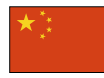




Trilateral Cooperation Secretariat

2019

Trilateral Statistics



Download the data in excel here

2019
Trilateral Statistics

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The People's Republic of China, Japan and the Republic of Korea(ROK) have played an increasingly important role in driving global growth. This can be seen in the fact that the combined GDP and total motor vehicle production of the three countries account for 24% and 50% of the world total, respectively. To promote a better understanding of the dynamics of this vibrant region and illustrate its contributions in the world, the 2019 Trilateral Statistics presents visualization of key statistical data based on the latest figures acquired from international organizations.

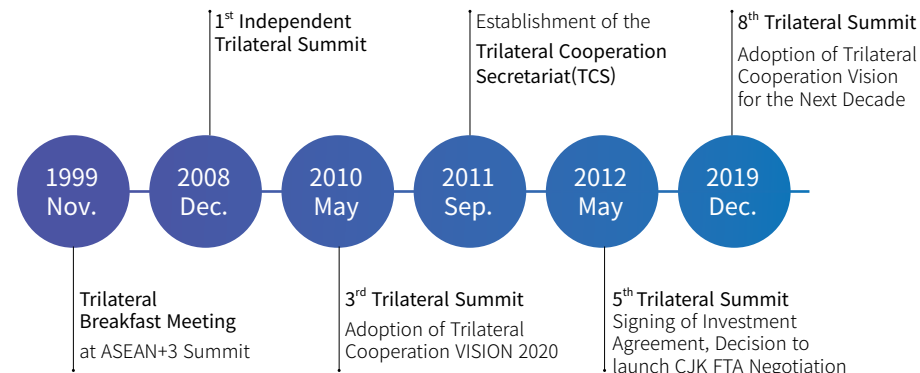
With new technologies and industries, it is expected that the international community will face profound changes in the future. Strengthening communication channels among the three countries and responding collectively to the common challenges would be very meaningful for the stability and prosperity of Northeast Asia. I hope that this booklet can be a useful source to know where China, Japan and the ROK stand today and gain insights into the future potentials of trilateral cooperation.

March 2020

道 上 尚 史

MICHIGAMI Hisashi

Secretary-General
Trilateral Cooperation Secretariat



The Trilateral Cooperation among the People's Republic of China, Japan, and the Republic of Korea(ROK) was officially initiated in 1999 by holding a breakfast meeting on the sideline of the ASEAN+3 Summit in Manila. There have been independent Summits among the three countries since 2008 and cooperation has made a gradual and continuous progress. Over the past 20 years, trilateral cooperation developed into 21 Ministerial Meetings, more than 70 inter-governmental dialogue mechanisms and over 100 cooperative projects at various level.

About Trilateral Cooperation Secretariat(TCS)

The Trilateral Cooperation Secretariat(TCS) is an international organization established with a vision to promote peace and common prosperity among the People's Republic of China, Japan and the ROK, hereinafter referred to as CJK. Upon the agreement signed and ratified by each of the three governments, the TCS was officially inaugurated in Seoul, September 2011. We aim to serve as a hub for trilateral cooperation that encompasses the broad spectrum of sectors and actors. With a view to solidifying the cooperative ties among the three countries, the TCS will strive to ensure that trilateral cooperation remains dynamic and future-oriented in the coming days.

Abbreviations and Symbols

ADB-ARIC Asian Development Bank | Asia Regional Integration Center
APEC Asia-Pacific Economic Cooperation
ASEAN Association of South-East Asian Nations
ASEAN+3 Association of Southeast Asian Nations, China, Japan and ROK
bcm Billion cubic meters of natural gas
BIS Bank for International Settlements
CIS Commonwealth of Independent States, including associate and former member states
CJK China-Japan-ROK
CNY Chinese Yuan
CRED-EM-DAT Emergency Events Database | Centre for Research on the Epidemiology of Disasters
EU European Union
FDI Foreign Direct Investment
GDP Gross Domestic Product
GT Gross Tonnage
ICAO International Civil Aviation Organization
IMF-DOTS International Monetary Fund | Direction of Trade Statistics
JPY Japanese Yen
KRW Korean Won
LCU Local Currency Unit
MERCOSUR Southern Common Market
Mt Million Tonnes
Mtoe Millions of Tonnes of Oil Equivalent
NAFTA North American Free Trade Agreement
OECD Organisation for Economic Co-operation and Development
OICA International Organization of Motor Vehicle Manufacturers
P.R. China People's Republic of China
ROK Republic of Korea
SAARC South Asian Association for Regional Cooperation
TCS Trilateral Cooperation Secretariat
TEU Twenty-foot Equivalent Unit
TWh Terawatt-hour, a measure of electrical energy, 1012 watt-hours
UN Comtrade United Nations Commodity Trade Statistics Database
UNCTAD United Nations Conference on Trade and Development
UNWTO World Tourism Organization
USD United States Dollar
WBG World Bank Group
WIPO World Intellectual Property Organization
WSC World Shipping Council

The following symbols are used in this publication:

0	figure is zero or became zero due to rounding
-	not applicable
%	a percentage, a number or ratio as a fraction of 100

Billion Billion means one thousand million

Minor discrepancies between constituent figures and totals are due to rounding.

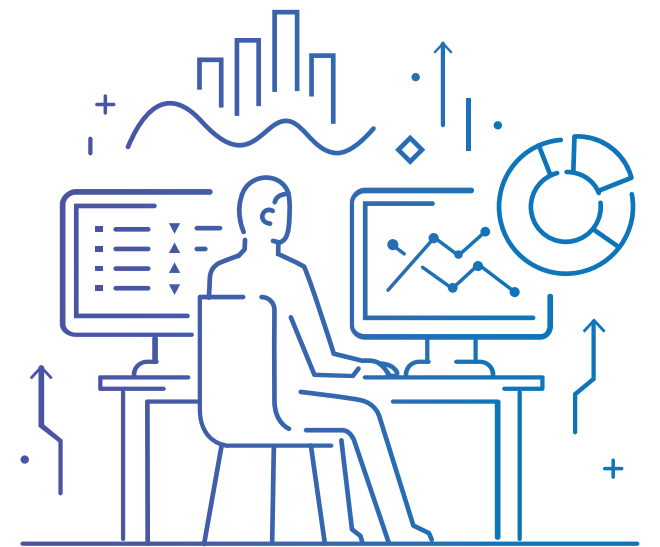
The statistical data in this publication are retrieved from and under the responsibility of the relevant statistical authorities. Figures in Part 2 are used mostly in one decimal point rounding off the raw number, and figures in Part 3 are used mostly in integers.

The use of such data and terms does not constitute or imply an expression of opinion by the TCS concerning the status of any country or territory, or the delimitation of its frontiers, or sovereignty. The colors, boundaries and names shown and the designations in this publication do not imply any judgment, official endorsement or acceptance by the TCS as to the legal status or frontier of any territory.

Closing date of the data: 31 December 2019

Part I

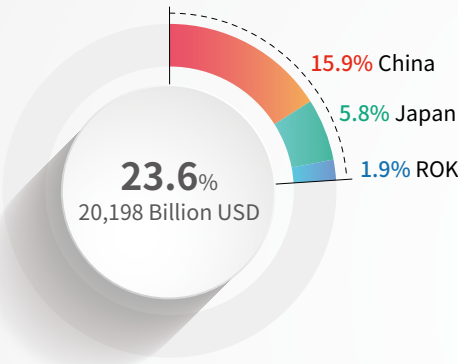
CJK Together in Summary



CJK Together in Summary

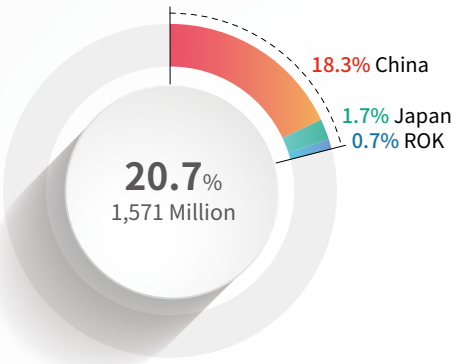
GDP

Source : WBG



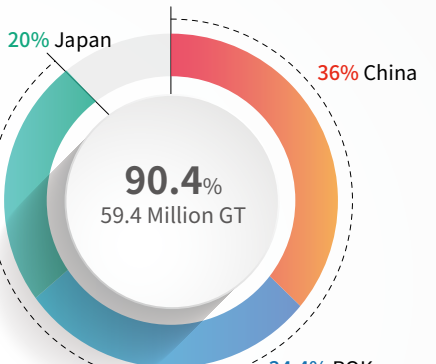
Population

Source : WBG



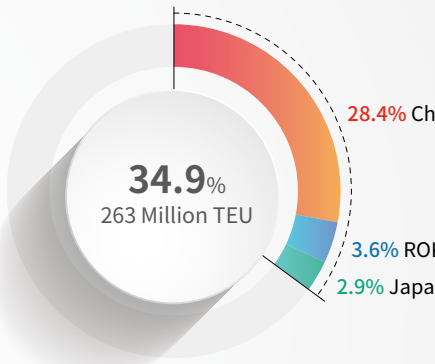
Ships Built

Source : UNCTAD



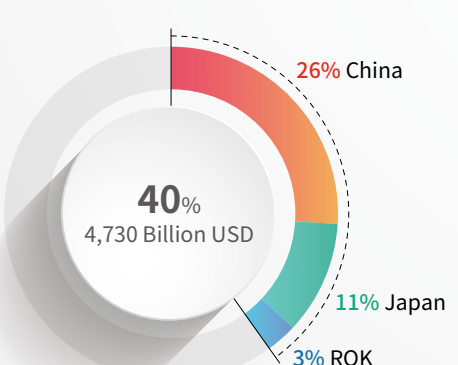
Container Port Traffic

Source : WBG



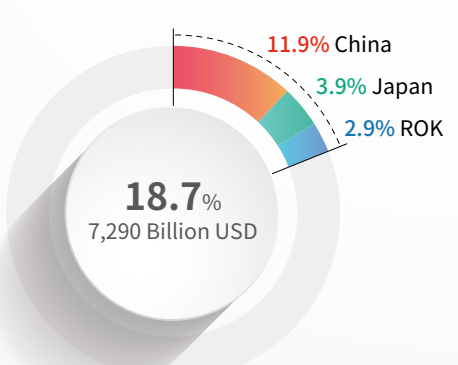
Reserves

Source : WBG



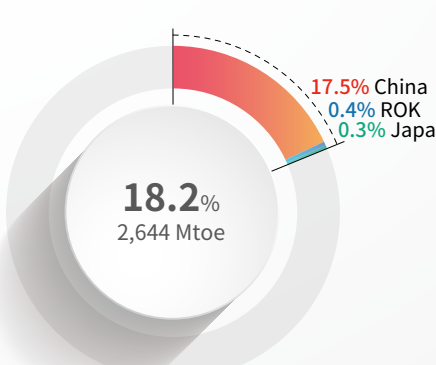
Trade Volume

Source : IMF-DOTS



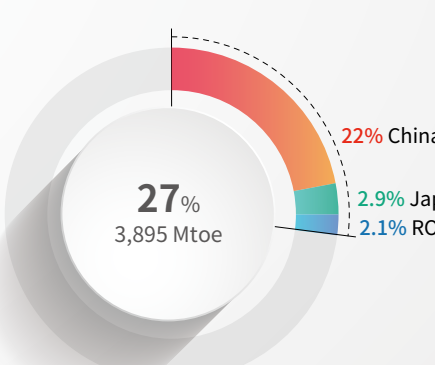
Energy Production

Source : Enerdata



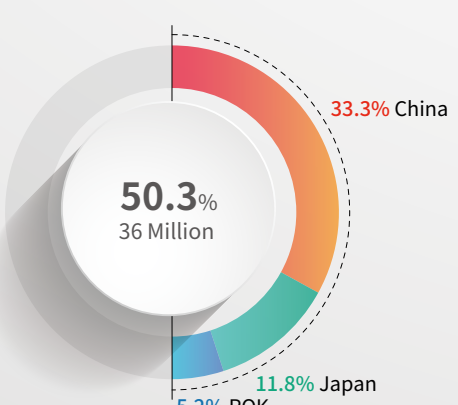
Energy Consumption

Source : Enerdata



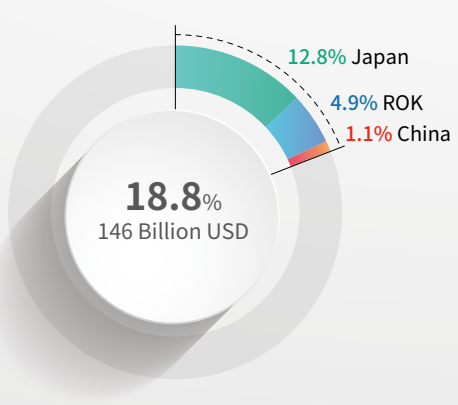
Motor Vehicle Production

Source : OICA



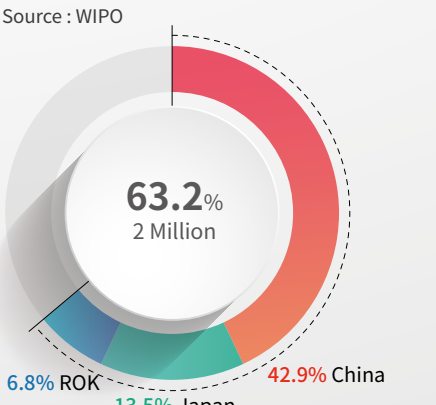
Motor Vehicle Export Volume

Source : UN Comtrade



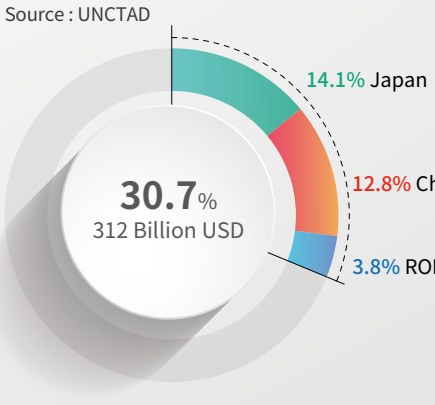
Intellectual Property Rights (Patent Application)

Source : WIPO



Foreign Direct Investment (Outward Flow)

Source : UNCTAD



Part II

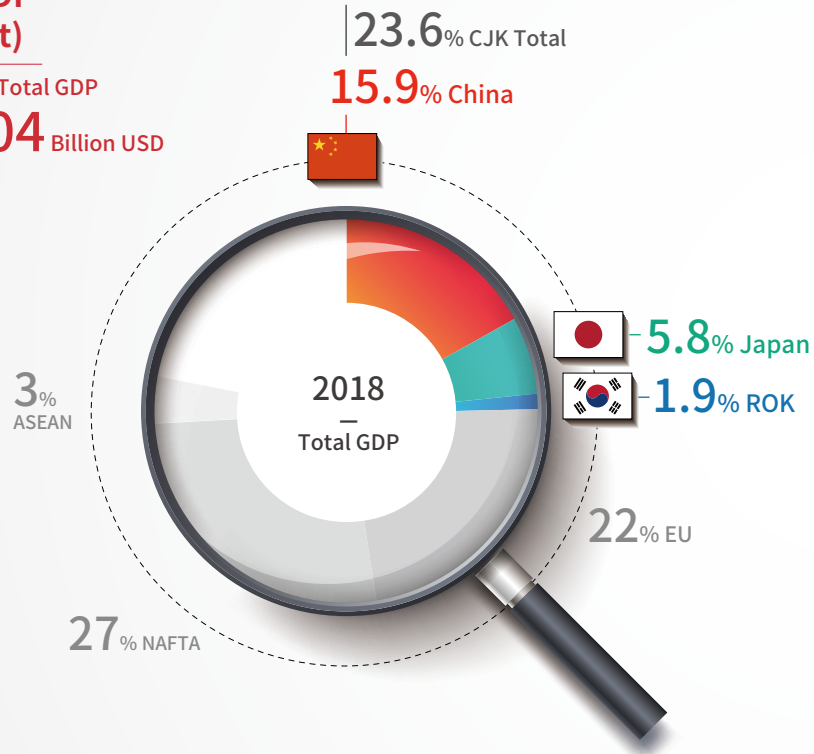
Key Summary of CJK Statistics



Basic Economic Indicators

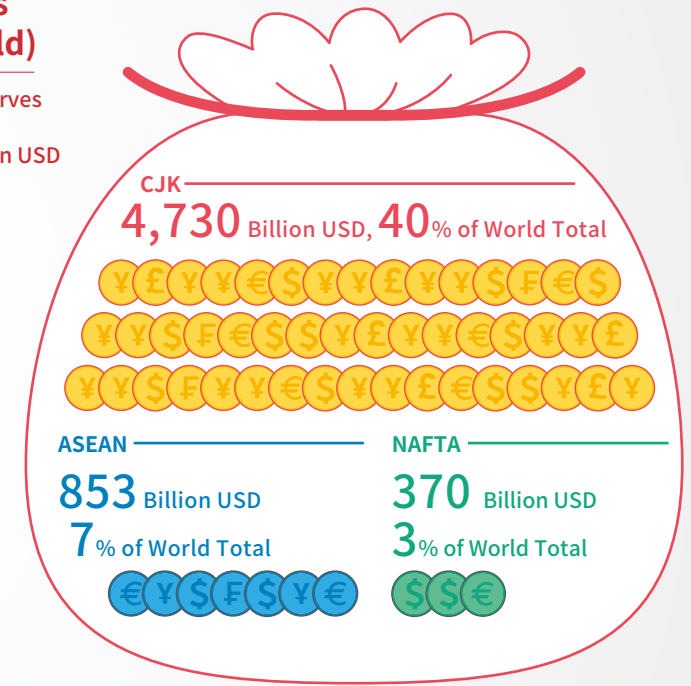
Total GDP (Current)

2018 World Total GDP
85,804 Billion USD



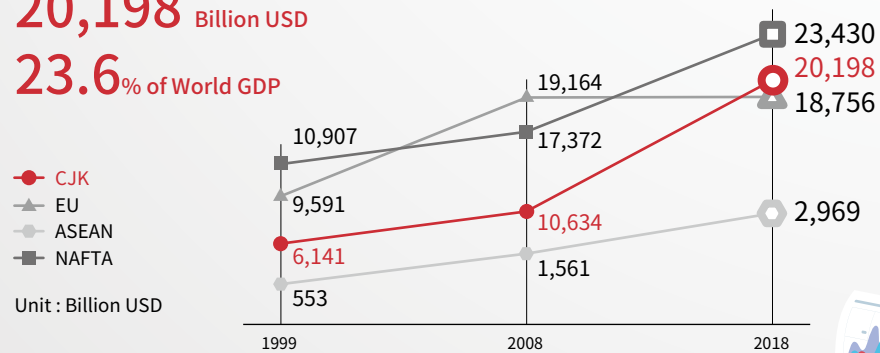
Total Reserves (Excluding Gold)

2018 World Total Reserves
11,797 Billion USD



CJK GDP (Current)

2018 CJK Total GDP
20,198 Billion USD
23.6% of World GDP

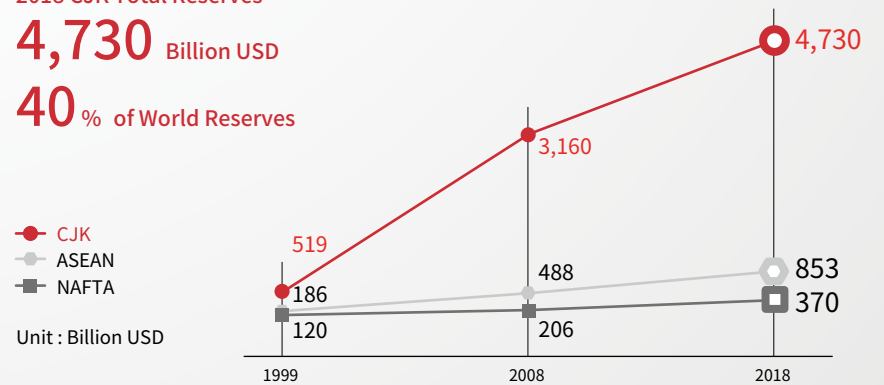


Unit : Billion USD

Source : WBG

CJK Reserves (Excluding Gold)

2018 CJK Total Reserves
4,730 Billion USD
40% of World Reserves

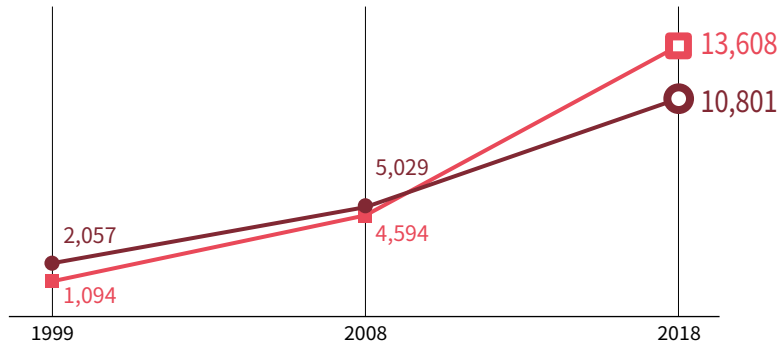


Unit : Billion USD

Source : WBG

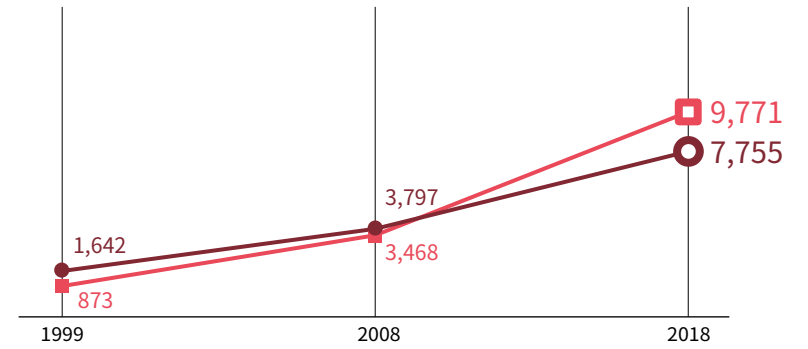
GDP : China

■ GDP(Current USD) ● GDP(Constant 2010 USD)



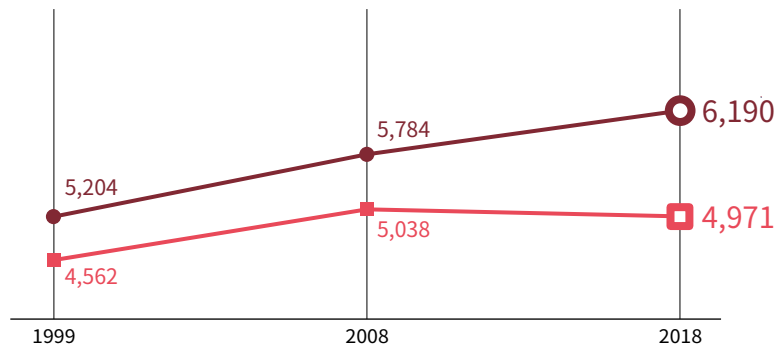
GDP per Capita : China

■ GDP per Capita(Current USD) ● GDP per Capita(Constant 2010 USD)



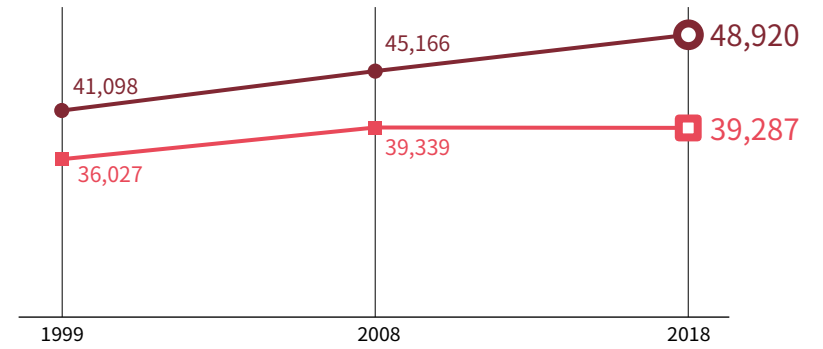
GDP : Japan

■ GDP(Current USD) ● GDP(Constant 2010 USD)



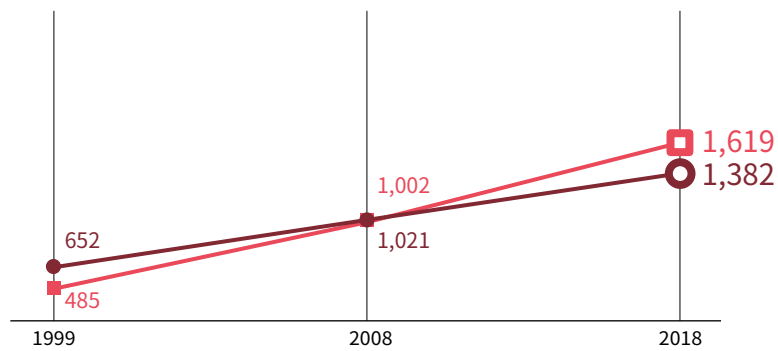
GDP per Capita : Japan

■ GDP per Capita(Current USD) ● GDP per Capita(Constant 2010 USD)



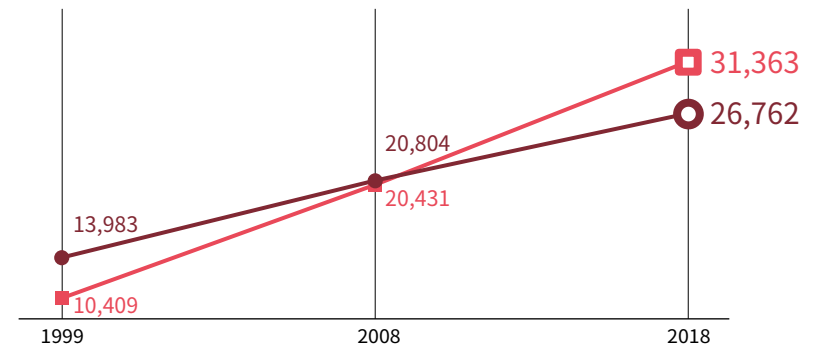
GDP : ROK

■ GDP(Current USD) ● GDP(Constant 2010 USD)

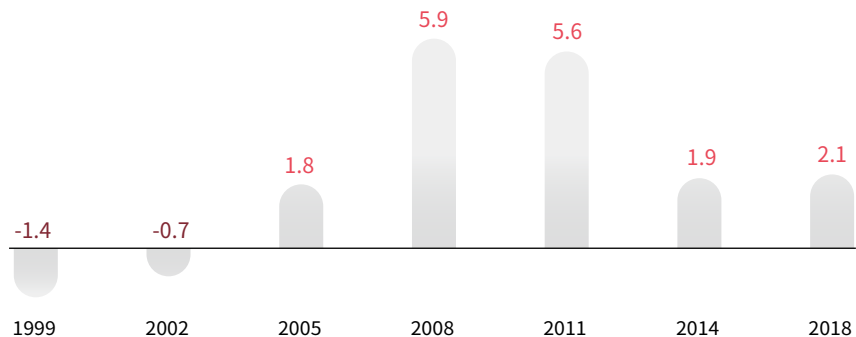


GDP per Capita : ROK

■ GDP per Capita(Current USD) ● GDP per Capita(Constant 2010 USD)



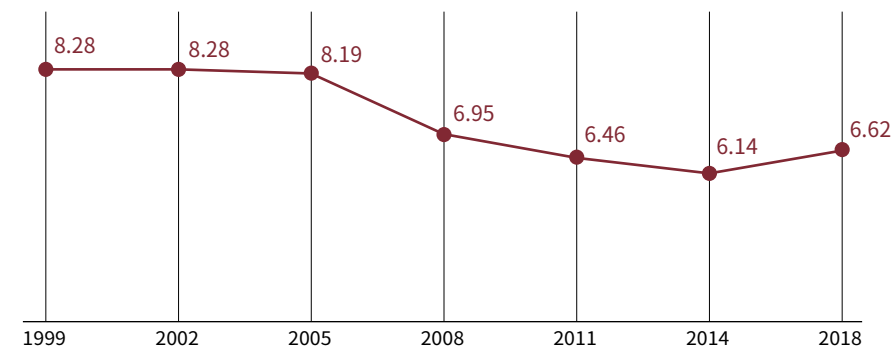
Inflation Rate(Consumer Prices) : China



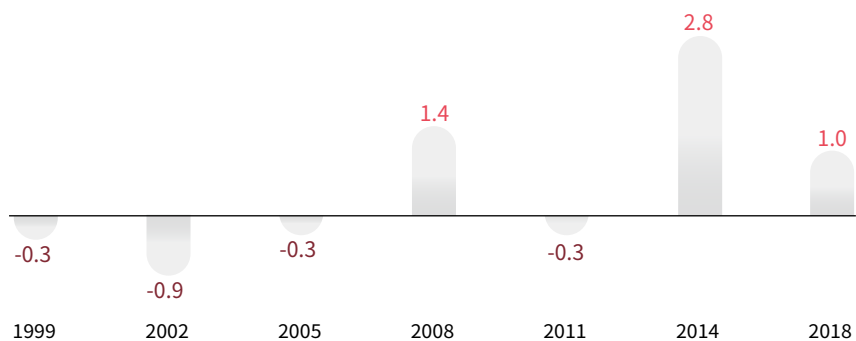
Official Exchange Rate : China



Unit : CNY/USD



Inflation Rate(Consumer Prices) : Japan



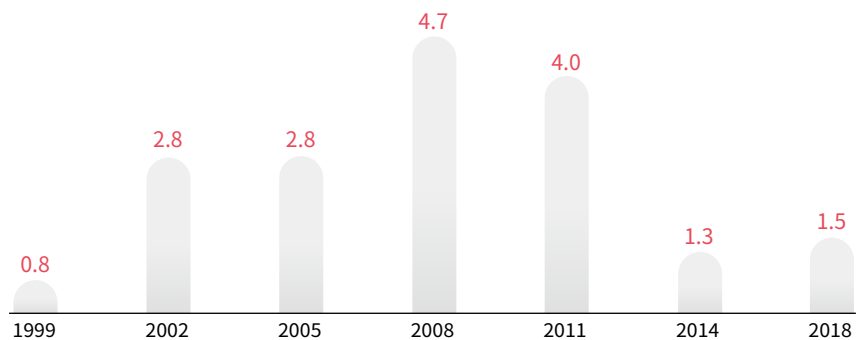
Official Exchange Rate : Japan



Unit : JPY/USD



Inflation Rate(Consumer Prices) : ROK



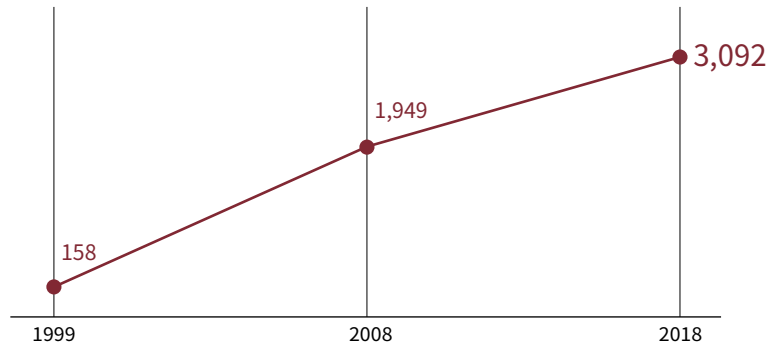
Official Exchange Rate : ROK



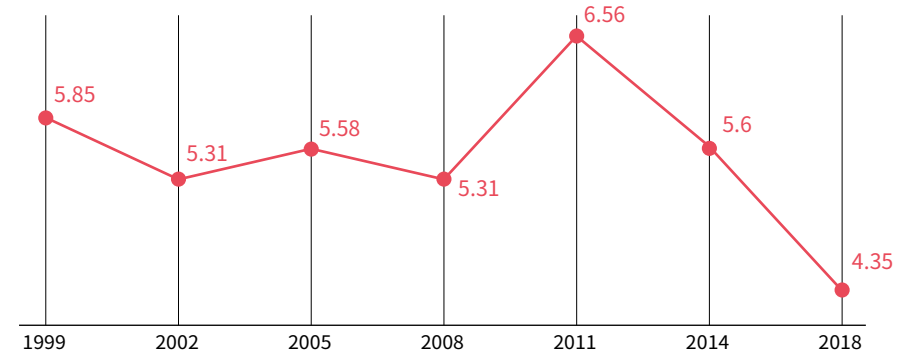
Unit : KRW/USD



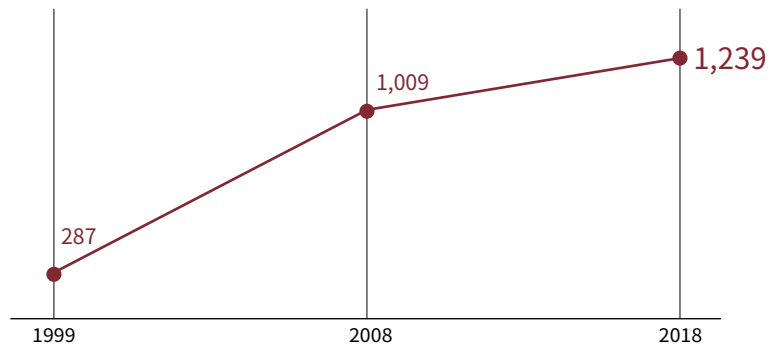
Total Reserves(Excluding Gold) : China



Interest Rate(Central Bank Policy Rate) : China



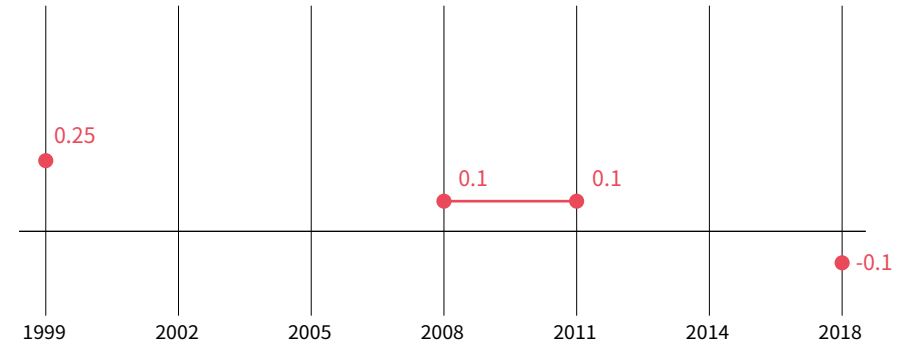
Total Reserves(Excluding Gold) : Japan



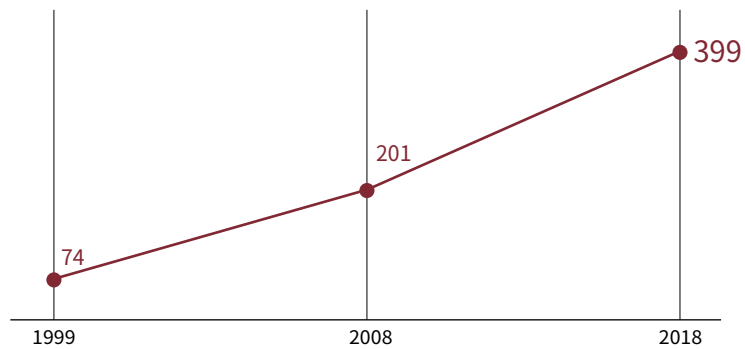
Interest Rate(Central Bank Policy Rate) : Japan



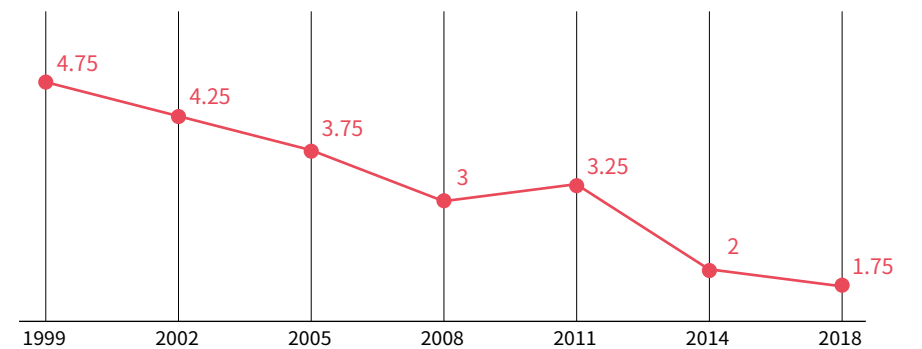
*No policy available for the years 2002, 2005, and 2014



Total Reserves(Excluding Gold) : ROK



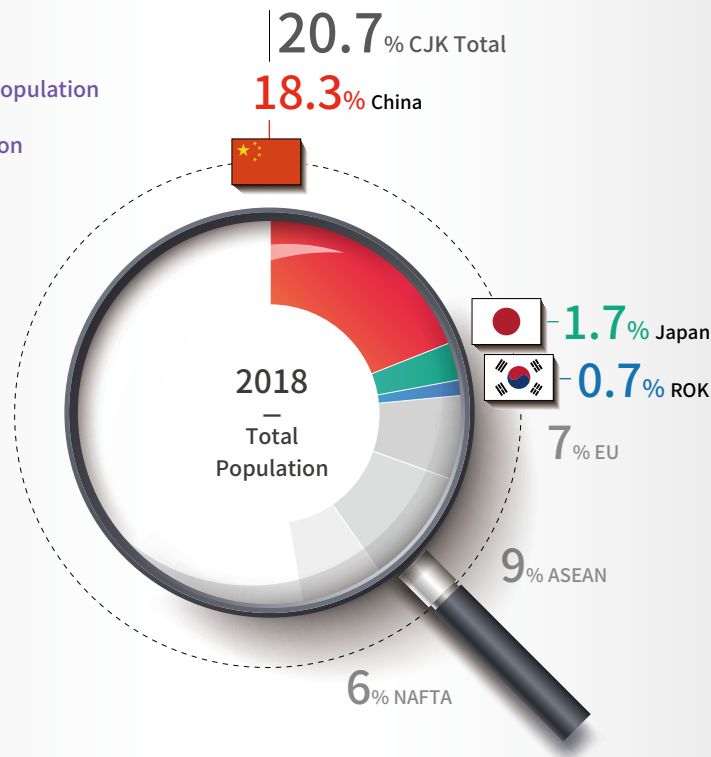
Interest Rate(Central Bank Policy Rate) : ROK



Population

Total Population

2018 World Total Population
7,594 Million



CJK Population

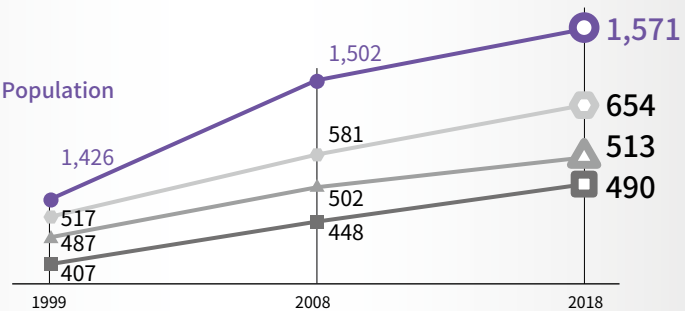
2018 CJK Total Population

1,571 Million

20.7% of World Population

- CJK
- ▲ EU
- ASEAN
- NAFTA

Unit: Million

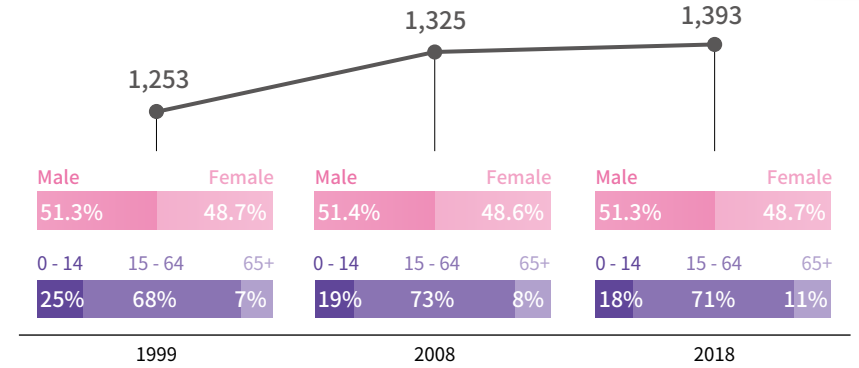


Source: WBG



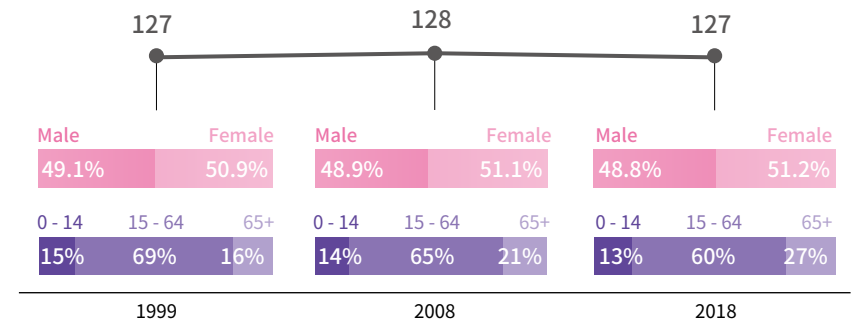
Population Distribution : China

● Population ■ Gender ■ Age Level



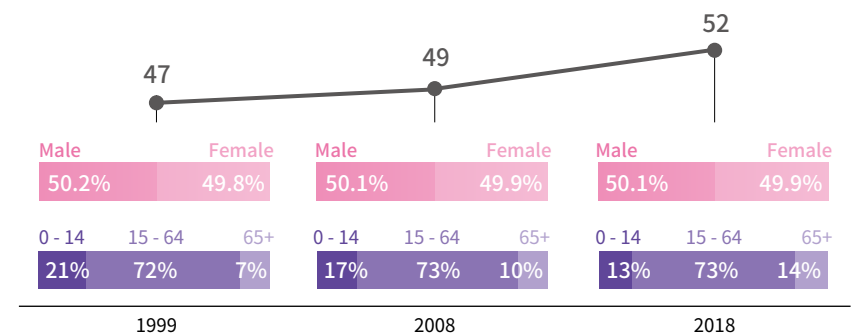
Population Distribution : Japan

● Population ■ Gender ■ Age Level



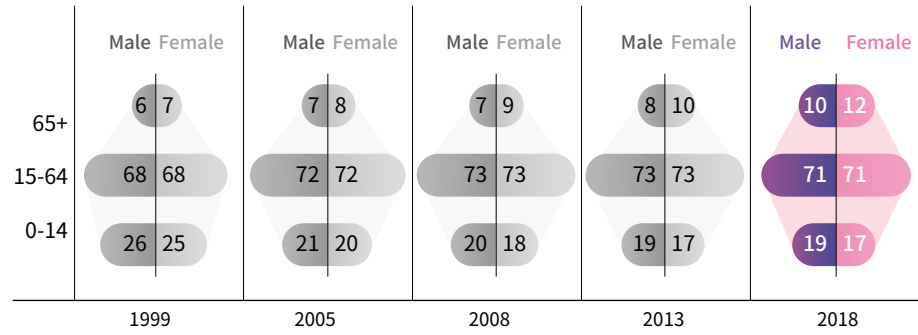
Population Distribution : ROK

● Population ■ Gender ■ Age Level



Unit: Million
Source: WBG

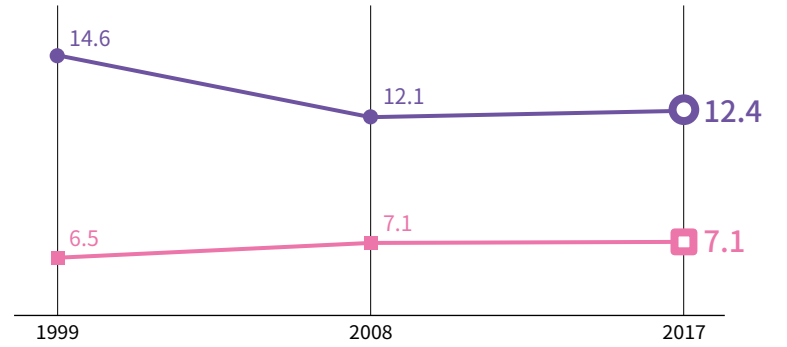
Population Distribution : China



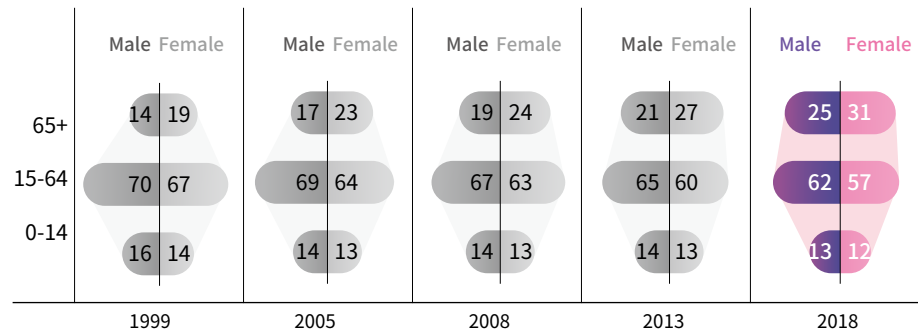
Birth and Death Rate : China



● Birth Rate ■ Death Rate



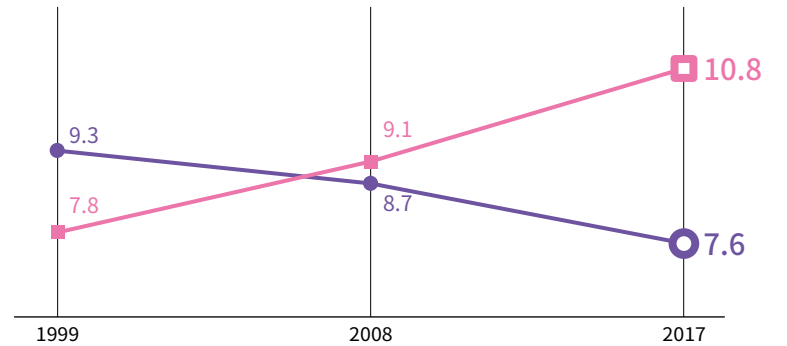
Population Distribution : Japan



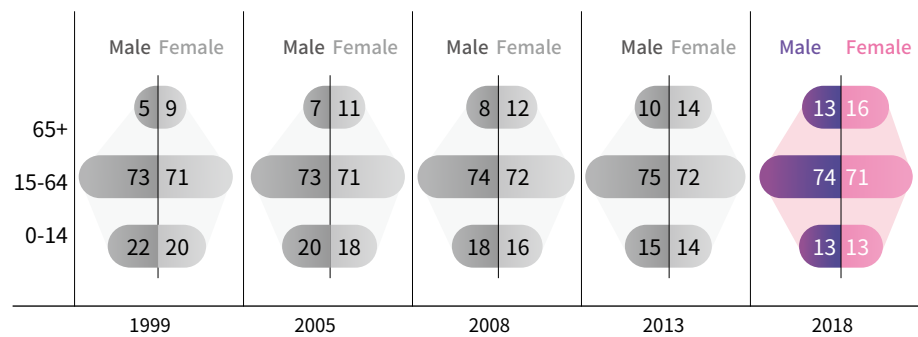
Birth and Death Rate : Japan



● Birth Rate ■ Death Rate



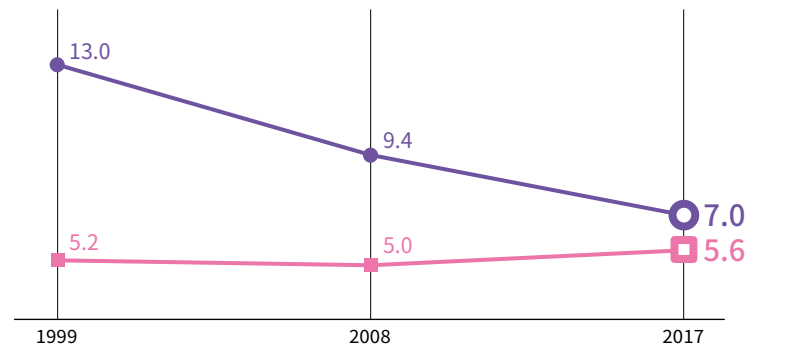
Population Distribution : ROK



Birth and Death Rate : ROK



● Birth Rate ■ Death Rate



Unit : %
Source : WBG

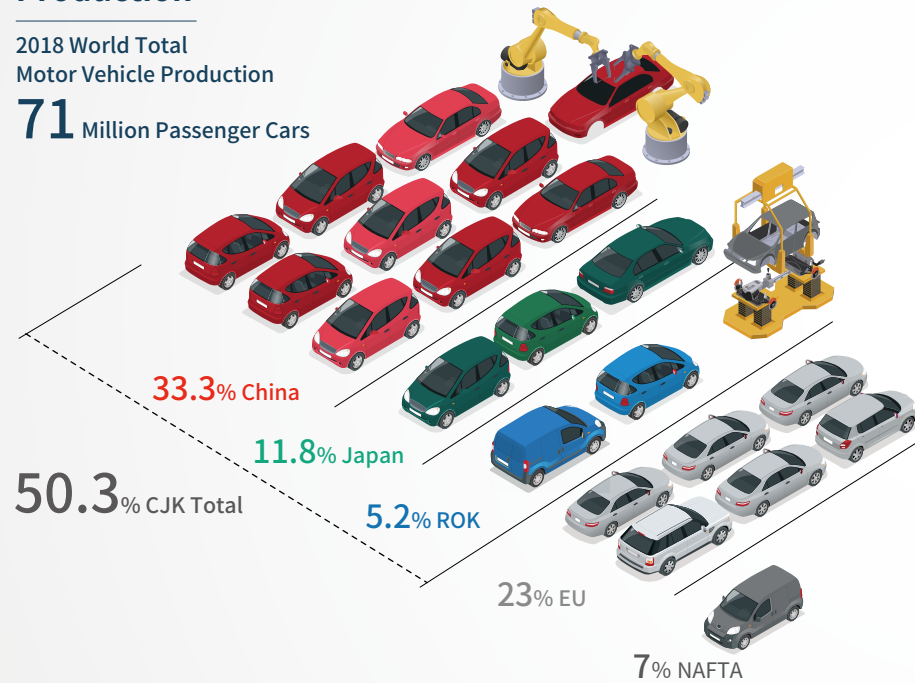
Unit : Number of Births/Deaths per 1,000 People
Source : WBG

Production : Vehicle and Ship

Total Motor Vehicle Production

2018 World Total Motor Vehicle Production

71 Million Passenger Cars



CJK Motor Vehicle Production

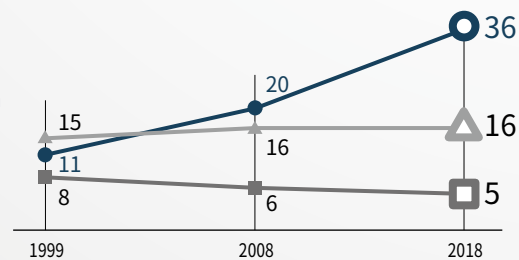
2018 CJK Total Motor Vehicle Production

36 Million Passenger Cars
50.3% of World Production

● CJK
▲ EU
■ NAFTA

Unit : Million Passenger Cars

Source : OICA



Total Export Volume of Motor Vehicle

2018 World Total Export Volume

776 Billion USD

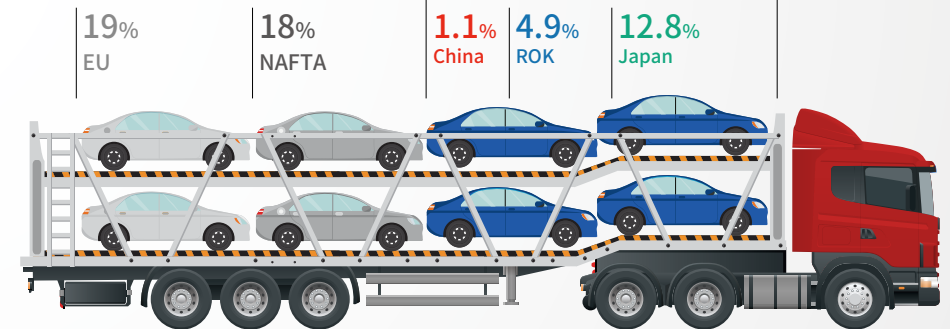
2018 CJK Total Export Volume

146 Billion USD

18.8% of World Export Volume

146 Billion USD

18.8% CJK Total



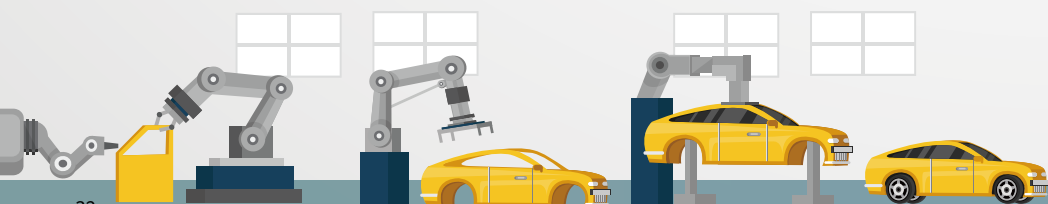
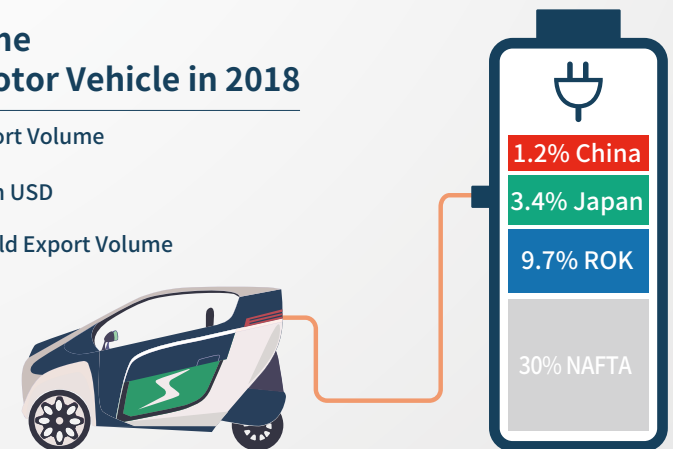
Export Volume of Electric Motor Vehicle in 2018

2018 CJK Total Export Volume

1,609 Million USD

14.3% of World Export Volume

Source : UN Comtrade



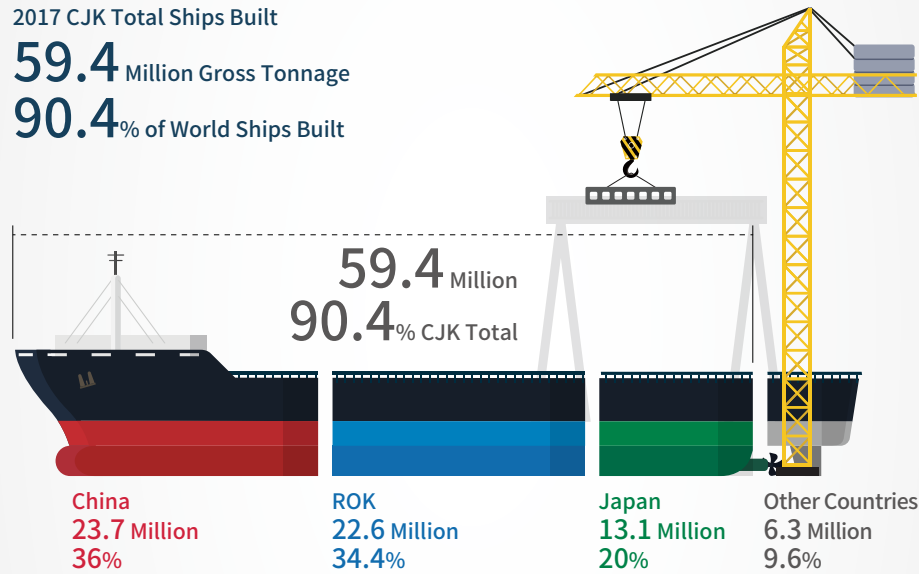
Production : Vehicle and Ship

Ships Built by CJK

2017 CJK Total Ships Built

59.4 Million Gross Tonnage

90.4% of World Ships Built



Unit : GT
Source : UNCTAD

Largest Container Ships Built by CJK

ROK

Samsung Heavy Industries(SHI)

MSC Gülsün
World Rank : 1
23,756 TEU

China

China State Shipbuilding Corporation(CSSC)

COSCO Shipping Universe
World Rank : 4
21,237 TEU

Japan

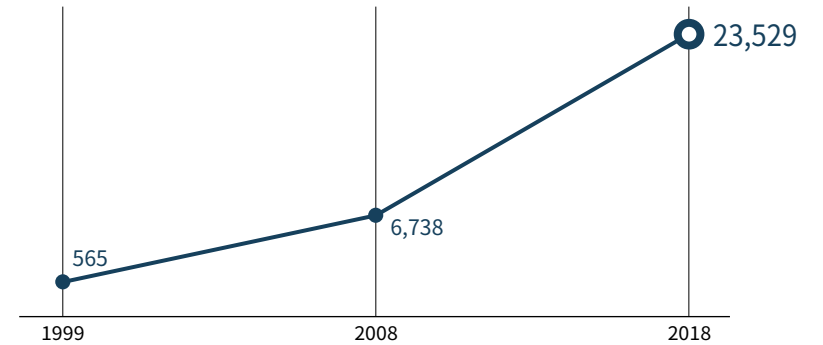
Saijo Shipyards of Imabari Shipbuilding Company Limited

MOL Truth
World Rank : 8
20,182 TEU

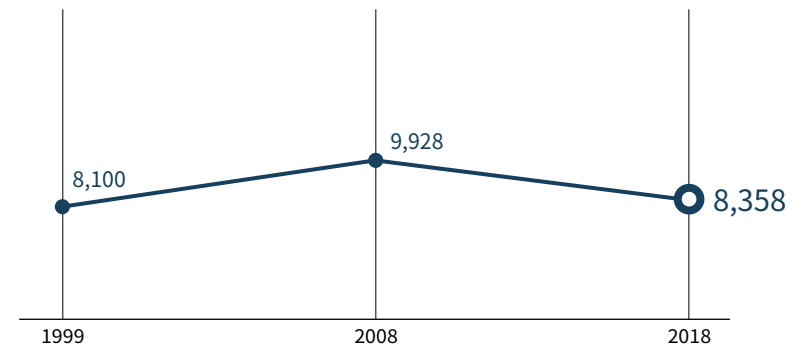
Source : Compiled from Various Container Ship Construction Companies



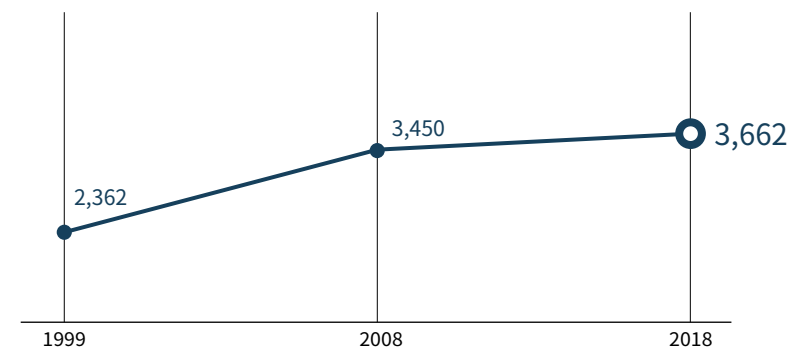
Motor Vehicle Production : China



Motor Vehicle Production : Japan

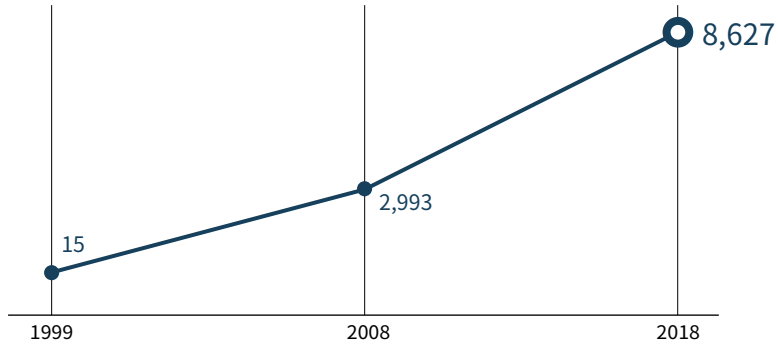


Motor Vehicle Production : ROK

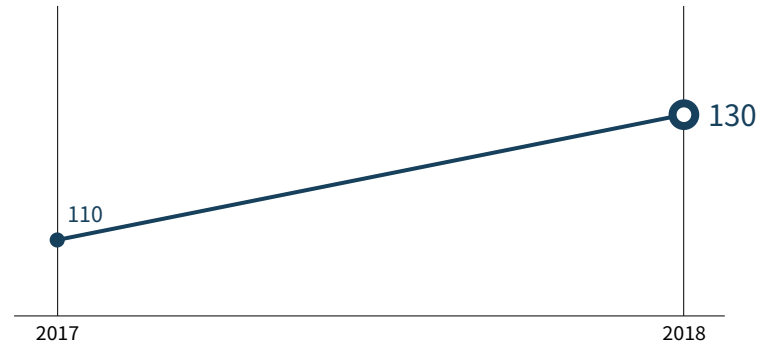


Unit : Thousand Passenger Cars
Source : OICA

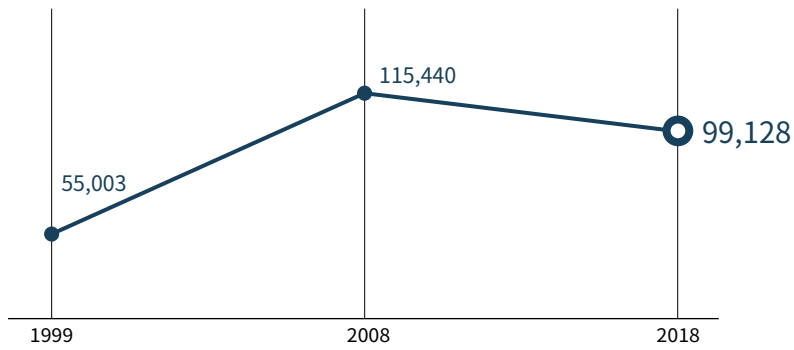
Export Volume of Motor Vehicle : China



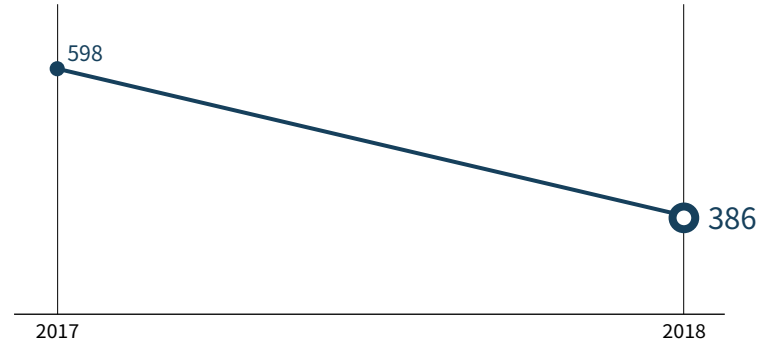
Export Volume of Electric Motor Vehicle : China



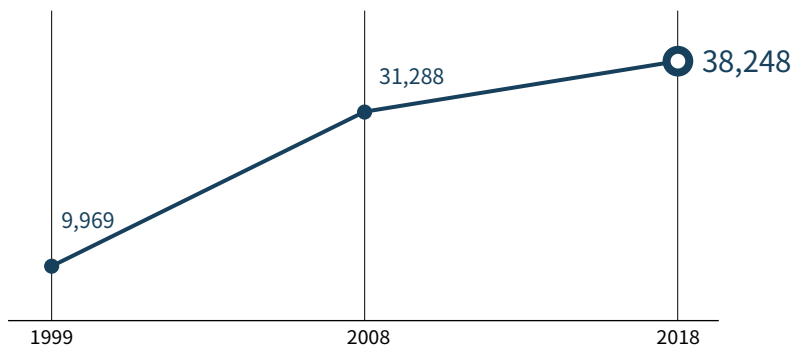
Export Volume of Motor Vehicle : Japan



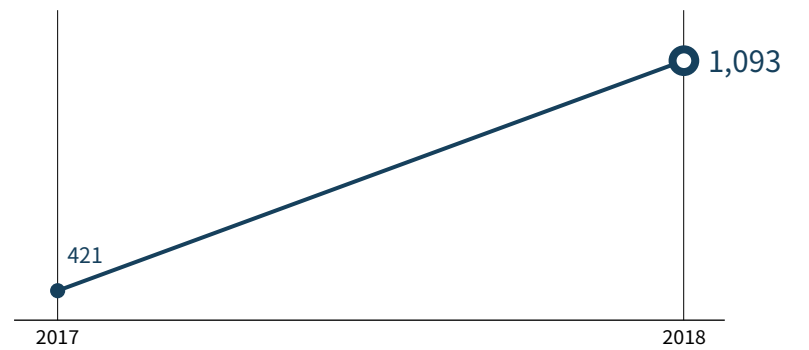
Export Volume of Electric Motor Vehicle : Japan



Export Volume of Motor Vehicle : ROK



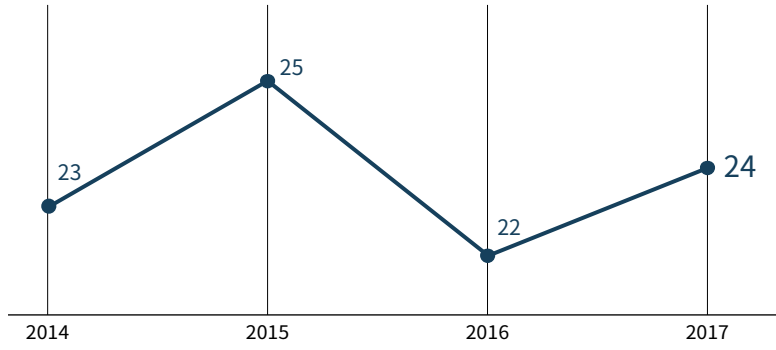
Export Volume of Electric Motor Vehicle : ROK



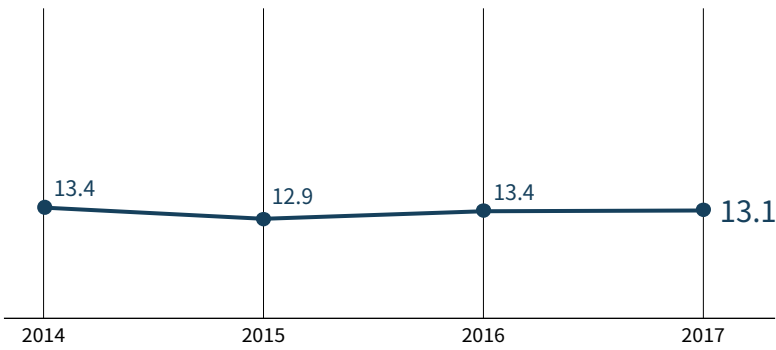
Unit : Million USD
Source : UN Comtrade

Unit : Million USD
Source : UN Comtrade

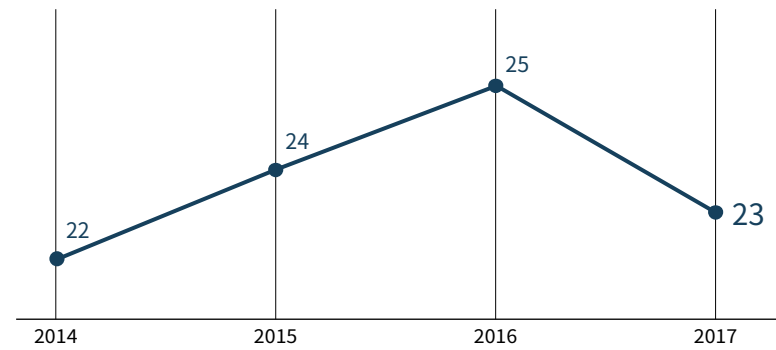
Number of Ships Built : China



Number of Ships Built : Japan



Number of Ships Built : ROK



Unit : Million GT
Source : UNCTAD

Port Logistics

Total Container Port Traffic

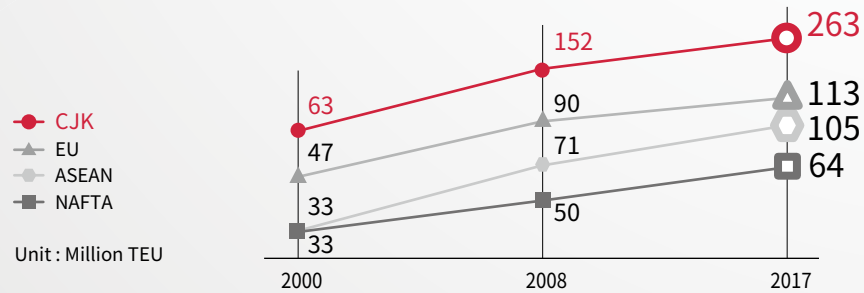
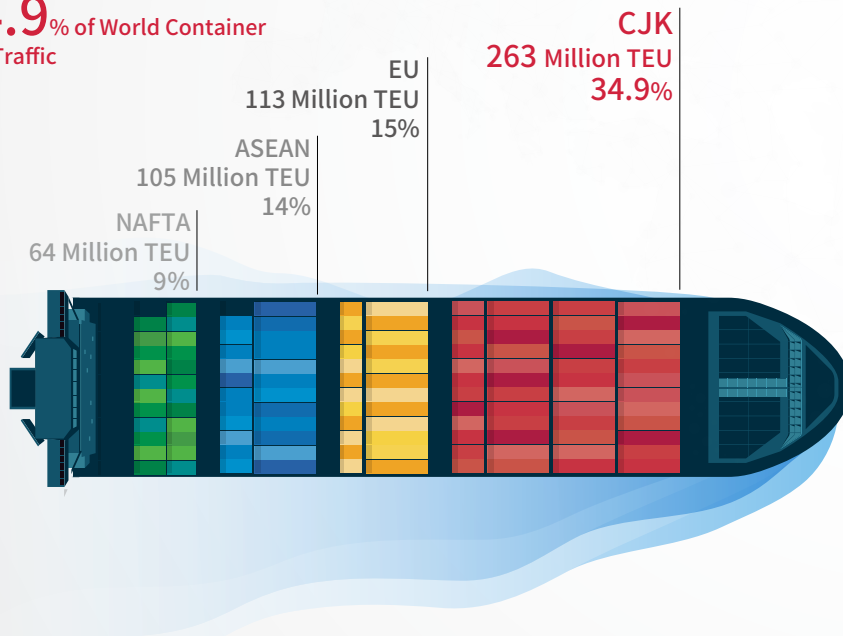
2017 World Total Container Port Traffic

753 Million TEU

2017 CJK Total Container Port Traffic

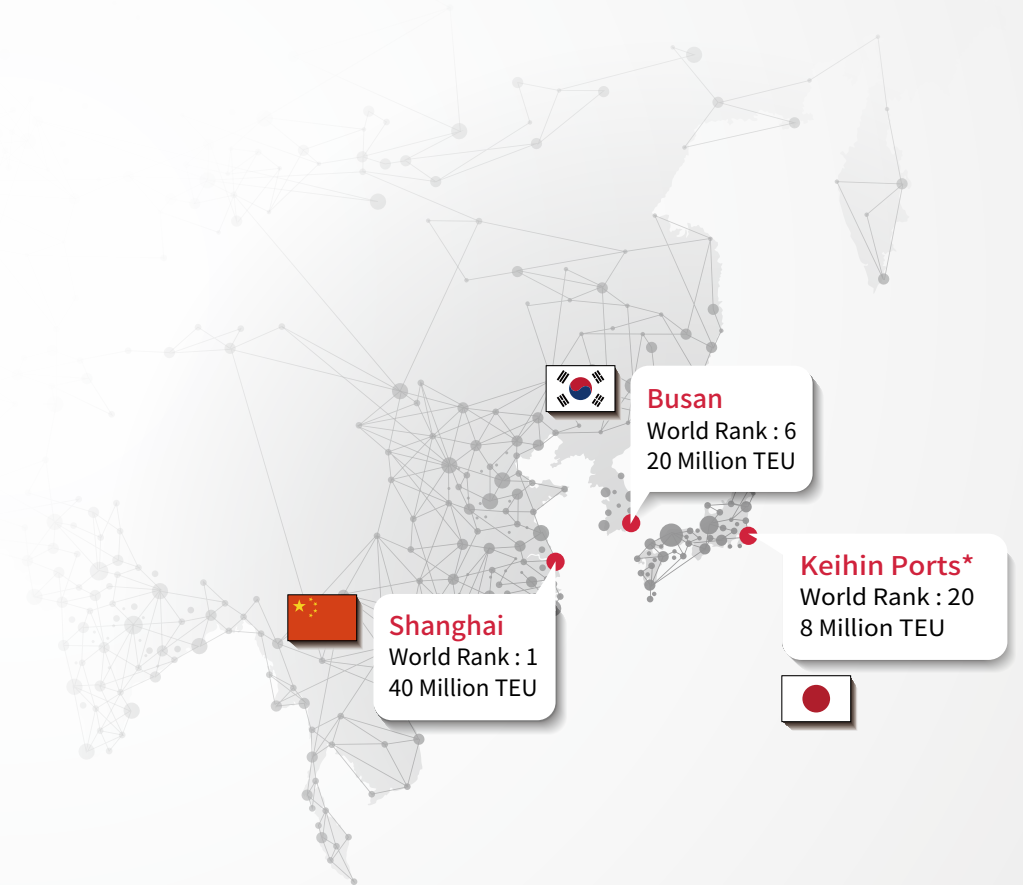
263 Million TEU

34.9% of World Container Port Traffic



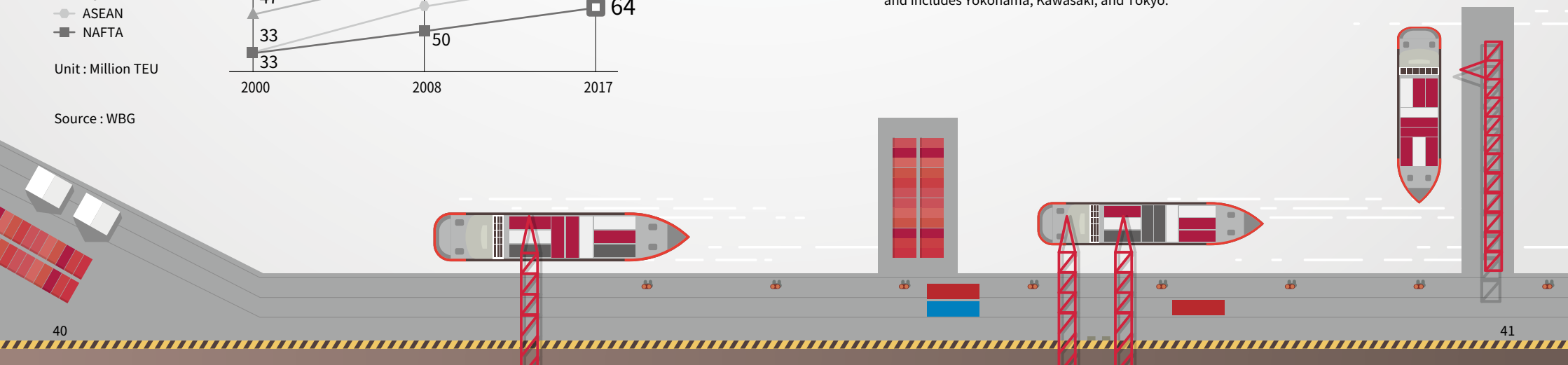
Source : WBG

Largest Container Ports in CJK in 2017



Source : WSC

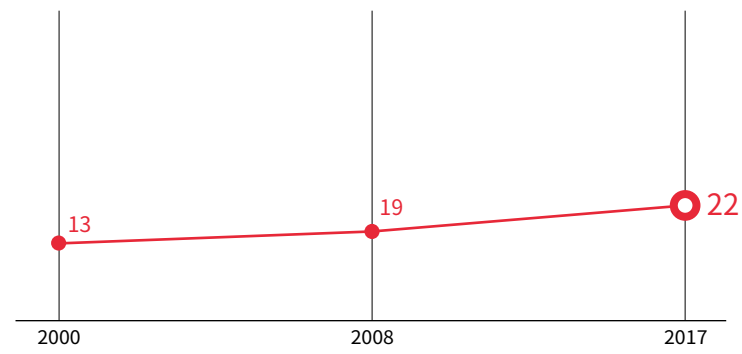
*Keihin Ports is Japan's superport hub on the Tokyo Bay and includes Yokohama, Kawasaki, and Tokyo.



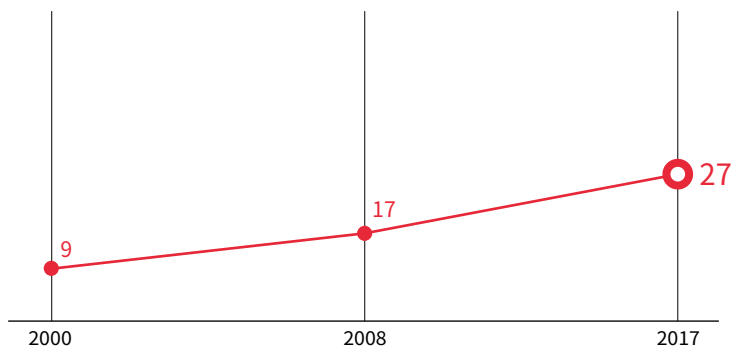
Container Port Traffic : China



Container Port Traffic : Japan



Container Port Traffic : ROK

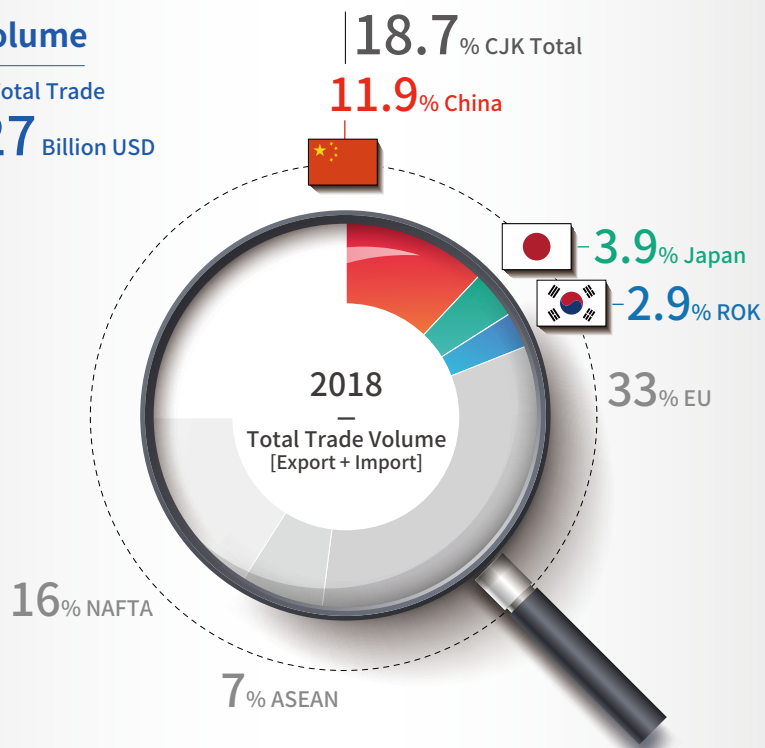


Unit : Million TEU
Source : WBG

Trade

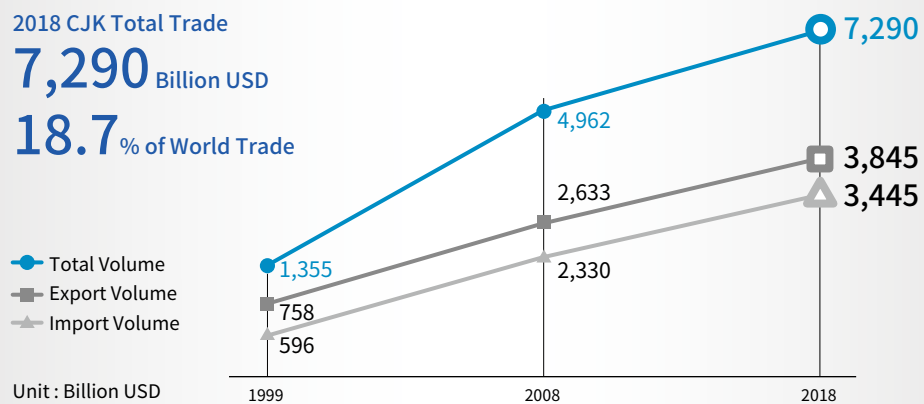
Total Trade Volume

2018 World Total Trade
38,927 Billion USD



CJK Trade Volume

2018 CJK Total Trade
7,290 Billion USD
 18.7% of World Trade

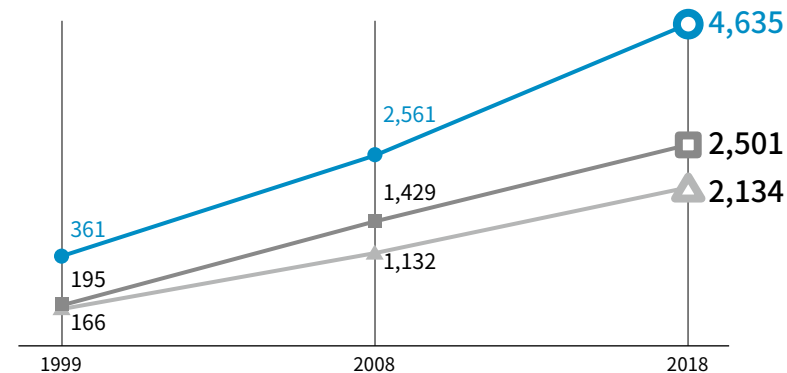


Unit : Billion USD

Source : IMF-DOTS

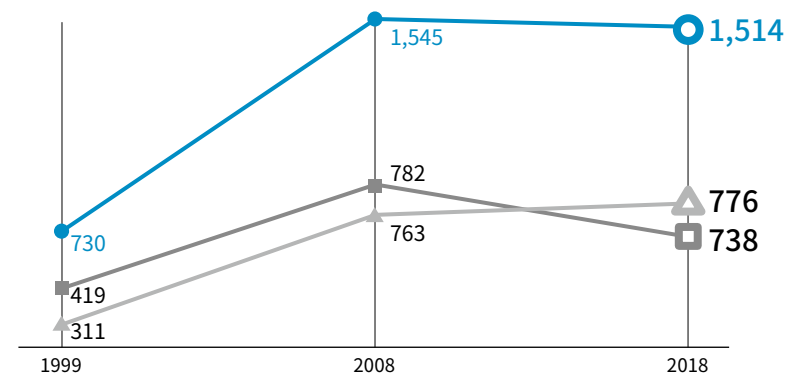
Trade Volume : P.R. China

● Total Volume ■ Export Volume ▲ Import Volume



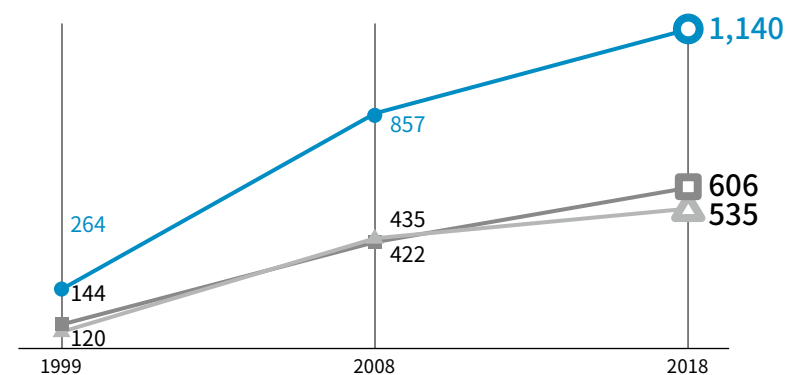
Trade Volume : Japan

● Total Volume ■ Export Volume ▲ Import Volume



Trade Volume : ROK

● Total Volume ■ Export Volume ▲ Import Volume

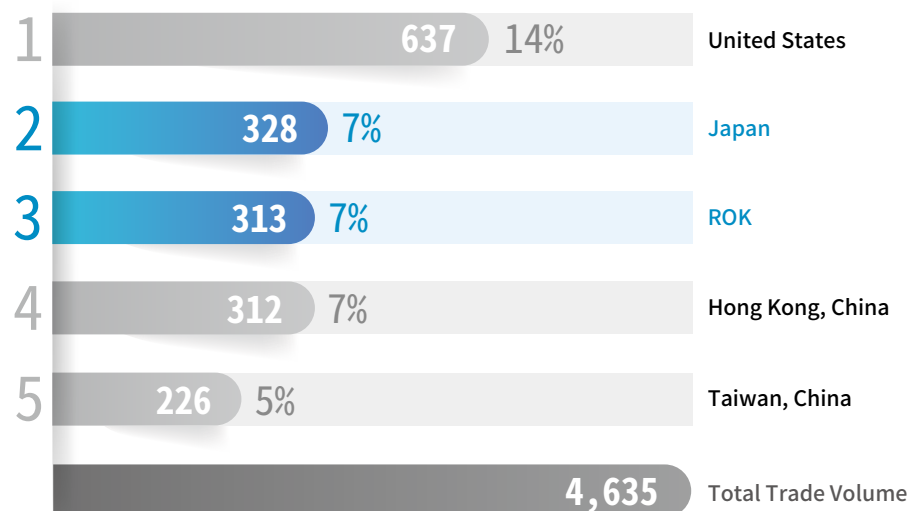


Unit : Billion USD
 Source : IMF-DOTS

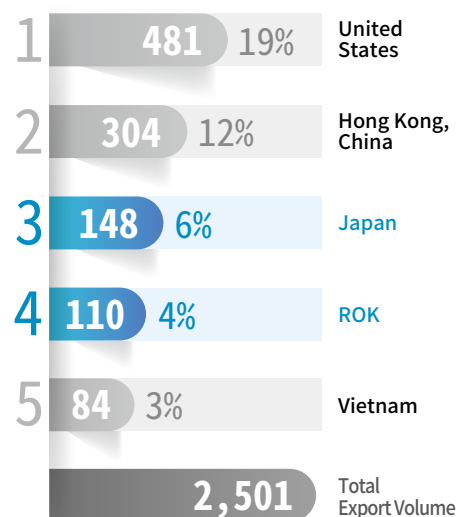
Top 5 Trading Partners of P.R. China in 2018



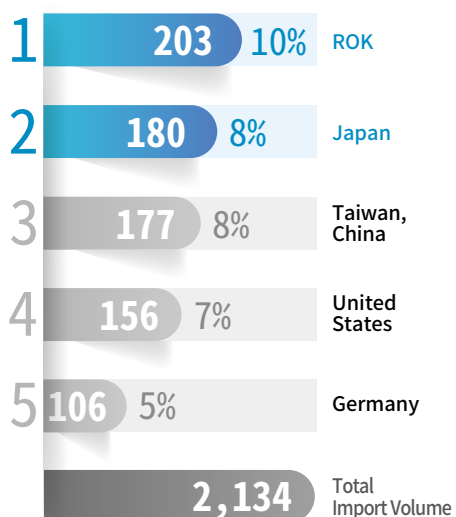
Total Trade Volume



Export Volume



Import Volume

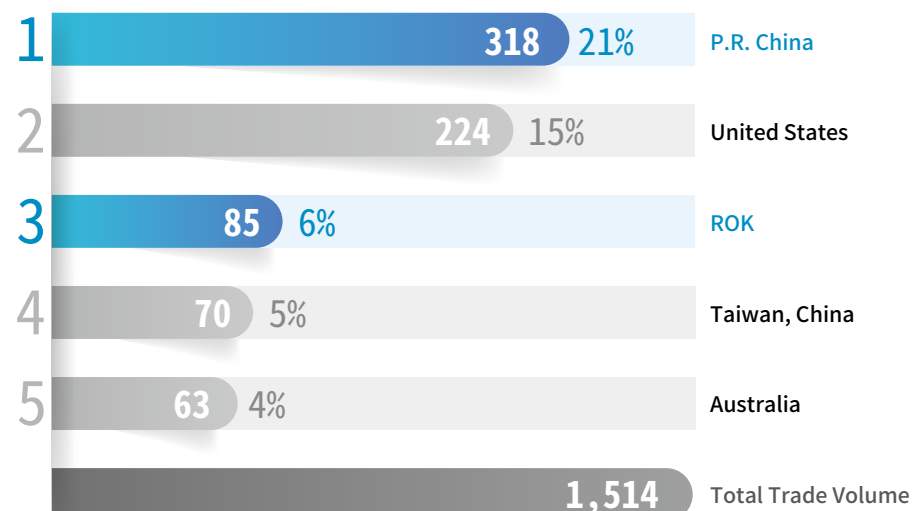


Unit : Billion USD
Source : Calculation by the TCS based on IMF-DOTS

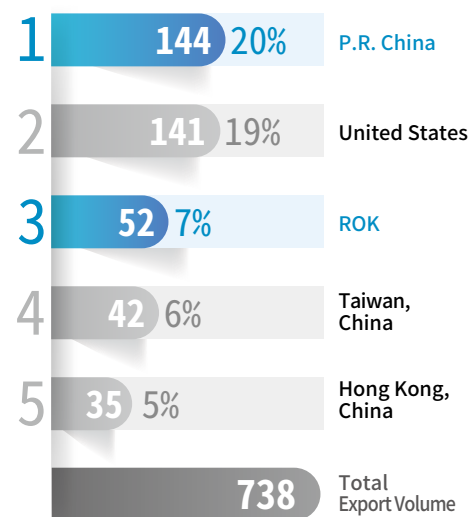
Top 5 Trading Partners of Japan in 2018



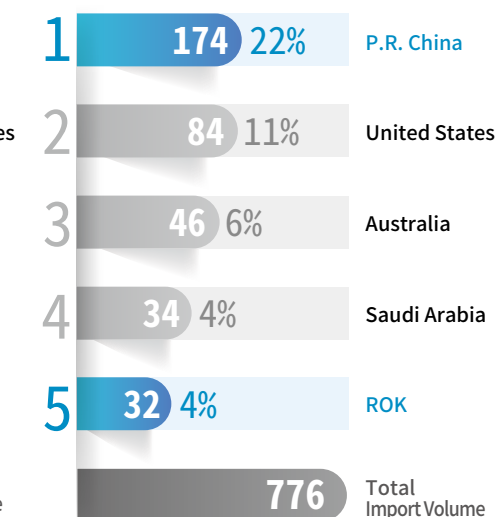
Total Trade Volume



Export Volume



Import Volume

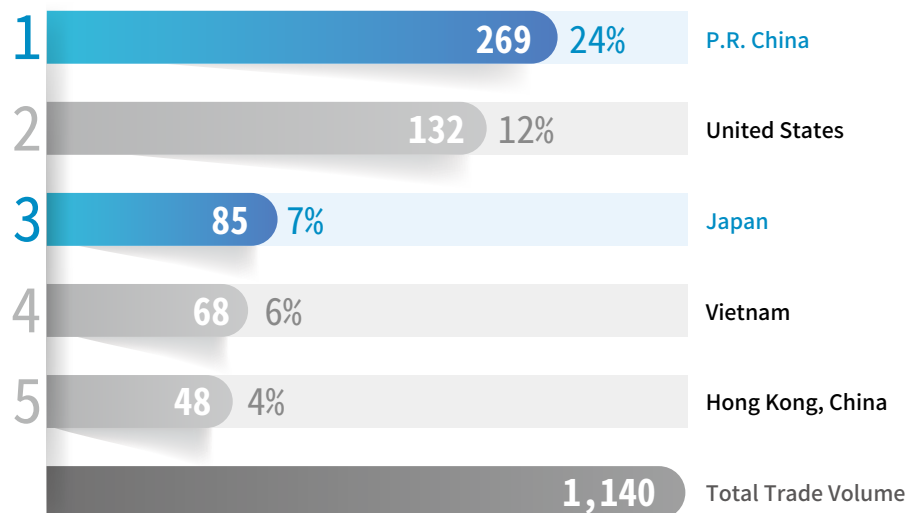


Unit : Billion USD
Source : Calculation by the TCS based on IMF-DOTS

Top 5 Trading Partners of ROK in 2018



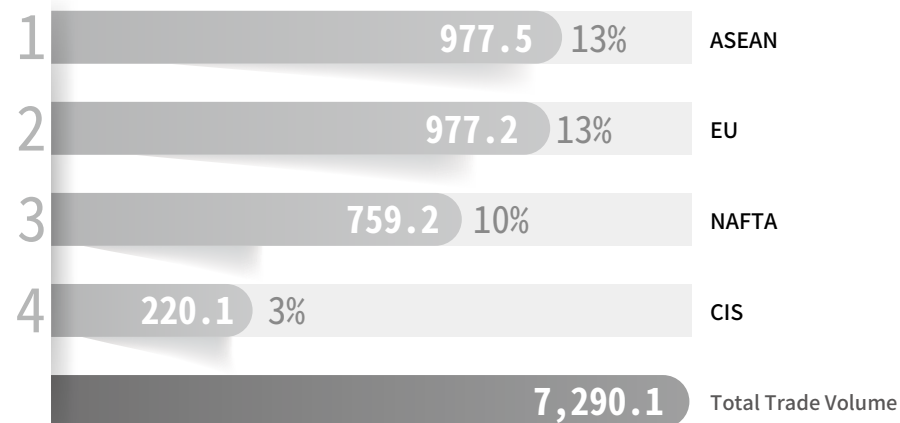
Total Trade Volume



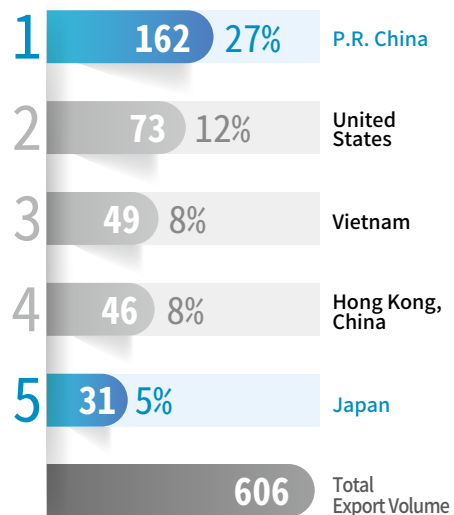
Top Trading Regions of CJK in 2018



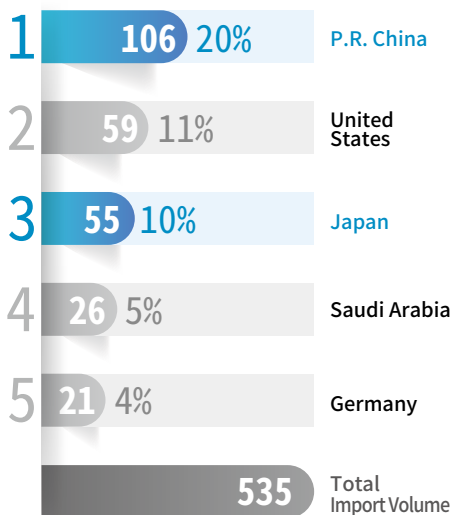
Total Trade Volume



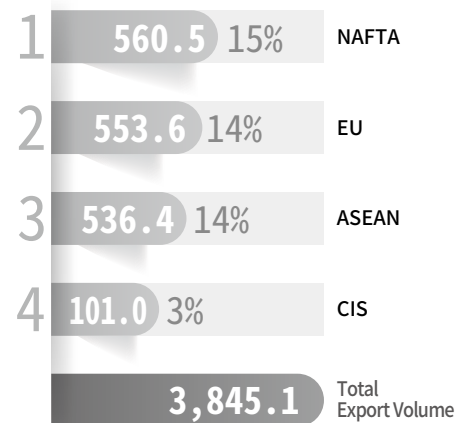
Export Volume



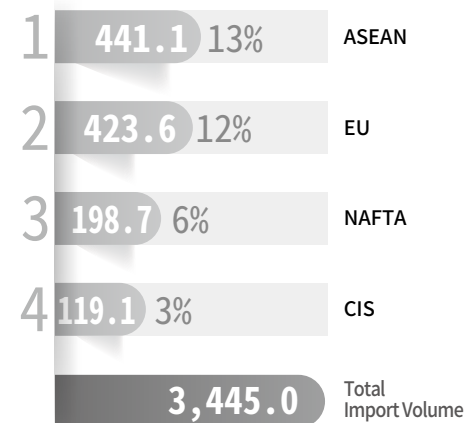
Import Volume



Export Volume



Import Volume



People-to-People Exchange

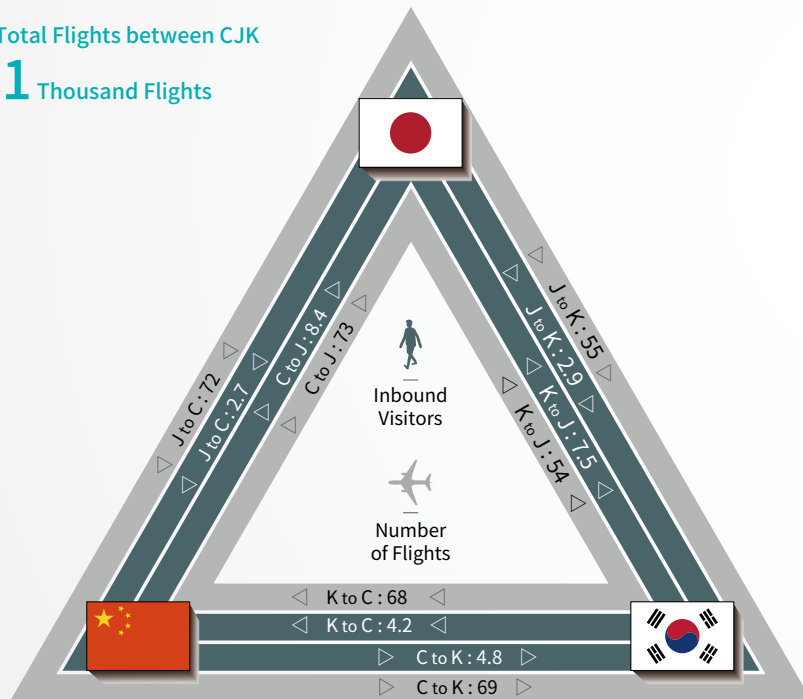
Visitors and Flights between CJK

2018 Total Inbound Visitors between CJK

30.5 Million People

2018 Total Flights between CJK

391 Thousand Flights



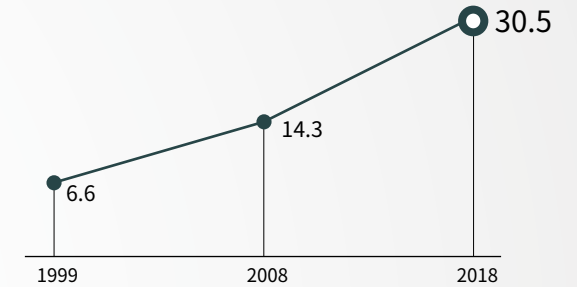
Unit : Million(Visitors)/Thousand(Flights)
Source : UNWTO(Visitors)/ICAO(Flights)

Inbound Visitors between CJK

2018 Total Inbound Visitors between CJK

30.5 Million People

40% of Total Visitors to CJK



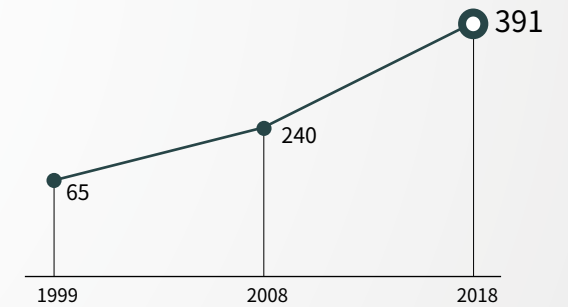
Unit : Million
Source : UNWTO, National Tourism Administration of CJK

Flights between CJK

2018 Total Flights between CJK

391 Thousand Flights

39% of Total Flights to CJK



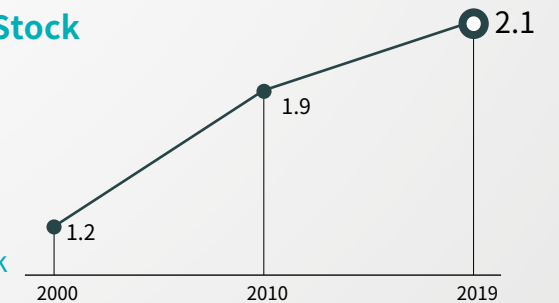
Unit : Thousand
Source : ICAO

International Migrant Stock between CJK

2019 Total Migration between CJK

2.1 Million People

45% of Total Migrant Stock to CJK



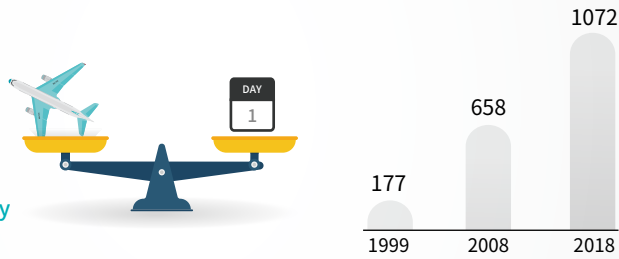
Unit : Million
Source : UN



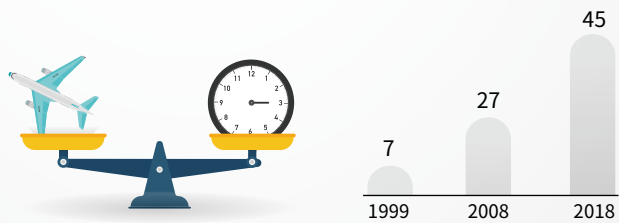
People-to-People Exchange

Air Traffic between CJK

2018 Number of Flights per Day
1,072 Flights per Day



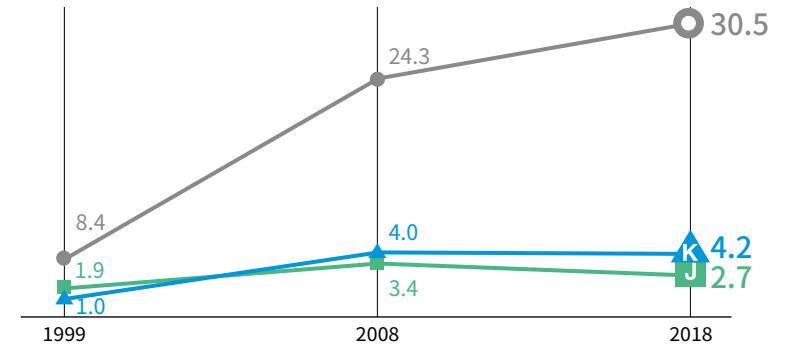
2018 Number of Flights per Hour
45 Flights per Hour



Source : Calculation by the TCS based on ICAO data

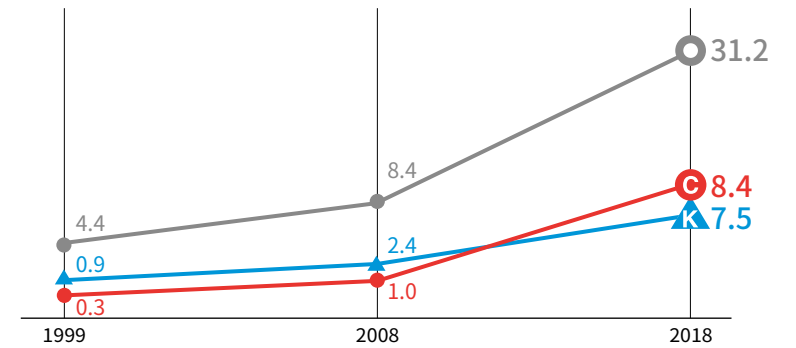
Inbound Visitors to P.R. China

World ROK Japan



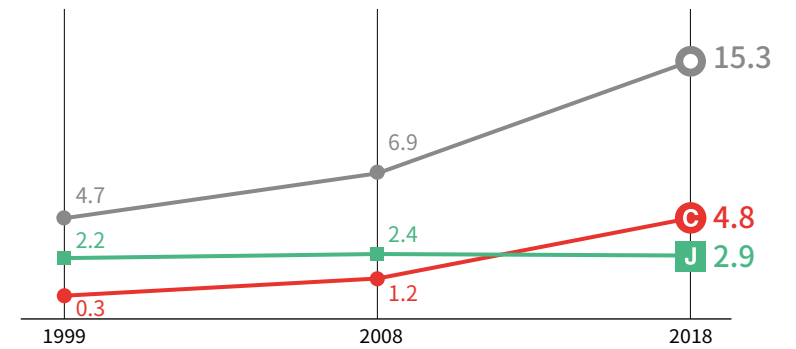
Inbound Visitors to Japan

World China ROK



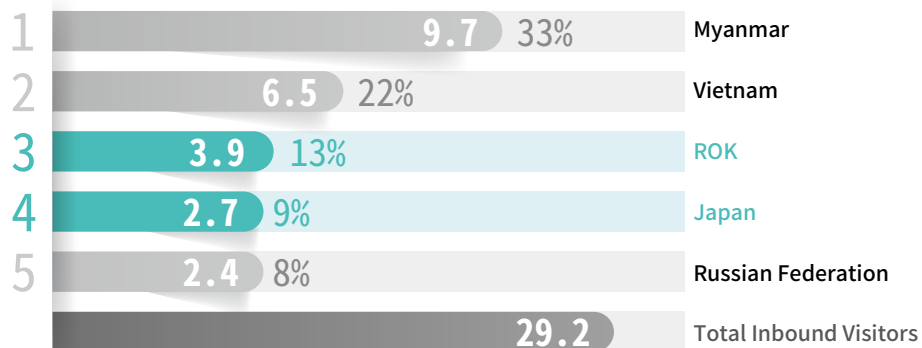
Inbound Visitors to ROK

World China Japan

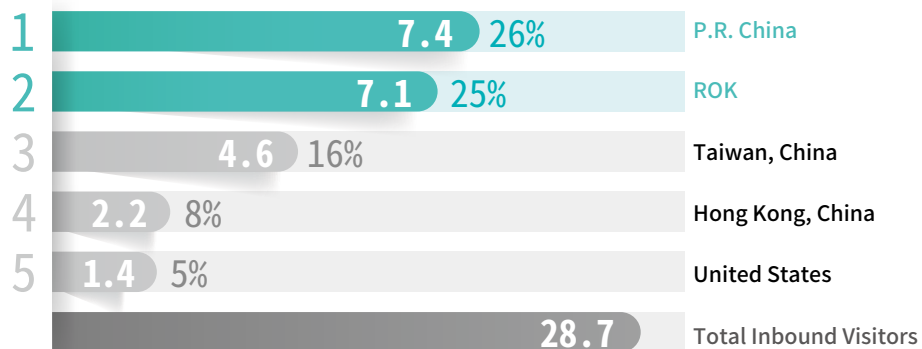


Unit : Million
Source : UNWTO, National Tourism Administration of CJK

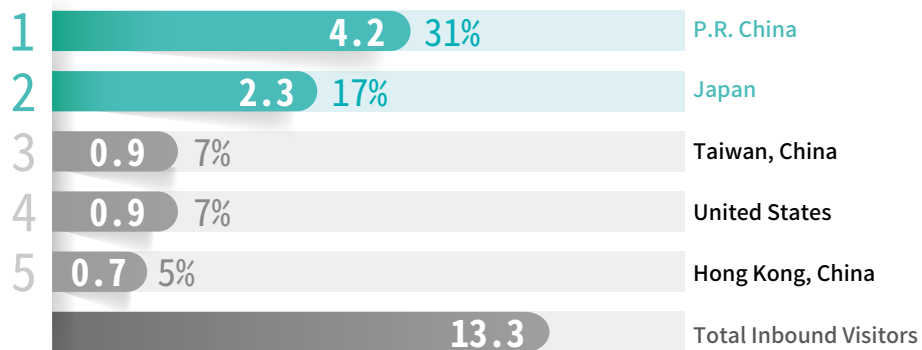
P.R. China's Top 5 Sources of Visitors in 2017



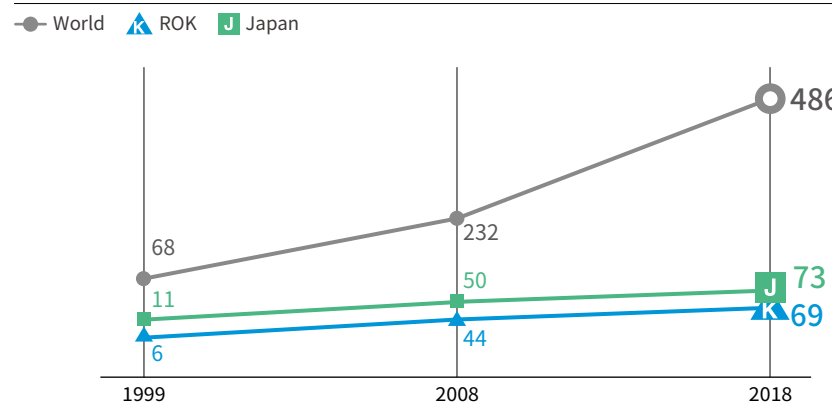
Japan's Top 5 Sources of Visitors in 2017



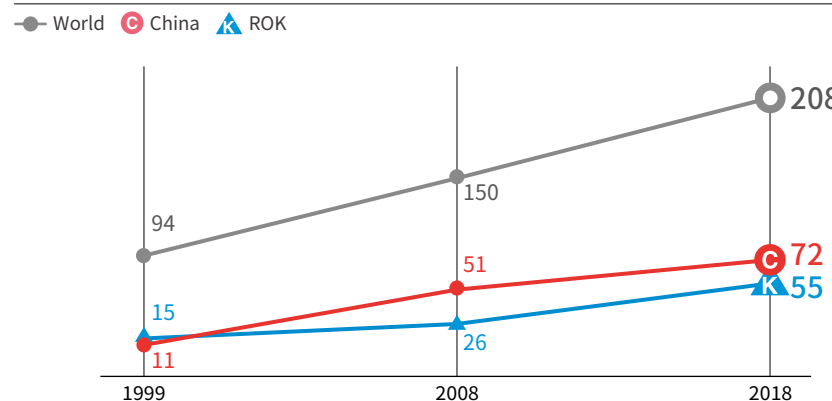
ROK's Top 5 Sources of Visitors in 2017



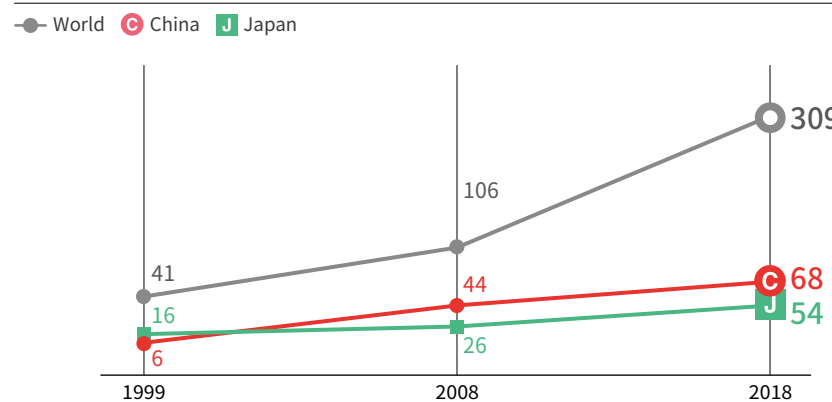
Number of Flights from China



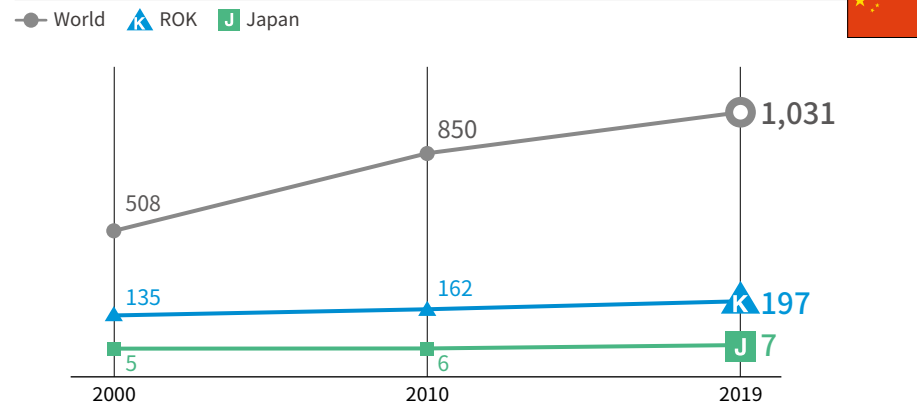
Number of Flights from Japan



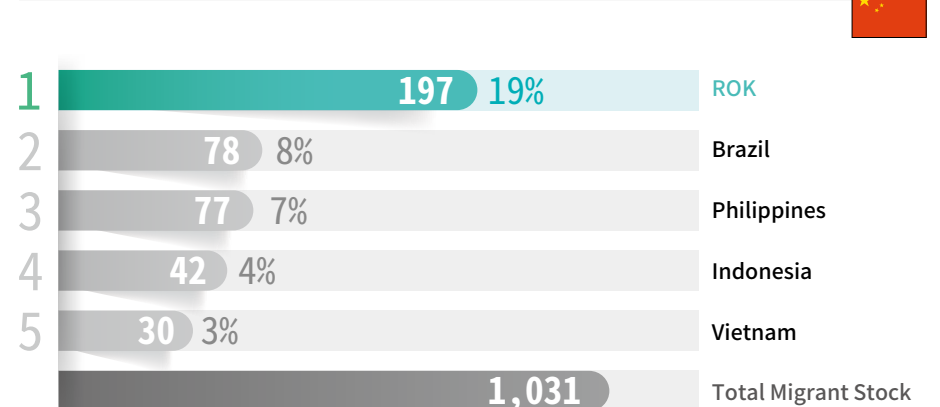
Number of Flights from ROK



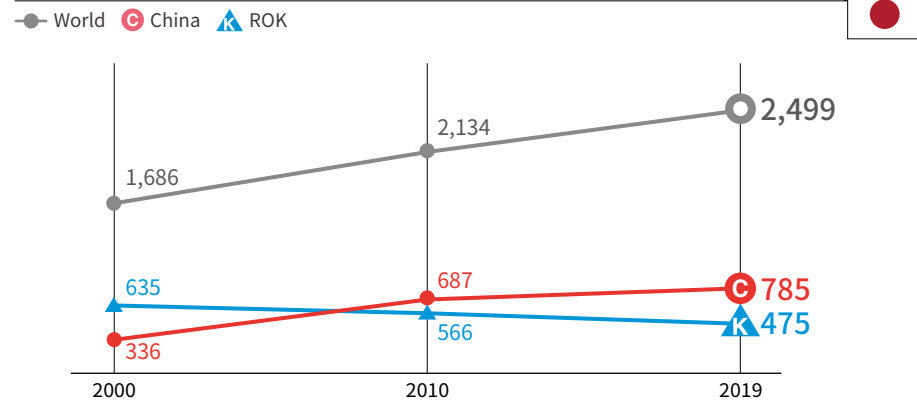
International Migrant Stock to China



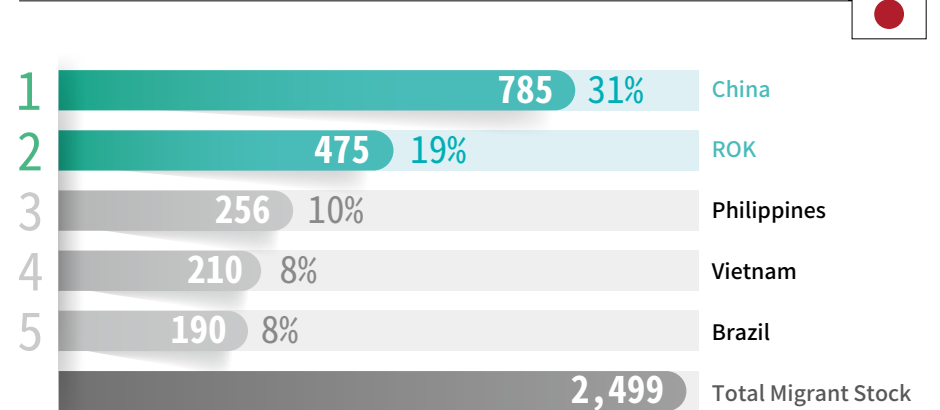
Top 5 Migrant Stock to China by Country in 2019



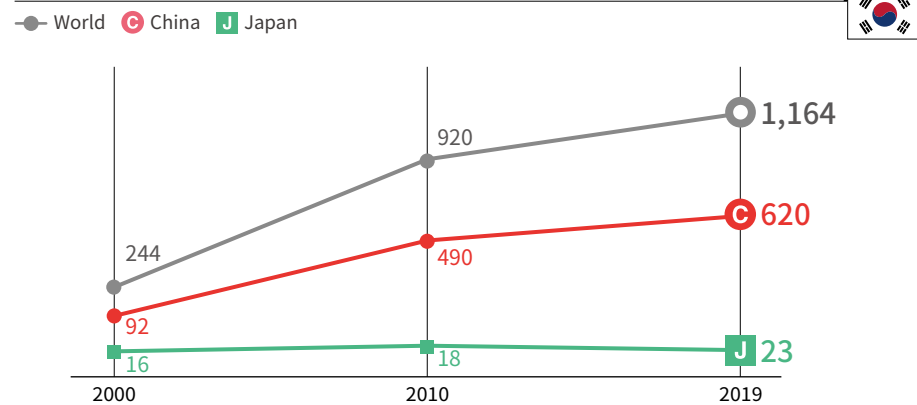
International Migrant Stock to Japan



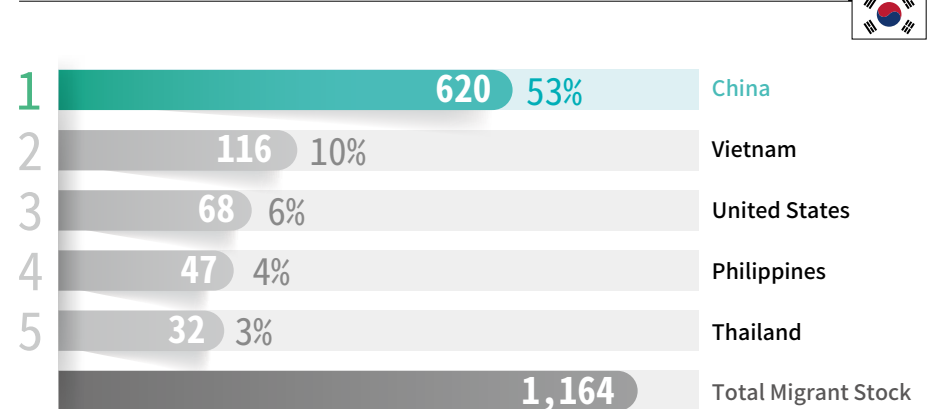
Top 5 Migrant Stock to Japan by Country in 2019



International Migrant Stock to ROK



Top 5 Migrant Stock to ROK by Country in 2019

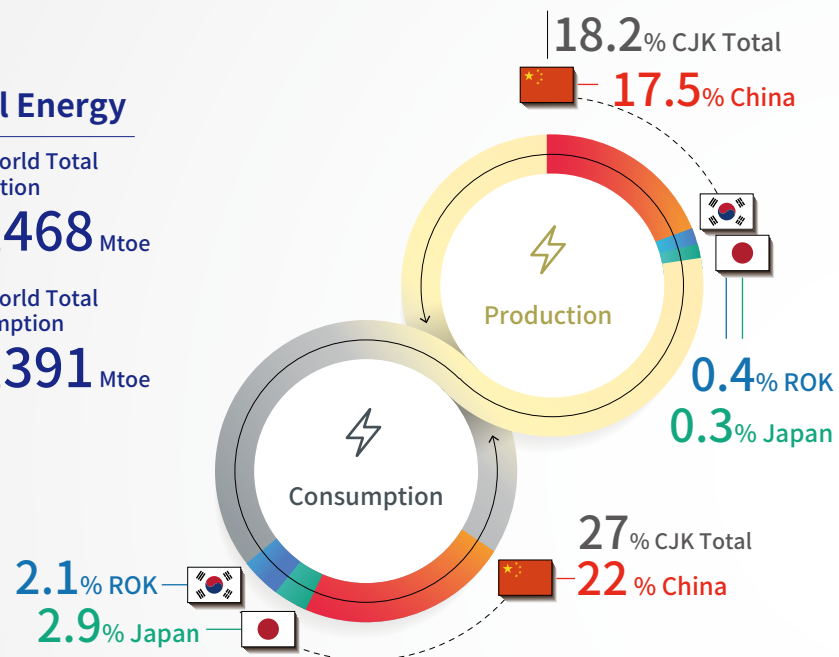


Energy

Total Energy

2018 World Total Production
14,468 Mtoe

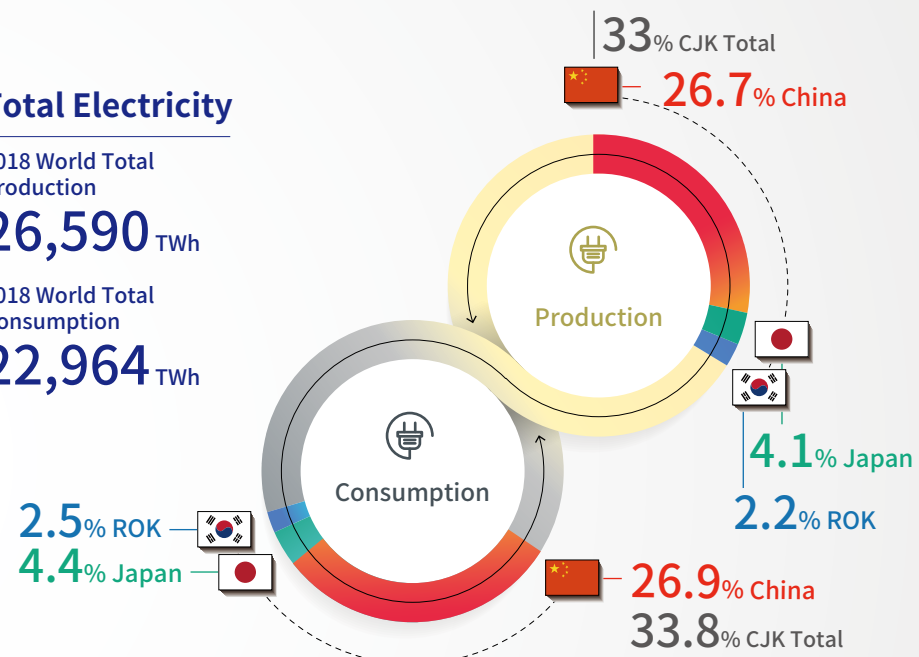
2018 World Total Consumption
14,391 Mtoe



Total Electricity

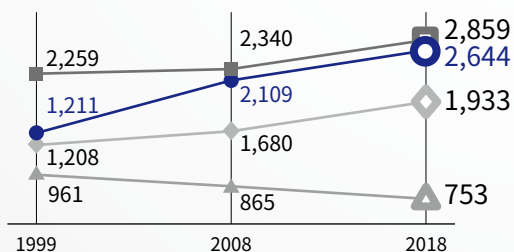
2018 World Total Production
26,590 TWh

2018 World Total Consumption
22,964 TWh

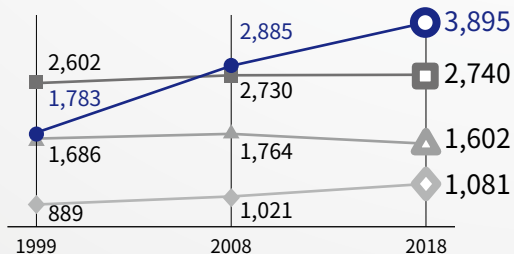


CJK Total Energy

2018 CJK Total Energy Production
2,644 Mtoe
18.2% of World Production



2018 CJK Total Energy Consumption
3,895 Mtoe
27% of World Consumption

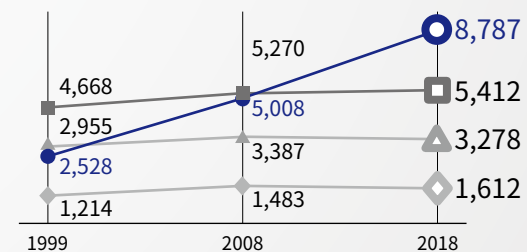


● CJK
▲ EU
■ NAFTA
◆ CIS

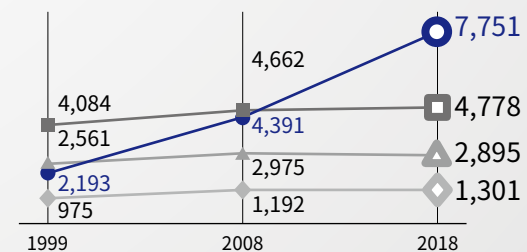
Unit: Mtoe
Source: Enerdata

CJK Total Electricity

2018 CJK Total Electricity Production
8,787 TWh
33% of World Production



2018 CJK Total Electricity Consumption
7,751 TWh
33.8% of World Consumption

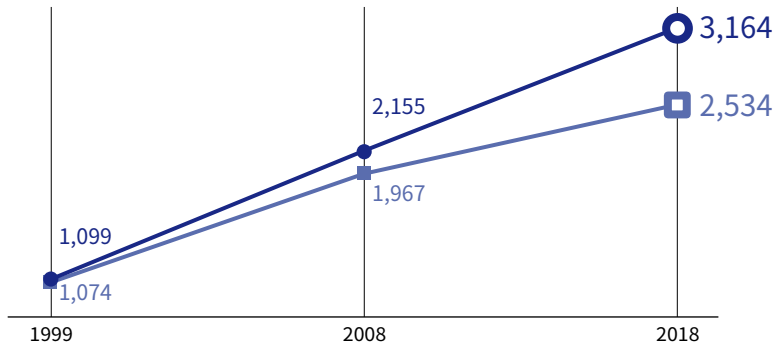


● CJK
▲ EU
■ NAFTA
◆ CIS

Unit: TWh
Source: Enerdata

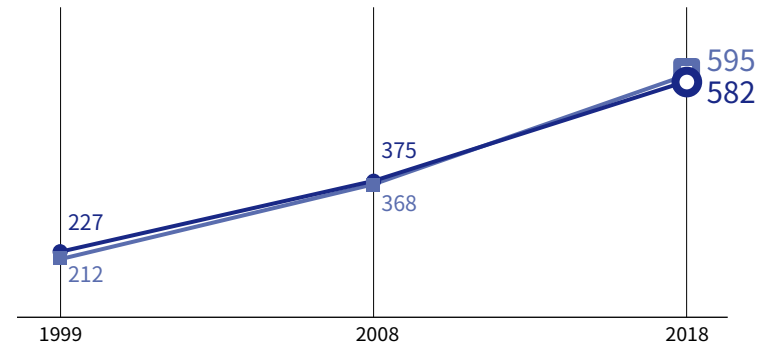
Total Energy : China

■ Production ● Consumption



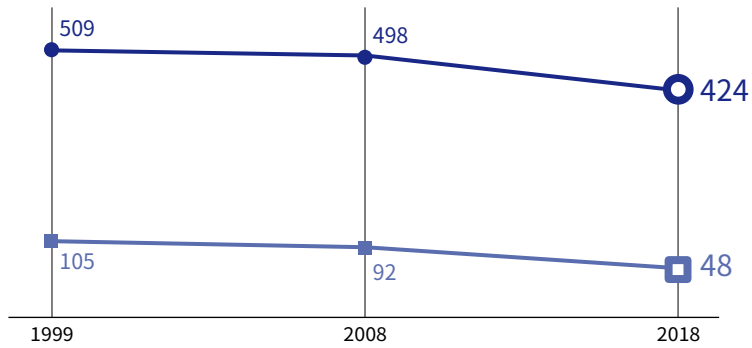
Oil Products : China

■ Production ● Consumption



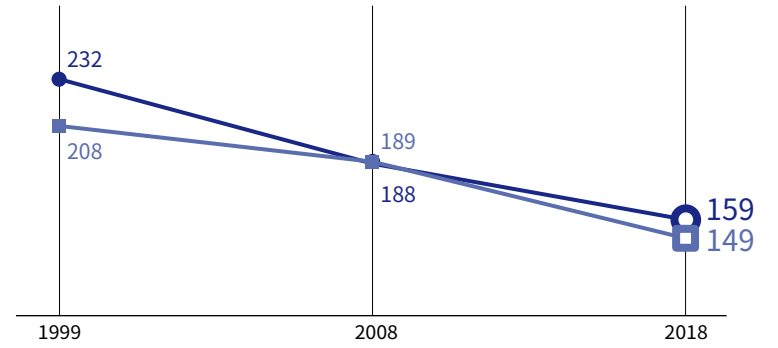
Total Energy : Japan

■ Production ● Consumption



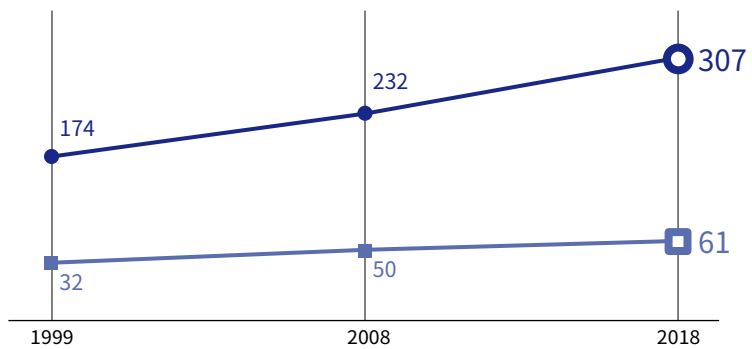
Oil Products : Japan

■ Production ● Consumption



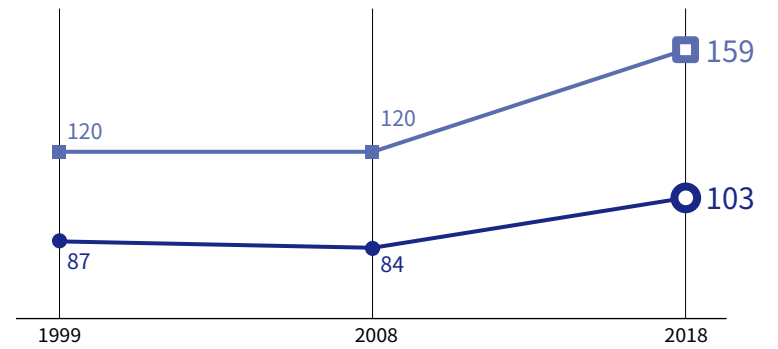
Total Energy : ROK

■ Production ● Consumption



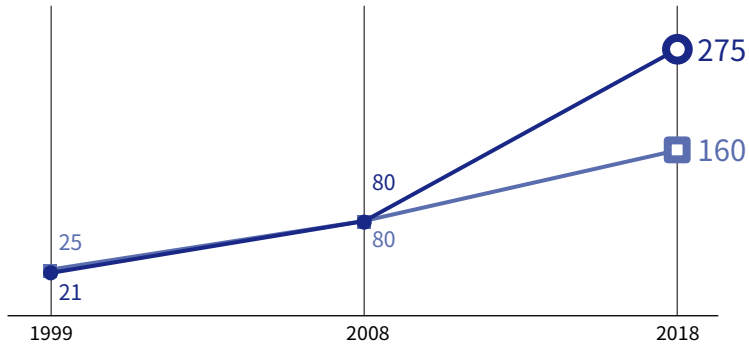
Oil Products : ROK

■ Production ● Consumption



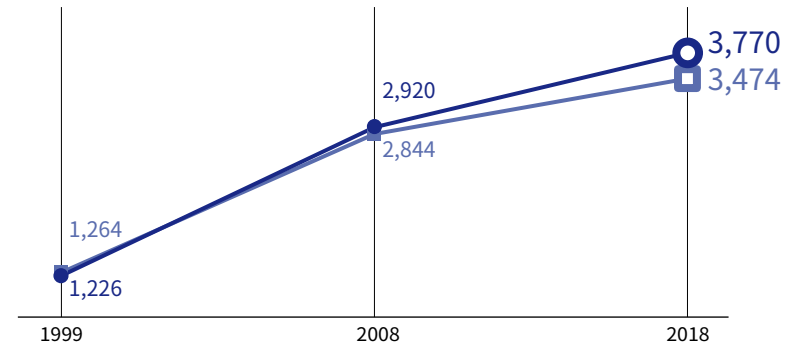
Natural Gas : China

■ Production ● Consumption



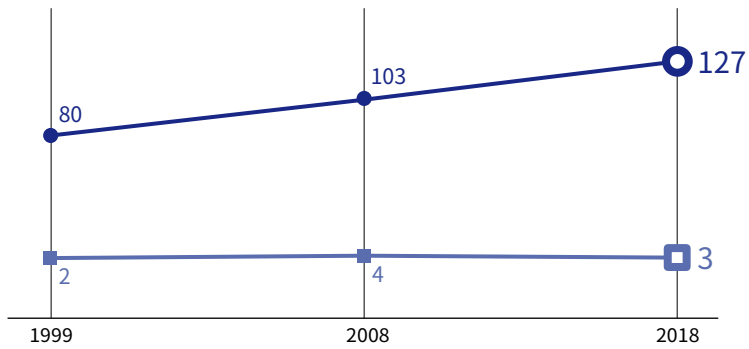
Coal and Lignite : China

■ Production ● Consumption



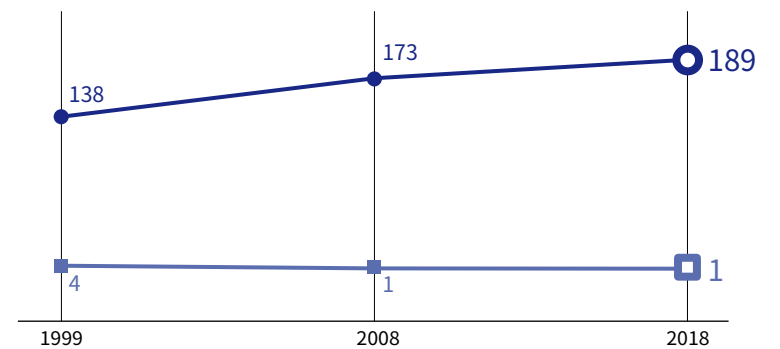
Natural Gas : Japan

■ Production ● Consumption



Coal and Lignite : Japan

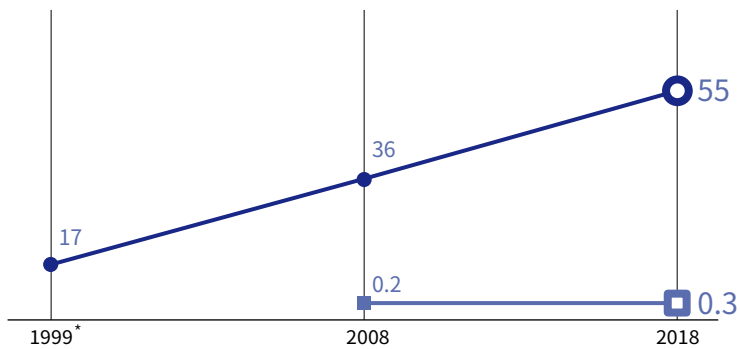
■ Production ● Consumption



Natural Gas : ROK

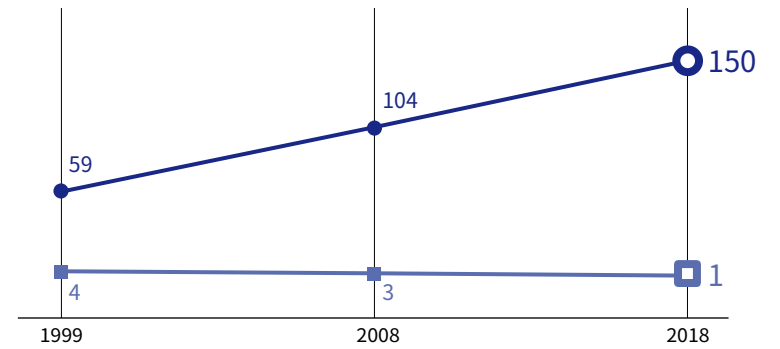
■ Production ● Consumption

*No data regarding production for the year 1999



Coal and Lignite : ROK

■ Production ● Consumption

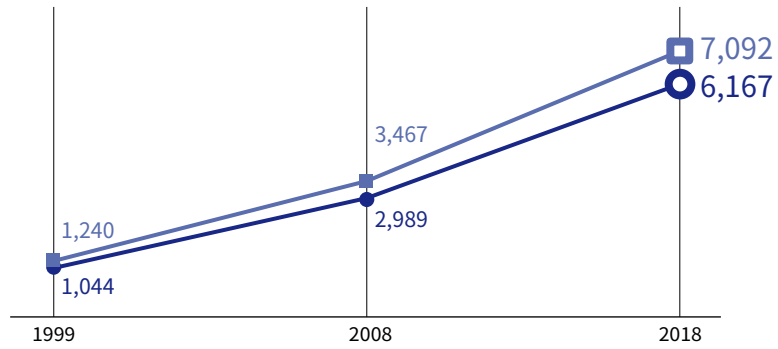


Unit : bcm
Source : Enerdata

Unit : Mt
Source : Enerdata

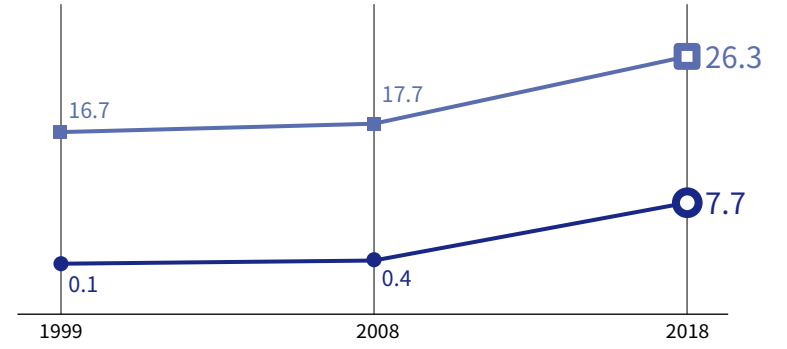
Electricity : China

■ Production ● Consumption



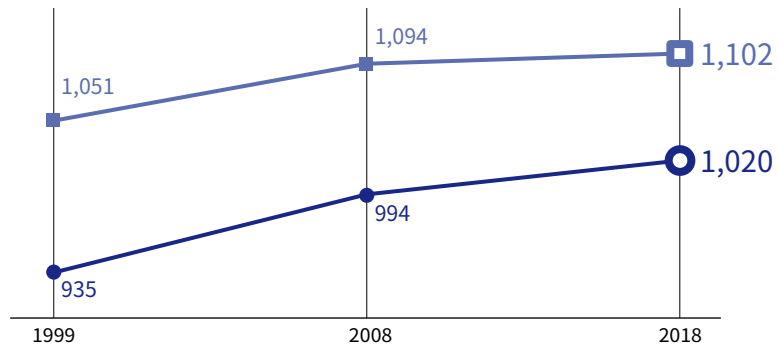
Share of Renewables in Electricity Production : China

■ Renewables ● Wind and Solar



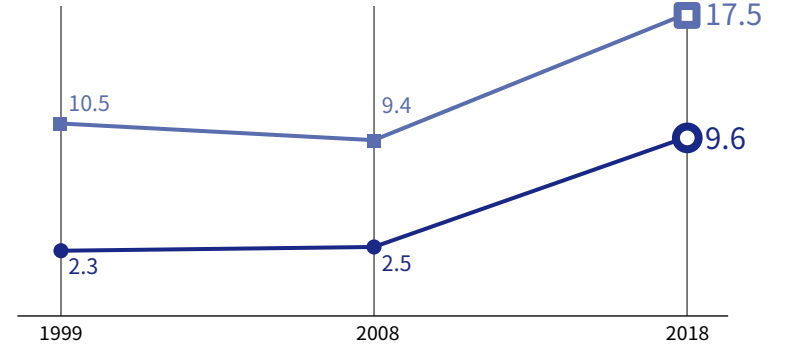
Electricity : Japan

■ Production ● Consumption



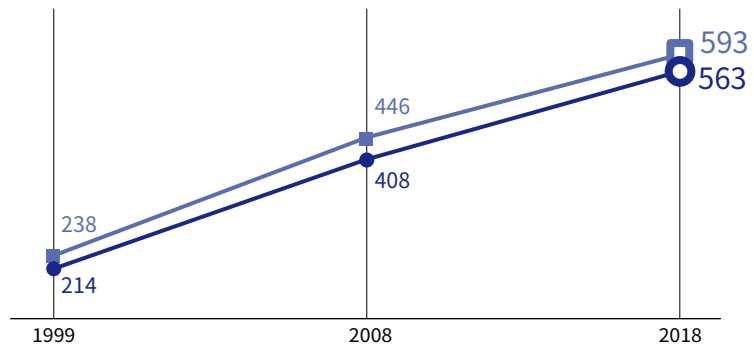
Share of Renewables in Electricity Production : Japan

■ Renewables ● Wind and Solar



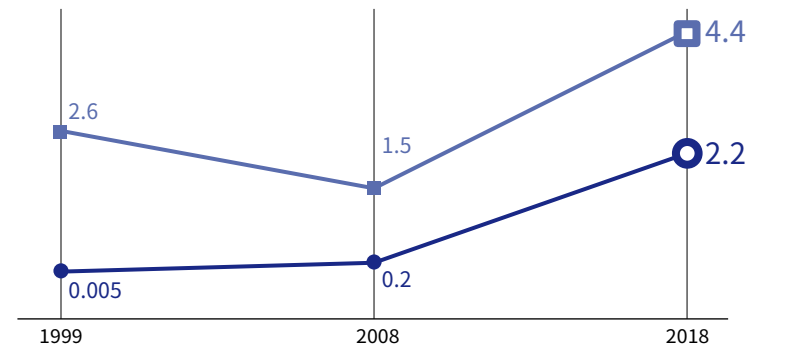
Electricity : ROK

■ Production ● Consumption



Share of Renewables in Electricity Production : ROK

■ Renewables ● Wind and Solar



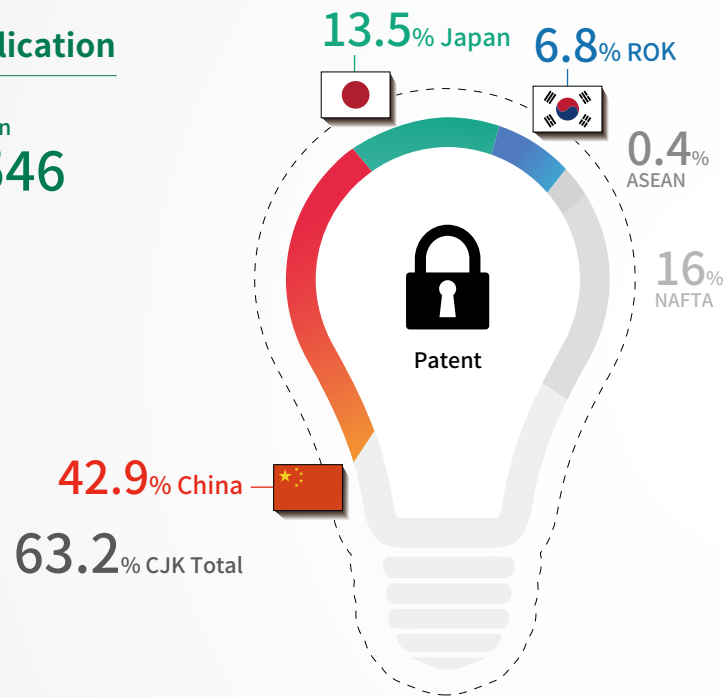
Unit : TWh
Source : Enerdata

Unit : %
Source : Enerdata

Intellectual Property Rights

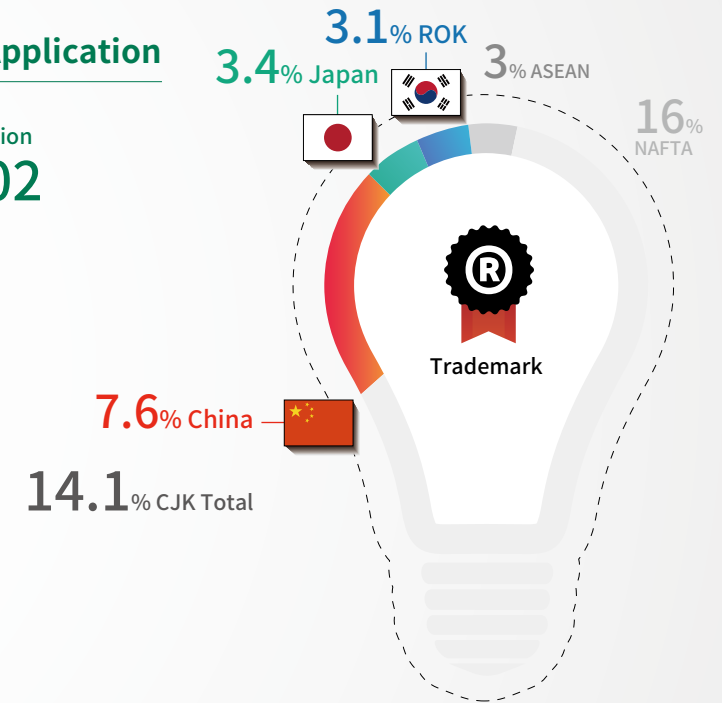
Total Patent Application

2018 World Total
Patent Application
3,407,546



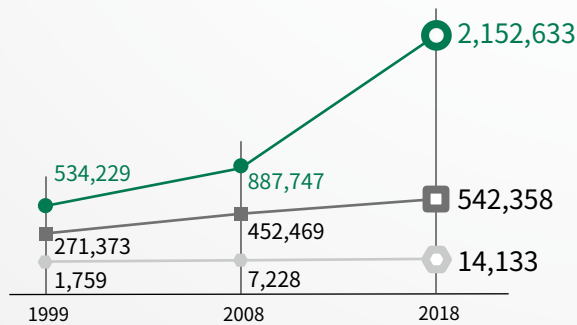
Total Trademark Application

2018 World Total
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CJK Patent Application

2018 CJK Total
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63.2% of World
Patent Application



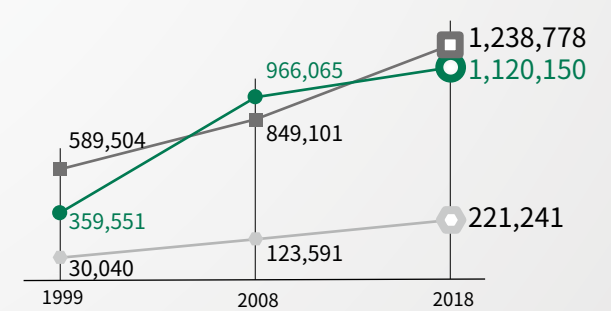
● CJK
● ASEAN
■ NAFTA

Unit : Number of Application

Source : WIPO

CJK Trademark Application

2018 CJK Total
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14.1% of World
Trademark Application



● CJK
● ASEAN
■ NAFTA

Unit : Number of Application

Source : WIPO

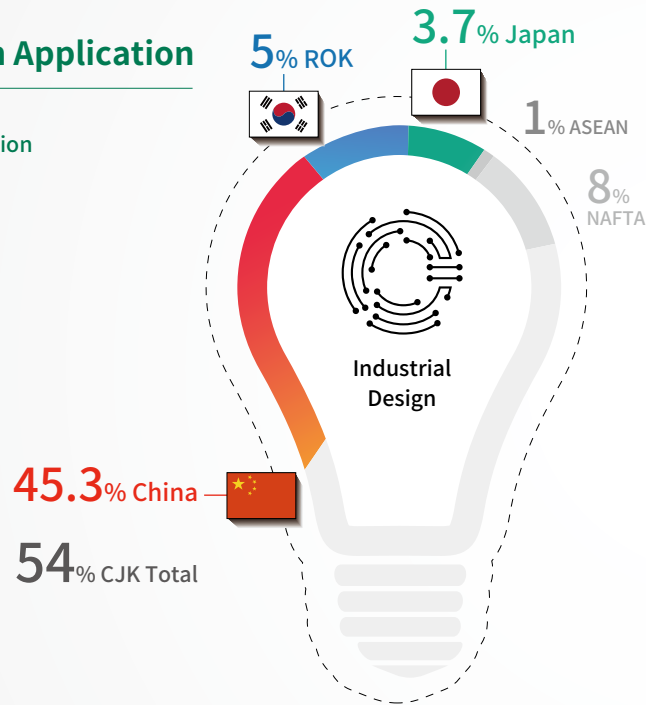
*Trademark data in China is not consistent since 2014.
China stopped providing trademark by applicant's origin to WIPO.



Intellectual Property Rights

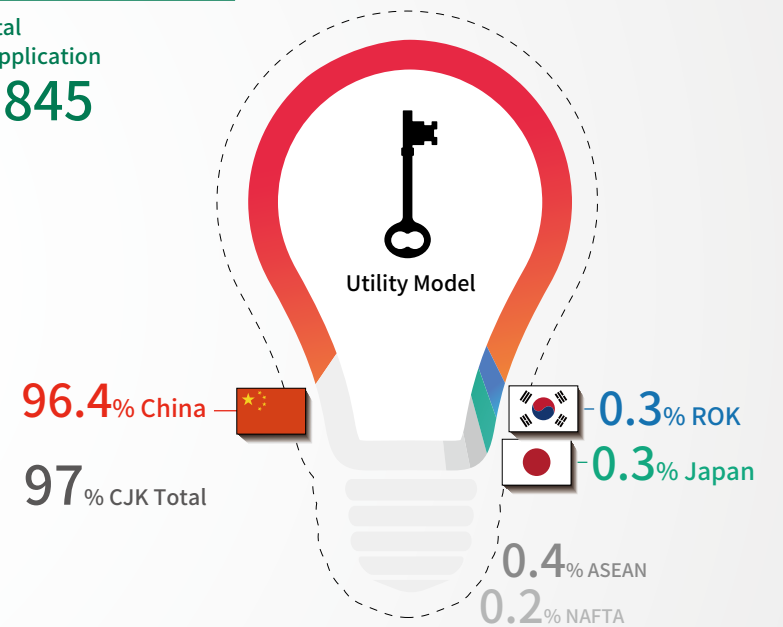
Total Industrial Design Application

2018 World Total
Industrial Design Application
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Total Utility Model Application

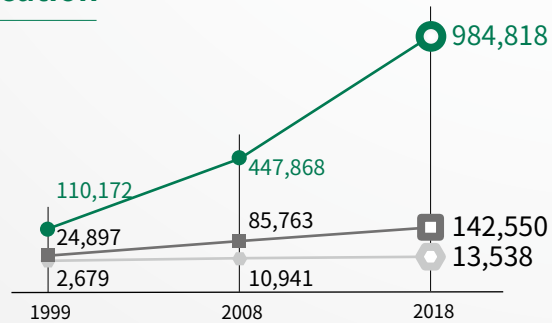
2018 World Total
Utility Model Application
2,143,845



CJK Industrial Design Application

2018 CJK Total
Industrial Design Application
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54% of World
Industrial Design Application

● CJK
● ASEAN
■ NAFTA



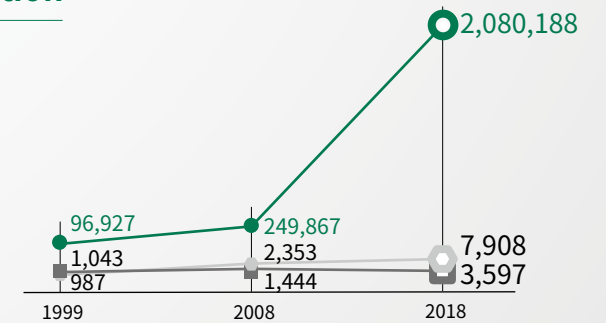
Unit : Number of Application

Source : WIPO

CJK Utility Model Application

2018 CJK Total
Utility Model Application
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97% of World
Utility Model Application

● CJK
● ASEAN
■ NAFTA



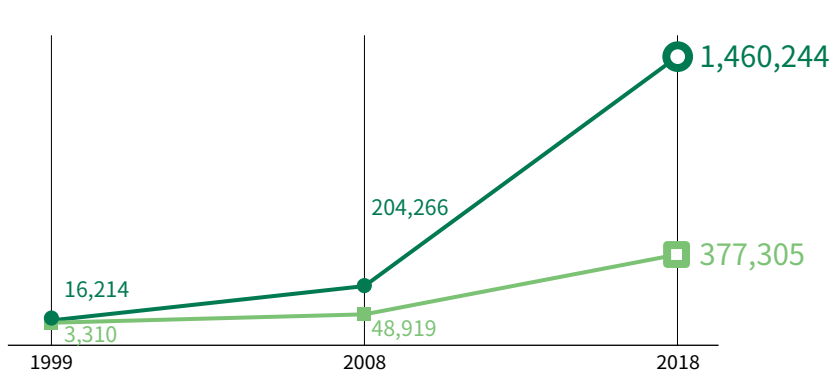
Unit : Number of Application

Source : WIPO



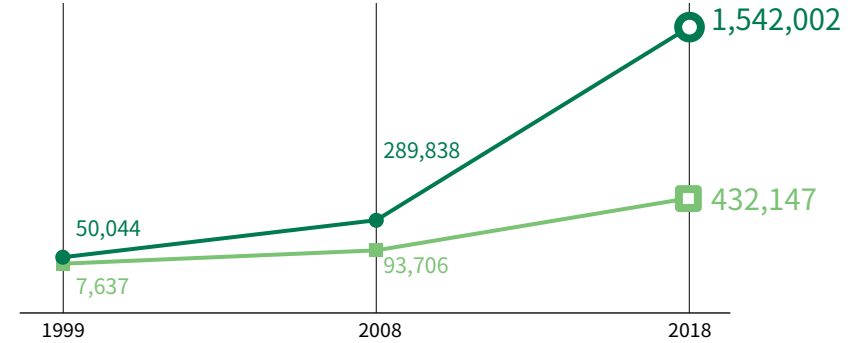
Patent by Applicant's Origin : China

● Application ■ Grant



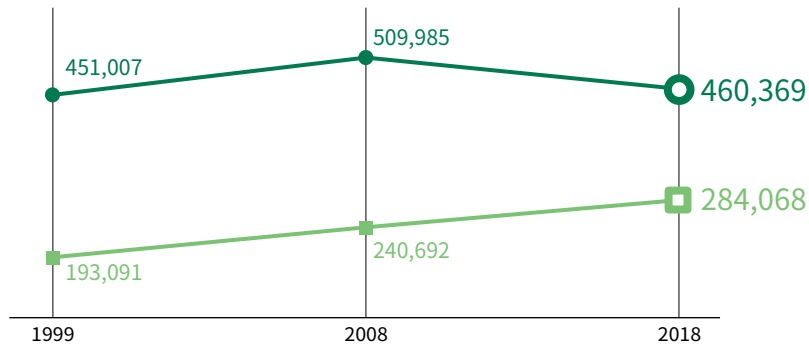
Patent by Filing Office : China

● Application ■ Grant



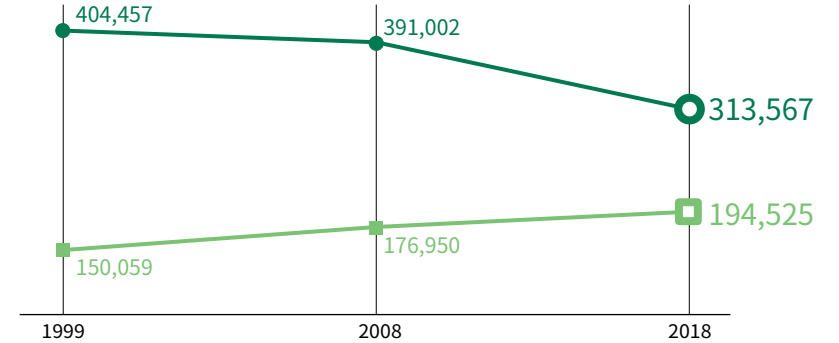
Patent by Applicant's Origin : Japan

● Application ■ Grant



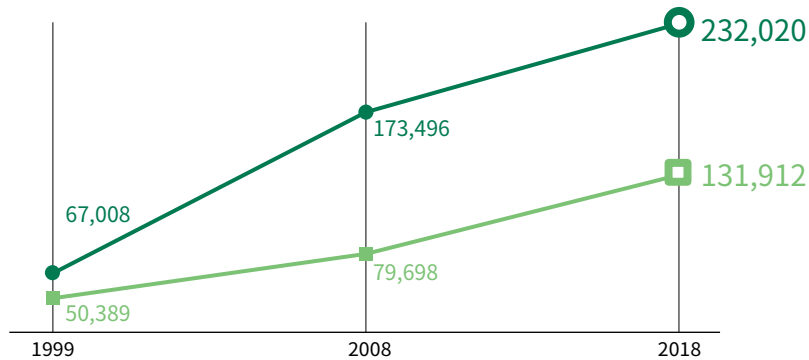
Patent by Filing Office : Japan

● Application ■ Grant



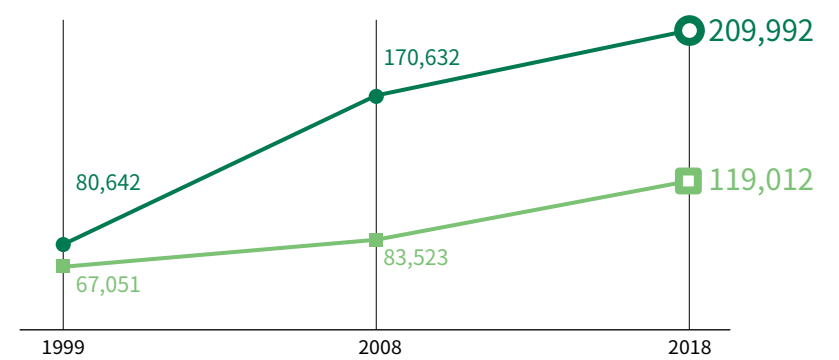
Patent by Applicant's Origin : ROK

● Application ■ Grant



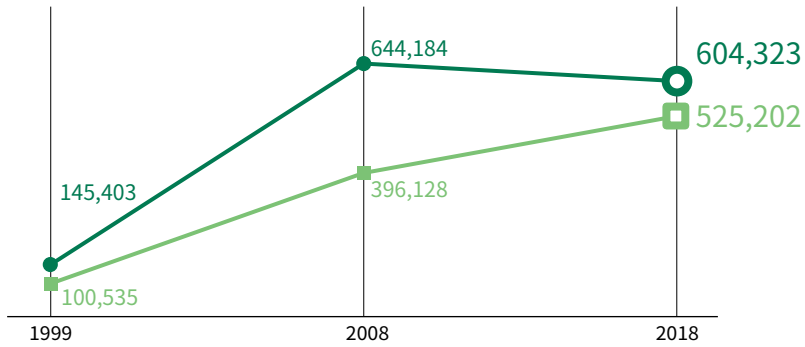
Patent by Filing Office : ROK

● Application ■ Grant



Trademark by Applicant's Origin : China

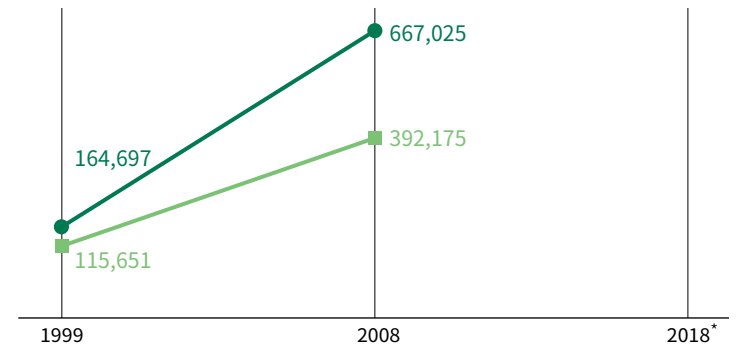
● Application ■ Registration



Trademark by Filing Office : China

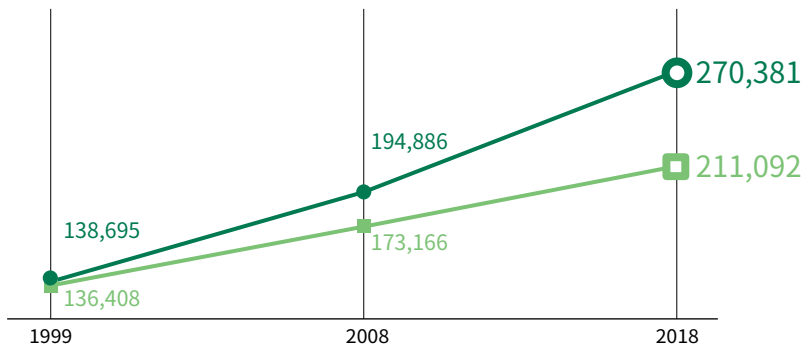
● Application ■ Registration

*No data for the year 2018



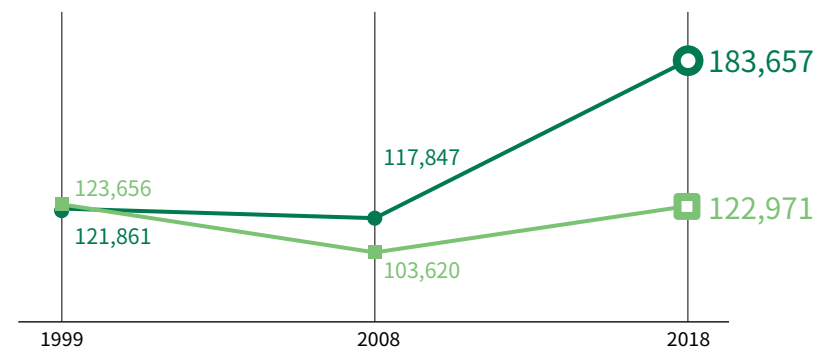
Trademark by Applicant's Origin : Japan

● Application ■ Registration



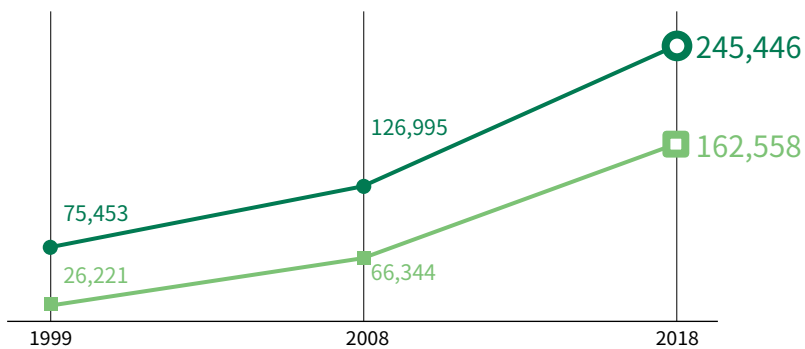
Trademark by Filing Office : Japan

● Application ■ Registration



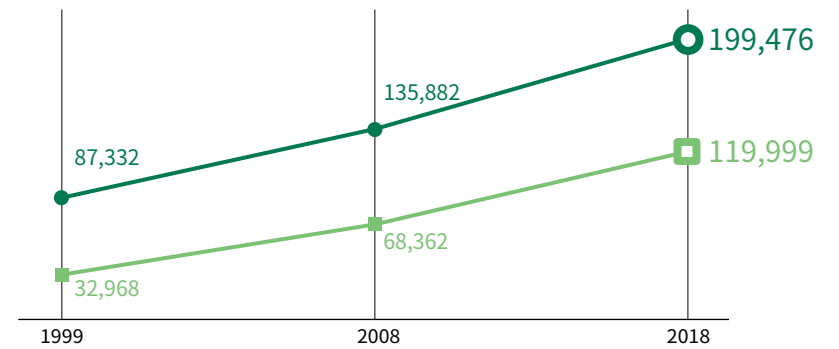
Trademark by Applicant's Origin : ROK

● Application ■ Registration



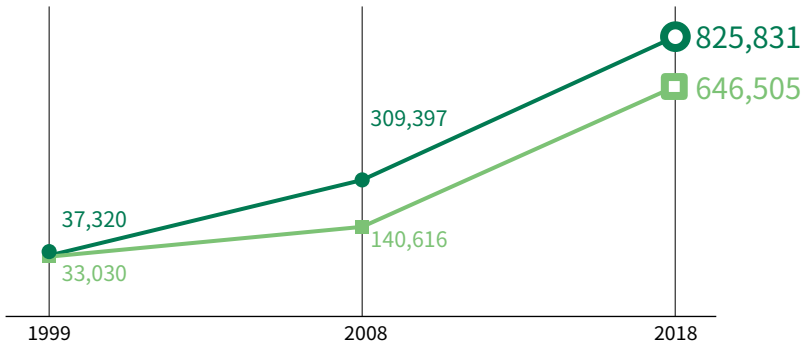
Trademark by Filing Office : ROK

● Application ■ Registration



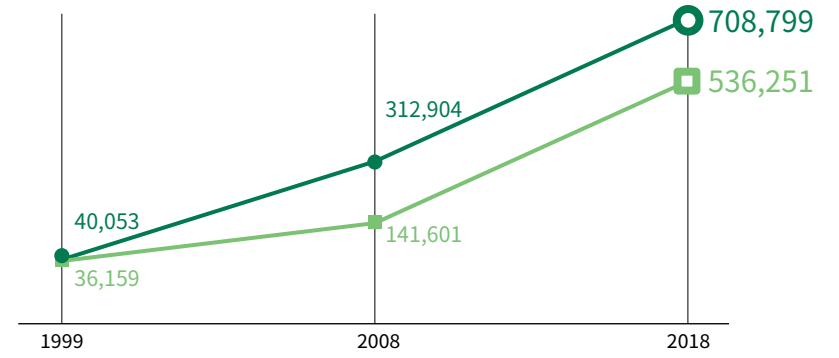
Industrial Design by Applicant's Origin : China

● Application ■ Registration



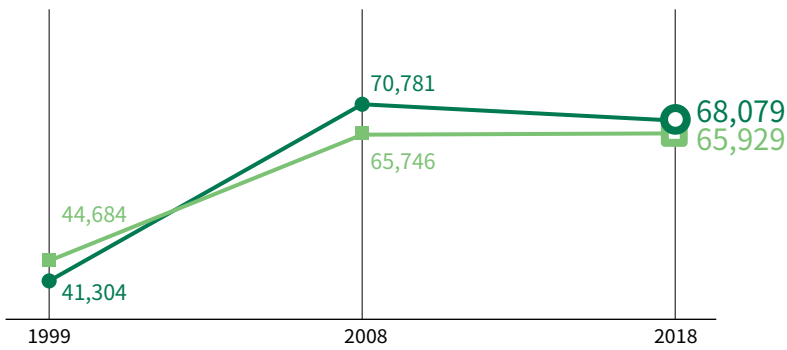
Industrial Design by Filing Office : China

● Application ■ Registration



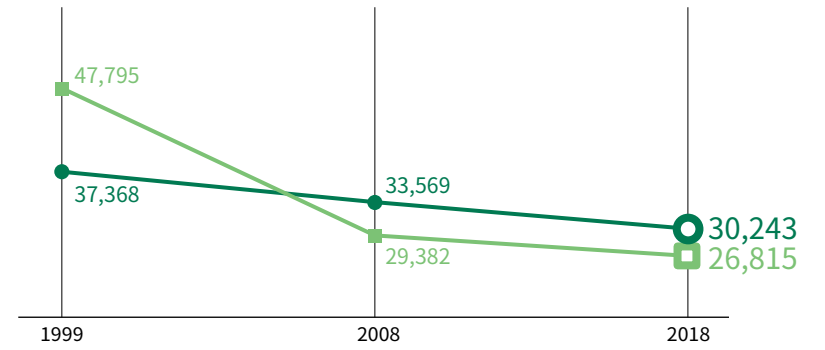
Industrial Design by Applicant's Origin : Japan

● Application ■ Registration



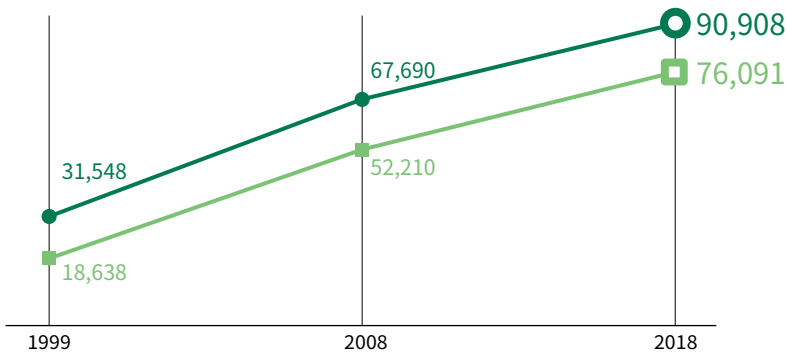
Industrial Design by Filing Office : Japan

● Application ■ Registration



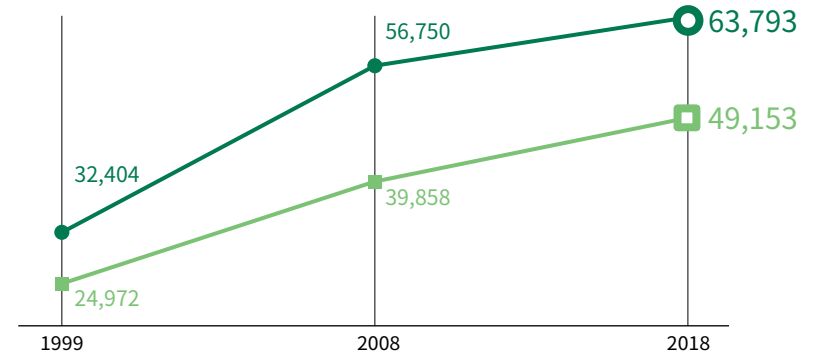
Industrial Design by Applicant's Origin : ROK

● Application ■ Registration



Industrial Design by Filing Office : ROK

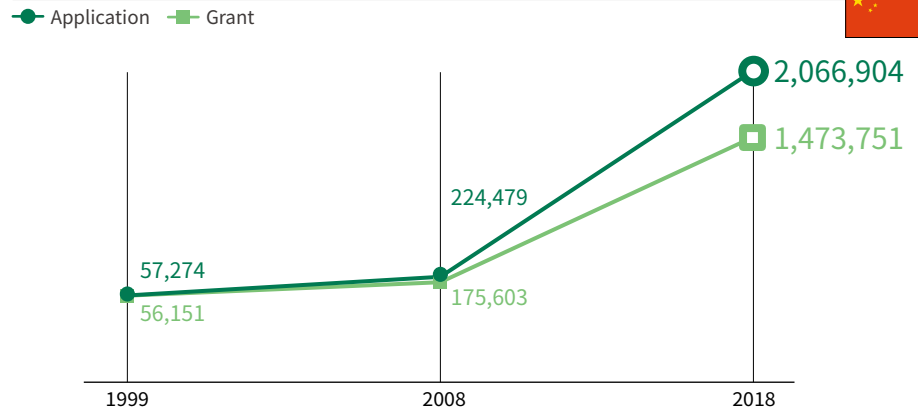
● Application ■ Registration



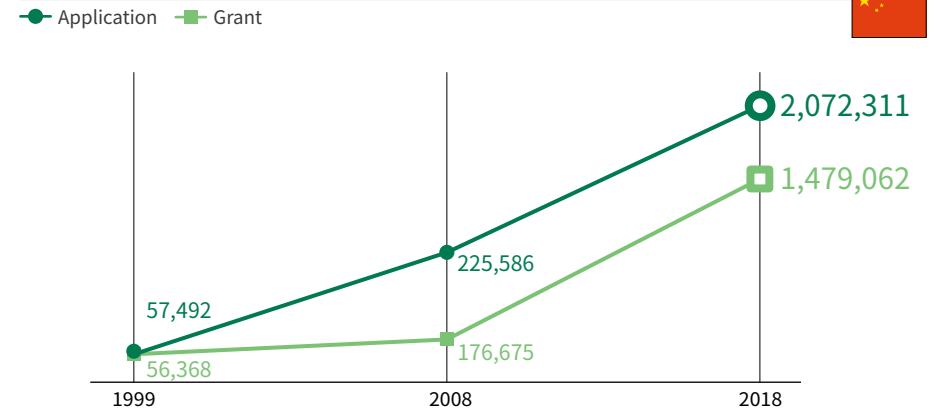
Unit : Number of Industrial Designs
Source : WIPO

Unit : Number of Industrial Designs
Source : WIPO

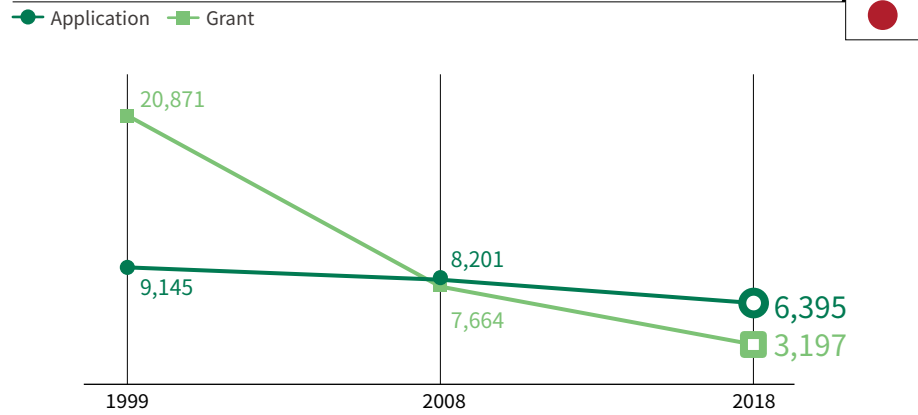
Utility Model by Applicant's Origin : China



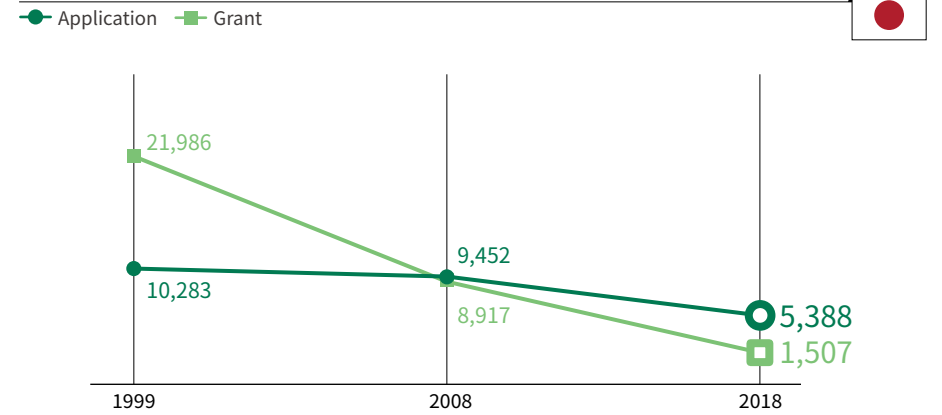
Utility Model by Filing Office : China



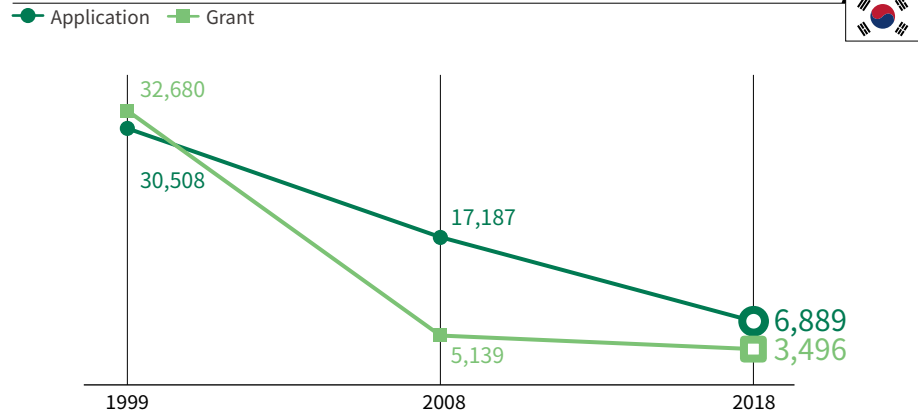
Utility Model by Applicant's Origin : Japan



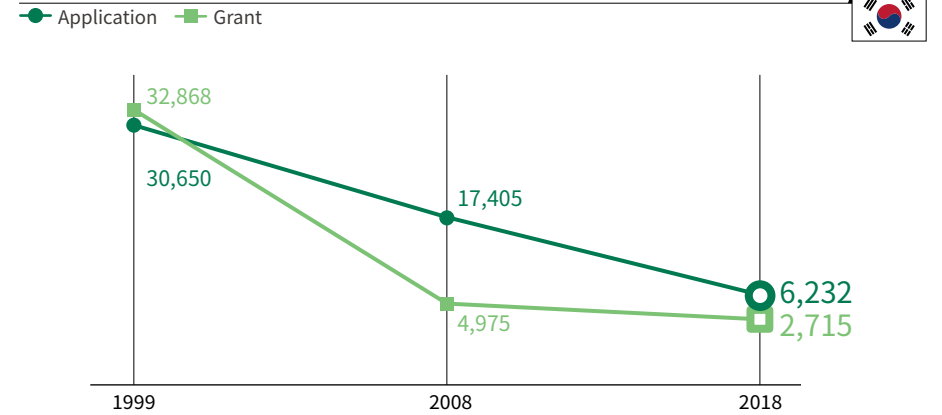
Utility Model by Filing Office : Japan



Utility Model by Applicant's Origin : ROK



Utility Model by Filing Office : ROK



Unit : Number of Utility Models
Source : WIPO

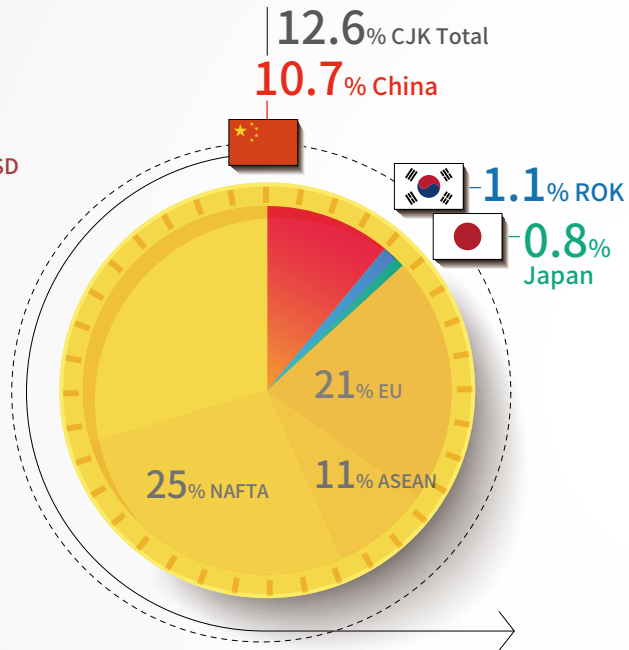
Unit : Number of Utility Models
Source : WIPO

Foreign Direct Investment

Inward Flow

2018 World Total
Inward Flow
1,297 Billion USD

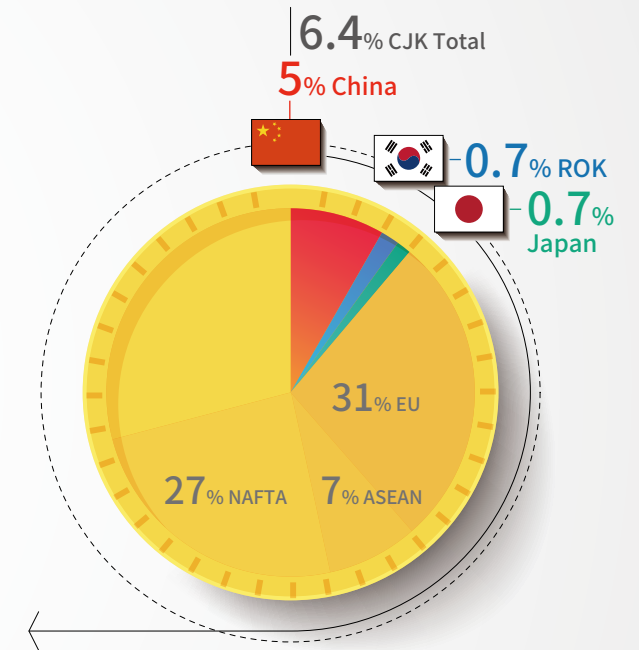
2018 CJK Total
Inward Flow
163 Billion USD
12.6% of World
Inward Flow



Inward Stock

2018 World Total
Inward Stock
32,272 Billion USD

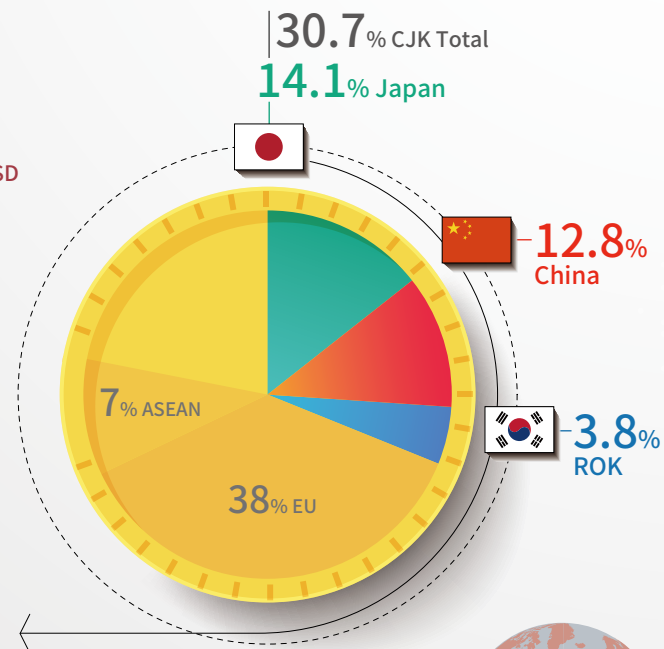
2018 CJK Total
Inward Stock
2,073 Billion USD
6.4% of World
Inward Stock



Outward Flow

2018 World Total
Outward Flow
1,014 Billion USD

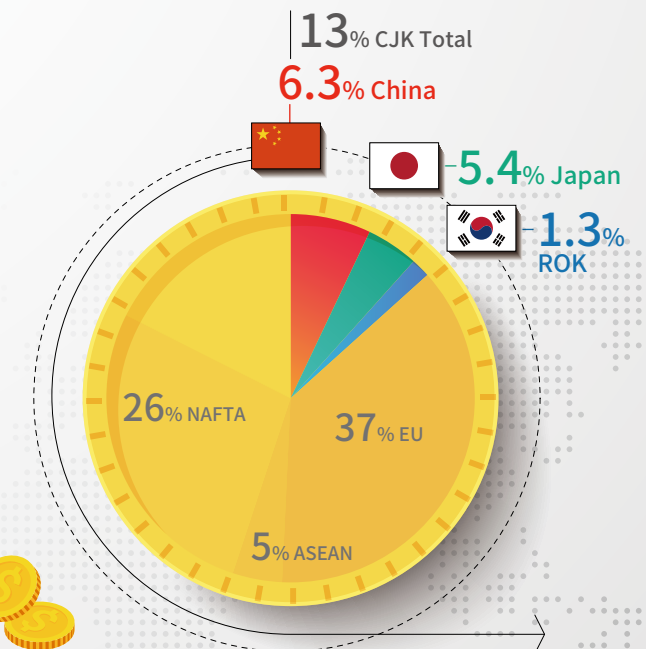
2018 CJK Total
Outward Flow
312 Billion USD
30.7% of World
Outward Flow



Outward Stock

2018 World Total
Outward Stock
30,975 Billion USD

2018 CJK Total
Outward Stock
3,992 Billion USD
13% of World
Outward Stock



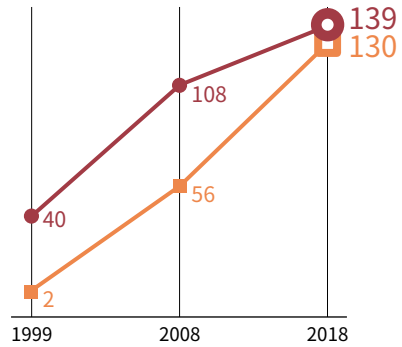
Source : UNCTAD

Source : UNCTAD

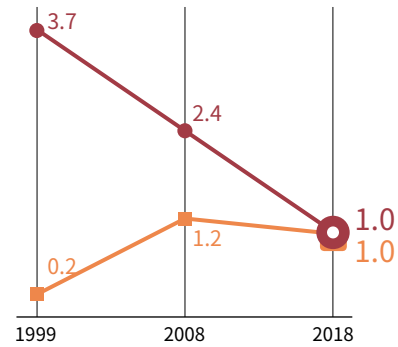
FDI Flow : China

● Inward ■ Outward

Flow



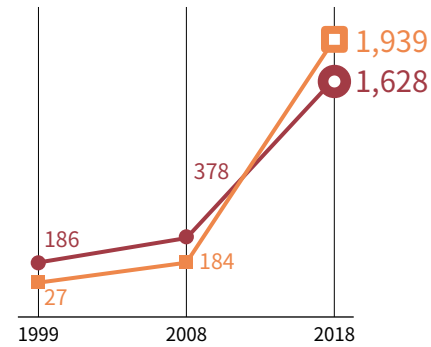
Percentage of GDP



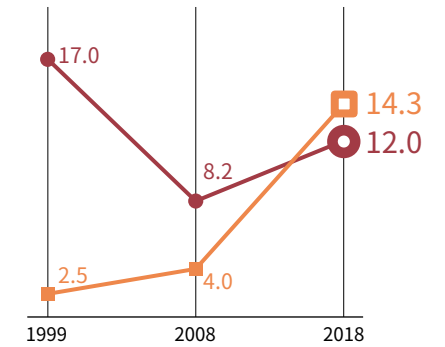
FDI Stock : China

● Inward ■ Outward

Stock



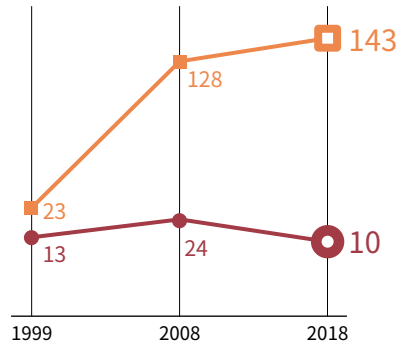
Percentage of GDP



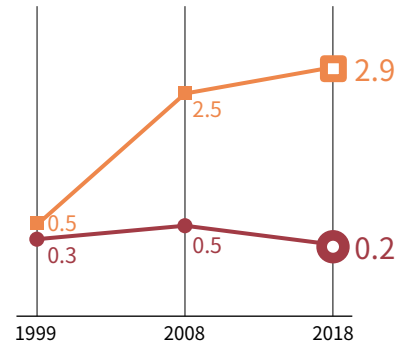
FDI Flow : Japan

● Inward ■ Outward

Flow



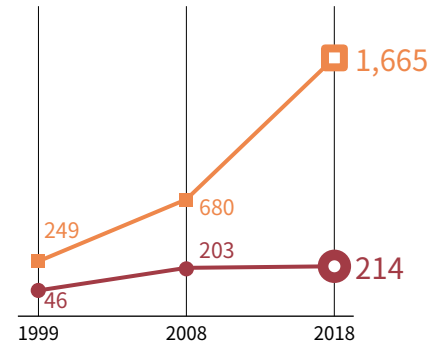
Percentage of GDP



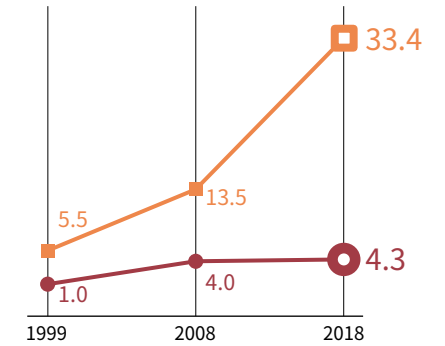
FDI Stock : Japan

● Inward ■ Outward

Stock



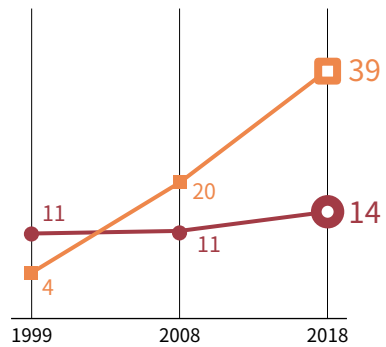
Percentage of GDP



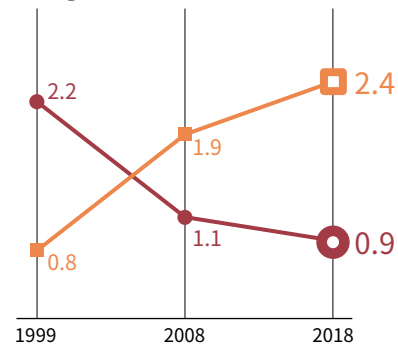
FDI Flow : ROK

● Inward ■ Outward

Flow



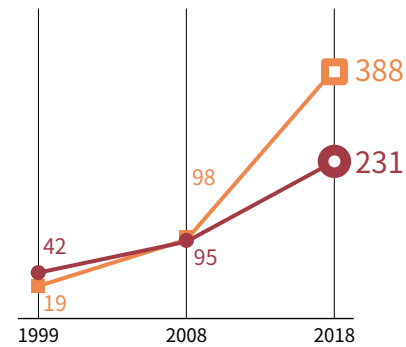
Percentage of GDP



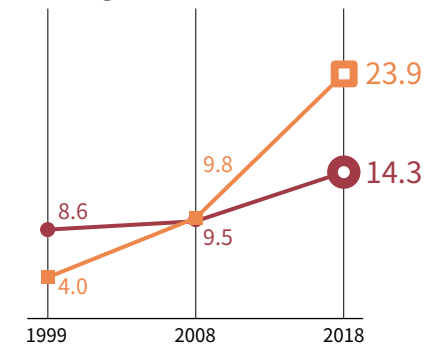
FDI Stock : ROK

● Inward ■ Outward

Stock



Percentage of GDP



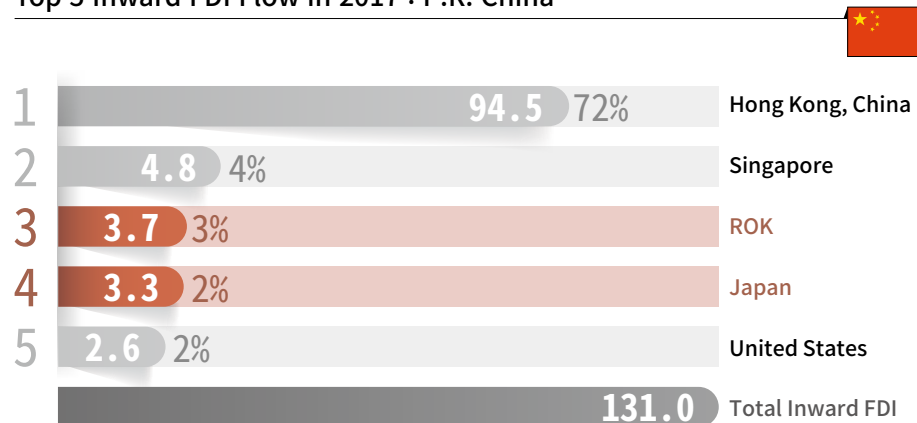
Unit : Billion USD
Source : UNCTAD

Unit : %
Source : UNCTAD

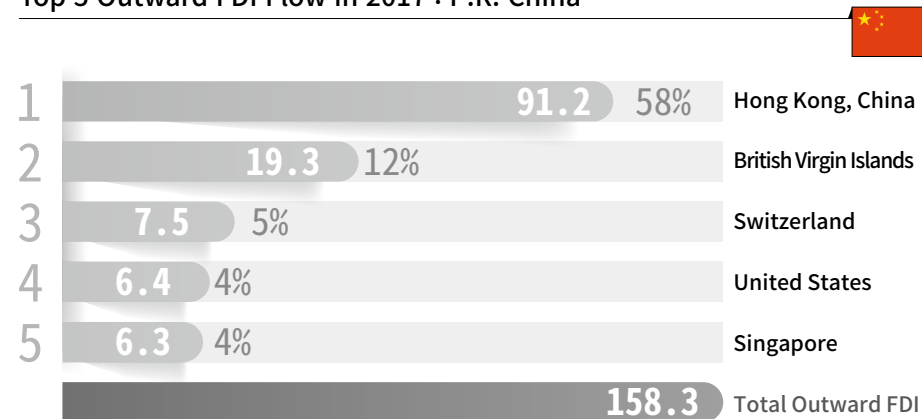
Unit : Billion USD
Source : UNCTAD

Unit : %
Source : UNCTAD

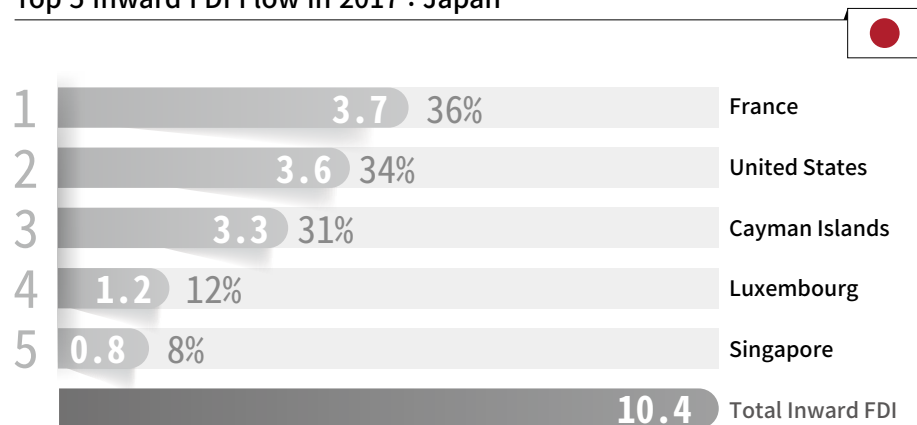
Top 5 Inward FDI Flow in 2017 : P.R. China



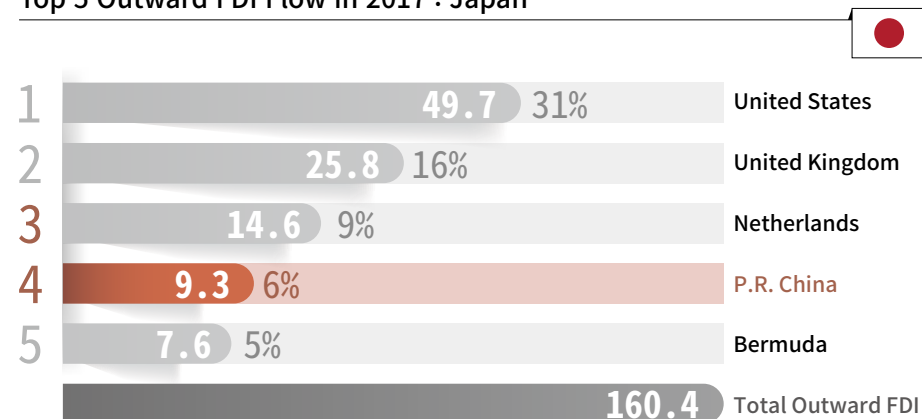
Top 5 Outward FDI Flow in 2017 : P.R. China



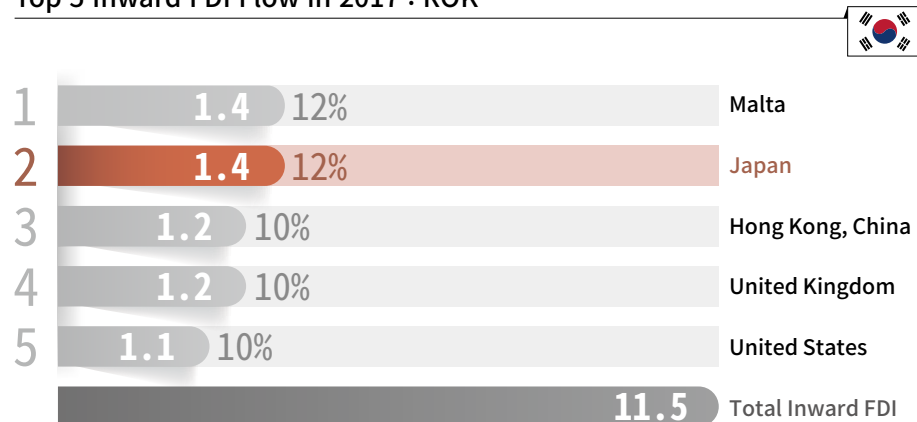
Top 5 Inward FDI Flow in 2017 : Japan



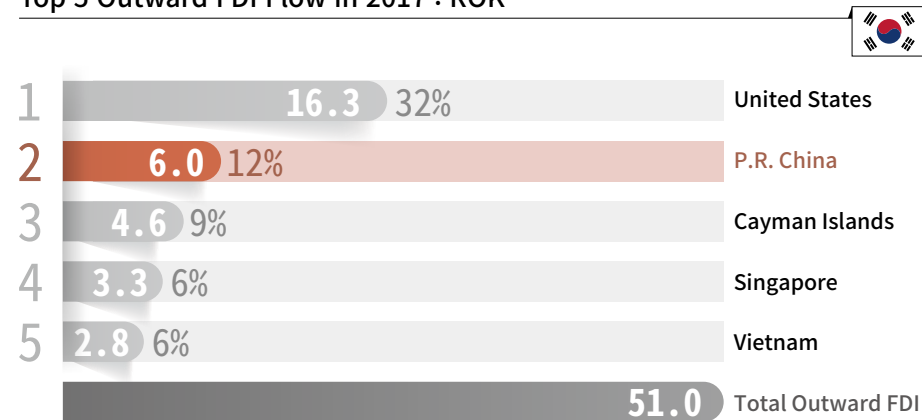
Top 5 Outward FDI Flow in 2017 : Japan



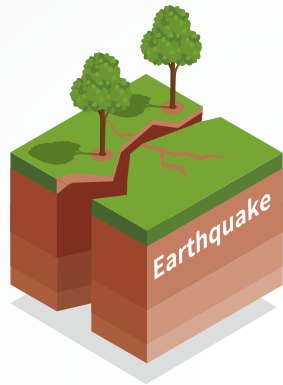
Top 5 Inward FDI Flow in 2017 : ROK









Top 5 Outward FDI Flow in 2017 : ROK

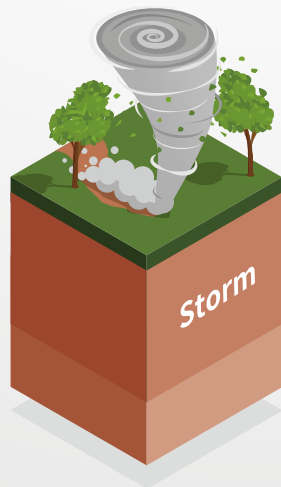
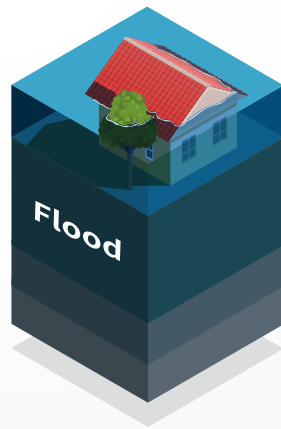





Natural Disaster : 1999-2018



	China 97 Earthquakes 66 Million People Affected 104 Billion USD Damage
	Japan 24 Earthquakes 1 Million People Affected 279 Billion USD Damage
	ROK 2 Earthquakes 35 Thousand People Affected 21 Million USD Damage

	China 199 Floods 1 Billion People Affected 169 Billion USD Damage
	Japan 20 Floods 2 Million People Affected 23 Billion USD Damage
	ROK 15 Floods 0.4 Million People Affected 864 Million USD Damage



	China 195 Storms 353 Million People Affected 91 Billion USD Damage
	Japan 75 Storms 1 Million People Affected 58 Billion USD Damage
	ROK 23 Storms 0.2 Million People Affected 11 Billion USD Damage

Part III

Annex



1 Basic Economic Indicators

1.1 GDP(Current USD)

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,094	3%	1,211	4%	1,339	4%	1,471	4%	1,660	4%	1,955	4%	2,286	5%	2,752	5%	3,550	6%	4,594	7%
Japan	4,562	14%	4,888	15%	4,304	13%	4,115	12%	4,446	11%	4,815	11%	4,755	10%	4,530	9%	4,515	8%	5,038	8%
ROK	485	1%	562	2%	533	2%	609	2%	681	2%	765	2%	898	2%	1,012	2%	1,123	2%	1,002	2%
CJK	6,141	19%	6,660	20%	6,176	19%	6,195	18%	6,786	17%	7,535	17%	7,940	17%	8,294	16%	9,188	16%	10,634	17%
EU	9,591	29%	8,910	27%	9,013	27%	9,828	28%	11,960	31%	13,809	32%	14,443	30%	15,409	30%	17,811	31%	19,164	30%
ASEAN	553	2%	614	2%	590	2%	658	2%	742	2%	832	2%	938	2%	1,123	2%	1,342	2%	1,561	2%
NAFTA	10,907	34%	11,703	35%	12,075	36%	12,466	36%	13,080	34%	14,019	32%	15,083	32%	16,105	31%	16,970	29%	17,372	27%
World	32,529	100%	33,582	100%	33,382	100%	34,669	100%	38,900	100%	43,812	100%	47,459	100%	51,443	100%	57,969	100%	63,616	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	5,102	8%	6,087	9%	7,552	10%	8,532	11%	9,570	12%	10,439	13%	11,016	15%	11,138	15%	12,143	15%	13,608	16%
Japan	5,231	9%	5,700	9%	6,157	8%	6,203	8%	5,156	7%	4,850	6%	4,389	6%	4,927	6%	4,860	6%	4,971	6%
ROK	902	1%	1,094	2%	1,202	2%	1,223	2%	1,306	2%	1,411	2%	1,383	2%	1,415	2%	1,531	2%	1,619	2%
CJK	11,235	19%	12,882	20%	14,911	20%	15,958	21%	16,032	21%	16,700	21%	16,788	22%	17,479	23%	18,534	23%	20,198	24%
EU	17,127	28%	17,010	26%	18,374	25%	17,317	23%	18,053	23%	18,669	24%	16,446	22%	16,551	22%	17,350	21%	18,756	22%
ASEAN	1,556	3%	1,988	3%	2,301	3%	2,434	3%	2,512	3%	2,534	3%	2,458	3%	2,580	3%	2,779	3%	2,969	3%
NAFTA	16,720	28%	17,663	27%	18,512	25%	19,222	26%	19,901	26%	20,638	26%	20,943	28%	21,312	28%	22,290	28%	23,430	27%
World	60,340	100%	66,037	100%	73,357	100%	75,046	100%	77,190	100%	79,296	100%	75,003	100%	76,103	100%	80,891	100%	85,804	100%

Unit : Billion USD
Source : WBG

1.2 GDP(Constant 2010 USD)

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	2,057	4%	2,232	4%	2,418	5%	2,639	5%	2,904	5%	3,198	6%	3,562	6%	4,015	7%	4,586	7%	5,029	8%
Japan	5,204	11%	5,349	11%	5,371	11%	5,377	10%	5,459	10%	5,580	10%	5,672	10%	5,753	9%	5,848	9%	5,784	9%
ROK	652	1%	710	1%	742	1%	797	2%	821	2%	861	2%	895	2%	941	2%	992	2%	1,021	2%
CJK	7,914	17%	8,291	17%	8,531	17%	8,813	17%	9,184	17%	9,638	17%	10,129	17%	10,709	18%	11,427	18%	11,834	18%
EU	14,231	30%	14,778	30%	15,111	30%	15,318	29%	15,515	29%	15,916	28%	16,254	28%	16,801	28%	17,326	27%	17,419	27%
ASEAN	1,126	2%	1,193	2%	1,227	2%	1,288	2%	1,360	3%	1,448	3%	1,530	3%	1,623	3%	1,731	3%	1,807	3%
NAFTA	14,268	30%	14,877	30%	15,023	29%	15,286	29%	15,696	29%	16,283	29%	16,839	29%	17,333	29%	17,665	28%	17,673	27%
World	47,929	100%	50,035	100%	51,009	100%	52,127	100%	53,643	100%	55,995	100%	58,161	100%	60,681	100%	63,241	100%	64,413	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	5,502	9%	6,087	9%	6,669	10%	7,193	10%	7,751	11%	8,317	11%	8,892	12%	9,491	12%	10,132	13%	10,801	13%
Japan	5,471	9%	5,700	9%	5,694	8%	5,779	8%	5,894	8%	5,916	8%	5,989	8%	6,025	8%	6,141	8%	6,190	7%
ROK	1,028	2%	1,094	2%	1,135	2%	1,161	2%	1,194	2%	1,234	2%	1,269	2%	1,306	2%	1,346	2%	1,382	2%
CJK	12,000	19%	12,882	20%	13,497	20%	14,132	20%	14,840	21%	15,468	21%	16,149	21%	16,822	22%	17,619	22%	18,372	22%
EU	16,662	26%	17,010	26%	17,301	25%	17,232	25%	17,276	24%	17,584	24%	17,995	24%	18,355	24%	18,815	23%	19,193	23%
ASEAN	1,845	3%	1,988	3%	2,085	3%	2,210	3%	2,322	3%	2,429	3%	2,542	3%	2,661	3%	2,799	3%	2,939	4%
NAFTA	17,189	27%	17,663	27%	17,985	26%	18,397	26%	18,739	26%	19,210	26%	19,729	26%	20,046	26%	20,503	26%	21,059	25%
World	63,327	100%	66,037	100%	68,093	100%	69,804	100%	71,655	100%	73,690	100%	75,793	100%	77,737	100%	80,198	100%	82,635	100%

Unit : Billion USD
Source : WBG

86 1.3 GDP Growth(Annual)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	7.7	8.5	8.3	9.1	10.0	10.1	11.4	12.7	14.2	9.7	9.4	10.6	9.6	7.9	7.8	7.3	6.9	6.7	6.8	6.6
Japan	-0.3	2.8	0.4	0.1	1.5	2.2	1.7	1.4	1.7	-1.1	-5.4	4.2	-0.1	1.5	2.0	0.4	1.2	0.6	1.9	0.8
ROK	11.3	8.9	4.5	7.4	2.9	4.9	3.9	5.2	5.5	2.8	0.7	6.5	3.7	2.3	2.9	3.3	2.8	2.9	3.1	2.7
CJK*	2.6	4.8	2.9	3.3	4.2	4.9	5.1	5.7	6.7	3.6	1.4	7.3	4.8	4.7	5.0	4.2	4.4	4.2	4.7	4.3
EU	3.0	3.8	2.3	1.4	1.3	2.6	2.1	3.4	3.1	0.5	-4.3	2.1	1.7	-0.4	0.3	1.8	2.3	2.0	2.5	2.0
ASEAN*	3.4	6.0	2.8	5.0	5.6	6.5	5.7	6.0	6.6	4.4	2.1	7.8	4.9	6.0	5.1	4.6	4.7	4.7	5.2	5.0
NAFTA*	4.7	4.3	1.0	1.7	2.7	3.7	3.4	2.9	1.9	0.0	-2.7	2.8	1.8	2.3	1.9	2.5	2.7	1.6	2.3	2.7
World	3.3	4.4	1.9	2.2	2.9	4.4	3.9	4.3	4.2	1.9	-1.7	4.3	3.1	2.5	2.7	2.8	2.9	2.6	3.2	3.0

Unit : %
Source : WBG
* Calculation by the TCS based on WBG data

1.4 GDP per Capita(Current USD)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	873	959	1,053	1,149	1,289	1,509	1,753	2,099	2,694	3,468	3,832	4,550	5,618	6,317	7,051	7,651	8,033	8,079	8,759	9,771
Japan	36,027	38,532	33,846	32,289	34,808	37,689	37,218	35,434	35,275	39,339	40,855	44,508	48,168	48,603	40,454	38,109	34,524	38,794	38,332	39,287
ROK	10,409	11,948	11,253	12,783	14,209	15,908	18,640	20,888	23,061	20,431	18,292	22,087	24,080	24,359	25,890	27,811	27,105	27,608	29,743	31,363
EU	19,674	18,250	18,431	20,046	24,306	27,952	29,120	30,951	35,636	38,199	34,036	33,729	36,457	34,284	35,635	36,735	32,266	32,376	33,873	36,546
World	5,390	5,492	5,389	5,526	6,123	6,811	7,287	7,802	8,684	9,414	8,821	9,539	10,474	10,589	10,764	10,929	10,218	10,248	10,770	11,298

Unit : USD
Source : WBG

1.5 GDP per Capita(Constant 2010 USD)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	1,642	1,768	1,901	2,061	2,254	2,467	2,732	3,063	3,480	3,797	4,133	4,550	4,961	5,325	5,711	6,096	6,484	6,884	7,308	7,755
Japan	41,098	42,170	42,239	42,191	42,744	43,672	44,394	44,995	45,687	45,166	42,725	44,508	44,539	45,277	46,249	46,484	47,103	47,444	48,439	48,920
ROK	13,983	15,105	15,667	16,735	17,137	17,905	18,568	19,427	20,385	20,804	20,843	22,087	22,725	23,124	23,685	24,324	24,871	25,484	26,152	26,762
EU	29,192	30,269	30,901	31,245	31,530	32,217	32,771	33,747	34,667	34,721	33,113	33,729	34,326	34,117	34,103	34,600	35,304	35,905	36,733	37,398
World	7,941	8,182	8,235	8,309	8,444	8,705	8,931	9,203	9,474	9,532	9,258	9,539	9,722	9,850	9,992	10,156	10,325	10,468	10,677	10,881

Unit : USD
Source : WBG

1.6 GDP per Capita Growth

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	6.7	7.6	7.6	8.4	9.4	9.5	10.7	12.1	13.6	9.1	8.9	10.1	9.0	7.3	7.2	6.8	6.4	6.2	6.2	6.1
Japan	-0.4	2.6	0.2	-0.1	1.3	2.2	1.7	1.4	1.5	-1.1	-5.4	4.2	0.1	1.7	2.1	0.5	1.3	0.7	2.1	1.0
ROK	10.5	8.0	3.7	6.8	2.4	4.5	3.7	4.6	4.9	2.1	0.2	6.0	2.9	1.8	2.4	2.7	2.2	2.5	2.6	2.3
EU	2.8	3.7	2.1	1.1	0.9	2.2	1.7	3.0	2.7	0.2	-4.6	1.9	1.8	-0.6	0.0	1.5	2.0	1.7	2.3	1.8
World	1.9	3.0	0.6	0.9	1.6	3.1	2.6	3.1	2.9	0.6	-2.9	3.0	1.9	1.3	1.4	1.6	1.7	1.4	2.0	1.9

Unit : %
Source : WBG

92 1.7 Inflation Rate(Consumer Prices)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	-1.4	0.3	0.7	-0.7	1.1	3.8	1.8	1.6	4.8	5.9	-0.7	3.2	5.6	2.6	2.6	1.9	1.4	2.0	1.6	2.1
Japan	-0.3	-0.7	-0.7	-0.9	-0.3	0.0	-0.3	0.2	0.1	1.4	-1.4	-0.7	-0.3	-0.1	0.3	2.8	0.8	-0.1	0.5	1.0
ROK	0.8	2.3	4.1	2.8	3.5	3.6	2.8	2.2	2.5	4.7	2.8	2.9	4.0	2.2	1.3	1.3	0.7	1.0	1.9	1.5
EU	2.2	3.0	3.4	2.2	2.1	2.2	2.5	2.7	2.5	4.2	1.0	1.5	3.3	2.7	1.4	0.2	0.0	0.2	1.5	1.8
World	3.2	3.4	3.9	3.0	3.0	3.4	4.1	4.3	4.8	8.9	2.9	3.3	4.8	3.8	2.6	2.3	1.4	1.5	2.2	2.5

Unit : %
Source : WBG

1.8 Official Exchange Rate(LCU per USD, Period Average)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	8.28	8.28	8.28	8.28	8.28	8.28	8.19	7.97	7.61	6.95	6.83	6.77	6.46	6.31	6.20	6.14	6.23	6.64	6.76	6.62
Japan	113.91	107.77	121.53	125.39	115.93	108.19	110.22	116.30	117.75	103.36	93.57	87.78	79.81	79.79	97.60	105.94	121.04	108.79	112.17	110.42
ROK	1188.82	1130.96	1290.99	1251.09	1191.61	1145.32	1024.12	954.79	929.26	1102.05	1276.93	1156.06	1108.29	1126.47	1094.85	1052.96	1131.16	1160.43	1130.42	1100.56

Unit : LCU / USD
Source : WBG

1.9 Total Reserves(Excluding Gold)

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	158	8%	168	8%	216	10%	291	11%	408	13%	614	16%	822	19%	1,068	20%	1,530	23%	1,949	26%
Japan	287	15%	355	18%	395	18%	461	18%	663	21%	834	22%	834	19%	880	17%	953	14%	1,009	14%
ROK	74	4%	96	5%	103	5%	121	5%	155	5%	199	5%	210	5%	239	4%	262	4%	201	3%
CJK	519	27%	619	31%	714	33%	874	35%	1,227	39%	1,647	43%	1,866	42%	2,187	41%	2,745	41%	3,160	43%
ASEAN	186	10%	187	9%	183	9%	204	8%	238	8%	284	7%	297	7%	361	7%	464	7%	488	7%
NAFTA	120	6%	124	6%	136	6%	156	6%	170	5%	174	5%	161	4%	166	3%	188	3%	206	3%
World	1,888	100%	2,027	100%	2,152	100%	2,532	100%	3,162	100%	3,874	100%	4,395	100%	5,317	100%	6,769	100%	7,418	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	2,416	28%	2,866	30%	3,203	30%	3,331	29%	3,840	32%	3,859	32%	3,345	30%	3,030	27%	3,159	27%	3,092	26%
Japan	1,025	12%	1,070	11%	1,258	12%	1,227	11%	1,237	10%	1,231	10%	1,207	11%	1,188	11%	1,232	10%	1,239	11%
ROK	270	3%	291	3%	304	3%	323	3%	342	3%	359	3%	363	3%	366	3%	384	3%	399	3%
CJK	3,711	43%	4,228	44%	4,765	45%	4,881	43%	5,418	45%	5,449	45%	4,915	44%	4,584	41%	4,776	40%	4,730	40%
ASEAN	547	6%	670	7%	738	7%	793	7%	783	6%	752	6%	714	6%	746	7%	847	7%	853	7%
NAFTA	274	3%	299	3%	347	3%	368	3%	381	3%	385	3%	360	3%	363	3%	369	3%	370	3%
World	8,543	100%	9,657	100%	10,665	100%	11,413	100%	12,154	100%	12,015	100%	11,299	100%	11,066	100%	11,804	100%	11,797	100%

Unit : Billion USD
Source : WBG

94 1.10 Interest Rate(Central Bank Policy Rate)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	5.85	5.85	5.85	5.31	5.31	5.58	5.58	6.12	7.47	5.31	5.31	5.81	6.56	6	6	5.6	4.35	4.35	4.35	4.35
Japan	0.25	0.25	*	*	*	*	*	0.25	0.5	0.1	0.1	0.1	0.1	0.1	*	*	*	-0.1	-0.1	-0.1
ROK	4.75	5.25	4	4.25	3.75	3.25	3.75	4.5	5	3	2	2.5	3.25	2.75	2.5	2	1.5	1.25	1.5	1.75

Unit : %
 Source : BIS
 * No policy rate available at the given period

2 Population

2.1 Population

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,252,735,000	21%	1,262,645,000	21%	1,271,850,000	21%	1,280,400,000	20%	1,288,400,000	20%	1,296,075,000	20%	1,303,720,000	20%	1,311,020,000	20%	1,317,885,000	20%	1,324,655,000	20%
Japan	126,631,000	2%	126,843,000	2%	127,149,000	2%	127,445,000	2%	127,718,000	2%	127,761,000	2%	127,773,000	2%	127,854,000	2%	128,001,000	2%	128,063,000	2%
ROK	46,616,677	1%	47,008,111	1%	47,370,164	1%	47,644,736	1%	47,892,330	1%	48,082,519	1%	48,184,561	1%	48,438,292	1%	48,683,638	1%	49,054,708	1%
CJK	1,425,982,677	24%	1,436,496,111	23%	1,446,369,164	23%	1,455,489,736	23%	1,464,010,330	23%	1,471,918,519	23%	1,479,677,561	23%	1,487,312,292	23%	1,494,569,638	22%	1,501,772,708	22%
EU	487,497,959	8%	488,221,138	8%	489,015,301	8%	490,252,423	8%	492,063,516	8%	494,028,141	8%	495,983,155	8%	497,844,869	8%	499,790,863	7%	501,683,669	7%
ASEAN	516,524,650	9%	524,122,581	9%	531,609,260	9%	538,890,812	9%	545,961,605	9%	553,064,248	9%	560,161,011	9%	567,235,435	9%	574,311,704	9%	581,461,043	9%
NAFTA	406,926,118	7%	411,747,986	7%	416,288,010	7%	420,670,030	7%	424,832,981	7%	429,260,885	7%	433,765,555	7%	438,511,239	7%	443,290,734	7%	448,156,355	7%
World	6,035,284,135	100%	6,115,108,363	100%	6,194,460,444	100%	6,273,526,441	100%	6,352,677,699	100%	6,432,374,971	100%	6,512,602,867	100%	6,593,623,202	100%	6,675,130,418	100%	6,757,887,172	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	1,331,260,000	19%	1,337,705,000	19%	1,344,130,000	19%	1,350,695,000	19%	1,357,380,000	19%	1,364,270,000	19%	1,371,220,000	19%	1,378,665,000	19%	1,386,395,000	18%	1,392,730,000	18%
Japan	128,047,000	2%	128,070,000	2%	127,833,000	2%	127,629,000	2%	127,445,000	2%	127,276,000	2%	127,141,000	2%	126,994,511	2%	126,785,797	2%	126,529,100	2%
ROK	49,307,835	1%	49,554,112	1%	49,936,638	1%	50,199,853	1%	50,428,893	1%	50,746,659	1%	51,014,947	1%	51,245,707	1%	51,466,201	1%	51,635,256	1%
CJK	1,508,614,835	22%	1,515,329,112	22%	1,521,899,638	22%	1,528,523,853	22%	1,535,253,893	21%	1,542,292,659	21%	1,549,375,947	21%	1,556,905,218	21%	1,564,646,998	21%	1,570,894,356	21%
EU	503,194,070	7%	504,298,777	7%	504,005,894	7%	505,096,232	7%	506,597,697	7%	508,193,856	7%	509,717,579	7%	511,218,529	7%	512,191,098	7%	513,213,363	7%
ASEAN	588,592,925	9%	595,799,282	9%	603,184,132	9%	610,721,762	9%	618,268,469	9%	625,736,585	9%	633,052,252	9%	640,197,460	9%	647,112,434	9%	653,900,199	9%
NAFTA	452,864,311	7%	457,423,937	7%	461,614,810	7%	465,862,595	7%	469,967,842	7%	474,178,984	7%	478,303,839	7%	482,514,205	6%	486,464,713	6%	490,417,078	6%
World	6,840,591,577	100%	6,922,947,261	100%	7,004,011,262	100%	7,086,993,625	100%	7,170,961,674	100%	7,255,653,881	100%	7,340,548,192	100%	7,426,103,221	100%	7,510,990,456	100%	7,594,270,356	100%

Unit : Number of People
 Source : WBG

2.2 Population Growth

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5
Japan	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
ROK	0.7	0.8	0.8	0.6	0.5	0.4	0.2	0.5	0.5	0.8	0.5	0.5	0.8	0.5	0.5	0.6	0.5	0.5	0.4	0.3
CJK	0.6	0.6	0.6	0.5	0.5	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2
World	1.4	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1

Unit : %
Source : WBG

2.3 Birth and Death Rate

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	Birth	14.6	14.0	13.4	12.9	12.4	12.3	12.4	12.1	12.1	12.1	12.1	11.9	11.9	12.1	12.1	12.4	12.1	13.0	12.4	-
	Death	6.5	6.5	6.4	6.4	6.4	6.4	6.5	6.8	6.9	7.1	7.1	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.1	-
Japan	Birth	9.3	9.4	9.3	9.3	9.2	8.7	8.4	8.7	8.6	8.7	8.5	8.5	8.3	8.2	8.2	8.0	8.0	7.8	7.6	-
	Death	7.8	7.7	7.7	8.1	8.4	8.1	8.5	8.5	8.7	9.1	9.1	9.5	9.9	10.0	10.1	10.1	10.3	10.5	10.8	-
ROK	Birth	13.0	13.3	11.6	10.2	10.2	9.8	8.9	9.2	10.0	9.4	9.0	9.4	9.4	9.6	8.6	8.6	8.6	7.9	7.0	-
	Death	5.2	5.2	5.0	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.3	5.3	5.3	5.4	5.5	5.6	-
World	Birth	21.9	21.6	21.3	21.1	20.8	20.7	20.6	20.4	20.3	20.2	20.0	19.8	19.6	19.5	19.3	19.2	19.0	19.0	18.7	-
	Death	8.6	8.5	8.5	8.4	8.4	8.2	8.2	8.1	8.1	8.0	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.5	7.5	-

Unit : Number of Births/Deaths per 1000 People
Source : WBG

* Crude Birth/Death Rate Indicates the Number of Live Births/Deaths per 1,000 Midyear Population.

2.4 Rural and Urban Population Ratio

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	Rural	65	64	63	62	60	59	57	56	55	53	52	51	49	48	47	46	45	43	42	41
	Urban	35	36	37	38	40	41	43	44	45	47	48	49	51	52	53	54	56	57	58	59
Japan	Rural	21	21	20	18	17	15	14	13	12	11	10	9	9	9	9	9	9	9	8	8
	Urban	79	79	80	82	83	85	86	87	88	89	90	91	91	91	91	91	91	91	91	92
ROK	Rural	21	20	20	20	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	19
	Urban	79	80	80	80	81	81	81	82	82	82	82	82	82	82	82	82	82	82	82	81
World	Rural	54	53	53	52	52	51	51	50	50	49	49	48	48	47	47	47	46	46	45	45
	Urban	46	47	47	48	48	49	49	50	50	51	51	52	52	53	53	53	54	54	55	55

Unit : %
Source : WBG

2.5 Population by Gender

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	Female	48.7	48.7	48.7	48.7	48.7	48.7	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.7	48.7	48.7
	Male	51.3	51.3	51.3	51.3	51.3	51.3	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.3	51.3	51.3
Japan	Female	50.9	50.9	50.9	50.9	51.0	51.0	51.0	51.0	51.0	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.2	51.2
	Male	49.1	49.1	49.1	49.1	49.0	49.0	49.0	49.0	49.0	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.8	48.8
ROK	Female	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
	Male	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1
World	Female	49.7	49.7	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
	Male	50.3	50.3	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4

Unit : %
Source : WBG

86 2.6 Population by Age Level

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	0-14	25	25	24	23	22	21	20	20	19	19	19	19	19	18	18	18	18	18	18	18
	15-64	68	68	69	70	71	72	72	73	73	73	73	73	73	73	73	73	73	72	72	71
	65+	7	7	7	7	7	7	8	7	8	8	8	8	8	9	9	9	9	10	10	11
Japan	0-14	15	15	15	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	13
	15-64	69	68	68	68	67	67	67	66	66	65	65	64	64	63	62	62	61	60	60	60
	65+	16	17	17	18	19	19	19	20	20	21	22	23	23	24	25	25	26	27	27	27
ROK	0-14	21	21	20	20	20	19	19	18	18	17	17	16	16	15	15	14	14	13	13	13
	15-64	72	72	72	72	72	72	72	72	73	73	73	73	73	73	73	73	73	73	73	73
	65+	7	7	8	8	8	9	9	10	9	10	10	11	11	12	12	13	13	14	14	14
World	0-14	31	30	30	29	29	29	28	28	28	27	27	27	27	27	27	26	26	26	26	26
	15-64	63	63	63	64	64	64	65	65	65	65	65	65	65	65	66	66	66	65	65	65
	65+	6	7	7	7	7	7	7	7	7	7	8	8	8	8	8	7	8	8	9	9

Unit : %
Source : WBG

2.7 Population Distribution by Gender and Age Level

			1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
China	Male	0-14	26	25	25	24	23	22	21	20	20	20	20	19	19	19	19	19	19	19	19	19	
		15-64	68	68	69	70	70	71	72	72	72	73	73	73	73	73	73	73	73	73	72	72	71
		65+	6	7	6	6	7	7	7	7	8	7	7	7	8	8	8	8	8	9	9	10	
	Female	0-14	25	24	24	23	21	20	20	19	19	18	18	18	18	18	17	17	17	17	17	17	
		15-64	68	68	69	70	71	72	72	73	73	73	73	73	73	73	73	73	73	73	72	72	71
		65+	7	8	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	11	11	12	
Japan	Male	0-14	16	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	14	13	13	
		15-64	70	70	70	70	69	69	69	68	68	67	67	66	66	65	65	64	63	63	62	62	
		65+	14	15	15	15	16	16	17	18	18	19	19	20	20	21	21	22	23	23	25	25	
	Female	0-14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12	
		15-64	67	66	66	66	65	65	64	64	64	63	63	62	61	61	60	59	59	58	58	57	
		65+	19	20	20	20	21	22	23	23	23	24	24	25	26	26	27	29	29	30	30	31	
ROK	Male	0-14	22	22	21	21	21	20	20	19	19	18	17	17	16	16	15	15	14	14	14	13	
		15-64	73	73	73	73	73	73	73	73	73	74	74	74	75	75	75	75	75	75	75	74	
		65+	5	5	6	6	6	7	7	8	7	8	9	8	9	9	10	10	11	11	11	13	
	Female	0-14	20	19	19	19	18	18	18	17	17	16	16	15	15	15	14	14	13	13	13	13	
		15-64	71	71	72	72	71	71	71	71	72	72	72	72	72	72	72	72	72	71	71	71	
		65+	9	10	9	9	11	11	11	12	11	12	12	12	13	13	13	14	14	15	16	16	

Unit : %
Source : WBG

3 Production: Vehicle and Ship

3.1 Motor Vehicle Production

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	565,366	1%	604,677	1%	703,521	2%	1,101,696	3%	2,018,875	5%	2,480,231	6%	3,931,807	8%	5,233,132	10%	6,381,116	12%	6,737,745	13%
Japan	8,100,169	20%	8,359,434	20%	8,117,563	20%	8,618,354	21%	8,478,328	20%	8,720,385	20%	9,016,735	19%	9,754,903	20%	9,944,637	19%	9,928,143	19%
ROK	2,361,735	6%	2,602,008	6%	2,471,444	6%	2,651,273	6%	2,767,716	7%	3,122,600	7%	3,357,094	7%	3,489,136	7%	3,723,482	7%	3,450,478	7%
CJK	11,027,270	28%	11,566,119	28%	11,292,528	28%	12,371,323	30%	13,264,919	32%	14,323,216	32%	16,305,636	35%	18,477,171	37%	20,049,235	38%	20,116,366	38%
EU	14,843,671	37%	14,778,879	36%	14,938,604	38%	14,741,442	36%	15,765,277	38%	16,042,155	36%	15,996,987	34%	16,219,903	32%	17,103,687	32%	15,954,688	30%
NAFTA	8,258,037	21%	8,371,806	20%	7,154,687	18%	7,347,916	18%	6,624,692	16%	6,468,454	15%	6,523,591	14%	6,892,197	14%	6,475,498	12%	6,189,535	12%
CIS	994,196	3%	1,009,584	2%	1,066,807	3%	1,020,430	2%	1,088,511	3%	1,228,151	3%	1,214,680	3%	1,324,537	3%	1,583,707	3%	1,795,266	3%
World	39,759,847	100%	41,215,653	100%	39,825,888	100%	41,358,394	100%	41,968,666	100%	44,554,268	100%	46,862,978	100%	49,918,578	100%	53,201,346	100%	52,841,125	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	10,383,831	22%	13,897,083	24%	14,485,326	24%	15,523,658	25%	18,084,169	28%	19,928,505	29%	21,143,351	31%	24,420,744	34%	24,806,687	34%	23,529,423	33%
Japan	6,862,161	14%	8,310,362	14%	7,158,525	12%	8,554,503	14%	8,189,323	13%	8,277,070	12%	7,830,722	11%	7,873,886	11%	8,347,836	11%	8,358,220	12%
ROK	3,158,417	7%	3,866,206	7%	4,221,617	7%	4,167,089	7%	4,122,604	6%	4,124,116	6%	4,135,108	6%	3,859,991	5%	3,735,399	5%	3,661,730	5%
CJK	20,404,409	43%	26,073,651	45%	25,865,468	43%	28,245,250	45%	30,396,096	46%	32,329,691	48%	33,109,181	48%	36,154,621	50%	36,889,922	51%	35,549,373	50%
EU	13,988,907	29%	15,288,619	26%	15,708,191	26%	14,637,950	23%	14,738,151	23%	15,409,337	23%	16,324,423	24%	16,887,225	23%	16,576,261	23%	16,101,966	23%
NAFTA	3,960,731	8%	5,084,330	9%	5,624,553	9%	6,959,318	11%	7,106,013	11%	7,082,340	10%	7,019,427	10%	6,712,992	9%	5,691,163	8%	5,027,675	7%
CIS	730,891	2%	1,361,693	2%	1,920,932	3%	2,184,754	3%	1,974,859	3%	1,804,587	3%	1,296,519	2%	1,134,199	2%	1,400,929	2%	1,691,856	2%
World	47,772,598	100%	58,264,852	100%	59,897,273	100%	63,081,024	100%	65,460,263	100%	67,782,035	100%	68,618,998	100%	72,388,433	100%	72,883,131	100%	70,567,581	100%

Unit : Number of Passenger Cars
Source : OICA

3.2 Top 50 Motor Vehicle Manufacturers in 2017

Ranking	Manufacturer	Total	%
1	TOYOTA	10,466,051	11%
2	VOLKSWAGEN	10,382,334	11%
3	HYUNDAI	7,218,391	7%
4	G.M.	6,856,880	7%
5	FORD	6,386,818	7%
6	NISSAN	5,769,277	6%
7	HONDA	5,236,842	5%
8	FIAT	4,600,847	5%
9	RENAULT	4,153,589	4%
10	PSA	3,649,742	4%
11	SUZUKI	3,302,336	3%
12	SAIC	2,866,913	3%
13	DAIMLER AG	2,549,142	3%
14	B.M.W.	2,505,741	3%
15	GEELY	1,950,382	2%
16	CHANGAN	1,616,457	2%
17	MAZDA	1,607,602	2%

Ranking	Manufacturer	Total	%
18	DONGFENG MOTOR	1,450,999	1%
19	BAIC	1,254,483	1%
20	MITSUBISHI	1,210,263	1%
21	SUBARU	1,073,057	1%
22	GREAT WALL	1,041,025	1%
23	TATA	932,387	1%
24	IRAN KHODRO	710,869	1%
25	SAIPA	648,324	1%
26	MAHINDRA	612,595	1%
27	ISUZU	612,421	1%
28	CHERY	605,331	1%
29	FAW	592,688	1%
30	GAC	513,870	1%
31	ANHUI JAC AUTOMOTIVE	493,199	1%
32	BYD	421,590	0.4%
33	BRILLIANCE	362,166	0.4%
34	HUNAN JIANGNAN	315,363	0.3%

Ranking	Manufacturer	Total	%
35	CHINA NATIONAL HEAVY DUTY TRUCK	296,594	0.3%
36	CHONGQING LIFAN MOTOR CO.	214,145	0.2%
37	SHANNXI	189,066	0.2%
38	ASHOK LEYLAND	160,208	0.2%
39	SOUTH EAST (FUJIAN)	159,473	0.2%
40	PACCAR	153,405	0.2%
41	CHANGFENG	135,682	0.1%
42	RONGCHENG HUATAI	132,511	0.1%
43	TESLA	101,027	0.1%
44	HAIMA CARS	94,932	0.1%
45	GAZ	88,902	0.1%
46	CHENGDU DAYUN	79,737	0.1%
47	NAVISTAR	68,258	0.1%
48	ZHENGZHOU YUTONG	67,231	0.1%
49	PROTON	67,170	0.1%
50	LEYLAND TRUCKS	59,795	0.1%
	World	96,922,080	100%

Unit : Number of Motor Vehicles
Source : OICA

102 3.3 Export Volume of Motor Vehicle

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	15	0.005%	31	0.01%	36	0.01%	48	0.01%	114	0.03%	317	0.07%	850	0.17%	1,536	0.3%	2,811	0.5%	2,993	0.5%
Japan	55,003	19%	56,926	19%	52,989	17%	62,702	18%	68,392	17%	74,823	16%	79,769	16%	94,485	18%	108,147	17%	115,440	18%
ROK	9,969	3%	11,896	4%	12,029	4%	13,467	4%	17,536	4%	24,632	5%	27,256	6%	30,597	6%	34,483	6%	31,288	5%
CJK	64,987	22%	68,853	23%	65,055	21%	76,217	22%	86,042	22%	99,772	22%	107,876	22%	126,619	24%	145,441	23%	149,721	24%
EU	-	-	44,068	15%	46,375	15%	54,800	16%	64,215	16%	73,355	16%	77,580	16%	84,505	16%	96,246	15%	101,130	16%
NAFTA	64,273	22%	68,831	23%	65,419	21%	67,183	20%	66,692	17%	73,970	16%	82,072	17%	90,618	17%	101,211	16%	104,903	16%
World	293,458	100%	303,797	100%	308,927	100%	344,244	100%	393,659	100%	455,563	100%	486,738	100%	536,966	100%	621,994	100%	636,259	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	1,389	0.3%	2,205	0.4%	3,739	1%	4,768	1%	4,623	1%	4,548	1%	4,139	1%	4,913	1%	7,177	1%	8,627	1%
Japan	62,268	14%	90,373	16%	87,338	14%	97,460	15%	91,689	14%	88,543	12%	86,047	13%	91,900	13%	93,373	12%	99,128	13%
ROK	22,399	5%	31,782	6%	40,910	6%	42,388	7%	44,283	7%	44,816	6%	41,721	6%	37,496	5%	38,831	5%	38,248	5%
CJK	86,057	20%	124,360	22%	131,987	21%	144,616	22%	140,596	21%	137,907	19%	131,907	19%	134,310	19%	139,381	19%	146,003	19%
EU	66,808	15%	101,087	18%	130,581	20%	139,286	21%	148,583	22%	152,789	22%	143,128	21%	138,210	20%	148,835	20%	150,640	19%
NAFTA	66,806	15%	99,314	18%	115,042	18%	130,687	20%	134,882	20%	138,944	20%	133,114	20%	134,068	19%	141,748	19%	141,802	18%
World	438,481	100%	558,959	100%	639,082	100%	649,672	100%	678,346	100%	708,801	100%	680,666	100%	700,247	100%	749,840	100%	775,693	100%

Unit : Million USD
Source : UN Comtrade

3.4 Export Volume of Electric Motor Vehicle

	2017	%	2018	%
China	110	1%	130	1%
Japan	598	7%	386	3%
ROK	421	5%	1,093	10%
CJK	1,129	14%	1,609	14%
NAFTA	3,195	39%	3,390	30%
World	8,290	100%	11,280	100%

Unit : Million USD
Source : UN Comtrade

104 3.5 Ships Built by Country

	2014	%	2015	%	2016	%	2017	%
China	22,851,302	36%	25,275,424	37%	22,365,449	33%	23,682,160	36%
Japan	13,392,130	21%	12,899,210	19%	13,363,959	20%	13,113,388	20%
ROK	21,871,925	34%	23,756,983	35%	25,455,551	38%	22,616,947	34%
CJK	58,115,357	91%	61,931,617	91%	61,184,959	92%	59,412,495	90%
ASEAN	2,070,182	3%	2,003,814	3%	1,366,268	2%	2,111,254	3%
NAFTA	231,425	0.4%	357,317	1%	352,014	1%	226,210	0.3%
World	63,662,235	100%	67,876,902	100%	66,782,739	100%	65,712,437	100%

Unit : GT
Source : UNCTAD
*Data is only available from 2014-2017

3.6 Largest Container Ships Built by CJK Companies

	Company	Name	Volume	World Rank
China	China State Shipbuilding Corporation (CSSC)	COSCO Shipping Universe	21,237	4
Japan	Saijo shipyards of Imabari Shipbuilding Company Limited	MOL Truth	20,182	8
ROK	Samsung Heavy Industries (SHI)	MSC Gülsün	23,756	1

Unit : TEU
Source : Compiled from Various Container Ship Construction Companies

4 Port Logistics

4.1 Container Port Traffic

	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	41,000,000	18%	44,726,084	19%	55,717,488	21%	61,898,336	21%	74,725,444	22%	67,245,263	18%	84,810,503	20%	103,823,024	21%	115,941,970	22%
Japan	13,100,000	6%	13,127,144	6%	13,501,420	5%	15,055,696	5%	16,436,146	5%	17,055,082	5%	18,469,710	4%	19,164,522	4%	18,943,606	4%
ROK	9,030,174	4%	9,287,221	4%	11,719,500	4%	13,049,534	4%	14,363,194	4%	15,113,275	4%	15,513,935	4%	17,086,133	3%	17,417,723	3%
CJK	63,130,174	28%	67,140,449	29%	80,938,408	31%	90,003,566	30%	105,524,784	31%	99,413,620	26%	118,794,148	29%	140,073,679	29%	152,303,299	30%
EU	47,486,366	21%	49,730,282	21%	53,845,263	20%	58,332,095	20%	67,981,905	20%	71,622,805	19%	76,145,365	18%	89,924,957	18%	90,222,728	17%
ASEAN	32,940,499	15%	33,467,929	14%	39,173,340	15%	43,434,222	15%	49,005,840	14%	52,179,385	14%	54,778,018	13%	65,302,115	13%	70,510,489	14%
NAFTA	32,543,643	14%	31,556,100	13%	34,548,740	13%	38,014,347	13%	40,731,120	12%	44,805,608	12%	47,907,279	11%	50,914,605	10%	50,445,150	10%
World	224,774,536	100%	235,075,458	100%	263,456,511	100%	296,996,130	100%	338,433,750	100%	376,268,146	100%	416,751,971	100%	489,818,309	100%	516,152,333	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%
China	108,799,934	23%	142,970,010	26%	157,422,311	26%	166,510,601	26%	175,936,351	27%	186,679,051	27%	195,276,751	28%	199,551,751	28%	213,719,925	28%
Japan	16,285,918	3%	19,547,865	3%	19,169,505	3%	20,833,791	3%	21,049,617	3%	21,139,091	3%	20,577,013	3%	20,784,617	3%	21,904,443	3%
ROK	15,699,663	3%	19,456,000	3%	21,543,000	4%	22,617,900	4%	23,711,000	4%	24,818,667	4%	25,354,352	4%	26,152,977	4%	27,427,000	4%
CJK	140,785,515	30%	181,973,875	32%	198,134,816	33%	209,962,292	33%	220,696,968	34%	232,636,809	34%	241,208,116	35%	246,489,344	35%	263,051,368	35%
EU	78,192,773	17%	84,499,377	15%	94,101,207	16%	95,531,273	15%	98,431,766	15%	103,403,710	15%	102,189,401	15%	106,129,663	15%	112,777,593	15%
ASEAN	65,368,948	14%	76,243,139	14%	81,982,576	14%	88,013,119	14%	91,228,604	14%	95,925,453	14%	97,507,209	14%	100,682,596	14%	105,072,118	14%
NAFTA	44,419,456	9%	50,543,708	9%	51,601,131	9%	53,685,196	8%	54,563,839	8%	58,333,109	8%	60,724,176	9%	61,423,144	9%	64,029,056	9%
World	472,175,125	100%	560,159,177	100%	606,171,151	100%	634,284,417	100%	656,328,735	100%	687,084,145	100%	695,802,397	100%	710,058,001	100%	752,704,435	100%

Unit : TEU
Source : WBG

106 4.2 Container Port Traffic Growth Rate

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average Annual Growth	Percentage Growth (2000 - 2017)
China	9	25	11	21	-10	26	22	12	-6	31	10	6	6	6	5	2	7	11	421
Japan	0.2	3	12	9	4	8	4	-1	-14	20	-2	9	1	0.4	-3	1	5	3	67
ROK	3	26	11	10	5	3	10	2	-10	24	11	5	5	5	2	3	5	7	204
CJK	6	21	11	17	-6	19	18	9	-8	29	9	6	5	5	4	2	7	9	317
EU	5	8	8	17	5	6	18	0.3	-13	8	11	2	3	5	-1	4	6	5	137
ASEAN	2	17	11	13	6	5	19	8	-7	17	8	7	4	5	2	3	4	7	219
NAFTA	-3	9	10	7	10	7	6	-1	-12	14	2	4	2	7	4	1	4	4	97
World	5	12	13	14	11	11	18	5	-9	19	8	5	3	5	1	2	6	8	235

Unit : %
Source : Calculation by the TCS based on WBG data

107 4.3 Top 20 World Container Ports in 2017

Rank	Port	Country	Volume
1	Shanghai	China	40
2	Singapore	Singapore	34
3	Shenzhen	China	25
4	Ningbo-Zhoushan	China	25
5	Hong Kong	China	21
6	Busan	ROK	20
7	Guangzhou Harbor	China	20
8	Qingdao	China	18
9	Jebel Ali, Dubai	United Arab Emirates	15
10	Tianjin	China	15
11	Rotterdam	Netherlands	14
12	Port Klang	Malaysia	14
13	Antwerp	Belgium	10
14	Xiamen	China	10
15	Kaohsiung, Taiwan	China	10
16	Dalian	China	10
17	Los Angeles	United States	9
18	Hamburg	Germany	9
19	Tanjung Pelepas	Malaysia	8
20	Keihin Ports*	Japan	8

Unit : Million TEU
Source : WSC
*Keihin Ports is Japan's superport hub on the Tokyo Bay and includes Yokohama, Kawasaki, and Tokyo.

5 Trade

5.1 Trade Volume

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	360,654	3%	474,475	4%	510,280	4%	621,190	5%	851,595	6%	1,154,458	6%	1,422,421	7%	1,760,811	7%	2,174,087	8%	2,560,785	8%
Japan	730,230	6%	783,105	6%	821,008	7%	932,069	7%	854,879	6%	1,020,645	5%	1,110,107	5%	1,225,543	5%	1,336,182	5%	1,544,638	5%
ROK	263,659	2%	332,519	3%	291,342	2%	313,211	2%	372,468	2%	478,028	3%	545,340	3%	634,319	3%	727,714	3%	856,927	3%
CJK	1,354,544	12%	1,590,099	12%	1,622,631	13%	1,866,470	14%	2,078,943	14%	2,653,131	14%	3,077,867	15%	3,620,673	15%	4,237,983	15%	4,962,350	15%
EU	4,670,861	41%	4,960,310	38%	4,957,864	40%	5,245,512	40%	6,296,981	41%	7,547,972	41%	8,233,658	39%	9,383,079	39%	10,947,499	39%	12,233,411	37%
ASEAN	658,269	6%	796,536	6%	725,793	6%	760,347	6%	870,331	6%	1,075,735	6%	1,238,924	6%	1,435,464	6%	1,616,554	6%	1,926,548	6%
NAFTA	2,504,770	22%	2,889,734	22%	2,744,528	22%	2,722,863	21%	2,900,014	19%	3,342,605	18%	3,780,394	18%	4,236,778	17%	4,574,306	16%	4,973,654	15%
World	11,479,837	100%	13,003,806	100%	12,548,124	100%	13,112,713	100%	15,293,802	100%	18,578,329	100%	21,071,167	100%	24,276,809	100%	28,123,327	100%	32,658,066	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	2,205,941	9%	2,972,353	10%	3,640,710	10%	3,867,436	11%	4,159,963	11%	4,306,327	11%	3,882,302	12%	3,726,055	12%	4,112,220	12%	4,635,360	12%
Japan	1,132,679	5%	1,463,824	5%	1,677,562	5%	1,684,656	5%	1,546,956	4%	1,502,436	4%	1,272,789	4%	1,251,797	4%	1,369,269	4%	1,514,319	4%
ROK	686,350	3%	891,596	3%	1,079,780	3%	1,067,454	3%	1,075,218	3%	1,098,179	3%	963,255	3%	901,889	3%	1,034,600	3%	1,140,428	3%
CJK	4,024,970	16%	5,327,774	17%	6,398,052	18%	6,619,546	18%	6,782,137	18%	6,906,943	18%	6,118,347	19%	5,879,741	18%	6,516,089	18%	7,290,107	19%
EU	9,338,408	37%	10,502,316	34%	12,335,810	34%	11,689,140	32%	11,996,601	32%	12,196,890	32%	10,624,800	32%	10,638,554	33%	11,715,699	33%	12,878,204	33%
ASEAN	1,542,521	6%	2,002,973	7%	2,387,376	7%	2,474,014	7%	2,510,629	7%	2,518,478	7%	2,266,084	7%	2,227,975	7%	2,563,176	7%	2,833,461	7%
NAFTA	3,795,806	15%	4,666,826	15%	5,341,912	15%	5,531,103	15%	5,578,527	15%	5,753,511	15%	5,399,178	16%	5,243,590	16%	5,619,491	16%	6,082,932	16%
World	25,134,794	100%	30,622,129	100%	36,451,248	100%	36,817,126	100%	37,500,656	100%	37,692,803	100%	32,960,439	100%	31,982,960	100%	35,298,251	100%	38,927,087	100%

Unit : Million USD
Source : IMF-DOTS

5.2 Export Volume

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	194,936	3%	249,300	4%	266,713	4%	325,751	5%	438,500	6%	593,647	6%	762,218	7%	969,025	8%	1,217,832	9%	1,428,869	9%
Japan	419,456	7%	403,524	7%	471,915	8%	594,889	9%	471,915	6%	565,821	6%	594,889	6%	646,797	5%	714,267	5%	782,048	5%
ROK	143,918	3%	172,179	3%	150,356	2%	161,919	3%	193,731	3%	253,745	3%	284,243	3%	325,173	3%	371,213	3%	421,778	3%
CJK	758,310	13%	825,002	13%	888,985	14%	1,082,558	17%	1,104,146	15%	1,413,213	15%	1,641,350	16%	1,940,995	16%	2,303,313	17%	2,632,695	16%
EU	2,344,115	41%	2,449,492	38%	2,473,638	40%	2,641,903	41%	3,157,138	42%	3,770,689	41%	4,077,901	39%	4,607,382	38%	5,370,698	39%	5,968,685	37%
ASEAN	358,938	6%	428,096	7%	388,018	6%	406,528	6%	473,621	6%	575,213	6%	657,530	6%	769,025	6%	860,999	6%	986,641	6%
NAFTA	1,064,521	19%	1,213,396	19%	1,151,091	19%	1,106,513	17%	1,160,159	15%	1,320,411	14%	1,479,282	14%	1,675,204	14%	1,854,894	13%	2,047,853	13%
World	5,663,375	100%	6,404,770	100%	6,163,676	100%	6,472,560	100%	7,551,570	100%	9,148,218	100%	10,391,985	100%	11,995,048	100%	13,882,745	100%	16,149,911	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	1,202,048	10%	1,578,444	10%	1,899,281	10%	2,050,092	11%	2,210,662	12%	2,343,222	12%	2,280,541	14%	2,136,595	13%	2,280,094	13%	2,501,334	13%
Japan	580,719	5%	769,773	5%	822,564	5%	798,619	4%	714,613	4%	690,214	4%	624,799	4%	644,931	4%	698,083	4%	738,044	4%
ROK	363,280	3%	466,384	3%	555,405	3%	547,870	3%	559,632	3%	572,665	3%	526,757	3%	495,857	3%	562,026	3%	605,708	3%
CJK	2,146,048	17%	2,814,601	19%	3,277,250	18%	3,396,581	19%	3,484,908	19%	3,606,101	19%	3,432,097	21%	3,277,383	21%	3,540,204	20%	3,845,086	20%
EU	4,617,019	37%	5,182,291	34%	6,092,890	34%	5,815,343	32%	6,075,370	33%	6,157,901	33%	5,388,780	33%	5,379,354	34%	5,909,396	34%	6,468,199	33%
ASEAN	813,265	7%	1,047,915	7%	1,233,716	7%	1,251,126	7%	1,265,989	7%	1,285,983	7%	1,161,249	7%	1,133,214	7%	1,300,004	7%	1,438,767	7%
NAFTA	1,603,078	13%	1,963,468	13%	2,283,373	13%	2,371,738	13%	2,416,618	13%	2,492,631	13%	2,293,490	14%	2,217,247	14%	2,373,827	14%	2,562,594	13%
World	12,405,943	100%	15,169,631	100%	18,131,551	100%	18,280,050	100%	18,685,744	100%	18,783,795	100%	16,380,592	100%	15,831,602	100%	17,542,035	100%	19,384,842	100%

Unit : Million USD
Source : IMF-DOTS

5.3 Import Volume

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	165,718	3%	225,175	3%	243,567	4%	295,440	4%	413,095	5%	560,811	6%	660,202	6%	791,787	6%	956,255	7%	1,131,916	7%
Japan	310,774	5%	379,582	6%	349,092	5%	337,180	5%	382,964	5%	454,824	5%	515,218	5%	578,746	5%	621,915	4%	762,590	5%
ROK	119,741	2%	160,340	2%	140,986	2%	151,292	2%	178,738	2%	224,283	2%	261,097	2%	309,146	3%	356,501	3%	435,149	3%
CJK	596,233	10%	765,096	12%	733,646	11%	783,912	12%	974,796	13%	1,239,918	13%	1,436,517	13%	1,679,679	14%	1,934,671	14%	2,329,655	14%
EU	2,326,745	40%	2,510,818	38%	2,484,226	39%	2,603,609	39%	3,139,843	41%	3,777,282	40%	4,155,757	39%	4,775,696	39%	5,576,801	39%	6,264,726	38%
ASEAN	299,331	5%	368,440	6%	337,775	5%	353,818	5%	396,710	5%	500,523	5%	581,394	5%	666,439	5%	755,555	5%	939,906	6%
NAFTA	1,440,248	25%	1,676,338	25%	1,593,437	25%	1,616,349	24%	1,739,856	22%	2,022,194	21%	2,301,112	22%	2,561,574	21%	2,719,411	19%	2,925,801	18%
World	5,816,462	100%	6,599,036	100%	6,384,448	100%	6,640,153	100%	7,742,232	100%	9,430,111	100%	10,679,182	100%	12,281,762	100%	14,240,582	100%	16,508,155	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	1,003,893	8%	1,393,909	9%	1,741,430	10%	1,817,344	10%	1,949,300	10%	1,963,105	10%	1,601,761	10%	1,589,460	10%	1,832,126	10%	2,134,026	11%
Japan	551,960	4%	694,052	4%	854,998	5%	886,036	5%	832,343	4%	812,222	4%	647,990	4%	606,866	4%	671,185	4%	776,274	4%
ROK	323,069	3%	425,212	3%	524,375	3%	519,584	3%	515,586	3%	525,515	3%	436,499	3%	406,032	3%	472,574	3%	534,720	3%
CJK	1,878,922	15%	2,513,173	16%	3,120,803	17%	3,222,965	17%	3,297,229	18%	3,300,842	17%	2,686,250	16%	2,602,358	16%	2,975,885	17%	3,445,021	18%
EU	4,721,389	37%	5,320,024	34%	6,242,920	34%	5,873,798	32%	5,921,231	31%	6,038,989	32%	5,236,019	32%	5,259,200	33%	5,806,303	33%	6,410,006	33%
ASEAN	729,256	6%	955,058	6%	1,153,660	6%	1,222,887	7%	1,244,640	7%	1,232,495	7%	1,104,835	7%	1,094,761	7%	1,263,172	7%	1,394,694	7%
NAFTA	2,192,728	17%	2,703,358	17%	3,058,539	17%	3,159,365	17%	3,161,909	17%	3,260,880	17%	3,105,688	19%	3,026,343	19%	3,245,664	18%	3,520,338	18%
World	12,728,852	100%	15,452,498	100%	18,319,697	100%	18,537,076	100%	18,814,912	100%	18,909,008	100%	16,579,847	100%	16,151,358	100%	17,756,216	100%	19,542,245	100%

Unit : Million USD

Source : IMF-DOTS

5.4 Trade Volume Growth

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	11	32	8	22	37	36	23	24	23	18	-14	35	22	6	8	4	-10	-4	10	13
Japan	9	7	5	14	-8	19	9	10	9	16	-27	29	15	0	-8	-3	-15	-2	9	11
ROK	17	26	-12	8	19	28	14	16	15	18	-20	30	21	-1	1	2	-12	-6	15	10
CJK	11	17	2	15	11	28	16	18	17	17	-19	32	20	3	2	2	-11	-4	11	12
EU	3	6	0	6	20	20	9	14	17	12	-24	12	17	-5	3	2	-13	0.1	10	10
ASEAN	8	21	-9	5	14	24	15	16	13	19	-20	30	19	4	1	0.3	-10	-2	15	11
NAFTA	8	15	-5	-1	7	15	13	12	8	9	-24	23	14	4	1	3	-6	-3	7	8
World	5	13	-4	4	17	21	13	15	16	16	-23	22	19	1	2	1	-13	-3	10	10

Unit : %

Source : Calculation by the TCS based on IMF-DOTS

5.5 Export Volume Growth

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	6	28	7	22	35	35	28	27	26	17	-16	31	20	8	8	6	-3	-6	7	10
Japan	8	-4	17	26	-21	20	5	9	10	9	-26	33	7	-3	-11	-3	-9	3	8	6
ROK	8	20	-13	8	20	31	12	14	14	14	-14	28	19	-1	2	2	-8	-6	13	8
CJK	8	9	8	22	2	28	16	18	19	14	-18	31	16	4	3	3	-5	-5	8	9
EU	3	4	1	7	20	19	8	13	17	11	-23	12	18	-5	4	1	-12	-0.2	10	9
ASEAN	8	19	-9	5	17	21	14	17	12	15	-18	29	18	1	1	2	-10	-2	15	11
NAFTA	5	14	-5	-4	5	14	12	13	11	10	-22	22	16	4	2	3	-8	-3	7	8
World	5	13	-4	5	17	21	14	15	16	16	-23	22	20	1	2	1	-13	-3	11	11

Unit : %

Source : Calculation by the TCS based on IMF-DOTS

112 5.6 Import Volume Growth

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	18	36	8	21	40	36	18	20	21	18	-11	39	25	4	7	1	-18	-1	15	16
Japan	11	22	-8	-3	14	19	13	12	7	23	-28	26	23	4	-6	-2	-20	-6	11	16
ROK	28	34	-12	7	18	25	16	18	15	22	-26	32	23	-1	-1	2	-17	-7	16	13
CJK	16	28	-4	7	24	27	16	17	15	20	-19	34	24	3	2	0.1	-19	-3	14	16
EU	4	8	-1	5	21	20	10	15	17	12	-25	13	17	-6	1	2	-13	0.1	10	10
ASEAN	8	23	-8	5	12	26	16	15	13	24	-22	31	21	6	2	-1	-10	-1	15	10
NAFTA	11	16	-5	1	8	16	14	11	6	8	-25	23	13	3	0.1	3	-5	-3	7	8
World	5	13	-3	4	17	22	13	15	16	16	-23	21	19	1	1	1	-12	-3	10	10

Unit : %
Source : Calculation by the TCS based on IMF-DOTS

5.7 Trade Balance(Export - Import)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	29,218	24,125	23,146	30,311	25,405	32,836	102,016	177,238	261,578	296,954	198,156	184,535	157,851	232,748	261,362	380,117	678,780	547,135	447,969	367,307
Japan	108,681	23,942	122,823	257,709	88,952	110,998	79,671	68,051	92,352	19,457	28,759	75,721	-32,434	-87,417	-117,729	-122,008	-23,190	38,064	26,898	-38,230
ROK	24,178	11,839	9,370	10,626	14,993	29,462	23,146	16,027	14,712	-13,371	40,211	41,172	31,030	28,285	44,047	47,150	90,258	89,825	89,452	70,988
CJK	162,077	59,906	155,339	298,646	129,350	173,295	204,833	261,316	368,642	303,040	267,125	301,428	156,447	173,616	187,679	305,259	745,847	675,024	564,319	400,066
EU	17,370	-61,326	-10,587	38,294	17,294	-6,593	-77,855	-168,314	-206,102	-296,041	-104,370	-137,733	-150,030	-58,455	154,139	118,912	152,761	120,153	103,094	58,193
ASEAN	59,607	59,657	50,243	52,710	76,911	74,690	76,137	102,586	105,444	46,735	84,009	92,858	80,056	28,239	21,349	53,487	56,414	38,453	36,832	44,073
NAFTA	-375,727	-462,942	-442,346	-509,836	-579,697	-701,782	-821,831	-886,370	-864,517	-877,948	-589,649	-739,890	-775,166	-787,627	-745,292	-768,249	-812,197	-809,096	-871,837	-957,745

Unit : Million USD
Source : Calculation by the TCS based on IMF-DOTS

5.8 Top 10 Trading Partners of P.R. China in 2018

Economy	Total Trade Volume	%	Economy	Total Export Volume	%	Economy	Total Import Volume	%
United States	636,948	14%	United States	480,689	19%	ROK	202,995	10%
Japan	328,043	7%	Hong Kong, China	303,725	12%	Japan	180,479	8%
ROK	312,520	7%	Japan	147,565	6%	Taiwan, China	177,130	8%
Hong Kong, China	312,258	7%	ROK	109,524	4%	United States	156,259	7%
Taiwan, China	225,780	5%	Vietnam	84,223	3%	Germany	106,214	5%
Germany	184,368	4%	Germany	78,155	3%	Australia	105,141	5%
Australia	152,788	3%	India	77,023	3%	Brazil	76,867	4%
Vietnam	148,377	3%	Netherlands	73,289	3%	Vietnam	64,154	3%
Brazil	110,660	2%	United Kingdom	57,291	2%	Malaysia	63,493	3%
Malaysia	109,636	2%	Singapore	50,090	2%	Russian Federation	58,580	3%

Unit : Million USD
Source : Calculation by the TCS based on IMF-DOTS

114 5.9 Top 10 Trading Partners of Japan in 2018

Economy	Total Trade Volume	%	Economy	Total Export Volume	%	Economy	Total Import Volume	%
P.R. China	317,665	21%	P.R. China	144,053	20%	P.R. China	173,612	22%
United States	224,235	15%	United States	140,664	19%	United States	83,571	11%
ROK	84,594	6%	ROK	52,482	7%	Australia	45,680	6%
Taiwan, China	70,304	5%	Taiwan, China	42,247	6%	Saudi Arabia	33,775	4%
Australia	62,769	4%	Hong Kong, China	34,723	5%	ROK	32,112	4%
Thailand	57,332	4%	Thailand	32,275	4%	Taiwan, China	28,057	4%
Germany	46,851	3%	Singapore	23,411	3%	United Arab Emirates	27,578	4%
Saudi Arabia	37,889	3%	Germany	20,892	3%	Germany	25,959	3%
Vietnam	37,555	2%	Australia	17,088	2%	Thailand	25,058	3%
Indonesia	37,371	2%	Vietnam	16,435	2%	Indonesia	21,578	3%

Unit : Million USD
Source : Calculation by the TCS based on IMF-DOTS

5.10 Top 10 Trading Partners of ROK in 2018

Economy	Total Trade Volume	%	Economy	Total Export Volume	%	Economy	Total Import Volume	%
P.R. China	268,617	24%	P.R. China	162,168	27%	P.R. China	106,449	20%
United States	132,295	12%	United States	73,314	12%	United States	58,982	11%
Japan	85,155	7%	Vietnam	48,637	8%	Japan	54,559	10%
Vietnam	68,262	6%	Hong Kong, China	46,010	8%	Saudi Arabia	26,261	5%
Hong Kong, China	48,008	4%	Japan	30,595	5%	Germany	20,840	4%
Taiwan, China	37,493	3%	Taiwan, China	20,773	3%	Australia	20,699	4%
Saudi Arabia	30,406	3%	India	15,611	3%	Vietnam	19,626	4%
Australia	30,323	3%	Philippines	12,047	2%	Russian Federation	17,458	3%
Germany	30,273	3%	Singapore	11,794	2%	Taiwan, China	16,720	3%
Russian Federation	24,934	2%	Mexico	11,460	2%	Qatar	16,294	3%

Unit : Million USD
Source : Calculation by the TCS based on IMF-DOTS

5.11 Top Trading Regions of CJK in 2018

Region	Total Trade Volume	%	Region	Total Export Volume	%	Region	Total Import Volume	%
EU	977,200	13%	EU	553,600	14%	EU	423,600	12%
ASEAN	977,528	13%	ASEAN	536,427	14%	ASEAN	441,101	13%
NAFTA	759,222	10%	NAFTA	560,533	15%	NAFTA	198,689	6%
CIS	220,074	3%	CIS	101,007	3%	CIS	119,066	3%

Unit : Million USD
Source : Calculation by the TCS based on IMF-DOTS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CJK	30	31	32	34	35	35	34	33	33	31	32	32	31	31	30	30	31	31	30	29
EU	67	65	66	67	67	67	66	66	66	65	65	63	63	61	62	63	63	64	64	64
ASEAN	23	24	23	24	24	24	25	25	25	25	24	25	24	24	24	24	23	23	22	23
ASEAN+3	43	45	45	47	48	48	47	47	46	45	46	47	46	46	46	45	47	47	47	46
APEC	72	73	72	72	71	71	70	69	68	65	67	68	66	67	67	67	70	70	70	69
SAARC	4	4	5	5	6	6	5	5	5	5	4	5	4	4	4	5	6	6	6	6

Unit : %
Source : ADB-ARIC

6 People-To-People Exchange

6.1 Inbound Visitors between CJK

Country of Destination	Country of Origin	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	Japan	1,855,197	22%	2,201,528	22%	2,384,538	21%	2,986,854	22%	2,251,261	20%	3,334,255	20%	3,389,785	17%	3,748,882	17%	3,977,479	15%	3,446,117	14%
	ROK	991,979	12%	1,244,721	12%	1,676,996	15%	2,177,965	16%	1,945,071	17%	2,844,862	17%	3,542,785	18%	3,922,017	18%	4,776,752	18%	3,960,392	16%
	World	8,432,296	100%	10,196,818	100%	11,209,330	100%	12,823,569	100%	11,293,896	100%	16,932,482	100%	20,247,700	100%	22,192,012	100%	26,109,668	100%	24,325,337	100%
Japan	China	294,937	7%	351,788	7%	391,284	8%	452,420	9%	448,782	9%	616,009	10%	652,820	10%	811,675	11%	942,439	11%	1,000,416	12%
	ROK	942,674	21%	1,064,390	22%	1,133,971	24%	1,271,836	24%	1,459,333	28%	1,588,472	26%	1,747,171	26%	2,117,325	29%	2,600,694	31%	2,382,397	29%
	World	4,437,863	100%	4,757,149	100%	4,752,900	100%	5,238,964	100%	5,211,725	100%	6,127,905	100%	6,727,926	100%	7,334,077	100%	8,346,969	100%	8,350,835	100%
ROK	China	316,639	7%	442,794	8%	482,227	9%	539,466	10%	512,768	11%	627,264	11%	710,243	12%	896,969	15%	1,068,925	17%	1,167,891	17%
	Japan	2,184,121	47%	2,472,054	46%	2,377,321	46%	2,320,837	43%	1,802,542	38%	2,443,070	42%	2,440,129	41%	2,338,921	38%	2,235,963	35%	2,378,102	35%
	World	4,659,785	100%	5,321,792	100%	5,147,204	100%	5,347,468	100%	4,752,762	100%	5,818,128	100%	6,022,752	100%	6,155,047	100%	6,448,240	100%	6,890,841	100%
CJK*	CJK	6,585,547	38%	7,777,275	38%	8,436,337	40%	9,749,378	42%	8,419,757	40%	11,453,932	40%	12,482,933	38%	13,835,789	39%	15,602,252	38%	14,335,315	36%
Country of Destination	Country of Origin	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	Japan	3,317,400	15%	3,722,100	14%	3,658,300	12%	3,518,200	13%	2,877,500	11%	2,717,600	10%	2,497,657	10%	2,587,440	9%	2,680,033	9%	2,691,400	9%
	ROK	3,197,500	15%	4,085,400	16%	4,185,400	15%	4,069,800	15%	3,969,000	15%	4,181,700	16%	4,444,389	17%	4,762,163	17%	3,854,869	13%	4,193,500	14%
	World	21,937,400	100%	26,126,900	100%	27,112,000	100%	27,191,700	100%	26,290,400	100%	26,361,000	100%	25,985,400	100%	28,151,200	100%	29,165,300	100%	30,542,900	100%
Japan	China	1,006,085	15%	1,412,875	16%	1,043,246	17%	1,425,100	17%	1,214,437	13%	2,409,158	18%	4,993,689	25%	6,373,564	27%	7,355,818	26%	8,380,034	27%
	ROK	1,586,772	23%	2,439,816	28%	1,658,073	27%	2,042,775	24%	2,456,165	24%	2,755,313	21%	4,002,095	20%	5,090,302	21%	7,140,438	25%	7,538,952	24%
	World	6,789,658	100%	8,611,175	100%	6,218,752	100%	8,358,105	100%	10,363,904	100%	13,413,467	100%	19,737,409	100%	24,039,700	100%	28,691,073	100%	31,191,856	100%
ROK	China	1,242,317	17%	1,875,157	21%	2,220,196	23%	2,836,892	25%	4,326,869	36%	6,126,865	43%	5,984,170	45%	8,067,722	47%	4,169,353	31%	4,789,512	31%
	Japan	3,053,311	39%	3,023,009	34%	3,289,051	34%	3,518,792	32%	2,747,750	23%	2,280,434	16%	1,837,782	14%	2,297,893	13%	2,311,447	17%	2,948,527	19%
	World	7,817,533	100%	8,797,658	100%	9,794,796	100%	11,140,028	100%	12,175,550	100%	14,201,516	100%	13,231,651	100%	17,241,823	100%	13,335,758	100%	15,346,879	100%
CJK*	CJK	13,403,385	37%	16,558,357	38%	16,054,266	37%	17,411,559	37%	17,591,721	36%	20,471,070	38%	23,759,782	40%	29,179,084	42%	27,511,958	39%	30,541,925	40%

Unit : Number of People
Source : National Tourism Administration of CJK(China: 1999-2018, Japan and ROK: 1999-2013; 2018), UNWTO(Japan and ROK: 2014-2017)
* Intra-regional volume and ratio(Calculation by the TCS)

Country of Origin	Country of Destination	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	Japan	294,937	351,788	391,384	452,420	448,782	616,009	652,820	811,675	942,439	1,000,416
	ROK	316,639	442,794	482,227	539,466	513,236	627,264	709,836	896,969	1,068,925	1,167,891
Japan	China	1,855,197	2,201,528	2,385,700	2,925,553	2,254,800	3,334,255	3,389,976	3,745,881	3,977,479	3,446,117
	ROK	2,184,121	2,472,054	2,377,321	2,320,837	1,802,171	2,443,070	2,439,809	2,338,921	2,235,963	2,378,102
ROK	China	991,979	1,344,721	1,678,836	2,124,310	1,945,484	2,844,862	3,545,341	3,923,986	4,776,752	3,960,392
	Japan	942,674	1,064,390	1,133,971	1,271,835	1,459,333	1,588,472	1,747,171	2,117,325	2,600,694	2,382,397
CJK*	CJK	6,585,547	7,877,275	8,449,439	9,634,421	8,423,806	11,453,932	12,484,953	13,834,757	15,602,252	14,335,315

Country of Origin	Country of Destination	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	Japan	1,006,085	1,412,875	1,043,246	1,425,100	1,314,437	2,409,158	4,993,689	6,373,564	7,355,818	8,380,034
	ROK	1,342,317	1,875,157	2,220,196	2,836,892	4,326,869	6,126,865	5,984,170	8,067,722	4,169,353	4,789,512
Japan	China	3,317,459	3,731,200	3,658,169	3,518,153	2,877,533	2,717,600	2,497,657	2,587,440	2,680,033	2,691,400
	ROK	3,053,311	3,023,009	3,289,051	3,518,792	2,747,750	2,280,434	1,837,782	2,297,893	2,311,447	2,948,527
ROK	China	3,197,538	4,076,392	4,185,398	4,069,868	3,968,998	4,181,700	4,444,389	4,762,163	3,854,869	4,193,500
	Japan	1,586,772	2,439,816	1,658,073	2,042,775	2,456,165	2,755,313	4,002,095	5,090,302	7,140,438	7,538,952
CJK*	CJK	13,503,482	16,558,449	16,054,133	17,411,580	17,691,752	20,471,070	23,759,782	29,179,084	27,511,958	30,541,925

Unit : Number of People

Source : UNWTO

* Intra-regional volume and ratio(Calculation by the TCS)

6.3 Top 10 Sources of Visitors of CJK in 2017

P.R. China			Japan			ROK		
Country	Inbound Tourist	%	Country	Inbound Tourist	%	Country	Inbound Tourist	%
Myanmar	9,662,152	33%	P.R. China	7,355,818	26%	P.R. China	4,169,353	31%
Vietnam	6,546,874	22%	ROK	7,140,438	25%	Japan	2,311,447	17%
ROK	3,863,847	13%	Taiwan, China	4,564,053	16%	Taiwan, China	925,616	7%
Japan	2,682,999	9%	Hong Kong, China	2,231,568	8%	United States	868,881	7%
Russian Federation	2,356,835	8%	United States	1,374,964	5%	Hong Kong, China	658,031	5%
United States	2,312,929	8%	Thailand	987,211	3%	Thailand	498,511	4%
Mongolia	1,864,519	6%	Australia	495,054	2%	Philippines	448,702	3%
Malaysia	1,233,237	4%	Malaysia	439,548	2%	Vietnam	324,740	2%
Philippines	1,168,512	4%	Philippines	424,121	1%	Malaysia	307,641	2%
Singapore	941,210	3%	Singapore	404,132	1%	Russian Federation	270,427	2%
Total Inbound Visitors	29,165,300	100%	Total Inbound Visitors	28,691,073	100%	Total Inbound Visitors	13,335,758	100%

Unit : Number of People

Source : National Bureau of Statistics of China (China), UNWTO (Japan and ROK)

6.4 Number of Flights

From	To	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	Japan	11,483	17%	11,252	16%	14,610	17%	23,993	20%	28,166	24%	36,193	23%	39,214	22%	40,759	21%	48,999	22%	49,867	21%
	ROK	5,733	8%	6,650	10%	8,833	10%	16,529	14%	17,606	15%	22,159	14%	26,551	15%	33,117	17%	46,855	21%	44,097	19%
	World	68,310	100%	69,035	100%	84,873	100%	118,623	100%	119,499	100%	157,946	100%	178,379	100%	195,965	100%	227,621	100%	232,203	100%
Japan	China	10,557	11%	10,497	11%	14,336	14%	24,186	24%	27,732	24%	35,880	27%	39,228	28%	41,245	29%	49,253	34%	50,551	34%
	ROK	15,221	16%	16,680	18%	18,669	18%	14,432	14%	17,971	15%	21,357	16%	22,714	16%	24,159	17%	24,368	17%	25,748	17%
	World	93,793	100%	94,300	100%	101,725	100%	101,411	100%	117,329	100%	131,897	100%	140,745	100%	139,841	100%	145,737	100%	149,788	100%
ROK	China	6,029	15%	6,848	15%	9,005	18%	16,576	30%	18,089	27%	21,961	30%	26,475	34%	32,852	38%	46,913	45%	43,892	41%
	Japan	15,708	38%	16,754	37%	18,726	38%	14,388	26%	19,867	29%	21,039	29%	22,991	29%	24,511	28%	24,728	24%	26,037	25%
	World	41,154	100%	44,806	100%	49,683	100%	55,690	100%	68,137	100%	73,208	100%	77,979	100%	86,780	100%	104,470	100%	106,131	100%
CJK*	CJK	64,731	32%	68,681	33%	84,179	36%	110,104	40%	129,431	42%	158,589	44%	177,173	45%	196,643	47%	241,116	50%	240,192	49%

From	To	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	Japan	46,813	20%	36,834	17%	33,792	12%	33,242	12%	43,063	13%	49,038	14%	64,525	15%	72,243	15%	71,871	15%	72,809	15%
	ROK	39,368	17%	32,419	15%	32,675	12%	45,497	16%	49,533	16%	58,269	17%	62,422	14%	68,320	15%	56,293	12%	69,003	14%
	World	230,225	100%	222,543	100%	272,390	100%	287,333	100%	319,423	100%	352,862	100%	438,068	100%	468,068	100%	481,527	100%	485,727	100%
Japan	China	47,227	33%	37,195	31%	34,847	31%	33,267	28%	42,340	30%	48,363	30%	63,856	34%	73,197	39%	71,593	38%	72,125	35%
	ROK	26,968	19%	18,991	16%	19,640	17%	26,750	23%	29,264	21%	27,968	17%	26,634	14%	25,819	14%	24,858	13%	55,086	26%
	World	144,868	100%	118,545	100%	113,316	100%	118,431	100%	140,504	100%	159,924	100%	190,085	100%	189,974	100%	190,180	100%	208,055	100%
ROK	China	39,916	38%	33,211	37%	33,536	34%	45,354	36%	49,632	38%	58,206	41%	62,457	42%	69,659	36%	55,363	31%	67,971	22%
	Japan	26,438	25%	18,113	20%	18,724	19%	26,583	21%	28,931	22%	27,712	19%	26,573	18%	25,550	13%	24,516	14%	54,288	18%
	World	104,516	100%	90,860	100%	98,058	100%	124,367	100%	129,498	100%	142,343	100%	149,657	100%	191,710	100%	179,443	100%	309,410	100%
CJK*	CJK	226,730	47%	176,763	41%	173,214	36%	210,693	40%	242,763	41%	269,556	41%	306,467	39%	334,788	39%	304,494	36%	391,282	39%

Unit : Number of Flights

Source : ICAO

* Intra-regional volume and ratio(Calculation by the TCS)

6.5 Flights between CJK

Unit	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of Flights per Day	177	188	231	302	355	434	485	539	661	658	621	484	475	577	665	739	840	917	834	1072
Number of Flights per Hour	7	8	10	13	15	18	20	22	28	27	26	20	20	24	28	31	35	38	35	45

Source : Calculation by the TCS based on ICAO data

* 1 year is assumed to be 365 days.

122 6.6 Number of Passengers(Flight)

From	To	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	Japan	1,891,807	15%	2,033,804	15%	2,452,703	17%	3,573,337	19%	3,287,619	20%	4,644,978	20%	4,793,533	18%	5,226,105	18%	5,483,755	18%	4,969,278	17%
	ROK	1,119,856	9%	1,326,965	10%	1,510,242	11%	2,504,938	13%	2,333,507	14%	3,093,347	14%	3,763,460	14%	4,179,858	15%	5,477,800	18%	4,685,979	16%
	World	12,446,109	100%	13,358,240	100%	14,186,699	100%	19,124,257	100%	16,380,653	100%	22,721,641	100%	26,109,293	100%	28,407,815	100%	31,198,107	100%	29,783,739	100%
Japan	China	1,885,507	10%	2,026,407	11%	2,441,650	13%	3,559,658	19%	3,245,847	18%	4,616,213	21%	4,737,123	21%	5,225,300	23%	5,445,433	24%	4,909,690	23%
	ROK	3,145,647	17%	3,495,857	18%	3,451,888	18%	2,666,268	14%	2,857,625	16%	3,848,758	17%	3,837,808	17%	4,020,031	18%	4,205,759	19%	4,285,406	20%
	World	18,196,993	100%	18,910,992	100%	19,041,586	100%	18,876,415	100%	18,393,039	100%	22,256,749	100%	23,026,990	100%	22,768,079	100%	22,545,290	100%	21,686,980	100%
ROK	China	1,113,752	15%	1,317,179	16%	1,486,130	17%	2,489,816	26%	2,433,304	23%	3,074,630	26%	3,757,485	29%	4,121,865	30%	5,389,619	35%	4,635,789	31%
	Japan	3,269,490	45%	3,506,642	41%	3,530,327	40%	2,694,073	29%	3,275,306	32%	3,861,643	33%	3,967,368	30%	4,140,912	30%	4,309,117	28%	4,366,096	29%
	World	7,322,560	100%	8,461,095	100%	8,737,877	100%	9,433,602	100%	10,371,371	100%	11,829,059	100%	13,039,212	100%	13,744,269	100%	15,573,544	100%	15,125,231	100%
CJK*	CJK	12,426,059	33%	13,706,854	34%	14,872,940	35%	17,488,090	37%	17,433,208	39%	23,139,569	41%	24,856,777	40%	26,914,071	41%	30,311,483	44%	27,852,238	42%

From	To	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	Japan	4,908,044	16%	4,540,395	14%	3,882,867	9%	4,153,595	9%	5,054,542	11%	6,125,431	11%	8,553,480	12%	9,278,619	12%	9,853,078	13%	11,144,586	14%
	ROK	4,288,586	14%	3,840,451	12%	4,087,922	10%	6,090,910	13%	6,715,755	14%	8,443,630	16%	8,898,577	13%	10,462,676	14%	7,747,462	10%	10,194,932	13%
	World	30,239,915	100%	32,442,094	100%	41,130,526	100%	45,478,765	100%	48,076,839	100%	54,403,195	100%	70,129,482	100%	75,271,937	100%	78,017,685	100%	80,202,813	100%
Japan	China	4,866,151	23%	4,519,639	24%	3,904,036	24%	4,093,938	21%	4,942,680	23%	5,969,931	24%	8,459,400	28%	9,503,972	32%	9,743,398	31%	11,071,467	31%
	ROK	4,471,163	21%	2,896,896	15%	2,629,965	16%	4,368,784	22%	4,177,331	19%	3,953,878	16%	4,034,435	13%	4,056,358	13%	4,032,388	13%	9,142,411	26%
	World	21,536,957	100%	18,874,487	100%	16,450,350	100%	19,885,598	100%	21,905,693	100%	24,710,001	100%	30,407,554	100%	30,168,608	100%	31,363,897	100%	35,697,094	100%
ROK	China	4,292,236	28%	3,841,974	32%	4,063,609	31%	6,032,524	31%	6,652,437	34%	8,324,139	38%	8,813,102	36%	10,613,457	34%	7,522,811	25%	9,881,012	19%
	Japan	4,518,680	30%	2,927,138	25%	2,623,710	20%	4,379,283	23%	4,184,550	22%	3,987,043	18%	4,061,305	17%	4,097,033	13%	4,094,188	14%	9,189,964	17%
	World	15,072,772	100%	11,913,396	100%	12,936,598	100%	19,408,998	100%	19,401,828	100%	21,866,181	100%	24,187,805	100%	31,480,080	100%	30,092,562	100%	53,364,666	100%
CJK*	CJK	27,344,860	41%	22,566,493	36%	21,192,109	30%	29,119,034	34%	31,727,295	35%	36,804,052	36%	42,820,299	34%	48,012,115	35%	42,993,325	31%	60,624,372	36%

Unit : Number of People

Source : ICAO

* Intra-regional volume and ratio(Calculation by the TCS)

6.7 International Migrant Stock

Country of Destination	Country of Origin	2000	%	2005	%	2010	%	2015	%	2019	%
China	Japan	4,917	1%	5,424	1%	5,932	1%	6,826	1%	7,194	1%
	ROK	134,524	26%	148,413	22%	162,303	19%	186,786	19%	196,874	19%
	World	508,034	100%	678,947	100%	849,861	100%	978,046	100%	1,030,871	100%
Japan	China	335,600	20%	648,120	32%	687,156	32%	714,570	32%	784,763	31%
	ROK	635,194	38%	532,475	26%	565,989	27%	457,772	21%	475,166	19%
	World	1,686,444	100%	2,011,555	100%	2,134,151	100%	2,232,189	100%	2,498,891	100%
ROK	China	92,142	38%	243,217	50%	490,407	53%	609,332	53%	620,295	53%
	Japan	15,744	6%	14,133	3%	18,100	2%	22,489	2%	22,893	2%
	World	244,224	100%	486,065	100%	919,987	100%	1,143,087	100%	1,163,655	100%
CJK*	CJK	1,218,121	50%	1,591,782	50%	1,929,887	49%	1,997,775	46%	2,107,185	45%

Unit : Number of People

Source : UN

* Intra-regional volume and ratio(Calculation by the TCS)

124 6.8 Top 10 Migrant Stock to CJK by Country in 2019

China			Japan			ROK		
Country	Number of People	%	Country	Number of People	%	Country	Number of People	%
ROK	196,874	19%	China	784,763	31%	China	620,295	53%
Brazil	78,301	8%	ROK	475,166	19%	Vietnam	115,632	10%
Philippines	77,016	7%	Philippines	255,530	10%	United States	67,819	6%
Indonesia	41,882	4%	Vietnam	209,731	8%	Philippines	46,528	4%
Vietnam	29,612	3%	Brazil	189,735	8%	Thailand	32,456	3%
United States	28,223	3%	United States	56,321	2%	Indonesia	32,310	3%
Thailand	16,012	2%	Peru	50,065	2%	Mongolia	25,633	2%
Peru	14,211	1%	Thailand	49,967	2%	Uzbekistan	24,444	2%
United Kingdom	9,599	1%	Indonesia	44,937	2%	Japan	22,893	2%
India	9,452	1%	India	30,063	1%	Sri Lanka	20,446	2%
Total Migrant Stock	1,030,871	100%	Total Migrant Stock	2,498,891	100%	Total Migrant Stock	1,163,655	100%

Unit : Number of People
Source : UN

7 Energy

7.1 Total Energy Production

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,074	11%	1,124	11%	1,176	12%	1,227	12%	1,375	13%	1,534	14%	1,671	14%	1,793	15%	1,917	16%	1,967	16%
Japan	105	1%	106	1%	105	1%	100	1%	87	1%	99	1%	104	1%	105	1%	94	1%	92	1%
ROK	32	0.3%	36	0.4%	37	0.4%	38	0.4%	41	0.4%	42	0.4%	47	0.4%	48	0.4%	47	0.4%	50	0.4%
CJK	1,211	12%	1,266	13%	1,318	13%	1,365	13%	1,504	14%	1,675	15%	1,822	16%	1,945	16%	2,058	17%	2,109	17%
EU	961	10%	953	10%	952	9%	953	9%	944	9%	939	8%	911	8%	892	8%	867	7%	865	7%
NAFTA	2,259	23%	2,269	23%	2,299	23%	2,279	22%	2,273	21%	2,300	21%	2,292	20%	2,332	20%	2,337	19%	2,340	19%
CIS	1,208	12%	1,256	13%	1,297	13%	1,347	13%	1,436	13%	1,506	13%	1,555	13%	1,602	14%	1,641	14%	1,680	14%
World	9,727	100%	10,017	100%	10,178	100%	10,258	100%	10,672	100%	11,186	100%	11,542	100%	11,870	100%	12,071	100%	12,314	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	2,052	17%	2,236	17%	2,386	18%	2,402	18%	2,467	18%	2,506	18%	2,516	18%	2,364	17%	2,448	17%	2,534	18%
Japan	98	1%	102	1%	54	0.4%	31	0.2%	30	0.2%	29	0.2%	34	0.2%	37	0.3%	42	0.3%	48	0.3%
ROK	49	0.4%	51	0.4%	53	0.4%	53	0.4%	51	0.4%	58	0.4%	62	0.4%	62	0.5%	63	0.4%	61	0.4%
CJK	2,199	18%	2,389	19%	2,493	19%	2,486	19%	2,549	19%	2,593	19%	2,611	19%	2,464	18%	2,553	18%	2,644	18%
EU	827	7%	844	7%	812	6%	803	6%	798	6%	780	6%	773	6%	761	6%	758	5%	753	5%
NAFTA	2,305	19%	2,341	18%	2,417	18%	2,464	19%	2,540	19%	2,692	20%	2,688	19%	2,575	19%	2,677	19%	2,859	20%
CIS	1,589	13%	1,692	13%	1,737	13%	1,759	13%	1,786	13%	1,766	13%	1,769	13%	1,798	13%	1,862	13%	1,933	13%
World	12,216	100%	12,791	100%	13,119	100%	13,298	100%	13,486	100%	13,716	100%	13,802	100%	13,754	100%	14,068	100%	14,468	100%

Unit : Mtoe
Source : Enerdata

7.2 Total Energy Consumption

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,099	11%	1,130	11%	1,168	12%	1,246	12%	1,420	13%	1,615	14%	1,782	16%	1,950	16%	2,099	17%	2,155	18%
Japan	509	5%	519	5%	511	5%	512	5%	509	5%	524	5%	523	5%	523	4%	518	4%	498	4%
ROK	174	2%	190	2%	193	2%	201	2%	206	2%	212	2%	214	2%	218	2%	227	2%	232	2%
CJK	1,783	18%	1,839	18%	1,872	19%	1,960	19%	2,134	20%	2,351	21%	2,519	22%	2,691	23%	2,843	23%	2,885	23%
EU	1,686	17%	1,699	17%	1,736	17%	1,734	17%	1,772	17%	1,789	16%	1,796	16%	1,802	15%	1,772	15%	1,764	14%
NAFTA	2,602	27%	2,673	27%	2,631	26%	2,662	26%	2,690	25%	2,745	25%	2,771	24%	2,758	23%	2,796	23%	2,730	22%
CIS	889	9%	898	9%	904	9%	911	9%	945	9%	957	9%	963	8%	991	8%	1,001	8%	1,021	8%
World	9,790	100%	10,020	100%	10,112	100%	10,330	100%	10,692	100%	11,174	100%	11,487	100%	11,831	100%	12,152	100%	12,300	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	2,297	19%	2,536	20%	2,723	21%	2,821	21%	2,912	22%	2,965	22%	2,994	22%	2,965	22%	3,051	22%	3,164	22%
Japan	475	4%	501	4%	463	4%	453	3%	455	3%	439	3%	432	3%	428	3%	430	3%	424	3%
ROK	234	2%	256	2%	267	2%	271	2%	272	2%	277	2%	283	2%	293	2%	302	2%	307	2%
CJK	3,006	25%	3,293	26%	3,453	26%	3,545	27%	3,638	27%	3,681	27%	3,709	27%	3,686	27%	3,782	27%	3,895	27%
EU	1,663	14%	1,729	13%	1,663	13%	1,650	12%	1,631	12%	1,570	12%	1,589	12%	1,598	12%	1,619	12%	1,602	11%
NAFTA	2,607	21%	2,656	21%	2,642	20%	2,613	20%	2,661	20%	2,685	20%	2,659	19%	2,639	19%	2,658	19%	2,740	19%
CIS	941	8%	1,008	8%	1,054	8%	1,070	8%	1,043	8%	1,036	8%	1,004	7%	1,030	7%	1,070	8%	1,081	8%
World	12,200	100%	12,871	100%	13,071	100%	13,278	100%	13,458	100%	13,632	100%	13,675	100%	13,768	100%	14,070	100%	14,391	100%

Unit : Mtoe

Source : Enerdata

7.3 Oil Products Production

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	212	6%	233	6%	235	6%	243	7%	263	7%	306	8%	317	8%	336	9%	352	9%	368	9%
Japan	208	6%	207	6%	201	6%	202	6%	202	5%	199	5%	205	5%	196	5%	198	5%	189	5%
ROK	120	3%	122	3%	119	3%	111	3%	111	3%	116	3%	120	3%	123	3%	123	3%	120	3%
CJK	540	15%	561	16%	555	15%	556	15%	576	16%	621	16%	642	16%	655	17%	673	17%	677	17%
EU	690	20%	699	19%	698	19%	692	19%	703	19%	720	19%	717	18%	715	18%	707	18%	706	18%
NAFTA	1,000	28%	1,015	28%	1,015	28%	1,012	28%	1,033	28%	1,055	27%	1,044	27%	1,042	26%	1,036	26%	1,030	26%
CIS	218	6%	227	6%	239	7%	253	7%	258	7%	265	7%	277	7%	285	7%	292	7%	295	7%
World	3,518	100%	3,595	100%	3,625	100%	3,634	100%	3,714	100%	3,859	100%	3,904	100%	3,933	100%	3,951	100%	3,983	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	388	10%	401	10%	416	11%	440	11%	460	11%	485	12%	510	12%	534	13%	560	13%	595	14%
Japan	179	5%	178	4%	169	4%	169	4%	171	4%	162	4%	162	4%	163	4%	157	4%	149	3%
ROK	117	3%	120	3%	128	3%	132	3%	127	3%	129	3%	140	3%	146	3%	155	4%	159	4%
CJK	683	18%	699	18%	714	18%	740	18%	758	19%	776	19%	813	19%	843	20%	873	20%	904	21%
EU	658	17%	651	16%	638	16%	635	16%	606	15%	604	15%	633	15%	630	15%	638	15%	627	15%
NAFTA	974	25%	1,001	25%	968	24%	967	24%	983	24%	1,001	25%	1,012	24%	1,015	24%	1,020	24%	1,026	24%
CIS	292	8%	308	8%	313	8%	314	8%	325	8%	343	8%	338	8%	324	8%	323	8%	331	8%
World	3,882	100%	3,958	100%	3,952	100%	4,012	100%	4,027	100%	4,084	100%	4,171	100%	4,207	100%	4,270	100%	4,305	100%

Unit : Mt

Source : Enerdata

7.4 Oil Products Consumption

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	227	6%	241	7%	245	7%	258	7%	281	8%	329	9%	333	9%	353	9%	367	9%	375	10%
Japan	232	7%	228	6%	222	6%	226	6%	223	6%	220	6%	216	6%	208	5%	206	5%	188	5%
ROK	87	2%	90	3%	89	2%	90	2%	90	2%	88	2%	88	2%	87	2%	89	2%	84	2%
CJK	546	15%	558	16%	557	16%	573	16%	594	16%	637	17%	637	17%	647	17%	662	17%	647	17%
EU	626	18%	613	17%	624	17%	618	17%	624	17%	625	16%	623	16%	619	16%	599	15%	591	15%
NAFTA	1,043	29%	1,041	29%	1,056	29%	1,016	28%	1,038	28%	1,073	28%	1,077	28%	1,061	27%	1,057	27%	997	26%
CIS	166	5%	164	5%	163	5%	162	5%	165	5%	164	4%	164	4%	169	4%	171	4%	175	4%
World	3,537	100%	3,561	100%	3,589	100%	3,588	100%	3,650	100%	3,807	100%	3,849	100%	3,895	100%	3,941	100%	3,896	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	382	10%	401	10%	419	11%	438	11%	461	12%	476	12%	507	12%	523	13%	549	13%	582	14%
Japan	183	5%	183	5%	185	5%	188	5%	185	5%	175	4%	171	4%	167	4%	164	4%	159	4%
ROK	87	2%	89	2%	89	2%	92	2%	92	2%	93	2%	98	2%	102	2%	104	2%	103	2%
CJK	652	17%	673	17%	694	18%	718	18%	738	18%	744	18%	776	19%	792	19%	817	19%	844	20%
EU	557	15%	553	14%	530	14%	511	13%	497	12%	492	12%	501	12%	505	12%	515	12%	511	12%
NAFTA	942	25%	969	25%	923	24%	912	23%	919	23%	918	23%	932	23%	939	22%	948	22%	963	22%
CIS	168	4%	172	4%	187	5%	191	5%	187	5%	199	5%	198	5%	194	5%	195	5%	197	5%
World	3,802	100%	3,904	100%	3,904	100%	3,952	100%	4,002	100%	4,045	100%	4,123	100%	4,174	100%	4,262	100%	4,299	100%

Unit : Mt

Source : Enerdata

7.5 Natural Gas Production

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	25	1%	27	1%	30	1%	33	1%	35	1%	41	1%	49	2%	59	2%	69	2%	80	3%
Japan	2	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%	4	0.1%	4	0.1%	4	0.1%
ROK	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.02%	0.4	0.01%	0.4	0.01%	0.2	0.01%
CJK	28	1%	30	1%	33	1%	36	1%	38	1%	45	2%	53	2%	63	2%	74	2%	84	3%
EU	259	11%	265	11%	264	10%	260	10%	254	9%	259	9%	241	8%	231	8%	217	7%	222	7%
NAFTA	747	31%	763	30%	779	31%	761	29%	765	28%	751	27%	742	26%	760	26%	779	26%	798	25%
CIS	694	29%	709	28%	712	28%	731	28%	763	28%	780	28%	797	28%	813	27%	824	27%	852	27%
World	2,418	100%	2,504	100%	2,549	100%	2,612	100%	2,709	100%	2,788	100%	2,867	100%	2,958	100%	3,035	100%	3,160	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	85	3%	96	3%	105	3%	111	3%	121	3%	130	4%	135	4%	137	4%	148	4%	160	4%
Japan	4	0.1%	4	0.1%	4	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%	3	0.1%
ROK	1	0.02%	1	0.02%	0.5	0.01%	0.4	0.01%	0.5	0.01%	0.3	0.01%	0.2	0.01%	0.2	0.004%	0.3	0.01%	0.3	0.01%
CJK	90	3%	100	3%	109	3%	114	3%	124	4%	133	4%	138	4%	140	4%	151	4%	163	4%
EU	200	7%	206	6%	185	6%	174	5%	173	5%	155	4%	139	4%	138	4%	131	3%	112	3%
NAFTA	799	26%	815	25%	857	25%	884	26%	888	25%	942	27%	973	27%	966	27%	987	26%	1,082	27%
CIS	747	24%	828	25%	867	26%	859	25%	885	25%	861	24%	860	24%	857	24%	913	24%	972	24%
World	3,059	100%	3,280	100%	3,369	100%	3,423	100%	3,492	100%	3,541	100%	3,590	100%	3,628	100%	3,781	100%	3,975	100%

Unit : bcm

Source : Enerdata

7.6 Natural Gas Consumption

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	21	1%	25	1%	28	1%	29	1%	35	1%	41	1%	46	2%	57	2%	69	2%	80	3%
Japan	80	3%	83	3%	82	3%	85	3%	88	3%	88	3%	87	3%	96	3%	105	3%	103	3%
ROK	17	1%	19	1%	21	1%	23	1%	24	1%	29	1%	30	1%	33	1%	35	1%	36	1%
CJK	119	5%	126	5%	132	5%	137	5%	147	5%	158	6%	164	6%	186	6%	209	7%	219	7%
EU	472	19%	483	19%	493	19%	494	19%	512	19%	525	19%	536	19%	530	18%	524	17%	538	17%
NAFTA	759	31%	792	32%	757	30%	788	30%	776	29%	780	28%	775	27%	770	26%	816	27%	823	26%
CIS	566	23%	567	23%	575	23%	580	22%	608	22%	617	22%	624	22%	632	22%	644	21%	650	21%
World	2,428	100%	2,508	100%	2,530	100%	2,613	100%	2,704	100%	2,790	100%	2,864	100%	2,933	100%	3,057	100%	3,148	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	88	3%	104	3%	129	4%	145	4%	164	5%	181	5%	188	5%	203	6%	234	6%	275	7%
Japan	102	3%	108	3%	126	4%	131	4%	131	4%	132	4%	126	4%	131	4%	130	3%	127	3%
ROK	34	1%	43	1%	47	1%	51	1%	53	2%	47	1%	44	1%	47	1%	49	1%	55	1%
CJK	225	7%	256	8%	301	9%	326	9%	348	10%	361	10%	359	10%	381	10%	412	11%	457	12%
EU	504	16%	545	16%	493	15%	479	14%	470	13%	422	12%	437	12%	467	13%	485	13%	477	12%
NAFTA	807	26%	850	26%	869	26%	906	26%	917	26%	934	27%	952	27%	963	27%	962	26%	1,057	27%
CIS	599	20%	655	20%	674	20%	666	19%	651	19%	645	18%	614	17%	606	17%	646	17%	671	17%
World	3,070	100%	3,322	100%	3,381	100%	3,453	100%	3,491	100%	3,507	100%	3,549	100%	3,631	100%	3,765	100%	3,954	100%

Unit : bcm

Source : Enerdata

7.7 Coal and Lignite Production

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,264	28%	1,355	29%	1,450	30%	1,539	31%	1,819	34%	2,089	37%	2,317	38%	2,520	39%	2,722	41%	2,844	41%
Japan	4	0.1%	3	0.1%	3	0.1%	1	0.03%	1	0.03%	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.02%
ROK	4	0.1%	8	0.2%	8	0.2%	3	0.1%	3	0.1%	3	0.1%	3	0.05%	3	0.04%	3	0.04%	3	0.04%
CJK	1,272	28%	1,366	29%	1,461	30%	1,543	31%	1,824	34%	2,094	37%	2,321	38%	2,524	39%	2,726	41%	2,848	41%
EU	663	15%	657	14%	666	14%	666	13%	667	13%	655	12%	639	11%	630	10%	620	9%	599	9%
NAFTA	1,079	24%	1,052	23%	1,103	23%	1,070	22%	1,046	20%	1,098	19%	1,122	19%	1,153	18%	1,143	17%	1,158	17%
CIS	368	8%	388	8%	397	8%	381	8%	408	8%	413	7%	439	7%	453	7%	459	7%	488	7%
World	4,532	100%	4,665	100%	4,890	100%	4,945	100%	5,296	100%	5,691	100%	6,056	100%	6,405	100%	6,673	100%	6,870	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	3,043	43%	3,316	45%	3,608	46%	3,678	46%	3,749	47%	3,640	46%	3,563	46%	3,268	45%	3,376	45%	3,474	45%
Japan	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.02%	1	0.01%
ROK	3	0.04%	2	0.03%	2	0.03%	2	0.03%	2	0.02%	2	0.02%	2	0.02%	2	0.02%	1	0.02%	1	0.02%
CJK	3,046	44%	3,319	45%	3,611	46%	3,681	46%	3,752	47%	3,643	46%	3,566	46%	3,271	45%	3,379	45%	3,477	45%
EU	574	8%	564	8%	591	8%	591	7%	559	7%	540	7%	528	7%	482	7%	491	7%	473	6%
NAFTA	1,063	15%	1,079	15%	1,093	14%	1,015	13%	988	12%	1,003	13%	887	11%	735	10%	778	10%	754	10%
CIS	445	6%	476	6%	492	6%	528	7%	525	7%	513	6%	504	6%	520	7%	535	7%	565	7%
World	7,000	100%	7,389	100%	7,834	100%	7,945	100%	8,014	100%	7,973	100%	7,756	100%	7,336	100%	7,542	100%	7,683	100%

Unit : Mt

Source : Enerdata

132 7.8 Coal and Lignite Consumption

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,226	27%	1,304	27%	1,378	28%	1,492	30%	1,779	33%	2,043	36%	2,345	38%	2,609	40%	2,821	42%	2,920	42%
Japan	138	3%	148	3%	152	3%	159	3%	166	3%	170	3%	177	3%	175	3%	182	3%	173	2%
ROK	59	1%	72	1%	78	2%	75	1%	80	1%	81	1%	83	1%	86	1%	93	1%	104	2%
CJK	1,423	31%	1,524	32%	1,608	33%	1,726	34%	2,024	37%	2,293	40%	2,605	43%	2,870	45%	3,096	46%	3,196	46%
EU	806	18%	832	17%	844	17%	841	17%	868	16%	857	15%	833	14%	844	13%	855	13%	803	12%
NAFTA	1,020	22%	1,060	22%	1,040	21%	1,049	21%	1,077	20%	1,083	19%	1,099	18%	1,091	17%	1,106	16%	1,095	16%
CIS	350	8%	356	7%	346	7%	345	7%	361	7%	350	6%	349	6%	366	6%	364	5%	392	6%
World	4,568	100%	4,794	100%	4,880	100%	5,026	100%	5,442	100%	5,750	100%	6,101	100%	6,446	100%	6,784	100%	6,907	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	3,158	45%	3,350	46%	3,695	48%	3,832	49%	3,969	50%	3,837	49%	3,770	49%	3,718	49%	3,732	49%	3,770	49%
Japan	163	2%	176	2%	170	2%	178	2%	192	2%	190	2%	189	2%	190	2%	193	3%	189	2%
ROK	108	2%	120	2%	130	2%	128	2%	126	2%	131	2%	135	2%	135	2%	146	2%	150	2%
CJK	3,429	49%	3,646	50%	3,995	52%	4,138	53%	4,288	54%	4,159	53%	4,093	53%	4,043	53%	4,071	53%	4,109	53%
EU	734	11%	750	10%	781	10%	797	10%	765	10%	732	9%	717	9%	662	9%	658	9%	633	8%
NAFTA	973	14%	1,028	14%	985	13%	874	11%	903	11%	895	11%	788	10%	724	10%	716	9%	680	9%
CIS	350	5%	369	5%	390	5%	404	5%	378	5%	355	4%	362	5%	361	5%	362	5%	377	5%
World	6,954	100%	7,300	100%	7,697	100%	7,839	100%	7,982	100%	7,912	100%	7,736	100%	7,615	100%	7,679	100%	7,744	100%

Unit : Mt
Source : Enerdata

7.9 Electricity Production

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,240	8%	1,356	9%	1,481	9%	1,654	10%	1,911	11%	2,204	13%	2,500	14%	2,866	15%	3,282	17%	3,467	17%
Japan	1,051	7%	1,070	7%	1,053	7%	1,071	7%	1,062	6%	1,091	6%	1,112	6%	1,115	6%	1,144	6%	1,094	5%
ROK	238	2%	290	2%	311	2%	332	2%	345	2%	368	2%	389	2%	404	2%	427	2%	446	2%
CJK	2,528	17%	2,716	18%	2,845	18%	3,057	19%	3,318	20%	3,663	21%	4,001	22%	4,385	23%	4,853	24%	5,008	25%
EU	2,955	20%	3,036	20%	3,119	20%	3,144	19%	3,235	19%	3,303	19%	3,326	18%	3,371	18%	3,384	17%	3,387	17%
NAFTA	4,668	32%	4,864	31%	4,669	30%	4,871	30%	4,908	29%	5,012	29%	5,166	28%	5,170	27%	5,244	26%	5,270	26%
CIS	1,214	8%	1,250	8%	1,270	8%	1,274	8%	1,318	8%	1,346	8%	1,374	7%	1,433	8%	1,458	7%	1,483	7%
World	14,795	100%	15,495	100%	15,611	100%	16,221	100%	16,816	100%	17,586	100%	18,347	100%	19,057	100%	19,886	100%	20,268	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	3,715	18%	4,208	20%	4,716	21%	4,994	22%	5,447	23%	5,679	24%	5,860	24%	6,218	25%	6,585	26%	7,092	27%
Japan	1,060	5%	1,127	5%	1,064	5%	1,052	5%	1,073	5%	1,053	4%	1,047	4%	1,058	4%	1,085	4%	1,102	4%
ROK	455	2%	500	2%	523	2%	535	2%	542	2%	551	2%	553	2%	563	2%	576	2%	593	2%
CJK	5,229	26%	5,835	27%	6,303	28%	6,581	29%	7,062	30%	7,282	30%	7,459	31%	7,838	31%	8,246	32%	8,787	33%
EU	3,222	16%	3,367	16%	3,301	15%	3,296	14%	3,271	14%	3,191	13%	3,235	13%	3,258	13%	3,293	13%	3,278	12%
NAFTA	5,066	25%	5,258	24%	5,286	24%	5,232	23%	5,263	22%	5,304	22%	5,296	22%	5,310	21%	5,262	20%	5,412	20%
CIS	1,407	7%	1,483	7%	1,513	7%	1,542	7%	1,538	7%	1,542	6%	1,531	6%	1,557	6%	1,583	6%	1,612	6%
World	20,186	100%	21,538	100%	22,233	100%	22,735	100%	23,426	100%	23,896	100%	24,333	100%	25,040	100%	25,691	100%	26,590	100%

Unit : TWh
Source : Enerdata

7.10 Electricity Consumption

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,044	8%	1,138	9%	1,241	9%	1,380	10%	1,605	11%	1,859	12%	2,126	14%	2,446	15%	2,817	16%	2,989	17%
Japan	935	7%	957	7%	942	7%	959	7%	949	7%	983	7%	999	6%	1,004	6%	1,034	6%	994	6%
ROK	214	2%	263	2%	282	2%	301	2%	318	2%	338	2%	358	2%	371	2%	393	2%	408	2%
CJK	2,193	17%	2,358	18%	2,464	18%	2,640	19%	2,872	20%	3,180	21%	3,483	22%	3,821	23%	4,244	25%	4,391	25%
EU	2,561	20%	2,637	20%	2,702	20%	2,733	20%	2,801	19%	2,859	19%	2,901	19%	2,941	18%	2,961	17%	2,975	17%
NAFTA	4,084	32%	4,242	32%	4,208	31%	4,299	31%	4,364	30%	4,435	30%	4,543	29%	4,552	28%	4,673	27%	4,662	27%
CIS	975	8%	1,000	8%	1,011	8%	1,012	7%	1,047	7%	1,075	7%	1,086	7%	1,138	7%	1,165	7%	1,192	7%
World	12,609	100%	13,172	100%	13,384	100%	13,827	100%	14,381	100%	15,027	100%	15,661	100%	16,314	100%	17,106	100%	17,430	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	3,223	19%	3,626	20%	4,052	21%	4,326	22%	4,718	23%	4,939	24%	5,103	24%	5,407	25%	5,726	26%	6,167	27%
Japan	961	6%	1,009	5%	970	5%	967	5%	990	5%	975	5%	967	5%	982	5%	1,005	5%	1,020	4%
ROK	415	2%	458	2%	481	3%	493	3%	498	2%	499	2%	507	2%	530	2%	543	2%	563	2%
CJK	4,598	26%	5,093	27%	5,503	29%	5,786	30%	6,206	31%	6,412	31%	6,577	31%	6,920	32%	7,274	33%	7,751	34%
EU	2,828	16%	2,949	16%	2,889	15%	2,888	15%	2,863	14%	2,796	14%	2,837	14%	2,870	13%	2,887	13%	2,895	13%
NAFTA	4,480	26%	4,660	25%	4,683	24%	4,627	24%	4,666	23%	4,687	23%	4,658	22%	4,696	22%	4,677	21%	4,778	21%
CIS	1,135	7%	1,203	6%	1,223	6%	1,247	6%	1,243	6%	1,242	6%	1,228	6%	1,251	6%	1,277	6%	1,301	6%
World	17,355	100%	18,550	100%	19,143	100%	19,598	100%	20,225	100%	20,619	100%	20,942	100%	21,615	100%	22,189	100%	22,964	100%

Unit : TWh

Source : Enerdata

7.11 Share of Renewables in Electricity Production

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	16.7	16.6	19.0	17.6	15.0	16.2	16.2	15.6	15.3	17.7	17.9	18.8	17.0	20.1	20.5	22.8	24.1	25.3	25.7	26.3
Japan	10.5	10.3	10.2	9.9	11.3	11.0	9.4	10.4	9.1	9.4	9.8	10.3	11.1	10.7	11.4	12.8	14.6	15.3	16.2	17.5
ROK	2.6	2.0	2.0	1.7	2.1	1.7	1.4	1.4	1.4	1.5	1.7	1.8	2.0	2.0	2.4	2.5	2.6	3.5	4.1	4.4
EU	14.4	14.8	15.3	13.9	13.6	14.8	14.9	15.5	16.2	17.6	19.5	21.1	21.4	24.2	27.2	29.2	29.9	30.1	30.4	32.7
CIS	18.5	18.1	18.6	17.7	17.0	18.4	17.8	17.1	16.9	15.9	17.3	16.5	16.0	15.6	17.0	16.3	15.8	17.0	17.1	18.0
World	19.1	18.8	18.3	18.3	17.9	18.3	18.4	18.5	18.3	18.9	19.7	19.9	20.2	21.2	21.9	22.6	23.1	24.1	24.8	25.6

Unit : %

Source : Enerdata

7.12 Share of Wind and Solar in Electricity Production

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.7	1.1	1.5	2.1	2.9	3.3	3.9	5.0	6.5	7.7
Japan	2.3	2.2	2.3	2.3	2.5	2.4	2.5	2.6	2.6	2.5	2.8	2.8	3.2	3.4	4.0	5.0	6.1	7.6	8.4	9.6
ROK	0.005	0.008	0.006	0.007	0.01	0.02	0.04	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.7	0.9	1.2	1.5	1.9	2.2
EU	0.7	0.9	1.1	1.4	1.7	2.2	2.6	2.9	3.5	4.0	4.9	5.4	7.2	8.7	10.2	11.3	13.0	13.0	15.0	15.8
CIS	0.003	0.005	0.009	0.01	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.1	0.1	0.1	0.2	0.2	0.2	0.3
World	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.6	1.9	2.2	2.7	3.2	3.8	4.3	5.0	5.6	6.7	7.5

Unit : %

Source : Enerdata

8 Intellectual Property Rights

8.1 Patent Application by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	16,214	1%	26,445	2%	31,236	2%	41,418	3%	58,755	4%	69,017	4%	97,948	6%	129,290	7%	161,308	8%	204,266	10%
Japan	451,007	38%	490,772	37%	508,501	38%	483,806	36%	484,948	35%	510,023	33%	530,009	31%	517,485	29%	508,260	27%	509,985	26%
ROK	67,008	6%	85,783	7%	88,405	7%	94,248	7%	112,754	8%	136,438	9%	162,694	10%	173,301	10%	176,336	9%	173,496	9%
CJK	534,229	45%	603,000	46%	628,142	46%	619,472	46%	656,457	47%	715,478	46%	790,651	46%	820,076	46%	845,904	45%	887,747	46%
ASEAN	1,759	0.1%	1,870	0.1%	2,134	0.2%	2,419	0.2%	3,962	0.3%	4,418	0.3%	4,544	0.3%	5,380	0.3%	6,953	0.4%	7,228	0.4%
NAFTA	271,373	23%	295,108	23%	308,863	23%	306,911	23%	317,410	23%	351,148	23%	404,480	24%	427,652	24%	461,436	24%	452,469	23%
World	1,189,948	100%	1,310,367	100%	1,355,285	100%	1,333,086	100%	1,394,145	100%	1,541,557	100%	1,707,250	100%	1,788,359	100%	1,898,102	100%	1,950,191	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	241,435	13%	308,327	15%	436,168	20%	561,404	23%	734,093	28%	837,814	30%	1,010,524	34%	1,257,425	39%	1,306,080	40%	1,460,244	43%
Japan	463,623	25%	468,438	23%	475,070	22%	490,271	20%	473,140	18%	465,971	17%	457,949	16%	456,550	14%	460,771	14%	460,369	14%
ROK	170,233	9%	178,654	9%	187,751	9%	203,835	8%	223,527	8%	230,553	8%	238,185	8%	233,801	7%	226,614	7%	232,020	7%
CJK	875,291	47%	955,419	47%	1,098,989	50%	1,255,510	52%	1,430,760	54%	1,534,338	56%	1,706,658	58%	1,947,776	61%	1,993,465	61%	2,152,633	63%
ASEAN	7,351	0.4%	8,779	0.4%	8,893	0.4%	8,956	0.4%	11,322	0.4%	11,976	0.4%	12,534	0.4%	12,677	0.4%	14,226	0.4%	14,133	0.4%
NAFTA	421,441	22%	459,160	22%	467,643	21%	502,522	21%	529,587	20%	536,408	19%	557,912	19%	549,110	17%	551,926	17%	542,358	16%
World	1,881,978	100%	2,046,016	100%	2,204,823	100%	2,418,344	100%	2,633,500	100%	2,751,568	100%	2,932,211	100%	3,194,653	100%	3,244,414	100%	3,407,546	100%

Unit : Number of Patents
Source : WIPO

8.2 Patent Application by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	50,044	4%	51,906	4%	63,450	4%	80,232	6%	105,317	7%	130,384	8%	173,327	10%	210,501	12%	245,161	13%	289,838	15%
Japan	404,457	32%	419,543	30%	440,248	30%	421,805	29%	413,093	28%	423,081	27%	427,078	25%	408,674	23%	396,291	21%	391,002	20%
ROK	80,642	6%	102,010	7%	104,612	7%	106,136	7%	118,651	8%	140,115	9%	160,921	9%	166,189	9%	172,469	9%	170,632	9%
CJK	535,143	42%	573,459	42%	608,310	42%	608,173	42%	637,061	43%	693,580	44%	761,326	45%	785,364	44%	813,921	43%	851,472	44%
EU	89,359	7%	100,692	7%	110,027	8%	106,243	7%	116,604	8%	123,701	8%	128,713	8%	135,231	8%	140,763	8%	146,150	8%
ASEAN	25,544	2%	28,298	2%	27,354	2%	23,554	2%	24,433	2%	27,237	2%	30,487	2%	30,319	2%	30,708	2%	33,532	2%
NAFTA	315,123	25%	348,578	25%	379,752	26%	387,248	27%	391,876	26%	408,342	26%	445,056	26%	483,509	27%	512,884	27%	514,991	27%
World	1,268,600	100%	1,377,500	100%	1,456,800	100%	1,444,000	100%	1,483,900	100%	1,568,200	100%	1,703,200	100%	1,791,700	100%	1,874,700	100%	1,930,000	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	314,604	17%	391,177	20%	526,412	24%	652,777	28%	825,136	32%	928,177	35%	1,101,864	38%	1,338,503	43%	1,381,594	44%	1,542,002	46%
Japan	348,596	19%	344,598	17%	342,610	16%	342,796	15%	328,436	13%	325,989	12%	318,721	11%	318,381	10%	318,481	10%	313,567	9%
ROK	163,523	9%	170,101	9%	178,924	8%	188,915	8%	204,589	8%	210,292	8%	213,694	7%	208,830	7%	204,775	6%	209,992	6%
CJK	826,723	45%	905,876	45%	1,047,946	49%	1,184,488	50%	1,358,161	53%	1,464,458	55%	1,634,279	57%	1,865,714	60%	1,904,850	60%	2,065,561	62%
EU	134,580	7%	150,961	8%	142,793	7%	148,560	6%	147,987	6%	152,662	6%	160,028	6%	159,358	5%	166,585	5%	174,397	5%
ASEAN	30,823	2%	30,744	2%	32,842	2%	30,307	1%	39,241	2%	42,149	2%	44,755	2%	44,554	1%	44,209	1%	47,753	1%
NAFTA	507,864	27%	540,251	27%	552,748	26%	593,371	25%	621,797	24%	630,418	24%	644,445	22%	657,729	21%	659,162	21%	649,726	20%
World	1,855,900	100%	1,997,400	100%	2,158,200	100%	2,356,500	100%	2,556,100	100%	2,672,200	100%	2,878,600	100%	3,117,500	100%	3,162,300	100%	3,326,300	100%

Unit : Number of Patents
Source : WIPO

138 8.3 Patent Grant by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	3,310	1%	6,446	1%	5,722	1%	6,348	1%	11,984	2%	18,967	3%	21,575	3%	26,356	3%	33,502	4%	48,919	6%
Japan	193,091	34%	167,099	32%	168,087	31%	175,650	31%	183,299	29%	188,775	30%	187,892	29%	220,193	29%	235,082	30%	240,692	31%
ROK	50,389	9%	29,437	6%	28,299	5%	37,075	7%	39,388	6%	45,477	7%	64,034	10%	102,869	14%	106,616	14%	79,698	10%
CJK	246,790	43%	202,982	39%	202,108	38%	219,073	39%	234,671	37%	253,219	40%	273,501	43%	349,418	46%	375,200	48%	369,309	47%
ASEAN	194	0.03%	360	0.07%	281	0.05%	335	0.06%	1,080	0.2%	1,178	0.2%	1,247	0.2%	1,587	0.2%	2,072	0.3%	2,152	0.3%
NAFTA	145,352	25%	142,987	28%	146,185	27%	150,758	27%	159,095	25%	154,985	25%	146,368	23%	166,843	22%	158,265	20%	158,747	20%
World	572,189	100%	517,261	100%	533,715	100%	565,309	100%	628,049	100%	625,289	100%	638,468	100%	757,585	100%	774,381	100%	786,232	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	68,500	8%	84,814	9%	118,128	12%	152,096	13%	154,470	13%	176,345	15%	279,508	22%	322,516	23%	352,567	24%	377,305	25%
Japan	255,548	31%	286,845	31%	304,668	30%	343,524	30%	340,227	29%	297,020	25%	271,149	21%	289,235	21%	285,982	20%	284,068	19%
ROK	63,804	8%	76,000	8%	97,702	10%	112,111	10%	123,839	10%	127,394	11%	109,108	9%	120,545	9%	131,577	9%	131,912	9%
CJK	387,852	47%	447,659	48%	520,498	51%	607,731	53%	618,536	52%	600,759	50%	659,765	52%	732,296	52%	770,126	53%	793,285	53%
ASEAN	2,208	0.3%	2,887	0.3%	3,002	0.3%	3,236	0.3%	3,344	0.3%	3,711	0.3%	4,160	0.3%	4,865	0.4%	4,661	0.3%	5,614	0.4%
NAFTA	166,998	20%	201,262	21%	213,197	21%	241,783	21%	258,330	22%	269,402	23%	271,672	21%	292,150	21%	300,707	21%	303,794	20%
World	826,966	100%	936,237	100%	1,021,250	100%	1,157,021	100%	1,193,335	100%	1,196,170	100%	1,267,486	100%	1,403,945	100%	1,460,705	100%	1,499,964	100%

Unit : Number of Patents
Source : WIPO

8.4 Patent Grant by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	7,637	1%	13,058	3%	16,296	3%	21,257	4%	37,154	6%	49,360	8%	53,305	8%	57,786	8%	67,948	9%	93,706	12%
Japan	150,059	26%	125,880	24%	121,742	23%	119,192	21%	122,522	20%	124,192	20%	122,944	19%	141,399	19%	164,954	21%	176,950	23%
ROK	67,051	12%	34,956	7%	34,675	6%	45,046	8%	44,178	7%	49,068	8%	73,512	12%	120,790	16%	123,705	16%	83,523	11%
CJK	224,747	39%	173,894	34%	172,713	32%	185,495	33%	203,854	33%	222,620	36%	249,761	39%	319,975	42%	356,607	46%	354,179	45%
EU	35,358	6%	27,523	5%	34,704	6%	47,384	8%	59,946	10%	58,730	9%	53,258	8%	62,780	8%	54,699	7%	59,819	8%
ASEAN	6,671	1%	7,233	1%	11,382	2%	11,823	2%	9,007	1%	11,221	2%	12,927	2%	17,169	2%	17,985	2%	12,884	2%
NAFTA	171,164	30%	175,148	34%	183,533	34%	179,044	32%	186,638	30%	184,206	30%	167,420	26%	198,374	26%	185,790	24%	186,915	24%
World	573,500	100%	517,600	100%	538,100	100%	561,600	100%	620,600	100%	622,800	100%	633,100	100%	754,500	100%	776,300	100%	781,700	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	128,389	16%	135,110	15%	172,113	17%	217,105	19%	207,688	18%	233,228	20%	359,316	29%	404,208	30%	420,144	30%	432,147	30%
Japan	193,349	24%	222,693	24%	238,323	24%	274,791	24%	277,079	24%	227,142	19%	189,358	15%	203,087	15%	199,577	14%	194,525	14%
ROK	56,732	7%	68,843	8%	94,720	9%	113,467	10%	127,330	11%	129,786	11%	101,873	8%	108,875	8%	120,662	9%	119,012	8%
CJK	378,470	46%	426,646	47%	505,156	50%	605,363	53%	612,097	53%	590,156	51%	650,547	53%	716,170	53%	740,383	53%	745,684	52%
EU	51,969	6%	58,108	6%	62,112	6%	65,665	6%	66,696	6%	64,608	6%	68,431	6%	95,956	7%	105,645	8%	127,603	9%
ASEAN	12,350	2%	9,389	1%	11,396	1%	11,366	1%	12,867	1%	13,156	1%	16,797	1%	20,958	2%	20,126	1%	25,366	2%
NAFTA	196,475	24%	248,133	27%	256,752	26%	287,332	25%	312,036	27%	334,246	29%	329,946	27%	338,125	25%	351,438	25%	340,179	24%
World	814,400	100%	914,800	100%	1,001,700	100%	1,137,700	100%	1,163,200	100%	1,167,400	100%	1,233,700	100%	1,345,800	100%	1,397,900	100%	1,422,800	100%

Unit : Number of Patents
Source : WIPO

140 8.5 Trademark Application by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	145,403	6%	188,757	6%	238,370	9%	331,727	12%	417,238	13%	551,005	14%	630,480	15%	714,285	15%	656,705	12%	644,184	12%
Japan	138,695	6%	168,394	5%	172,525	6%	148,168	5%	165,313	5%	187,007	5%	194,485	5%	193,750	4%	206,594	4%	194,886	4%
ROK	75,453	3%	96,771	3%	92,451	3%	98,067	4%	100,420	3%	102,492	3%	113,327	3%	120,963	3%	132,529	2%	126,995	2%
CJK	359,551	14%	453,922	15%	503,346	18%	577,962	21%	682,971	22%	840,504	21%	938,292	22%	1,028,998	21%	995,828	18%	966,065	18%
ASEAN	30,040	1%	37,624	1%	64,576	2%	72,838	3%	89,744	3%	100,905	3%	98,312	2%	112,369	2%	118,417	2%	123,591	2%
NAFTA	589,504	24%	711,585	23%	541,843	19%	505,982	18%	535,139	17%	674,609	17%	747,464	17%	796,632	17%	902,478	17%	849,101	16%
World	2,506,459	100%	3,120,606	100%	2,795,467	100%	2,784,490	100%	3,152,206	100%	3,936,964	100%	4,307,271	100%	4,810,529	100%	5,419,606	100%	5,317,744	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	798,751	15%	1,054,785	17%	1,373,069	20%	1,613,209	23%	1,850,294	24%	2,147,379	26%	195,525	3%	365,027	5%	525,425	7%	604,323	8%
Japan	182,377	3%	194,417	3%	198,730	3%	224,437	3%	210,635	3%	220,436	3%	226,549	3%	244,324	3%	274,989	4%	270,381	3%
ROK	134,546	3%	142,669	2%	150,682	2%	162,500	2%	190,983	2%	198,326	2%	241,761	4%	229,891	3%	220,641	3%	245,446	3%
CJK	1,115,674	21%	1,391,871	23%	1,722,481	25%	2,000,146	28%	2,251,912	29%	2,566,141	31%	663,835	10%	839,242	12%	1,021,055	13%	1,120,150	14%
ASEAN	131,201	2%	142,920	2%	157,280	2%	115,713	2%	164,458	2%	162,713	2%	170,425	3%	199,152	3%	199,181	3%	221,241	3%
NAFTA	756,769	14%	861,366	14%	943,407	14%	978,672	14%	1,027,178	13%	1,062,712	13%	1,124,261	17%	1,122,091	16%	1,175,900	16%	1,238,778	16%
World	5,298,961	100%	6,121,942	100%	6,759,215	100%	7,110,416	100%	7,728,642	100%	8,212,483	100%	6,578,294	100%	7,137,290	100%	7,569,025	100%	7,964,102	100%

Unit : Number of Trademarks
Source : WIPO

8.6 Trademark Application by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	164,697	7%	212,771	8%	259,417	11%	364,336	15%	446,641	17%	582,748	20%	657,603	21%	739,340	22%	679,935	20%	667,025	20%
Japan	121,861	5%	146,365	5%	123,149	5%	117,014	5%	123,347	5%	129,828	4%	135,164	4%	134,284	4%	142,496	4%	117,847	3%
ROK	87,332	4%	110,073	4%	107,137	4%	107,876	4%	111,114	4%	113,814	4%	122,133	4%	129,327	4%	140,272	4%	135,882	4%
CJK	373,890	17%	469,209	18%	489,703	20%	589,226	24%	681,102	26%	826,390	29%	914,900	30%	1,002,951	30%	962,703	28%	920,754	27%
EU	41,242	2%	57,324	2%	48,849	2%	45,098	2%	60,372	2%	59,716	2%	66,398	2%	78,029	2%	88,875	3%	87,101	3%
ASEAN	71,285	3%	91,286	3%	119,210	5%	116,043	5%	132,058	5%	158,903	5%	156,689	5%	175,611	5%	177,090	5%	179,675	5%
NAFTA	347,272	15%	398,437	15%	316,891	13%	305,608	13%	314,175	12%	348,807	12%	369,408	12%	390,923	12%	434,476	13%	422,632	12%
World	2,259,700	100%	2,667,600	100%	2,424,300	100%	2,441,800	100%	2,625,400	100%	2,895,700	100%	3,094,700	100%	3,320,700	100%	3,423,500	100%	3,388,000	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	806,906	24%	1,056,564	28%	1,386,776	32%	1,618,432	36%	1,847,938	38%	2,104,411	40%	-	-	-	-	-	-	-	-
Japan	109,614	3%	113,175	3%	107,017	3%	119,265	3%	116,141	2%	124,618	2%	144,862	2%	163,007	2%	188,928	2%	183,657	2%
ROK	133,116	4%	128,672	3%	132,506	3%	141,838	3%	157,139	3%	160,310	3%	183,005	3%	181,889	3%	180,422	2%	199,476	2%
CJK	1,049,636	31%	1,298,411	34%	1,626,299	38%	1,879,535	41%	2,121,218	44%	2,389,339	46%	327,867	5%	344,896	5%	369,350	4%	383,133	4%
EU	87,334	3%	98,617	3%	105,332	2%	108,877	2%	113,928	2%	118,978	2%	127,896	2%	138,544	2%	144,559	2%	152,938	1%
ASEAN	170,016	5%	190,128	5%	204,383	5%	230,532	5%	227,943	5%	221,253	4%	228,931	4%	268,574	4%	270,870	3%	301,555	3%
NAFTA	388,836	12%	421,139	11%	453,962	11%	469,263	10%	477,521	10%	503,537	10%	547,880	9%	576,825	8%	646,173	7%	669,397	6%
World	3,338,700	100%	3,812,000	100%	4,276,900	100%	4,550,700	100%	4,853,500	100%	5,229,500	100%	6,027,000	100%	7,030,900	100%	9,125,300	100%	10,874,500	100%

Unit : Number of Trademarks
Source : WIPO

142 8.7 Trademark Registration by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	100,535	7%	134,814	9%	174,059	13%	175,615	13%	216,163	11%	242,706	11%	248,944	8%	267,070	8%	260,618	7%	396,128	9%
Japan	136,408	10%	109,538	8%	97,689	7%	109,886	8%	138,656	7%	137,788	6%	157,714	5%	165,022	5%	156,548	4%	173,166	4%
ROK	26,221	2%	27,400	2%	29,572	2%	36,102	3%	43,642	2%	49,578	2%	58,283	2%	63,123	2%	61,805	2%	66,344	2%
CJK	263,164	19%	271,752	19%	301,320	23%	321,603	23%	398,461	21%	430,072	20%	464,941	15%	495,215	15%	478,971	13%	635,638	15%
ASEAN	11,507	1%	12,905	1%	19,909	2%	27,348	2%	32,518	2%	34,261	2%	42,841	1%	48,882	1%	59,916	2%	65,400	2%
NAFTA	354,915	26%	377,114	26%	227,062	17%	259,221	19%	356,702	19%	413,181	19%	571,875	18%	589,568	18%	651,637	18%	729,564	17%
World	1,373,952	100%	1,459,947	100%	1,316,049	100%	1,396,235	100%	1,889,776	100%	2,172,898	100%	3,099,469	100%	3,265,796	100%	3,652,543	100%	4,213,507	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	786,551	17%	1,284,921	22%	1,013,302	19%	1,008,183	19%	1,021,604	18%	1,358,222	22%	151,536	3%	257,057	5%	403,181	7%	525,202	8%
Japan	188,283	4%	188,434	3%	170,755	3%	183,128	3%	199,197	4%	196,370	3%	189,758	4%	184,837	3%	201,454	3%	211,092	3%
ROK	59,156	1%	74,954	1%	86,951	2%	97,433	2%	118,341	2%	137,077	2%	144,595	3%	173,022	3%	163,271	3%	162,558	2%
CJK	1,033,990	22%	1,548,309	27%	1,271,008	24%	1,288,744	24%	1,339,142	24%	1,691,669	27%	485,889	9%	614,916	11%	767,906	12%	898,852	14%
ASEAN	61,621	1%	67,743	1%	75,911	1%	76,421	1%	82,209	1%	109,208	2%	107,804	2%	112,375	2%	99,754	2%	120,928	2%
NAFTA	700,772	15%	731,765	13%	726,524	14%	758,757	14%	806,269	14%	834,289	13%	905,446	17%	895,315	16%	947,282	15%	963,325	15%
World	4,650,823	100%	5,748,451	100%	5,292,525	100%	5,283,458	100%	5,564,313	100%	6,240,543	100%	5,207,591	100%	5,539,359	100%	6,180,698	100%	6,556,927	100%

Unit : Number of Trademarks
Source : WIPO

8.8 Trademark Registration by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	115,651	7%	152,017	9%	193,481	11%	199,949	11%	234,363	13%	259,717	14%	256,082	12%	269,857	12%	250,984	11%	392,175	16%
Japan	123,656	8%	97,111	6%	96,915	6%	106,235	6%	110,043	6%	99,269	6%	99,767	5%	109,124	5%	101,425	4%	103,620	4%
ROK	32,968	2%	30,849	2%	33,683	2%	40,588	2%	47,705	3%	55,950	3%	65,029	3%	74,160	3%	69,339	3%	68,362	3%
CJK	272,275	18%	279,977	17%	324,079	19%	346,772	20%	392,111	22%	414,936	23%	420,878	20%	453,141	21%	421,748	18%	564,157	22%
EU	34,259	2%	34,760	2%	38,173	2%	35,896	2%	34,207	2%	34,583	2%	66,033	3%	66,706	3%	70,291	3%	83,922	3%
ASEAN	39,314	3%	42,840	3%	95,038	6%	93,746	5%	109,168	6%	95,463	5%	113,263	5%	111,570	5%	116,057	5%	116,742	5%
NAFTA	142,640	9%	173,164	10%	172,804	10%	208,156	12%	197,569	11%	193,700	11%	210,631	10%	245,209	11%	264,494	11%	287,712	11%
World	1,552,500	100%	1,652,000	100%	1,692,600	100%	1,740,500	100%	1,793,100	100%	1,797,200	100%	2,094,500	100%	2,172,600	100%	2,339,500	100%	2,527,300	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	820,453	29%	1,336,067	40%	1,011,123	32%	998,725	33%	989,308	32%	1,349,536	38%	0%	-	-	-	-	-	-	-
Japan	108,136	4%	99,569	3%	92,168	3%	99,291	3%	106,246	3%	108,072	3%	101,576	2%	106,580	2%	115,000	2%	122,971	2%
ROK	52,869	2%	61,459	2%	81,075	3%	80,220	3%	102,727	3%	101,674	3%	119,924	3%	121,615	3%	121,303	2%	119,999	2%
CJK	981,458	35%	1,497,095	44%	1,184,366	38%	1,178,236	39%	1,198,281	39%	1,559,282	43%	221,500	5%	228,195	5%	236,303	4%	242,970	3%
EU	89,041	3%	103,063	3%	95,934	3%	97,375	3%	99,580	3%	104,247	3%	114,791	3%	120,377	3%	130,405	2%	136,189	2%
ASEAN	95,376	3%	95,372	3%	110,808	4%	115,867	4%	129,154	4%	154,774	4%	161,655	4%	171,721	4%	155,253	3%	187,043	2%
NAFTA	277,805	10%	272,170	8%	292,485	9%	297,454	10%	309,141	10%	318,383	9%	347,082	8%	376,634	8%	404,130	7%	414,273	5%
World	2,789,600	100%	3,376,700	100%	3,129,700	100%	3,045,100	100%	3,097,400	100%	3,588,400	100%	4,418,400	100%	4,616,700	100%	5,460,600	100%	7,743,400	100%

Unit : Number of Trademarks
Source : WIPO

144 8.9 Industrial Design Application by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	37,320	14%	46,760	16%	56,897	20%	73,953	25%	87,778	20%	104,556	16%	155,236	20%	193,381	23%	262,407	26%	309,397	29%
Japan	41,304	16%	42,696	15%	44,384	15%	40,846	14%	55,617	12%	71,819	11%	71,448	9%	64,944	8%	68,413	7%	70,781	7%
ROK	31,548	12%	33,047	12%	36,017	12%	36,277	12%	36,859	8%	42,507	7%	55,122	7%	65,114	8%	65,082	7%	67,690	6%
CJK	110,172	42%	122,503	43%	137,298	47%	151,076	51%	180,254	40%	218,882	34%	281,806	36%	323,439	38%	395,902	40%	447,868	42%
ASEAN	2,679	1%	3,823	1%	4,174	1%	4,364	1%	5,585	1%	6,080	1%	7,311	1%	6,822	1%	7,735	1%	10,941	1%
NAFTA	24,897	10%	26,748	9%	22,932	8%	23,233	8%	41,288	9%	62,988	10%	71,579	9%	78,798	9%	82,274	8%	85,763	8%
World	261,504	100%	284,789	100%	290,391	100%	296,865	100%	449,657	100%	653,113	100%	778,736	100%	843,083	100%	990,902	100%	1,069,360	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	350,184	32%	421,418	34%	523,386	38%	662,506	43%	668,509	42%	575,302	37%	589,938	38%	690,588	40%	722,125	42%	825,831	45%
Japan	60,845	6%	67,587	6%	72,498	5%	73,702	5%	71,042	4%	70,255	5%	67,462	4%	72,152	4%	71,471	4%	68,079	4%
ROK	68,903	6%	70,100	6%	70,826	5%	83,555	5%	95,721	6%	88,256	6%	99,207	6%	105,283	6%	94,438	5%	90,908	5%
CJK	479,932	44%	559,105	46%	666,710	49%	819,763	53%	835,272	52%	733,813	48%	756,607	49%	868,023	50%	888,034	51%	984,818	54%
ASEAN	12,028	1%	8,235	1%	8,559	1%	8,505	1%	12,389	1%	12,028	1%	12,286	1%	13,832	1%	12,647	1%	13,538	1%
NAFTA	79,822	7%	96,342	8%	100,451	7%	110,369	7%	113,837	7%	120,307	8%	126,166	8%	132,997	8%	136,745	8%	142,550	8%
World	1,093,842	100%	1,225,487	100%	1,362,523	100%	1,546,732	100%	1,610,846	100%	1,534,607	100%	1,536,739	100%	1,727,034	100%	1,738,545	100%	1,823,222	100%

Unit : Number of Industrial Designs
Source : WIPO

8.10 Industrial Design Application by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	40,053	15%	50,120	17%	60,647	20%	79,260	24%	94,054	29%	110,850	32%	163,371	40%	201,322	45%	267,432	51%	312,904	55%
Japan	37,368	14%	38,496	13%	39,423	13%	37,230	11%	39,267	12%	40,757	12%	39,254	10%	36,724	8%	36,544	7%	33,569	6%
ROK	32,404	12%	33,841	12%	36,867	12%	37,587	12%	37,607	11%	41,184	12%	45,222	11%	51,039	11%	54,362	10%	56,750	10%
CJK	109,825	41%	122,457	42%	136,937	45%	154,077	47%	170,928	52%	192,791	56%	247,847	61%	289,085	64%	358,338	68%	403,223	71%
EU	-	-	-	-	-	-	-	-	10,412	3%	14,026	4%	16,808	4%	17,635	4%	19,224	4%	20,315	4%
ASEAN	3,792	1%	5,687	2%	7,075	2%	7,706	2%	8,779	3%	9,288	3%	11,249	3%	9,325	2%	10,042	2%	14,668	3%
NAFTA	21,985	8%	23,635	8%	22,730	8%	26,274	8%	28,283	9%	30,557	9%	33,012	8%	33,375	7%	35,703	7%	36,245	6%
World	268,600	100%	292,300	100%	302,700	100%	324,500	100%	329,300	100%	344,400	100%	406,500	100%	450,600	100%	524,900	100%	567,800	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	351,342	59%	421,273	62%	521,468	67%	657,582	70%	659,563	69%	564,555	66%	569,059	65%	650,344	68%	628,658	67%	708,799	69%
Japan	30,875	5%	31,756	5%	30,805	4%	32,391	3%	31,125	3%	29,738	3%	30,054	3%	29,908	3%	31,364	3%	30,243	3%
ROK	57,903	10%	57,187	8%	56,524	7%	63,135	7%	66,940	7%	64,620	8%	68,236	8%	65,656	7%	63,425	7%	63,793	6%
CJK	440,120	74%	510,216	75%	608,797	78%	753,108	81%	757,628	80%	658,913	77%	667,349	76%	745,908	77%	723,447	77%	802,835	78%
EU	20,338	3%	22,062	3%	23,236	3%	24,457	3%	25,319	3%	25,904	3%	25,750	3%	28,656	3%	29,703	3%	29,958	3%
ASEAN	14,273	2%	13,933	2%	14,995	2%	15,461	2%	16,060	2%	15,828	2%	16,223	2%	16,941	2%	17,363	2%	17,866	2%
NAFTA	33,005	6%	37,741	6%	39,843	5%	42,298	5%	45,391	5%	45,225	5%	49,298	6%	53,374	6%	54,254	6%	55,063	5%
World	593,500	100%	676,600	100%	783,200	100%	934,700	100%	950,800	100%	854,100	100%	872,600	100%	963,100	100%	945,100	100%	1,024,100	100%

Unit : Number of Industrial Designs
Source : WIPO

146 8.11 Industrial Design Registration by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	33,030	15%	34,769	15%	40,173	18%	49,405	21%	70,532	22%	65,357	11%	76,350	11%	96,813	14%	129,888	16%	140,616	16%
Japan	44,684	20%	43,649	19%	36,477	16%	34,054	15%	43,234	14%	61,864	11%	64,689	10%	59,783	9%	59,448	7%	65,746	8%
ROK	18,638	8%	18,292	8%	18,149	8%	25,921	11%	26,989	8%	31,124	5%	43,179	6%	47,017	7%	51,525	6%	52,210	6%
CJK	96,352	43%	96,710	42%	94,799	42%	109,380	47%	140,755	44%	158,345	27%	184,218	28%	203,613	29%	240,861	30%	258,572	30%
ASEAN	1,491	1%	1,257	1%	1,483	1%	1,955	1%	3,126	1%	3,467	1%	3,647	1%	3,976	1%	5,146	1%	5,148	1%
NAFTA	20,887	9%	22,995	10%	20,521	9%	16,475	7%	26,310	8%	57,588	10%	60,997	9%	72,553	10%	77,787	10%	82,836	10%
World	223,805	100%	231,474	100%	227,310	100%	232,335	100%	319,243	100%	580,632	100%	669,588	100%	701,364	100%	792,841	100%	854,676	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	244,265	26%	330,382	31%	381,010	32%	470,572	37%	421,256	33%	369,958	30%	499,852	36%	483,270	33%	527,099	36%	646,505	41%
Japan	61,903	7%	62,678	6%	66,109	6%	69,415	5%	68,207	5%	67,023	5%	63,251	5%	67,557	5%	67,660	5%	65,929	4%
ROK	43,916	5%	47,745	4%	56,739	5%	63,985	5%	71,139	6%	78,053	6%	84,448	6%	93,952	6%	78,698	5%	76,091	5%
CJK	350,084	37%	440,805	41%	503,858	43%	603,972	48%	560,602	44%	515,034	42%	647,551	47%	644,779	44%	673,457	45%	788,525	50%
ASEAN	4,430	0.5%	5,529	1%	5,708	0.5%	6,162	0.5%	9,365	1%	9,863	1%	10,192	1%	9,588	1%	8,231	1%	10,606	1%
NAFTA	76,548	8%	88,668	8%	94,499	8%	95,105	7%	103,387	8%	105,232	9%	111,401	8%	122,213	8%	129,865	9%	131,170	8%
World	935,443	100%	1,071,088	100%	1,184,878	100%	1,271,482	100%	1,281,834	100%	1,236,580	100%	1,382,751	100%	1,449,702	100%	1,482,512	100%	1,588,663	100%

Unit : Number of Industrial Designs
Source : WIPO

8.12 Industrial Design Registration by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	36,159	15%	37,919	16%	43,596	18%	53,442	20%	76,166	27%	70,255	27%	81,349	29%	102,561	34%	133,798	38%	141,601	40%
Japan	47,795	20%	40,037	16%	32,934	14%	31,503	12%	31,342	11%	32,681	12%	32,633	12%	29,689	10%	28,289	8%	29,382	8%
ROK	24,972	10%	18,845	8%	18,650	8%	27,235	10%	28,380	10%	31,021	12%	33,992	12%	34,206	11%	40,745	12%	39,858	11%
CJK	108,926	45%	96,801	40%	95,180	40%	112,180	42%	135,888	49%	133,957	51%	147,974	53%	166,456	55%	202,832	58%	210,841	59%
EU	-	-	-	-	-	-	-	-	9,233	3%	14,682	6%	17,639	6%	17,820	6%	18,401	5%	20,395	6%
ASEAN	1,872	1%	2,054	1%	3,448	1%	4,861	2%	6,662	2%	5,674	2%	5,811	2%	6,057	2%	7,171	2%	7,841	2%
NAFTA	34,435	14%	21,283	9%	21,003	9%	18,944	7%	20,416	7%	20,247	8%	18,924	7%	26,645	9%	32,345	9%	33,925	9%
World	242,000	100%	243,000	100%	240,600	100%	265,000	100%	278,100	100%	263,400	100%	277,700	100%	304,500	100%	348,500	100%	357,300	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	249,701	56%	335,243	63%	380,290	65%	466,858	68%	412,467	64%	361,576	60%	482,659	66%	446,135	63%	442,996	62%	536,251	66%
Japan	28,812	6%	27,438	5%	26,274	4%	28,349	4%	28,288	4%	27,306	5%	26,719	4%	26,056	4%	26,771	4%	26,815	3%
ROK	32,091	7%	33,697	6%	42,185	7%	46,146	7%	47,308	7%	54,237	9%	54,783	7%	55,258	8%	48,503	7%	49,153	6%
CJK	310,604	69%	396,378	74%	448,749	76%	541,353	79%	488,063	76%	443,119	74%	564,161	77%	527,449	75%	518,270	73%	612,219	75%
EU	20,249	5%	21,758	4%	22,876	4%	23,530	3%	24,428	4%	24,422	4%	24,738	3%	27,943	4%	28,957	4%	29,255	4%
ASEAN	5,148	1%	6,616	1%	6,905	1%	8,334	1%	13,030	2%	13,421	2%	13,507	2%	13,952	2%	11,318	2%	14,788	2%
NAFTA	30,758	7%	30,619	6%	28,529	5%	28,770	4%	30,104	5%	32,271	5%	35,239	5%	39,170	6%	40,478	6%	38,779	5%
World	447,300	100%	536,000	100%	589,200	100%	686,700	100%	641,600	100%	601,900	100%	731,600	100%	706,000	100%	711,400	100%	812,800	100%

Unit : Number of Industrial Designs
Source : WIPO

148 8.13 Utility Model Application by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	57,274	41%	68,583	43%	79,358	47%	92,328	52%	108,109	53%	111,755	54%	138,287	58%	160,325	63%	180,301	70%	224,479	73%
Japan	9,145	7%	8,084	5%	7,152	4%	7,353	4%	7,121	4%	7,058	3%	10,013	4%	9,037	4%	8,834	3%	8,201	3%
ROK	30,508	22%	37,028	23%	40,613	24%	38,962	22%	40,421	20%	37,379	18%	36,766	15%	32,283	13%	20,817	8%	17,187	6%
CJK	96,927	69%	113,695	72%	127,123	76%	138,643	79%	155,651	77%	156,192	76%	185,066	78%	201,645	79%	209,952	82%	249,867	81%
ASEAN	987	1%	1,341	1%	981	1%	1,400	1%	1,587	1%	2,296	1%	2,462	1%	2,935	1%	2,173	1%	2,353	1%
NAFTA	1,043	1%	592	0.4%	530	0.3%	1,916	1%	2,365	1%	1,087	1%	1,143	0.5%	849	0.3%	1,230	0.5%	1,444	0.5%
World	140,506	100%	158,357	100%	168,198	100%	175,918	100%	203,428	100%	206,649	100%	238,117	100%	255,035	100%	256,387	100%	309,156	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	309,485	78%	407,990	83%	582,152	87%	735,556	89%	886,613	91%	862,498	91%	1,121,297	93%	1,470,005	95%	1,681,657	96%	2,066,904	96%
Japan	8,209	2%	7,595	2%	7,955	1%	9,082	1%	9,262	1%	8,738	1%	8,300	1%	7,358	0.5%	6,881	0.4%	6,395	0.3%
ROK	16,990	4%	13,489	3%	11,773	2%	12,328	1%	10,795	1%	9,176	1%	9,095	1%	8,367	1%	7,408	0.4%	6,889	0.3%
CJK	334,684	85%	429,074	87%	601,880	90%	756,966	92%	906,670	93%	880,412	93%	1,138,692	95%	1,485,730	96%	1,695,946	96%	2,080,188	97%
ASEAN	2,403	1%	2,452	0.5%	2,457	0.4%	2,465	0.3%	2,967	0.3%	3,235	0.3%	3,766	0.3%	4,840	0.3%	5,062	0.3%	7,908	0.4%
NAFTA	1,631	0.4%	1,960	0.4%	2,293	0.3%	2,666	0.3%	3,464	0.4%	3,850	0.4%	4,190	0.3%	4,302	0.3%	3,954	0.2%	3,597	0.2%
World	395,769	100%	493,735	100%	667,278	100%	823,677	100%	975,386	100%	946,039	100%	1,200,054	100%	1,551,141	100%	1,759,145	100%	2,143,845	100%

Unit : Number of Utility Models
Source : WIPO

8.14 Utility Model Application by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	57,492	40%	68,815	42%	79,722	45%	93,139	48%	109,115	51%	112,825	52%	139,566	56%	161,366	60%	181,324	66%	225,586	72%
Japan	10,283	7%	9,587	6%	8,806	5%	8,603	4%	8,169	4%	7,986	4%	11,387	5%	10,965	4%	10,315	4%	9,452	3%
ROK	30,650	21%	37,163	23%	40,804	23%	39,193	20%	40,825	19%	37,753	18%	37,175	15%	32,908	12%	21,084	8%	17,405	6%
CJK	98,425	68%	115,565	71%	129,332	73%	140,935	73%	158,109	75%	158,564	74%	188,128	76%	205,239	77%	212,723	78%	252,443	80%
ASEAN	1,078	1%	1,532	1%	1,114	1%	1,558	1%	1,723	1%	2,517	1%	2,716	1%	3,184	1%	2,403	1%	2,690	1%
NAFTA	370	0.3%	375	0.2%	468	0.3%	454	0.2%	385	0.2%	385	0.2%	443	0.2%	386	0.1%	482	0.2%	434	0.1%
World	143,800	100%	163,400	100%	177,040	100%	193,410	100%	212,010	100%	215,330	100%	247,580	100%	266,860	100%	273,040	100%	313,790	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	310,771	78%	409,836	82%	585,467	87%	740,290	89%	892,362	91%	868,511	92%	1,127,577	94%	1,475,977	95%	1,687,593	96%	2,072,311	97%
Japan	9,507	2%	8,679	2%	7,984	1%	8,112	1%	7,622	1%	7,095	1%	6,860	1%	6,480	0.4%	6,105	0.3%	5,388	0.3%
ROK	17,144	4%	13,661	3%	11,854	2%	12,424	2%	10,968	1%	9,184	1%	8,711	1%	7,767	0.5%	6,811	0.4%	6,232	0.3%
CJK	337,422	84%	432,176	87%	605,305	90%	760,826	92%	910,952	93%	884,790	93%	1,143,148	95%	1,490,224	96%	1,700,509	97%	2,083,931	97%
ASEAN	2,615	1%	2,927	1%	2,665	0.4%	2,537	0.3%	3,161	0.3%	3,524	0.4%	4,055	0.3%	4,965	0.3%	4,939	0.3%	7,636	0.4%
NAFTA	535	0.1%	610	0.1%	581	0.1%	593	0.1%	714	0.1%	707	0.1%	661	0.1%	711	0.05%	619	0.04%	821	0.04%
World	399,690	100%	497,960	100%	670,890	100%	827,860	100%	978,560	100%	948,990	100%	1,205,570	100%	1,553,500	100%	1,761,440	100%	2,145,960	100%

Unit : Number of Utility Models
Source : WIPO

151 8.15 Utility Model Grant by Applicant's Origin

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	56,151	39%	55,789	39%	54,089	39%	57,167	45%	68,422	47%	70,143	48%	78,312	51%	106,573	59%	148,654	75%	175,603	75%
Japan	20,871	15%	11,383	8%	7,730	6%	6,389	5%	6,241	4%	6,075	4%	611	0.4%	8,614	5%	8,808	4%	7,664	3%
ROK	32,680	23%	41,560	29%	43,546	32%	39,634	31%	36,828	25%	33,790	23%	32,321	21%	29,112	16%	2,948	1%	5,139	2%
CJK	109,702	76%	108,732	76%	105,365	76%	103,190	81%	111,491	76%	110,008	75%	111,244	73%	144,299	80%	160,410	81%	188,406	80%
ASEAN	325	0.2%	406	0.3%	546	0.4%	650	1%	919	1%	748	1%	940	1%	1,089	1%	1,654	1%	1,290	1%
NAFTA	455	0.3%	1,007	1%	507	0.4%	556	0.4%	761	1%	680	0.5%	823	1%	651	0.4%	987	1%	1,034	0.4%
World	143,748	100%	142,336	100%	137,736	100%	128,132	100%	146,589	100%	146,296	100%	152,611	100%	179,880	100%	197,031	100%	235,522	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	202,562	77%	342,830	85%	405,810	86%	567,722	89%	687,335	91%	701,253	91%	870,120	93%	898,674	94%	969,013	94%	1,473,751	96%
Japan	7,805	3%	7,293	2%	6,902	1%	8,189	1%	8,975	1%	8,947	1%	8,173	1%	7,033	1%	6,353	1%	3,197	0.2%
ROK	4,022	2%	4,439	1%	6,010	1%	6,474	1%	6,086	1%	5,043	1%	3,633	0.4%	3,398	0.4%	3,602	0.4%	3,496	0.2%
CJK	214,389	82%	354,562	88%	418,722	88%	582,385	92%	702,396	93%	715,243	93%	881,926	95%	909,105	95%	978,968	95%	1,480,444	97%
ASEAN	967	0.4%	1,042	0.3%	1,372	0.3%	1,443	0.2%	1,483	0.2%	1,713	0.2%	2,304	0.2%	3,217	0.3%	2,229	0.2%	3,642	0.2%
NAFTA	1,123	0.4%	1,378	0.3%	1,635	0.3%	2,103	0.3%	2,409	0.3%	3,142	0.4%	3,477	0.4%	3,086	0.3%	3,405	0.3%	3,012	0.2%
World	262,076	100%	403,222	100%	474,566	100%	635,560	100%	756,866	100%	767,464	100%	931,047	100%	959,130	100%	1,027,602	100%	1,529,312	100%

Unit : Number of Utility Models
Source : WIPO

8.16 Utility Model Grant by Filing Office

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	56,368	13%	56,077	13%	54,359	12%	57,484	14%	68,906	15%	70,623	15%	79,349	17%	107,655	19%	150,036	25%	176,675	25%
Japan	21,986	5%	12,613	3%	9,441	2%	7,793	2%	7,694	2%	7,363	2%	2,106	0.4%	10,593	2%	10,080	2%	8,917	1%
ROK	32,868	7%	41,745	10%	43,842	10%	39,957	10%	37,272	8%	34,182	7%	32,716	7%	29,736	5%	2,795	0.5%	4,975	1%
CJK	111,222	25%	110,435	25%	107,642	25%	105,234	26%	113,872	25%	112,168	24%	114,171	24%	147,984	26%	162,911	27%	190,567	27%
ASEAN	339	0.1%	436	0.1%	607	0.1%	689	0.2%	960	0.2%	1,121	0.2%	993	0.2%	1,161	0.2%	1,760	0.3%	1,474	0.2%
NAFTA	90	0.02%	106	0.02%	105	0.02%	88	0.02%	89	0.02%	123	0.03%	192	0.04%	179	0.03%	154	0.03%	142	0.02%
World	439,632	100%	437,673	100%	435,912	100%	412,032	100%	461,445	100%	457,911	100%	478,098	100%	559,809	100%	604,623	100%	716,538	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	203,802	26%	344,472	28%	408,110	28%	571,175	30%	692,845	30%	707,883	31%	876,217	31%	903,420	31%	973,294	32%	1,479,062	32%
Japan	9,019	1%	8,572	1%	7,595	1%	8,054	0.4%	7,363	0.3%	7,017	0.3%	6,695	0.2%	6,297	0.2%	6,024	0.2%	1,507	0.03%
ROK	3,949	0.5%	4,301	0.4%	5,853	0.4%	6,353	0.3%	5,959	0.3%	4,955	0.2%	3,253	0.1%	2,854	0.1%	2,993	0.1%	2,715	0.1%
CJK	216,770	27%	357,345	29%	421,558	29%	585,582	31%	706,167	31%	719,855	31%	886,165	32%	912,571	32%	982,311	32%	1,483,284	32%
ASEAN	1,015	0.1%	1,005	0.1%	1,418	0.1%	1,443	0.1%	1,491	0.1%	1,715	0.1%	2,347	0.1%	3,219	0.1%	2,040	0.1%	3,380	0.1%
NAFTA	187	0.02%	179	0.02%	207	0.01%	252	0.01%	193	0.008%	178	0.008%	215	0.008%	175	0.006%	164	0.005%	199	0.004%
World	795,738	100%	1,219,464	100%	1,433,700	100%	1,916,844	100%	2,279,013	100%	2,310,807	100%	2,800,215	100%	2,883,357	100%	3,088,338	100%	4,591,110	100%

Unit : Number of Utility Models
Source : WIPO

9 Foreign Direct Investment

9.1 Inward FDI Flow

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	40,319	4%	40,715	3%	46,878	6%	52,743	9%	53,505	10%	60,630	9%	72,406	8%	72,715	5%	83,521	4%	108,312	7%
Japan	12,741	1%	8,323	1%	6,242	1%	9,239	2%	6,324	1%	7,815	1%	2,776	0.3%	-6,506	-	22,549	1%	24,425	2%
ROK	10,726	1%	11,509	1%	6,522	1%	5,475	1%	7,010	1%	13,294	2%	13,643	1%	9,162	1%	8,827	0.5%	11,188	1%
CJK	63,786	6%	60,547	4%	59,641	8%	67,457	11%	66,839	12%	81,740	12%	88,825	9%	75,371	5%	114,897	6%	143,925	10%
EU	506,373	47%	680,299	50%	334,024	43%	282,429	48%	242,964	44%	208,411	30%	470,506	50%	546,292	39%	823,662	44%	303,893	21%
ASEAN	31,011	3%	21,751	2%	22,161	3%	16,188	3%	30,649	6%	38,086	6%	42,738	5%	63,794	5%	78,585	4%	49,508	3%
NAFTA	322,065	30%	399,051	29%	217,166	28%	120,672	20%	78,852	14%	160,291	23%	156,478	16%	318,546	23%	365,249	19%	397,384	27%
World	1,076,230	100%	1,356,613	100%	772,715	100%	589,860	100%	550,549	100%	692,325	100%	948,585	100%	1,403,250	100%	1,891,445	100%	1,479,747	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	95,000	8%	114,734	8%	123,985	8%	121,080	8%	123,911	9%	128,500	9%	135,610	7%	133,710	7%	134,063	9%	139,043	11%
Japan	11,938	1%	-1,252	-	-1,758	-	1,732	0.1%	2,304	0.2%	12,030	1%	2,976	0.1%	17,751	1%	10,430	1%	9,858	1%
ROK	9,022	1%	9,497	1%	9,773	1%	9,496	1%	12,767	1%	9,274	1%	4,104	0.2%	12,104	1%	17,913	1%	14,479	1%
CJK	115,960	10%	122,980	9%	132,000	8%	132,307	9%	138,981	10%	149,803	11%	142,690	7%	163,565	9%	162,405	11%	163,380	13%
EU	386,750	33%	362,641	27%	434,755	28%	376,462	26%	345,035	24%	265,619	20%	635,840	31%	556,119	29%	340,570	23%	277,640	21%
ASEAN	41,386	4%	112,977	8%	85,911	6%	112,092	8%	118,132	8%	129,357	10%	114,233	6%	116,763	6%	144,171	10%	148,646	11%
NAFTA	184,490	16%	253,786	19%	294,898	19%	264,103	18%	319,288	22%	290,258	21%	547,314	27%	538,650	28%	334,181	22%	323,043	25%
World	1,172,234	100%	1,365,107	100%	1,561,354	100%	1,470,334	100%	1,431,164	100%	1,357,240	100%	2,033,803	100%	1,918,679	100%	1,497,371	100%	1,297,153	100%

Unit : Million USD
Source : UNCTAD

9.2 Inward FDI Flow : Percentage of GDP

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	4	3	3	4	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1
Japan	0.3	0.2	0.1	0.2	0.1	0.2	0.1	-	0.5	0.5	0.2	-	-	0.03	0.04	0.2	0.1	0.4	0.2	0.2
ROK	2	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0.3	1	1	1
CJK	6	6	5	5	4	5	5	3	4	4	3	3	2	2	2	2	2	2	2	2
EU	5	8	4	3	2	2	3	4	5	2	2	2	2	2	2	1	4	3	2	1
ASEAN	5	3	4	2	4	4	4	6	6	3	3	6	4	5	5	5	5	5	5	5
NAFTA	3	3	2	1	1	1	1	2	2	2	1	1	2	1	2	1	3	3	1	1
World	3	4	2	2	1	2	2	3	3	2	2	2	2	2	2	2	3	3	2	2

Unit : %
Source : UNCTAD

9.3 Outward FDI Flow

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	1,774	0.2%	916	0.1%	6,885	1%	2,518	1%	2,855	1%	5,498	1%	12,261	1%	17,634	1%	26,506	1%	55,907	3%
Japan	22,743	2%	31,557	3%	38,333	6%	32,281	6%	28,800	5%	30,951	3%	45,781	5%	50,266	4%	73,549	3%	128,020	8%
ROK	3,967	0.4%	4,842	0.4%	2,744	0.4%	3,437	1%	5,019	1%	7,196	1%	8,330	1%	12,563	1%	21,831	1%	19,537	1%
CJK	28,485	3%	37,315	3%	47,962	7%	38,236	8%	36,674	7%	43,645	5%	66,372	8%	80,463	6%	121,886	6%	203,463	12%
EU	728,140	68%	791,534	68%	394,501	58%	237,573	48%	258,190	49%	362,354	40%	568,078	68%	660,906	49%	1,216,217	56%	751,016	44%
ASEAN	10,090	1%	8,996	1%	20,766	3%	4,982	1%	6,023	1%	19,270	2%	20,056	2%	30,498	2%	64,463	3%	33,139	2%
NAFTA	226,638	21%	187,304	16%	165,306	24%	162,621	33%	153,530	29%	342,684	38%	49,376	6%	276,218	20%	467,851	22%	388,011	23%
World	1,075,186	100%	1,163,731	100%	683,512	100%	496,870	100%	529,611	100%	905,885	100%	832,990	100%	1,351,401	100%	2,168,349	100%	1,701,001	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	56,529	5%	68,811	5%	74,654	5%	87,804	7%	107,844	8%	123,120	9%	145,667	9%	196,149	13%	158,290	11%	129,830	13%
Japan	74,699	7%	56,263	4%	107,599	7%	122,549	10%	135,749	10%	130,843	10%	136,249	8%	151,301	10%	160,449	11%	143,161	14%
ROK	17,401	2%	28,222	2%	29,648	2%	30,599	2%	28,318	2%	27,999	2%	23,687	1%	29,890	2%	34,069	2%	38,917	4%
CJK	148,628	14%	153,296	11%	211,901	14%	240,951	19%	271,910	20%	281,962	22%	305,603	18%	377,340	24%	352,809	25%	311,908	31%
EU	348,954	32%	461,576	34%	493,621	32%	320,828	25%	342,914	25%	214,231	16%	654,956	39%	489,526	32%	412,873	29%	390,389	38%
ASEAN	49,564	5%	63,304	5%	64,300	4%	58,168	5%	81,890	6%	89,038	7%	68,968	4%	50,072	3%	70,832	5%	69,601	7%
NAFTA	337,363	31%	326,874	24%	461,990	30%	396,958	31%	375,549	27%	398,450	31%	342,415	20%	359,922	23%	384,292	27%	-6,237	-
World	1,098,494	100%	1,373,191	100%	1,564,490	100%	1,277,487	100%	1,376,642	100%	1,298,772	100%	1,682,584	100%	1,550,129	100%	1,425,439	100%	1,014,173	100%

Unit : Million USD

Source : UNCTAD

9.4 Outward FDI Flow : Percentage of GDP

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	0.2	0.1	1	0.2	0.2	0.3	1	1	1	1	1	1	1	1	1	1	1	2	1	1
Japan	0.5	1	1	1	1	1	1	1	2	3	1	1	2	2	3	3	3	3	3	3
ROK	1	1	1	1	1	1	1	1	2	2	2	3	2	3	2	2	2	2	2	2
CJK	1	2	2	2	2	2	2	3	4	6	4	5	5	6	6	6	6	7	7	6
EU	8	9	4	2	2	3	4	4	7	4	2	3	3	2	2	1	4	3	2	2
ASEAN	2	2	5	1	1	2	2	3	5	2	3	3	3	2	3	4	3	2	3	2
NAFTA	2	2	1	1	1	2	0.3	2	3	2	2	2	2	2	2	2	2	2	2	-
World	3	4	2	1	1	2	2	3	4	3	2	2	2	2	2	2	2	2	2	1

Unit : %

Source : UNCTAD

9.5 Inward FDI Stock

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	186,189	3%	193,348	3%	203,142	3%	216,503	3%	228,371	2%	245,467	2%	272,094	2%	292,559	2%	327,087	2%	378,083	3%
Japan	46,115	1%	50,323	1%	50,320	1%	78,143	1%	89,729	1%	96,987	1%	100,901	1%	107,636	1%	132,854	1%	203,374	1%
ROK	41,850	1%	43,738	1%	53,208	1%	62,658	1%	66,070	1%	87,766	1%	104,879	1%	115,774	1%	121,957	1%	94,722	1%
CJK	274,154	4%	287,409	4%	306,669	4%	357,304	5%	384,170	4%	430,220	4%	477,874	4%	515,968	4%	581,898	3%	676,178	4%
EU	2,205,566	31%	2,322,122	31%	2,424,656	32%	2,762,325	38%	3,555,436	39%	4,059,463	39%	4,363,352	38%	5,529,208	39%	7,154,762	40%	6,275,504	42%
ASEAN	246,998	3%	257,603	3%	258,966	3%	285,364	4%	324,996	4%	372,911	4%	433,248	4%	554,923	4%	737,815	4%	778,684	5%
NAFTA	3,061,653	43%	3,229,946	44%	3,037,270	41%	2,476,620	34%	3,069,908	34%	3,468,145	33%	3,704,634	32%	4,277,240	30%	4,895,920	27%	3,387,298	23%
World	7,086,845	100%	7,377,272	100%	7,470,682	100%	7,327,962	100%	9,136,440	100%	10,533,801	100%	11,423,017	100%	14,070,192	100%	17,930,375	100%	15,027,431	100%

	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	473,083	3%	587,817	3%	711,802	3%	832,882	4%	956,793	4%	1,085,293	4%	1,220,903	5%	1,354,613	5%	1,488,676	5%	1,627,719	5%
Japan	200,144	1%	214,880	1%	225,787	1%	205,752	1%	170,710	1%	171,663	1%	174,146	1%	196,614	1%	200,193	1%	213,754	1%
ROK	121,933	1%	135,500	1%	135,178	1%	157,876	1%	180,860	1%	179,441	1%	179,544	1%	188,877	1%	229,399	1%	231,409	1%
CJK	795,160	5%	938,196	5%	1,072,768	5%	1,196,510	5%	1,308,363	5%	1,436,397	6%	1,574,593	6%	1,740,104	6%	1,918,269	6%	2,072,882	6%
EU	6,849,828	39%	6,850,500	35%	7,060,440	35%	7,858,692	34%	8,222,540	33%	8,596,881	33%	8,681,958	33%	8,629,051	31%	10,168,628	31%	10,113,762	31%
ASEAN	890,721	5%	1,144,165	6%	1,269,966	6%	1,488,648	7%	1,609,941	7%	1,766,093	7%	1,820,750	7%	1,907,911	7%	2,266,348	7%	2,381,067	7%
NAFTA	4,201,888	24%	4,795,753	24%	4,745,124	23%	5,328,142	23%	6,420,632	26%	6,943,307	27%	7,039,680	27%	8,025,696	28%	9,407,726	29%	8,844,444	27%
World	17,642,197	100%	19,751,909	100%	20,375,326	100%	22,791,494	100%	24,670,591	100%	25,917,817	100%	26,312,743	100%	28,243,023	100%	32,623,557	100%	32,272,043	100%

Unit : Million USD

Source : UNCTAD

9.6 Inward FDI Stock : Percentage of GDP

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	17	16	15	15	14	13	12	11	9	8	9	10	9	10	10	10	11	12	12	12
Japan	1	1	1	2	2	2	2	2	3	4	4	4	4	3	3	4	4	4	4	4
ROK	9	8	10	10	10	11	12	11	11	9	14	12	11	13	14	13	13	13	15	14
CJK	27	25	26	27	25	26	26	24	23	22	27	26	24	26	27	27	28	29	31	31
EU	23	26	27	29	31	30	30	36	40	33	40	40	38	45	46	46	53	52	59	54
ASEAN	42	41	43	42	43	44	45	48	54	49	56	58	55	61	64	70	74	74	82	81
NAFTA	28	27	25	20	23	25	24	26	29	19	25	27	25	28	32	33	33	37	42	38
World	22	22	22	21	24	24	24	27	31	24	29	30	28	30	32	33	35	37	41	38

Unit : %

Source : UNCTAD

9.7 Outward FDI Stock

	1999	%	2000	%	2001	%	2002	%	2003	%	2004	%	2005	%	2006	%	2007	%	2008	%
China	26,853	0.4%	27,768	0.4%	34,654	0.5%	29,900	0.4%	33,222	0.4%	44,777	0.4%	57,206	0.5%	90,630	1%	117,911	1%	183,971	1%
Japan	248,777	3%	278,445	4%	300,115	4%	304,234	4%	335,504	4%	370,541	3%	386,585	3%	449,567	3%	542,618	3%	680,330	4%
ROK	19,190	0.3%	21,497	0.3%	19,967	0.3%	20,735	0.3%	24,986	0.3%	32,166	0.3%	38,683	0.3%	49,187	0.3%	74,777	0.4%	97,953	1%
CJK	294,820	4%	327,711	4%	354,735	5%	354,868	5%	393,712	4%	447,484	4%	482,474	4%	589,384	4%	735,305	4%	962,254	6%
EU	2,850,149	40%	2,907,116	39%	3,048,228	42%	3,311,516	45%	4,102,982	44%	4,596,154	42%	5,058,434	43%	6,366,026	42%	7,926,721	43%	7,454,609	48%
ASEAN	80,408	1%	84,056	1%	101,648	1%	129,871	2%	159,673	2%	190,871	2%	219,039	2%	316,944	2%	422,559	2%	405,148	3%
NAFTA	3,048,983	43%	3,144,910	42%	2,748,959	38%	2,441,532	33%	3,274,442	35%	4,038,722	37%	4,388,620	37%	5,327,483	35%	6,307,615	34%	3,810,412	25%
World	7,147,975	100%	7,408,782	100%	7,278,580	100%	7,326,049	100%	9,230,192	100%	10,845,233	100%	11,895,765	100%	15,016,109	100%	18,634,253	100%	15,501,098	100%
	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	2017	%	2018	%
China	245,755	1%	317,211	2%	424,781	2%	531,941	2%	660,478	3%	882,642	3%	1,097,865	4%	1,357,390	5%	1,809,040	6%	1,938,870	6%
Japan	740,927	4%	831,076	4%	955,854	5%	1,037,698	5%	1,118,010	5%	1,152,006	4%	1,228,766	5%	1,315,221	5%	1,494,648	5%	1,665,200	5%
ROK	121,279	1%	144,032	1%	172,413	1%	202,875	1%	238,812	1%	260,502	1%	285,932	1%	310,218	1%	360,566	1%	387,591	1%
CJK	1,107,961	6%	1,292,318	6%	1,553,048	8%	1,772,514	8%	2,017,301	8%	2,295,151	9%	2,612,563	10%	2,982,829	11%	3,664,255	11%	3,991,661	13%
EU	8,215,676	44%	8,515,254	42%	8,720,027	42%	9,062,121	40%	9,544,027	38%	10,125,005	39%	10,187,441	39%	10,263,480	37%	11,817,476	36%	11,507,069	37%
ASEAN	487,441	3%	600,491	3%	663,317	3%	768,343	3%	863,805	3%	947,923	4%	1,024,771	4%	1,120,094	4%	1,325,035	4%	1,397,368	5%
NAFTA	5,298,825	29%	5,924,960	29%	5,518,787	27%	6,346,227	28%	7,529,114	30%	7,596,167	29%	7,316,787	28%	7,810,573	28%	9,487,029	29%	7,952,228	26%
World	18,534,288	100%	20,310,855	100%	20,668,070	100%	22,624,092	100%	24,831,613	100%	25,994,355	100%	26,259,583	100%	27,620,617	100%	32,383,049	100%	30,974,932	100%

Unit : Million USD

Source : UNCTAD

9.8 Outward FDI Stock : Percentage of GDP

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	2	2	3	2	2	2	3	3	3	4	5	5	6	6	7	8	10	12	15	14
Japan	5	6	7	7	8	8	8	10	12	14	14	15	16	17	22	24	28	27	31	33
ROK	4	4	4	3	4	4	4	5	7	10	13	13	14	17	18	18	21	22	24	24
CJK	12	12	13	13	13	14	15	18	22	27	32	33	35	40	47	51	59	61	69	72
EU	30	33	34	35	35	34	35	41	45	39	48	50	47	52	53	54	62	62	68	62
ASEAN	15	15	18	21	23	24	23	28	32	26	32	31	30	33	36	39	43	45	49	49
NAFTA	28	27	23	19	25	29	29	33	37	22	32	33	30	33	38	37	35	36	42	34
World	22	23	22	21	24	25	25	29	32	25	31	31	28	30	32	33	36	37	41	37

Unit : %

Source : UNCTAD

181 9.9 Top 10 Inward FDI Flow in 2017

P.R. China			Japan			ROK		
Economy	Inward FDI	%	Economy	Inward FDI	%	Economy	Inward FDI	%
Hong Kong, China	94,509	72%	France	3,732	36%	Malta	1,405	12%
Singapore	4,763	4%	United States	3,586	34%	Japan	1,363	12%
ROK	3,673	3%	Cayman Islands	3,266	31%	Hong Kong, China	1,195	10%
Japan	3,261	2%	Luxembourg	1,209	12%	United Kingdom	1,152	10%
United States	2,649	2%	Singapore	799	8%	United States	1,118	10%
Netherlands	2,174	2%	ROK	794	8%	Netherlands	1,114	10%
Taiwan, China	1,772	1%	Taiwan, China	644	6%	Singapore	1,021	9%
Germany	1,542	1%	P.R. China	597	6%	Bermuda	748	6%
United Kingdom	1,003	1%	United Kingdom	373	4%	Germany	705	6%
Denmark	819	1%	Australia	315	3%	Luxembourg	186	2%
Total Inward FDI	131,035	100%	Total Inward FDI	10,428	100%	Total Inward FDI	11,531	100%

Unit : Million USD

Source : National Bureau of Statistics of China(China), OECD(Japan and ROK)

9.10 Top 10 Outward FDI Flow in 2017

P.R. China			Japan			ROK		
Economy	Outward FDI	%	Economy	Outward FDI	%	Economy	Outward FDI	%
Hong Kong, China	91,153	58%	United States	49,727	31%	United States	16,280	32%
British Virgin Islands	19,301	12%	United Kingdom	25,800	16%	P.R. China	6,007	12%
Switzerland	7,510	5%	Netherlands	14,649	9%	Cayman Islands	4,590	9%
United States	6,425	4%	P.R. China	9,311	6%	Singapore	3,250	6%
Singapore	6,320	4%	Bermuda	7,604	5%	Vietnam	2,834	6%
Australia	4,242	3%	Singapore	7,036	4%	United Kingdom	2,005	4%
Germany	2,716	2%	Luxembourg	5,643	4%	Hong Kong, China	1,784	3%
Kazakhstan	2,070	1%	Thailand	5,246	3%	Brazil	1,566	3%
United Kingdom	2,066	1%	Cayman Islands	5,239	3%	Ireland	1,509	3%
Malaysia	1,720	1%	Indonesia	3,402	2%	Japan	1,181	2%
Total Outward FDI	158,288	100%	Total Outward FDI	160,425	100%	Total Outward FDI	51,045	100%

Unit : Million USD

Source : National Bureau of Statistics of China(China), OECD(Japan and ROK)

10 Natural Disaster

10.1 Natural Disaster

			1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	Earthquake	Occurrence	3	5	5	2	11	5	2	6	1	7
		Total deaths	-	9	8	2	317	4	16	23	3	87,564
		Total affected	3,036,807	2,105,050	503,124	65,878	3,146,942	436,930	634,009	411,548	329	47,369,797
		Total damage(thousand USD)	44,000	116,983	91,000	-	500,933	124,000	-	7,191	342,000	85,492,000
	Flood	Occurrence	6	9	9	10	6	9	11	20	12	7
		Total deaths	1,185	422	402	1,246	662	450	578	430	1,030	352
		Total affected	107,197,000	762,907	2,349,839	113,255,696	155,924,986	42,720,339	34,752,066	14,990,049	111,110,792	7,189,166
		Total damage(thousand USD)	9,254,400	315,366	711,000	4,728,800	15,329,640	1,985,500	4,660,860	1,687,500	5,023,155	2,392,000
	Storm	Occurrence	9	10	10	6	5	7	14	8	6	9
		Total deaths	496	162	344	108	61	249	426	1,500	95	66
		Total affected	2,181,610	2,531,389	21,165,838	107,403,094	9,480,207	9,791,865	40,782,831	55,337,820	9,005,154	1,649,106
		Total damage(thousand USD)	829,700	260,321	3,587,000	218,000	537,938	2,217,980	7,161,915	7,859,000	2,639,543	2,015,000
Japan	Earthquake	Occurrence	-	2	1	-	3	1	2	-	3	2
		Total deaths	-	1	2	-	2	40	1	-	10	24
		Total affected	-	7,232	11,261	-	21,267	62,183	4,430	-	55,228	918
		Total damage(thousand USD)	-	500,000	500,000	-	1,207,000	28,000,000	400,000	-	12,750,000	277,000
	Flood	Occurrence	2	1	1	-	1	2	1	2	1	1
		Total deaths	60	18	1	-	23	22	-	42	2	5
		Total affected	24,139	360,110	138	-	814	28,097	900	10,532	10,000	50,003
		Total damage(thousand USD)	107,000	7,440,000	-	-	7,000	1,950,000	-	-	-	-
	Storm	Occurrence	1	3	4	5	2	8	3	3	3	-
		Total deaths	26	13	22	7	21	199	135	20	13	-
		Total affected	27,338	193,041	9,888	100,825	2,403	331,039	273,044	12,901	40,994	-
		Total damage(thousand USD)	5,000,000	2,050,000	1,300,000	25,500	105,000	15,143,500	1,033,000	2,500,000	1,060,000	-

ROK	Earthquake	Occurrence	-	-	-	-	-	-	-	-	-	-
		Total deaths	-	-	-	-	-	-	-	-	-	-
		Total affected	-	-	-	-	-	-	-	-	-	-
		Total damage(thousand USD)	-	-	-	-	-	-	-	-	-	-
	Flood	Occurrence	1	2	2	1	-	2	1	1	1	1
		Total deaths	64	20	70	21	-	10	18	46	3	10
		Total affected	30,208	3,089	310,000	4,007	-	4,691	14,510	4,630	1,000	13
		Total damage(thousand USD)	332,000	50,000	76,000	345,000	-	6,595	-	-	-	-
	Storm	Occurrence	1	2	1	3	1	4	3	-	1	-
		Total deaths	4	33	11	204	130	14	11	-	20	-
		Total affected	514	711	300	88,625	80,000	2,922	1,100	-	602	-
		Total damage(thousand USD)	4,000	82,300	290,000	4,210,000	4,500,000	821,000	165,500	-	70,000	-

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total (1999-2018)	
China	Earthquake	Occurrence	2	5	7	6	8	8	5	3	4	2	97	
		Total deaths	1	2,977	32	86	296	738	33	3	37	-	92,149	
		Total affected	69,885	177,549	229,459	978,858	3,519,817	2,394,973	227,818	51,320	248,417	30,024	65,638,534	
		Total damage(thousand USD)	318,100	504,400	346,400	1,548,000	8,055,300	5,640,000	32,850	200,500	533,000	79,000	103,975,657	
	Flood	Occurrence	7	5	5	12	14	13	12	12	12	12	8	199
		Total deaths	209	1,911	628	622	637	473	310	816	231	244	12,838	
		Total affected	45,226,038	140,194,000	93,360,000	32,992,000	7,684,030	23,581,500	1,374,350	61,297,200	12,333,608	3,698,400	1,011,993,966	
		Total damage(thousand USD)	1,373,000	18,171,000	10,704,130	14,970,333	16,598,600	9,667,000	6,992,000	31,793,000	8,446,000	4,569,972	169,373,256	
	Storm	Occurrence	10	6	5	8	15	16	17	13	9	12	195	
		Total deaths	169	139	44	75	265	329	119	340	91	110	5,188	
		Total affected	23,296,806	3,137,290	26,649,950	10,541,177	11,345,574	11,209,694	2,189,485	604,695	307,206	4,609,700	353,220,491	
		Total damage(thousand USD)	3,601,452	871,036	716,585	3,216,000	10,787,000	10,069,973	8,983,690	7,624,160	7,381,600	10,675,200	91,253,093	
Japan	Earthquake	Occurrence	1	-	2	-	1	1	-	3	-	2	24	
		Total deaths	1	-	19,848	-	-	-	-	58	-	49	20,036	
		Total affected	25,319	-	368,952	-	8,438	2,657	-	419,725	-	24,095	1,011,705	
		Total damage(thousand USD)	400,000	-	210,000,000	-	0	2,000	-	20,100,000	-	4,500,000	278,636,000	
	Flood	Occurrence	-	1	1	1	1	-	1	1	1	1	20	
		Total deaths	-	10	6	30	5	-	21	7	37	246	535	
		Total affected	-	-	2,000	48,135	3,633	-	45,046	6,000	2,944	1,500,102	2,092,593	
		Total damage(thousand USD)	-	-	-	1,400,000	2,000	-	1,400,000	-	700,000	9,500,000	22,506,000	
	Storm	Occurrence	2	-	3	6	7	9	6	4	3	3	75	
		Total deaths	16	-	86	143	57	129	11	25	12	24	959	
		Total affected	7,119	-	1,663	54,153	64,957	41,282	61,033	9,703	41,855	26,300	1,299,538	
		Total damage(thousand USD)	1,000,000	-	2,520,000	302,400	220,200	6,641,000	230,200	100,000	1,502,000	17,000,000	57,732,800	

ROK	Earthquake	Occurrence	-	-	-	-	-	-	-	1	1	-	2
		Total Deaths	-	-	-	-	-	-	-	-	-	-	-
		Total Affected	-	-	-	-	-	-	-	29,832	5,057	-	34,889
		Total Damage(thousand USD)	-	-	-	-	-	-	-	21,000	-	-	21,000
	Flood	Occurrence	-	-	2	-	-	1	-	-	-	-	15
		Total Deaths	-	-	62	-	-	17	-	-	-	-	341
		Total Affected	-	-	29,000	-	-	-	-	-	-	-	401,148
		Total Damage(thousand USD)	-	-	52,000	-	-	2,000	-	-	-	-	863,595
	Storm	Occurrence	-	1	-	3	-	2	-	1	-	-	23
		Total Deaths	-	12	-	22	-	24	-	9	-	-	494
		Total Affected	-	41,500	-	3,120	-	101	-	1,500	-	-	220,995
		Total Damage(thousand USD)	-	-	-	799,000	-	11,000	-	126,000	-	-	11,078,800

Source : CRED-EM-DAT

*According to CRED-EM-DAT, for a disaster to be entered into database at least one of the following criteria must be fulfilled:

- Ten(10) or more people reported killed
- Hundred(100) or more people reported affected
- Declaration of a state of emergency
- Call for international assistance

About ‘Trilateral Statistics’

The ‘Trilateral Statistics’ series aims to provide a comprehensive understanding on the development trend of the three countries individually as well as to understand the importance of trilateral cooperation by analyzing the integrated statistics of CJK in comparison with other regional economic blocs. We hope that this booklet will show the general public why CJK cooperation is important through various topics of statistical analyses.

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Supervised by

MICHIGAMI Hisashi, Secretary-General, TCS
CAO Jing, Deputy Secretary-General, TCS
QIAO Wen, Director of Economic Affairs, TCS

Data Compiled by

LI Nianwei, Program Officer, TCS

Project Team

KIM Yeonsoo, Program Officer, TCS
LI Nianwei, Program Officer, TCS
SAKAI Marina, Program Officer, TCS
HUANG Wandu, Program Officer, TCS
KAMAKAMI Eri, Program Officer, TCS

Contact

economic@tcs-asia.org

Printed by

Sangsang Creative

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