

# JETRO Global Trade and Investment Report 2017

- Global Economy Reaching Turning Point -

Overview

July 31, 2017
Japan External Trade Organization (JETRO)
Overseas Research Department

# Chapter 1

The world economy, international trade and foreign direct investment

## World economy maintains its pace of moderate growth

#### ■ World economy grows at about 3% for five consecutive years

According to IMF estimates, the world's real GDP growth rate in 2016 was 3.2%, keeping up its pace of moderate growth of about 3% for the fifth consecutive year. The 3.2% growth rate was the lowest growth rate since 2010. In 2017, growth is expected to pick up speed to 3.5%, underpinned by factors such as recovery of global manufacturing and trade, strong economic performance in the Euro zone, outlook for steady growth in the Chinese economy, and recovery of commodity exporting countries accompanying the rise in commodity prices.

#### Trends in commodity prices holds one of the keys to the world economy

The contribution rate of commodity-exporting developing economies (57 emerging/developing economies) to the growth rate of the world economy is closely interlocked with commodity prices. When commodity prices rose in the 2000s, contribution rate was on par with that of China (29.5% at its peak in 2008), but fell in tandem with the decline in non-fuel commodity prices after 2011 and the decline in fuel prices after mid-2014, hitting a low of just 0.1% in 2015. With the rise in commodity prices after the beginning of 2016, contribution rate is expected to reach 9.7% in 2018, exceeding that of the United States and the Euro zone. The gradual increase of commodity prices is expected to contribute positively to the world economy.

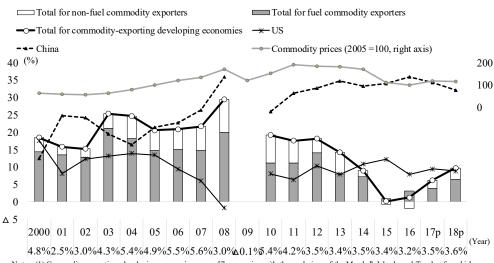
#### Trends in real GDP growth rate/contribution ratio by economies

	20	)15	20	)16	2017 (£	orecast)	2018 (famagest)	
						-	2018 (forecast)	
	Percent	Contribu-	Percent	Contribu-		Contribu-	Percent	
XX7 11	change	tion rate	change	tion rate	change	tion rate	change	
World	3.4	100.0	3.2		3.5	100.0	3.6	
Advanced economies	2.1	27.4	1.7	22.4	2.0	24.3	1.9	
US	2.6	12.2	1.6	7.9	2.1	9.4	2.1	
Euro area	2.0	7.3	1.8	6.7	1.9	6.5	1.7	
Germany	1.5	1.5	1.8	1.9	1.8	1.7	1.6	
France	1.1	0.8	1.2	0.9	1.5	1.0	1.7	
UK	2.2	1.6	1.8	1.3	1.7	1.1	1.5	
Japan	1.1	1.5	1.0	1.4	1.3	1.6	0.6	
Emerging and developing economies	4.3	73.2	4.3	77.4	4.6	77.3	4.8	
Emerging and developing Asia	6.8	60.1	6.4	61.0	6.5	59.4	6.5	
China	6.9	34.1	6.7	35.9	6.7	34.4	6.4	
India	8.0	15.9	7.1	15.5	7.2	15.0	7.7	
ASEAN 5	4.9	7.6	4.9	8.1	5.1	7.9	5.2	
Latin America and the Caribbean	0.1	0.2	-1.0	-2.5	1.0	2.3	1.9	
Brazil	-3.8	-3.4	-3.6	-3.1	0.3	0.2	1.3	
Mexico	2.6	1.5	2.3	1.4	1.9	1.1	2.0	
Emerging and developing Europe	4.7	4.9	3.0	3.3	3.5	3.6	3.2	
Russia/CIS	-2.2	-3.1	0.4	0.6	1.7	2.2	2.1	
Russia	-2.8	-2.9	-0.2	-0.3	1.4	1.3	1.4	
Middle East and North Africa	2.7	6.1	5.0	11.8	2.6	5.7	3.3	
Sub-Saharan Africa	3.4	3.1	1.3	1.3	2.7	2.4	3.5	

Notes: The definitions of advanced/emerging and developing economies follow the World Economic Outlook (WEO). ASEAN 5 refers to Indonesia, Malaysia, Philippines, Thailand, and Vietnam. The Middle East and North Africa includes Afghanistan and Pakistan. 2) The contribution rate is calculated using the weighted PPP (purchasing power parity) of the previous year, which was released in April 2017.

Source: "WEO, April/July 2017" (IMF)

## Contribution rate by commodity-exporting developing economies and key countries to the world's economic growth rate



Notes: (1) Commodity-exporting developing economies cover 57 economies with the exclusion of the Marshall Islands and Tuvalu, for which data is not available, from the original 59 emerging and developing economies based on "WEO, April 2017" (IMF), p12 (with the addition of Brazil and Peru in Annex Table D on p179). Brazil and Peru are categorized as non-fuel commodity exporters. (2) Contribution rate is calculated based on GDP weight of PPP (purchasing power parity) from the previous year, published in April 2017. (3) The figures below each year represent real GDP growth rate for the world. (4) As growth rate for the world economy was negative in 2009, contribution rate could not be calculated. (5) Figures for 2017 - 2018 are forecasts by IMF.

Source: "WEO, April/July 2017" (IMF)

## World trade declines for the second year running in 2016

#### ■ World trade declines by 3.1% to \$15.6201 trillion in 2016 (JETRO estimate)

World trade in 2016 (merchandise trade, nominal export basis) fell by 3.1% year-on-year to \$15.62 trillion (JETRO estimate). Although the percentage of decline was smaller than the 12.9% decline of the previous year, this was the second consecutive year of decline in world trade, and the first time since 1981 - 83 when negative growth was recorded for consecutive years. Trade volume (export basis), which is an indicator of real trade, remained at about the same level with a 0.2% fall, marking the lowest growth since 2010. Commodity price depreciation (in particular, dip in fuel prices), is believed to have brought about a difference in the growth rate of value and quantity.

#### World trade related indicators

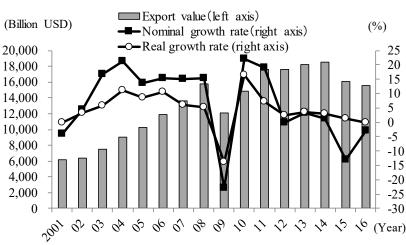
(All figures are percentages, unless indicated at the end of column)

(All figures are percentages, unless indicated at the end of column)									
	2012	2013	2014	2015	2016				
World trade (export, 100 mil USD)	176,680	182,542	185,006	161,124	156,201				
Nominal growth rate	0.0	3.3	1.3	-12.9	-3.1				
Real growth rate	2.3	3.7	3.0	1.3	-0.2				
Price growth rate	-2.2	-0.3	-1.6	-14.0	-2.9				
World trade (import, 100 mil USD)	183,118	186,879	189,460	164,902	160,030				
Nominal growth rate	0.4	2.1	1.4	-13.0	-3.0				
Real growth rate	1.3	3.3	2.8	0.2	-0.9				
Price growth rate	-0.8	-1.2	-1.4	-13.1	-2.1				
Industrial production index growth rate (developed countries)	0.4	0.2	2.1	0.2	0.1				
Crude price growth rate	1.0	-0.9	-7.5	-47.2	-15.7				
Natural gas price growth rate	13.1	-6.6	-6.5	-30.2	-40.4				
Metal price index growth rate	-16.8	-4.3	-10.1	-23.0	-5.4				
Iron ore price growth rate	-23.4	5.3	-28.1	-42.4	4.3				
Food price index growth rate	-2.6	0.7	-4.1	-17.2	2.1				
Growth of nominal effective dollar exchange rate	3.8	2.2	2.5	15.3	0.2				

Notes: 1) Both trade values and nominal growth rates are estimated by JETRO. See Appendix Annnotation II regarding the method of estimation. 2) The price growth rate was calculated based on the price index of the IFS. 3) The real growth rate was calculated by dividing the nominal amount by price index. 4) All commodity prices are indicated in the growth rate of the annual average. Crude oil prices are the average of Dubai, Brent and WTI. Natural gas prices are Russian market prices. Iron ore prices are the import prices at China's CFR Tianjin port.

Source: Trade statistics of respective economies and "IFS, May 2017" (IMF)

#### Trends in world trade (export basis)



Source: JETRO's estimates based on the trade statistics of respective economies, and "IFS, May 2017" (IMF)

### Trends by country in world trade:

### Impact of economic downturn in the US, China, and commodity exporters

#### US and China imports and exports fall for second consecutive year

The United States (second largest exporter and largest importer in the world) and China (largest exporter and second largest importer in the world) recorded a decline in both imports and exports for the second consecutive year, pushing down world trade. The decline in US exports (3.5% decline) was primarily the result of a decline in general machinery and chemicals, as well as a decline in petroleum and petroleum products against the backdrop of depreciation in crude oil prices. Close to 60% of the decline in imports (2.7% decline) is also the result of a decline in petroleum and petroleum products brought about by the depreciation in crude oil prices. China also recorded a fall in imports and exports across most products. In particular, electrical equipment, general machinery, base metals and its products, and textile and its products had an impact on the overall decline in exports (6.4% decline), while petroleum and its products and electrical equipment had an impact on the decline in imports (4.8% decline).

#### Commodity exporters account for close to half of the decline in world trade

Against a backdrop of sluggish commodity prices, exports from commodity exporters (41 emerging/developing economies and 7 advanced economies) declined by 9.7% while imports fell by 8.7%. Close to half of the decline in the amount of world exports for 2016 can be accounted for by the decline in trade of the commodity exporters.

### ■ Relatively strong performance by the EU, and high growth rates for Vietnam and the Philippines

The EU performed relative well in comparison with other regions, staying at about the same level with a 0.2% drop in exports and 0.1% growth in imports. Germany recorded growth in both imports and exports, while Italy and Spain recorded growth in exports. The growth in exports bound for EU and China, led by the transport equipment and electrical equipment sectors, contributed to the growth in exports (0.8% growth) for Germany. Vietnam recorded high growth rates of 9.0% increase in exports and 5.6% increase in imports. Its export growth was driven by telephones, mobile phones, and their parts, as well as computers, electrical products, and their parts. Imports to the Philippines increased by 21.2% against a backdrop of strong performance in personal consumption, the promotion of infrastructural investment by the government, and rapid growth in construction and capital investment in the private sector.

World trade value by country and region (2016)

(100 million USD %)

						(100 million USD, %)				
		Exp				Imp				
	Value	Share	Growth	Contri-	Value	Share	Growth	Contri-		
			rate	bution			rate	bution		
NAFTA	22,151	14.2	-3.4	-0.5	29,778	18.6	-2.8	-0.5		
US	14,510	9.3	-3.5	-0.3	21,878	13.7	-2.7	-0.4		
Canada	3,902	2.5	-4.9	-0.1	4,029	2.5	-4.0	-0.1		
Mexico	3,739	2.4	-1.8	0.0	3,871	2.4	-2.1	0.0		
EU	53,351	34.2	-0.2	-0.1	52,594	32.9	0.1	0.0		
Germany	13,380	8.6	0.8	0.1	10,552	6.6	0.3	0.0		
Netherlands	5,695	3.6	-0.1	0.0	5,043	3.2	-1.7	-0.1		
France	5,009	3.2	-1.0	0.0	5,727	3.6	-0.1	0.0		
Italy	4,616	3.0	1.0	0.0	4,045	2.5	-1.6	0.0		
UK	4,092	2.6	-11.0	-0.3	6,365	4.0	1.6	0.1		
Japan	6,446	4.1	3.1	0.1	6,070	3.8	-6.4	-0.3		
Australia	1,916	1.2	2.1	0.0	1,893	1.2	-5.5	-0.1		
East Asia	39,986	25.6	-4.8	-1.2	32,000	20.0	-3.5	-0.7		
China	21,353	13.7	-6.4	-0.9	15,247	9.5	-4.8	-0.5		
South Korea	4,954	3.2	-5.9	-0.2	4,062	2.5	-6.9	-0.2		
Taiwan	2,572	1.6	-2.6	0.0	2,304	1.4	1.1	0.0		
ASEAN 6	11,107	7.1	-1.5	-0.1	10,388	6.5	-1.0	-0.1		
Singapore	3,299	2.1	-4.8	-0.1	2,830	1.8	-4.6	-0.1		
Thailand	2,137	1.4	1.3	0.0	1,958	1.2	-3.0	0.0		
Malaysia	1,897	1.2	-4.8	-0.1	1,687	1.1	-4.2	0.0		
Vietnam	1,766	1.1	9.0	0.1	1,748	1.1	5.6	0.1		
Indonesia	1,445	0.9	-3.9	0.0	1,357	0.8	-4.9	0.0		
Philippines	563	0.4	-4.0	0.0	808	0.5	21.2	0.		
India	2,646	1.7	-1.3	0.0	3,617	2.3	-8.2	-0.2		
Brazil	1,852	1.2	-3.1	0.0	1,376	0.9	-19.8	-0.2		
Russia	2,857	1.8	-16.8	-0.4	1,823	1.1	-0.3	0.0		
Turkey	1,425	0.9	-0.9	0.0	1,985	1.2	-4.0	-0.1		
South Africa	767	0.5	-6.1	0.0	751	0.5	-12.4	-0.		
World	156,201	100.0	-3.1	-3.1	160,030	100.0		-3.0		
Advanced economies	96,997	62.1	-1.3	-0.8	101,640	63.5	-1.7	-1.0		
Emerging/develop-					- 1					
ing economies	59,204	37.9	-5.8	-2.3	58,390	36.5	-5.1	-1.9		
Commodity exporters	21,437	13.7	-9.7	-1.4	21,008	13.1	-8.7	-1.2		
Fuel exporters	10,282	6.6	-16.3	-1.4	9,915	6.2	-10.3	-0.7		
Nonfuel exporters	11,155	7.1	-10.5	-0.2	11,093	6.9	-7.2	-0.5		
Commodity exporters Dev.	14,048	9.0	-12.4	-0.2	13,377	8.4	-11.3	-0		
· ·	7,389	9.0 4.7	-12.4 -4.1	-0.2	7,632	6.4 4.8		-0.2		
Commodity exporters Adv.  Notes: 1) "Commodity exporters and the second										

Notes: 1) "Commodity exporters Dev. (Adv.)" indicate commodity-exporting emerging/developing economies (advanced economies). 2) Figures of "World," "EU," "Advanced economies," "Emerging/developing economies" and "Commodity exporters" were estimated by JETRO. 3) Figures of "EU" include those of intraregional trade. 4) Member countries of ASEAN 6 are Singapore, Thailand, Malaysia, Vietnam, Indonesia and the Philippines. 5) East Asia includes China, South Korea, Taiwan, ans ASEAN 6. 6) See footnote in the main text regarding the definition of "Commodity exporters," which include 41 emerging/developing economies and seven advanced economies. Figures of small countries which were unavailable or unable to be estimated were excluded. 7) Advanced economies include 39 economies based on the definition of DOTS (IME)

Source: Trade statistics of respective economies

### Trends in world trade by type of product: 80% of the decline is due to commodity-related products

#### Decline in commodity-related products accounts for 80% of the decline in world trade

The value of trade (exports) for commodity-related products (total for mineral fuels, etc., mineral ore, base metals and its products, food, oils and fats, and other animal and vegetable products), which makes up 1/4 of world trade, reflecting the decline in commodity prices, fell by 8.9% to \$3.96 trillion. This decline accounts for 78.2% of the decline in world exports.

#### Growth in the trade of transport equipment on the back of expansion in Japan and intra-EU trade

While trade in general machinery (2.1% decline), electrical equipment (0.6% decline), precision equipment (1.8% decline), and chemicals (1.9% decline) has fallen, trade in transport equipment has increased (1.1% growth). Factors that contributed to the growth for transport equipment include the increase in intra-EU trade activity on the back of strong performance by the automotive market, and a growth in Japanese exports bound for US, EU, and China.

#### World trade by product (export basis, 2016)

(100 million USD, %)

0.1

	Value	Share	Growth	Contri-		Value	Share	Growth	Contri-
	value	Share	rate	bution		value	Share	rate	bution
Total exports	156,201	100.0	-3.1	-3.1	Other materials and their products	46,343	29.7	-8.3	-2.6
Machinery and equipment	66,114	42.3	-0.7	-0.3	Mineral ore (c)	1,547	1.0	-0.9	0.0
General machinery	18,851	12.1	-2.1	-0.3	Iron ore	716	0.5	2.4	0.0
Mining and construction machines	695	0.4	-12.2	-0.1	Mineral fuels etc.(d)	14,350	9.2	-18.7	-2.0
Machine tools	307	0.2	-9.3	0.0	Coal	766	0.5	-1.4	0.0
Turbines	1,071	0.7	5.7	0.0	LNG etc.	1,627	1.0	-26.0	-0.4
Engines	1,492	1.0	-1.4	0.0	Petroleum and its products	10,889	7.0	-18.7	-1.6
Industrial robots	45	0.0	7.7	0.0	Textile and its products	7,441	4.8	-2.9	-0.1
Computer and peripheral equipment	4,331	2.8	-5.8	-0.2	Gold	3,147	2.0	7.1	0.1
Semiconductor manufacturing equipment	568	0.4	18.0	0.1	Base metal and its products (e)	10,086	6.5	-6.8	-0.5
Electrical equipment	23,115	14.8	-0.6	-0.1	Iron and Steel	5,541	3.5	-7.7	-0.3
Communication equipment	5,312	3.4	-3.4	-0.1	IT related products (total)	24,269	15.5	-1.4	-0.2
Integrated circuits	5,337	3.4	5.3	0.2	Parts	11,793	7.5	0.4	0.0
Transport equipment	18,303	11.7	1.1	0.1	Final goods	12,476	8.0	-2.9	-0.2
Automobiles	8,366	5.4	3.3	0.2	Commodity-related products (total)	39,627	25.4	-8.9	-2.4
Passenger vehicles	6,942	4.4	3.5	0.1	Fuel (=(d))	14,350	9.2	-18.7	-2.0
Automobile parts	4,033	2.6	3.3	0.1	Non-fuel (metal, food and beverages)	25,277	16.2	-2.2	-0.3
Precision equipment	5,845	3.7	-1.8	-0.1	Metal (= (c) + (e))	11,633	7.4	-6.0	-0.5
Chemicals	21,566	13.8	-1.9	-0.3	Food and beverages $(=(a)+(b))$	13,644	8.7	1.4	0.1
Pharmaceuticals and medical supplies	5,064	3.2	1.7	0.1	Materials	13,364	8.6	-11.7	-1.1
Food (a)	11,825	7.6	1.2	0.1	Intermediate goods	73,824	47.3	-3.2	-1.5
Oils, fats, and other animal and vegetable products (b)	1,819	1.2	2.7	0.0	Processed goods	45,577	29.2	-5.2	-1.5
Miscellaneous manufactured goods	5,791	3.7	-0.2	0.0	Parts	28,246	18.1	0.1	0.0
Notes: JETRO estimates.					Final goods	64,642	41.4	-0.9	-0.4
Source: Trade statistics of respective economie	s				Capital goods	26,478	17.0	-3.1	-0.5

Consumption goods

38,163

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### High growth in semiconductor-related and industrial robot trade

### ■ Growth for seven consecutive years for integrated circuits, and three consecutive years for semiconductor manufacturing equipment

Amidst the overall decline in trade for general machinery, electrical equipment, and chemicals, growth was recorded for turbines (5.7% growth, export basis), industrial robots (7.7% growth), semiconductor manufacturing equipment (18.0% growth), integrated circuits (5.3% growth), and pharmaceuticals and medical supplies (1.7% growth). Against the backdrop of video viewing on smartphones and the advancement of IoT, and acceleration in the development of artificial intelligence (AI) and self-driving technologies, global semiconductor demand is expanding, and trade in integrated circuits grew for the 7th consecutive year, while trade in semiconductor manufacturing equipment grew for the 3rd consecutive year.

#### Japan ranks first in the world for semiconductor manufacturing equipment and industrial robot exports

Economies that contributed to the growth in the export of integrated circuits include Vietnam, Taiwan, and the EU (particularly Ireland).

The growth in export of semiconductor manufacturing equipment could be attributed in part to increase in Japan, Singapore, US, and the Netherlands. Imports by the top three economies for imports of semiconductor manufacturing equipment (China, Taiwan, Korea) expanded by an average of 13 - 17% every year after 2009.

A large part of the increase in industrial robot exports can be accounted for by export growth in Japan and the EU. China came in at first place for industrial robot imports, with more than 20% of the import share, due to the introduction of industrial robots brought about by labor shortage, rising labor costs, and government promotion measures aimed at enhancing the sophistication of the manufacturing industry. However, remarkable import growth was also recorded for other emerging and developing economies.

Japan ranks first in the world for industrial robot and semiconductor manufacturing equipment exports, and its share of the world export market exceeds 30%.

Top 10 exporters of semiconductor-related products and industrial robots (2016)

(100 million USD, %)

					lion USD, %)		
	Rank	Economies	Value	Share	Growth	Contri-	2009-16
	IXank				rate	bution	CAGR
	1	Taiwan	724	13.6	13.7	1.7	11.1
	2	China	638	11.9	-9.1	-1.3	15.2
its	3	South Korea	523	9.8	0.2	0.0	11.5
Integrated circuits	4	US	350	6.5	4.4	0.3	2.1
l ci	5	Malaysia	266	5.0	-2.3	-0.1	3.2
ıtec	6	Japan	241	4.5	1.9	0.1	-1.8
gra	7	Singapore	167	3.1	-1.8	-0.1	0.3
Inte	8	Philippines	139	2.6	-2.9	-0.1	14.9
	9	Vietnam	135	2.5	231.0	1.9	86.2
	10	Germany	122	2.3	1.4	0.0	5.5
		(memo) EU	403	7.6	17.2	1.2	3.5
ıg	1	Japan	179	31.5	36.1	9.8	11.6
Semiconductor manufacturing equipment	2	US	128	22.5	8.9	2.2	13.3
act	3	Netherlands	75	13.1	12.3	1.7	18.6
nuf it	4	Singapore	48	8.4	30.3	2.3	37.8
ma	5	South Korea	42	7.4	-8.0	-0.8	23.0
luctor man	6	China	19	3.3	24.0	0.8	22.6
duc	7	Germany	17	3.1	6.7	0.2	-0.4
ono	8	Taiwan	8.3	1.5	32.6	0.4	29.7
mic	9	Malaysia	6.9	1.2	25.9	0.3	42.1
Se	10	Austria	4.9	0.9	-16.4	-0.2	6.3
		(memo) EU	109	19.2	9.2	1.9	11.9
	1	Japan	16	35.9	13.2	4.5	18.6
	2	Germany	6.4	14.2	1.7	0.3	7.5
S	3	Italy	2.9	6.5	-10.1	-0.8	14.6
bot	4	France	2.5	5.5	21.2	1.0	10.7
lro	5	US	2.0	4.3	8.5	0.4	1.0
tria]	6	South Korea	1.8	4.0	-23.8	-1.3	20.1
Industrial robots	7	Austria	1.6	3.5	9.2	0.3	16.1
Inc	8	China	1.6	3.4	7.9	0.3	30.6
	9	Sweden	1.4	3.2	-9.5	-0.4	4.9
	10	Denmark	1.1	2.5	109.9	1.4	26.4
		(memo) EU	20	44.3	7.8	3.5	9.5
Notes:	1) Exp	orts of Singapor	e and Hon	g Kong ex	clude re-expo	rts. 2) "Share"	indicates the

Notes: 1) Exports of Singapore and Hong Kong exclude re-exports. 2) "Share" indicates the the share in world exports (JETRO estimates). 3) Vietnam's export values are estimated based on trade statistics of importers. 4) CAGR indicates compound annual growth rate. Source: Trade statistics of respective economies

## Continued signs of "slow trade" phenomenon

#### Prolonged "slow trade" phenomenon

World trade, which had previously been outpacing world demand in growth, has been showing remarkable signs of slowdown recently. "Slow trade," where growth in trade volume falls below the growth rate of world GDP, is an ongoing phenomenon. Growth rate in world trade slowed down drastically after 2012, and its ratio against GDP growth rate has fallen below 1. The "slow trade" phenomenon is particularly serious in emerging and developing economies, with the ratio of growth rate for trade in the most recent years of 2005 - 2016 to GDP growth rate at just 0.4, significantly lower than the ratio for advanced economies (1.6).

#### Many studies point to decline in demand as a primary cause of "slow trade"

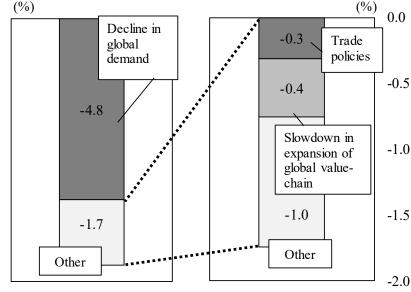
Many studies by the central banks of various countries, as well as international organizations such as IMF and WTO, analyzing the factors behind "slow trade," have presented the view that a decline in global demand is the primary cause. For example, IMF pointed out that 3/4 of the recent decline in trade can be accounted for by a decline in global demand, especially the low level of investments with strong ability to stimulate imports. It also explained that the slowdown in the pace of expansion of the global value-chain, trade policies, and other reasons also have a certain degree of persuasiveness as the factors contributing to the portion that cannot be accounted for by a decline in demand.

0.0

#### Ratio of world trade growth to world GDP growth (Real trade growth/real GDP growth) 5.5 Advanced economies 5.0 - Emerging/developing economies -1.0—○— World 4.5 4.0 -2.03.5 -3.03.0 2.5 -4.02.0 1.5 -5.0 1.0 -6.00.5 0.0 -7.0

Note: 1) Real trade growth is based on import volume. 2) All years, except for 2016, in which either the trade growth rate or GDP (Year) growth rate were negative are excluded. Years in shadow are those in which real trade growth/real GDP growth fell below 1. Source: "WEO, April 2017"(IMF) and "IFS(06/26/2017)" (IMF)

### Factors behind the decline in world trade (IMF)



Note: Figures show the contribution of each factor against the difference in real import change between 2003 - 2007 and 2012 - 2015.

Source: "WEO, October 2016" (IMF)

-0.5

### Products expected to experience growth in trade over the medium to long-term

#### Despite "slow trade," there are still products with increased trade

Based on a comparison of the growth in trade volume from 2003 - 2007 and 2012 - 2015, drawn up by the IMF, 85% of the products registered a smaller trade volume during the latter period.

Looking at the products that registered an increase in imports from 2012 - 2016 (b)—when the "slow trade" phenomenon continued amidst the lackluster trade performance worldwide—based on JETRO's product categories, we see a lineup of consumer durables such as passenger vehicles, communication equipment, processed food, apparel, and pharmaceutical products. Even though the growth rate for the imports of all these products slowed down from 2003 – 2007 (a), they continued to register positive growth. Consumer durables, represented by passenger vehicles, are products with room for future growth in penetration rate alongside with growth in income. While there were also some intermediate goods such as integrated circuits, and capital goods such as turbines, that continued to register import growth, in general, consumer goods stood out for its strong performance.

Even on the basis of the four-digit HS classification, the growth rate for imports during period (b) exceeded that of period (a) for food products such as shellfish, beef, and cocoa beans, in addition to clothing accessories such as footwear and men's clothing; even here, the stable performance of consumer durables was prominent. By nature, necessities such as apparel and clothing accessories are not characterized by demand that declines significantly, so trade is expected to continue growing in tandem with population growth in emerging and developing economies going forward.

#### "Slow trade" to ease with recovery in investments

Capital investment is on a recovery trend in the key countries/regions of the world as of the first quarter of 2017. If the primary cause of "slow trade" is a decline in demand due to sluggish investment, this means that the slow trade phenomenon could ease gradually if investment continues to recover throughout the year.

#### **Products which sustained strong imports**

				Average grov	wth rate (%
	Products	Goods classification	Imports in 2016 (Million USD)	(a) 2003- 2007	(b) 2012- 2016
	Passenger vehicles	Consumer	702,131	11.9	2.
	Integrated circuits	Parts	639,507	13.4	4.
	Telecommunications equipment	Capital/ Consumer	578,667	20.9	4.
п	Processed food	Consumer/Processed	540,234	12.8	0.
atic	Pharmaceutical products	Consumer/Processed	533,562	16.2	2
ific	Clothes			9.4	1
ass	Auto parts	Consumer	405,502 399,682	12.7	0
ರ	Gold	Parts Processed	,		
IETRO Classification	Turbines		336,201	19.1	0
ET	Fish and shellfish	Parts/Capital	140,914	11.6	2
_		Consumer	107,823	9.5	2
	Ceramics Beef	Consumer	46,454	12.9	1
		Consumer	40,363	12.8	2
	Motorcycles Consumer		19,875	14.1	1
	Industrial robots	Capital	3,995	10.7	2
	Footwear	Consumer	24,772	8.3	14
	Shellfish	Consumer	19,581	3.0	4
	Beef	Consumer	11,054	3.2	10
1)	Sulphonamides	Processed	10,373	14.3	16
4-digit HS code	Precious and semi-precious stones	Materials/ Processed	10,362	14.5	21
H	Cocoa beans	Materials	9,121	3.2	7
<u>1</u>	Navigational equipment	Capital/Parts	6,283	1.9	2
4-d	Men's clothing	Consumer	5,102	6.1	9
	Plastic rug	Processed	4,974	10.7	11
	Wooden boards	Processed	4,785	2.7	3
	Cacao butter	Processed	4,311	15.0	21
	Flat glass	Processed	3,329	13.5	38
Me	morandum) Trade by goods			<u> </u>	
	erials		1,513,986	23.7	-15
	rmediate goods		7,845,399	17.4	-2
	shed goods		6,797,561	14.3	0
	Capital goods		2,852,965	16.7	-0
	Consumer goods		3,944,596	12.7	1

Note: 1) Products under "4-digit HS code" were calculated from the statistics of the top 20 countries/regions which accounted for over 70% of the world's imports in 2016. 2) Lines within the category of "JETRO Classification" indicate products of which the growth rate was positive during (b). The other lines within the category of "4-digit HS code" indicate products of which the growth rate during (b) surpassed (a). 3) Definitions of goods are based on BEC (the United Nations).

Source: Trade statistics of respective countries and regions

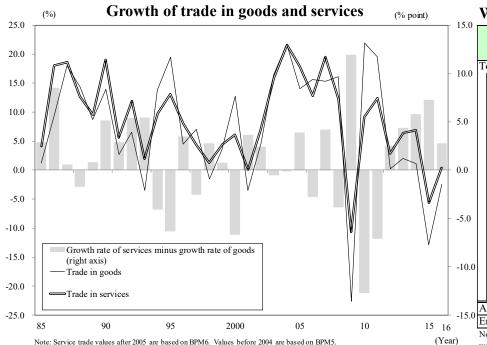
## Steady trade in services in comparison with goods

#### ■ Moderate "slow trade" phenomenon in service trade

World trade in services in 2016 increased by 0.4% year-on-year to \$4.88 trillion. Its share in overall trade of goods (products) and services reached a historical high of 23.5%. Since 2012, the amount of trade in services has been growing at a rate that outpaces that of trade in goods, and we could say that services are more resilient toward economic downturn than goods are. Ratio against GDP growth rate (nominal basis) fell below 1 for goods after 2012; on the other hand, trade in services recorded a growth of 1.5 - 2.6 times of GDP growth rate from 2012 to 2014.

#### ■ Growth in services exports is the source of growth for emerging and developing economies

Looking at services trade by categories, growth rate was higher in areas such as charges for the use of intellectual property (5.0%), telecommunications, computer and information (6.9%), and other business services such as law and accounting (5.5%), than in traditional service sectors such as transportation (average growth rate of 0.5% from 2010 to 2016) and tourism (4.0%). Trade in services by region sowed significant growth in exports from emerging and developing economies. In contrast with an export growth rate of 3.5% for advanced economies after 2010, growth rate was 4.7% for emerging and developing economies. The expansion in service trade can be an important element in stimulating growth in emerging and developing economies. According to the IMF, it has been proven that growth in service exports has a negative correlation with income disparity, and the pace of employment growth is faster for countries with a higher growth rate for services exports.



World trade in services by categories (2016)

(Million USD, %)

,10)	(Million	n USD, %)
Value	Share	2010-2016 Average growth rate
4,879,290	100.0	3.7
166,010	3.4	3.2
85,140	1.7	-1.2
80,870	1.7	9.9
852,550	17.5	0.5
1,205,480	24.7	4.0
2,583,640	53.0	5.0
87,730	1.8	0.7
121,590	2.5	3.2
420,270	8.6	3.7
314,060	6.4	5.0
493,050	10.1	6.9
1,093,270	22.4	5.5
140,530	2.9	7.1
357,970	7.3	3.7
573,220	11.7	-0.8
71,610	1.5	0.0
3,544,611	73.7	3.5
1,263,079	26.3	4.7
	Value  4,879,290 166,010 85,140 80,870 852,550 1,205,480 2,583,640 87,730 121,590 420,270 314,060 493,050 1,093,270 140,530 357,970 573,220 71,610 3,544,611 1,263,079	Value         Share           4,879,290         100.0           166,010         3.4           85,140         1.7           80,870         1.7           852,550         17.5           1,205,480         24.7           2,583,640         53.0           87,730         1.8           121,590         2.5           420,270         8.6           314,060         6.4           493,050         10.1           1,093,270         22.4           140,530         2.9           357,970         7.3           573,220         11.7           71,610         1.5           3,544,611         73.7

Note: 1) Due to constraints on data, the averge growth rate of that of "professional and management consulting services" was calculated from the data in 2012 and that of "technical, trade-related and other business services" from 2014 to 2016. 2) The total of the advanced and emerging/developing economies not tally with the "Total trade in services" as the figures follow WTO's own estimates. Source: WTO

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Source: "IFS, May 2017"(IMF) and WTO

## World trade in 2017 is expected to shift toward positive growth

#### Increase in value of trade across almost all products in the first quarter of 2017

Taking the total value of trade in products for 34 major countries/regions for which product-specific data is available for the first quarter of 2017, exports in the first quarter of 2017 increased by 9.3% year-on-year, and imports grew by 11.4%. While more than 60% of the growth could be attributed to the increase for commodity-related products on the back of a rise in commodity prices, the amount of trade shifted toward positive growth for most product items.

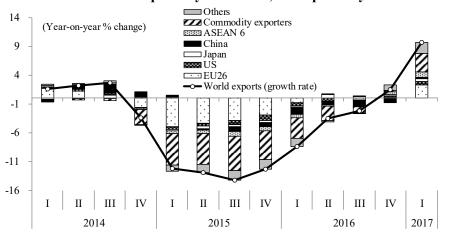
#### ■ Trend of shrinking decline rate after hitting bottom in Q3 2015

The rate of decline for the amount of world trade has been shrinking after hitting bottom in the third quarter of 2015, and shifted toward positive growth every month from November 2016 to March 2017. The main factor contributing to this trend is recovery in the EU, as well as for commodity exporters against the backdrop of rising commodity prices. China and US also registered positive growth for both imports and exports in the first quarter of 2017.

#### ■ World trade for the whole of 2017 is expected to shift toward positive growth

Based on forecasts by WTO (April 2017), world trade volume for 2017 is expected to increase by 2.4% (range of forecast is 1.8% - 3.6%). The value of trade is also expected to shift toward positive growth due to the rise in commodity prices and acceleration in the growth of the global economy.

#### Contribution of exports by economies, on a quarterly basis



Notes: See footnote in the main text regarding the definition of "Commodity exporters." EU26 indicates all EU member economies excluding two commodity exporters (Greece and Cyprus). Source: "DOTS (June 26, 2017)" (IMF)

Trade for 34 major countries/regions by product, on a quarterly basis (year-on-year growth rate)

<b>V V B</b>		,				(%)
	World trade		20	16		2017
	coverage ratio	I	II	III	IV	I
Total (exports)	83.6	-7.3	-2.6	-1.9	1.2	9.3
General machinery	91.9	-6.6	-1.9	-1.8	0.3	6.4
Turbines	93.0	4.6	4.5	10.1	5.1	9.3
Industrial robots	89.5	-2.0	14.9	5.4	14.6	34.3
Computer and peripheral equipment	93.2	-11.2	-6.9	-5.4	-2.2	5.5
Semiconductor manufacturing equipment	99.2	0.5	14.7	17.9	37.5	36.9
Electrical equipment	90.0	-4.4	-2.2	-0.8	0.6	8.2
Communication equipment	89.4	-6.8	-5.9	-2.3	-2.1	6.4
Integrated circuits*	95.4	-0.5	3.6	6.2	6.2	13.3
Transport equipment	90.2	-1.8	3.7	-1.0	0.4	2.9
Precision equipment	94.4	-5.9	-1.8	-1.2	0.5	5.7
Chemicals	89.0	-4.0	-1.3	-0.9	0.3	7.6
Pharmaceuticals and medical supplies	93.0	0.1	5.0	1.3	0.2	7.4
Commodity-related products*	77.9	-20.4	-13.9	-8.0	4.9	28.7
Fuel (=Mineral fuels etc.)*	81.6	-34.5	-26.7	-16.2	6.6	55.5
LNG etc.*	83.4	-36.5	-30.0	-25.2	-5.8	23.4
Petroleum and its products*	82.3	-36.0	-27.0	-15.2	7.3	63.2
Non-fuel (metal, food and beverages)	79.4	-8.8	-3.3	0.1	3.9	11.7
Metal	81.2	-16.5	-8.1	-3.3	4.4	17.9
Iron ore*	94.7	-33.5	-3.0	0.0	14.7	78.6
Iron and steel	86.3	-18.7	-7.9	-4.9	1.3	16.3
Food and beverages	77.8	-0.7	1.5	3.4	3.4	6.2
Materials*	87.6	-28.3	-20.0	-10.2	8.2	48.0
Intermediate goods	86.4	-8.5	-3.3	-1.9	1.4	10.4
Capital goods	92.0	-7.7	-2.6	-3.3	-0.7	4.8
Consumption goods	83.6	-0.9	2.4	-0.9	-0.7	3.0
<del></del>						

Notes: 1) The key 34 economies are Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, Netherlands, Philippines, Portugal, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, UK, and US.

2) Products marked with an asterisk (\*) are based on imports, other products are based on exports. World trade coverage ratio for 2016 is based on the larger of the two (imports or exports).

Source: Trade statistics of respective economies

### Japan's trade balance marks first surplus in six years

#### Exports show signs of picking up

For Japan's trade (customs clearance basis) in 2016, exports increased by 3.1% year-on-year to \$644.6 billion, while imports fell by 6.4% to \$607.0 billion. The trade surplus was \$37.6 billion, marking Japan's first trade surplus in six years since 2010. A surplus of \$9.6 billion was also recorded in the first half of 2017, indicating a gradual return of the trade balance to the black. On the basis of trade volume, exports grew marginally from a decline in the previous year (1.0% decline) to 0.3% growth, while imports fell for the second consecutive year with a 0.3% decline. The upward trend for exports has continued in 2017, and shows signs of picking up. On the yen basis, exports in 2016 fell by 7.4% to \$70.0 trillion, while imports fell by 15.8% to \$66.0 trillion, registering a trade surplus of \$4.0 trillion.

#### Japan's trade trends (2012 – June 2017)

(Million USD, 100 million JPY, %)

											(MIMION OS	D, 100 mmc	$\frac{1}{1}$
		2012	2013	2014	2015	2016				2017			
		2012	2013	2014	2015	2010	Jan-Jun	Jan	Feb	Mar	Apr	May	Jun
7	Total exports	801,335	719,205	694,270	625,068	644,579	335,209	46,629	55,974	63,546	57,104	52,350	59,605
se	(Growth rate)	-2.4	-10.3	-3.5	-10.0	3.1	9.6	3.9	15.1	11.4	7.7	11.9	7.2
-pa	Total imports	888,584	838,889	817,103	648,343	607,020	325,617	55,937	48,813	58,182	52,734	54,318	55,633
Dollar-based	(Growth rate)	4.2	-5.6	-2.6	-20.7	-6.4	12.5	11.3	4.9	15.3	15.5	15.1	13.0
[0Q	Trade balance	-87,250	-119,684	-122,832	-23,275	37,559	9,592	-9,308	7,161	5,364	4,371	-1,968	3,972
	(Year-on-year difference)	-54,973	-32,435	-3,148	99,557	60,834	-7,069	-3,942	5,082	-1,219	-3,001	-1,590	-2,399
	Total exports	637,476	697,742	730,930	756,139	700,358	377,881	54,220	63,475	72,296	63,294	58,512	66,084
eq	(Growth rate)	-2.7	9.5	4.8	3.4	-7.4	9.5	1.3	11.3	12.0	7.5	14.9	9.7
oas	Total imports	706,886	812,425	859,091	784,055	660,420	367,460	65,139	55,364	66,193	58,503	60,576	61,686
en-based	(Growth rate)	3.8	14.9	5.7	-8.7	-15.8	12.2	8.4	1.3	15.9	15.2	17.9	15.5
Χe	Trade balance	-69,411	-114,684	-128,161	-27,916	39,938	10,422	-10,919	8,111	6,103	4,792	-2,064	4,398
	(Year-on-year difference)	-43,763	-45,273	-13,477	100,245	67,854	-7,316	-4,349	5,757	-1,346	-3,321	-1,591	-2,466
Exp	oort volume index	91.6	90.2	90.7	89.8	90.0	92.3	78.2	92.9	104.4	93.9	86.7	97.6
	(Growth rate)	-4.8	-1.5	0.6	-1.0	0.3	5.1	-0.2	8.2	6.6	4.1	7.5	4.0
Im	oort volume index	105.0	105.3	106.0	103.0	102.6	104.2	109.9	93.0	112.5	100.5	103.6	105.7
	(Growth rate)	2.4	0.3	0.6	-2.8	-0.3	3.5	6.3	-4.2	4.2	4.9	5.4	4.2
Cn	ade oil import price	114.8	110.5	105.1	55.0	41.6	54.1	53.4	55.3	56.1	53.9	53.9	52.2
(Do	ollar/barrel, growth rate)	5.6	-3.7	-4.9	-47.7	-24.3	45.9	44.5	81.9	74.0	45.8	32.4	15.3
Exc	change rate (yen/dollar)	79.8	97.6	105.8	121.0	108.8	112.3	114.7	113.1	113.0	110.1	112.2	110.9
	(Yen appreciation, %)	0.0	-18.3	-7.8	-12.5	11.2	-0.5	3.1	1.7	0.1	-0.2	-2.7	-4.9

Note: 1) Yen-based values are converted to dollar-based values by JETRO. 2) The volume index is on a 2010 basis.

Source: "Trade Statistics" (Ministry of Finance), "Foreign Exchange Rate" (Bank of Japan)

<sup>3)</sup> Exchange rates are the interbank rate average for each period. 4) Growth rates are a year-on-year comparison.

## US is the largest export partner for the fourth consecutive year

#### Although China has been the largest import partner for the 15th consecutive year, there is a continuing decline

Looking at exports by country in 2016, the US became Japan's largest export partner for the fourth consecutive year with exports worth \$130 billion (3.3% increase year-on-year). The US economy remained steady, with robust private consumption and growth in areas such as automobiles and construction machinery. China, which had experienced sluggish export growth last year, registered a 4.2% growth to \$113.9 billion. In addition to continued growth in the semiconductor manufacturing equipment, the growth for automobiles and automotive parts also continued to this export growth. In the EU, growth in countries such as the Germany (automobiles) and UK (railroad vehicles) contributed to an increase of 11.2% to \$73.4 billion. As for imports, China registered a decline of 2.6% to \$156.4 billion; despite gradual decline since last year, it has remained as Japan's largest import partner every year for the 15th consecutive year. In the electrical equipment, which is a primary import product, there was a fall in the import of photovoltaic cells used for solar power generation, as well as for textiles and textile products, for which production is progressively being transferred to other emerging Asian economies. Furthermore, as a result of the fall in energy prices, imports from Middle East also declined significantly.

#### Japan's exports and imports by major country/region

(Million USD, %)

							(IVIIIIOII	(0.5D, 70)
		2015	2016	YoY change	Contri bution	Jan-Jun 2017	YoY change	Contri bution
Tota	al exports	625,068	644,579	3.1	3.1	335,209	9.6	9.6
	US	125,852	130,019	3.3	0.7	64,312	3.1	0.6
	EU	66,004	73,394	11.2	1.2	37,573	4.9	0.6
	China	109,266	113,874	4.2	0.7	61,567	17.8	3.0
	ASEAN	95,052	95,535	0.5	0.1	50,060	10.7	1.6
Tota	al imports	648,343	607,020	-6.4	-6.4	325,617	12.5	12.5
	US	66,638	67,371	1.1	0.1	35,708	10.9	1.2
	EU	71,265	74,944	5.2	0.6	37,244	4.2	0.5
	China	160,674	156,444	-2.6	-0.7	78,020	4.2	1.1
	ASEAN	97,953	92,301	-5.8	-0.9	49,814	11.6	1.8

Note: Yen-based values are converted to dollar-based values by JETRO.

Source: "Trade Statistics" (MOF)

#### Characteristics of Japan's trade in 2016

		Characteristics for 2016
Sn	Export	Largest export partner for fourth consecutive year. Consumption remained steady, and automobile exports performed well. The strong performance of housing construction also contributed to growth for mining and construction equipment.
	Import	Food products, which make up approximately 20% of imports, was impacted by the market recession, resulting in decline in the amount of imports for the second consecutive year.
na	Export	Grew for the first time in five years. In the general machinery, in response to increased production by semiconductor manufacturers, there was an increase for semiconductor manufacturing equipment. In the transport equipment, automobile and automotive parts registered an increase, particularly in the area of luxury cars.
China	Import	Despite a decline from the previous year, China has remained the largest import partner for the 15th consecutive year. In the electrical equipment, there was a decline in imports of photovoltaic cells due to sluggish demand and a fall in prices. Textiles and textile products such as apparel also continued to decline. On the other hand, mobile phone imports increased from the previous year.
ASEAN	Export	In Thailand, parts for IT-related products rebounded, while machine tools, iron and steel, etc. declined. The machine tools also registered sluggish performance in Indonesia. On the other hand, Vietnam saw growth in IT-related products and parts, automotive parts, and textiles, while the Philippines registered growth in the mining and construction machinery.
ASF	Import	Due to the impact from the fall in energy prices, the amount of imports from Malaysia and Indonesia continued to decline significantly. In Vietnam, partly due to the impact of transfer of production from China, the textiles and textile products sector, such as apparel, registered growth. There was also significant increase in the import of mobile phones.
EU	Export	Exports increased year-on-year, with contributions from Germany thanks to the passenger vehicle in response to the strong performance of the domestic automotive market, from UK in the railroad vehicle toward the inter-city high-speed rail order plan resulting in orders placed with Japanese manufacturers, and from Italy in the large-scale passenger ferry.
	•	There was a rise in the imports of passenger vehicles and pharmaceutical products from Germany and France. From Italy, there was a rapid growth in pharmaceutical products, engines for automobiles, and heat-not-burn cigarettes. Passenger vehicle imports from UK grew, surpassing the US to rank next after Germany.

Source: "Trade Statistics" (Ministry of Finance), press releases from the respective companies, various reports, etc.

### Recovery in transport equipment contributes to export growth

#### Decline in mineral fuel imports due to depreciation in crude oil prices

Looking at exports by product, transport equipment contributed to export growth with an increase of 6.3% to \$161 billion. Strong performance was recorded for exports bound for US and China in the automobile, and for exports bound for East Asia including China in the automotive parts. For general machinery, firm semiconductor demand due to the advancement of IoT and other factors has brought about an expansion in the semiconductor manufacturing equipment. For imports, the continued depreciation in crude oil prices until the early part of the year has contributed to a drop for mineral fuels by 26.6% to \$110.6 billion. However, in response to OPEC agreements to reduce production output, crude oil prices moved into an upward trend in the second half of the year, and mineral fuel imports from January to May 2017 increased year-on-year.

#### Intermediate goods and capital goods demonstrate their strength under "slow trade" conditions

While world trade experienced a robust export of consumer goods in the midst of a slow trade overall, Japan—in addition to a rise in passenger vehicles—showed strong growth in many products within the categories of intermediate goods and capital goods, including semiconductor manufacturing equipment and parts for airplanes and helicopters.

#### Japan's exports & imports by main product

	1 1			(Million US					
		2015	2016	YoY change	Contri bution	Jan-May 2017	YoY change	Contri bution	
Tota	al exports	625,068	644,579	3.1	3.1	275,603	10.1	10.1	
	General machinery	117,650	124,010	5.4	1.0	55,329	13.5	2.6	
	Semiconductor manufacturing equipment	13,133	17,871	36.1	0.8	9,138	43.8	1.1	
	Mining and construction machines	7,883	8,578	8.8	0.1	4,081	10.6	0.2	
	Electrical equipment	95,608	98,252	2.8	0.4	40,738	9.2	1.4	
	Electronic parts such as semiconductors	32,267	33,179	2.8	0.1	13,831	11.0	0.5	
	Transport equipment	151,497	161,013	6.3	1.5	65,643	2.7	0.7	
	Iron and steel products	37,776	33,955	-10.1	-0.6	15,366	13.5	0.7	
Tota	al imports	648,343	607,020	-6.4	-6.4	269,964	12.4	12.4	
	Mineral fuels	150,633	110,625	-26.6	-6.2	60,519	39.4	7.1	
	Crude oil	67,365	50,811	-24.6	-2.6	27,161	45.1	3.5	
	Chemicals	74,062	75,473	1.9	0.2	32,050	5.2	0.7	
	Pharmaceauticals & medical supplies	23,147	24,537	6.0	0.2	9,222	-5.3	-0.2	
	General machinery	59,539	59,443	-0.2	0.0	26,367	6.4	0.6	
	Electrical equipment	90,266	89,943	-0.4	0.0	37,757	8.9	1.3	
	Food	58,461	59,311	1.5	0.1	24,800	5.6	0.5	

Note: Yen-based values are converted to dollar-based values by JETRO.

Source: "Trade Statistics" (MOF)

#### Products of which export has increased even under trend of "slow trade"

		Expo	ort value	Export volume
Product	Category	Million USD	2012 - 2016 Average growth rate	2012 - 2016 Average growth rate
Passenger motor vehicles, cylinder capacity >1500 cc, ≤3000 cc	Consumer goods	55,522	3.2	3.3
Machines for manufacturing equipment of semiconductor devices, IC	Capital goods*	8,114	2.0	-3.9
Gold, nonmonetary, unwrought	Processed goods*	6,378	10.1	18.4
Parts for airplanes and helicopters	Parts*	4,747	5.0	8.8
Parts & accessories for manufacturing equipment of semiconductor devices	Parts*	4,409	7.4	22.6
Passenger motor vehicles, with diesel engine, cylinder capacity >1500 cc,	Consumer goods	4,272	4.9	8.5
Machines for manufacturing of flat panel displays	Capital goods*	3,459	18.3	4.2
Tankers	Capital goods*	3,383	2.5	1.1
Vehicular engines (over 1000 cc)	Parts*	3,170	4.3	2.6
Parts for turbojets and turbo propellers	Parts*	3,045	6.4	6.4
Parts for phone sets & other apparatuses for voice transmission or reception	Parts*	2,819	10.9	-12.4
Lithium ion batteries	Parts*	2,615	3.4	7.5
Gold or platinum jewelry and parts	Consumer goods	2,314	19.1	19.8
Pharmaceutical products, not containing antibiotics or hormones	Consumer goods	2,217	11.8	6.2
Mounted piezoelectric crystals	Parts*	2,060	9.7	17.9
Microtomes (including parts and accessories)	Capital goods*	1,923	0.6	3.8
Outboard motors for marine engines	Consumer goods	1,679	1.2	-2.3
Industrial robots	Capital goods*	1,627	3.0	12.3
Beauty & skin care preparation	Consumer goods	1,590	11.4	18.1
Patient monitoring systems, medical imaging appatantuses, etc.	Capital goods*	1,402	8.9	-5.3

Note: Calculated based on the HS6-digit level. The top 20 export products in 2016 among products of which export amounted to over a \$100 million in 2016 and the average export growth rate from 2012 to 2016 was positive.

<sup>\*</sup> Intermediate goods (including parts and processed products) and capital goods Source: "Trade Statistics" (MOF)

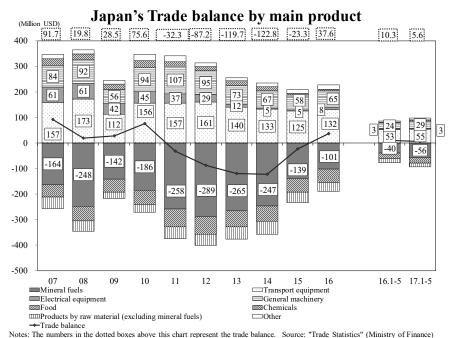
### Significant reduction in mineral fuel deficit

#### Recent rebound in energy prices has also had an impact

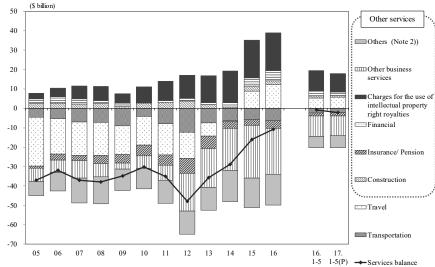
Looking trade balance by product, the downward trend in the amount of surplus for transport equipment, general machinery, and electrical equipment has come to a halt, and is on the move upwards. On the other hand, the amount of deficit for mineral fuels has continued shrinking after hitting bottom in 2012, and shrank significantly in 2015 and 2016. In 2017, surpluses that were on par with the level in the previous year were recorded for main surplus-generating products such as transport equipment. However, the deficit for mineral fuels is still growing, partly due to the impact of the rebound of energy prices.

#### Travel service balance in the black for second consecutive year

Japan's current account surplus in 2016 was \$187.8 billion, registering an increase in the amount of surplus for the second consecutive year. The main factors behind this increase in surplus lie in the shift toward surplus for the trade balance and the reduction in account balance deficit for services. With a \$12.2 billion surplus in the travel service balance, following from last year when a surplus was registered for the first time in 53 years. The number of tourists visiting Japan, mainly from Asian countries such as China, has continued to rise. Looking at the market share of travel services receipts for 2016 by country, China had the largest share at about 30%, while other Asian countries combined, including Taiwan and Korea, made up the majority at about 80%. In addition, the amount of surplus from charges for the use of intellectual property rights, etc. was \$19.5 billion, maintaining the level from 2015 (\$19.4 billion) when a historical high was recorded.



### Japan's service trade



Notes: 1) Yen-based values are converted to dollar-based values by JETRO. 2) "Other" includes manufacturing services on physical inputs owned by others, maintenance and repairs, communications, computers and information, personal, cultural and recreational, and government services.

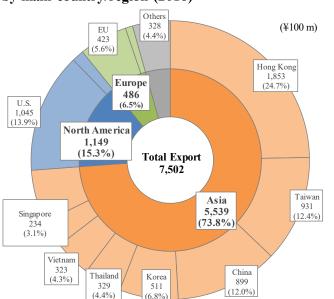
Sources: "Balance of Payments" (Bank of Japan, Ministry of Finance), "Foreign Exchange Rates" (Bank of Japan)

## Japan's agricultural, forestry, and fishery exports

## New record high for the amount of agricultural, forestry, and fishery exports

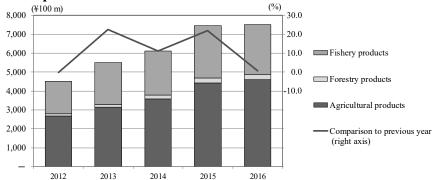
Japan's agricultural, forestry, and fishery exports to the world in 2016 hit a new record high for the fourth consecutive year at 750.2 billion yen, 0.7% higher than the previous year. The top 10 export destinations were, in order from the largest amount of exports, Hong Kong, US, Taiwan, China, Korea, Thailand, Vietnam, Singapore, Australia, and the Philippines; these made up 73.8% of total exports. Looking at the breakdown by product, the amount of agricultural products exported was 459.3 billion yen (61.2% of the total), the amount of forestry products exported was 26.8 billion yen (3.6% of the total), and the amount of fishery products exported was 264.0 billion yen (35.2% of the total). The product item with the highest amount of exports was scallops. The amount of beef exports also hit a record high, ranking in 10th place.

## Export value of Japan's agricultural, forestry, fishery and food products by main country/region (2016)



Source: "Overview of Foreign Trade of Agricultural, Forestry and Fishery Products" (MAFF)

## Export value of Japan's agricultural, forestry, fishery and food products



Source: "Overview of Foreign Trade of Agricultural, Forestry and Fishery Products" (MAFF)

### Top 20 export categories of agricultural, forestry, fishery and food products (value basis) (Unit: Milion van %)

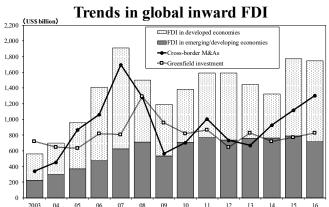
	,		(Un	ıt: Mılıon yen, %)
	Product	2015		2016
	1 Toddet	Amount	Amount	Percentage
1	Scallops (fresh, chilled, frozen, salted, dried)	59,079	54,834	-7.2
2	Alcoholic beverages	39,029	42,996	10.2
3	Pearls (natural, cultured)	31,905	30,381	-4.8
4	Sauces and mixed seasonings	26,423	27,372	3.6
5	Tobacco	23,588	21,873	-7.3
6	Soft drinks	19,738	19,431	-1.6
7	Confectionery (excluding rice products)	17,702	18,162	2.6
8	Mackerel (fresh, chilled, frozen)	17,896	17,986	0.5
9	Seeds for sowing	15,139	14,623	-3.4
10	Beef (including edible offal)	11,005	13,552	23.1
11	Amderjacks nei (fresh, chilled, frozen)	13,840	13,473	-2.6
12	Apples	13,393	13,299	-0.7
13	Green tea	10,106	11,551	14.3
14	Bonito/Tuna (fresh, chilled, frozen)	13,776	9,794	-28.9
15	Hides of pigs	8,997	9,737	8.2
16	Fish paste products (fish sausages, etc.)	8,168	9,272	13.5
17	Dried sea cucumber (preparation)	10,306	8,676	-15.8
18	Logs	9,416	8,466	-10.1
19	Garden tree, etc.	7,609	8,033	5.6
20	Compound feeds, formula feed	8,252	6,944	-15.8

Source: "Overview of Foreign Trade of Agricultural, Forestry, and Fishery Products" (Ministry of Agriculture, Forestry and Fisheries)

### World inward FDI levels off in 2016

#### Expansion toward advanced economies through large-scale M&As, and deceleration toward emerging and developing economies

According to the United Nations Conference on Trade and Development (UNCTAD), world inward FDI in 2016 (balance of payments basis, net, flow) declined by 1.6% year-on-year to \$1.7 trillion, leveling off from 2015 when a significant growth was recorded. FDI toward advanced economies increased by 4.9% to \$1.0 trillion as a result of the impact of large-scale M&As targeted at British and American corporations. In particular, thanks to multiple large-scale M&A, UK jumped forward in the ranking of FDI recipient countries from 14th place in 2015 to second in 2016 after the US. On the other hand, slowdown in economic growth and sluggish primary commodity process in emerging and developing economies have contributed to a decline in investments mainly in Asia and Central and South America, resulting in a 9.6% decline to \$714.1 billion.



Note: 1) The definition of developed economies follows UNCTAD, and is the total for 39 countries/regions. 2) The figure for emerging and developing economies are obtained by subtracting the figures for developed economies from the world total (excluding the financial centers in the Caribbean region). Source: UNCTAD and Thomson Reuters

Top 10 countries/regions for FDI (2016)

(Unit: US:									
	Inward FD	)I	Outward FDI						
1	United States	391,104	United States	299,003					
2	United Kingdom	253,826	China	183,100					
3	China	133,700	Netherlands	173,658					
4	Hong Kong	108,126	Japan	145,242					
5	Netherlands	91,956	Canada	66,403					
6	Singapore	61,597	Hong Kong	62,460					
7	Brazil	58,680	France	57,328					
8	Australia	48,190	Ireland	44,548					
9	India	44,486	Spain	41,789					
10	Russian	37,668	Germany	34,558					

Source: UNCTAD and Thomson Reuters

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Note: Coutries/regions exclude the financial centers in the Caribbean region.

FDI for major countries/regions (2016)

rui ior majo	r countr	res/reg	gions (	2010)			(Unit: US	\$\$Million, %)
		Inward 1	FDI			Outward	FDI	
	Value	Percent Change	Share	Contribution	Value	Percent Change	Share	Contribution
United States	391,104	12.3	22.4	2.4	299,003	-1.4	20.6	-0.3
EU	566,234	17.0	32.4	4.6	470,351	-12.2	32.4	-4.1
United Kingdom	253,826	669.1	14.5	12.4	-12,614	-	-	-
Netherlands	91,956	33.8	5.3	1.3	173,658	25.8	12.0	2.2
Belgium	33,103	55.8	1.9	0.7	18,269	-39.8	1.3	-0.8
Italy	28,955	49.8	1.7	0.5	22,794	12.4	1.6	0.2
France	28,352	-39.7	1.6	-1.1	57,328	29.2	3.9	0.8
Australia	48,190	147.4	2.8	1.6	6,012	-	0.4	-
Japan	11,388	-	0.7	-	145,242	12.9	10.0	1.0
East Asia	362,079	-18.3	20.7	-4.6	326,083	11.1	22.5	2.0
China	133,700	-1.4	7.7	-0.1	183,100	43.5	12.6	3.5
Hong Kong	108,126	-38.0	6.2	-3.7	62,460	-13.0	4.3	-0.6
Korea	10,827	163.8	0.6	0.4	27,274	14.8	1.9	0.2
Taiwan	8,333	245.3	0.5	0.3	17,843	21.3	1.2	0.2
ASEAN	101,093	-20.1	5.8	-1.4	35,405	-36.4	2.4	-1.3
Singapore	61,597	-12.7	3.5	-0.5	23,888	-23.9	1.6	-0.5
Viet Nam	12,600	6.8	0.7	0.0	1,388	26.2	0.1	0.0
Malaysia	9,926	-10.7	0.6	-0.1	5,601	-43.4	0.4	-0.3
Philippines	7,912	60.3	0.5	0.2	3,698	-33.2	0.3	-0.1
India	44,486	1.0	2.5	0.0	5,120	-32.4	0.4	-0.2
Latin America	142,072	-14.1	8.1	-1.3	751	-97.6	0.1	-1.9
Brazil	58,680	-8.7	3.4	-0.3	-12,434	-	-	-
Mexico	26,739	-19.4	1.5	-0.4	-787	-	-	-
CIS	61,779	98.4	3.5	1.7	24,727	-21.2	1.7	-0.4
Russian	37,668	217.7	2.2	1.5	27,272	0.7	1.9	0.0
Middle East	27,797	-2.0	1.6	0.0	30,844	-18.8	2.1	-0.4
Turkey	11,987	-30.5	0.7	-0.3	2,869	-40.3	0.2	-0.1
Africa	59,373	-3.5	3.4	-0.1	18,173	0.7	1.3	0.0
Angola	14,364	-11.2	0.8	-0.1	10,693	34.7	0.7	0.2
Developed economies	1,032,373	4.9	59.1	2.7	1,043,884	-11.0	71.9	-8.1
Emerging and developing economies	714,050	-9.6	40.9	-4.3	408,578	-3.1	28.1	-0.8
World	1,746,423	-1.6	100.0	-1.6	1,452,463	-8.9	100.0	-8.9
Note: 1) The definition of develo	oped economies for	ollows UNCT	AD, and are	the total for 39	countries/region:	s with inward	FDI, the tota	l for 38 countr

2) The figure for emerging and developing economies are obtained by subtracting the figures for developed economies from the world total

Source: UNCTAD

<sup>(</sup>excluding the financial centers in the Caribbean region)

<sup>3)</sup> The amount of East Asia is summed with figures of China, South Korea, Taiwan, Hong Kong, and ASEAN.

<sup>4)</sup> The amount of Latin America exclude the financial centers in the Caribbean region.

<sup>5)</sup> Due to the difference in FDI data compilation, the figure for Japan (Directional principle) in the table do not correspond to "Japan's FDI" (Asset and Liabilities principle) 6) "-" denotes figures that could not be calculated.

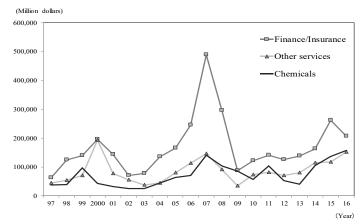
### Increasing restructuring activity in sectors such as finance/insurance, chemicals

#### cross-border M&A in the world reaches second highest level in history

Total cross-border M&A in the world, executed in 2016, increased by 16.4% year-on-year to \$1.3040 trillion, marking growth for the third consecutive year. This is the second highest level in history, coming after the \$1.6954 trillion recorded in 2007. Looking at global cross-border M&A by industry, we see that active cross-border M&A is taking place in the areas of finance and insurance, and other services, in the service industry, and in the chemicals sector in the manufacturing industry. In all of these sectors, acquisition value is on a rise again after the global financial crisis. After the crisis, large-scale cross-border M&A have been implemented in these sectors. We can see that global corporations, particularly in Europe and US, have been actively carrying out business restructuring through M&A.

## Major M&A deals in the chemicals, finance/insurance, and other services sectors (after the global financial crisis)

#### Changes in global cross-border M&A by industry



Note: Based on the industry of acquired company. The industry classification is based on the classification by Thomson Reuters.

Date comple		Acquiror Name Acquiror Ultim Parent Natio		Target Name	Target Name Target Nation		Value (Million USD)	Ownership (%) after transaction
	Mar-09	Roche Holding AG	Switzerland	Genentech Inc	United States	Drugs	46,695	100.0
	Aug-16	Teva Pharmaceutical Industries	Israel	Allergan PLC-Generic Drug Bus	United States	Drugs	38,750	100.0
Chemicals	Jun-16	Shire PLC	Ireland-Rep	Baxalta Inc	United States	Drugs	35,219	100.0
	Apr-11	Sanofi-Aventis SA	France	Genzyme Corp	United States	Drugs	23,525	100.0
	Nov-15	Merck KGaA	Germany	Sigma-Aldrich Corp	United States	Chemicals and Allied Products	16,449	100.0
	Jan-16	ACE Ltd	Switzerland	Chubb Corp	United States	Insurance	28,534	100.0
F:	Jun-16	Visa Inc	United States	Visa Europe Ltd	United Kingdom	Other Financial	21,355	100.0
Finance /Insurance	May-09	BNP Paribas SA	France	Fortis Bank SA/NV	Belgium	Commercial Banks, Bank Holding Companies	12,765	74.9
/ilisurance	Aug-15	CPPIB Credit Investments Inc	Canada	GE Antares Capital	United States	Credit Institutions	12,000	100.0
	Mar-15	Deutsche Annington Immobilien	Germany	Gagfah SA	Luxembourg	Real Estate; Mortgage Bankers and Brokers	10,431	94.0
	Jun-16 Investor Group		Netherlands	Cablevision Systems Corp	United States	Radio and Television Broadcasting Stations	18,108	100.0
04 :	Oct-13	Vodafone Vierte	United Kingdom	Kabel Deutschland Holding AG	Germany	Radio and Television Broadcasting Stations	11,434	76.6
Other services	Feb-16	Al Noor Hospitals Group PLC	Utd Arab Em	Mediclinic International Ltd	South Africa	Health Services	11,082	100.0
	Nov-14	Liberty Global PLC	United Kingdom	Ziggo NV	Netherlands	Radio and Television Broadcasting Stations	10,854	100.0
	Jun-16	Progressive Waste Solutions	Canada	Waste Connections Inc	United States	Sanitary Services	8,132	100.0

Notes: 1) The deals are ranked for the transaction value each time. 2) The industry classification is based on the classification by Thomson Reuters

Source: Thomson Reuters, JETRO business daily news, Press report from various news sources.

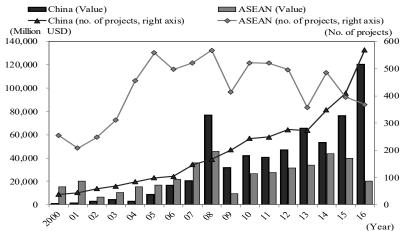
### Acquisition of foreign corporations by Chinese corporations on the rise worldwide

#### Record high in both value and number of acquisitions

Looking at global cross-border M&A by the nationality of the acquiring party, we note a significant increase in the value of overseas corporations acquired by Asian corporations. East Asia's market share (total for China, Korea, Taiwan, Hong Kong and ASEAN) as a percentage of the total acquisition value worldwide, grew from 2.3% in 2000 to 13.6% in 2016. The growth in East Asia's market share is driven mainly by Chinese corporations. The acquisition value of overseas corporations by China reached a historic high of \$120.4 billion in 2016. On the other hand, until 2007, the acquisition of overseas corporations by ASEAN corporations progressed at a scale exceeding that of China. However, it has remained at a level of about \$30 billion per year since then. When the M&A deals transacted by Chinese and ASEAN corporations in the past five years are ranked in order of acquisition value, acquisition deals by Chinese corporations occupy the top positions.

### Top-ranking acquisition deals of overseas corporations by Chinese and ASEAN corporations (2012 – 2016)

#### Trends in cross border M&As by Chinese and ASEAN firms



Note: 1) Acquiror Ultimate Parent Nation. 2) The dates show when M&As have been completed.

Source: Thomson Reuters

Date of completion	Acquiror Name	Acquiror Ultimate Parent Nation	Target Name	Target Nation	Industry Sector	Value (Million USD)	Owners hip (%) after trans action
Feb-13	CNOOC Canada Holding Ltd	China	Nexen Inc	Canada	Oil and Gas; Petroleum Refining	17,918	100.0
Jul-16	Halti SA	China	Supercell Oy	Finland	Prepackaged Software	8,600	84.3
Nov-15	Marco Polo Industrial Hldg SpA	China	Pirelli & C SpA	Italy	Rubber and Miscellaneous Plastic Products	7,065	100.0
Sep-13	Shuanghui Intl Hldg Ltd	China	Smithfield Foods Inc	United States	Food and Kindred Products	6,947	100.0
Feb-13	TCC Assets Ltd	Thailand	Fraser & Neave Ltd	Singapore	Food and Kindred Products	6,896	91.2
Mar-16	Anbang Insurance Group Co Ltd	China	Strategic Hotels & Resorts Inc	United States	Investment & Commodity Firms, Dealers, Exchanges	6,500	100.0
Dec-16	Tianjin Tianhai Invest Co Ltd	China	Ingram Micro Inc	United States	Wholesale Trade-Durable Goods	6,258	100.0
Dec-12	Petronas Carigali Canada Ltd	Malaysia	Progress Energy Resources Corp	Canada	Oil and Gas; Petroleum Refining	5,866	100.0
Apr-14	Mayon Investments Pte Ltd	Singapore	AS Watson Holdings Ltd	Hong Kong	Miscellaneous Retail Trade	5,672	25.0
Jun-16	Qingdao Haier Co Ltd	China	General Electric Co-Appl Bus	United States	Electronic and Electrical Equipment	5,600	100.0
Oct-13	CNPC	China	Kashagan Oilfield	Kazakhstan	Oil and Gas; Petroleum Refining	5,000	8.3
Jul-14	OCBC Pearl Ltd	Singapore	Wing Hang Bank Ltd	Hong Kong	Commercial Banks, Bank Holding Companies	4,847	97.8
Mar-12	SIPC	China	Petrogal Brasil Ltda	Brazil	Oil and Gas; Petroleum Refining	4,800	30.0
Nov-15	Global Logistic Properties Ltd	Singapore	Industrial Income Tr Inc-US	United States	Transportation and Shipping (except air)	4,550	100.0
Jul-13	Petro China Co Ltd	China	ENI East Africa SpA	Mozambique	Oil and Gas; Petroleum Refining	4,210	28.6
Jul-16	China Three Gorges Brasil	China	ANNEL-Hydropower Concession(2)	Brazil	Electric, Gas, and Water Distribution	3,732	100.0
Nov-16	Ninestar Holdings Co Ltd	China	Lexmark International Inc	United States	Computer and Office Equipment	3,605	100.0
May-12	China Three Gorges Europe	China	EDP SA	Portugal	Electric, Gas, and Water Distribution	3,516	21.3
Mar-16	Dalian Wanda Group Co Ltd	China	Legend Pictures LLC	United States	Motion Picture Production and Distribution	3,500	-
Aug-14	Frasers Centrepoint Ltd	Thailand	Australand Property Group	Australia	Real Estate; Mortgage Bankers and Brokers	3,389	100.0

Notes: 1) The nationality of an acquring company corresponds to that of the ultimate parent company. 2) The deals are ranked for the transaction value each time.

<sup>3)</sup> The industry classification is based on the classification by Thomson Reuters. 4) Excluding deals between China and Hong Kong. 5) Excluding acquisition deals by investor groups. Source: Thomson Reuters, JETRO business daily news, Press report from various news sources.

### Promotion of the "Belt and Road Initiative" by China

#### ■ Four years after the initial proposal of the "Belt and Road Initiative"

The "Belt and Road Initiative" ("Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road") is a medium-to long-term external economic and diplomatic strategy that captures the respective land and maritime regions connecting the western regions of China to Central Asia, West Asia, and Europe, as respective economic zones. About four years have passed since President Xi Jinping first proposed the concept in September 2013. Cooperation with the countries along the belt have been ongoing, centered around five key areas of cooperation that have been established in the plan.

#### Impact assessment to be implemented going forward

Many projects related to this initiative have already been underway before the announcement of the initiative, and many new projects have just commenced. According to the information issued by the Ministry of Commerce, China's outward FDI toward the countries along the route of the "Belt and Road Initiative" was \$14.5 billion in 2016 (gross investment, 2% decline year-on-year). This amounts to just 8.5% of China's total outward FDI, and no significant impact on macro statistics has been noted to date.

## Cooperation in five key areas of the "Belt and Road Initiative" ("five areas of connectivity")

`		• /
	Key areas	Overview
	Policy cooperation	Establish mechanisms for exchange with the governments of each country, and enhance mutual consistency in political/economic policies
	Cooperation on infrastructural construction	Develop roads, railways, ports, energy transportation facilities, and IT communications facilities jointly with each country
	Cooperation in trade and investment	Actively promote the conclusion of free trade agreements (FTA) with regions or countries along the belt, with the aim of improving trade/investment convenience, and abolish the relevant barriers. Also promote overseas expansion by Chinese corporations, and the establishment of industrial parks overseas.
	4 Financial cooperation	Develop cooperative projects with countries along the route in the areas of currency swap agreements and bond issuance. Through the establishment of international financial institutions such as AIIB, provide financial support for critical projects of the Belt and Road Initiative.
	5 Public-private cooperation	Strengthen exchange and cooperation between the government and the private sector in areas related to promoting citizen welfare, such as cultural projects and medical care.

Source: Prepared based on materials from the National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China

#### Examples of infrastructural projects under the "Belt and Road Initiative"

Category	Country	Overview					
	Pakistan	April 2015: Agreement to promote the China-Pakistan Economic Corridor November 2015: Conclusion of memorandum of understanding on the management of special economic zones in Port Gwadar in the southwestern part of Pakistan for 43 years May 2016: Start of construction on Peshawar-Karachi Highway November 2016: With expansion works for Port Gwadar, start of trial operation of container shipping service to Middle East and East Africa					
	France	April 2016: Opening of railway between Wuhan and Lyon (France)					
	Indonesia	In September 2015, the Indonesian government adopted the high-speed rail proposal from China (between Jakarta and Bandung). The ground-breaking ceremony was held in January 2016 with plans to complete the project in 2018, but delays in land expropriation and the acquisition of construction permits have led to delays in the construction work.					
Rail	Russia	The Russian government decided to place orders with Chinese corporations for the exploration and design of a Moscow-Kazan high-speed rail in April 2015, vehicle production in November 2015, and operational management and signaling systems in April 2016.					
	Laos	The Laos government split the Laos section (Boten - Vientiane) of the China-Laos railway into six intervals and put them up for tender offers until September 2016. Six Chinese companies made successful bids. Construction work started in 2016, and the railway is expected to commence operation in 2020.					
	Thailand	The Department of Land Transport of Thailand announced on 21 September 2016 that the governments of China and Thailand have entered into consultation on the first phase of the high-speed rail project (Bangkok - Nakhon Ratchasima).					
	Malaysia	In November 2016, China Communications Construction Company Ltd. and Malayan Railways Limited signed an agreement on the railway project along the east coast of Malaysia (Port Klang - Tumpat).					
Resources	Myanmar	In January 2015, petroleum and gas pipelines connecting Myanmar's Kyaukpyu Port and Kunming in Yunnan Province were opened.					
Port develop- ment	Sri Lanka	September 2014: Start of development of Colombo Port City in Sri Lanka with an injection of \$1.4 billion March 2015: Construction works suspended due to change in political regime March 2016: Development resumed August 2016: Renamed "Colombo International Financial City"					
	Greece	April 2016: Acquisition of Piraeus Port in Greece					
	Netherlands	May 2016: 35% capital investment in the container berth company in the Port of Rotterdam					

Source: Various reports

### New record high for Japan's outward FDI

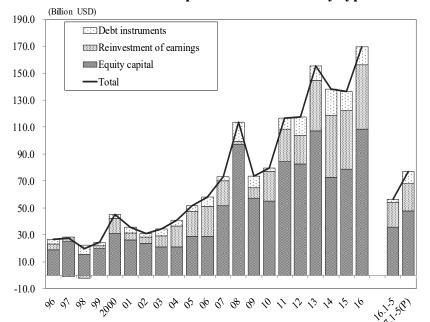
#### 24.3% year-on-year growth to \$169.6 billion in 2016

Japan's outward FDI in 2016 increased by 24.3% year-on-year to \$169.6 billion (balance of payments basis, net, flow). This was a new record high, exceeding the last peak value recorded in 2013 (\$155.6 billion), since 1996 when comparison could be made based on the same standards. Equity capital, including M&A of foreign corporations by Japanese corporations, and Greenfield investments overseas, grew by 37.3% year-on-year to \$108.3 billion.

#### Rapid growth in FDI toward UK

By countries/regions, the amount of investment in the EU was \$70.3 billion in 2016, approximately double that of the previous year. The surge in investment in the EU was mainly brought about by a growth in investment in UK. In September 2016, SoftBank Group acquired ARM Holdings plc, a semiconductor design company in the UK, for \$30.8 billion. This acquisition deal was the largest outward M&A acquisition by a Japanese company. Investment in the US grew by 5.8% to \$52.2 billion. Investment toward the US made up 30.8% of overall outward FDI in 2016, making it the largest investment destination (by country) for the seventh consecutive year. In the finance/insurance sector, there were successive large-scale acquisitions of US insurance companies by Japanese insurance companies.

#### Trends in Japan's outward FDI by type



Note: 1) The yen-based value is converted to dollars by quarter, using the average quarterly Bank of Japan interbank rate 2) Figures are based on BPM6.

Source: "Balance of Payment Statistics" (Ministry of Finance, Bank of Japan).

Japan's outward FDI by country/region

(Million USD, %)

						Jan-May,		
	2014	2015	2016	Share	Percent change	2017 (P)	Share	Percent change
Asia	43,407	34,477	10,886	6.4	-68.4	12,775	16.6	-7.3
China	10,889	10,077	8,634	5.1	-14.3	3,633	4.7	8.4
ASEAN	22,820	20,624	-6,098	-	-	6,710	8.7	2.3
Singapore	8,145	6,779	-18,955	-	-	1,950	2.5	56.5
Thailand	5,568	3,926	4,064	2.4	3.5	2,348	3.1	53.5
Indonesia	4,835	3,306	2,924	1.7	-11.6	1,095	1.4	-7.1
Malaysia	1,291	2,893	1,409	0.8	-51.3	-252	-	-
Philippines	901	1,520	2,312	1.4	52.1	561	0.7	-56.6
Vietnam	1,652	1,439	1,854	1.1	28.9	856	1.1	16.2
India	2,408	-1,176	3,690	2.2	-	835	1.1	-46.9
North America	51,350	50,630	53,086	31.3	4.9	17,766	23.1	-23.9
US	49,437	49,319	52,194	30.8	5.8	17,742	23.1	-23.1
Latin America	6,266	5,953	25,565	15.1	329.5	8,764	11.4	414.7
Mexico	1,203	1,188	2,545	1.5	114.1	-3	-	-
Oceania	6,029	6,917	5,953	3.5	-13.9	286	0.4	-83.0
Australia	4,604	5,943	4,309	2.5	-27.5	-58	-	-
Europe	28,447	36,109	73,548	43.4	103.7	35,970	46.8	122.7
EU	27,025	35,638	70,308	41.5	97.3	35,524	46.2	138.9
UK	6,273	14,017	47,800	28.2	241.0	12,405	16.1	78.2
World	138,018	136,423	169,582	100.0	24.3	76,882	100.0	36.9

Note: 1) The yen-based value is converted to dollars by quarter, using the average quarterly Bank of Japan interbank rate. 2) For after 2014, figures reflect the annual revision. 3) The cumulative total for 2017 is a preliminary

Source: "Balance of Payment Statistics" (Ministry of Finance, Bank of Japan).

### Growing importance of US as an investment destination

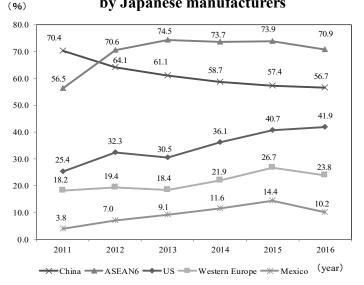
#### ■ Rise in percentage of corporations choosing the US as a destination for overseas business expansion

The importance of the US as an investment destination for Japanese corporations is growing. Of Japan's total outward FDI, the percentage of outward FDI toward the US grew from 13.5% in 2011 to 30.8% in 2016. In the "Survey on the International Operations of Japanese Firms" conducted by JETRO, the ratio of corporations choosing the US as a destination for their overseas business expansion rose by 12.4 points from 2011 (21.1%) to 2016 (33.5%). Looking at only figures for the manufacturing industry, the ratio of corporations choosing the US increases further to 16.5 points.

#### Increasingly active investment in the US in the AI and IoT sectors

Among investments by Japanese corporations in the US in recent years, there has been growing activity in the areas of investing in US venture corporations in the artificial intelligence (AI) and Internet of Things (IoT) sectors, or moves to establish research and development centers in the US. By cooperating with venture business and universities in the US, Japanese corporations are attempting to bring in human resources and technology that are indispensable in the development of new products.

## The target country or region for overseas expansion by Japanese manufacturers



Note: 1) The numbers in FY2011 and FY2012 indicate the number of firms answering that they "intend to begin and exp and overseas operations" after excluding the number of firms which gave no answer on functions planned to be expanded. The numbers in FY2013 and thereafter indicate the number of firms "intending to exp and overseas operations" after excluding the number of firms which gave no answer on functions planned to be expanded. 2) ASEAN 6 refers to the total for the six countries of Singapore, Thailand, Malaysia, Indonesia, the Philippines and Vietnam (excluding duplication).

#### Source: "Survey on the International Operations of Japanese Firms" (JETRO).

#### Examples of investment in the areas of AI and IoT by Japanese corporations

Company name	Target country	Overview	Date of announcement
SoftBank Group	UK	Acquisition of ARM Holdings plc, a semiconductor design company, at approximately \$31 billion (about 3.3 trillion yen). Gained ARM Holdings' semiconductor technology, used widely in smartphones and home appliances, opening up the IoT market.	2016/7/18
Sony	US	Capital participation in US venture business, Cogitai, Inc., which specializes in artificial intelligence, and joint development in new artificial intelligence technologies that form the basis for next-generation AI applications and product groups.	2016/5/18
Hitachi, Ltd.	US	Strengthened the development and construction of IoT platform toward the expansion of the digital solutions business. It will invest 100 billion yen over three years, with a focus on the establishment of new bases in the US.	2016/4/14
Toyota Motor Corporation	US	Toyota Research Institute, which is engaged in the research and development of artificial intelligence technology, will establish its third base in Ann Arbor, Michigan. It will collaborate with the University of Michigan on research on self-driving technology.	2016/4/8
NEC	UK	Concluded partnership agreement with Bristol Is Open (BIO), a company promoting the smart city project of Bristol in the UK. It will carry out demonstrations of technology that contributes to the realization of a smart city, such as IoT.	2016/2/12
Toyota Motor US Corporation		In January 2016, it established the Toyota Research Institute (TRI) in Silicon Valley as a R&D center for artificial intelligence technology, and will invest about \$1 billion over a five-year period.	2015/11/6
Dentsu Inc.	US	Invested in Sensai Corporation, a US venture company that provides a Big Data analytical platform that harnesses artificial intelligence technology.	2015/10/22
SoftBank Group	US	Invested a total of \$59 million, along with existing shareholders, in Cybereason, a US venture company that provides a platform that harnesses artificial intelligence to counter cyberattacks.	2015/10/14
KDDI	US	Invested in Jibo, the US venture company that developed the intelligent robot "Jibo" for domestic use, through an investment fund. Formed a capital alliance based on the assessment that Jibo is a startup with potential in the robotics market.	2015/8/6

Source: Press releases of the respective companies, report materials.

### Contribution to creation employment in the US by Japanese corporations

#### ■ Japanese manufacturer comes out top in ranking of employee numbers by country

According to statistics by the US Department of Commerce, the total number of employees employed by the Japanese manufacturer in the US was 382,600 in 2014, overtaking Germany and UK to be the country employing the largest number of employees in the US. Although the number of employees in the manufacturing industry for the whole of the US in the same year had increased by only 5.7% (656,000 people) as compared to 2010, the number of employees employed by Japanese manufacturer increased by 32.2% (93,200 people) during the same period, presenting a growth rate that far exceeds the overall average.

#### Increase in number of employees even in the Great Lakes Region

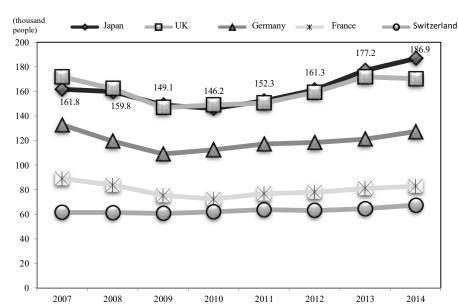
In the US presidential elections held in November 2016, one of the factors leading to Donald Trump's win was his success in gaining the support of electorates in the Great Lakes Region, where there is a concentration of automotive companies. Looking at the total number of employees hired by the Japanese corporations in this region, we see that the figure has increased to from 146,200 in 2010 to 186,900 in 2014. The percentage increase during the same period was 27.8% (40,700 people), making Japan the country with the largest growth rate.

#### Changes in the number of employees in the manufacturing industry

#### (thousand (thousand ■ Total number of employees (right axis) people) people) Germany Canada → France 450 16,000 382.6 400 357.4 14,000 330.9 350 12,000 300 10,000 250 8,000 200 6,000 150 4,000 100 2,000 50 2006 2007 2008 2009 2010 2011 2012 2014

#### Note: Majority owned companies by ultimate beneficial owner (UBO) Source: US Department of Commerce, Bureau of Economic Analysis

#### Changes in the number of employees in the Great Lakes Region



Note: Majority owned companies by ultimate beneficial owner (UBO). Great Lakes Region includes Illinois, Indiana, Wisconsin, Ohio and Michigan

Source: US Department of Commerce, Bureau of Economic Analysis

## Continued shift toward ASEAN despite a lull

#### **■** Japanese corporations continue to place importance on ASEAN

In 2016, Japan recorded an excess of withdrawals for FDI toward ASEAN. As a result, FDI toward China in the same year exceeded FDI toward ASEAN. However, based on the assumption that exclude withdrawal of equity capital by SoftBank Group from its Singapore subsidiary (announced in August 2016), Japan's FDI toward ASEAN in 2016 fell by 16.0% year-on-year to \$17.3 billion. Although a lull was observed in 2016, Japanese corporations continue to place great importance on ASEAN as a direct investment destination in Asia.

#### Continued moves to shift bases and functions in China to ASEAN

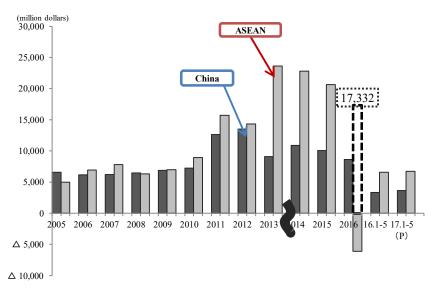
When Japanese corporations reorganize their domestic and overseas bases, the largest number of companies select ASEAN as their relocation destination. Looking at the combinations of main transfer origins and transfer destinations for corporations reorganize their business bases, we can see a growing trend of moving bases and functions in China into ASEAN, indicating the continued shift toward ASEAN among Japanese corporations.

0.0

FY2006

(n=243)

#### Japan's outward FDI: Comparison of China and ASEAN



Note: 1) Data excludes investment in the finance and insurance sectors of Thailand in relation to the floods in the country (Q4, 2011: \$3.924 billion, Q1, 2012: \$3.674 billion). 2) In August 2016, SoftBank Group withdrew equity capital from its Singapore subsidiary. The dotted line shows assumption that exclude this withdrawal. 3) Figures are based on BPM6 after 2014. Source: "Balance of Payments" (MOF, BOJ)

#### functions by Japanese firms (%) 40.0 37.4 Shift from Japan to China ··· • · · Shift from Japan to ASEAN 35.0 ── Shift from China to ASEAN Shift from China to Japan 30.0 Shift within ASEAN 25.0 22.0 19.8 20.0 16.2 15.3 15.0 12.0 13.7 10.0 8.2 5.0 4.7

Main transfer patterns of domestic and overseas bases and

Notes: 1) The figures above include cases of reported restructuring of bases conducted in the past two to three years or planned for in the coming two to three years. 2) Multiple answers. Source: "Survey on the International Operations of Japanese Firms" (JETRO) various issues

FY2013

(n=780)

FY2014

(n=798)

FY2016

(n=458)

FY2010

(n=232)

## Trends in overseas sales of Japanese companies

#### Japanese companies maintain their high overseas sales ratio

According to calculations by JETRO, based on the summary of financial reports and securities reports of Japanese corporations (176 companies) for the fiscal year from December 2016 to March 2017, the overseas sales ratio of Japanese corporations (\*not including exports from Japan) was 56.5%. The figure has exceeded 50% for the fourth consecutive year since 2013, as companies continue to keep up the high ratio. Looking at figures by region, the Americas ranked highest at 26.3%, making up about 1/4 of total sales revenue. Overseas sales ratio for the Americas, centered on the US, has continued rising in recent years. In contrast, the percentage for Asia Pacific, at 17.3%, slid marginally before that for the previous year. Looking at the figures by industry, we see that transport equipment has maintained a high overseas sales ratio of 61.7%.

#### Share of Japanese companies' sales by region

	1						(%)
_	ar (No. of anies)	Domestic	Overseas	Americas	Europe	Asia- Pacific	Other
2000	(547)	71.4	28.6	13.4	5.6	5.8	3.8
2001	(581)	68.5	31.5	14.7	6.1	6.3	4.4
2002	(592)	67.2	32.8	14.9	6.6	6.8	4.5
2003	(624)	66.5	33.5	14.1	7.0	7.7	4.8
2004	(669)	65.4	34.6	13.6	7.4	8.5	5.1
2005	(724)	64.9	35.1	13.8	6.9	9.5	4.9
2006	(751)	62.3	37.7	14.5	7.7	10.3	5.1
2007	(781)	60.8	39.2	14.2	9.1	10.7	5.2
2008	(817)	62.6	37.4	12.7	8.6	10.8	5.3
2009	(844)	63.3	36.7	12.4	7.5	11.3	5.4
2010	(320)	54.0	46.0	18.1	8.1	15.2	4.7
2011	(236)	53.1	46.9	17.7	8.9	15.0	5.3
2012	(221)	51.3	48.7	18.6	7.8	17.2	5.1
2013	(211)	45.6	54.4	21.5	9.2	18.2	5.5
2014	(212)	43.1	56.9	23.5	9.2	18.7	5.5
2015	(186)	41.7	58.3	25.9	8.9	18.4	5.0
2016	(176)	43.5	56.5	26.3	7.8	17.3	5.1

Note: 1) Companies surveyed: The accounting period is from December to March, and information is broken down by location. 2) Figures for FY2016 reflected companies with financial statements or securities reports available by June 12, 2017. 3) Percentage = sales of each region/total sales. 4) Surveyed companies include listed subsidiaries, which were double-counted. 5) Companies which combine multiple regional sales such as "Americas and Europe" and "Europe and Africa", were excluded.

Source: Aggregated sales amount of all companies based on thier financial statements

#### Share of Japanese firms' sales by industry and region (FY2016)

(0/	`

	nate of oupanese firm	15 541	es by III	dustry	and reg	,1011 (1		(%)	
	T 1 .								
	Industry (No of companies)		Domestic	Overseas	Americas	Europe	Asia- Pacific	Other	
M	anufacturing	[143]	42.3	57.7	27.1	8.0	17.5	5.1	
IVI	andacturing	(1 <del>4</del> 3)	(+1.2)	(-1.2)	(-0.9)	(+0.2)	(-0.3)	(-0.1)	
	Transport agginement	[43]	38.3	61.7	31.3	8.2	16.5	5.7	
	Transport equipment	(43)	(+ 1.4)	(-1.4)	(-1.1)	(+0.2)	(-0.2)	(-0.2)	
	Machinery & alastria andianas	s [56]	58.0	42.0	11.6	8.3	19.3	2.8	
	Machinery & electric appliances		(+0.3)	(-0.3)	(-0.4)	(+0.4)	(-0.3)	(+0.1)	
	Electrical assistant	[01]	55.1	44.9	11.3	7.1	23.8	2.7	
	Electrical equipment	[21]	(-0.4)	(+0.4)	(-0.2)	(+0.6)	(-0.1)	(+0.2)	
	Materials/material processed	[30]	56.4	43.6	6.8	3.3	29.7	3.8	
	goods		(-0.7)	(+0.7)	(+0.4)	(+0.8)	(-0.7)	(+0.2)	
ът.	C. 4	רממן	67.1	32.9	8.9	3.2	13.8	6.9	
INC	on-manufacturing	[33]	(+4.3)	(-4.3)	(-1.4)	(-0.3)	(-1.8)	(-0.8)	

Notes: 1) The manufacturing industry comprises the following areas: Transport machinery, machinery and electric appliances, materials/material processed goods, pharmaceuticals and biotechnology, and food and household goods. Non-manufacturing industry comprises the following broad areas in the same database: Construction and real estate, consumer services, away from home meals/home-meal replacement, advertising/infocomms services, legal services, intermediate distribution, finance, transport services, and resources and energy. Electrical equipment is categorized into the following middle categories based on the same database: Infocomm equipment manufacturing, consumer electronics manufacturing, electronic parts/device manufacturing. 2) In the parentheses, the change on share of Japanese firms' sales of FY2015, calculated by the same company as in FY 2016.

Source: Aggregated sales amount of all companies based on thier financial statements

### Inward FDI from Asia to Japan continues to grow

#### Significant growth in Japan's inward FDI in 2016

In 2016, the value of Japan's inward FDI (on a balance of payment basis, net, flow) was \$34.9 billion, which showed an approximately six-fold increase from \$5.6 billion reported in 2015, and marked a record high since comparable records began in 1996. By region, we see that investment from Asia increased by 43.8% year-on-year as the region retained its strong presence as a primary investor. FDI from Europe shifted from negative in 2015 (net outflow) to positive, while FDI from the US also increased from the previous year.

Movements were observed mainly in the electrical and electronics sector for FDI from Asia, the services sector from the US, and the pharmaceutical products and automotive parts sectors from Europe. M&A targeted at Japan in 2016 was \$27.8 billion, about 3.2 times that of last year, as a result of the conclusion of large-scale deals (acquisition of management rights of Kansai International Airport, etc. by a consortium centered around French company VINCI S.A. at a total of \$17.9 billion).

#### Japan's inward FDI by country/region

(Million USD, %)

					(IVIIIIOII	USD, 70)
	2014	2015	2016	YoY change	2017 Jan-May(P)	YoY change
Asia	6,384	5,562	8,001	43.8	4,235	226.3
China	767	641	-126	-	-40	-
Hong Kong	2,089	973	1,361	39.8	-278	-
Taiwan	1,207	723	2,497	245.1	392	78.1
South Korea	667	939	563	-40.0	267	50.8
ASEAN	1,649	2,273	3,714	63.4	3,902	270.1
Singapore	1,365	1,842	3,046	65.4	4,273	383.9
North America	7,141	5,186	5,745	10.8	3,139	-3.8
US	7,131	5,199	5,761	10.8	3,227	-1.6
Latin America	717	-2,027	1,714	-	1,390	402.2
Oceania	585	-640	846	-	-408	-
Europe	4,349	-2,721	18,477	-	-100	-
EU	3,672	-2,533	17,414	-	-399	_
World	19,769	5,585	34,897	524.8	8,247	-35.8

Notes: 1) The yen-based value is converted to dollars by quarter, using the average quarterly Bank of Japan interbank rate. 2). For after 2014, figures reflect the annual revision. The cumulative total for 2017 is a preliminary figure.

Source: "Balance of Payment Statistics" (Ministry of Finance, Bank of Japan).

#### Main trends for Japan's inward FDI in 2016

	Main trends
Asia	<ul> <li>◆ Acquisition of Sharp by Hon Hai / Foxconn Technology Group from Taiwan, a global leader in providing contract manufacturing services for electronic equipment (Electrical/Electronics)</li> <li>◆ Acquisition of Toshiba Lifestyle Products &amp; Services Corporation, which is engaged in the home appliance business under the umbrella of Toshiba, by leading Chinese home appliance manufacturer Midea Group (Electrical/Electronics)</li> <li>◆ Development of logistics facilities by Global Logistics Properties (GLP), a leading logistics facility operator in Singapore (Logistics services)</li> </ul>
NS	<ul> <li>Conversion of joint venture (high frequency components) between US electronic parts manufacturer Skyworks Solution, and Panasonic, to a wholly owned subsidiary (Electrical/Electronics)</li> <li>Acquisition of all the shares of First Kitchen by US-owned burger chain, Wendy's Japan (Food services)</li> <li>Successive plans for the opening of US-owned luxury hotel chains (Hyatt, Hilton, Marriott, etc. (Hotels)</li> </ul>
Europe	<ul> <li>Acquisition of Astellas Pharma's global dermatology business overseas by Denmark's LEO Pharma (Pharmaceuticals)</li> <li>Acquisition of respiratory business of Takeda Pharmaceutical Company by UK company AstraZeneca plc (Pharmaceuticals)</li> <li>Establishment of joint venture between global airbag leader from Sweden, Autoliv Inc., and leading Japanese brake manufacturer, Nissin Kogyo Co., Ltd. (Automotive parts)</li> </ul>

Source: Thomson Reuters, various reports, etc.

### Ratio of Japan's inward FDI stock against GDP exceeds 5%

#### Asia's share in Japan's inward FDI stock expands to 18.0%

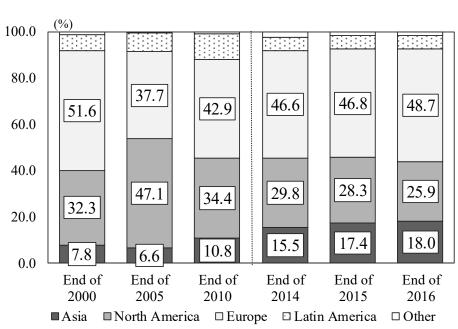
Japan's inward FDI stock as of the end of 2016 was 27.8 trillion yen, marking 3.1 trillion yen growth from the end of the previous year and a new record high since the end of 1996 when comparisons could be made. As a result of the increase in Japan's inward FDI stock, ratio against GDP rose from 4.7% in 2015 to 5.2% in 2016, exceeding the 5% mark for the first time. By region, Europe had the largest share with 48.7%, while North America made up 25.9%. Due to large-scale acquisitions by Taiwanese corporations and other factors, Asia's share in Japan's inward FDI stock grew to 18.0%, strengthening its presence as a major investor not only on the basis of annual inflow, but also on the basis of stock.

#### **Inward FDI stock in Japan**

#### (Trillion yen) 6.0 30.0 Debt instruments Reinvestment of earnings 25.0 5.0 Equity capital $3.7 \stackrel{4.0}{\blacktriangle} 3.7 \stackrel{3.8}{\blacktriangle} 3.9$ 20.0 →Inward FDI stock/GDP (right axis) 4.0 15.0 10.0 2.0 1.0 0000000000000000000000

### Note: Based on BPM6 over the entire period. Source: "International Investment Position" (MOF, BOJ), data from the Cabinet Office

#### Share of inward FDI stock in Japan by region



Note: Because the BOP-related statistics have been revised, there is no strict continuity in the data before the end of 2013 and after the end of 2014.

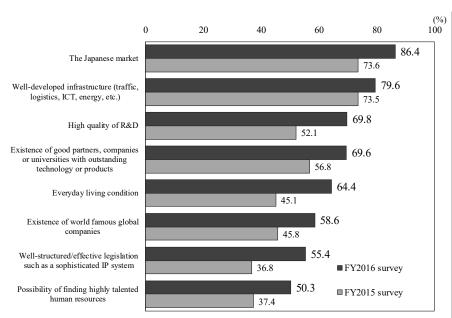
Source: "International Investment Position" (MOF, BOJ), data from the Cabinet Office

### Continued establishment of R&D centers with a view to developing new fields

#### ■ Positive appraisal of the R&D environment

For foreign corporations, the growing appeal of Japan as a location for business development lies in the technological aspect of Japan's superb technology and knowhow. According to JETRO's survey, there has been a significant rise in the percentage of foreign corporations that highly rate Japan's high-quality of R&D, the existence of good partners, companies or universities with outstanding technologies or products, and the well-structured/effective legislation such as a sophisticated IP (intellectual property) system. Japan's superiority in these technological aspects have left a favorable impression, leading to successive establishment and strengthening of R&D centers in new fields for which future growth is anticipated, such as the areas of regenerative medicine and IoT that have been attracting much attention in recent years.

#### The attractiveness of doing business in Japan



Notes: 1) Only the top 10 items with the highest rating in "The attractiveness of doing business in Japan" ("The Survey on Japan's Investment Climate 2016 Results"). 2) Each item is rated on four options, and the percentage shows the proportion of companies that selected the top two options ("It's attractive" and "It's largely attractive"). Source: JETRO Invest Japan Report 2016 (JETRO)

#### R&D centers of foreign-affiliated firms with their eyes on new fields

Company name	Overview
Agilis Biotherapeutics, Inc. (US)	US bio venture company that carries out clinical development of gene therapy. In 2016, it established a joint venture company together with a Japanese corporation to conduct R&D on the treatment of rare diseases. In February 2017, it established a new R&D center in Life Science Innovation Center in Kawasaki City, Kanagawa Prefecture.
Philips Electronics Japan, Ltd. (Netherland)	Leading medical device manufacturer based in the Netherlands. In 2016, it established an R&D center in Showa University and conducted experimental studies on its program that enables doctors in a control center to monitor patients who are in ICU beds in hospitals at remote locations. It is linked with several ICUs and control centers of hospitals, and monitors patients' conditions and data, etc
Dalian Hi-Think Computer Technology, Corp. (China)	Leading Chinese software development company. In 2016, it established an R&D company in Kyoto. It aims to build an integrated system using new technologies such as artificial intelligence (AI) and IoT. In February 2017, it established an R&D center in Kyoto Research Park.
NextDrive Inc. (Taiwan)	A company engaged in the development of IoT equipment in Taiwan. In 2017, it set up a Japanese subsidiary in Tokyo to conduct R&D on home energy management systems using IoT technology. It is also working with Kyoto University to jointly develop compact gateways for IoT.
Dassault Systèmes (France)	Global leader in 3D software. In 2016, it established its first Japanese R&D centers in Tokyo and Nagoya. It conducts R&D on software that provides comprehensive support for product design, etc. in manufacturing industries.

[Source] Press releases of the respective companies, various reports, etc.

# Chapter 2

Trends in development of world trade rules

### Number of FTAs in force around the world reaches 290

#### ■ 11 new FTAs entering into force after 2016

The number of free trade agreements (FTAs) in force around the world as of 30 June 2017 is 290 (based on JETRO surveys, including customs unions and preferential trade agreements). A total of 11 new FTAs entered into force, with 10 in 2016 and 1 between January and June 2017. Since 2003 for 14 consecutive years, the number of FTAs entering into force each year has been a double-digit. However, those entering into force after 2016 have not been large-scale FTAs between major economic countries/regions but instead, FTAs between countries with relatively small amount of trade, such as Japan-Mongolia FTA and Korea-Colombia FTA.

#### No significant changes to the FTA coverage ratio for major countries/regions

Looking at the FTA coverage ratio for major countries/regions, based on trade statistics for 2016 (ratio of trade with countries that the subject country has established FTAs with, as a proportion of total trade of the subject country), on the basis of the amount of two-way trade, there were no significant changes from the previous year, with Japan registering 22.5%, the US at 39.1% and China at 29.3%. The Japan-EU EPA, for which the parties have reached a framework agreement in July 2017, and the Regional Comprehensive Economic Partnership (RCEP) for the East Asia region that is currently under negotiations, are important in raising Japan's FTA coverage ratio. The figures for US, Canada, and Mexico affirm the vital importance of NAFTA, and much attention will be given to the direction of renegotiations going forward.

Number of FTAs which are in force by region and year (as FTA coverage ratio of major countries/regions (2016) of end of June 2017)

(Unit: Number)

							(Unit	: Number)
		Asia Pacific	Americas	Europe	Mile East/ Africa	Russia/ CIS	Cross- regional	Total
	1955-59			1	1			2
	60-64		1	1	1			3
	65-69							0
	70-74		1	1			2	4
	75-79	2					1	3
••••	80-84	2	1					3
••••	85-89		3		1		2	6
••••	90-94	4	1	5	1	5	1	17
	95-99		7	3	9	14	6	39
••••	2000-04	9	7	5	8	2	18	49
••••	2005-09	20	8	5	4	2	38	77
••••	2010-	19	15	7		2	44	87
	2010	5	1	5			1	12
	2011	3	1				9	13
	2012		6	1		1	7	15
	2013	3	2				7	12
	2014	2	1				10	13
	2015	5	1	1		1	3	11
	2016	1	2				7	10
	2017		1					1
	Total	56	44	28	25	25	112	290

r in coverag	zc rano	v vi ilia	joi cou	11111103/10	givii	3 (2010)		(U	Jnit:%)
	FTA	coverage 1	ratio		FTA	partner coun	tries/re	gions	
	Two-way trade	Export	Import	1st		2nd		3rd	
Japan	22.5	20.8	24.3	ASEAN	15.0	Australia	3.6	Mexico	1.3
US	39.1	46.5	34.2	NAFTA	29.3	South Korea	3.1	DR-CAFTA	1.4
Canada	70.5	79.1	62.9	NAFTA	67.1	South Korea	1.5	EFTA	0.9
Mexico	79.7	93.4	66.5	NAFTA	66.0	EU	8.1	Japan	2.8
Chile	93.1	92.2	94.2	China	25.9	US	15.8	EU	14.8
Brazil	15.9	17.2	14.2	Mercosur	9.8	CAN	3.1	Chile	2.2
EU28 Total trade	74.7	75.5	73.9	EU	63.9	Switzerland	2.8	Turkey	1.5
EU28 Extra-regional	30.2	32.6	27.7	Switzerland	7.6	Turkey	4.2	EEA	3.2
China	29.3	22.4	38.8	ASEAN	12.1	South Korea	7.0	Taiwan	4.9
South Korea	67.8	70.7	64.3	China	23.4	ASEAN	13.2	US	12.2
ASEAN	58.8	55.6	62.2	ASEAN	22.8	China	16.3	Japan	8.9
Singapore	78.1	73.7	80.5	ASEAN	24.1	China	13.6	US	9.5
Malaysia	63.0	62.3	63.7	ASEAN	27.1	China	16.2	Japan	8.1
Vietnam	56.3	44.8	67.8	China	19.6	ASEAN	12.7	South Korea	11.8
Thailand	60.4	56.1	65.0	ASEAN	22.9	China	16.1	Japan	12.5
Indonesia	64.5	60.0	69.3	ASEAN	24.3	China	17.0	Japan	10.4
India	18.7	20.1	17.6	ASEAN	10.5	South Korea	2.5	Japan	2.2
Australia	68.2	70.1	66.2	China	27.5	ASEAN	13.0	Japan	10.8
New Zealand	52.9	53.7	52.2	China	19.9	Australia	14.9	ASEAN	11.6
Note: 1) The subject countries	include countrie	s and regions wh	ich have establis	hed an FTA as of the	end of Jun	e 2017. The figures at	e based un	on trade value in 201	6

2) Abbreviations: The Central American-Dominican Republic Free Trade Agreement (DR-CAFTA), the European Free Trade Association (EFTA), and the European Economic

<sup>3)</sup> China's figures exclude those of Hong Kong(8.1%) and Macau (0.1%).

<sup>4)</sup> ASEAN's figures were based on the total trade value with each member country although some have not yet issued FTAs.

<sup>5)</sup> Figures for Canada and Singapore were calculated by export statistics which exclude re-exported trade Source: Materials and trade statistics from each country's government, "DOT, June 8th, 2017" (IMF)

### Japan's FTA utilization and related issues

#### ■ FTA utilization rate for imports rises to 18.5%

Japan's FTA utilization rate for imports (value basis) was 18.5%, 2.2 points increase from the previous year. Among countries with large trade values, the utilization rate for imports from Vietnam was at the high level of 35.7%. In terms of the amount of imports utilizing FTAs, although the amount from Thailand exceeded that from Vietnam, the difference has been shrinking in the past few years.

#### Despite tax-saving effect, there are issues in utilizing FTAs, such as with HS code classification, etc.

According to surveys conducted by JETRO, the percentage of Japanese corporations using FTA for export was 45.1% of all companies that export to FTA partner countries. Looking at examples of FTA utilization by Japanese corporations, we see companies enjoying reduction in tariffs in trade with overseas subsidiaries as well as retailers at the export destination emphasizing their FTA utilization record in their efforts to expand their sales channels. On the other hand, there are also cases where companies give up the idea of utilizing FTA due to the complex procedures, difficulty of classifying HS codes right, and the effort and costs. There are issues that need to be overcome in order to further promote the utilization.

#### Status of Japan's FTA utilization (based on import value)

FTA co	ounter-party		e of Utlized F 00 million ye		Utilization rate (%)			
		2014	2015	2016	2014	2015	2016	
	Thailand	6,247	6,889	6,328	27.2	27.9	28.9	
	Indonesia	3,414	3,730	3,548	12.6	15.6	17.8	
	Singapore	474	463	361	5.7	4.8	4.5	
	Vietnam	4,847	6,054	6,302	29.7	33.0	35.7	
	Malaysia	2,998	2,961	2,573	9.7	11.4	13.7	
ASEAN	Philippines	2,418	2,574	2,634	22.5	24.0	26.8	
	Myanmar	33	45	44	3.7	4.3	4.3	
	Cambodia	105	132	100	12.9	11.2	7.6	
	Laos	9	12	17	7.7	10.6	13.7	
	Brunei	1	0	1	0.0	0.0	0.0	
	AJCEP	5,207	6,437	6,558	5.5	6.8	8.1	
Other Asia	India	1,565	1,623	1,423	21.2	27.6	27.9	
Pacific	Australiza	-	2,848	3,012	-	6.8	9.1	
countries	Mongolia	-	-	6	-	-	49.2	
Europe	Switzerland	476	540	488	6.2	6.0	5.9	
Latin	Mexico	1,052	1,227	1,169	23.2	21.3	18.7	
	Peru	134	130	143	7.2	8.7	9.8	
America	Chile	1,851	1,734	1,570	21.5	23.9	26.6	
Total		25,624	30,961	29,720	16.8	16.3	18.5	

Notes: 1) The total amount of imports for the utilization of AJCEP (ASEAN-Japan FTA) does not include the amount for Indonesia, for which the FTA has not entered into force. 2) According to "World Tariff Profiles" (WTO), 55.9% (tariff line, 2015), or 83.2% (import value basis, 2014), of the amount of improts for Japan is tax-free.

Source: "Trade Statistics" (MOF)

#### **Examples of FTA utilization by Japanese corporations**

Limit	,105 01 1	. III uu	nzation by supunes	e corporations
Corporation	Location	Industry	Status of FTA utilization	Challenges of FTA utilization
Company A	Ishikawa Prefecture	Production and sale of industrial machinery	The company uses FTAs for all exports to overseas subsidiaries and also for sales to other companies when such requests are received. As unit cost is high, even a tariff reduction of several percent produces significant taxsaving effect.	There are strict requirements for approving the deferred payment of fees for the issuance of Certificate of Origin, and payment has to be made at the counter of the Chamber of Commerce for each issuance. Creative effort had to be put into consolidating the required documents while trying to reduce the burden on the suppliers.
Company B	Tokyo	Production and sale of plastic products	The company started using voluntarily after attending FTA seminars, etc. To date, it has experience in utilizing FTAs for exports to Mexico, Thailand, and Malaysia. It will utilize them if they receive requests from the export destination. Sales company in Thailand uses its track record in FTA utilization as a point of appeal when expanding sales	Even for the same product, the interpretation of the HS code may be different depending on countries. Despite urging the customer in the partner country to confirm the HS code through advance ruling, there were times when the customer company did not have a good understanding of the system.
Company C	Osaka	Production and sale of handicraft- related goods	Triggered by a request from a customer, started utilizing FTA by using a self-certification system for exporting to Australia.	The interpretation of HS code may differ depending on officers in charge of customs clearance, causing much difficulty. In drawing up the Certificate of Origin, it took time for the company to establish a system to collect product information from its local suppliers in an efficient manner. In using the self-certification system, it was difficult to determine how detailed the information had to be.
Source: Field	interviews		-	

Source: Field interviews

### Framework agreement for the Japan-EU Economic Partnership Agreement (Japan-EU EPA)

#### Aim to reach final agreement by the end of 2017

Negotiations for the Japan-EU EPA, which commenced in April 2013, reached a framework agreement at the political level on 6 July 2017. Going forward, Japan and the EU will move forward on negotiations in the remaining areas such as investment and regulatory cooperation, with the aim of reaching a final agreement by the end of 2017, and entering into force of the EPA as early as 2019. If this EPA comes into force, Japan's FTA coverage ratio will increase to 34.4%, while that of the EU will increase to 33.8%.

#### Claims on tariff reductions for industrial products in the case of Japan and food products in the case of the EU

Since the start of negotiations, Japan had consistently placed importance on reducing tariffs for industrial products such as automobiles and electrical equipment. The EU makes up 11.1% of Japan's automobile exports, and 13.5% of its automotive parts exports. Customs tariffs for passenger vehicles will be abolished over seven years after the EPA enters in force, and tariffs for automotive parts will be eliminated over seven years (immediately upon entry into force for some). On the other hand, the EU has requested for tariff reductions for agricultural, forestry, and fishery products, as well as the relaxation of regulations on pharmaceuticals and processed food products. Imports of chemical products from EU makes up 38.7% of Japan's all imports of chemical products. Similarly, imports of food and beverages makes up 13.3% of Japan's imports of the category, with pork and wine making up 36.4% and 72.9%, respectively.

#### Trade Ratio of Japan with EU by product category (2016)

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		World		F	TAs in for	In Force	
	Product Category		EU		ASEAN	Australia	+ EU
	Transportational machinery	161,013	12.4	16.1	8.3	4.2	28.5
	Automobiles	103,600	11.1	14.6	5.1	6.0	25.7
	Automobile parts	35,408	13.5	23.6	16.5	1.0	37.2
	General machinery	124,010	13.5	20.2	14.9	1.2	33.7
	Printing machinery	9,809	25.8	19.0	15.2	1.4	44.8
Export	Electrical equipment	98,252	10.2	21.1	17.8	0.4	31.2
	Precision equipment	36,813	15.3	14.4	11.0	0.7	29.7
	Chemicals	81,185	10.3	18.4	13.6	1.0	28.7
	Chemical products	47,968	11.3	15.6	11.8	0.7	26.8
	Food and beverages	5,710	4.8	17.7	15.3	1.9	22.5
	Total		11.4	20.8	14.8	2.2	32.2
	Two-way trade	1,252,781	11.9	22.5	15.0	3.6	34.4

		World		F	ΓAs in for	rce	(Unit: %) In Force
	Product Category	(million dollar)	EU		ASEAN	Australia	+ EU
	Machinery and equipment	205,534	14.5	17.8	14.7	0.1	32.3
	General machinery	59,443	14.0	14.5	12.6	0.1	28.5
	Electrical equipment	89,943	4.5	19.9	18.7	0.0	24.3
	Transportation machinery	28,779	39.9	12.2	9.4	0.2	52.1
	Precision equipment	27,370	21.6	24.4	12.0	0.4	46.0
Import	Chemicals	75,473	31.7	20.5	13.8	0.5	52.2
	Chemical products	57,529	38.7	17.2	8.9	0.5	55.8
	Food and beverages	59,311	13.3	27.4	14.5	6.1	40.8
	Pork	4,174	36.4	12.0	0.0	0.1	48.4
	Wine	1,504	72.9	16.0	0.0	2.7	88.9
	Total	607,728	12.3	24.3	15.2	5.0	36.7

Note: Harmonized System Codes (HS Code) of the product category are as follows: Transportational machinery (HS86-89), Automobiles (HS8702-8705), Automobile parts (8707-8708, 840731-840734), General machinery (HS84), Printing machinery (HS8443), Electrical equipment (HS85), Precision equipment (HS90-91), Chemicals (HS28-40), Chemical products (excluding plastics and rubber) (HS28-38), Foods and beverages (HS01-11, 16-24), Pork (HS0203), Wine (HS2204).

Source: "Trade Statistics" (MOF)

### Growing moves toward regional economic integration among developing economies

#### ASEAN

ASEAN, which celebrates its 50th anniversary this year, has been attempting to liberalize not only trade in goods but also investment in the region to promote trade in services within the framework of the ASEAN Economic Community established in 2015. In external relations, ASEAN is also leading RCEP negotiations.

#### **■** The Pacific Alliance

The Pacific Alliance, established in 2011, will abolish intraregional tariffs by 2030. It is also promoting integration in areas other than trade, such as the establishment of an integrated stock market of the four countries and freedom of movement for citizens. With the aim of developing closer ties with the rest of the world, especially Asia, it has announced the start of FTA negotiations with four countries, of which three are Asian countries. It is also gradually building cooperative relations with Mercosur.

#### Africa Economic Community (AEC)

In 1991, member countries of the African Union reached an agreement to establish the Africa Economic Community (AEC) by 2028 through six stages, including the establishment of a free trade area, the African Customs Union, and the introduction of a common currency. As the third stage in the establishment of the AEC, the Tripartite Free Trade Area (TFTA) was signed in June 2015 among member countries of the East African Community (EAC), the Southern African Development Community (SADC), and the Common Market for Eastern and Southern Africa (COMESA). In June of the same year, negotiations also commenced on the Continental Free Trade Area (CFTA), which includes all member countries. Going forward, the African countries will continue to strengthen integration toward the establishment of the AEC.

Besides abovementioned integrations, there are also moves toward economic integration in various regions, particularly among developing economies. An example is the Eurasian Economic Union (EEU) in the Russia CIS region.

#### Key moves toward regional economic integration in developing economies

Name	Region	Member states	Established	Overview/Key points
Association of Southeast Asian Nations (ASEAN)	Asia	Thailand Indonesia Philippines Singapore Malaysia Brunei Cambodia Laos Myanmar Vietnam	August 1967	*ASEAN established the ASEAN Economic Community along with the ASEAN Political-Security Community and the ASEAN Socio-Cultural Community in December 2015. The aim is to deepen the economic integration that it has been promoting since the 1990s.  *Tariff elimination/reduction rates are very high, and it is gradually introducing more flexible systems for the Certificate of Origin system.  *In the service sector, it is putting effort into liberalization for each sector, based on the ASEAN Framework Agreement on Services (AFAS). To date, it has completed negotiations on liberalization of 70% of entry of foreign capital for the air transportation, eASEAN, healthcare, tourism, and logistics sectors, and 50% for other sectors.  *In external relations, it is approaching external negotiations, including RCEP, based on the philosophy of ASEAN Centrality (independently driving external relations forward).
The Pacific Alliance	Americas	Chile Colombia Mexico Peru	April 2011	*Apart from the member states, 50 countries are registered as observers. In addition to economic integration within the region, it also aims to deepen economic relations with Asia and other regions. In June 2017, it announced new guidelines for associate members, with the aim of expanding and strengthening the alliance.  *Customs tariffs have already been eliminated for 92% of the products, with plans to eliminate the remaining by 2030.  *Launched the Latin America Integrated Market (MILA) to promote investment. In the aspect of the movement of people, Mexico and Peru have instituted visa exemptions for residents who fulfill certain criteria.  *While drawing closer to Mercosur, the two organizations drew up a roadmap in April 2017 with the aim of strengthening their relations. It also announce the start of FTA negotiations with Canada, Australia, New Zealand, and Singapore.
Africa Economic Community (AEC)	Middle East/Africa	Members of the African Union (54 countries)	2028 (scheduled)	*The Treaty Establishing the African Economic Community, which entered into force in 1994, puts forth six stages toward the establishment of the AEC by 2028, including free trade areas and the African Customs Union.  *In July 2015, the Tripartite Free Trade Area (TFTA) was signed. In addition to the elimination and reduction of customs tariffs by member states, it also aims to reach an agreement on non-tariff areas such as competition policies.  *In June 2015, negotiations commenced on the Continental Free Trade Area (CFTA). Going forward, there are plans to continue moving toward the establishment of the AEC.

Note: The date of establishment refers to the establishment of the organization, and is different from the date that the free trade agreement entered into force

into force.

Source: Materials from the respective governments and regional organizations.

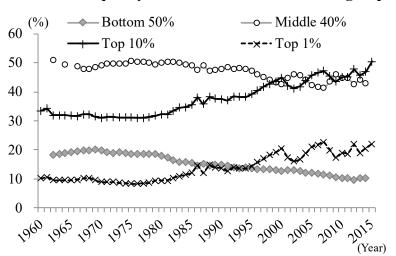
### Background to the growth in support for "inward-looking" policies in the West

#### A background of growing income and employment disparity

Some countries in the West have shown a tendency of growing support for inward-looking policies that go against the trend of globalization. These include UK's decision to leave the European Union, and the US Trump administration's exit from the TPP, NAFTA renegotiations, and strengthening of immigration policies. It is said that this trend is backed by growing income and employment disparity (polarization), which has heightened discontent among low-income groups in advanced economies. Hence, support was shown for the easy-to-understand claim that globalization is the primary cause behind unemployment and low income among these groups of people.

After the 1990s, intensified competition in advanced economies against developing economies in the aspects of goods and people Globalization (international movement of goods, money, and people) advanced rapidly from the 1990s to the 2000s. Particularly in advanced economies, competition with developing economies intensified in the aspects of goods and people. The percentage of imports in advanced economies originating from developing economies rose from 20.0% in 1990 (of which China made up 2.7%) to 39.7% in 2015 (of which China made up 15.4%), and trade deficit against developing economies also grew from \$106.6 billion to \$692.7 billion during the same period. The percentage of international immigrant stock of advanced economies that originated from developing economies also increased from 49.9% in 1990 to 60.7% in 2015.

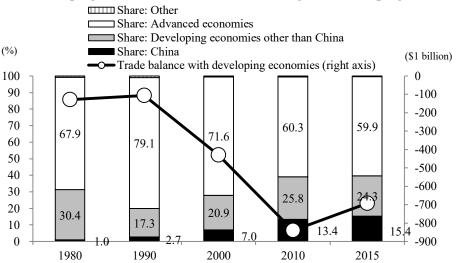
#### Income inequality in US: Share of each income group



Note: 1) The "middle 40%" ranges from the 50th to 90th percentile ranks. 2) Income data is based on the fiscal income (the sum of all income items reported on income tax returns, before any deduction).

Source: World Wealth and Income Database (WID.world)

## Percentage of imports in advanced economies originating from developing economies, and trade balance against developing economies



Notes: 1) Definition for advanced economies and developing economies follows DOTS. "Other" is obtained by deducting the total for advanced and developing economies from total for the world. 2) Trade balance is calculated using formula [Export values (FOB) - Import values (CIF)].

Source: "DOTS, February 2017" (IMF)

### Technological progress as the main cause behind income and employment disparity

# ■ Growth of imports from developing economies in recent years has had a negative impact on some workers in advanced economies

In recent years, several empirical studies have pointed out that the growth of imports from developing economies such as China after the 1990s has had a negative impact on the wages and employment of some workers in the West. On the other hand, outward foreign direct investment, off-shoring, and immigration were observed to have had mostly no negative impact on labor market in advanced economies.

## ■ Technological progress as the main cause behind income and employment disparity

The general view is that the main cause behind the expansion in income and employment disparity in advanced economies is not globalization, but technological progress. The cost of using computers has fallen rapidly since the 1980s, making it even more advantageous for companies to replace workers with technology.

#### Globalization is beneficial but also poses some challenges

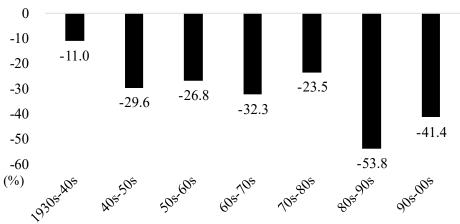
Globalization brings mutual benefits to the home country and foreign countries on the whole (transfer of knowledge and technology, improvement in productivity through more efficient allocation of production factors, allows consumers to purchase diverse goods at cheaper prices, creation of employment through foreign capital, overseas remittance by migrants, etc.). However, it is necessary to note that there are some workers who suffer from the negative impact of globalization, particularly through trade. Rather than dealing with the problems by imposing restrictions on trade, there is a need to respond through macroeconomic policies and policies that promote education/training, subsidies, and labor mobility and reemployment.

#### Impact of globalization on labor markets in advanced economies

Form of globalization	Direction of impact	Detailed impact	Backing sources (mainly survey papers of previous research)
Goods (imports)	Negative (Partially positive)	1980s: Small impact on wages.  1990s and after: Increase in imports from developing economies such as China. Regions, industries, occupations, etc. exposed to this import competition suffered negative impact on employment and wages (research on Europe and Americas). Greater negative impact for workers with lower skills and lower wages.  However, increase in imports from China had a positive impact on manufacturing employment in Japan. Imports of cheap intermediate goods can contribute to reducing production cost and increasing profits for companies.	Author, Dorn, and Hanson (2016), Taniguchi (2016), Fabinger, Shibuya, and Taniguch (2017)
Money (Outward FD offshoring)	I, Positive, or no impact	Most of the results showed positive impact on employment, or no negative impact.	Kiyota (2015), Tanaka (2015), Navaretti and Venables (2004)
People (Acceptance immigrants)	Mostly no impact	Very small impact, approaching zero, on wages and employment.	Kerr and Kerr (2011)

Source: "Backing sources" in the table, and materials produced by Hitoshi Sato and Tomohiro Machikita (researchers at IDE-JETRO)

#### Cost of using computers: Compound annual growth rate



Note: The compound annual growth rate was calculated by comparing the medians of the real cost per million computations (2006 USD prices) of the corresponding decade. Source: Revised data of table 6 of Nordhaus (2007) created by William D. Nordhaus

### Concerns over expanding trade-restrictive measures

#### Trade-restrictive measures in principal countries remain at a high level

Trade-restrictive measures that were introduced after the financial crisis that began in the US in 2008 have continued to accumulate. Since the start of monitoring by WTO and other authorities in October 2008, while 1,263 trade-restrictive measures that were introduced in G20 countries up till October 2016 are in effect, only 406 measures have been abolished.

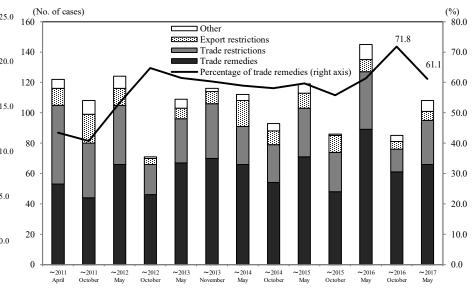
#### Trade remedies such as anti-dumping make up a large percentage of the measures

Of these, trade remedies make up a large proportion. When trade-restrictive measures are classified into the four categories of import restrictive measures (import licensing system, raising customs tariffs, etc.), export restrictive measures (export taxes, restrictions on export volume, etc.), trade remedies (antidumping, safeguards and countervailing measures), and other measures (request for local contents, etc.), the percentage of trade remedies has reached the high level of 71.8% during the period from May to October 2016. As measures that are systematically implemented under WTO rules, and which are effective in restricting trade, trade remedies are expected to be frequently used going forward.



and other measures

#### Breakdown of trade-restrictive measures, and percentage of trade remedies



Note: 1) Trade remedies is the total for anti-dumping measures, safeguard measures and countervailing measures. 2) The target period changes depending on the period for the consolidatin of the report, and is not constant.3) In the report for June 2017, trade remedies were excluded from trade-restrictive measures, but these were calculated here for comparison purposes. Source: Materials from WTO secretariat

<sup>2)</sup> Data aggregation of measures was conducted from the end of 2010 until Oct. 2016. The length of period covered differs according to the dates of publication of each monitoring report.

<sup>3)</sup> In the recent report published in May 2017, trade remedies were excluded from the categories of trade-restrictive measures. However, in order to compare with the previous results, the number of such remedies is added to the total figure. Source: WTO Secretariat

# Trend of utilizing trade remedies

#### Anti-dumping measures utilized at a high frequency

Anti-dumping measures are constantly and frequently used, mainly in the iron and steel as well as chemicals sectors. This measure was invoked for 181 cases in 2015, a high level since 2003. The application of anti-dumping measure on imports from China reflected caution against the trend of oversupply, and reached a record high of 61 cases in 2015.

#### ■ Growing use of safeguard measures, centered on emerging economies

The number of safeguard investigations for the five-year period from 2011 to 2015 was an average of 18.8 cases per year, far exceeding the average of 13.6 cases from 1995 - 2010. Utilization is growing mainly in emerging economies. Among the safeguard measures in force as at the end of October 2016, all the countries with multiple measures enforced were emerging and developing economies. The iron and steel sector stands out for the enforcement of safeguard measures, against a backdrop of oversupply of iron and steel products worldwide.

# Situation by country invoking anti-dumping measures or where the measure was invoked (1995 - June 2016)

	•			,									
(user of measures)  Exporter (country affected)	Argentina	Australia	Brazil	Canada	China	EU	India	Japan	Mexico	Republic of South Africa	Turkey	υS	World
Argentina	-	0	5	0	0	1	0	0	1	0	0	6	22
Australia	1	-	0	0	0	2	2	1	0	3	0	2	14
Brazil	39	0	-	5	1	5	8	0	10	5	1	10	91
Canada	1	1	2	-	2	0	3	0	2	0	1	7	22
China	75	24	64	28	-	88	149	2	35	21	68	107	840
EU	0	0	5	0	21	-	46	0	1	0	0	0	82
India	10	0	9	5	7	21	-	0	2	12	11	15	119
Indonesia	5	9	3	4	3	14	23	0	1	5	9	13	121
Japan	5	8	2	3	32	8	26	-	2	1	0	23	140
Korea	12	20	12	11	27	13	45	1	2	16	7	21	229
Mexico	3	0	7	3	1	3	4	0	1	0	0	17	46
Russia	2	1	4	3	9	20	19	0	6	2	5	7	112
Republic of													
South Africa	6	2	6	3	0	4	9	1	0	-	0	9	47
Taiwan	12	9	11	6	14	12	47	1	3	6	10	22	187
Thailand	5	13	9	3	5	19	32	0	0	4	11	10	139
Turkey	2	0	1	5	0	3	6	0	0	2	-	6	40
US	7	6	23	11	35	9	30	0	23	6	4	-	175
World	239	135	233	133	184	310	599	8	115	137	174	368	3,316

Notes: 1) Importers are countries/regions with more than 100 cases (cumulative), and Japan. Exporters are countries/regions with more than 100 cases (cumulative), and other countries/regions listed as Importers.

2) The shaded cells are bilateral/regional relations with the top five cases.

Source: Materials from the WTO secretariat

### Major safeguard measures in effect

Reporting Country	Product	Effective date	Note
•	Seamless pipes and tubes	Aug-2014	
	Saturated fatty alcohols	Aug-2014	
India	Sodium citrate	Sep-2014	
	Hot-rolled flat steel products	Mar-2016	
	Hot-rolled flat steel products	Nov-2016	
	Cotton yarn	Jun-2011	extended
	Articles of iron or steel wire	Nov-2012	
	Seamless pipes	Aug-2013	
Indonesia	Flat-rolled products of iron or non-alloy steel	Jul-2014	
	I and H sections of other alloy steel	Jan-2015	
	Coated paper and paperboard	Sep-2015	
	Wire rods and reinforcing bars		extended
Morocco	Cold rolled sheets and plated or coated	May-2015	
	sheets	Y 2016	
	Paper in rolls and paper in reams	Jun-2016	. 1.1
D1 71 .	Steel angle bars	Aug-2009	
Philippines	Testliner		extended
	Newsprint	May-2015	
TT 1 1	Glass block	Aug-2011	
Thailand	Hot rolled steel flat products	Sep-2013	
	Non alloy hot rolled steel products	Dec-2014	
	Seamless steel pipes		extended
Ukraine	Tableware and kitchenware of porcelain	May-2014	
	Flexible porus plates, blocks and sheets of polyurethane foams	Jun-2016	
T1	Polyethylene terephthalate	Jun-2011	
Turkey	Wallpaper and similar wallcoverings	Jun-2015	
	Vegetable oil	Sep-2013	
Vietnam	Semi-finished an certain finished products of alloy and non-alloy steel	Aug-2016	

Note: WTO members which take two or more safeguard measures as of October 2016 (as of

May 2017 for G20 countries). Based on notifications to the WTO Secretariat. Source: WTO Secretariat

# UK begins its negotiations to leave the EU

### Commonalities and differences in the negotiation policies of UK and EU

Based on the formal notification to leave the EU triggered in March 2017, the UK has commenced the process of the so-called Brexit negotiations. The UK and EU are in accord on the principles of protecting the rights of EU citizens in the UK and British citizens in the EU, as well as maintaining stability and transparency of business. In parallel with Brexit negotiations, UK has proposed the conclusion of a "bold and ambitious free trade agreement" between UK and EU, but EU has presented a phased approach that prioritizes Brexit negotiations and rejected the proposal by UK.

### Strong dependence of UK on EU, with many viewing the negotiations to be disadvantageous to UK

Two-way trade with EU makes up 49.0% (2016) of UK's trade value, while EU's share of UK's inward FDI balance has reached 45.4% (2015).

### Principles set out by the British government toward its exit from the EU

	12 Principles							
1	Providing certainty and clarity	7	Protecting workers rights					
2	Taking control of our own laws	8	Ensuring free trade with European markets					
3	Strengthening the Union	9	Securing new trade agreements with other countries					
4	Protecting our strong historic ties with Ireland and maintaining the Common Travel Area	10	Ensuring the UK remains the best place for science and innovation					
5	Controlling immigration	11	Cooperating in the fight against crime and terrorism					
6	Securing rights for EU nationals in the UK and UK nationals in the EU	12	Delivering a smooth, orderly exit from the EU					

Source: The UK government

### Stance of EU institutions toward Brexit negotiations

Document	Main points
European Council (Article 50) guidelines on Brexit negotiations (Adopted 29 April 2017)	Securing the rights of EU citizens working and studying in the UK     Avoiding the legal vacuum for stability of corporate activities     Commitment to fulfilling UK's debts as a member state of the EU     Responding flexibly to border issues with Ireland
European Parliament resolution of 5 April 2017 on negotiations with the United Kingdom following its notification that it intends to withdraw from the European Union (Adopted 5 April 2017)	The transition period after Brexit should be capped at a maximum of three years Security cooperation and trade conditions are not interchangeable for one another Rejection of preferential access to the shared market

Source: Materials from the European Council and European Parliament

Stock of immigrants from the Eastern Europe to the UK, Germany and Italy (as of 2015) (Unit: number of immigrants, %)

(emit number of management)									
	UI	K Ger		ıny	Italy				
	Number of Immigrants	Growth rate compared with year 2000	Number of Immigrants	Growth rate compared with year 2000	Number of Immigrants	Growth rate compared with year 2000			
Poland	703,050	1097.8	1,930,136	187.8	118,641	174.9			
Hungary	56,166	341.5	172,755	94.3	12,889	155.1			
Romania	89,402	1111.6	590,189	82.8	1,021,613	760.4			
Baltic States	192,268	1768.7	92,272	138.7	10,228	536.1			
Turkey (extra-EU)	100,956	93.0	1,655,996	0.4	20,491	113.0			

Note: Baltic States include Estonia, Latvia and Lithuania,

Source: United Nations

Intra-EU ratio of FDI stock of major EU countries
(Units: million euros, %)

	Inward FDI stock (year 2015)			Outward FDI stock (year 2015)		
			Intra-			Intra-
	Intra-EU	World	EU	Intra-EU	World	EU
			ratio			ratio
EU28	7,333,194	13,078,106	56.1	8,213,864	15,105,490	54.4
UK	587,471	1,294,795	45.4	611,955	1,433,450	42.7
Germany	526,950	722,826	72.9	738,188	1,264,059	58.4
France	422,774	606,370	69.7	637,230	1,101,103	57.9
Spain	394,315	502,663	78.4	177,345	450,361	39.4
Italy	274,577	309,620	88.7	281,043	429,228	65.5
Netherlands	1,793,658	3,618,685	49.6	2,208,976	4,299,559	51.4
Luxemburg	1,383,523	3,005,207	46.0	1,914,562	3,517,234	54.4

Source: Eurostat

# EU heading toward "multi-speed integration"

#### 60 years since the signing of the Treaty of Rome: Expanding and diversifying membership

In March 2017, the EU welcomes its 60th anniversary since the signing of the Treaty of Rome, which marked the establishment of the European Economic Community (EEC). It announced the Rome Declaration, and affirmed the integration philosophy of prosperity based on the premise of peace in Europe, which remains unwavering even today. However, with 28 member countries in various stages of development, the EU has been faced with many difficult issues in recent years including the European debt crisis, large-scale influx of refugees, and Brexit negotiations with the UK. It is being forced to reconsider the direction that EU integration should move in.

#### The pros and cons of "multi-speed integration"

Prior to marking the 60th anniversary of the Treaty of Rome, the European Commission released the "White paper on the future of Europe: Reflections and scenarios for the EU27 by 2025." It raises the questions of whether to continue on the extension of supranational integration, or to respect the rights of member countries and restrict areas of supranational integration, or to lean toward "multi-speed integration" that tolerates differences in the speed and depth of integration corresponding to the ability and wishes of member countries, for each area such as the Economic and Monetary Union and diplomatic cooperation. In summary, of the EU member states, the major advanced economies in Western Europe will promote multi-speed integration. On the other hand, Eastern European countries that joined after 2000 will retain their rights as member states, while taking the position that multi-speed integration should be limited to areas recognized under the traditional framework, such as cooperation in the field of justice and home affairs.

#### Major events in European Integration and numbers of member countries (Number of member countries) March 2019: the UK will 2009: the Treaty of Lisbon in effect leave the EU 27 2013: 2007 Croatia 25 Bulgaria, 2002: the currence euro adopted Czech Republic Cyprus, 1967: European Community established Estonia, 1968: Completion of the Customs Union 1993: the Maastricht Treaty in effect Hungary, Latvia, Lithuania, Malta. Poland, 15 1987: the Single European Act in effect (the Slovakia single market was established in the end of 15 1995 Austria 1957: the Treaty of Rome signed Finland, 1958: the Treaty of Rome in effect European Economic Community established 10 1986: Portugal, Spain 1981: Candidiate countries: 1973 (accession): Albania, Denmark, Ireland Montenegro Servia. The former Yugoslav Founding members in 1957 Republic of Macedonia, Belgium, France, West Germany Turkey Italy, Luxemburg, Netherlands

### European Commission's five scenarios for the EU by 2025

11		Emphasis on the rights of member states		Main scenarios of EU	-	Expansion of supranationalism
		(Visegrad Group (four countries Central and Eastern Europe))	of	(Western European countries of Germany, France, Italy, Spain)	•	(No strong support)
ſ		Scenario 2	Scenario 4	Scenario 3	Scenario 1	Scenario 5
	Area/Point of contention	Limited to single market	Selection and concentration	Multi-speed integration	Continue with existing scenario	Acceleration in integration of all member states
	Single market and trade	Certain restrictions on the freedom of movement of people and services	Strengthen market integration for new industrial sectors	Strengthen freedom of movement of goods and capital	Promote the conclusion of new types of free trade agreements	Harmonization of regulations and standards, and further strengthening of the implementation measures
	Economic and Monetary Union (EMU)	Keep to a minimum	Implement Euro stabilization policies	Promotion of tax system harmonization and social security cooperation in some member states	Progressive implementation of policies to stabilize the Euro	Expansion of economic and fiscal policies including harmonization of social security and tax systems
	Schengen Agreement, immigration policies, security and justice	Review of regional border controls	Strengthen management of border control and refugee protection	Deepen police/justice cooperation in some member states	Progressive development of cooperation/ common parts utilization	Strengthen management of border control and refugee protection
	Diplomacy/ Security policies	Entrust some foreign policies to member states	Strengthen overall common diplomacy/ security policies	Deepen defense cooperation in some member states	Securing consistency as EU	Strengthen overall common diplomacy/ security policies
	Finance/ Budget	Narrow down, reduce	Concentrate resources on priority items	Budget required additionally borne by implementing country	Review of some systems	Maintain/ Strengthen financial support frameworks for stabilization of the Euro zone
	EU's authority and decision-making	Diminish EU's authority	Expected difficulties in the selection of priority matters	Growing complexity of scope of EU's authority and decision-making processes	Maintain existing complex decision- making processes	Strengthen EU's authority, and reduce the sovereignty domains of member states

Notes: 1) The numbering of the scenarios follows the order assigned in materials from the European Commission. These have been rearranged according to the direction of the scenarios.

<sup>2)</sup> The points raised in the overview are representative examples, and not exhaustive

<sup>3)</sup> The Visegrad Group comprises the following four countries: Poland, Czech Republic, Hungary, and Slovakia Source: Materials from the European Commission

### Call from US for thorough enforcement of "fair trade" through various means

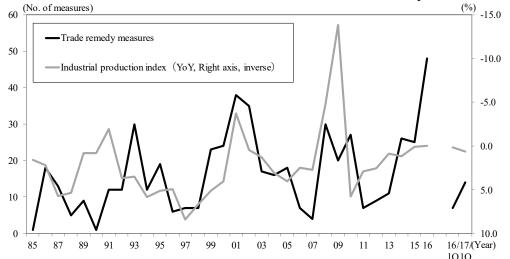
### Thorough enforcement of "fair trade" on the basis of US trade policy

The philosophy of "fair trade" is at the basis of US trade policy. Based on the recognition that it is important for the markets of each country to be open, and to realize conditions of fair competition, the US has consistently called on partner countries for the enforcement of fair trade through various means, such as unilateral measures, trade remedies, and raising disputes to WTO.

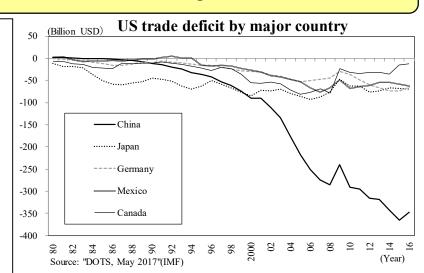
### Opposition through various means, targeted at countries with trade deficit

In particular, the US has pointed out problems in various aspects—mainly in relation to trade imbalance—toward China, which makes up half of the trade deficit. The US is expected to continue demanding for the correction of the deficit through means such as strict trade remedy measures, with a focus on countries with a trade deficit such as China. Under the Trump administration, the percentage of US imports that are eligible for special trade restrictions such as trade remedy measures is expected to double to 7.4%, from 3.8% before the Obama administration.

### Relation between US economic conditions and trade remedy measures



Note: Number of trade remedy measures (antidumping and coutervailing duty orders) are based on countries subject to measures, not the products, as of late May 2017. Source: International Trade Commission and Federal Board of Governors of the Federal Reserve System



Law	Measures put in place by the US	Conditions for invocation
Tariff Act of 1930:	Law that became the basis for the US	S tariff system today.
Anti-dumping, countervailing tariffs	Raising of tariffs	Damages to the domestic industries of the US by dumping and export of subsidized items.
Article 337	Prohibition of imports, injunction against unfair practices	In cases where US industries incur damages as a result of unfair practices in import. Mainly applied to the infringement of intellectual property rights.
Γrade Expansion A	ct of 1962: Law that aims to expand t	the US export market and promote free trade.
Article 232	Raising of tariffs, restrictions on import volume	Cases where the Secretary of Commerce acknowledges that imports may harm US security
Trade Act of 1974:	Reflecting the trade deficit, focuses of	on "fair trade." Codification of trade promotion authority.
Article 122	Raising of tariffs, restrictions on import volume	Massive and serious trade imbalance in the US.
Article 201 (safeguard)	Raising of tariffs, restrictions on import volume	When USITC acknowledges that rapid growth in the import of target items seriously damages or are at risk of damaging domestic industries.
Article 301	Prohibition of imports, injunction against unfair practices	Foreign trade practices deemed by the USTR as being in violation of trade agreements, or as unfair, unreasonable, or discriminatory, and which limit trade with the US.
		8: Comprehensive provision of measures to restore the
competitiveness of		T
Article 1302 (Super 301)	Retaliatory measures such as raising of tariffs	Unfair trade practices such as violation of trade agreements and trade barriers. Strengthened version of Article 301 of the 1974 Trade Act (revoked in 2002).
Article 1303 (Special 301)	Prohibition of imports,	Unfair practice in import. Mainly applied to the infringement

Source: US Department of Commerce, US House Committee on Ways and Means, "Report on Compliance by Major Trading Partners with Trade Agreements" (METI), etc.

# Involvement of various parties concerned in US trade policies

### Although it is possible to raise tariffs and regulate imports based on laws, it is difficult for the President to make significant changes to trade policy independently

In the US, under the Constitution, the Congress has the authority to impose tariffs and regulate trade with other countries. For the President to implement any policies beyond the scope of his or her authorization, or enforce trade agreements within the US, there are cases where it is necessary to enact new legislation or revise existing legislation in the US legal system; the consent of the Congress is required each time. Trade policies are formulated not only by the President and the Congress, but also through the interaction of interest groups, such as the relevant government ministries and agencies, industries, and labor unions. The impact of unfair trade is primarily investigated by the International Trade Commission (ITC), which reports on the results of investigations to the President and the Congress. Bills are drawn up within the Congress in response to requests from the industry, and the President approves or rejects them. The United States Trade Representative (USTR), which takes the center stage in trade negotiations with other countries, consolidates views from within the US and presents its case. This is the flow of trade policy formulation in the US.

The Trump administration, established in January 2017, has reviewed past FTAs including withdrawing from the TPP and NAFTA renegotiations, and made successive announcements on conducting a factor analysis on trade deficit, creating the impression that it is keeping its commitment and pledges to voters. Through its trade policies, the Trump administration has expressed its dissatisfaction with the existing global trade system that is centered around the WTO, and has adopted an approach of strictly enforcing measures such as trade remedies and Article 301 of the Trade Act of 1974. However, there are limits to the President's authority, and the President is not able to independently make significant changes to trade policy, such as the signing of new trade agreements.

#### Parties/Institutions involved in US trade policy The White House Legislature Office of Trade and Manufacturing Policy(OTMP) President Congress Trade negotiation authority uthority (1988 Omnibus Trade Investigative report Advice Investigative report Negoti United States Trade Representative (USTR) -ations Administration Investigative repor United States International Trade Commission Department of Commerce (USITC) Policy management Investigations and research Industrial sectors Note: Established for the first time under the Trump administration. The newly established National Trade Council was abolished with the setting up of the

### Trade related Executive Orders and Presidential Memoranda by President Trump (2017)

	Date of gnature	Title	Outline
	Mar 31	Omnibus Report on Significant Trade Deficits	Assessment of major causes of trade deficits, unequal burdens imposed
			by trading partners and impacts on the economy of the United of States.
	Mar 31	Establishing Enhanced Collection and	Development of a plan to enforce antidumping and countervailing duties
		Enforcement of Antidumping and	as well as combat violations of the US trade and customs laws.
ers		Countervailing Duties and Violations of Trade	
Executive Orders		and Customs Laws	
/e (	Apr 18	Buy American and Hire American	Assessing the extent of enforcement of the Buy American Law and
üţį			impact of trade agreements, and to review the immigration system
xec			including the H1-B visa program.
m	Apr 29	Addressing Trade Agreement Violations and	Identifying violations or abuses of WTO and any US trade agreement
		Abuses	and investment agreement.
	Apr 29	Establishment of Office of Trade and	Establishment of office with the mission to advise the President on
		Manufacturing Policy	policies to decrease the trade deficit and strengthen the United States
			manufacturing bases.
nda	Jan 23	Withdrawal of the United States from the	Permanent withdrawal of the US from TPP, and pursuit of bilateral trade
ora		TPP	negotiations.
em	Jan 24	Construction of American Pipelines	Development of a plan to use materials and equipment produced in the
Σ			US for all new pipelines within US borders.
tia	Apr 20	Steel Imports and Threats to National	Investigating the effects on national security of steel imports based on
Presidential Memoranda		Security	the Trade Expansion Act of 1962.
resi	Apr 27	Aluminum Imports and Threats to National	Investigating the effects on national security of aluminum imports based
Ē		Security	on the Trade Expansion Act of 1962.

Note: Although there is no clear distinction between the two instruments above, as a matter or historical practice, it seems that presidents are more apt to utilize executive orders on matters that may benefit from public awareness. Memoranda, on the other hand, are often used to carry out routine executive decisions, or to direct agencies to perform duties consistent with the law or implement laws that are presidential priorities.

Source: White House

# Changes to objectives and format of US FTA with the times

#### Bilateral or multilateral?

The FTA has been regarded as an important foreign policy tool for the US. The first characteristic of FTAs of the US is that the orientation toward either a bilateral or multilateral FTA has been dependent on the times, or the selection criteria for the partner country has always been different. In the case of the US, it is clear that concluding an FTA is either for economic reasons such as expanding its exports, or as a foreign policy, including security factors. Under the Trump administration, the country has made a clear transition from the multilateral approach that had lasted until the previous administration, to a bilateral ideology.

### ■ Presence of a vital Trade Promotion Authority (TPA)

The second essential viewpoint is the presence of the President's Trade Promotion Authority (TPA), where administrative authority is granted by the Congress. The TPA is a provision that enables the adoption of a trade agreement concluded between the government and a foreign country, only with a vote of yes or no, without any revisions made to the individual contents by the Congress. The partner country can also trust in and negotiate with the US government under this provision. While the President has acquired TPA for almost all FTAs, it is becoming increasingly difficult to obtain TPA amidst growing doubts toward free trade.

### Popularization of US-style rules through FTAs

The third characteristic lies in the aspect of the contents—the US positions FTA as a means for establishing international rules. For example, in addition to formulating provisions that are more protective toward intellectual property than the TRIPS agreement under WTO, the FTAs also include provisions on labor and the environment that are outside WTO's regulatory scope. The US has deployed a strategy of using the FTA to gain a foothold toward disseminating and expanding, among many countries, discussions that it could not bring into the WTO. Going forward, it is expected to maintain this policy, but it is unclear if it will be possible to spread the TPP-style rules, which are currently regarded as rules of the highest standards, even bilaterally between two countries.

### Status of FTAs concluded by the US

(Year/Montl

					*Neg=	=Launch ofnego		
$\overline{}$	President/	40th	41st George	42nd		rd	44th	45th
	Trade representative	Reagan [Republican]	H.W.Bush [Republican]	Clinton [Democratic]	George W.Bus 1st term	h[Republican] 2nd term	Obama [Democratic]	Trump [Republican
		81-89	89-93	93-01	01-05	05-09	09-17	17-
FT	'A	I: Brock II: Yeutter	Hills	I: Kantor II: Barshefsky	Zoellick	<ul> <li>Portman</li> <li>Schwab</li> </ul>	• Kirk • Froman	Lighthizer
Trad	le promotion	II. I cutter		94/04	02/08	07/07	15/06	
	nority			Revoked	Enacted	Revoked	Enacted	
					04/02			
	FTAA (1)			98/04 Neg	Suspended			
	NAFTA		91/06 Neg 92/12 Signed	94/01 EIF				17/08 Renegotiat n
SI	Chile	***************************************		00/12 Neg	03/06 Signed			·····
srica	Cirre			00/12 Neg	04/01 EIF			
Americas	CAFTA-DR	***************************************			04/08 Agreed			
`	5 countries of				03/01 Neg	06/03-09/01		
	Central America				04/01 Agreed	EIF		
	Dominican Republic				04/01 Neg			
	Panama	***************************************			04/04 Neg	07/06 Signed	12/10 EIF	
	Peru				04/05 Neg	06/04 Signed	09/02 EIF	000000000000000000000000000000000000000
-	Colombia	m 1 . 1 . 1		(2)	04/05 Neg	06/11 Signed	12/05 EIF	
	Middle East Free	84/01 Neg	iative (MEFIA)	(2)	T	·····		
_	Israel	85/04 Signed 85/09 EIF						
Middle East and Africa					01/09		***************************************	
Υp	Jordan			00/06 Neg	Approval			
t an					01/12 EIF			
Eas	Morocco				03/01 Neg	06/01 EIF		
dle	Morocco	***************************************		v	04/06 Signed	00/01 EII		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
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						05/03 Neg		
	Oman					06/01 Signed		
-	Estamaia 6. AC	E A NI Indiana	(EAD (2)			09/01 EIF		
	Enterprise for AS	EAN Initiative	(EAI)(5)		02/05 8: 1			
	Singapore			00/11 Neg	03/05 Signed 04/01 EIF			
0					04/01 EIF	06/05 Neg		
Asia Pacific	Korea					07/06 Signed	12/03 EIF	
ia P				***************************************	03/03 Neg			
As	Australia				04/05 Signed			
					05/01 EIF			
	TPP						10/03 Neg	17/01
							16/02 Signed	Withdrawa
Europe	TIIP						13/07 Neg	

Notes: 1) Timing of agreement undetermined (34 countries from the Americas participating in negotiations). 2) Concept presented in May 2003. 3) Concept presented in October 2002. Trade and investment framework agreement concluded in August 2006. 4) Shaded cells refer to FTAs that have entered into force. FTAs with suspended negotiations are not shown.

Source: United States Trade Representative (USTR) materials, etc.

# International standardization as a part of foreign economic strategy

### ■ Growing influence of international standards under the WTO system

In tandem with advancements in technology today, strategic initiatives toward acquiring international standards and promoting the international expansion of the country's goods and services in a way that benefits the country, are being actively implemented in policies at the national and regional level, as well as at the corporate level. One of the objectives of WTO agreements is to promote the international harmonization of various regulations and standards, which differ for each country, and to lower non-tariff trade barriers. As a result, after the second half of the 1990s, there has been greater incentive for corporations and governments that carry out public procurement to adopt and obtain international standards issued by international standardization institutions.

### Characteristic initiatives taken by principal countries/regions toward international standardization

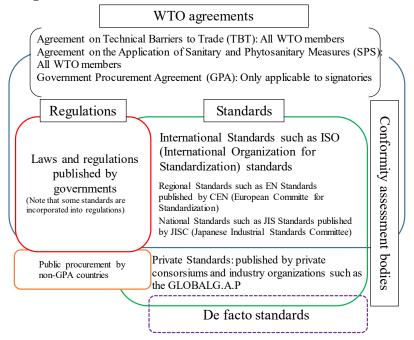
Against the background of the growing influence of international standards, the principal countries/regions have adopted the approach of strategically incorporating international standardization into their respective policies, particularly since the start of the 2000s. As a result of the strengthened initiatives toward the formulation of international standards by each country, the number of international standards has also increased. For example, the number of international standards offered by the International Organization for Standardization has increased by more than 10,000 in the past 20 years.

Important elements regarding international standardizaion strategies in major countries and regions

strucegres in i	and or countries and regions				
Country/Regions	Elements				
	- European standardization bodies such as the European Committee for				
	Standardization (CEN) collaborate with international standardization bodies such as				
EU	the International Organization for Standardization (ISO).				
	- Harmonization of regulations and standards within Europe through EU Directives.				
	- Spread of European standards to other regions.				
	- A tradition of attaching importance to market mechanism				
LIC	-Criteria developed in various fields by approx. 450 private institutes				
US	- Wide utilization of international standards under the WTO regime				
	- Strategic promotion of unique standardization in high-tech fields				
	- Standardization enhanced after joining the WTO in 2001				
China	- Initiative taken in promoting standardization as a national strategy				
China	- Prominence of China growing in international standardization organizations such as				
	the ISO				
	- Harmonization and mutual approval of rules and specifications among member				
	countries based on the ASEAN Economic Community (AEC)				
ASEAN	- Slow streamlining of standards and specifications in responding to real economic				
	conditions				
	- An aim at mild harmonization in consideration of differences between countries				
	- Nearing achievement of its strategic goal for increasing its presence in international				
Japan	standardization organizations by 2015				
_	- Strategic formulation of standards in new fields				

Source: Interview surveys, seminar reports

### WTO agreements and various rules for international standardization



Note: 1) Only those WTO agreements related to standards are listed.

- 2) Regulations are written rules, the adoptation to which are obligatory.
- 3) Standards are written rules which are not compulsory in principle.

However, some standards are effectively incorporated into national regulations. Sources: Interview surveys and others

# International standardization today, from the perspective of trade rules

#### Challenges that international standards are faced with

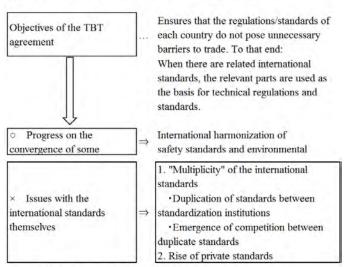
WTO agreements set forth the objective of promoting international harmonization of various standards, and reducing non-tariff trade barriers. After the 1990s, progress has been made in the compliance of the standards of each country with international standards, and the international convergence of some technical regulations has also progressed to a certain degree. On the other hand, issues with the international standards themselves have been brought into sharp relief, including (1) With the expansion of the subjects of international standards from "goods" to "services" and "systems," it is becoming increasingly difficult to differentiate between the standardization organizations; (2) The number of private standards (for example, GLOBAL G.A.P., accreditation by the British Retail Consortium (BRC) etc.) is on the rise and becoming more influential.

### Duplication of standards between international standardization organizations, as seen from Smart Cities

For example, the standardization of Smart Cities spans a wide range of fields, including urban planning, infrastructure such as power and transportation, and environment, and it is becoming a major battlefield for the establishment of duplicate international standards. The respective international standardization organizations such as ISO, IEC, ITU-T, and ISO/IEC JTC1, as well as international standardization organizations from principal countries such as BSI from the UK, are promoting standardization in parallel. In standardization organizations, whether or not a standard developed is adopted by a corporation or public organization is a decision that lies with the party concerned, or in other words, the market. Hence, eliminating the absence of a standard that is necessary, instead of a duplicate standard, is deemed as their key issue. On the other hand, WTO views the duplication of international standards as a problem that poses an obstacle to achieving the objectives of the TBT agreement.

### Objectives of WTO/TBT agreements, and status of achievement

#### Objectives of the WTO/TBT agreements, and status of achievement



Source: WTO agreement and results of interview

### Standardization of Smart Cities, progressing in a multilayered format

Standardization organization	Main competent committee	Targets/Objectives
ISO	TC268 Sustainable cities and communities	Targets overall functions of a city, such as quality of life (QOL), disaster-resilient urban development, etc.
International Organization for Standardization	TC268/SC1 Smart community infrastructure	Develop an evaluation framework for urban infrastructure that can serve as a foundation to support urban facilities and services.
IEC International Electrotechnical Commission	SEG1 Smart Cities TC57 Power systems management and associated information exchange, etc.	Efficient power supply to urban facilities such as buildings, traffic networks, medical facilities, factories, etc., development of Smart Grid interface standards, etc.
ISO/IEC JTC1 ISO/IEC Joint Technical Committee	WG11 Smart Cities	Development of information and communication technology (ICT) standards that can serve as a foundation for smart cities. In cooperation with ISO TC268, develop ICT-related indicators for smart cities.
ITU-T International Telecommunication Union Telecommunication Standardization Sector	SG20 Smart and sustainable cities	Develop ICT standards related to the utilization of IoT (Internet of Things) technology in smart cities.
CEN/CENELEC/ETSI European Committee for Standardization/ European Committee for Electrotechnical Standardization/ European Telecommunications Standards Institute	SF-SSCC Sector Forum on Smart and Sustainable Cities and Communities	Consolidate and disseminate matters of interest and needs of the respective countries in Europe.  Collaboration with the respective international standardization organizations.
BSI British Standards Institution	Smart City Standards Strategy Group	Provides for decision-making frameworks to establish smart cities and prevent misunderstanding due to confusion with terminology.
AENOR Spanish Association for Standardization and Certification	CTN178	Promote effective and intensive use of ICT by the citizens, corporations, and administration, and improve economic productivity and competitiveness.

Note: Although the terminology used by each organization are not standardized, "smart city" was adopted as the term generally used in Japan. Source: ISO, IEC materials, and materials from the respective organizations

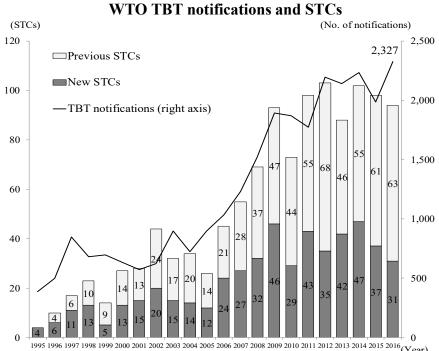
### WTO contributes to international standardization to a certain degree

### Obligation to report, based on the TBT agreement, as its function

An important function set forth under the TBT agreement is the obligation of member countries to make public the formulation, enactment, revisions, etc. of technical regulations, by reporting to the WTO. Since the establishment of WTO, the number of TBT reports has exceeded 28,000, and surpassed 2,000 cases every year in recent years. This marks WTO's contribution toward improving transparency of regulations and standards.

### Preventing disputes beforehand through reviews in the TBT Committee

Of the TBT reports, measures that were pointed out as in WTO "Specific Trade Concerns (STC)" by member countries were discussed within the TBT Committee, and where necessary, the country introducing the measure would be requested to put in place remedies. The number of STC cases reviewed by the TBT Committee exceeds 100 cases per year, for new and ongoing cases combined. Despite the fact that provisions related to TBT have been included in FTAs in recent years (of the 23 FTAs that entered into force from 2015 to the first half of 2017, 21 included a chapter on TBT), the scope that facilitates the handling of TBT problems bilaterally is very limited. There is no change to the fact that WTO still plays a primary role.



Note: "Previous STCs" refers to STCs which have been discussed in two or more meetings of the TBT

Source: WTO TBT-IMS database

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Top countries and regions pointed out by TBT Committee regarding STCs (1995-2016)

Country/	number of	Examples (year)		
Region	STCs	Examples (year)		
EU	98	Regulation on Chemicals (REACH) (2003)		
China	60	Regulation on Classification, Labelling and Packaging (CLP) (2007)  Administrative Measure on Cosmetics Labelling (2015)  Compulsory Certification (CCC) System (2006)		
US	47	Bioterrorism Act (2003) Transportation of Lithium Batteries (2010)		
South Korea	32	Food Industry Promotion Act (2009)		
India	26	Alcoholic Beverages Standards (2013)		
Brazil	23	Draft Resolution on tobacco pruducts (2011)		
Indonesia	21	Regulation on the label of processed foods (2013)		
Ecuador	19	Resolution establishing a general conformity assessment framework (2013)		
Russia	18	Draft Technical Regulation on Safety of Alcohol Drinks (2012)		
Mexico	15	Energy Labelling Measures (Law for Sustainable Use of Energy) (2011)		
Colombia	13	Commercial Truck Diesel Emissions Regulation (2011)		
Japan	12	Labelling Guidelines on Wagyu Beef (2008)		
Canada	11	Amendment to Tobacco Act (2009)		
Thailand	10	Draft Notification for Labels of Alcoholic Beverages (2014)		
Argentina	8	MERCOSUR Regulation on Alcoholic Beverages (2004)		
Taiwan	8	GMO Labelling (2015)		
France	8	Draft decree on a common set of symbols informing the consumer about recyclable products (2014)		
Total	521			

Note: Examples shown are the cases which relatively large number of WTO members raised as STCs

Source: WTO TBT-IMS database

# A WTO system that presents both aspects of potential and risk

### Multilateral trade negotiations show steady output and progress

After reaching an agreement on the Agreement on Trade Facilitation at the 9th WTO Ministerial Conference held in December 2013 (Bali), WTO has been steadily achieving result in individual agenda items. Amidst criticisms in the international society of the emergence of groups of people left behind by the flow of globalization, the significance and effects of inclusive multilateral trade rules have been reaffirmed through the WTO. Even developing economies, which have traditionally adopted a passive attitude in dealing with new trade issues in WTO from the standpoint that they should not depart from the main agenda of the Doha Round, have presented a different attitude, such as pointing out the need to formulate multilateral rules on e-commerce.

### ■ A difficult path forward for multilateral trade systems

On the other hand, WTO is faced with an even more difficult situation than ever before. With 164 member states, its decision-making process in principle is based on consensus. It has to win the consent of a wide range of countries in tackling new issues such as e-commerce, which is not an easy task. Furthermore, the Trump administration has displayed the stance that it does not necessarily place great importance on the WTO system; this is a risk factor that could destabilize the multilateral trade system going forward.

# Recent achievements or progress in WTO and plurilateral trade negtiations

	Issues	Recent achievements or progress
	Agriculture	Prohibition of export subsidies (2015)  Duty-free, quota-free for cotton exports from LDCs (2015)
Achieved results	Market access	Expansion of tariff-free products under the Information Technology Agreement (ITA) (2015)
ieved 1	Government procurement	Revised agreement in effect (2014) which facilitated new accessions
Ack	Trade facilitation	Trade Facilitation Agreement in effect (2017)
	Intellectual property	Amendment of the TRIPS Agreement on access to medicines in effect (2017)
s	Services	Negotiation of "Trade in Services Agreement (TiSA)" in progress among 23 WTO members (since 2013)
rogres	Trade rules	Negotiation on fishery subsidies in progress (activated since 2016)
Agenda in progress	Environment	Negotiation of "Environmental Goods Agreement" in progress among 18 WTO members (since 2014)
Agend	New issues	Discussions on e-commerce (since 2016) Discussions on investment facilitation (since 2017) Discussions on how SMEs can benefit from global trade (since 2017)

Note: TiSA negotiations are conducted outside the WTO system. Source: WTO Secretariat and other sources on international trade Copyright (C) 2017 JETRO. All rights reserved.

# Position of principal countries/regions toward multilateral negotiations/negotiations between many countries

	Doha Round	New fields	Plurilateral negotiations
US	Need for a new approach	Not persist in discussions in WTO	Traditionally, active involvement
EU	Need for a new approach	Propose proactively	Active involvement
Japan	Need for a new approach	Propose e-commerce rules	Active involvement
China	In principle, maintain the previous framework	Propose proactively but assert balance between issues	Participation in environmental goods agreement negotiations
India South Africa	Maintain the previous framework	Oppose	Non-participation
Argentina Brazil	In principle, maintain the previous framework	Propose proactively	Non-participation
Russia	In principle, maintain the previous framework	Propose rules to facilitate investment	Non-participation
LDC	Maintain the previous framework	Opposition in principle	Non-participation

Source: Various specialized trade journals

### WTO's Trade Facilitation Agreement is a positive influence on trade administration

### Trade Facilitation Agreement enters into force in February 2017

WTO's Trade Facilitation Agreement entered into force in February 2017. If the simplification of trade procedures and improvement of transparency based on the Agreement are realized, it would contribute to reducing the cost and time needed in trade, thereby providing a push for the parties concerned, including SMEs, to participate in trade. As to the schedule for the implementation of each clause of the agreement, developing economies have been making reports to the WTO based on classifications A to C.

If the agreement were completely fulfilled, WTO estimates that it could reduce trade-related costs by 14.3% worldwide. Particularly for developing economies, as there are cases where the time and cost required for customs clearance poses a problem, if advancements are achieved in the digitization of documents for example, it would then help to simplify procedures. Although the full implementation of the agreement is expected to take some time, it is highly significant in its potential to raise the level of trade facilitation across the world.

### **Outlook of WTO Trade Facilitation Agreement**

	cific commitments members	should implement		
Article I	blication and availability of ormation	Recommending members to promptly publish information related to customs procedure in an easily accessible manner such as through the Internet.		
Article 3 Ad	lvance rulings	Introduction of advance rulings, publication of its procedures, etc.		
Article 4 Pro	ocedures for appeal or	Allowing traders to request appeal or review on decisions made by customs.		
	lease and clearance of	Facilitating quick release and clearance of goods.		
Article 10 imp	malities connected with portation, exportation and	Facilitating symplification of formalities connected with importation, exportation and transit.		
Article 11 Fre	eedom of transit	Recommending members to guarantee freedom of transit including by applying transit charges, procedures and controls.		
Section 2: Spe-	cial and differential treatment	t (SDT) provisions		
		the Member will implement by the time the Agreement enters into force (or in ad country Member within one year after entry into force).		
Article 14	Category B: Provisions that the Member will implement after a transitional period following the entry into force of the Agreement.			
Article 14 Sate		the Member will implement on a date after a transitional period following the ement and requiring the acquisition of assistance and support for capacity		
Article 17 Ea	rly warning mechanism	Extension of implementation dates for Provisions in Categories B and C.		
Article 19	ifting between Categories B	Members may shift provisions between Categories B and C through the submission of a notification to the Committee.		
Article /U I	ace period for the tlement of disputes	Grace period for the application of the understanding on Rules and Procedure governing the settlement of disputes.		

### Time and cost to export

Time and cost to export							
Time to	Time to	Cost to					
export:	export:	export:					
Border	Documenta	Border					
compliance	ry	compliance					
(hours)	compliance	(USD)					
12	3	150					
2	2	175					
24	4	280					
36	1	345					
23	2	265					
57	73	402					
26	21	522					
51	11	223					
53	61	254					
48	10	321					
59	78	376					
106	38	413					
64	56	527					
20	8	400					
49	18	959					
64	77	460					
	Time to export: Border compliance (hours)  12 24 36 23 57 26 51 53 48 59 106 64 20	Time to export:  Border compliance (hours)  12					

Note: Regional classification follows the World Bank.

Source: "Doing Business 2017" (World Bank)

# Chapter 3

E-commerce and foreign human resources as a new overseas business model

# What is electronic commerce (e-commerce)?

#### Definition of e-commerce

With growing use of the Internet accompanying the popularization of personal computers and mobile phones, electronic commerce (ecommerce) has gained prominence as a new business model. Although there is no internationally prescribed definitions for e-commerce, the definition by OECD, which is frequently quoted in documents drawn up by the various countries, defines e-commerce as "the sale or purchase of goods or services, conducted over computer networks [...] between enterprises, households, individuals, governments, and other public or private organizations." (Ministry of Economy, Trade and Industry). As long as they are "orders received or placed on any Internet application" (Ministry of Economy, Trade and Industry), such as electronic data interchange (EDI) or the receiving/placing of orders through a corporate website or mobile app, it does not matter which devices are used to conduct the transaction (personal computer, mobile phone, tablet device, gaming device, etc.).

### Of the various formats of e-commerce, B2C is growing by leaps and bounds and attracting much attention

E-commerce can be broadly categorized into six different formats. B2B covers business-to-business transactions that are carried out through electronic data interchange (EDI), corporate webpages, and e-commerce platforms. B2C refers to purchases made by consumers on e-commerce platforms or corporate webpages. Apart from these, there are also C2B and C2C formats in which consumers become suppliers, and G2B and G2C are e-commerce formats in which the government becomes the supplier. Of these, the amount of transactions for B2B and B2C is significantly larger than for the other formats, and the growth rate for B2C surpasses that of B2B. The growth of B2C has a significant impact on overall e-commerce, including sales models and methods of approaching consumers, and is attracting much attention.

### Main formats of e-commerce

	Business-to-Business	Business-to-Consumers	Consumer-to-Consumer	Consumer-to-Business	Government-to-Business	Government-to-Consumer
	(B2B)	(B2C)	(C2C)	(C2B)	(G2B)	(G2C)
	Trading of goods and	Trading that involves sales	Trading of goods and	Trading that involves	Trading that involves	Trading that involves
Format	services that is carried out	of goods and services from	services that is carried out	provision of services from	provision of services from	provision of services from
Format	between businesses	businesses to consumers	between consumers	individuals to businesses	government to businesses	government to consumers
	• Receiving orders for	· Sale of health	<ul> <li>Sale of used clothing on</li> </ul>	· Making a request for the	<ul> <li>Corporate registration,</li> </ul>	<ul> <li>Submission of final</li> </ul>
	industrial machinery	supplements posed on the	a personal blog	company's Japanese	payment of taxes, etc.	returns, passport/visa
	through the company's	company's website	<ul> <li>Sale of bicycle that an</li> </ul>	documents to be translated	online	applications, etc. online
Example	website	· Sales of toys put up for	individual no longer uses on	to English, through a	<ul> <li>Digitization of</li> </ul>	
	·Receiving and placing	sale by the company on an	an auction site	website for freelancers	customers clearance	
	orders using EDI with	e-commerce platform			procedures	
	suppliers and customers					

Source: "Economic growth in the APEC through e-commerce" (APEC Business Advisory Council, November 2015)

# B2C markets in major countries/regions

### Developing markets where rapid growth is anticipated

UNCTAD estimates e-commerce transactions in the B2C sector worldwide was approximately \$2.9 trillion in 2015. China is considered to have already overtaken the US to become the world's largest market. The average annual growth rate for India is estimated to grow at a pace surpassing China, reaching almost 40% from 2016 to 2020. In the related indicators to the e-commerce business environment that influence the expansion of the e-commerce market, advanced economies surpass developing economies. However, there are also developing economies that are putting nationwide effort into improving the e-commerce environment. If they are successful in developing these environments in the future, the amount of transactions for these countries are expected to draw closer to that of the advanced economies.

### Sales value of B2C e-commerce in major countries, e-commerce index, and market share

(million dollar, %

	Sales Value of B2C e-commerce					E-commerce related indexes			\finnon donat, 70						
	2010	2016	2020 (estimate)	Growth Rate (2015→ 2016)	CAGR(2016 →2020)	UNCTAD E-Commerce Index (2016)	% of Individuals using the Internet (2015)	% of Individuals having a credit card (2014)	Logistics Index Performance (2016)	1st	Market Share of major companies (2016)  1st 2nd		16) 3rd	3rd	
China	12,216	366,078	650,210	33.5	15.4	49.1	50.3	15.8	3.66	Alibaba Group Holding	43.5	JD.com	20.2	Sunning Commerce Group	3.1
US	133,557	312,064	533,514	12.8	14.3	82.6	74.5	60.1	3.99	Amazon	33.0	Wal-Mart Stores	7.8	eBay	7.4
UK	32,107	73,456	106,720	13.9	9.8	83.7	92.0	61.7	4.07	Amazon	26.5	eBay	10.1	Tesco	6.6
Japan	35,003	72,577	104,400	8.5	9.5	86.1	91.1	66.1	3.97	Amazon	20.2	Rakuten	20.1	Softbank (Yahoo!Shopping)	8.9
Germany	18,391	44,094	70,068	12.0	12.3	78.0	87.6	45.8	4.23	Amazon	40.8	eBay	15.0	Otto	11.2
France	16,913	35,769	51,205	10.5	9.4	76.2	84.7	44.1	3.90	Amazon	10.7	Casino Guichard- Perrachon(Cdiscount)	9.9	E Leclerc	7.5
India	1,226	21,648	81,633	90.6	39.4	34.0	26.0	4.2	3.42	Flipkart	39.5	Jasper Infortech (Snapdeal)	30.2	Amazon	12.1
Russia	2,879	11,494	20,096	21.1	15.0	57.6	70.1	21.0		Maksus (Svyaznoy)	4.6	Wildberries	4.3	Ulmart	3.6
Brazil	4,114	10,369	16,481	8.0	12.3	56.2	59.1	32.0	3.09	Rojas Americanas (Americanas.com)	18.7	MercadoLibre	17.6	Casino Guichard- Perrachon(Pontofrio)	15.5
Mexico	610	4,563	11,505	33.7	26.0	49.1	57.4	17.8	3.11	MercadoLibre	9.5	Rocket Internet (Linio)	5.8	Amazon	5.5
Argentina	413	4,505	15,321	55.5	35.8	51.9	69.4	26.6		MercadoLibre	38.6	Cencosud (Jumbo)		Garbarino	2.9
Indonesia	293	2,652	5,417	35.0	19.5	33.0	22.0	1.6	2.98	Rocket Internet (Zalora)	21.6	XL Axiata (Elevenia)	9.2	Alibba Group Holding (Lazada)	4.4
Thailand	552	1,505	2,488	11.2	13.4	47.2	39.3	5.7	3.26	Charoen Pokphand Group (Wemall.com)		Rocket Internet (Zalora)	14.9	Amazon	7.7
South Africa	211	543	1,174	23.2	21.3	50.3	51.9	13.5	3.78	Tiger Global Management (Take a Lot)		Apple	5.5	Pick 'n' Pay Stores	5.1
Nigeria	10	195	689	14.1	37.2	30.4	47.4	2.8	2.63	Jumia	50.9	Konga.com	23.6	DealDey	5.3

Note: 1. The sales value is an estimate by Euromonitor International. The values are the sales of consumer goods to the general public via the Internet (excluding sales of motor vehicles, motorcycles and vehicle parts) through any electronic device. Sales of delivery services, such as those of foods and household goods, and pickup at stores where the payment is made in the store are excluded. 2. The UNCTAD BZC E-commerce Index is set by UNCTAD between 0 and 100 based upon the share of individuals using the Internet (ITU), secure Internet servers per 1 million people (World Bank), the share of individuals with credit card (World Bank), and Postal Reliability Score (Universal Postal Union). 3. Logistics Performance Index is set between 1 to 5 by World Ban based upon six criteria, including customs performance, infrastructure quality, timeliness of shipments, etc. 4. The names in parentheses are major e-commerce platforms or online shopping sites of the respective companies.

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# Trends for leading companies around the world

### Amazon continues with global business expansion

US company Amazon has expanded its business to 11 countries worldwide. It is the world's largest e-commerce, with users even from outside the operating countries. In addition to expanding the company's internal distribution network, it is also working on expanding itse-commerce business by introducing, on a pilot basis, delivery using drones. Offline, it is also introducing and acquiring new businesses and has a great impact on the retail sector. It is continuing with efforts to expand the business, including the acquisition of the largest e-commerce platform in the Middle East, Souq.com, expanding its business in India, and formulating plans to enter the Southeast Asian market.

### ■ Alibaba Group, which contributes to the growth of China's e-commerce market

China's largest e-commerce company, Alibaba group, commands 43.5% of China's e-commerce market. It has contributed to the growth of e-commerce in China, including the introduction of an independent payment system "Alipay" and developing a distribution network. Outside of China, it has invested in various companies, mainly in Southeast Asia, and is expected to continue expanding its business going forward.

### ■ Spotlight on restructuring of the Middle East e-commerce market

In the Middle East, the acquisition of Souq.com by Amazon was announced. Competition is becoming increasingly intense in this region with the rise of new businesses such as the e-commerce platform "Noon.com," whose establishment was announced in October 2016. The entry of Amazon into the market has come under the spotlight as watchers observe what changes it will bring to the e-commerce market in the Middle East.

Apart from these, major corporations also have a significant market share in the respective markets in India, Central and South America, and Africa. They are keeping up with their efforts to expand their businesses, such as by developing independent payment methods and distribution networks.

### Trends for leading e-commerce companies

	Trends for reading e-commerce companies									
Region	Company	Nationality	Year establishe	Sales (2016, Million	Recent major trends					
	name		d	dollars)	,					
	Amazon. com	US	1994	123,768	*World's largest e-commerce company that has a presence in 11 countries. The platforms are also used by many customers from outside of the operating countries.  *In addition to initiatives such as the pilot introduction of new distribution methods and independent payment systems, it has also developed various businesses in its offline retail business, including Amazon Fresh and Amazon Go.  *Currently, it is making moves to expand its business interests not only in advanced economies that it has already broken into, but also in India, M iddle East, and Southeast Asia.					
	Mercado Libre	Argentina	1999	844	<ul> <li>Largest e-commerce company in the Central and South American region that sells to 18 countries mainly in the same region, including Argentina, Brazil, and Chile.</li> <li>The company introduced MercadoPago, a payment system that accepts credit card payments, cash payments at affiliate stores, and charging using cash to meet various payment needs.</li> <li>In addition to B2C, it also engages in C2C business and helps to develop an environment where individuals are able to facilitate sales.</li> </ul>					
	Alibaba Group Holding	China	1999	19,450	•Largest e-commerce corporation in China that makes up 43.5% of the country's e-commerce market.  •Has developed China's e-commerce environment through means such as introduction of an independent payment system "Alipay" and the building of distribution networks.  •In particular, it has successively invested in e-commerce in Southeast Asia as well as in payment businesses, and strengthened its presence in the same region.					
	Flipkart	India	2007	n.a.	•Largest company that makes up 39.5% of India's e-commerce market. •There are talks of acquiring Snapdeal, which has struggled with increasing sales in re-commerceent years. If realized, it would make Flipkart a massive corporation that accounts for more than 60% of the e-commerce market.					
/Africa	Souq.com	UAE	2005	n.a.	<ul> <li>Largest e-commerce company in the Middle East region and also sells to North Africa.</li> <li>Taking the opportunity of the growth of Internet use in the same region, it became the first unlisted venture corporation in the Middle East to attain an appraised valuation exceeding \$1 billion.</li> <li>Announced in March 2017 that it would be acquired by Amazon.</li> </ul>					
Middle East/Africa	Jumia	Nigeria	2012		*Leading e-commerce corporation that was the first unlisted venture corporation in Africa to attain an appraised valuation exceeding \$1 billion. Many European and American companies have also invested in it.  *In addition to developing an independent distribution network, it has continued to grow while responding to the infrastructural conditions in Africa, such as developing systems that accept cash on delivery.  *Apart from e-commerce, it also conducts business in a wide range of fields using the Internet, such as food delivery, real estate, and recruitment websites.					

Note: 1) Flipkart, Souq.com, and Jumia are unlisted corporations.

Source: Reports from JETRO's overseas offices, websites of the respective corporations, press reports, etc.

Sales for Jumia are based on the annual report of its parent company, Rocket Internet (84 million Euros).
 Based on "IFS 14 July 2017 edition" (IMF), with exchange rate of \$1 = 0.9 Euros.

### Regulations related to e-commerce

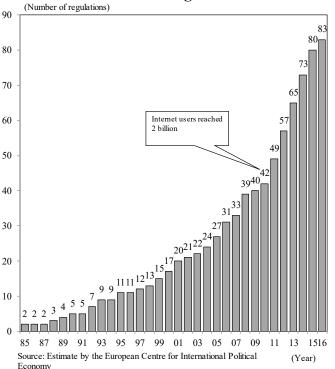
### ■ Increase in related regulations along with the popularization of the Internet

As the e-commerce market expands worldwide, it has been pointed out that in some countries, (1) There are complex regulations, or regulations lacking in transparency, which may become a barrier to business; (2) The systems to support e-commerce are inadequate. With regard to (1), under existing laws in Vietnam for example, providers, etc. are obligated to set up servers in the country. There are similar regulations in Indonesia and Russia. In India, foreign investment regulations imposed on retailers may form a bottleneck during the expansion of e-commerce. Furthermore, inadequacies in prompt customs clearance systems and electronic payment procedures correspond to the problem raised in (2).

### Corporations perceive data localization as a problem

A regulation that corporations view as being particularly problematic is "data localization," which requires corporations tostore data, or the servers containing the stored data, within the home country. The number of data-related regulations that encompass data localization has continued to increase alongside with the rise in the number of Internet users, particularly since the later half of the 2000s. Such demands or regulations imposed by the government could damage e-commerce's advantage, which lies in the ability to expand sales channels while remaining based in the home country.

### Number of data related regulations in the world



### E-commerce regulations in major countries

Regulations	Country/ Region	Basis law	Outline	Impact on businesses
Data localization	Vietnam	Decree 72 of 2013	Demanding companies in the information service industry such as content providers to set up more than one server within the country.	For companies providing cloud computing services, the demand to set up the relevant facilities and data storage within the country is a factor that can inhibit the optimum placement of facilities. For users of such services as well, when expanding business overseas
	Russia	Federal Law No. 242-FZ	Regulating companies which collect personal information to set up servers which store the data of consumers within the country.	in cooperation with international service providers, the mandatory use of domestic servers in the countries that they have business interests in may impose unnecessary costs on them.
Restrictions on foreign investment	India	FDI policy	Foreign-affiliated retailers which deal in a single brand are allowed to operate under 100% foreign investment when 30% of their procurement comes from within the country. While prohibiting those which deal in multiple brands from conducting e-commerce, it is permitted for companies producing products within the country to sell products through Internet.	Although the system allows single brands to receive 100% foreign capital investments, automatic approval is restricted up to 49% of the foreign capital investment; for investments above this level, approval from the government is required. In actual fact, entry into the market is difficult, and local companies have a significant share.
	China	Foreign Investment Industrial Guidance Catalogue	Requiring companies to obtain an operating license for value-added telegraph services in order to provide Internet service to third parties through their own platforms.	In addition to the fact that the telecommunications industry itself is a restricted industry, companies have to meet a high level of demands when they apply for business licenses.
Personal information protection	EU	General Data Protection Regulation (enforced in May 2018)	Making companies to appropriately process personal data within the European Economic Area, and prohibiting them from transferring the data outside the area in principle.	It is unclear at which point an act is deemed as the "processing" and "transfer" of personal data; if deemed to be such an act, it would be subjected to expensive penalties.
Opaque or complex regulations	China	Cybersecurity Law (enforced in June 2017)	Mandating companies to undergo a screening process when collecting customer data from within the country that is either stored domestically or transferred overseas.	The definitions of terminology are ambiguous and largely dependent on the discretion of the government. As China manages its own data independently, this could lead to a rise in costs.

Source: Servey reports of JETRO and materials from respective governments

### Points of contention in multilateral negotiations on e-commerce

### ■ WTO continues practice of non-imposition of customs tariffs

There are several organizations attempting to formulate e-commerce rules, and the representative organization is WTO. Discussions on e-commerce began with the "Ministerial Declaration on Global Electronic Commerce" issued in 1998. The main points of contention were the problem of classification of "digital content" that are subjected to regulation, and making the non-imposition of customs tariffs on electronic transmissions a permanent measure. However, with the exception of maintaining the practice of non-imposition of customs tariffs, the absence of established rules on e-commerce was a situation that lasted.

In July 2016, in light of the growing momentum toward the establishment of rules accompanying the recent growth of the e-commerce market, discussions toward the formulation of international rules began at the special session on e-commerce. With the aim of achieving results at the 11th Ministerial Conference to be held at the end of 2017, more than 20 members to date have submitted their draft proposals for negotiations.

Even for organizations other than WTO, active discussions are ongoing with the aim of improving the business environment. For example, APEC has picked up on the issue of digital trade as a future trade and investment issue, and is working to secure the free cross-border movement of data.

### Issues on e-commerce discussed in WTO

0	Issues	1) Treatment of digital content	2) Custom duties on electronic transmissions	3) Cooperation with developing countries
		How to classify value generated by transactions of digital content.	Not imposing tariffs on digital transfer in terms of technological aspects and securement of the environment for free trade through e- commerce.	Developing countries are concerned about reduction of tax income in accordance with the development of e-commerce.
Discussions	in	GATT is applied for trade in goods, GATS for services and TRIPS for intellectual property rights. However, there is no unified rule because discussions on this topic have divided by each Council.	While the policy of the "Moratorium on Customs Duties" has been maintained since the ministerial declaration in 1998, it is a temporary measure. When the moratorium period is finished, imposing tariff will be possible.	In order to gain an understandings of developing countries, it is necessary to study both positive and negative aspects of the promotion of e- commerce which might adversely affect national revenues.
Solutions	by FTAs	Defining digital content in express terms.	Permanently ensuring that customs duties will not be imposed on digital transfers.	Setting forth provisions regarding cooperation, including for sharing related information.

Source: Reports and papers of WTO and E15

### Initiatives toward the establishment of international rules for e-commerce

Period		Initiative
1997	Nov	"A Vision for the 21st Century" makes reference to the potential of e-
		commerce (APEC)
1998	May	Ministers' declaration on global e-commerce. Here, the moratorium on
		customs duties was decided on.
	Sep	"Work Plan for E-commerce" adopted
	Oct	Conditions for e-commerce taxation framework, OECD Action Plan
		for Electronic Commerce (OECD)
	Nov	APEC Blueprint for Action on Electronic Commerce (APEC)
1999	Feb	Review Report to the WTO General Council
	Jun	Establishment of e-commerce management group by senior officials
		(APEC)
	Dec	Guidelines for Consumer Protection in the Context of Electronic
		Commerce (OECD)
2004	Jul	Extension of moratorium on customs duties at the General Council (1)
2005	Dec	Extension of moratorium on customs duties at the Ministerial
		Conference (2)
2007	Sep	Publication of the model chapter on e-commerce in FTA (APEC)
2009	Dec	Extension of moratorium on customs duties at the Ministerial
		Conference (3)
2011	Dec	Extension of moratorium on customs duties at the Ministerial
		Conference (4)
2013	Jun	Start of negotiations on new Trade in Services Agreement (TISA).
		Plans to draw up provisions for e-commerce in the Annex.
	Dec	Extension of moratorium on customs duties at the Ministerial
		Conference (5)
2015	May	Agreement on G7 Principles and Actions on Cyber (G7)
	Nov	Work Plan for Advancing Facilitating Digital Trade for Inclusive
		Growth (APEC)
	Dec	Extension of moratorium on customs duties at the Ministerial
		Conference (6) (-Dec 2017)
2016	Jul	Launch of discussions at the special session on e-commerce
	Sep	Affirmation of the importance of "free flow of information" (G20)
	Nov	Agreement on 'Next Steps for Advancing Work on Digital Trade in
		2017" (APEC)
2017	Apr	First meeting of the Digital Ministers (G20)
	May	Confirmation of progress on roadmap for promoting digital economy at
		the meeting of trade ministers (APEC)

Notes: 1) Initiatives concerning personal information have not been included. 2) Shaded cells show items related to WTO.

Source: Materials from WTO, OECD, APEC.

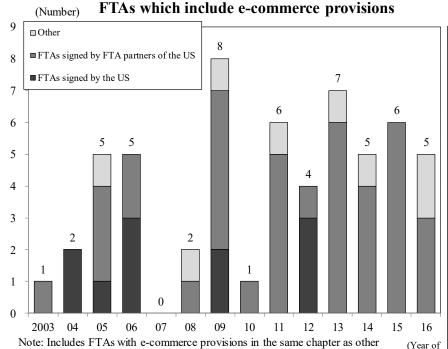
# E-commerce provisions in FTAs

### **Expansion in US-style e-commerce rules**

Alongside with efforts by international organizations, the number of e-commerce provisions in FTAs has also been on the rise after the 2000s. The objective of the e-commerce chapter in FTAs is to reduce unnecessary barriers, improving consumer credibility, and sharing information on regulations and policies. FTAs also have the aspect of coming up with a certain conclusion on the point of contention that were problematic in WTO, such as making the practice of non-imposition of customs tariffs permanent. Many of the FTAs that contain an e-commerce chapter, numbering about 60, are agreements with the US or within its FTA partners' countries, and it is clear that US-style e-commerce chapters have become increasingly widespread. On the other hand, FTAs of the EU reflect the position that digital contents should be regulated by service rules, and there are few agreements with an independent e-commerce chapter.

### ■ New rules that TPP incorporates

Even among the FTAs that have an e-commerce chapter, the TPP is currently rated as having the most comprehensive provisions. In addition to the conventional major provisions, the TPP includes new rules on cross-border information transfer through electronic means, prohibition on requests to set up computer-related facilities in the country, and prohibition on requests to disclose the source code of software. Amidst the growing importance of e-commerce, the global spread of such high-level regulations carries great significance.



### Provisions on e-commerce by FTA

Provisions  Definitions of "Digital products" ("Electronic commerce" in case of CETA)	APEC model chapter for electric commerce (Released in Sep 2007)  (Suggests to set out the definitions applicable to the chapter on electronic commerce.)	Pacific A Iliance (Entry into force in May 2016) Product that is digitally encoded. Digitised representation of financial instrument not included.	TPP (Signed in Feb 2016) Product that is digitally encoded, produced for commercial sale or distribution, and that can be transmitted electronically. Digitised representation of financial instrument not included.	CETA (Signed in Oct 2016)  Commerce conducted through telecommunications, alone or in conjunction with other information and communication technologies.
Not imposing custom duties on electronic transmissions	~	~	~	~
Non-discriminatory treatment on digital products	V	×	~	×
Domestic electronic transactions framework	Mandating companies to maintain domestic rules in line with international standards.	Stipulating avoidance of regulations without specific obligation.	Mandating companies to maintain domestic rules in line with international standards.	No speficic obligation imposed.
Online consumer protection	<b>V</b>	V	V	V
Personal information protection	V	~	~	~
Electronic authentication and electronic signatures	V	V	V	V
Paperless trading	<b>V</b>	<b>V</b>	V	×
Cross-border transfer of information, including personal information	×	× (Future negotiations considered)	V	×
No requirement on location of computing facilities	×	×	~	×
No requirement on transfer of, or access to source code	×	×	~	×
Cooperation	V	V	V	V

Source: Ministry of Economy, Trade and Industry, and respective FTAs

fields, and provisions under Annexes. Source: Based on the respective FTA articles

# e-commerce utilization by Japanese corporations

### Japanese corporations planning to start sales in the ASEAN market

According to surveys conducted by JETRO, 24.4% of the Japanese corporations surveyed have had experience using e-commerce, and approximately half of this percentage (47.2%) carry out sales overseas through e-commerce. Many of the sales destinations of these corporations are currently countries in Northeast Asia and those in the West, but many corporations indicated that ASEAN countries are potential sales destinations for the future.

### Expanding sales channels through the use of e-commerce

Looking at the examples of e-commerce utilization by Japanese corporations, we see that it has become possible to approach different customers than was conventionally possible. Company A, which produces "Go-" stones (chess pieces) from hard clam shells (Miyazaki Prefecture), uses e-commerce to sell its products to countries/regions where it does not have any sales agents. It is putting effort into improving brand awareness, such as by creating a webpage to introduce the company and its technique, and increasing the number of its fans worldwide. Company C, a housing equipment manufacturer (Osaka), has received business inquiries from leading US chains through an e-commerce platform in the US and experienced a sales promotion effect that had not been possible in the past. Going forward, it will continue to expand its use of e-commerce.

### Sales destinations of Japanese corporations through ecommerce

(Unit:%)

Parameter Rank	(1) Current s destinatio (n=345)	n	(2) Corporat aiming to expa commerce so (n=247)	ınd e- ales	(3) Corporations considering to start e- commece sales (n=673)		
1	China	49.6	China	44.1	China	45.8	
2	US	36.2	US	27.9	Taiwan	31.5	
3	Taiwan	26.4	Thailand	26.3	US	30.0	
4	Hong Kong	22.6	Hong Kong	23.5	Hong Kong	28.1	
5	Korea	19.4	Taiwan	22.7	Thailand	26.9	
6	Singapore	18.8	Vietnam	22.3	Singapore	26.3	
7	Thailand	15.1	Malaysia	22.3	Vietnam	24.2	
8	UK	14.2	Singapore	21.1	Malaysia	18.9	
9	Canada	11.0	Indonesia	20.6	Indonesia	18.3	
10	Germany	10.7	Korea	15.8	Korea	18.0	

Note: 1) Parameters are: (1) Corporations using e-commerce to carry out sales overseas; (2) Corporations using e-commerce to carry out sales overseas and planning to expand their e-commerce business in future; (3) Corporations that are not using e-commerce now, but considering the use of e-commerce in future." Multiple answers.

2) Shaded cells show data for ASEAN countries.

Source: "FY2016 Survey on International Operations of Japanese Firms" (JETRO)

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### **Examples of e-commerce utilization by Japanese** cornorations

Corporation	Overview	Issues
Company A (Miyazaki P	refecture) / Production and sale of "Go" stones (chess pieces)	
B2C Cross-border Sales countries/regions: Europe and US, Northeast Asia, Southeast Asia, etc. Company B (Niigata Pre B2B Cross-border Sales countries/regions:	"The company makes sales through its own online shopping site to customers in the countries and regions where it has no partner distributor. The company has also created a designated web page to introduce the culture of the "Go" game as well as the company's sophisticated techniques to make "Go"-stones to increase the brand awareness.  *Payments are accepted through credit card and PayPal. Ordered items are sent to customers after payment is received and confirmed.  *Apan Post's EMS system is used for deliveries. Delivery time is short, and tracking and swiff response is possible even when problems occur.  *Tecture*    Production and sale of metal products*   For sales through the company's own website, orders are received after payment via a deposit or PayPal is recieved and confirmed.  *Sales are also carried out through B2B platforms specialized for materials. Sales conducted through	Brand awareness     Distribution (deliveries in other countries)     Multilingual compatibility      Inventory control     Multilingual compatibility
Northeast Asia, Southeast Asia, Europe	these platforms exceed sales on the company's own site.	*
Company C (Osaka) / Pr	oduction and sale of housing equipment	
B2C, B2B Cross-border Sales countries/regions: Northeast Asia, North America, Europe	• In China, e-commerce sales are conducted through trading companies. In Taiwan and the US, it puts products up for sale under the company's name on local e-commerce platforms. • As payments are settled in advance, no problem has ever occurred so far. As products that are in stock are put up for sale, there is no major problem with inventory control. • In the US, It was approached by a major local chain store through the e-commerce platform. This made the company realize the potential of e-commerce as an alternative way to expand into a new market	• Infrastructure (loca distribution, Internet environment, etc.)
Company D (Tokyo) / Foo		
B2C Local Sales countries/regions: China, US	•În both China and the US, it sells its products by opening stores on major local e-commerce platforms. •Sales in the US commenced four to five years ago. Through the utilization of a leading distribution network, it reached the top 20 in its product category about two years ago, and sales have been on the rise since then.	• Distribution (Inventory control, customs clearance) • Labor shortage
Company E (Hokkaido) /		
B2C Cross-border Sales countries/regions: Russia CIS	The company sells healthy food products and processed foods made in Japan that are popular in the country through the company's own web page in Russian. In addition to all of Russia, it also receives orders from the neighboring Russian-speaking countries.  'Credit card payments make up 90% of all payments. EMS is used for deliveries. While there are delays in the sales destination country from time to time, the packages can be tracked, and non-deliveries have not occurred to date.  **Panies engaged in sales through cross-border e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" refers to companies engaged in sales using e-commerce from Japan. "Local" r	<ul> <li>Brand awareness</li> <li>Internet security</li> <li>Distribution</li> <li>(deliveries in other countries)</li> </ul>

### Challenges in e-commerce utilization for overseas sales

### Issues with product delivery and payment systems

According to surveys by JETRO, there were many corporations that face problems with product delivery and reliability of payment systems when conducting overseas sales using e-commerce. In interviews with e-commerce utilizing corporations conducted by JETRO, there were corporations that had concerns about payment systems, as well as corporations facing problems with brand awareness, customs clearance, and delivery in the sales destination country.

### ■ Responses to the challenges influence the growth of the business

With regard to payment, payment via credit card or cash on delivery are the mainstream methods in many countries/regions. However, in developing economies where such infrastructure has not yet been developed, the development of a substitute payment system can influence the growth of the business. With regard to delivery, in addition to the availability of high-quality logistics companies, factors such as the efficiency of the customs authorities pose problems in delivering products from the e-commerce business operator to the consumer. Around the world, there are companies such as Safaricom (Kenya) and Alibaba Group (China), that have developed payment methods using mobile phones to tackle such issues in e-commerce utilization. In the aspect of distribution, Jumia (Nigeria) has built an independent distribution network that uses motorcycles to provide delivery services, while Amazon (US) has launched a pilot delivery service using drones. As for country policies, there are initiatives aimed at expanding the utilization of e-commerce. For example, Vietnam has moved to revise existing domestic laws imposing requirements on server locations, while the US and the Philippines have raised the amount of de minimis to increase goods that are exempt from customs tariffs.

### Challenges faced by Japanese corporations in using e-commerce for overseas sales

(Multiple answers %

010130	(Multiple answers, %)											
Para- meter Rank	Overall $((1)+(2)+(3))$ (n=1,404)		(1) Have used before, and will further expand usage in the future/maintain current usage levels (n=697)		(2) Have used before, by reduce usage in the fu (n = 34)		(3) Have not used before, but will consider using in the future (n=673)					
1	delivery (damage,	36.2	High delivery cost	37.4	High delivery cost 35.3		systems	42.1				
2	Reliability of payment systems	34.8	delivery (damage,	36.3	Complexity of customs clearance procedures	35.3	delivery (damage,	36.3				
3	High delivery cost	33.5	Necessity of using foreign languages	28.7	Difficulty in increasing the firm's brand awareness	35.3	Necessity of using foreign languages	32.5				
4	Necessity of using foreign languages	30.5	Reliability of payment systems	28.0	delivery (damage,	32.4	Lack of information on systems and regulations	32.2				
5	Lack of information on systems and regulations	29.1	Shortage of required personnel	27.5	Reliability of payment systems	29.4	Shortage of required personnel	30.5				
6	Shortage of required personnel	28.8	Lack of information on systems and regulations	26.4	Unclear tariff payment standards	29.4	Complexity of customs clearance procedures	29.9				
7	Complexity of customs clearance procedures	28.1	Complexity of customs clearance procedures	26.0	Necessity of using foreign languages	26.5	High delivery cost	29.4				
8	Difficulty in increasing the firm's brand awareness	22.7	Difficulty in increasing the firm's brand awareness	23.8	Lack of information on systems and regulations	23.5	Unclear tariff payment standards	21.4				
9	Unclear tariff payment standards	21.1	Unclear tariff payment standards	20.4	Shortage of required personnel	20.6	Difficulty in increasing the firm's brand awareness	21.0				
10	Undeveloped relevant legal systems and lack of	16.5	Undeveloped relevant legal systems and lack of	16.5	Limited payment methods	17.6	Concerns for information leakage	17.4				

#### Main issues in e-commerce flow

	Issues
Sales (Approaching consumers)	Internal factors: Brand awareness, procuring of necessary funds, securing human resources, etc. External factors: Infrastructural development for Internet, various regulations for mandatory server placement, etc., shutdown of Internet due to political instability, etc.
	•

Payment
(Receiving payments)

Costs/risks of cash on delivery, risk of incurring damages from fraudulent credit card payments, existence of alternative payment methods

Inventory control system that can deal with large volumes of small-lot deliveries, availability of high-quality distribution companies, delivery costs, and the efficiency of customs clearance at the export destination,

# Examples of countermeasures toward e-commerce utilization issues

Major e-commerce issues, and examples of countermeasures										
	Issues		Country/Corporation	Examples of countermeasures						
Sales	External factors (Data regulations)	$\Rightarrow$	Vietnam	With the signing of the TPP, Vietnam is moving toward the revision of existing domestic laws that impose mandatory server placement requirements.						
	Cash on delivery		Safaricom (SMS payment)	M-Pesa, which commenced its service in 2007 in Kenya, is a payment method that utilizes short messaging services (SMS) sent through mobile phones. Under the system, payments are added to the mobile phone bills. This SMS payment service generates the largest amount of transactions in the world for payments through mobile phones, etc.						
Payment	Credit cards		Alibaba Group (mobile payment)	Alipay, which commenced its service in 2004 in China, introduces a payment system that enables payment through the reading of QR codes. In addition to credit cards, it can also link to bank accounts and enables users to add money to their account by cash, bringing changes to payment systems in the country. The Alibaba Group carries out acquisitions and investments in various payment/financial corporations mainly in Southeast Asia and is strengthening its presence in the payment business sector in the region.						
	The availability of high-quality distribution companies		Jumia, Alibaba Group	As a leading e-commerce platform in Africa, Jumia has built its own distribution network using motorcycle delivery services. The Alibaba Group consolidates existing distribution corporations in China and has put effort into improving the efficiency of distribution.						
Logistics	"Last mile" (Diverse customer needs in parcel delivery)		Amazon	Amazon has expanded its scope through same day and next day deliveries and is moving forward on the expansion of its in-house warehouses in various countries. It is exploring faster and more efficient means of delivery, such as through the pilot introduction of delivery using drones.						
	De minimis rule		US, Indonesia, Philippines, etc.	• In March 2016, the US raised de minimis (upper limit of the value of imports that are not subjected to customs tariffs) from \$200 to \$800.  • Similarly, the Philippines raised its de minimis from about \$0.20 in October 2016 to about \$200, while Indonesia raised its from \$50 to \$100 in January 2017.						
	Customs clearance		China	China has enacted a designated zone system for cross-border e-comerce to improve customs clearance efficiency.						

Source: Reports from JETRO's overseas offices, various press reports Copyright (C) 2017 JETRO. All rights reserved.

### Securing human resources is the most serious management issue faced by Japanese corporations

### ■ Increase in number of corporations raising human resources as a issue

When Japanese companies develop overseas business such as by exporting and entering foreign markets, the most serious issue faced by Japanese corporations is that of securing human resources. According to JETRO's surveys, the percentage of companies raising human resources as a issue increased by 14.1 points from FY2013 (41.2%) to FY2016. Japanese corporations rapidly gained heightened awareness of this issue during the same period. The percentage of corporations indicating "securing human resources: as a issue was the largest among all the items listed.

### Advancing decline of working-age population

There has been a marked decline of working age population in Japan, who play a key role in corporate activity. Comparing the working-age population as a percentage of the total population with other major advanced countries, the ratio of Japan's working-age population is declining at a rapid rate. As of 1990, Japan's working-age population had been at the high level of 69.7%; by 2015, it had dropped to 60.8%, already below the levels for the US (66.3%), Germany (65.9%), UK (64.5%), and France (62.4%). Japan's working-age population will continue to decline going forward, and is forecast to hit 51.3% in 2050 with a further widening gap with other major advanced countries.

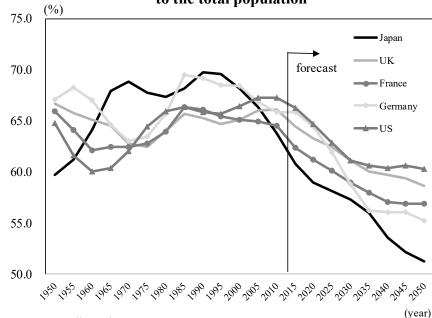
### Issues regarding overseas business

			(%)
	FY2016 (n=2,995)	FY2013 (n=3,471)	Change from FY2013
Personnel responsible for overseas business	55.3	41.2	14.1
Local business partners (alliance partners)	52.1	47.8	4.3
Information on overseas systems (tariff rates, regulations, permissions, etc.)	48.9	40.1	8.8
Information on local markets (consumers' preferences, needs, etc.)	48.6	39.4	9.2
Expansion of local sales networks	45.2	32.5	12.7
Cost competitiveness	38.0	27.0	11.0
Goods for local markets	31.5	21.4	10.1
Awareness of products and brands	30.9	-	-
Raising of necessary funds	18.5	16.2	2.3
Other	2.4	1.1	1.3
Nothing in particular	4.0	3.5	0.5

Note: 1) Percentage to the total number of respondent firms. 2) Multiple answers. 3) The FY2013 survey did not include the choice of "awareness of products and brands."

Source: "Survey on the International Operations of Japanese Firms" (JETRO), various issues

# Ratio of working age population(aged 15-64) to the total population



Notes: Median estimates.

Source: "World Population Prospects: The 2015 Revision" (United Nations)

### Number of foreign nationals working in Japan exceeds the 1 million mark

### Number of engineers and marketing professionals double

Against the backdrop of human resources as a issue, Japanese corporations are expressing a growing interest in employing foreign talents. The number of foreign nationals working in Japan grew by 19.4% year-on-year in 2016 to reach 1,083,769, surpassing the 1 million mark for the first time. Of these, the "Specialized technological field" (about 200,000 people) is the main category for highly skilled personnel supporting the overseas business expansion efforts of Japanese corporations. Within this category, the largest number holds residence status as "engineer" or "specialist in humanities/ international services," at 148,538 in 2016, double the number from 2010 (77,459). By nationality, the greatest contribution comes from China, and within industry, the largest numbers are in the non-manufacturing sectors.

### Number of international students reaches record high for fourth consecutive year

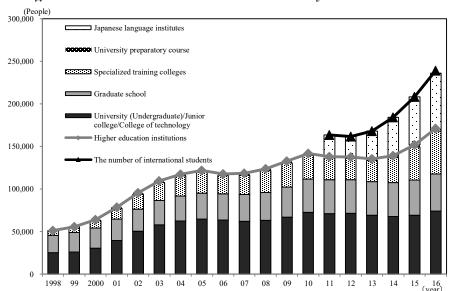
When Japanese corporations recruit foreign employees, they show the greatest interest in international students who are enrolled in educational institutions in Japan. The number of international students reached a new record high for the fourth consecutive year in 2016, at 239,287 students (14.8% increase year-on-year). This rising trend for the number of international students is similarly present even when limiting the numbers only to students at tertiary institutions and excluding those at Japanese language educational institutions, reaching a record high of 171,122 (12.5% increase year-on-year) in 2016. While China remains the country with the largest number of international students in Japan, the number has remained steady at about 80,000. On the other hand, there has been a significant rise in the number of international students from Vietnam and Nepal. The number of Vietnamese students exceeded the number of Korean students for the first time in 2015, putting them in second place after China.

### Trends in foreign workers in Japan by statuses of residence

#### (1,000 persons) 1,200 Specialized technological field Technical Intern Training 1,000 Activities without certification Residence based on status Designated Activities 800 -Total number of foreign workers in Japan 600 400 200 2009 2014 2008 2010 2011 2012 2013 2015 2016

(Year)
Note: 1) Data from the end of every October. 2) Based on the revised Immigration Control and Refugee Recognition Law on July
1, 2010, "Technical Intern Training" is added to the list of statuses of residence separate from "Designated Activities."
Source: Status of reporting on the employment of foreign workers by employers (Ministry of Health, Labour and Welfare)

### Changes in the number of international students by educational institution



Notes: 1) the total number of international students including Japanese language institutes is also drawn since 2011. 2) As of each May 1

3) Higher education institutions include graduate schools, universities (undergraduate schools), junior colleges, technical colleges, specialized training course, and university preparatory courses.

Source: Result of an Annual survey of International Students in Japan 2016 (JASSO)

# Expectations of expansion of sales channels and improvements in external negotiation capabilities through the employment of foreign talents

### ■ Benefits in technological innovation is limited at the current point in time

In JETRO's survey, Japanese corporations that have employed, or are considering employing, foreign employees, were asked about the benefits of utilizing foreign talents. The answers "Expanded sales channels" and "Improved international negotiating ability" received a high percentage of responses at 40.9% and 39.7% respectively. Looking at the benefits by the positions of foreign employees, the largest percentage answered "Expanded sales channels" in cases where foreign talents were employed to a director or management position. On the other hand, response rates for "Contribution to development of new products" and "Improved problem solving ability" which are related to technological innovation, were at a low level. While issues remain in sharing an organizational vision, and in communication among employees, employing foreign employees is of great significance in incorporating diversity into the management of the company. Along with the growing use of foreign talents by Japanese corporations, such areas are expected to become highly appraised.

### Benefits of hiring/employing foreign employees by position

_													(%)
					Ber	nefits of hi	ring/emplo	ying foreig	gn employ	ees			
		No. of firms	Financial effects (sales, business performa nce, etc.)	Expanded sales channels	Contri- bution to develop- ment of new products	Strategic prepara -tion for localization of manage -ment	Improved language ability	Increased motivation among Japanese employees	Improved problem- solving ability	Improved inter- national negotiating ability	Lowering psycholo- gical barriers among Japanese employees in communi -cation with foreign nationals	Other	No answer
	Total	1,887	13.5	40.9	11.7	28.6	31.6	13.9	9.2	39.7	27.9	6.1	4.6
	Directors	120	20.0	43.3	15.8	29.2	30.0	12.5	14.2	39.2	30.8	10.8	7.5
employees	Management at division/depart- ment manager level	270	22.6	50.7	20.4	38.5	33.0	15.6	14.1	49.6	31.9	6.7	3.3
	Engineers	357	12.9	30.5	18.5	36.1	28.6	16.0	9.5	35.6	30.5	10.6	2.2
s of foreign	General administrative staff	755	13.1	37.7	10.3	28.3	35.4	13.4	9.3	44.5	29.0	4.1	2.5
Positions	General plant staff	378	16.4	24.6	7.9	29.1	25.1	15.1	7.7	28.0	27.5	14.8	4.8
Pos	Not currently hiring foreign employees but considering it in the future	637	11.9	56.7	13.0	30.5	33.1	15.2	8.8	42.2	27.5	2.4	6.1

### Issues in hiring/employing foreign employees

Total **SMEs** Large-scale (n=3,005)firms (n=638) (n=2,367)Difficult to share the organizational vision 20.1 21.8 19.7 Frequent troubles in communication with 19.0 17.1 19.5 Japanese employees Don't know how to treat foreigners or 18.2 13.9 19.4 manage personnel affairs The turnover rate is high because many foreigners wish to return home or change their 16.9 21.2 15.7 iobs in the future Their Japanese ability has not reached the 16.4 13.5 17.2 required level Difficult to deal with application for permission for living in Japan, such as acquisition of a 15.4 9.7 16.9 working visa Financial effects (on sales, performance, etc.) 15.3 14.6 15.5 are unknown Don't know how to recruit foreigners 9.3 3.1 10.9 5.3 8.9 4.4 No (or few) applications for recruitment Other

Note: 1) Percentage to the total number of respondent firms. 2) Multiple answers. Source: "FY2015 Survey on the International Operations of Japanese Firms" (JETRO)

Note: 1) Percentage to the total number of firms answering "currently hiring foreign employees" or "expecting to consider recruitment of them". 2) Multiple

answers.

Source: "FY2014 Survey on the International Operations of Japanese Firms" (JETRO)