial systems increasingly interdependent. As cross-border intermediation flowed through debt instruments and banks, the risk of contagion also increased.

In Asia, the AFC became the impetus for closer regional financial cooperation and integration. The lack of strong capital markets and developed domestic financial systems (except in Singapore and Hong Kong, China) helped cause the crisis and problems in channeling the region's savings into productive investments. As banking reforms and capital market initiatives took hold following the AFC, Asia's financial base began to diversify. Capital market financing expanded and bank-efficiency improved. Asia's intraregional portfolio investment increased and home bias declined—though it remained strong. Co-movements of equity indexes based on simple correlations—another indicator of financial integration—also strengthened **(Figure 19)**.

Asia's cross-border portfolio investment is much smaller than Europe's—although Asia's share has increased over the past decade, especially among ASEAN+3 and ASEAN+6 economies **(Table 8)**. Indeed, Asia's financial markets are more integrated with markets outside the region particularly the US (for equity markets) and Europe (for bond markets). Asia's local-currency bond markets remain largely segmented, and regional consumption smoothing also remains limited. Although Asia's financial openness is much less than Europe's (0.18 versus 1.02, see Kawai & Morgan, 2014), it cannot fully explain the low degree of risksharing. Even with a high degree of openness, risksharing in Europe remains persistently weak.

Europe's financial sector is also generally more developed than Asia's. A recent study shows that, while Asia's financial systems have developed over the past 2 decades—becoming deeper and more complex—there remains a lack of convergence in financial development with advanced economies (Didier and Schmukler, 2014). It is often hypothesized that there is a threshold level of financial development before the benefits of greater financial integration exceed its costs. But the precise link between the two remains debatable. One study (Obstfeld, 2007) shows a higher correlation between growth and use of foreign capital in industrial economies than in low-income economies. But even this does not prove the precise link.

Nonetheless, Asia needs to further develop its financial sector to help reach its multiple development goals and to support real sector growth. Importantly, it should be done either for



PRC = People's Republic of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; SIN = Singapore; TAP = Taipei,China; THA = Thailand; US = United States.

Note: Time series data begin 2 April 1990 except for the PRC series which begins 19 December 1990. Source: ADB calculations using data from Bloomberg.

Table 8: Intraregional Portfolio Investment—Asia vs Europe

(share in total cross-border portfolio investments, %)

Assets	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ASEAN	10.5	9.2	7.0	8.5	9.0	7.7	8.4	6.7	6.8	9.3	8.7	10.3	9.8
ASEAN+3 and HKG	5.2	4.8	5.3	5.7	6.9	9.1	12.4	10.5	9.9	10.5	11.1	12.9	14.0
ASEAN+6 and HKG	8.5	8.1	8.9	9.4	10.9	13.3	16.9	14.8	15.0	15.6	16.2	17.8	18.1
Asia-11	5.5	5.1	5.7	6.2	7.5	9.9	13.7	11.6	11.2	12.0	12.3	14.3	15.4
Asia	8.8	8.4	9.1	9.7	11.2	13.7	17.3	15.1	15.5	16.2	16.5	18.3	18.5
EU15	60.0	62.6	63.8	64.2	62.3	61.9	61.7	65.0	65.4	60.6	60.5	60.4	58.3
EU27	60.5	63.1	64.5	65.1	63.3	62.8	62.7	66.0	66.4	61.8	61.7	61.7	59.6
Liabilities	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ASEAN	11.9	13.8	10.7	12.4	12.1	10.1	10.8	11.8	9.8	12.1	11.3	13.0	14.0
ASEAN+3 and HKG	10.1	10.8	10.3	10.2	9.8	12.2	16.2	17.5	16.8	17.2	18.1	19.8	20.1
ASEAN+6 and HKG	14.0	15.5	14.0	13.7	12.9	14.8	18.0	19.6	19.2	19.6	20.7	21.8	21.6
Asia-11	10.0	11.0	10.1	10.1	9.6	11.8	15.4	16.9	16.0	16.5	17.8	19.4	19.5
Asia	13.9	15.7	13.9	13.6	12.8	14.5	17.6	19.4	18.9	19.2	20.4	21.6	21.2
EU15	57.1	60.1	61.5	63.1	62.8	62.8	62.5	64.0	63.6	60.5	59.4	60.3	60.5
EU27	57.3	60.4	61.9	63.5	63.3	63.4	63.1	64.6	64.4	61.3	60.2	61.1	61.1

ASEAN = Brunei Darussalam, Cambodia, Indonesia, the Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam. ASEAN+3 = ASEAN, PRC, Japan and the Republic of Korea. ASEAN+6 = ASEAN+3; Australia; India; and New Zealand. Asia-11 = PRC, Hong Kong, China, India, Indonesia, Japan, the Republic of Korea, Malaysia, the Philippines, Singapore, Thailand, Taipei, China. EU15 = Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. EU27 = EU15 plus Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, and Slovenia. HKG = Hong Kong, China.

Source: ADB calculations using data from Coordinated Portfolio Investment Survey, International Monetary Fund.

financial sector development per se or to promote financial integration. Financial integration can deepen by strengthening the harmonization of rules and regulations. Thus, financial development and integration can progress in sequence irrespective of causality (that one causes the other). In this context, Europe's experience can provide Asia useful lessons in determining which institutions better foster financial development and how they influence financial integration.⁴⁴

Crisis Lessons

Despite relatively sound macroeconomic fundamentals prior to the AFC, Asian economies were still drawn into crisis. One major reason was investor overconfidence and the resulting mispriced risk on the Asian economy. The surge in capital inflows prior to the crisis gave banks and corporations an ample source of new credit. At the time, Asia's major economies followed de facto dollar pegs. This caused widening fluctuations in effective exchange rates against trading partners even as it stabilized bilateral exchange rates against the US dollar. These fluctuations weakened price competitiveness, deteriorating current account balances in economies like Thailand. The system of dollar pegs also made domestic financial institutions less circumspect over exchange rate risk, causing currency mismatches-misplaced confidence that dollar-denominated loans could readily be repaid out of local currency earnings.

But the key factor was the surge in private sector, foreign currency-denominated debt. These capital inflows were largely short-term (less than 1-year maturity) and unhedged. Again, the main force behind the inflows was investor overconfidence in Asia's economic prospects. Combined with additional domestic sources of funds—facilitated by the lack of prudential supervision—much of these inflows were invested in unproductive sectors, including housing and real estate. The resulting boom created bubbles. Once they burst, the AFC began to unravel. The double mismatch amplified the impact. This occurred despite the region's relatively sound macroeconomic conditions. The Thai baht was first to collapse, followed by the Indonesian rupiah, Malaysian ringgit, and other currencies in the region. When the true size of short-term debt in the Republic of Korea was finally exposed, this new OECD member also fell into crisis.

Learning from the AFC—and understanding the importance of avoiding double mismatches and providing emergency short-term liquidity in times of crisis, ASEAN+3 policymakers grew determined to develop stronger bond markets regionally through the Asia Bond Markets Initiative—thus fostering financial integration—and provide emergency liquidity through the Chiang Mai Initiative Multilateralization (CMIM). In other Asian subregions, financial safety nets through regional cooperation have also been either promoted or discussed. Thus, the AFC was impetus for greater regional cooperation and integration.

Europe's debt problem can be directly linked to the GFC, which led to a sovereign debt crisis in several eurozone economies in early 2010 (Volz, 2012). To offset the sharp fall in gross domestic product (GDP), governments responded with countercyclical fiscal policies that increased budget deficits. Fiscal positions worsened as tax revenues declined and transfer payments grew due to rising unemployment. In some economies, governments bailed out banks, boosting public debt.

Europe's banking problems can be attributed, among others, to removing the exchange rate risk associated with large capital flows from the core to periphery. Diverging inflation between countries and converging yields implied lower real interest rates. This drove large capital inflows to the periphery. Given Germany's dominance in eurozone GDP (28%) and low inflation (1.7%) over the euro's first decade, the European Central Bank (ECB) through policy decisions based on eurozone-wide inflation—kept its interest rate excessively low (in retrospect) for many members. So financial integration eventually led to large imbalances—a

⁴⁴The EU established the European Regional Development Fund with four components: (i) the European Social Fund, focusing on skills training and further education; (ii) the Financial Instruments for Fisheries Guidance; (iii) the European Agricultural Guidance and Guarantee Fund; and (iv) the Cohesion Fund, emphasizing transport and environmental projects.

Figure 20: The Sequence of Crisis and Financial Integration in Asia

Over-confidence and large capital flows in Asia 1997/98 Asian Financial Crisis Fostering financial integration and cooperation

Source: ADB.

credit boom in the periphery, financed by the surpluses in core economies.

When the bubbles burst, private debt became public debt, creating a "doom loop" between sovereigns and banks, both nationally and regionally. This interdependence between banks and sovereigns made the European crisis much deeper and difficult to resolve. Periphery banks held sizeable amounts of government bonds and bills. Stress on government bond markets meant stress on the country's banks. The national bank resolution regimes that mandated governments to stabilize the banking system further strained fiscal positions.

Clearly, a common feature of the AFC and EDC was the role played by massive capital inflows followed by "sudden stops." Merler and Pisani-Ferry (2012) argue that sudden-stop episodes in the eurozone fall into three periods: (i) the GFC, (ii) the period following the initial Greek bailout, and (iii) the summer of 2011. The timeline suggests contagion was at work. ECB provision of central bank liquidity significantly mitigated private capital outflows. But large external imbalances left a difficult legacy. Lacking an exchange rate adjustment tool—due to the euro and fixed exchange rates in the Balticscorrecting imbalances was both difficult and painful, as adjustments were limited to prices, wages, employment, and productivity. Moreover, the stock of external assets and liabilities accumulated over a decade of large current account imbalances ballooned, exposing economies to valuation risks and/or long-term deleveraging.

In retrospect, there is a fundamental difference between Asia and Europe, at least in the following sense. In Europe, low real interest rates in the periphery attracted most of the capital flows. The biggest impetus for capital flows in Asia before the AFC was investor over-confidence in the region's economic prospects. Unlike in Europe, the surge in capital flows in Asia had nothing to do with regional financial integration. It was the crisis that actually led to cooperation and further financial integration **(Figure 20)**. The reverse happened in the eurozone, where financial integration through monetary union came before the crisis.

The Case for Macroprudential Policy

Crises and contagion build the case for macroprudential policies to support sound macroeconomic policies—which includes effective financial regulation and supervision. Macroprudential policy can safeguard financial stability, particularly in handling credit- and assetprice cycles driven by global capital flows. In Europe, there was no concerted national effort to implement macroprudential policy. Efforts to dampen credit growth and housing bubbles were limited because of the prevailing view at the time that a balance of payments crisis will not happen under a currency union. The EU's relative financial openness may also explain its disinclination toward macroprudential policy. EU-wide macroprudential regulation was introduced only in 2011 with the creation of the European Systemic Risk Board (ESRB). The ESRB is mandated to study macroprudential risks to financial stability. It has a surveillance function but no binding powers. It can issue risk warnings to prompt early policy responses that avoid the buildup of systemic problems and lower the risk of future crisis. And it can recommend specific measures to address any identified risk. While the ESRB cannot impose measures on national authorities, it can expect a response. But without authority, the ESRB cannot be considered a "systemic stability regulator".

Although Asia has made greater use of macroprudential tools over time—especially on housing and real estate (Zhang and Zoli, 2014), in most cases standard measures are used—loanto-value ratios, housing tax measures, and foreign currency-related measures. While these assetside tools may help reduce the risk of financial instability—and other countries (including those in the EU) could have used them, most asset side measures failed to prevent risky behavior of banks when capital flows affect bank liabilities—as with rising non-core liabilities during massive bank-led flows in the 2000s.

So the risk of pro-cyclicality increased. This has happened in Europe, and to a lesser extent in Asia, since the mid-2000s. The debt build-up in the eurozone periphery and Eastern Europe at the time largely came via the surge in non-core liabilities. In this case, a new set of better targeted macroprudential policies should have been used (Azis and Shin, 2014).

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APPENDIXES

1: Regional Integration Tables

The statistical appendix is comprised of 10 tables that present selected indicators on economic integration covering the 48 regional members of the Asian Development Bank (ADB). The succeeding notes describe the country groupings and the calculation procedures undertaken.

Regional Groupings

- Asia consists of the 48 regional members of ADB.
- Developing Asia refers to Asia excluding Australia, Japan, and New Zealand.
- European Union (EU) consists of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom.

Regional Groupings

ArmeniaKazakhstanTurkmenistanAzerbaijanKyrgyz RepublicUzbekistanGeorgiaTajikistanEast AsiaPRCJapanMongoliaHong Kong, ChinaKorea, Rep. ofTaipei,ChinaSouth AsiaAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepal	Central Asia		
AzerbaijanKyrgyz RepublicUzbekistanGeorgiaTajikistanEast AsiaKorea, Rep. ofTaipei,ChinaPRCJapanMongoliaHong Kong, ChinaKorea, Rep. ofTaipei,ChinaSouth AsiaKorea, Rep. ofTaipei,ChinaAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepalKorea, Rep. of	Armenia	Kazakhstan	Turkmenistan
GeorgiaTajikistanEast AsiaKoreaPRCJapanMongoliaHong Kong, ChinaKorea, Rep. ofTaipei,ChinaSouth AsiaKorea, Rep. ofTaipei,ChinaAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepalKorea	Azerbaijan	Kyrgyz Republic	Uzbekistan
East AsiaPRCJapanMongoliaHong Kong, ChinaKorea, Rep. ofTaipei, ChinaSouth AsiaTaipei, ChinaAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepalState	Georgia	Tajikistan	
PRCJapanMongoliaHong Kong, ChinaKorea, Rep. ofTaipei, ChinaSouth AsiaAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepal	East Asia		
Hong Kong, ChinaKorea, Rep. ofTaipei, ChinaSouth AsiaIndiaPakistanAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepal	PRC	Japan	Mongolia
South AsiaAfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepal	Hong Kong, China	Korea, Rep. of	Taipei,China
AfghanistanIndiaPakistanBangladeshMaldivesSri LankaBhutanNepal	South Asia		
Bangladesh Maldives Sri Lanka Bhutan Nepal	Afghanistan	India	Pakistan
Bhutan Nepal	Bangladesh	Maldives	Sri Lanka
	Bhutan	Nepal	
Southeast Asia	Southeast Asia		
Brunei Darussalam Malaysia Thailand	Brunei Darussalam	Malaysia	Thailand
Cambodia Myanmar Viet Nam	Cambodia	Myanmar	Viet Nam
Indonesia Philippines	Indonesia	Philippines	
Lao PDR Singapore	Lao PDR	Singapore	
The Pacific	The Pacific		
Cook Islands Nauru Timor-Leste	Cook Islands	Nauru	Timor-Leste
Fiji Palau Tonga	Fiji	Palau	Tonga
Kiribati Papua New Guinea Tuvalu	Kiribati	Papua New Guinea	Tuvalu
Marshall Islands Samoa Vanuatu	Marshall Islands	Samoa	Vanuatu
Micronesia, Fed. Solomon Islands	Micronesia, Fed.	Solomon Islands	
States of	States of		
Oceania	Oceania		
Australia New Zealand	Australia	New Zealand	

Asia = Central Asia + East Asia + South Asia + Southeast Asia + The Pacific + Oceania.

Table Descriptions

Table A1: Trade Share—Asia

(% of total trade)

It is calculated as $(t_{ij}/T_{iw})^*100$, where t_{ij} is the total trade of economy "i" with economy "j" and T_{iw} is the total trade of economy "i" with the world. A higher share indicates a higher degree of regional trade integration.

Table A2: FTA Status—Asia

It is the number and status of bilateral and plurilateral free trade agreements (FTA) with at least one of the Asian economies as signatory. FTAs only proposed are excluded. It covers FTAs with the following status: Framework Agreement signed—the parties initially negotiate the contents of a framework agreement (FA), which serves as a framework for future negotiations; **Negotiations launched**—the parties, through the relevant ministries, declare the official launch of negotiations or set the date for such, or start the first round of negotiations; Signed but not yet in effect—parties sign the agreement after negotiations have been completed. However, the agreement has yet to be implemented; and **Signed and in effect**—provisions of FTA come into force, after legislative or executive ratification.

Table A3: Time to Export and Import—Asia (% to EU)

Time to export/import data measures the number of days required to export/import by ocean transport, including the processing of documents required to complete the transaction. It covers time used for documentation requirements and procedures at customs and other regulatory agencies as well as the time of inland transport between the largest business city and the main port used by traders. Regional aggregates are weighted averages based on total exports or imports. A score above (below) 100 means that it is more (less) costly to export or import from that economy compared to EU.

Table A4: Logistics Performance Index— Asia (% to EU)

Logistics Performance Index (LPI) scores are based on the following dimensions: (i) efficiency of border control and customs process; (ii) transport and trade-related infrastructure; (iii) competitively priced shipments; (iv) ability to track and trace consignments; and (v) timeliness of shipments. Regional aggregates are computed using total trade as weights. A score above (below) 100 means that it is easier (more difficult) to export or import from that economy compared to EU.

Table A5: Cross-Border Equity Holdings Share—Asia

(% of total cross-border equity holdings)

It is calculated as $(E_{ij}/E_{iv})^*100$ where E_{ij} is the holding of economy "i" of the equity securities issued by economy "j" and E_{iv} is the holding of economy "i" of the equity securities issued by all economies except those issued in the domestic market. Calculations are based solely on available data in the Coordinated Portfolio Investment Survey (CPIS) database of the International Monetary Fund (IMF). Rest of the World (ROW) includes equity securities issued by international organizations defined in the CPIS database and "unallocated data". A higher share indicates a higher degree of regional integration.

Table A6: Cross-Border Bond Holdings

Share—Asia (% of total cross-border bond holdings)

It is calculated as $(B_{ij}/B_{iw})^{*100}$ where B_{ij} is the holding of economy "i" of the debt securities issued by partner "j" and B_{iw} is the holding of economy "i" of the debt securities issued by all economies except those issued in the domestic market. Calculations are based solely on available data in the CPIS database of the IMF. ROW includes equity securities issued by international organizations defined in the CPIS database and "unallocated data". A higher share indicates a higher degree of regional integration.

Table A7: FDI Inflow Share—Asia

(% of total FDI inflows)

It is calculated as $(F_{ij}/F_{iw})^*100$ where F_{ij} is the foreign direct investment (FDI) received by economy "i" from economy "j" and F_{iw} is the FDI received by economy "i" from the world. Figures are based on net FDI inflow data. A higher share indicates a higher degree of regional integration.

Table A8: Remittance Inflows Share—Asia

(% of total remittance inflows)

It is calculated as $(R_{ij}/R_{iw})^*$ 100 where R_{ij} is the remittance received by economy "i" from partner "j" and R_{iw} is the remittance received by economy "i" from the world. Remittances refer to the sum of the following: (i) workers' remittances which are recorded as current transfers under the current account of the IMF's Balance of Payments (BOP); (ii) compensation of employees which includes wages, salaries, and other benefits of border, seasonal, and other non-resident workers and which are recorded under the "income" subcategory of the current account; and (iii) migrants' transfers which are reported under capital transfers in the BOP's capital account. Transfers through informal channels are excluded.

Table A9: Outbound Migration Share—Asia

(% of total outbound migrants)

It is calculated as $(M_{ij}/M_{iw})^*100$ where M_{ij} is the number migrants of economy "i" residing in economy "j" and M_{iw} is the number of all migrants of economy "i" residing overseas. This definition excludes those traveling abroad on a temporary basis. A higher share indicates a higher degree of regional integration.

Table A10: Outbound Tourism Share—Asia (% of total outbound tourists)

It is calculated as $(TR_{ij}/TR_{iw})^*100$ where TR_{ij} is the number of nationals of economy "i" travelling as tourists in economy "j" and TR_{iw} is the total number of nationals of economy "i" travelling as tourists overseas. A higher share indicates a higher degree of regional integration.

Table A1: Trade Share—Asia (% of total trade, Jan-May 2014)

			Par	tner				Partner						
Reporter	Asia	ofv	vhich	EU	US	ROW	Reporter	Asia	of v	vhich	EU	US	RO	
		PRC	Japan	-					PRC	Japan				
Central Asia	35.7	20.5	1.3	30.1	2.7	31.5	Lao PDR	91.8	35.7	1.9	2.9	0.4	4	
Armenia	20.0	9.0	2.2	28.4	3.9	47.7	Malaysia	72.4	15.1	9.6	9.3	7.8	10.	
Azerbaijan	24.6	2.1	0.5	45.3	4.0	26.1	Myanmar	94.2	42.8	4.7	2.5	0.5	2.	
Georgia	31.2	6.9	2.8	25.8	4.6	38.3	Philippines	72.4	16.0	14.0	11.1	10.8	5.	
Kazakhstan	29.5	20.4	1.6	37.3	2.3	31.0	Singapore	63.7	11.8	4.8	9.8	8.0	18.	
Kyrgyz Republic	63.7	43.5	1.2	5.3	0.7	30.4	Thailand	62.6	13.5	12.8	9.6	8.1	19.	
Tajikistan	60.5	36.8	0.5	6.8	0.7	32.0	Viet Nam	70.6	24.1	8.1	10.9	9.9	8.	
Turkmenistan	51.2	43.0	0.3	10.2	4.6	33.9								
Uzbekistan	54.6	18.7	1.4	12.0	1.2	32.2	The Pacific	72.7	10.8	5.4	5.2	2.7	19.	
							Cook Islands	-	-	-	-	-		
East Asia	51.9	13.8	6.1	11.9	11.6	24.6	Fiji	-	-	-	-	-		
PRC	43.9	-	7.5	14.3	12.6	29.2	Kiribati	-	-	-	-	-		
Hong Kong, China	77.1	49.6	5.5	8.3	6.9	7.6	Marshall Islands	-	-	-	-	-		
Japan	53.0	20.0	-	10.0	13.2	23.8	Micronesia, Fed.	-	-	-	-	-		
Korea, Rep. of	52.4	20.7	7.9	10.7	10.4	26.5	States of							
Mongolia	69.7	56.4	4.5	6.3	3.4	20.6	Nauru	-	-	-	-	-		
Taipei,China	62.2	21.4	9.8	8.4	10.1	19.3	Palau	-	-	-	-	-		
							Papua New	68.1	9.2	6.0	5.6	1.7	24.	
South Asia	34.9	10.3	2.1	13.8	7.7	43.6	Samoa	72 0	117	2.4	2 1	5.6	10	
Afghanistan	58.7	4.5	0.3	9.7	14.1	17.5	Solomon Islands	73.0 83.5	35.4	2.4	6.0	1.6	10 Q	
Bangladesh	47.3	15.5	2.7	21.3	8.4	23.0	Timor Losto	03.5	55.4	2.1	0.9	1.0	0.	
Bhutan	-	-	-	-	-	-	Tongo	05 0	E 0	- 2 1	-	0.2	-	
India	31.0	8.7	2.0	13.1	7.8	48.2	Tuvalu	0.00	5.0	2.1	2.7	9.2	Ζ.	
Maldives	60.7	5.4	1.9	13.5	2.9	22.9	Vanuatu	- 83.5	16.4	-	15	75	7	
Nepal	90.7	23.6	0.4	3.2	1.5	4.6	variuatu	03.5	10.4	0.0	1.5	7.5	/	
Pakistan	43.3	19.4	2.5	14.9	6.3	35.5	Oceania	60 /	26.2	11 /	117	76	11	
Sri Lanka	53.6	11.4	3.0	13.1	8.2	25.1	Australia	70.4	20.3	11.4	11.7	7.0	10.	
							Australia	70.0	27.4	12.3	11.4	/.3	10.0	
Southeast Asia	68.3	15.2	8.9	9.5	8.1	14.1	New Zealand	02.3	19.8	0.3	13./	9.4	14.	
Brunei Darussalam	92.6	9.0	24.7	1.2	6.6	-	Acia	EAE	14 5	66	11 0	10.2	22	
Cambodia	68.1	15.2	3.5	14.9	11.5	5.5		54.5	14.5	0.0	11.0	10.2	25.	
Indonesia	71.8	13.9	11.6	8.3	6.9	12.9	Developing Asia	53.9	13.1	1.2	12.1	9.9	24.	

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic, US = United States, ROW = rest of the world.

Source: ADB calculations using data from Direction of Trade Statistics, International Monetary Fund.

	Under N	egotiation	Signed		
Economy	Framework Agreement signed	Negotiations launched	but not yet In Effect	Signed and In Effect	Total
Central Asia					
Armenia	0	0	1	8	9
Azerbaijan	1	0	4	5	10
Georgia	0	0	2	9	11
Kazakhstan	2	4	3	7	16
Kyrgyz Republic	1	0	1	8	10
Tajikistan	1	0	5	4	10
Turkmenistan	1	0	1	3	5
Uzbekistan	1	0	5	5	11
East Asia					
China, People's Republic of	0	7	0	14	21
Hong Kong, China	0	0	1	3	4
Japan	1	7	1	13	22
Korea, Republic of	0	8	3	10	21
Mongolia	0	1	0	0	1
Taipei,China	1	1	0	7	9
South Asia					
Afghanistan	1	0	1	2	4
Bangladesh	2	1	1	2	6
Bhutan	1	0	0	2	3
India	4	11	0	13	28
Maldives	1	1	0	1	3
Nepal	1	0	0	2	3
Pakistan	4	3	2	7	16
Sri Lanka	1	0	1	4	6
Southeast Asia					
Brunei Darussalam	2	2	0	8	12
Cambodia	0	2	0	6	8
Indonesia	1	6	1	8	16

Table A2: FTA Status—Asia (as of July 2014)

Continued on next page

Table A2 continued.

	Under N	egotiation	Signed		
Economy	Framework Agreement signed	Negotiations launched	but not yet In Effect	Signed and In Effect	Total
Lao PDR	0	2	0	8	10
Malaysia	1	5	2	12	20
Myanmar	2	2	0	6	10
Philippines	0	2	0	7	9
Singapore	1	9	2	21	33
Thailand	3	5	1	12	21
Viet Nam	1	6	0	8	15
The Pacific					
Cook Islands	0	2	0	2	4
Fiji	0	2	0	3	5
Kiribati	0	2	0	2	4
Marshall Islands	0	2	0	2	4
Micronesia, Federated States of	0	2	0	2	4
Nauru	0	2	0	2	4
Palau	0	2	0	2	4
Papua New Guinea	0	2	0	4	6
Samoa	0	2	0	2	4
Solomon Islands	0	2	0	3	5
Timor-Leste	_	_	-	-	-
Tonga	0	2	0	2	4
Tuvalu	0	2	0	2	4
Vanuatu	0	2	0	3	5
Oceania					
Australia	1	7	2	9	19
New Zealand	1	6	0	10	17

Lao PDR = Lao People's Democratic Republic. Notes: Data as of July 2014. Excludes FTAs only proposed. Source: Asia Regional Integration Center FTA Database, Asian Development Bank.

Table A3: Time to	Export or Import-	-Asia (% to EU)

		Time to	Export			Import		
	2011	2012	2013	2014	2011	2012	2013	2014
Central Asia	591.2	637.5	603.1	578.4	561.8	636.8	663.4	644.5
Armenia	149.1	149.5	150.5	150.5	183.9	190.3	189.1	189.1
Azerbaijan	270.3	271.1	263.3	253.9	265.6	274.9	262.6	262.6
Georgia	93.2	84.1	84.6	84.6	112.4	105.7	105.0	105.0
Kazakhstan	708.3	757.1	761.7	742.9	633.3	729.6	724.7	703.7
Kyrgyz Republic	587.2	588.8	592.5	592.5	735.4	793.1	787.8	766.7
Tajikistan	661.7	663.6	667.7	667.7	663.9	761.3	756.2	735.2
Turkmenistan	-	-	-	-	-	-	-	-
Uzbekistan	717.6	747.7	677.1	507.8	939.7	1046.8	1134.4	1092.4
East Asia	138.8	140.0	143.1	143.1	160.0	165.3	167.0	167.0
PRC	195.7	196.3	197.5	197.5	245.1	253.8	252.1	252.1
Hong Kong, China	55.9	56.1	56.4	56.4	51.1	52.9	52.5	52.5
Japan	102.5	102.8	103.4	103.4	112.4	116.3	115.5	115.5
Korea, Rep. of	74.6	74.8	75.2	75.2	71.5	74.0	73.5	73.5
Mongolia	428.7	458.0	413.8	413.8	480.1	528.7	472.7	472.7
Taipei,China	111.8	93.5	94.0	94.0	122.6	105.7	105.0	105.0
South Asia	160.4	160.6	174.0	172.1	222.8	229.1	241.5	237.2
Afghanistan	689.7	691.7	761.7	808.7	786.5	814.2	892.8	955.8
Bangladesh	233.0	233.7	269.0	266.1	347.3	359.5	394.9	352.9
Bhutan	354.2	355.2	357.4	357.4	388.1	401.8	388.6	388.6
India	149.1	149.5	160.8	160.8	204.3	211.5	221.6	221.6
Maldives	195.7	196.3	197.5	197.5	224.7	232.6	231.1	231.1
Nepal	382.1	383.2	395.0	376.2	357.5	401.8	409.6	409.6
Pakistan	195.7	196.3	204.1	194.7	183.9	190.3	203.8	193.3
Sri Lanka	195.7	186.9	188.1	150.5	194.1	200.9	178.6	136.5
Southeast Asia	114.9	113.5	115.3	114.9	129.4	128.9	132.3	136.5
Brunei Darussalam	177.1	177.6	178.7	178.7	153.2	158.6	157.6	157.6
Cambodia	205.0	205.6	206.9	206.9	265.6	274.9	252.1	252.1
Indonesia	158.4	158.9	159.9	159.9	275.8	243.2	241.6	273.1
Lao PDR	298.2	233.7	216.3	216.3	337.1	274.9	273.1	273.1
Malaysia	121.2	102.8	103.4	103.4	102.1	84.6	84.0	84.0
Myanmar	_	233.7	235.1	188.1	-	285.5	283.6	231.1
Philippines	139.8	140.2	141.1	141.1	143.0	148.0	147.0	157.6
Singapore	55.9	56.1	56.4	56.4	40.9	42.3	42.0	42.0
Thailand	130.5	130.9	131.7	131.7	132.8	137.5	136.5	136.5
Viet Nam	205.0	196.3	197.5	197.5	214.5	222.1	220.6	220.6

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		Time to	Export			Time to	Import	
	2011	2012	2013	2014	2011	2012	2013	2014
The Pacific	209.4	209.6	211.5	211.5	274.3	306.5	295.4	283.7
Cook Islands	-	_	_	_	-	-	_	_
Fiji	167.8	168.2	178.7	178.7	224.7	232.6	231.1	231.1
Kiribati	186.4	186.9	188.1	188.1	214.5	222.1	220.6	220.6
Marshall Islands	214.4	215.0	216.3	216.3	255.4	264.4	262.6	262.6
Micronesia, Fed. States of	279.6	280.4	282.1	282.1	316.6	327.8	325.6	325.6
Nauru	-	_	_	_	-	_	_	_
Palau	242.3	243.0	244.5	244.5	316.6	327.8	325.6	315.1
Papua New Guinea	214.4	215.0	216.3	216.3	296.2	338.4	336.1	315.1
Samoa	205.0	205.6	197.5	197.5	286.0	296.1	294.1	294.1
Solomon Islands	205.0	205.6	206.9	206.9	204.3	211.5	210.1	210.1
Timor-Leste	261.0	261.7	263.3	263.3	265.6	274.9	273.1	273.1
Tonga	205.0	205.6	206.9	206.9	255.4	264.4	262.6	262.6
Tuvalu	-	-	-	-	-	-	-	-
Vanuatu	195.7	196.3	197.5	197.5	245.1	253.8	252.1	252.1
Oceania	85.0	85.3	85.9	85.9	83.0	85.9	85.4	85.4
Australia	83.9	84.1	84.6	84.6	81.7	84.6	84.0	84.0
New Zealand	93.2	93.5	94.0	94.0	91.9	95.2	94.5	94.5
Asia	141.5	143.1	144.1	139.5	161.2	166.3	171.0	171.1
Developing Asia	144.8	145.9	146.4	145.3	165.5	170.6	175.5	175.7

Table A3 continued

– = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic.

Source: ADB calculations using data from *Doing Business Database-World Bank* survey releases in 2011, 2012, 2013, and 2014.

Table A4: Logistics Performance Index (LPI) Scores—Asia (% to EU)

	2010	2012	2014		2010	_
Central Asia	71.2	68.4	66.3	Indonesia	72.0	
Armenia	65.7	67.3	69.0	Lao PDR	64.2	
Azerbaijan	68.9	65.2	63.3	Malaysia	89.7	
Georgia	68.1	72.8	64.9	Myanmar	60.8	
Kazakhstan	73.8	70.7	69.8	Philippines	81.9	
Kyrgyz Republic	68.4	61.8	57.1	Singapore	106.7	
Tajikistan	61.3	59.9	65.4	Thailand	85.8	
Turkmenistan	65.0	_	59.5	Viet Nam	77.2	
Uzbekistan	72.8	64.6	61.8			
				The Pacific	61.7	
East Asia	96.0	97.5	95.0	Cook Islands	-	
PRC	91.0	92.5	91.2	Fiji	58.4	
Hong Kong, China	101.2	108.3	99.0	Kiribati	_	
Japan	103.6	103.3	101.1	Marshall Islands	-	
Korea, Rep of.	95.0	97.2	94.9	Micronesia, Fed.	-	
Mongolia	58.7	59.1	61.0	States of		
Taipei,China	96.8	97.5	96.2	Nauru	-	
				Palau	-	
South Asia	78.2	79.6	77.5	Papua New Guinea	62.9	
Afghanistan	58.4	60.4	53.5	Samoa	-	
Bangladesh	71.5	-	66.2	Solomon Islands	60.3	
Bhutan	62.1	66.2	59.2	Timor-Leste	-	
India	81.4	80.9	79.6	Tonga	-	
Maldives	62.6	67.0	71.1	l luvalu	-	
Nepal	57.4	53.6	66.9	Vanuatu	-	
Pakistan	66.0	74.4	73.2			
Sri Lanka	59.7	72.3	69.8	Oceania	99.5	
				Australia	100.2	
Southeast Asia	89.7	90.2	90.3	New Zealand	95.2	
Brunei Darussalam	-	-	-	Acia	02.2	
Cambodia	61.8	67.3	70.8	Asia Developing Asia	93.2	
				Developing Asia	92.3	

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic. Source: ADB calculations using data from *Logistics Performance Index*, World Bank.

Table A5: Cross-Border Equity Holdings—Asia (% of total cross-border equity holdings, 2013)

	Partner							Partner							
	Asia	of v	vhich:	EU	US	ROW		Asia	of v	vhich:	EU	US	RC		
Reporter		PRC	Japan	-			Reporter		PRC	Japan	-				
Central Asia	12.8	0.0	8.6	26.7	50.4	10.1	Lao PDR	-	-	-	-	-			
Armenia	-	-	-	-	-	-	Malaysia	48.9	1.2	0.7	7.5	36.1	7		
Azerbaijan	-	-	-	-	-	-	Myanmar	-	-	-	-	-			
Georgia	-	-	-	-	-	-	Philippines	25.2	1.6	0.2	17.2	54.8	2		
Kazakhstan	12.8	0.0	8.6	26.7	50.4	10.1	Singapore	41.7	12.1	5.7	6.3	28.2	23		
Kyrgyz Republic	-	-	-	-	-	-	Thailand	24.8	3.2	0.9	19.4	50.5	5		
Tajikistan	-	-	-	-	-	-	Viet Nam	-	-	-	-	-			
Turkmenistan	-	-	-	-	-	-									
Uzbekistan	-	-	-	-	-	-	The Pacific	-	-	-	-	-			
							Cook Islands	-	-	-	-	-			
East Asia	19.1	12.3	0.9	19.3	25.7	35.8	Fiji	-	-	-	-	-			
PRC	-	-	-	-	-	-	Kiribati	-	-	-	-	-			
Hong Kong, China	28.5	24.9	1.0	15.0	3.4	53.1	Marshall Islands	-	-	-	-	-			
Japan	9.3	1.3	-	22.8	44.9	23.1	Micronesia, Fed.	-	-	-	-	-			
Korea, Rep. of	23.4	6.0	5.4	23.1	40.1	13.3	States of								
Mongolia	79.8	0.0	0.1	1.5	6.5	12.2	Nauru	-	-	-	-	-			
Taipei,China	-	-	-	-	-	-	Palau	-	-	-	-	-			
							Papua New Guinea	-	-	-	-	-			
South Asia	0.0	0.0	0.0	5.1	1.0	94.0	Samoa	-	-	-	-	-			
Afghanistan	-	-	-	-	-	-	Solomon Islands	-	-	-	-	-			
Bangladesh	-	-	-	-	-	_	Timor-Leste	-	-	-	-	-			
Bhutan	-	-	-	-	-	-	Tonga	-	-	-	-	-			
India	-	-	-	-	-	_	Tuvalu	-	-	-	-	-			
Maldives	-	-	-	-	-	_	Vanuatu	-	-	-	-	-			
Nepal	-	-	-	-	-	_									
Pakistan	0.0	0.0	0.0	5.1	1.0	94.0	Oceania	16.2	0.9	4.4	20.8	42.7	20		
Sri Lanka	-	-	-	-	-	_	Australia	13.1	1.0	4.9	22.4	44.8	19		
							New Zealand	41.6	-	-	7.7	25.8	24		
Southeast Asia	42.1	11.1	5.2	6.6	29.1	22.2									
Brunei Darussalam	-	-	-	-	-	_	Asia	23.2	10.0	2.4	17.1	29.5	30		
Cambodia	-	-	-	-	-	_	Developing Asia	33.0	17.8	3.0	12.7	16.8	37		
Indonesia	66.4	26.3	7.0	0.0	18.2	15.4									

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic, US = United States, ROW = rest of the world.

Source: ADB calculations using data from Coordinated Portfolio Investment Survey 2013, International Monetary Fund.

Table A6: Cross-Border Bond Holdings Share—Asia (% of total cross-border bond holdings, 2013)

			Par	tner				Partner							
		ofv	vhich:	EU	US	ROW			of	vhich:	EU	US	RO		
Reporter	Asia	PRC	Japan	-			Reporter	Asia	PRC	Japan	-				
Central Asia	14.0	0.1	5.0	25.6	53.2	7.3	Lao PDR	_	-	-	_	_			
Armenia	-	_	-	-	-	-	Malaysia	58.3	0.9	0.4	7.6	17.2	16.9		
Azerbaijan	-	_	-	-	-	-	Myanmar	-	-	-	-	-			
Georgia	-	_	-	-	-	-	Philippines	35.6	3.7	0.9	14.4	31.4	18.6		
Kazakhstan	14.0	0.1	5.0	25.6	53.2	7.3	Singapore	31.0	1.4	-	11.1	26.6	31.		
Kyrgyz Republic	-	-	-	-	-	_	Thailand	35.8	1.7	0.2	10.9	2.9	50.4		
Tajikistan	-	-	-	-	-	-	Viet Nam	-	-	-	-	-			
Turkmenistan	-	-	-	-	-	-									
Uzbekistan	-	-	-	-	-	_	The Pacific	-	-	-	-	-			
							Cook Islands	-	-	-	-	-			
East Asia	14.1	5.9	0.6	32.6	29.5	23.8	Fiji	-	-	-	-	-			
PRC	-	_	_	-	-	-	Kiribati	-	-	-	-	-			
Hong Kong, China	63.1	42.7	4.4	13.1	13.9	9.8	Marshall Islands	-	-	-	-	-			
Japan	6.2	0.1	0.0	35.7	32.0	26.1	Micronesia, Fed.	-	-	-	-	-			
Korea, Rep. of	14.4	0.9	2.5	33.6	28.8	23.3	States of								
Mongolia	34.6	0.0	0.0	4.2	20.8	40.4	Nauru	-	-	-	-	-			
Taipei,China	-	-	_	-	-	_	Palau	-	-	-	-	-			
							Papua New	-	-	-	-	-			
South Asia	20.9	0.2	6.7	10.5	0.3	68.3	Samoa								
Afghanistan	-	-	-	-	-	-	Salmoa	_	-	-	_	-			
Bangladesh	-	-	-	_	-	_	Timor Losto	_	_	-	_	_			
Bhutan	-	-	_	-	-	_	Tongo	_	-	_	_	-			
India	-	-	-	-	-	-	Tuvolu	_	-	-	_	-			
Maldives	-	-	_	-	-	_	Vanuatu	_	-	_	_	-			
Nepal	-	_	-	-	-	-	Valluatu	_	_	_	_	_			
Pakistan	20.9	0.2	6.7	10.5	0.3	68.3	Oceania	76	0.2	16	34.0	25.2	22		
Sri Lanka	-	-	-	_	-	_	Australia	7.0	0.2	1.0	26.0	33.2	20.		
							Now Zealand	22.0	0.5	1.0	9.0C	20.2 26 2	20.		
Southeast Asia	31.9	1.5	0.0	11.3	24.7	32.0		22.0	-	-	7.0	20.2	44.		
Brunei Darussalam	_	-	-	-	-	_	Asia	16.0	4.0	0.7	20.0	70 E	24		
Cambodia	_	-	-	-	-	_		10.0	4.9 19.7	0./	29.9 12.0	29.0	24.		
Indonesia	12.2	3.5	0.2	24.9	9.3	53.6	Developing Asia	73.2	10./	2.3	13.9	44 , I	20.		

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic, US = United States, ROW = rest of the world.

Source: ADB calculations using data from Coordinated Portfolio Investment Survey 2013, International Monetary Fund.

Table A7: FDI Inflow Share—Asia (% of total inflows, 2012)

			Partner										
		of w	hich						of w	hich			
Reporter	Asia	PRC	Japan	EU	US	ROW	Reporter	Asia	PRC	Japan	EU	US	ROW
Central Asia	22.2	15.6	2.8	87.2	11.8	-21.2	Lao People's Dem.	70.9	47.7	3.6	0.6	-	28.5
Armenia	-	-	-	63.2	0.8	36.0	Rep.						
Azerbaijan	0.2	-	0.2	20.8	4.6	74.3	Malaysia	61.6	0.3	18.7	15.1	-6.7	29.9
Georgia	13.7	4.0	1.5	48.3	2.2	35.8	Myanmar	3.6	-	-	-	-	96.4
Kazakhstan	25.2	17.5	3.4	103.5	14.3	-43.1	Philippines	12.3	-0.1	1.6	4.5	27.1	56.1
Kyrgyz Republic	31.8	23.2	-	31.4	1.7	35.1	Singapore	27.9	4.6	7.7	31.2	8.3	32.7
Tajikistan	99.8	99.8	-	-	-	0.2	Thailand	68.4	5.3	54.2	18.4	8.2	5.0
Turkmenistan	-	-	-	-	-	-	Viet Nam	85.9	2.3	34.2	6.5	1.0	6.7
Uzbekistan	-	_	-	-	_	-		2426	24.6	26			242.6
								542.0	24.0	5.0	-	-	-242.0
East Asia	61.5	14.2	6.0	7.0	-4.9	36.4		-	-	_	-	_	_
China, People's Rep. of	72.2	_	6.1	2.1	2.1	23.5	Kiribati	_	_	_	_	_	-
Hong Kong, China	44.3	40.1	1.3	14.1	-20.8	62.4	Marshall Islands	_	_	_	_	_	_
Japan	172.7	4.1	_	-175.6	-7.7	110.5	Micronesia, Fed.	-	-	-	_	-	-
Korea, Rep. of	63.0	2.6	43.4	16.4	22.6	-2.0	States of						
Mongolia	15.7	5.5	0.8	44.2	1.4	38.7	Nauru	-	-	-	-	-	-
Taipei,China	56.9	_	12.9	43.0	12.6	-12.6	Palau	75.5	-	75.5	-	-	24.5
							Papua New Guinea	-	-	-	-	-	-
South Asia	16.9	1.0	5.0	21.8	2.7	58.6	Samoa	263.8	204.2	59.6	_	_	-163.8
Afghanistan	19.2	19.2	-	-	-	80.8	Solomon Islands	38.1	_	_	_	_	61.9
Bangladesh	49.8	1.4	2.3	22.0	3.4	24.7	Timor-Leste	_	_	_	_	_	_
Bhutan	59.5	-	-	13.7	-	26.7	Tonga	_	_	_	_	_	_
India	14.3	0.6	5.5	21.9	2.0	61.7	Tuvalu	_	_	_	_	_	_
Maldives	-	-	-	-	-	-	Vanuatu	63.7	8.0	-8.0	_	_	36.3
Nepal	9.8	8.7	1.1	-	-	90.2							
Pakistan	43.8	8.7	3.4	51.5	25.4	-20.6	Oceania	35.3	6.7	18.3	26.1	23.0	15.6
Sri Lanka	18.1	1.8	-0.4	-	-	81.9	Australia	31.6	6.9	19.0	27.4	24.3	16.8
							New Zealand	127.7	3.4	-1.4	-5.4	-9.0	-13.3
Southeast Asia	48.9	3.8	19.8	20.7	6.0	24.4							
Brunei Darussalam	22.8	-	14.6	113.7	3.1	-39.6	Asia	50.6	9.7	11.1	17.4	2.9	29.1
Cambodia	93.2	25.4	1.0	8.7	1.1	-3.0	Developing Asia	42.6	7.4	10.7	31.5	-0.1	26.0
Indonesia	91.2	1.8	40.7	-0.3	4.4	4.7		•					•

- = unavailable, FDI = foreign direct investments, PRC = People's Republic of China, EU = European Union (27 members), US = United States, ROW = rest of the world. Source: ADB calculation using data from ASEAN FDI Statistics and United Nations Conference on Trade and Development (UNCTAD) Bilateral FDI.

Table A8: Remittance Inflows Share—Asia (% of total remittance inflows, 2012)

		I	Partner						Partner		
		of which				-		of which			
Reporter	Asia	Japan	EU	US	ROW	Reporter	Asia	Japan	EU	US	ROW
Central Asia	13.3	0.01	3.8	2.4	80.5	Indonesia	64.3	1.2	9.2	4.5	22.0
Armenia	7.7	0.00	8.4	10.9	73.0	Lao PDR	18.1	0.7	14.6	60.6	6.8
Azerbaijan	14.1	0.00	2.8	0.8	82.2	Malaysia	88.6	0.5	5.5	3.7	2.3
Georgia	6.7	0.01	10.1	3.1	80.1	Myanmar	_	-	_	_	100.0
Kazakhstan	5.8	0.01	3.1	0.4	90.7	Philippines	14.8	4.7	9.2	43.4	32.7
Kyrgyz Republic	1.2	0.03	3.2	0.7	94.8	Singapore	-	-	_	-	-
Tajikistan	23.8	0.00	1.0	0.7	74.5	Thailand	39.3	5.3	22.9	27.7	10.1
Turkmenistan	-	-	-	-	-	Viet Nam	17.7	1.6	14.9	56.8	10.6
Uzbekistan	-	-	-	-	-						
						The Pacific	60.5	0.1	3.1	22.7	13.8
East Asia	51.4	10.0	9.1	26.9	12.6	Cook Islands	-	-	-	-	-
PRC	56.4	7.2	9.2	21.7	12.7	Fiji	55.0	0.1	2.8	24.7	17.5
Hong Kong, China	14.3	-	15.9	29.8	39.9	Kiribati	-	-	-	-	-
Japan	16.2	-	18.3	44.8	20.6	Marshall Islands	-	-	-	-	-
Korea, Rep. of	33.7	28.4	5.5	51.3	9.5	Micronesia, Fed.					
Mongolia	55.9	13.7	31.2	10.9	2.0	States of	-	-	-	-	-
Taipei,China	-	-	-	-	-	Nauru	-	-	-	-	-
						Palau	-	-	-	-	-
South Asia	23.4	0.3	10.6	13.0	53.0	Papua New Guinea	67.4	0.1	3.9	5.1	23.5
Afghanistan	3.3	0.0	14.0	4.9	77.9	Samoa	64.5	0.1	0.4	21.7	13.4
Bangladesh	51.7	0.3	9.1	4.9	34.3	Solomon Islands	61.0	0.6	10.6	5.0	23.4
Bhutan	83.9	0.2	3.8	1.4	10.9	Timor-Leste	-	-	-	-	-
India	18.4	0.2	9.3	17.2	55.1	Tonga	67.5	0.3	1.3	27.5	3.7
Maldives	62.1	2.0	25.2	3.0	9.7	Tuvalu	-	-	-	-	-
Nepal	39.8	1.3	5.6	6.6	48.1	Vanuatu	49.7	0.1	28.3	3.6	18.4
Pakistan	18.4	0.2	17.1	7.8	56.8						
Sri Lanka	13.8	0.5	18.0	2.1	66.1	Oceania	46.1	1.8	31.5	12.7	9.7
						Australia	26.9	2.5	42.6	17.9	12.5
Southeast Asia	26.8	3.4	11.4	37.5	24.3	New Zealand	81.3	0.6	11.1	3.2	4.4
Brunei Darussalam	-	-	-	-	_						
Cambodia	20.9	0.7	21.8	48.4	8.8	Asia	32.4	3.9	10.2	21.6	35.7
						Developing Asia	32.5	3.9	9.9	21.5	36.2

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic, US = United States, ROW = rest of the world.

Source: ADB calculations using data from Bilateral Remittance Estimates for 2012 using Migrant Stocks, Host Country Incomes, and Origin Country Incomes (\$ million) (May 2013 Version), World Bank.

Table A9: Outbound Migration Share—Asia (% of total outbound migrants, 2013)

			Part	ner						Part	ner		
		of v	vhich						of v	vhich			
Reporter	Asia	PRC	Japan	EU	US	ROW	Reporter	Asia	PRC	Japan	EU	US	RO
Central Asia	11.2	_	-	10.9	2.3	75.7	Lao PDR	79.7	_	_	3.5	15.2	1.5
Armenia	4.9	-	-	8.7	11.9	74.5	Malaysia	87.2	0.6	0.6	5.1	4.5	3.2
Azerbaijan	25.0	-	-	2.6	1.7	70.7	Myanmar	95.3	_	_	0.6	3.7	0.4
Georgia	10.3	-	-	14.7	2.0	73.0	Philippines	14.2	2.2	4.1	7.9	36.4	41.5
Kazakhstan	4.2	-	-	20.2	0.7	74.9	Singapore	65.2	_	0.9	16.9	12.2	5.6
Kyrgyz Republic	5.8	-	-	7.9	0.5	85.8	Thailand	34.0	2.6	5.2	25.1	30.0	10.9
Tajikistan	14.7	-	-	2.5	0.6	82.2	Viet Nam	23.2	1.2	1.5	15.0	53.0	8.8
Turkmenistan	5.9	-	-	3.1	0.5	90.5							
Uzbekistan	20.2	-	-	2.2	3.3	74.3	The Pacific	63.6	_	-	1.8	20.2	14.4
							Cook Islands	99.6	-	-	0.0	0.3	0.1
East Asia	48.8	1.7	9.9	8.7	29.1	13.4	Fiji	59.9	-	-	3.3	22.3	14.6
PRC	53.8	-	7.0	9.1	24.0	13.0	Kiribati	58.1	-	-	0.7	39.2	2.1
Hong Kong, China	24.7	0.8	-	11.2	29.8	34.3	Marshall Islands	5.2	-	-	0.2	91.2	3.4
Japan	32.5	1.0	-	13.9	39.2	14.4	Micronesia, Fed.	2.2	-	-	0.0	67.4	30.4
Korea, Rep. of	44.2	8.6	26.9	4.2	44.1	7.6	States of						
Mongolia	43.9	-	-	21.2	0.3	34.6	Nauru	80.8	-	-	0.8	10.3	8.2
Taipei,China	-	-	-	-	-	-	Palau	47.3	-	-	0.2	30.5	21.9
							Papua New	90.4	-	-	1.1	6.8	1.7
South Asia	35.6	0.1	0.2	8.3	8.0	48.0	Guinea	<i>cc</i> 1			0.2	0.6	24.2
Afghanistan	46.5	-	-	4.9	1.4	47.2	Samoa	00.1	-	-	1.5	9.0	24.2
Bangladesh	51.1	0.1	0.2	4.9	2.6	41.4		92.9	-	-	1.5	3.0	2.7
Bhutan	97.9	-	-	1.3	0.2	0.6	Timor-Leste	95.2	-	-	4.0	-	0.2
India	24.4	0.1	0.2	7.9	14.5	53.2	Tonga	01.0	_	-	0.3	34.0	4.0
Maldives	61.9	-	-	11.2	-	26.9	Tuvalu	78.3	-	-	1.0	3.0	17.2
Nepal	82.1	-	-	5.9	8.4	3.6	vanuatu	25.6	_	-	9.2	1.7	63.5
Pakistan	25.1	0.1	0.2	13.4	6.0	55.5	Qaaania	<i></i>	c 7	1 4	31 5		
Sri Lanka	27.9	0.5	0.8	26.9	4.3	40.9	Oceania	04.0	U./	1.4	21.5	8.2	6.3
							Australia	33.Z	1./	2.7	40.4	14.0	11.8
Southeast Asia	49.5	1.3	1.9	7.9	23.0	19.6	ivew Zealand	83.9	-	0.6	9.2	4.1	2.8
Brunei Darussalam	75.4	-	-	11.7	2.1	10.8	Acia	20.7	07		0.0	14.6	
Cambodia	75.8	-	0.2	6.2	15.5	2.5	Asia	58./	0.7	2.2	ð.ð	14.0	37.5
Indonesia	57.8	2.0	1.0	6.0	3.6	32.5		38.4	0.7	2.3	8.5	14.4	38.7

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic, US = United States, ROW = rest of the world.

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

Table A10: Outbound Tourism Share—Asia (% of total outbound tourists, 2012)

			Part	ner				Partner					
		of v	vhich						of v	vhich			
Reporter	Asia	PRC	Japan	EU	US	ROW	Reporter	Asia	PRC	Japan	EU	US	ROW
Central Asia	35.1	3.0	-	0.2	0.2	64.5	Lao PDR	99.8	1.1	0.2	0.0	0.1	0.1
Armenia	6.6	0.4	-	0.4	0.3	92.7	Malaysia	92.4	13.3	1.4	1.6	0.7	5.3
Azerbaijan	6.6	0.7	-	0.1	0.2	93.1	Myanmar	97.8	31.3	1.1	0.0	0.3	1.8
Georgia	34.2	0.3	-	0.3	0.2	65.3	Philippines	80.3	19.0	1.7	1.1	3.5	15.1
Kazakhstan	35.3	7.6	-	0.4	0.2	64.1	Singapore	96.5	5.3	0.7	1.1	0.8	1.6
Kyrgyz Republic	69.3	2.1	-	0.0	0.1	30.5	Thailand	93.0	9.4	3.8	1.8	1.2	4.0
Tajikistan	19.0	1.9	-	0.0	0.1	80.9	Viet Nam	96.2	26.3	1.3	0.1	1.3	2.4
Turkmenistan	16.2	3.8	-	0.1	0.2	83.6							
Uzbekistan	47.3	1.0	-	0.1	0.1	52.5	The Pacific	84.4	2.8	-	0.4	3.6	11.6
							Cook Islands	97.6	-	-	0.0	0.3	2.1
East Asia	83.5	50.6	3.0	4.4	3.7	8.4	Fiji	87.3	4.2	-	0.3	8.6	3.9
PRC	71.2	-	3.1	7.5	3.2	18.1	Kiribati	91.0	36.1	-	0.5	3.2	5.3
Hong Kong, China	97.3	93.3	0.6	0.2	0.2	2.3	Marshall Islands	24.0	-	-	0.6	-	75.3
Japan	59.6	14.6	-	13.8	15.4	11.2	Micronesia, Fed.	13.4	-	-	1.2	-	85.3
Korea, Rep. of	78.3	26.5	13.3	5.3	8.1	8.3	States of						
Mongolia	75.1	68.2	0.9	0.1		24.9	Nauru	92.6	-	-	4.2	2.5	0.6
Taipei,China	90.0	47.1	12.9	2.2	2.6	5.2	Palau	11.5	-	-	1.0	-	87.5
							Papua New Guinea	97.9	-	-	0.1	0.8	1.2
South Asia	48.3	5.7	0.7	6.7	5.4	39.5	Samoa	68.5	-	-	0.3	2.8	28.4
Afghanistan	30.7	2.3	-	0.7	0.3	68.4	Solomon Islands	95.6	-	-	1.3	1.2	1.9
Bangladesh	74.5	4.3	0.5	1.3	1.3	22.9	Timor-Leste	98.0	-	-	0.4	0.1	1.4
Bhutan	95.3	2.7	-	0.8	1.0	2.9	Tonga	93.8	5.9	-	0.1	4.7	1.4
India	48.6	6.5	0.7	9.1	7.7	34.6	Tuvalu	90.1	-	-	2.7	1.0	6.2
Maldives	97.4	3.1	-	0.1	0.2	2.4	Vanuatu	78.0	2.7	-	0.4	1.0	20.6
Nepal	76.6	8.5	2.7	0.1	2.5	20.8							
Pakistan	17.8	4.3	0.4	4.7	2.0	75.5	Oceania	63.2	5.7	1.5	18.1	8.3	10.4
Sri Lanka	72.4	4.4	1.2	2.1	1.3	24.2	Australia	60.5	6.1	1.6	20.0	8.8	10.8
							New Zealand	75.1	4.4	1.1	9.7	6.3	8.8
Southeast Asia	92.6	10.2	1.4	1.1	1.1	5.2							
Brunei Darussalam	99.2	0.7	0.1	0.0	0.1	0.7	Asia	78.7	34.3	2.2	4.3	3.3	13.7
Cambodia	99.4	3.2	0.4	0.0	0.3	0.3	Developing Asia	81.5	37.9	2.5	2.5	1.8	14.2
Indonesia	86.1	7.3	1.2	0.7	0.9	12.3							

- = unavailable, PRC = People's Republic of China, EU = European Union (27 members), Lao PDR = Lao People's Democratic Republic, US = United States, ROW = rest of the world.

Source: ADB calculations using Data on Outbound Tourism, World Tourism Organization.



2: Subregional Trade Links (2013 and 2010)

Between South Asia and the Rest of the World



Between Central Asia and the Rest of the World



Between Southeast Asia and the Rest of the World







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 $(T_{ij}/T_{ij})/(T_{ij}/T_{w})$, 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 *j*; T_{i} is the dollar value of total trade of j with world; T_{ij} 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.

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About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to approximately two-thirds of the world's poor: 1.6 billion people who live on less than \$2 a day, with 733 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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