

Boao Forum for Asia

## Progress of Asian Economic Integration

Annual Report 2017



#### Boao Forum for Asia

## **Progress of Asian Economic Integration**

Annual Report 2017

对外经济贸易大学出版社 中国・北京

#### 图书在版编目 (CIP) 数据

博鳌亚洲论坛亚洲经济一体化进程 2017 年度报告 = Boao forum for Asia Progress of Asian Economic Integration Annual Report 2017: 英文. —北京: 对外经济贸易大学出版社, 2017, 3

ISBN 978-7-5663-1747-6

I. ①博···Ⅱ. Ⅲ. ①经济一体化-研究报告-亚洲-2017-英文 IV. ①F13

中国版本图书馆CIP数据核字(2017)第022632号

# Boao Forum for Asia Progress of Asian Economic Integration Annual Report 2017

责任编辑: 董 黛 胡小平

对 外 经 济 贸 易 大 学 出 版 社 北京市朝阳区惠新东街 10 号 邮政编码: 100029 邮购电话: 010-64492338 发行部电话: 010-64492342 网址: http://www.uibep.com E-mail:uibep@126.com

北京博海升彩色印刷有限公司印装 新华书店经销 成品尺寸: 215mm×278mm 7.25 印张 192 千字 2017 年 3 月北京第 1 版 2017 年 3 月第 1 次印刷

ISBN 978-7-5663-1747-6 定价: 160.00 元

#### LIST OF TABLES

Table 1.1	World Trade in Commercial Service by Regions, 2015	. 4
Table 1.2	Merchandise Trade of Major Asian Economies in the First Eight Months in 2016	. 8
Table 1.3	Growth of Trade in Intermediate Goods, Selected Asian Economies,	
	2001-2015 (percent)	. 12
Table 1.4	Inward Foreign Direct Investment of Asian Economies (USD billion)	· 13
Table 1.5	Outward Direct Investment of Asian Economies (USD billion)	. 17
Table 2.1	Regional Trade Dependence Indices, Selected Asian Economies (percent)	- 22
Table 2.2	Trade Dependence Indices of Selected Asian Economies, 2015 (percent)	23
Table 2.3	Trade Flows among Asian Economies, 2015 ( USD billion)	. 26
Table 2.4	Intra-regional Exports of Intermediate Goods, Selected Asian Economies,	
	2015 (USD billion)	. 27
Table 2.5	Pattern of Dependence in the Export of Intermediate Goods ,	
	Selected Asian Economies, 2015	28
Table 3.1	Index of Interdependence in Factory Asia, 2015	.30
Table 3.2	Index of Interdependence in Factory Asia, 2014	.30
Table 3.3	Index of Dependence on Factory Asia, Major Asian Economies, 2001-2015	.31
Table 3.4	Dependence of Trade in Top 22 Parts and Components by SITC Codes, 2015	.33
Table 3.5	Dependence of Trade in Top 22 Parts and Components by SITC Codes, 2014	.33
Table 3.6	Major P&C Exports by Asian Economies, 2015 (USD billion)	.35
Table 3.7	Major P&C Exports by Asian Economies, 2014 (USD billion)	.36
Table 3.8	Major P&C Exports by EU (27), 2015 (USD billion)	.36
Table 3.9	Major P&C Exports by EU (27), 2014 (USD billion)	
Table 3.10	Major P&C Exports by North America, 2015 (USD billion)	.38
Table 3.11	Major P&C Exports by North America, 2014 (USD billion)	.39
Table 4.1	Interdependence Indices of Inward FDI, Selected Asian	
	Economies, 2015 (percent)	.42
Table 4.2	Change in the Dependence Indices of Inward FDI from 2014 to 2015,	
	Selected Asian Economies (percentage point)	.42
Table 4.3	Interdependence Indices for Outward FDI, Selected Asian	
	Economies, 2015 (percent)	.43

Table 4.4	Asia's FDI Self-dependence Indices (Selected Asian Economies),	
	2015 (percent)	44
Table 5.1	Regional Service FTAs by Major Asian Economies	48
Table 5.2	Asia's Dependence Indices in Service Trade in Asia, 2015(percent)	50
Table 5.3	Dependence Indices on Asian Tourism of Selected	
	Economies, 2010-2015(percent)	51
Table 5.4	2015 Interdependency Indices between Different Asian Economies	
	(percent)	52
Table 6.1	Capital Flow of Portfolio Investment	
	in Selected Countrias and Regions(USD million)	
Table 6.2	Capital Account Restrictions for <i>De jure</i> Rating	61
Table 6.3	Ranking of Countries' de jure Financial Openness (15 economies)	65
Table 6.4	Ranking of <i>De facto</i> Financial Openness Based	
	on the IFIGDP Method (15 economies)	69
Table 6.5	Averaged Gross Savings and Investment Rates in Asia, 1997-2016	76
Table 6.6	Correlation Coefficients for the Sample, 1997-2016	77
Table 6.7(a)	Stock Market Correlation Coefficients in Asia, 2002-2006	79
Table 6.7(b)	Stock Market Correlation Coefficients in Asia, 2007-2011	79
Table 6.7(c)	Stock Market Correlation Coefficients in Asia, 2012-2016	80
Table 6.8(a)	Inflation Correlation in Asia and the US, 2002-2007	81
Table 6.8(b)	Inflation Correlation in Asia and the US, 2008-2016	82

#### LIST OF FIGURES

Figure 1.1	Shares of Asia's Merchandise Trade in the World, 2006-2015
Figure 1.2	Shares of World Trade in Commercial Service Taken by Asia and Value, 2006-2015
Figure 1.3	Shares of Major Markets in Asia's Merchandise Exports, 2008-2015 5
Figure 1.4	Merchandise Trade of China and the US, 2002-2015 6
Figure 1.5	Merchandise Exports of Selective Asian and Emerging Markets9
Figure 1.6	Trend of Trade in Intermediate Goods, 2000-2015
Figure 1.7	Dependence on FDI, Major Asian Economies16
Figure 2.1	Asia's Trade Dependence Indices on Asian Economies, 2004-201523
Figure 2.2	Trade Interdependence Index for Selected Economies (percent)24
Figure 5.1	Number of RTAs on Services, Major Asian Economies, 201648
Figure 5.2	Dependence Indices of Asian Tourism for Selected Economies,
	2015 (percent)
Figure 6.1	Annual Percentage Change of Porfolio Investment to Asia57
Figure 6.2	Porfolio Investment to and from Asia (USD billion)58
Figure 6.3	Destination of Asia Porfolio Investment
Figure 6.4	Source of Asia Porfolio Investment
Figure 6.5	Asia's 10 Economies' Porfolio Inflows, 2015
Figyre 6.6	Asia's 10 Economies' Porfolio Inflows, 2014
Figure 6.7	De jure Measure of Financial Openness, 1999 – 2015 — 64
Figure 6.8	De facto Financial Openness of Selected Countries Based on the IFIGDP Measure 67
Figure 6.9	De facto Financial Openness Based on the GEQY
Figure 6.10	De facto Financial Openness Based on the EQSH Method68
	Indices of Intra-regional Investment Preference, 2001-201571
	Average Bilateral Correlations by Country and Region72
Figure 6.13	Average Bilateral Correlations over Time72
Figure 6.14	Average Bilateral Correlations with East Asia73
	Average Bilateral Correlations with ASEAN74
	Average Bilateral Correlations with ASEAN over Time74
Figure 6.17	Trends of CPI in Asia and the US, 2008-2016 83

#### **ACRONYMS**

**AREAER** Annual Report of Exchange Arrangements and Exchange Restrictions

ASEAN Association of South East Asian Nations
CIS Commonwealth of Independent States

**CPI** Consumer Price Index

**DOTS** Direction of Trade Statistics **FDI** Foreign Direct Investment

FTA Free Trade Agreement
GVC Global Value Chain

IIP International Investment Position

IMF International Monetary Fund

IT Information Technology

NAFTA North American Free Trade Agreement

**NDRC** National Development and Reform Commission

**OBOR** One Belt and One Road

**OECD** Organization of Economic Cooperation and Development

P&C Parts and Components

QE Quantitative Easing

**RCEP** Regional Comprehensive Economic Partnership

**RTA** Regional Free Trade Agreements

TPP Trans-Pacific Partnership
WTO World Trade Organization

#### **FOREWORD**

The world economy is still under the shadow of the crisis even though it is already the eighth year after the outbreak of the financial crisis in 2008. As the long-waited boom is far away from people, the world is entering into a more complicated scenario with intensified social conflicts, discrimination against immigrants, resentment to globalization, rise of populism, geopolitical rivalry and ever increasing threat of terrorism.

The global downturn started with the developed countries with depressed demand and falling trade brought about by the financial crisis. Then it spread to the East Asian economies. Absent of self-adjusting mechanism, the Asian economies that used to demonstrate high growth dynamics in the pre-crisis era, have shown enough vulnerabilities as evidenced by high dependence on the developed markets and relative underdevelopment local entrepreneurs. The East Asian economies are gradually falling into an extended low growth trap.

In 2015, the growth of Asia's exports turned negative for the first time after the global financial crisis. While the change would pose serious challenges to employment and competitive edge of the Asian economies, the more significant change happened on the imports side, particularly for the East Asian economies. In 2015, East Asia's trade dropped by over 8 percent and a good part of this drop can be attributed to the more drastic decline in imports, by 12 percent. It means that East Asia is buying less from the rest of the world. This happened when the developed economies, particularly the US economies were showing signs of overall recovery. With repercussions in today's interdependent global economy, the depressed demand in East Asia would feed back to the rest of the world, resulting in lower exports and thus, GDP growth. This time, East Asia, instead of being the world's driver of growth, looks more like a decelerator of trade growth in the world.

To move one step further, as a considerable portion of East Asia's imports is about intermediate goods, the more drastic decline in imports occurred in intermediate inputs. As shown in this Report, the decline in the intermediates imports by major East Asian economies (including Japan, China, Korea, India, Singapore, Malaysia and Thailand) averaged at over -20 percent, ranging from the highest -30 percent for Japan to the lowest -13.3 percent for Thailand. Korea's decline in intermediates imports was -20.3 percent in 2015 while that of China was -19.5 percent. This observation is consistent with the input-output analysis in this Report in that all the major East Asian economies had seen significant increase in the domestic value added content in the total exports. The more drastic decline in intermediate inputs, to a large part, explains the slowdown in Asia's total imports and intra-regional trade flows.

Whatever the reasons, the changing pattern could have profound impact on the global trade and Asia's own integration process. As the East Asian economies reduced the demand for the intermediate imports, through repercussion effects, the exports from the rest of the world would reduce, causing higher unemployment and recession risks. Asia's international production network, which has been the progress of Asia's economic integration, may face new obstacles.

At this critical stage of transformation, East Asia should have to rethink its economic and trade policies. In the first tier, the East Asian economies need to diversify from the existing pattern of overdependence on foreign investment in the economic development to focus more on local entrepreneurship. Second, the East Asian economies may have to move away from their overdependence on the developed markets. With the persistent trade deficits, rising protectionism and tide of "de-globalization" in the western industrialized countries, Asia's global value chain may face new challenges. The developed countries may impose high barriers to discriminate the imports from the East Asian economies and adopt incentive policies to encourage onshore instead of offshore production. Third, the decline in intermediates imports maybe partly due to the increased capacity of the East Asian economies to substitute domestic inputs for foreign inputs. While this change is encouraging, we have to be careful not to let the region fall into the trap of "self-sufficiency". Finally, the East Asian economies should take serious efforts to boost the size of internal markets because it would create new demand for the existing production and thus, more imports of intermediate inputs.

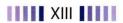
Asia's integration is now at a crucial stage. China's "One Belt and One Road" initiative has provided new ideas and approaches. At this critical stage, the Asian leaders should join their hands to make collective efforts to contribute their wisdom and power to Asia's integration and globle economic cooperation.

图之重

Zhou Wenzhong Secretary-General Boao Forum for Asia

#### **LIST OF CONTRIBUTORS**

Lin Guijun, Lead Writer, University of International Business and Economics
Deng Shizhuan, Beijing University of Civil Engineering and Architecture
Huang Xiaoling, University of International Business and Economics
Jiang Ping, University of International Business and Economics
Jing Ran, University of International Business and Economics
Li Yang, University of International Business and Economics
Pei Jiansuo, University of International Business and Economics
Ren Liang, School of International Business, Beijing Union University
Shu Jinghong, University of International Business and Economics
Sun Mengyang, School of Tourism, Beijing Union University
Xue Yi, University of International Business and Economics
Wang Chunrui, University of International Business and Economics



# **Table of Contents**

	RONYMS ·····	
	REWORD	
	T OF CONTRIBUTORS	
	apter 1 Recent Trend of Asia's Trade and Investment ·····	
	Trade of Asia in 2015	
	Asia's Trade in Intermediate Goods	
1.3	FDI Inflows and Outflows in Asia	13
Cha	apter 2 Trade Interdependence among the Asian Economies	21
2.1	Asia's Trade Integration Index	21
2.2	The Trade Interdependence Indices for Asia: Past and Present	23
2.3	Trade Flows among Selected Asian Economies	25
2.4	Direction and Pattern of Dependence in Intra-regional Flows of Intermediate Goods-	26
Cha	apter 3 Interdependence of Asian Economies in Factory Asia ······	29
3.1	Pattern of Interdependence Remained Stable	29
3.2	Product Dependence and Competitive Advantage of Asian	
	Economies in the Global Value Chain	32
	Pattern of Competitive Advantages among Three Global Factories	
	apter 4 FDI Interdependence in Asia ······	
	Interdependence Index of Inward FDI	
	Interdependence Index of Outward FDI	
	FDI Self-dependence in Asia ·····	
	apter 5 Integration in Asia's Service Sector ······	
5.1	Changing Structure of Asia's Service Trade	
5.2	5 , 5	
5.3	Index of Asia's Service Trade Integration	49
5.4	Integration Index of Asian Tourism	50
	apter 6 Financial Integration ······	
6.1	Portfolio Investment in Asia: Capital Flight amid Growing Uncertainty	55
	De jure and De facto Financial Openness of Asia	

6.3 Index of Business Cycle Synchronization	70	
6.4 Financial Integration Based on Regional Savings and Investment	74	
6.5 Stock Market Correlation Indices in Asia	77	
6.6 Inflation Correlation Indices in Asia	80	
Summary and Outlook ·····		
Appendix Important Events of the Asian Economic Integration	89	
REFERENCES		
ACKNOWI FDGEMENTS	99	

# **Chapter 1**

### Recent Trend of Asia's Trade and Investment

#### 1.1 Trade of Asia in 2015

### 1.1.1 Merchandise Trade and Commercial Service

2015 was a tough year for the global trade. For the first time, since 2008-2009 financial crisis both merchandise trade and trade in commercial service declined in current dollars. Being deeply integrated into the global economy, Asia's trade, unsurprisingly, registered negative growth rates in 2015. Merchandise exports fell by 7.7 percent while the imports of goods shrank by 8.5 percent. For trade in commercial service, Asian economies also registered a slight downturn.

However, there are two important features that are worth highlighting for the performance of Asia's trade in 2015. First, Asia's share in the global trade had actually strengthened due to the

Despite the decline in the value of Asia's merchandise trade, Asia's relative position in the world trade had strengthened in 2015. Figure 1.1 describes the value and shares of Asia's trade over the last 10 years. In 2015, Asia's total merchandise exports fell to USD5,463.68 billion from USD 5,917.25 billion attained in 2014, a drop of 7.7 percent. This decline should be taken seriously since it was the first time that Asia's export growth became negative after the financial crisis in 2008 and 2009. But compared to the rest of the world, Asia was still a medal winner for its export

relatively more drastic slowdown in the world. Second, the merchandise trade of both the world and Asia had actually increased in physical terms in 2015. Using physical volume as the measure, the world merchandise exports grew by 3 percent in 2015 whereas that of Asia grew by 3.1 percent.<sup>2</sup> In other words, there was obvious gap between growth rates measured in physical and value terms in 2015. This was an unusual, though not unique, phenomenon and could be attributed to the large swings in commodity prices and exchange rates.

<sup>1</sup> As a geographic definition, we follow its definition given by the WTO in its *International Trade Statistics 2015*. Asia includes Afghanistan, China's Hong Kong, China, Malaysia, Papua New Guinea, Tonga, Australia, India, Maldives, the Philippines, Tuvalu, Bangladesh, Indonesia, Mongolia, Samoa, Vanuatu, Bhutan, Japan, Myanmar, Singapore, Vietnam, Brunei Darussalam, Kiribati, Nepal, Solomon Islands, Cambodia, Republic of Korea, New Zealand, Sri Lanka, China, Laos, Pakistan, China's Taiwan, Fiji, China's Macao, Palau,and Thailand. Other territories in the region are not elsewhere specified.

<sup>2</sup> The data was obtained from Table A2, World Trade Statistics Review 2016, WTO.

performance, as the value of the world exports shrank by 11.9 percent in 2015. As a result, Asia's share in the world merchandise exports increased, from 32 percent in 2014 to 34.18 percent in 2015. As for the merchandise imports, Asia grew

at a negative rate of 8.5 percent with a total of USD5,017.9 billion being imported by the Asian economies. However, Asia's share in the world actually increased from 29.7 percent in 2014 to 30.8 percent in 2015.

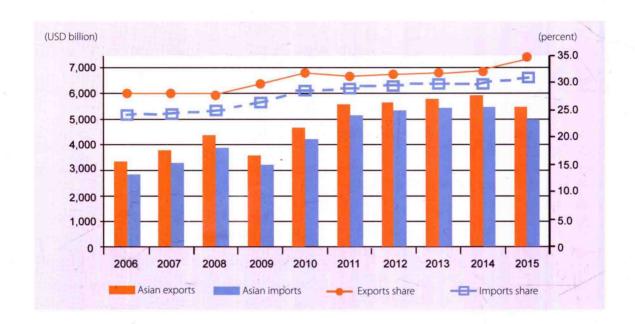


Figure 1.1 Shares of Asia's Merchandise Trade in the World, 2006-2015

**Note:** The bars represent the dollar value of trade, with amount shown on the left axis. The points connected by lines represent the shares of the Asian economies in the world trade. The values of the points can be found on the right axis.

Source: International Trade Statistics 2007-2015 and World Trade Statistics Review 2016, WTO.

In line with the moderate decline of world trade in commercial service, Asia's trade in commercial service recorded a slight downturn in 2015. As Figure 1.2 shows, Asia's exports of commercial service in 2015 were USD1,283.3 billion. It was 3 percent lower than the value attained in the previous year. However, Asia had also managed to increase its position in the global service trade. In 2015, Asia accounted for 27 percent of the global commercial service exports, up by 0.8 percent compared to 2014. On

the import side, Asia also experienced a decline in its commercial service imports from USD1,447.5 billion in 2014 to USD1,412 billion. However, as the global commercial service imports fell by 6.1 percent in 2015, Asia's share in the world increased to 30.6 percent, up by 0.9 percent over the previous year. Asia's position as a net importer of commercial services has remained unchanged over the last decade. However, the size of the commercial service trade deficit had been on a long-term trend of expanding since 2009.

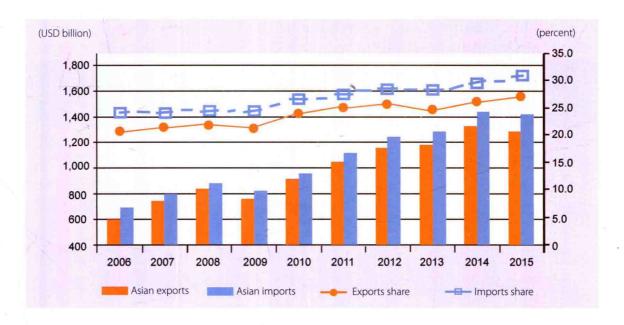


Figure 1.2 Shares of World Trade in Commercial Service Taken by Asia and Value, 2006-2015

Source: International Trade Statistics 2007-2015, World Trade Statistics Review 2016, WTO

Table 1.1 below is the decomposition of Asia's trade in commercial service. Four observations are to be noted. First, Asia's exports of travel service grew by 12.6 percent compared to that in 2014, to reach USD372 billion. This large expansion is in sharp contrast to the 0.8 percent decline of the world exports of travel service in 2015. Asia's growth of travel service exports was the second highest after only the Middle East.

Second, Asia was able to achieve the highest growth in the travel service imports as the total imports increased by 33.9 percent in 2015 as compared to the value achieved in the previous year. This impressive growth could, to a large extent, be explained by the appreciation of the US dollar and the quasi-pegged to the US dollar by the Chinese currency renminbi (RMB) at the time.

Third, there was a more serious contraction in Asia's trade on other commercial services than that of the world. Given other commercial services usually account for about half of the total commercial service trade, this decrease should send an early alert to the relevant Asian economies.

Fourth, trade in transportation service dropped for both exports and imports. Since the transportation is directly associated with the trade of merchandise goods, this contraction may predict Asia's merchandise trade in part of 2016 might still be sluggish.

In 2015, the US dollar had appreciated by 13 percent on average against the currencies of the US trading partners<sup>2</sup>.

<sup>1</sup> The decomposition is based Tables A30, A32, and A34 contained in World Trade Statistics Review, 2016, WTO.

<sup>2</sup> The data is obtained from P19, World Trade Statistics Review, 2016, WTO.

Table 1.1 World Trade in Commercial Service by Regions, 2015

Exports	Transpo	ortation	Trav	vel		Commercial ervices
Exports	Value (USD billion)	Growth (percent)	Value (USD billion)	Growth (percent)	Value (USD billion)	Growth (percent)
World	875	-8.4	1230	-0.8	2495	-3.5
North America	98	-5.8	212	0	455	-0.7
South and Central America	26	-10.3	57	3.6	53	-8.6
Europe	412	-12.0	422	-12.6	1300	-4.7
EU (27)	366	-11.6	368	-13.4	1198	-3.6
CIS	35	-14.6	19	-17.4	35	-16.7
Africa	30	3.4	41	-4.7	24	-7.7
Middle East	36	20.0	60	15.4	44	2.3
Asia -	240	-5.1	419	12.6	584	-1.7
Imports						
World	1090	-11.0	1215	4.3	2210	-3.5
North America	130	-1.5	160	3.2	294	-0.3
South and Central America	45	-16.7	42	-17.6	83	-6.7
Europe	357	-11.4	377	-10.7	1100	-2.1
EU (27)	327	-10.7	337	-11.1	1006	-2.2
CIS	- 22	-21.4	48	-26.2	62	-19.5
Africa	64	-9.9	26	0	66	-10.8
Middle East	107	-5.3	81	-6.9	69	1.5
Asia	364	-13.9	482	33.9	533	-5.2

Note: EU: European Union; CIS: Commonwealth of Independent States.

Source: World Trade Statistics Review 2016, WTO.

## 1.1.2 Who Bought the Merchandise Goods from Asia?

For the destinations of Asia's exports, four patterns could be summarized from Figure 1.3. First, North America has regained its share for Asian exports. The share of Asia's merchandise exports to North America had risen beyond the pre-crisis level in 2008. North America has been the largest market for the Asian exports outside Asia. In 2015, 19.5 percent of Asia's merchandise exports went to

North America, which was quite close to the share in 2007 (i.e. 19.9 percent).

Second, the European markets were still lingering around at a relativelylow level. While Asia was able to make small gains in Europe in 2015, its importance as a destination for the Asian exports reduced significantly. Europe and North America used to have similar shares in Asia's merchandise exports in 2008. However, after the global financial crisis, the gap between Europe and North America

tended to widen significantly. In 2015, 15.6 percent of Asia's exports went into the European markets as compared to 19.5 percent for North America.

Third, while the intra-regional trade still dominates Asia's trade its importance weakened in recent years from 2014 to 2015 as shown in Figure 1.3. In 2015, the share of exports among the Asian economies (intra-regional exports) was 51.4 percent as compared to 52.3 percent attained in

2014.

Last, the share of other markets beyond Asia, North America and Europe in Asia's exports reduced in 2015. After the global financial crisis, Asia started to make continuous and incremental gains in these markets and the share of these markets in Asia's exports reached 14.5 percent by 2014. However, this share dropped to 13.5 percent in 2015.

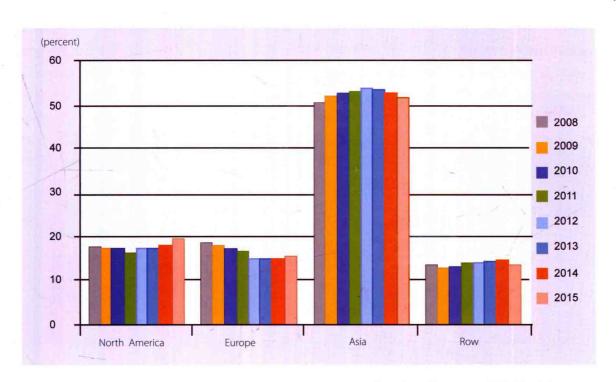


Figure 1.3 Shares of Major Markets in Asia's Merchandise Exports, 2008-2015

Source: International Trade Statistics (2009-2015) and World Trade Statistics Review 2016, WTO

#### 1.1.3 Two Largest Merchandise Traders of the World

China demonstrated relative resilience to the global decline in 2015 and maintained its position as the world largest merchandise trader. In 2015, China's exports were USD2,274.9 billion, accounting for 14 percent of the global exports. However, China is no exception amid the worldwide export decline. In 2015, China's export grew at a negative 2.9 percent, compared with -7.6 percent for Asia and -12 percent for the whole world. Consequently, China still maintained