

Chinese Economy and International Exposure

Lecture 1 China on the Global Stage

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What do you know about China?

- Key words in your mind for China...

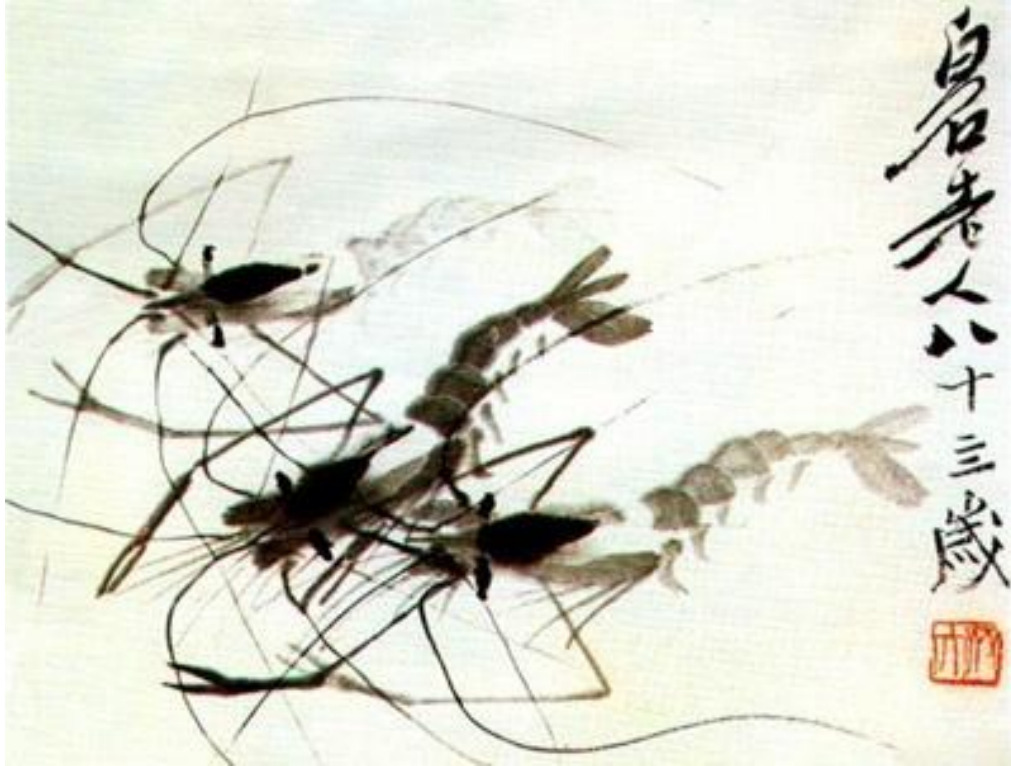




Customs—Spring festival, Christmas, ...



Art



Eating





*But, we live in a
global economy...*



- 'Globalisation is not a policy choice, it is a fact' (Bill Clinton; Speech to the WTO, May 1998)
- 'Globalisation is irreversible and irresistible' (Tony Blair; Ibid.)
- 'Globalisation is the intractable fate of the world, an irreversible process; it is also a process which affects us all' (Bauman, 1998)

Globalisation: Basic Dimensions

Globalisation of Markets

Convergence in buyer preferences
in markets around the world



Globalisation of Production and Innovation

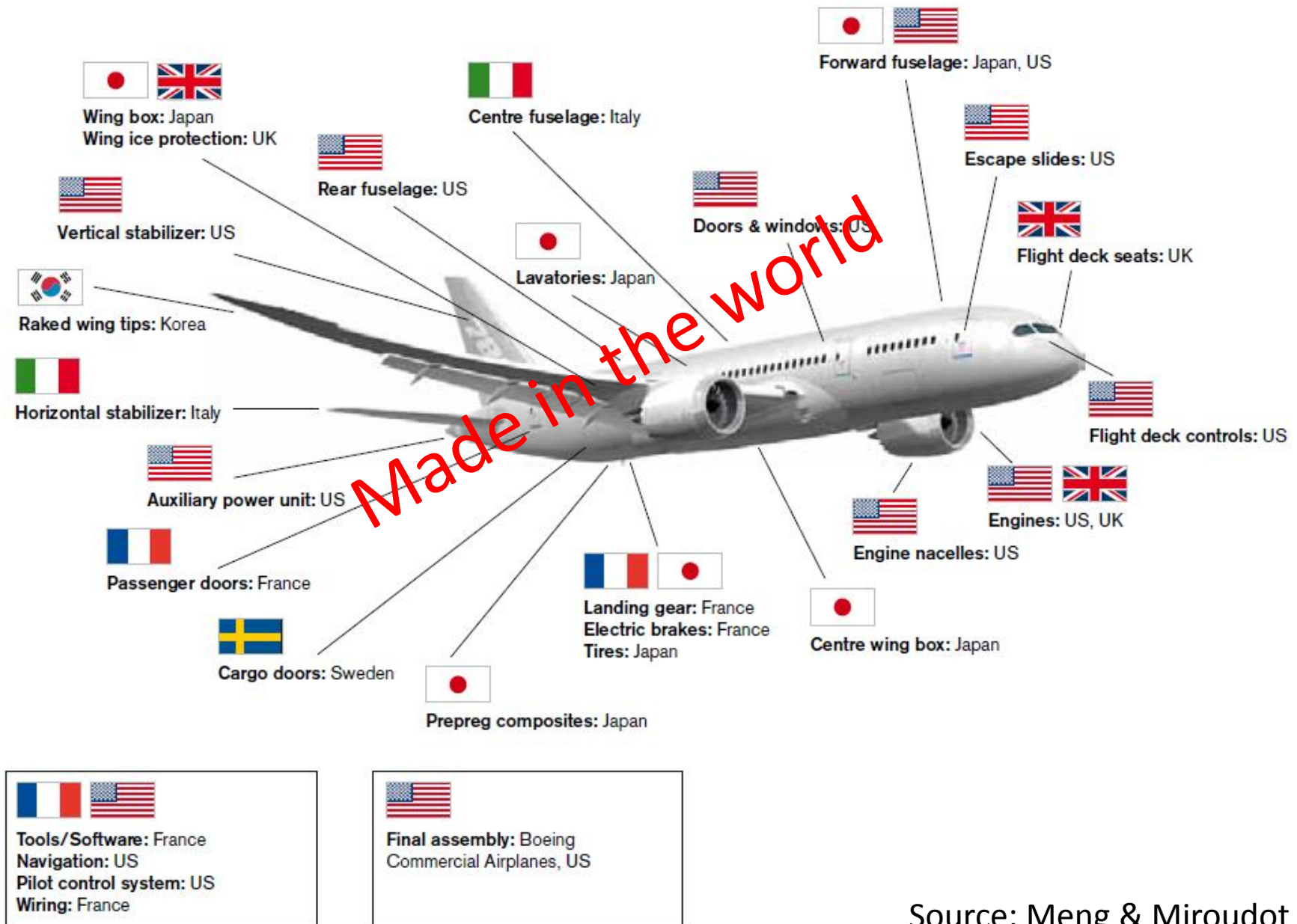
Global dispersion of activities



Globalness of Apple



Global production network: Boeing 787 Dreamliner



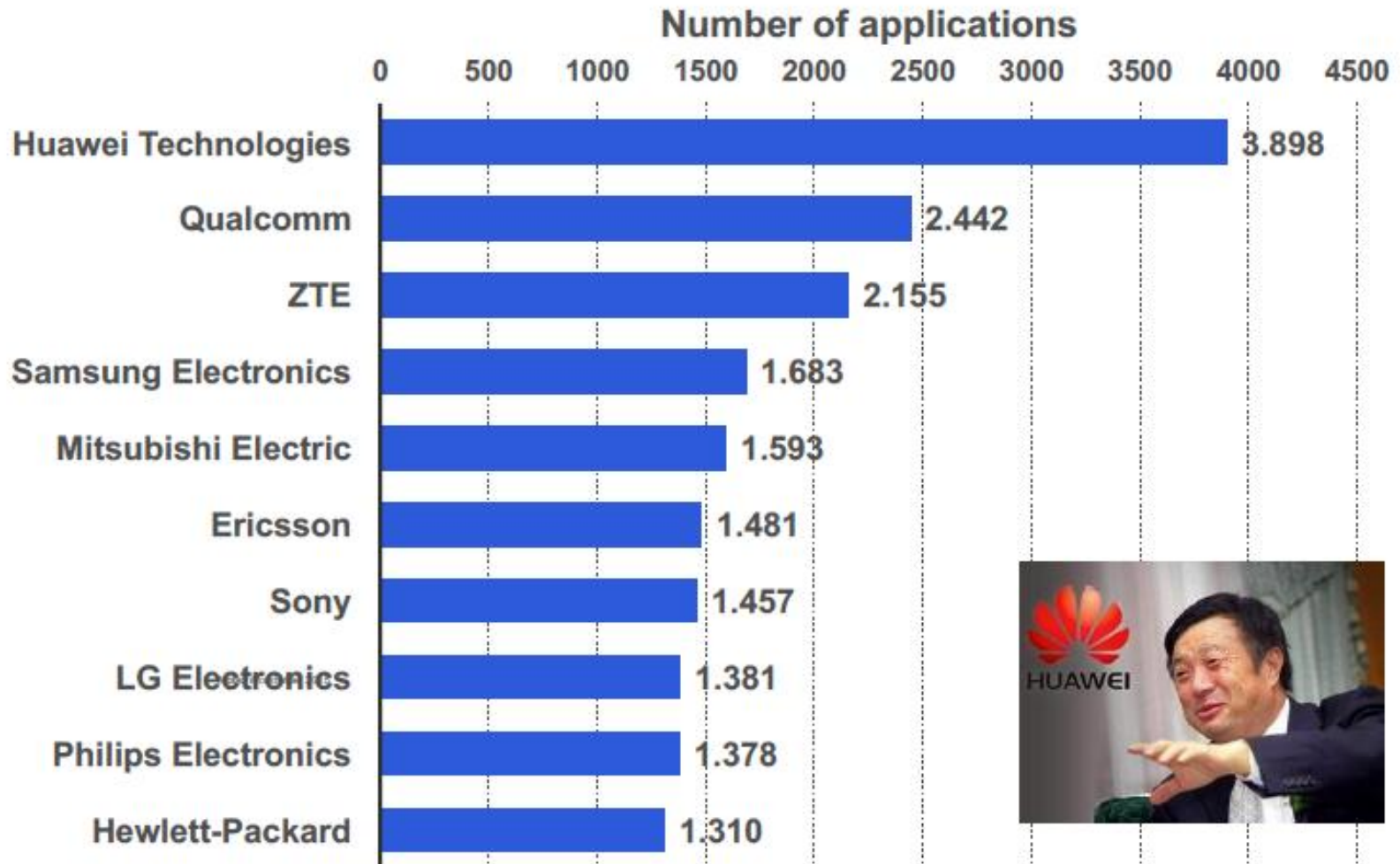
Global innovation network: Huawei

- We have cooperated with global innovators through our 16 R&D centers and 36 joint innovation centers around the world.
- Locations: Sweden, Poland, Italy, Romania, Germany, France, UK, Belgium, Ireland, Shanghai, Nanjing, Hangzhou, Shenzhen, Silicon Valley, Seattle.
- As of December 31, 2015, we had filed 52,550 patent applications in China and 30,613 outside China, with a total of 50,377 granted.



Global innovation network: Huawei

Ranking of the top 10 companies with the most international patent applications in 2015



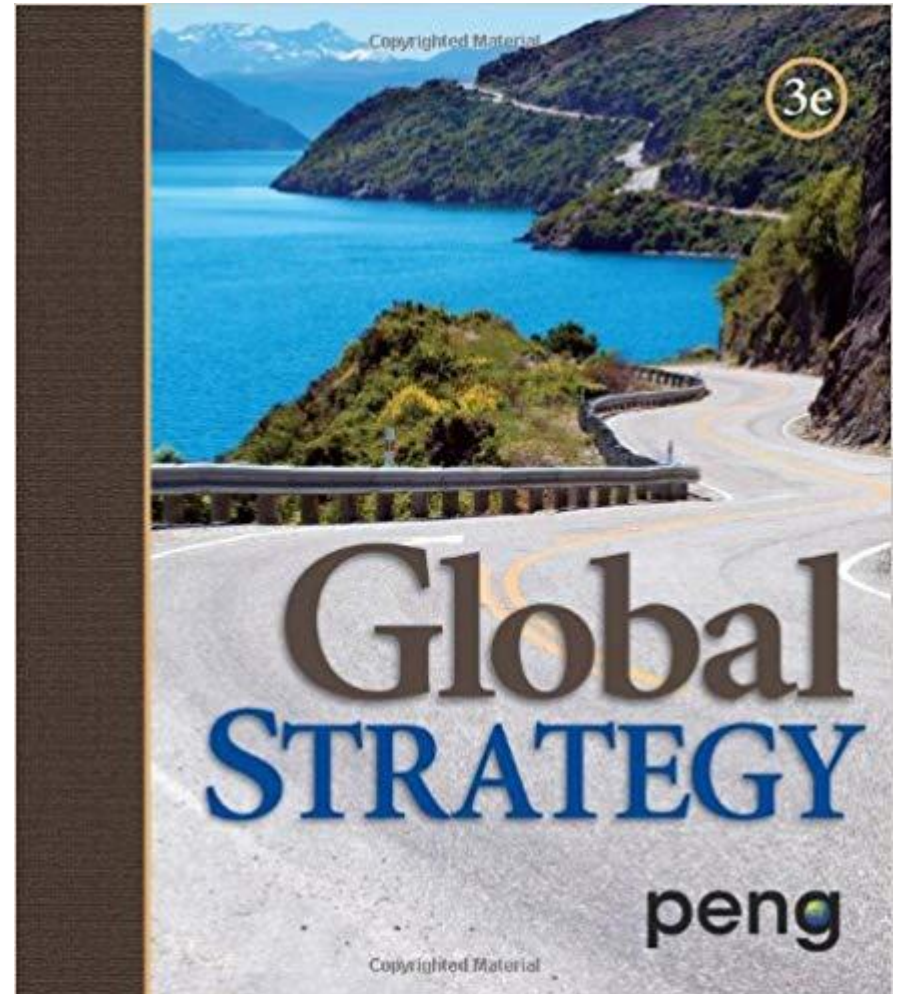
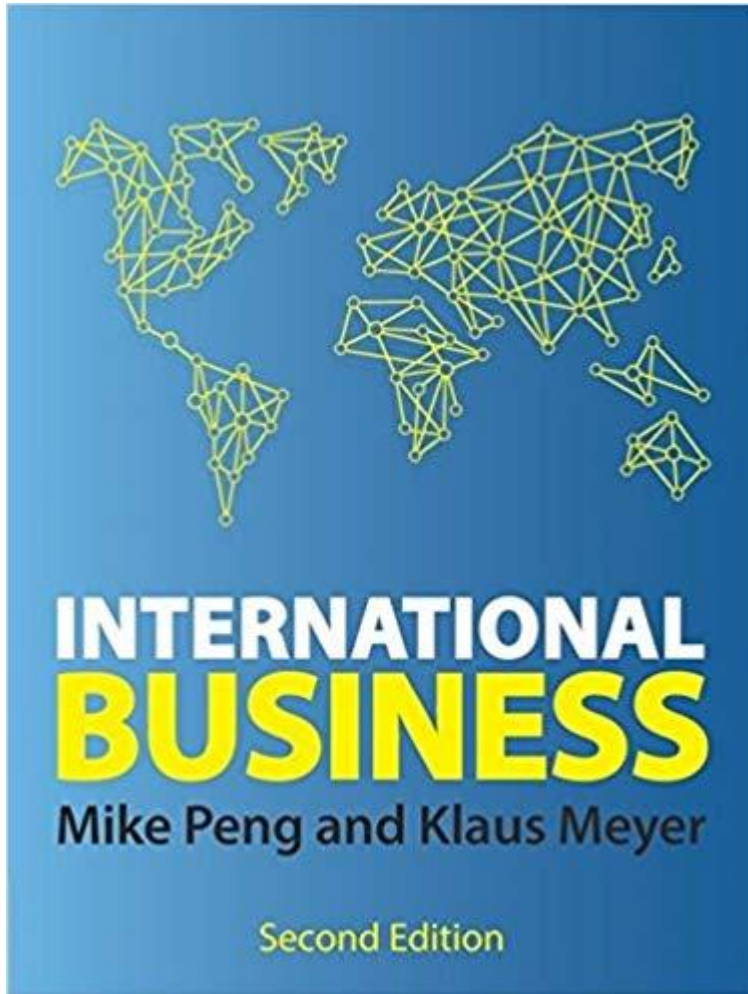
Multidimensionality of Globalisation

- Many more than the two dimensions
- Globalisation of what?

- **Politics**
- **Economy**
- **Technology**
- **Law**
- **People and culture**



Textbooks



Overview of China's Economy

World's Largest Markets

European Union (EU)

Population: 514 million

GDP: USD 18.46 trillion

United States

Population: 322 million

GDP: USD 17.42 trillion

China

Population: 1,368 million

GDP: USD 10.35 trillion

India

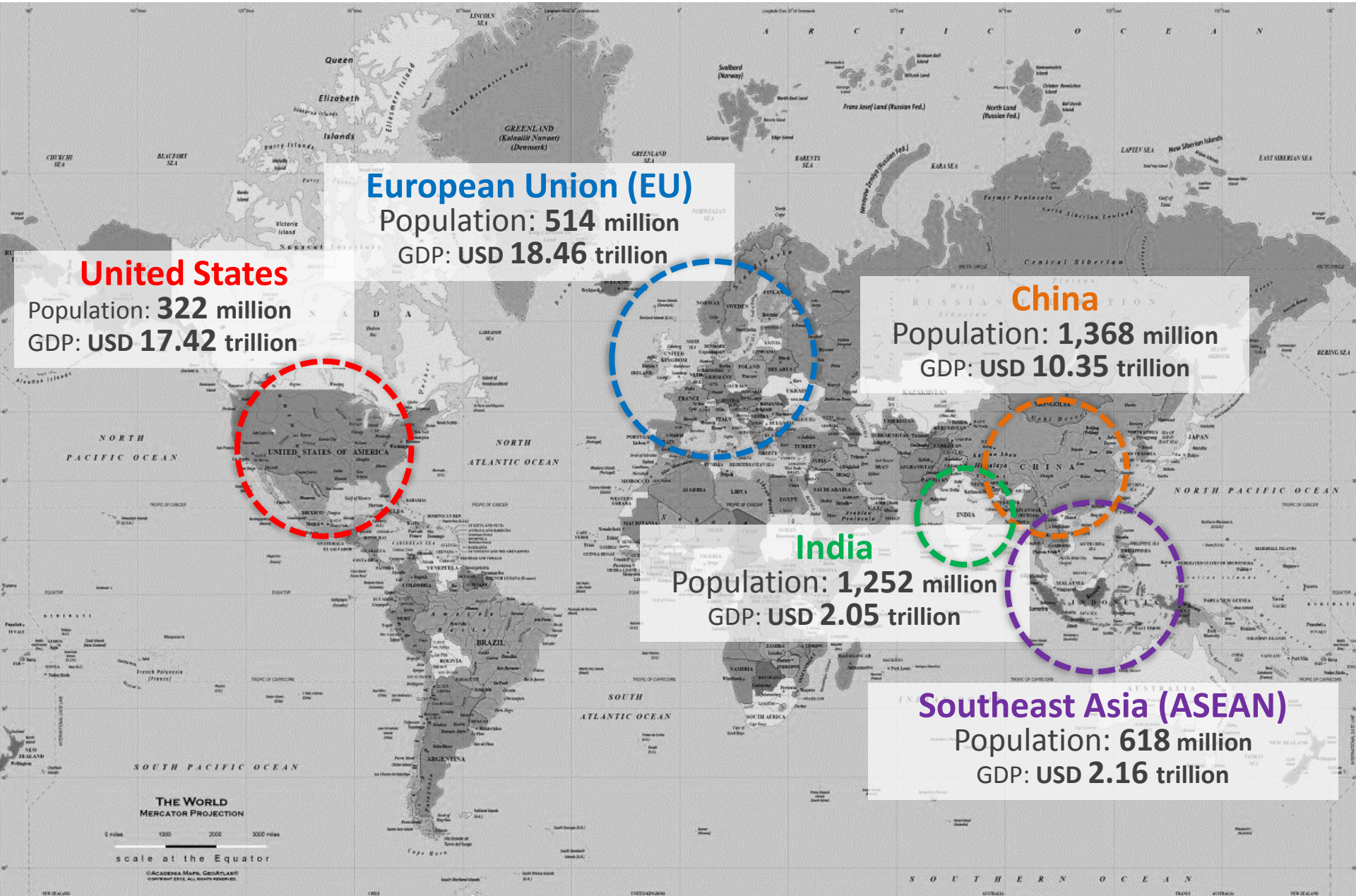
Population: 1,252 million

GDP: USD 2.05 trillion

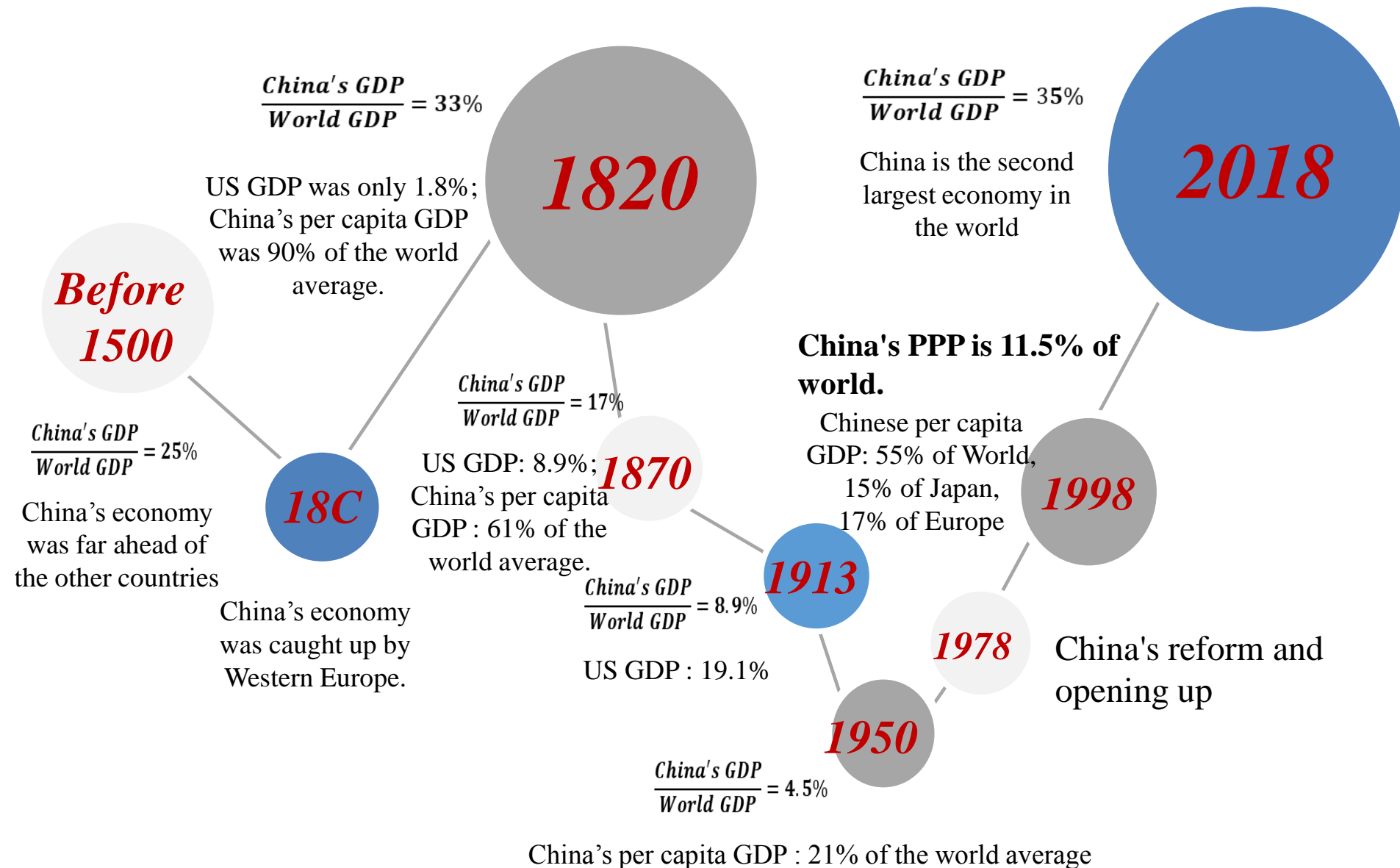
Southeast Asia (ASEAN)

Population: 618 million

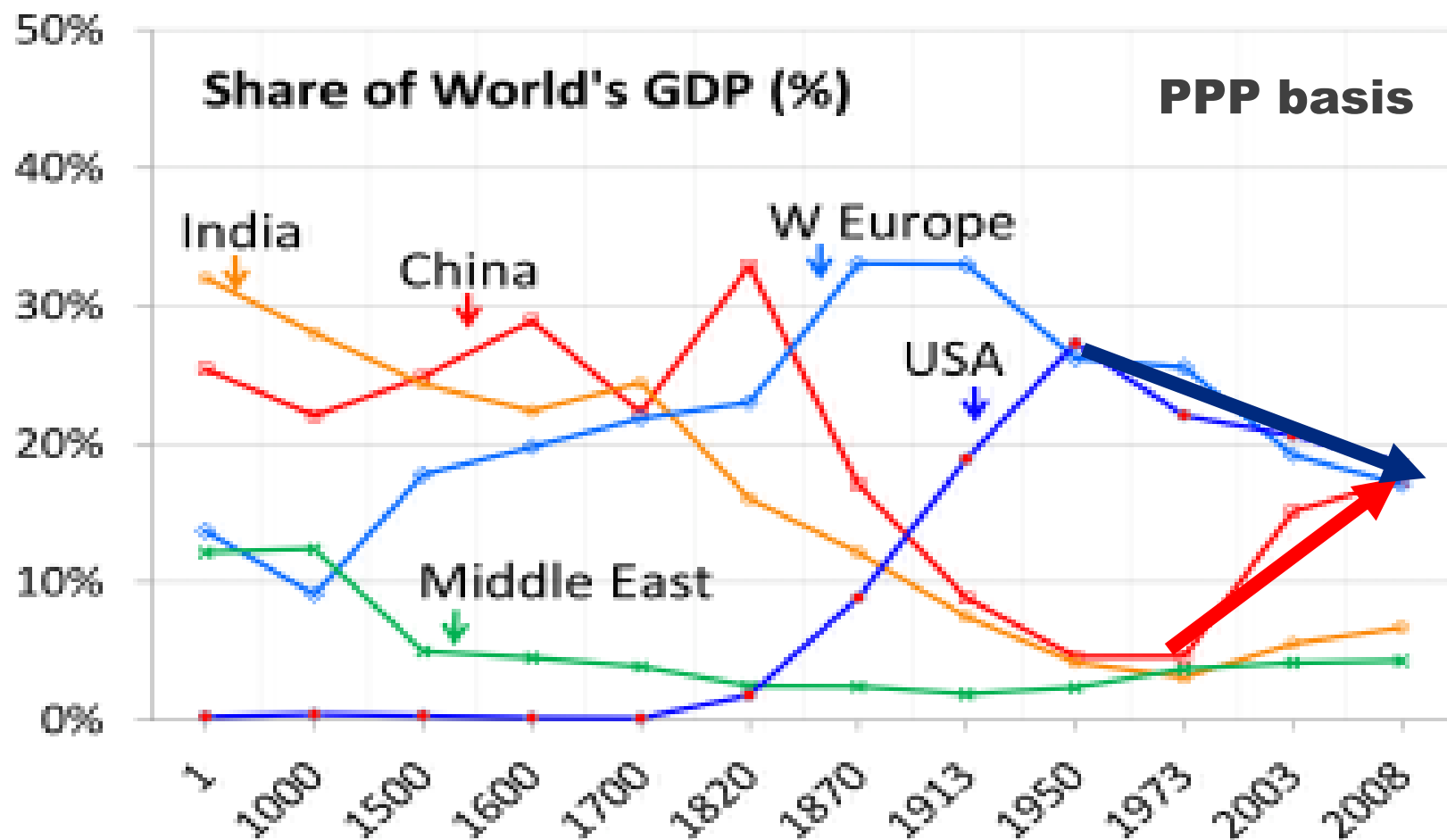
GDP: USD 2.16 trillion



Evolution of China's economy in the world



Evolution of China's economy in the world

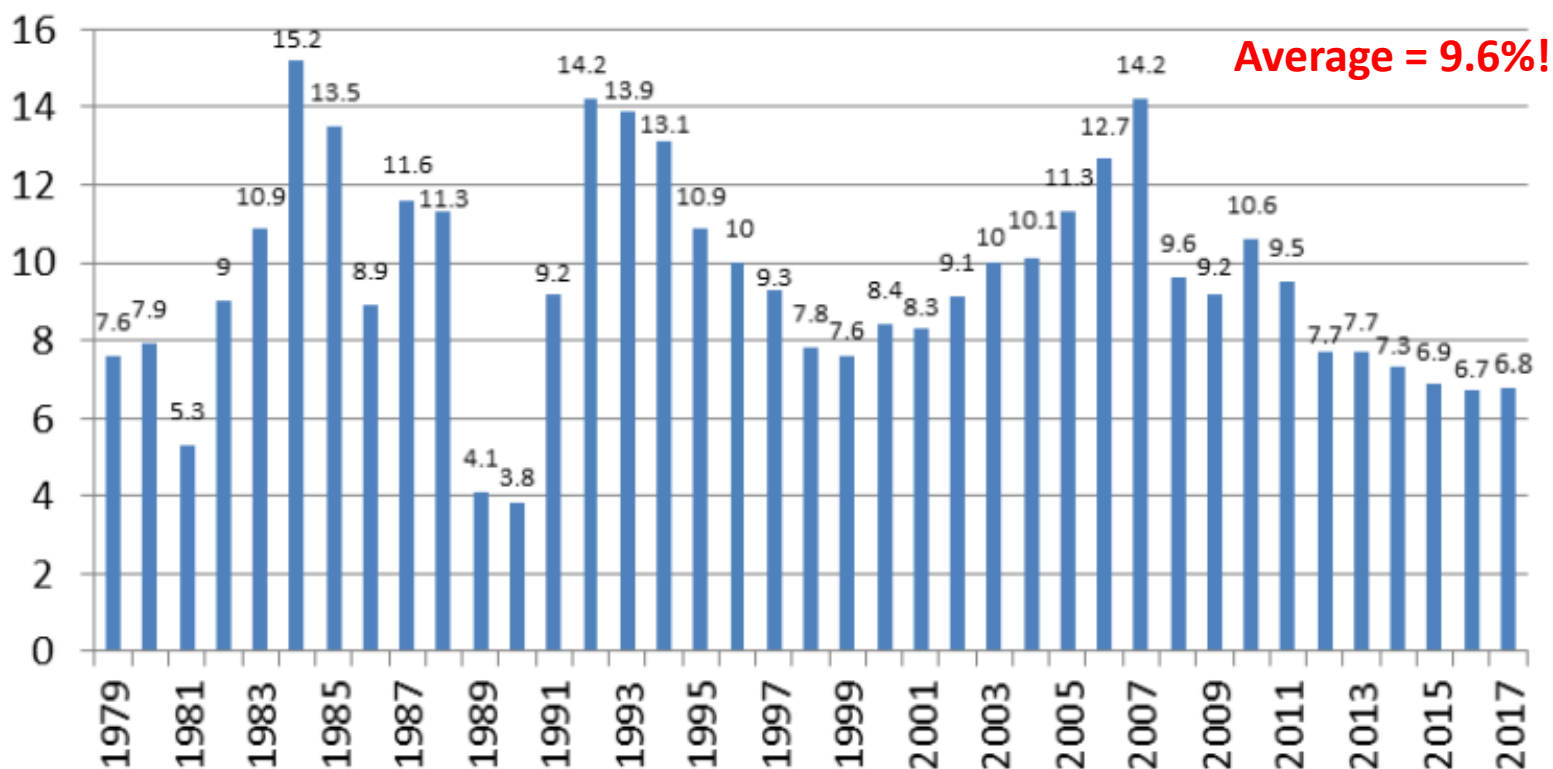


The global contribution by major economies from 1 AD to 2008 AD according to estimates by Angus Maddison(2007), *Contours of the World Economy I-2030AD*, (Oxford Univ. Press).

1. Nearly 40 years of strong Chinese growth

Chinese real GDP growth: 1979-2017 (percent)

World Bank: the fastest sustained expansion by a major economy in history.



Source: IMF, and Chinese National Bureau of Statistics.

1. Nearly 40 years of strong Chinese growth

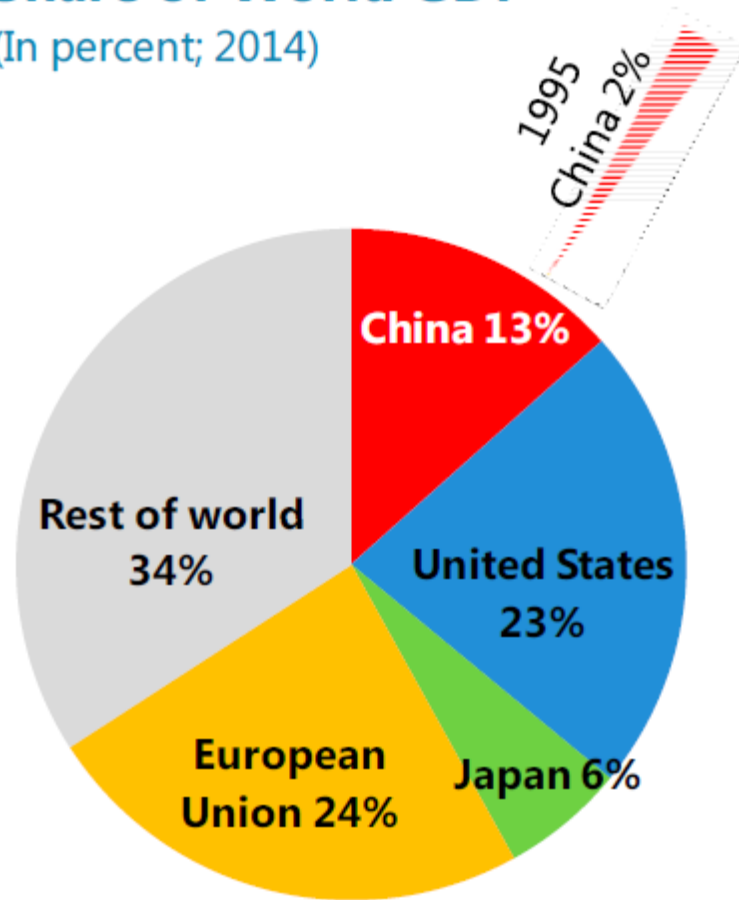
- China's economic miracle is genuine:
 - Growth $\approx 10\%$ p.a. for 3 decades is historic.
 - China's increase in size after 2000 is equivalent to adding another Germany and France to the world economy.
 - It took China only around 8 years to double income, starting from 1987!
 - UK: 58 years, from 1780
 - US: 47 years, from 1839
 - Japan: 35 years, from 1885
 - Korea: 11 years, from 1966
 - China's growth help raise an estimated 800 million people out of poverty
 - The Chinese middle class consumer population will exceed the entire population of the United States by 2026.

2. Size of the China's economy

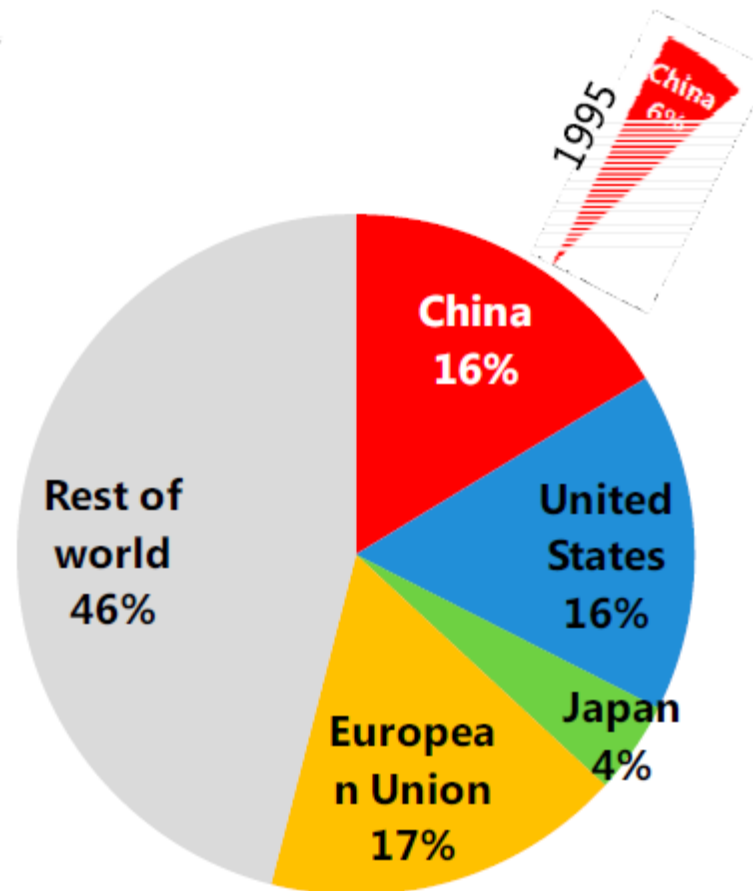
China GDP reached US in 2014 only if measured in PPP terms.

Share of World GDP

(In percent; 2014)



USD terms, 2014



PPP terms, 2014

Sources: IMF, World Economic Outlook; and IMF staff calculations.

2. Size of the China's economy

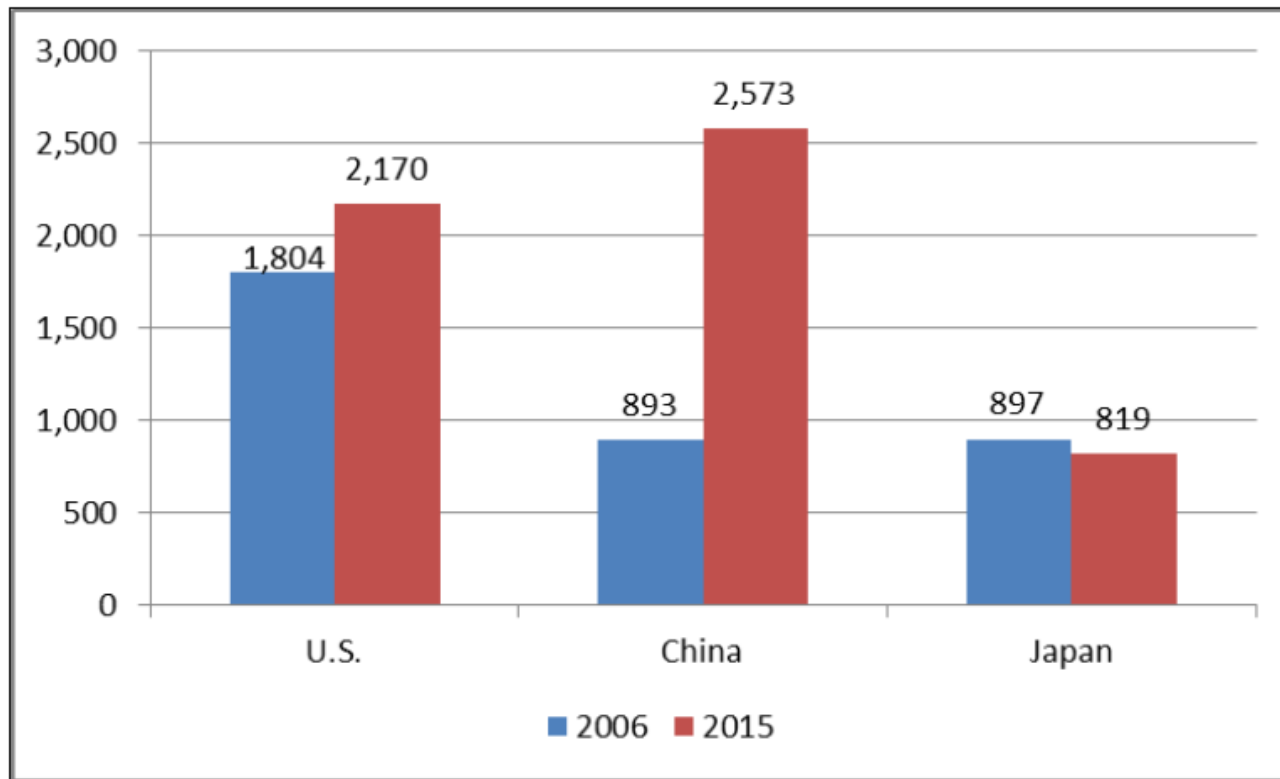
Comparisons of Chinese and U.S. GDP and Per Capita GDP in Nominal U.S. Dollars and a Purchasing Power Parity Basis: 2017

	China	United States
Nominal GDP (\$ billions)	11,938	19,362
GDP in PPP (\$ billions)	23,122	19,362
Nominal Per Capita GDP (\$)	8,583	59,495
Per Capita GDP in PPP (\$)	16,624	59,495

Source: IMF, World Economic Forum.

3. China as the World's Largest Manufacturer

Gross Value Added Manufacturing in China, the United States, and Japan:
2006 and 2015 (\$ billions)



- China overtook Japan as the world's second-largest manufacturer on a gross value added basis in 2006 and the United States in 2010.

- In 2014, China's gross value added manufacturing was equal to 27.7% of its GDP, compared to 12.1% for the United States.

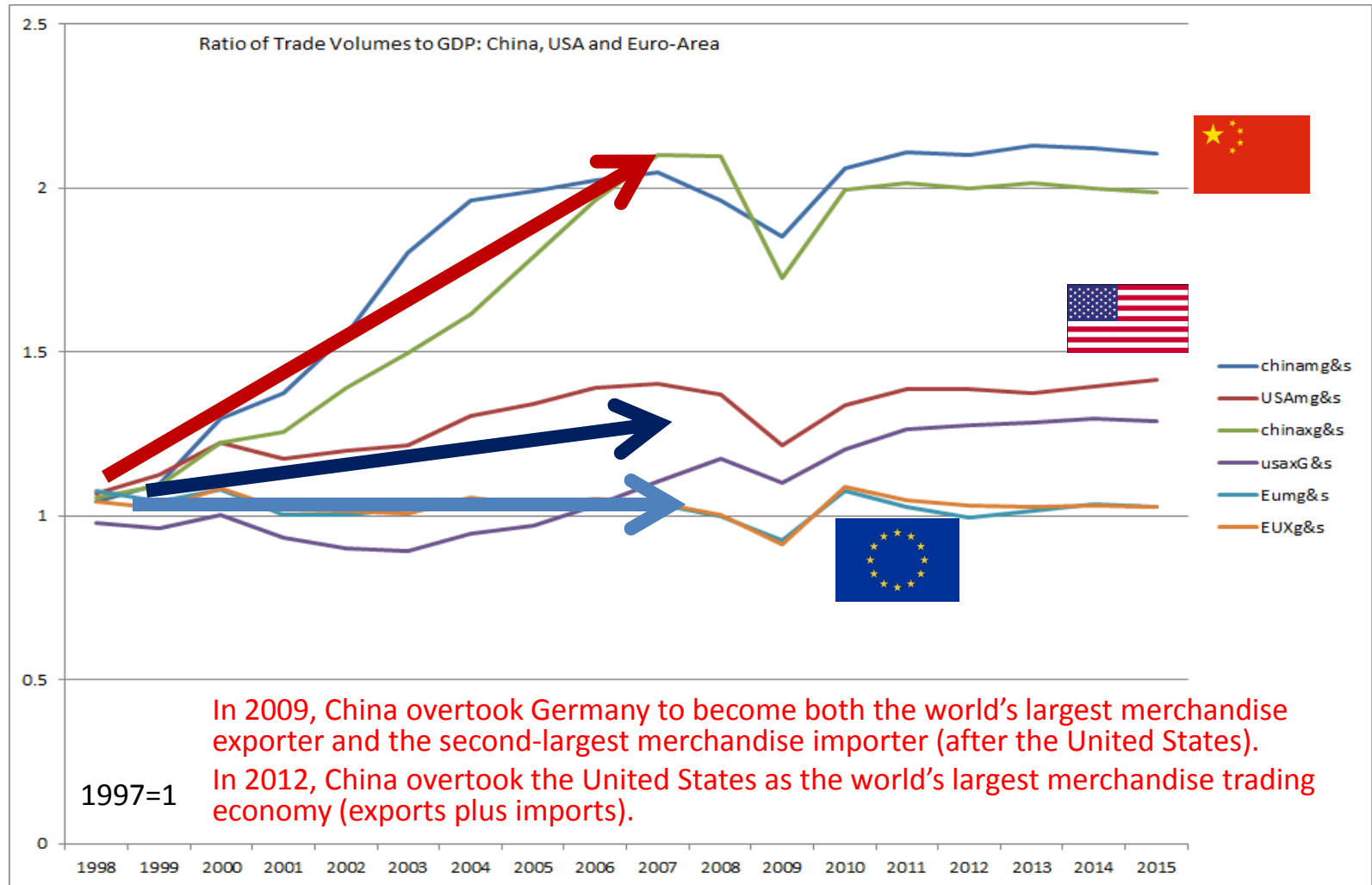
4. China as the World's Largest merchandise trader

- China's potential for trade
- world's largest emerging market
 - 1.37 billion people
 - rapidly rising purchasing power
- manufacturing centers
 - relatively young population
 - low living standard
 - education



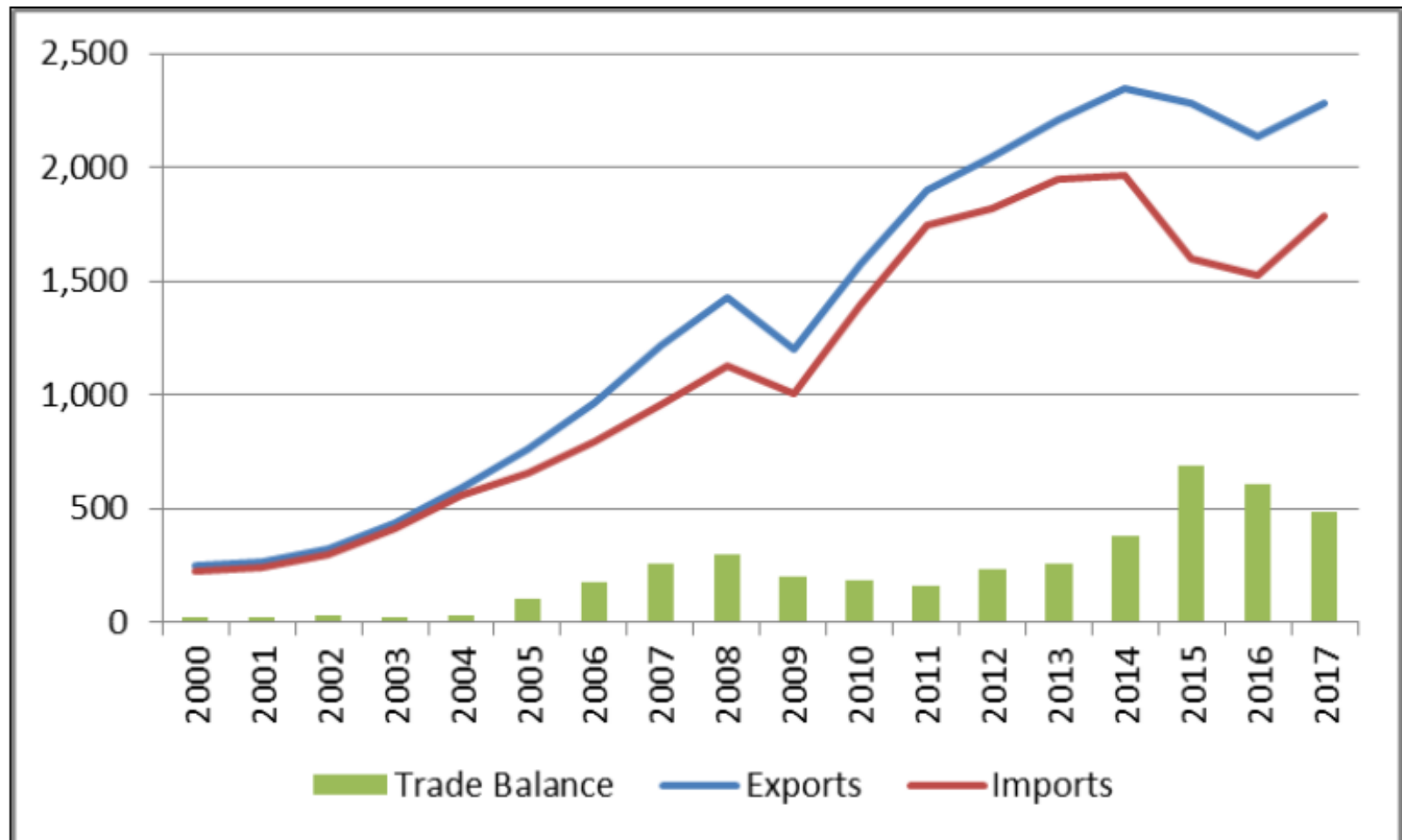
China's exports & imports had risen especially fast, even relative to GDP, before 2008.

(Followed by the US. EU trade/GDP had been flat.)



(1) Fast trade growth

China's Merchandise Trade: 2000-2017 (\$ billions)



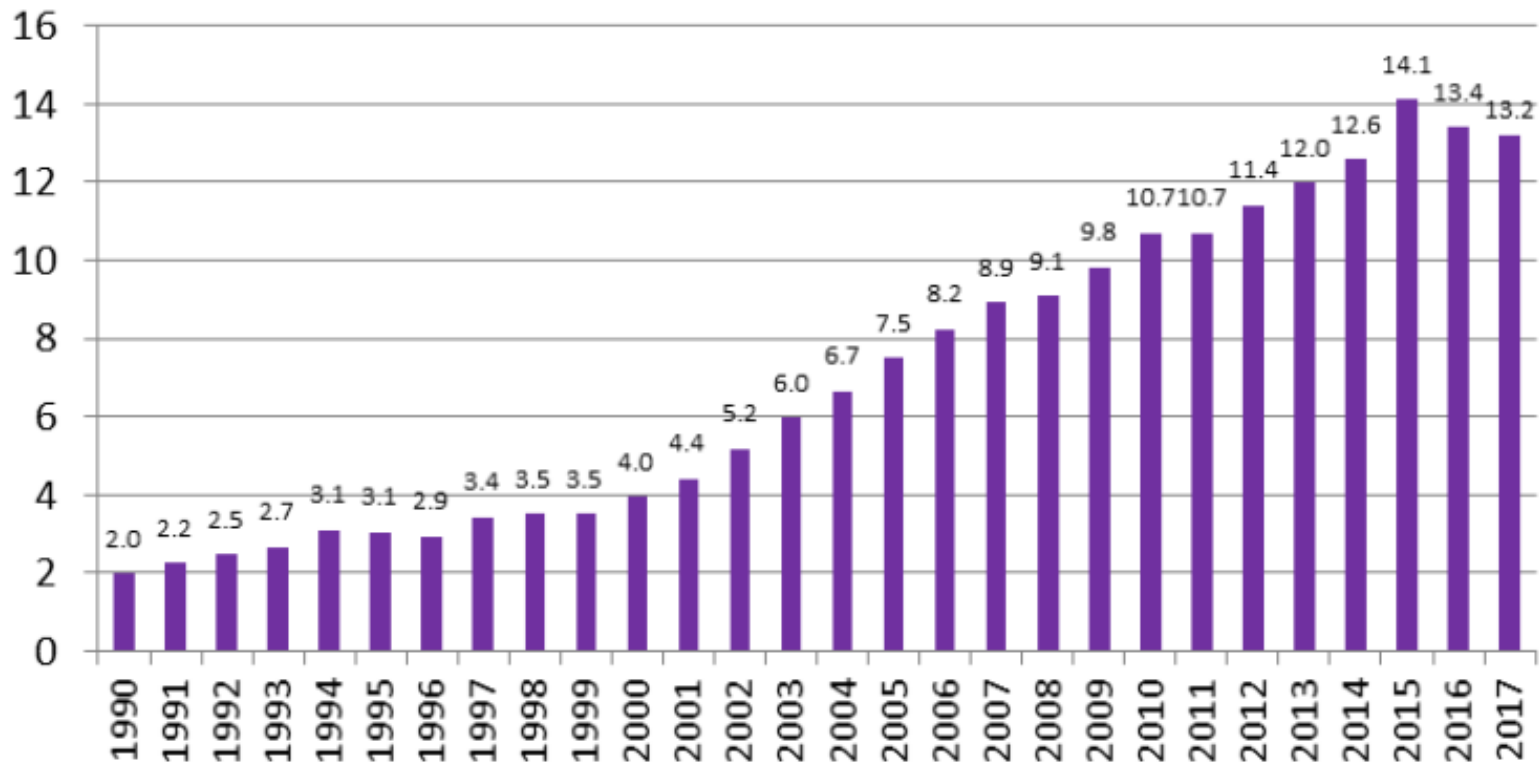
Source: World Trade Atlas and China's Customs Administration.

Note: Data are in U.S. dollars which may be impacted by changes in exchange rates.

(1) Fast trade growth

China's Share of Global Merchandise Exports:1990-2017 (percent)

China's share of global merchandise exports grew from 2.0% in 1990 to 14.1% in 2015, but fell to 13.4% in 2016 and to 13.2% in 2017.



Source: Economist Intelligence Unit.

Notes: Data for 2017 are estimated.

(2) Important trading partners for many countries

- China was the largest trading partner for 130 countries in 2013

China's Major Merchandise Trading Partners in 2017 (\$ billions)

Country	Total Trade	Chinese Exports	Chinese Imports	China's Trade Balance
European Union	618.1	373.7	244.4	129.3
United States	581.5	431.8	149.7	282.1
ASEAN	501.3	281.3	220.0	61.3
Japan	302.1	137.1	165.0	-27.9
Hong Kong	287.8	281.0	6.9	274.1
South Korea	280.2	102.9	177.3	-74.4
Taiwan	198.8	43.6	155.2	-111.6

Source: China's Customs Administration.

Notes: Rankings according to China's total trade in 2017. China's bilateral trade data often differ from that of its trading partners.

(3) Major Chinese trade commodities

Major Chinese Merchandise Imports in 2017

HS Code	Description	\$ Billions	Percentage of Total Exports	2017/2016 % Change
	Total Commodities	1,790	100.0	17.4
85	Electrical machinery and equipment	457	25.5	9.8
27	Mineral fuel, oil etc.	246	11.5	40.7
84	Nuclear reactors, boilers, and machinery	170	9.5	15.0
26	Ores, slag, and ash	125	7.0	34.7
90	Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	97	5.5	4.8
87	Vehicles, except railway, and parts (trucks, and bicycles)	79	4.4	10.9
39	Plastics and articles thereof	69	3.9	13.0
29	Organic chemicals	56	3.1	27.2
12	Oil seeds, misc. grain, fruit, plant, etc.	45	2.5	16.4
74	Copper and articles thereof	41	2.3	23.7

Source: *World Trade Atlas*, using official Chinese statistics.

Note: Top 10 imports in 2016, two-digit level, harmonized tariff system.

(3) Major Chinese trade commodities

Major Chinese Merchandise Exports in 2017

HS Code	Description	\$ Billions	Percentage of Total Exports	2017/2016 % Change
	Total Commodities	2,279	100.0	6.7
85	Electrical machinery	600	26.3	7.2
84	Nuclear reactors, boilers, and machinery	383	16.8	10.8
94	Furniture and bedding	91	4.0	-0.2
62	Apparel articles and accessories, woven	74	3.2	0.3
61	Apparel articles and accessories, knit or crochet	72	3.2	-4.8
39	Plastics and articles thereof	71	3.1	9.7
90	Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	71	3.1	3.5
87	Vehicles, except railway, and parts	67	3.0	11.1
73	Articles of iron or steel	58	2.5	6.7
95	Toys and sports equipment	56	2.4	23.2

Source: *World Trade Atlas*, using official Chinese statistics.

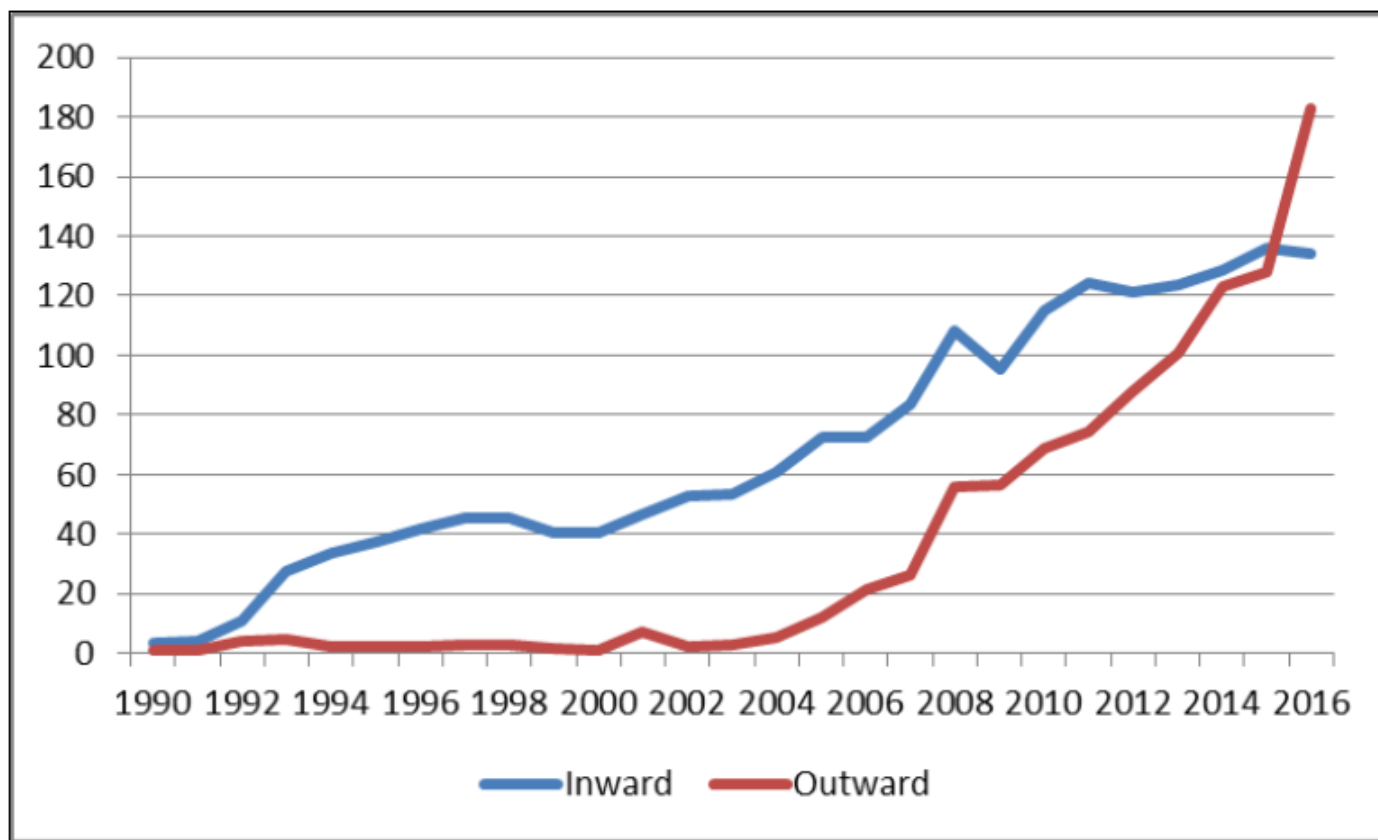
Note: Top 10 exports in 2017, two-digit level, harmonized tariff system.

5. Foreign direct investment (FDI) in China

- China's FDI inflows in 2016 were \$134 billion, making it the world's third-largest recipient of FDI (after the United States and the United Kingdom).
- China's FDI outflows in 2016 were \$183 billion, making it the world's second-largest source of FDI outflows (after the United States).
- China's FDI outflows exceeded inflows for the first time in 2016.

5. Foreign direct investment (FDI) in China

UNCTAD's Estimates of China's Annual FDI Flows: 1990-2016 (\$ billions)



Source: UNCTAD Data Center.

Notes: UNCTAD FDI data differ from that reported by China. Data exclude Hong Kong which is treated separately.

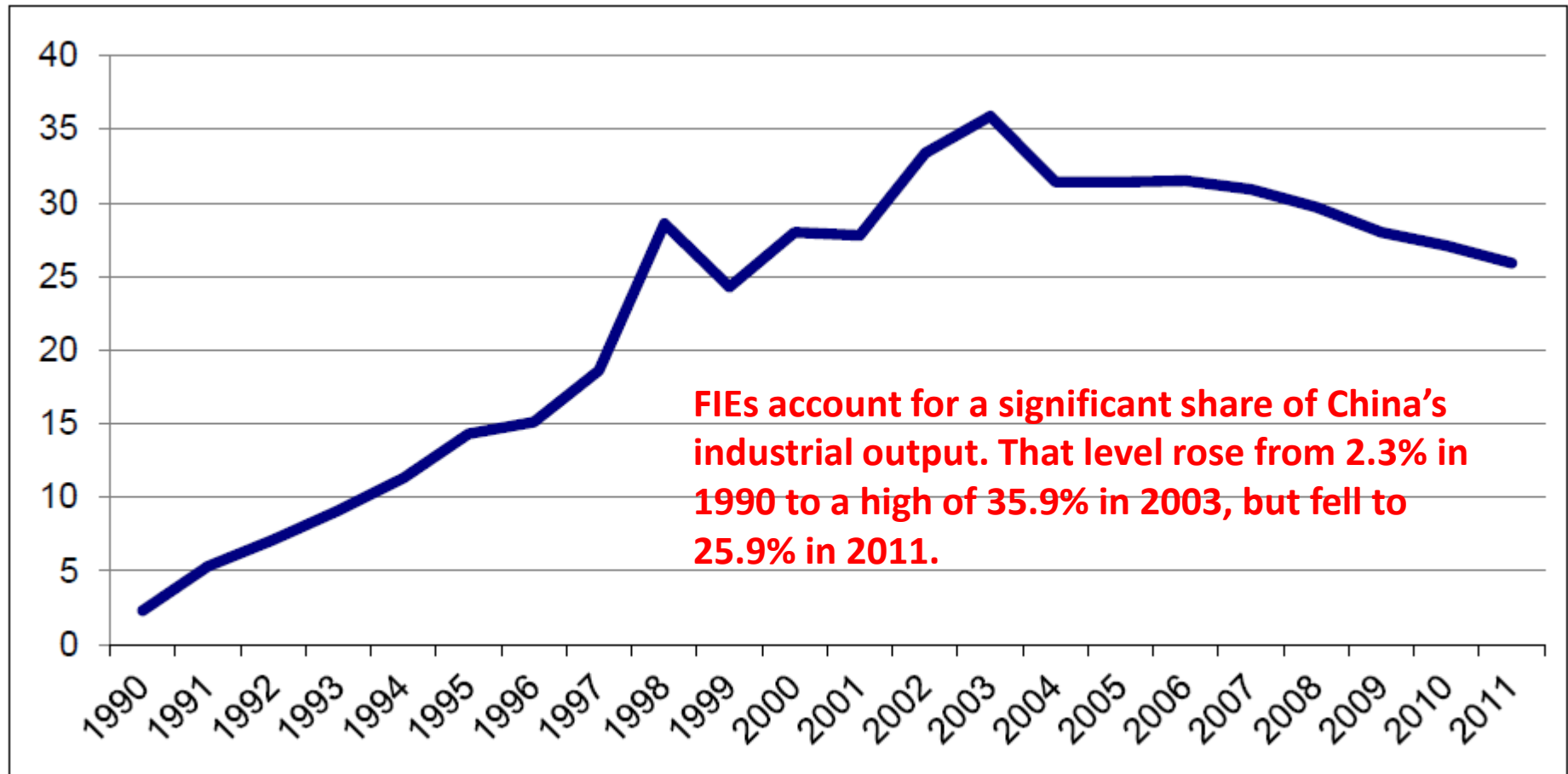
(1) Inward FDI in China

- There were reportedly 445,244 foreign-invested enterprises (FIEs) registered in China in 2010, employing 55.2 million workers or 15.9% of the urban workforce.



(1) Inward FDI in China

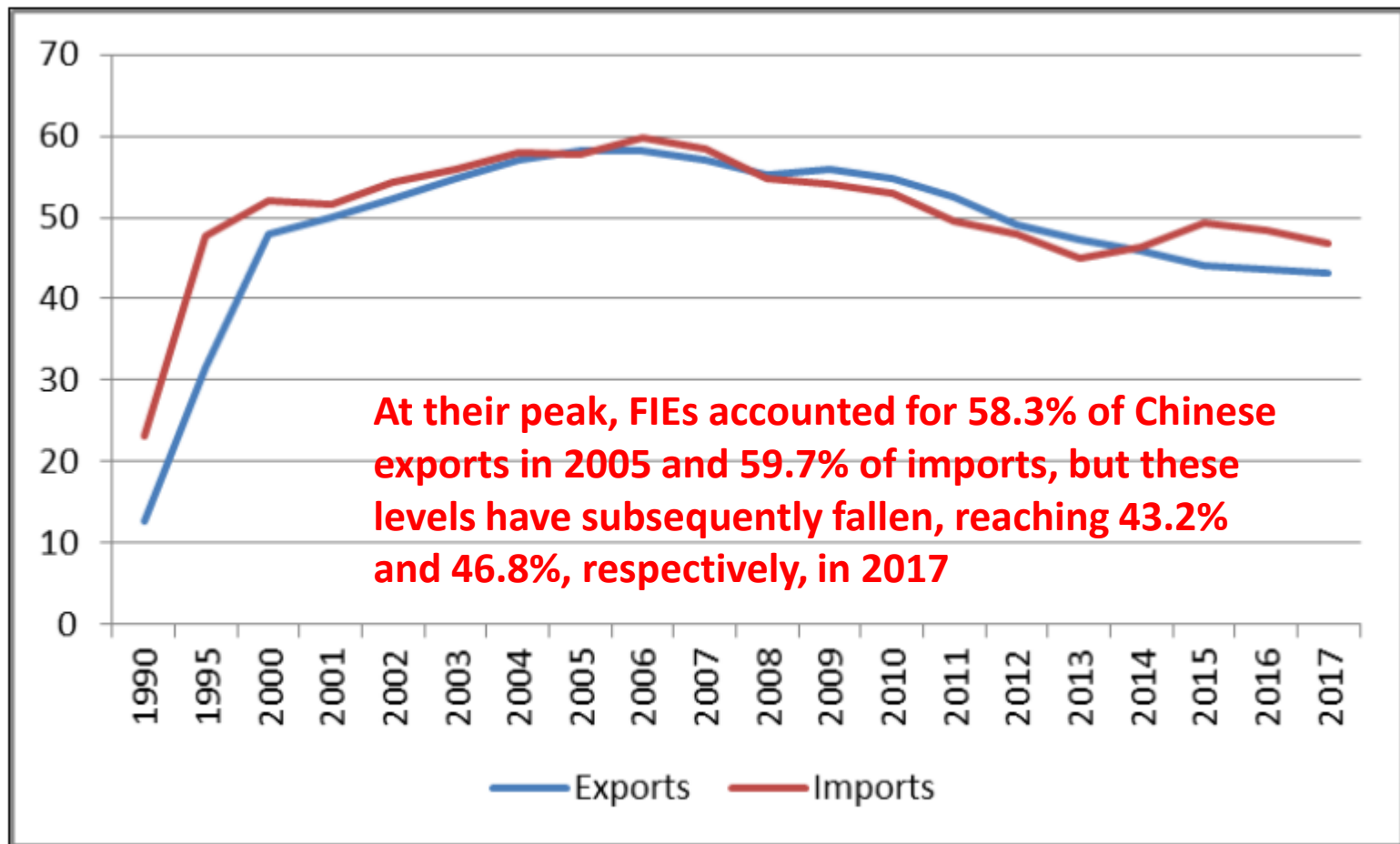
Industrial Output by Foreign-Invested Firms in China as a Share of National Output Total: 1990-2011



Source: Invest in China (<http://www.fdi.gov.cn>) and China's 2012 Statistical Yearbook.

(1) Inward FDI in China

Share of Chinese Merchandise Exports and Imports by Foreign-Invested Enterprises in China: 1990-2017 (percent)



(1) Inward FDI in China

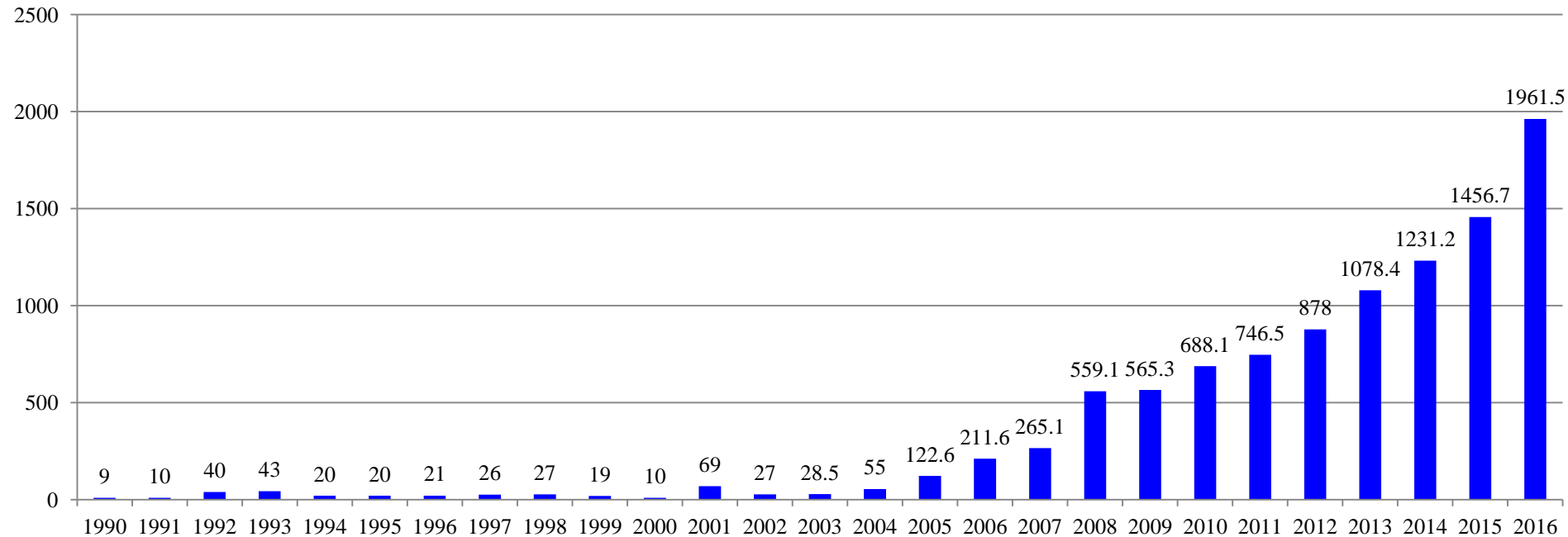
Chinese Data on Top Ten Sources of FDI Flows to China: 1979-2016
(\$ billions and percentage of total)

Country	Estimated Cumulative Utilized FDI: 1979-2016		Utilized FDI in 2016	
	Amount	% of Total	Amount	% of Total
Total	1,765.5	100	126.0	100
Hong Kong and Macau	928.2	52.6	82.3	65.3
British Virgin Islands	155.9	8.8	6.7	5.3
Japan	104.9	5.9	3.1	2.5
Singapore	85.3	4.8	6.1	4.8
United States	80.0	4.5	2.4	1.9
S. Korea	68.7	3.9	4.8	3.8
Taiwan	64.7	3.7	2.0	1.6
Cayman Islands	35.3	2.0	5.2	4.1
Germany	28.2	1.6	2.7	2.1
United Kingdom	15.7	0.9	1.4	1.1

Source: Cumulative data are from the IMF Coordinated Direct Investment Survey. Annual data are from the Chinese Ministry of Commerce.

(2) Outward FDI from China

Chinese outward FDI flows (\$ 100 millions)



- By the end of 2016, 24,400 Chinese investors have established 37,200 subsidiaries in 190 countries/regions.

(2) Outward FDI from China

Major Destinations of Chinese Non-financial FDI Outflows
in 2015: Flows and Stock (\$ billions and percentage)

Destination	FDI Flows in 2015	Stock of FDI through 2015	Share of FDI Stock through 2015 (%)
Total	145.7	1,098.0	—
Hong Kong	89.8	656.9	59.8
Cayman Islands	10.2	62.4	5.7
British Virgin Islands	1.8	51.7	4.7
United States	8.0	40.8	3.7
Singapore	10.5	32.0	2.9
Australia	3.4	28.4	2.6
United Kingdom	1.8	16.6	1.5

Source: Chinese Ministry of Commerce.

Note: Ranked according to the top seven destinations of the stock of Chinese FDI outflows through 2015.

(2) Outward FDI from China

- The sharp increase in China's global FDI outflows in recent years appears to be largely driven by
 - Chinese government policies and initiatives to encourage firms to “go global”, in order to move Chinese firms up the value-added chain in manufacturing and services, boost domestic innovation and development of Chinese brands, and help Chinese firms (especially SOEs) to become major global competitors.
 - China's slowing economy and rising labor costs have also encouraged greater Chinese overseas FDI in order to help firms diversify risk and expand business opportunities beyond the China market, and, in some cases, to relocate less competitive firms from China to low-cost countries.
 - Chinese government attempting to diversify its foreign exchange reserve holdings

6. Emerging Chinese multinationals

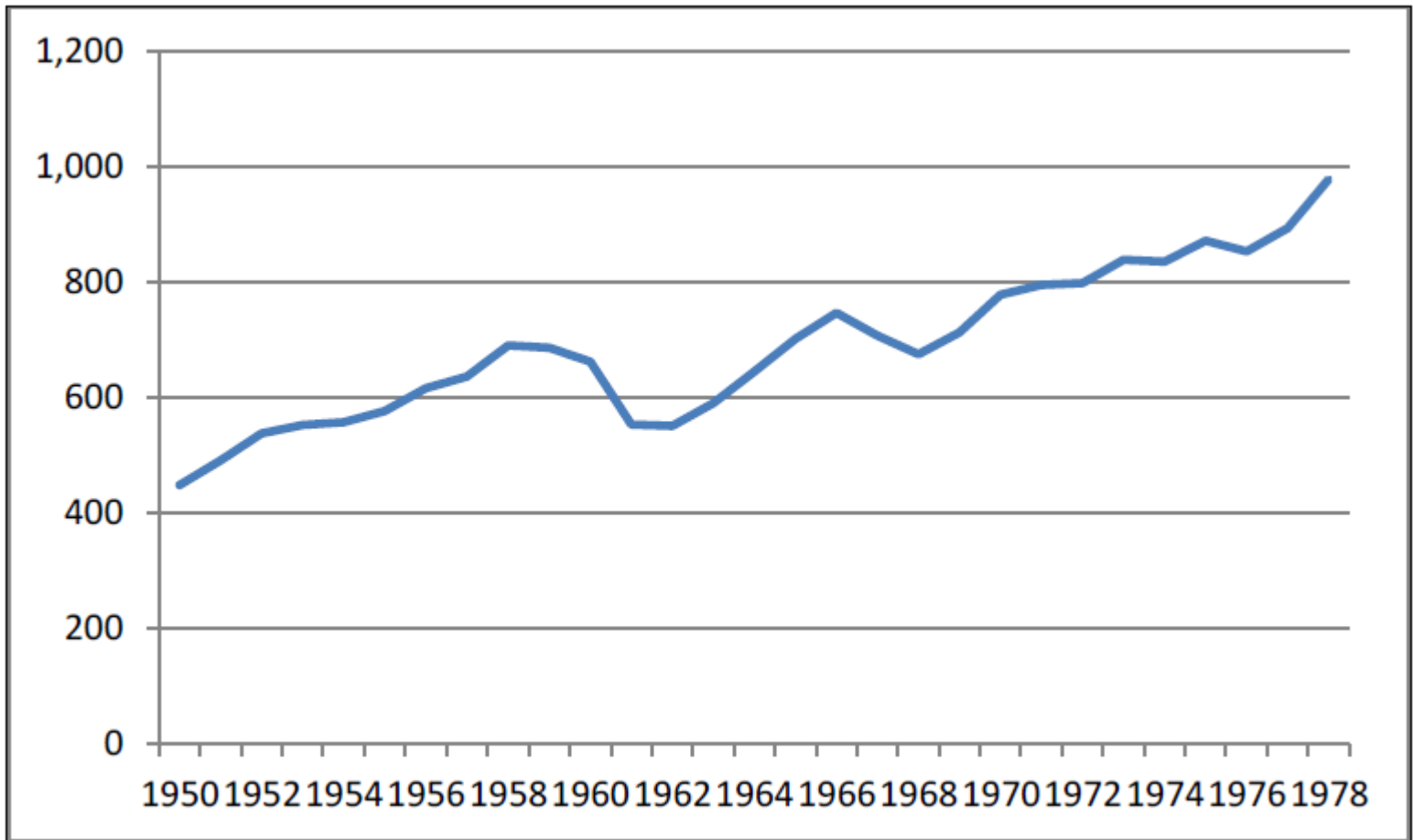
Source country distribution of Fortune 500

	1990	1995	2000	2005	2010	2014
United States	164	153	185	170	133	128
European Union	129	148	136	165	149	121
China	0	2	10	20	61	100
Japan	111	141	95	70	68	57
Canada	12	6	13	14	11	10
South Korea	11	12	8	12	10	17
Switzerland	11	16	10	12	15	13
Australia	9	4	7	8	8	8
Brazil	3	4	3	4	7	7
Russia	0	0	2	3	7	8
India	0	1	1	5	8	8
Others	50	13	30	17	23	23
Total	500	500	500	500	500	500

The history of China's economic development since 1949

1. China's Economy Prior to Reforms (1949-1978)

Chinese Per Capita GDP: 1950-1978 (\$ billions, PPP basis)



Source: Angus Maddison, Historical, Statistics of the World Economy: I-2008 AD.

2. The Introduction of Economic Reforms

- Initiated price and ownership incentives for farmers, which enabled them to sell a portion of their crops on the free market.
- Established four special economic zones along the coast for the purpose of attracting foreign investment, boosting exports, and importing high technology products into China.
- Decentralized economic policymaking in several sectors, especially trade. Economic control of various enterprises was given to provincial and local governments, which were generally allowed to operate and compete on free market principles, rather than under the direction and guidance of state planning.
- Citizens were encouraged to start their own businesses.

2. The Introduction of Economic Reforms

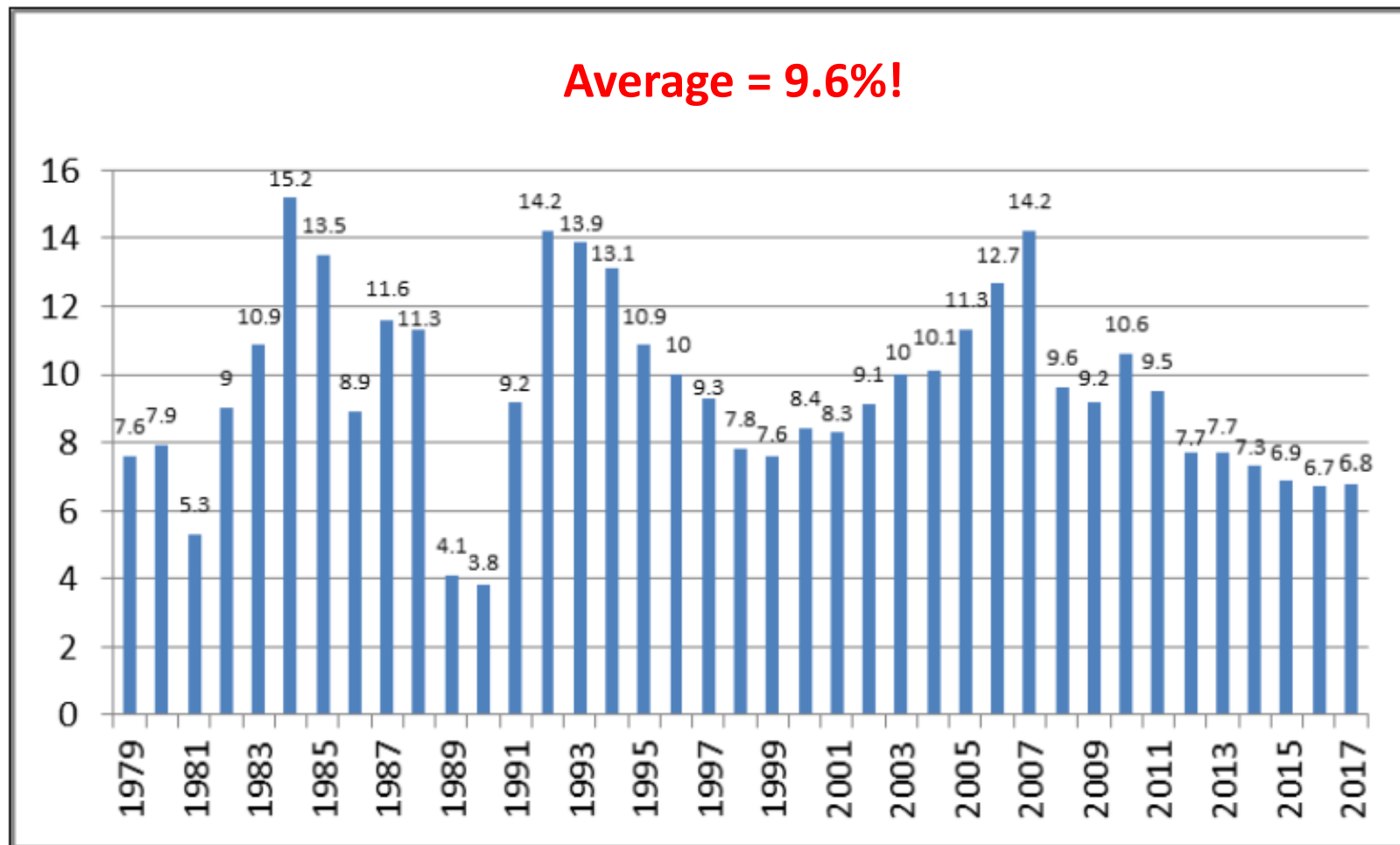
- Additional coastal regions and cities were designated as open cities and development zones, which allowed them to experiment with free-market reforms and to offer tax and trade incentives to attract foreign investment.
- State price controls on a wide range of products were gradually eliminated.
- Trade liberalization was also a major key to China's economic success. Removing trade barriers encouraged greater competition and attracted FDI inflows.

“Black cat, white cat, what does it matter what color the cat is as long as it catches mice? ”

“Crossing the river by touching the stones.”

3. China's Economic Growth and Reforms: (1979-the Present)

Chinese real GDP growth: 1979-2017 (percent)



Source: IMF, and Chinese National Bureau of Statistics.

3. China's Economic Growth and Reforms: (1979-the Present)

- **Causes of China's Economic Growth:**
 - large-scale capital investment;
 - rapid productivity growth.

Major challenges facing the Chinese economy

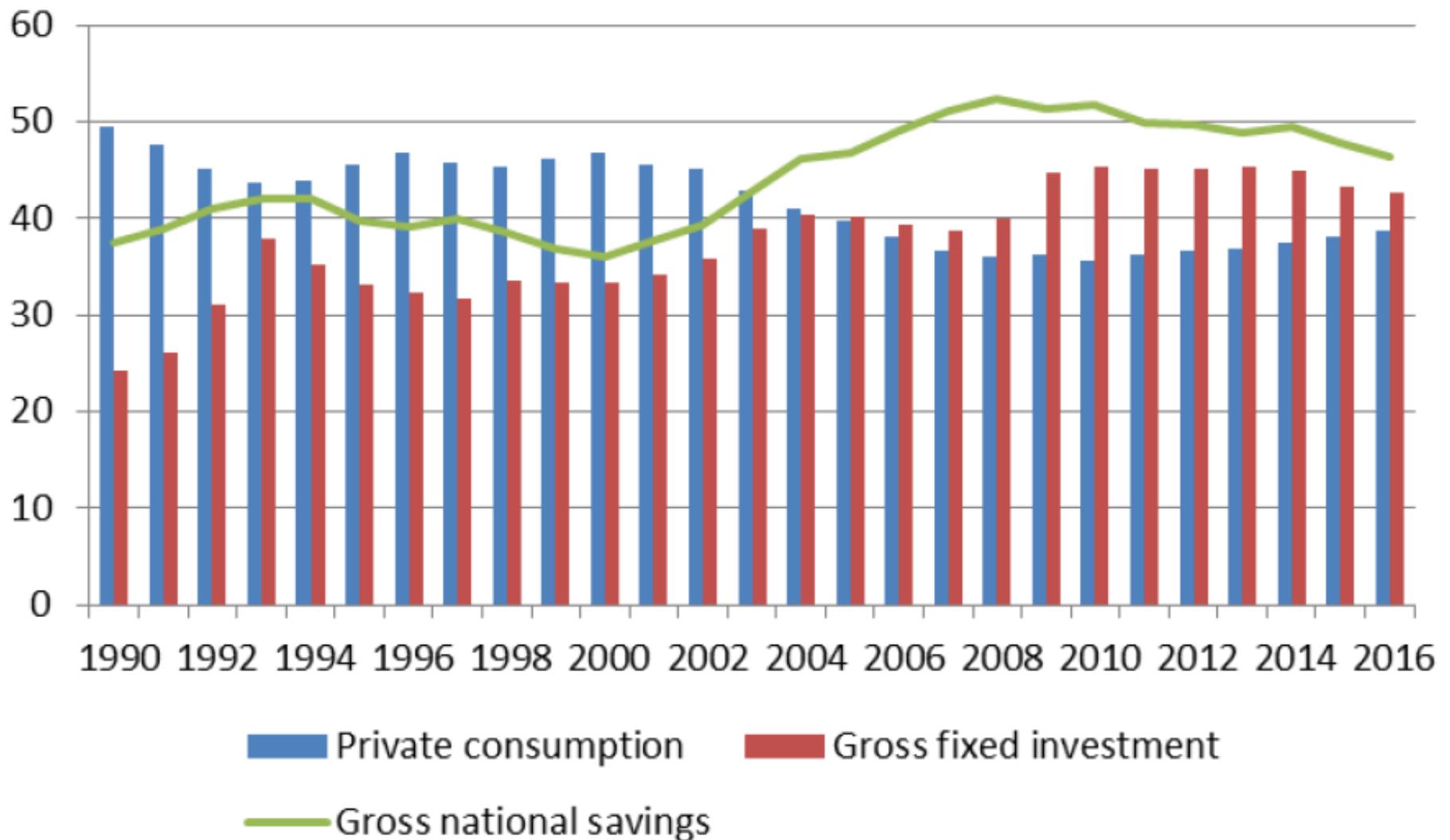
Questions?

- Is China's rapid growth sustainable?
- Can China avoid Middle-Income Trap?

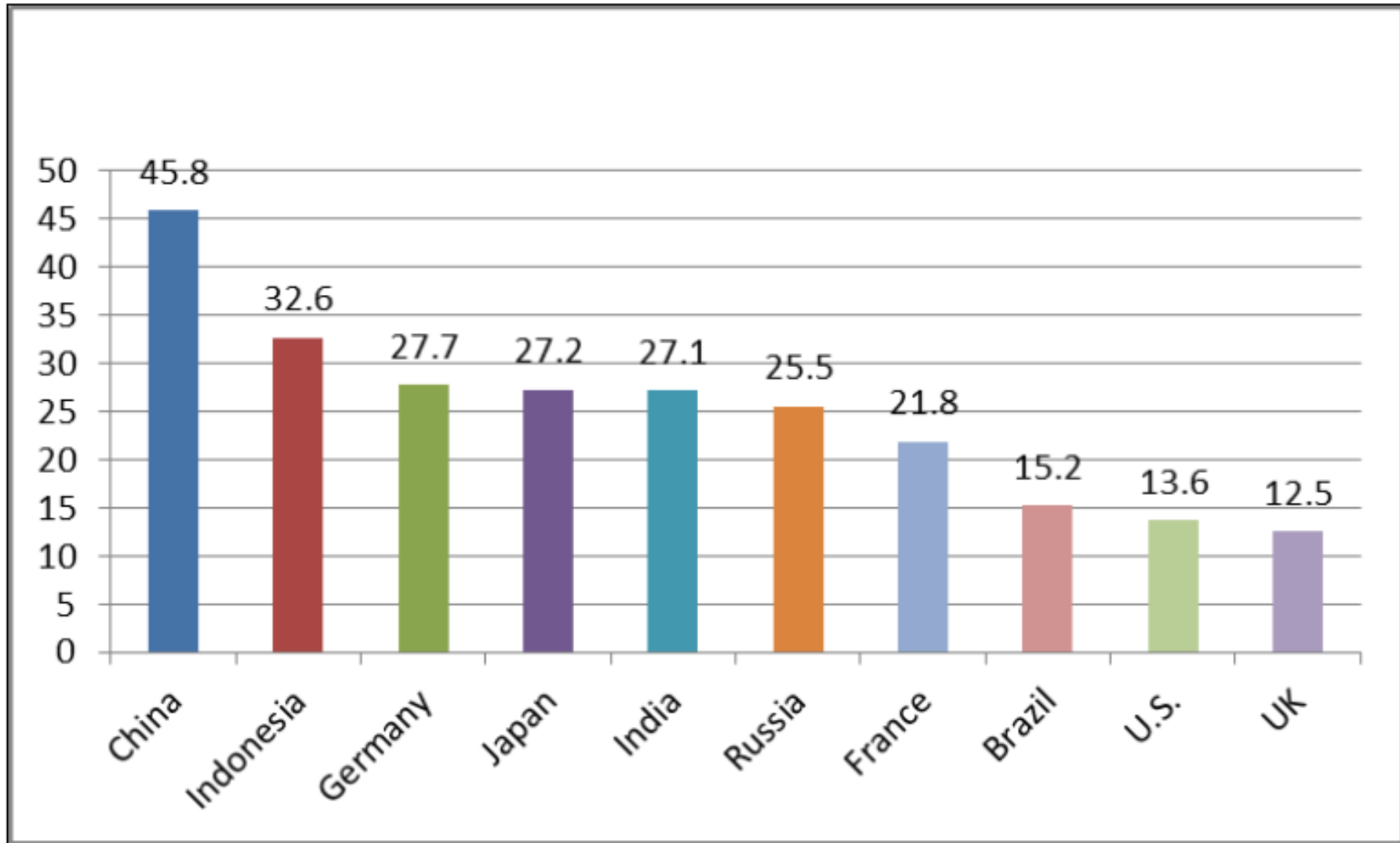
1. The old growth model is not sustainable

- The old drivers of economic growth are **fixed investment and export**.
- Policies employed in the past have entailed a number of costs:
 - heavy pollution
 - widening income inequality
 - overcapacity in many industries
 - an inefficient financial system and rising corporate debt
 - numerous imbalances in the economy

Chinese Gross Savings, Gross Fixed Investment, and Private Consumption as a Percentage of GDP: 1990-2016 (percent)

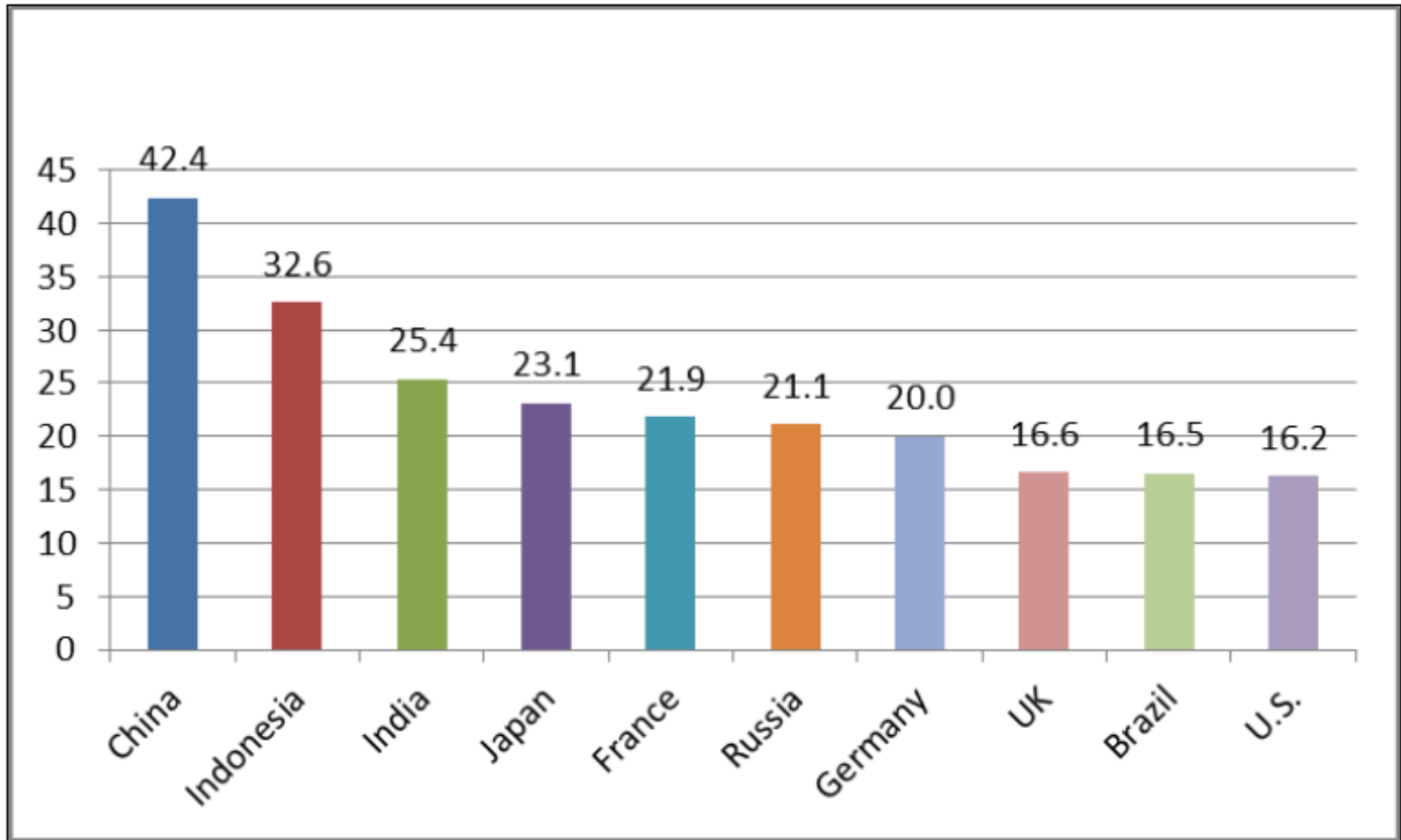


Comparison of **Gross Savings** Rates for Major Global Economies in 2016 (percentage of GDP)



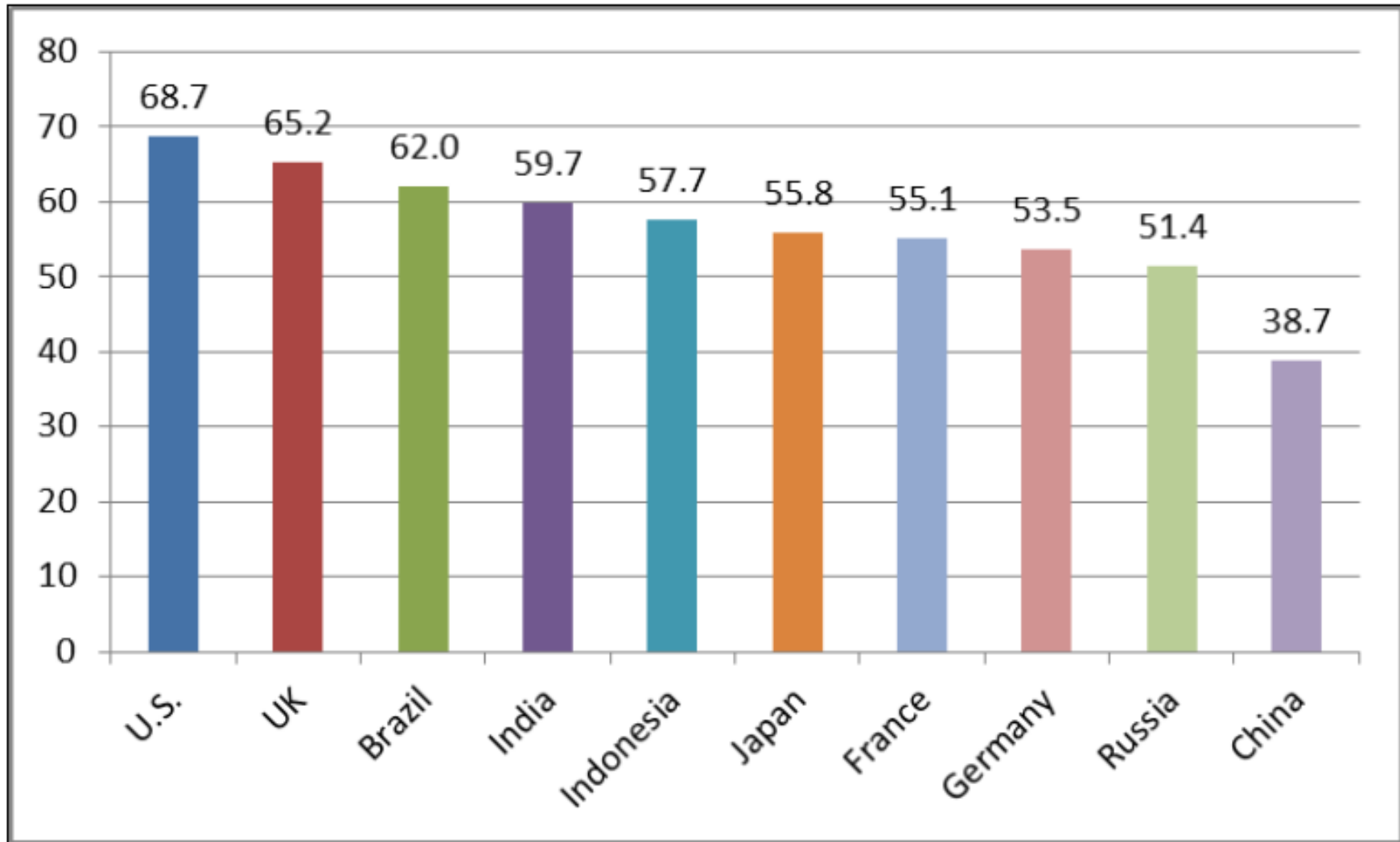
Source: Economist Intelligence Unit.

Comparison of **Gross Fixed Investment** for Major Global Economies in 2016 (percentage of GDP)



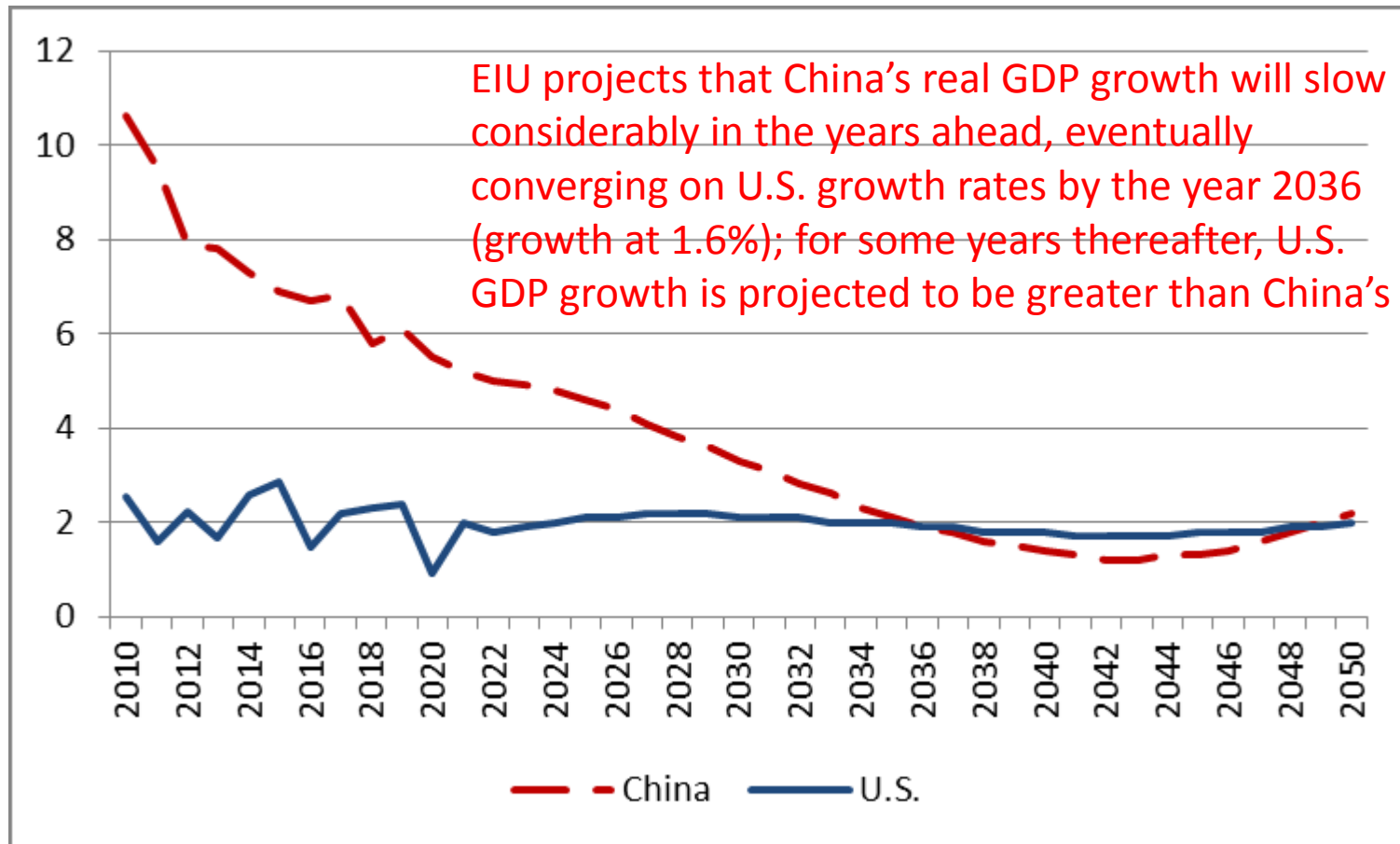
Source: Economist Intelligence Unit.

Comparison of **Private Consumption** of Major Global Economies in 2016 (percentage of GDP)



Source: Economist Intelligence Unit.

U.S. and Chinese Real GDP Growth Rates in 2010-2017 and Projections through 2050 (percent)



Source: Economist Intelligence Unit Database (accessed on January 26, 2018).

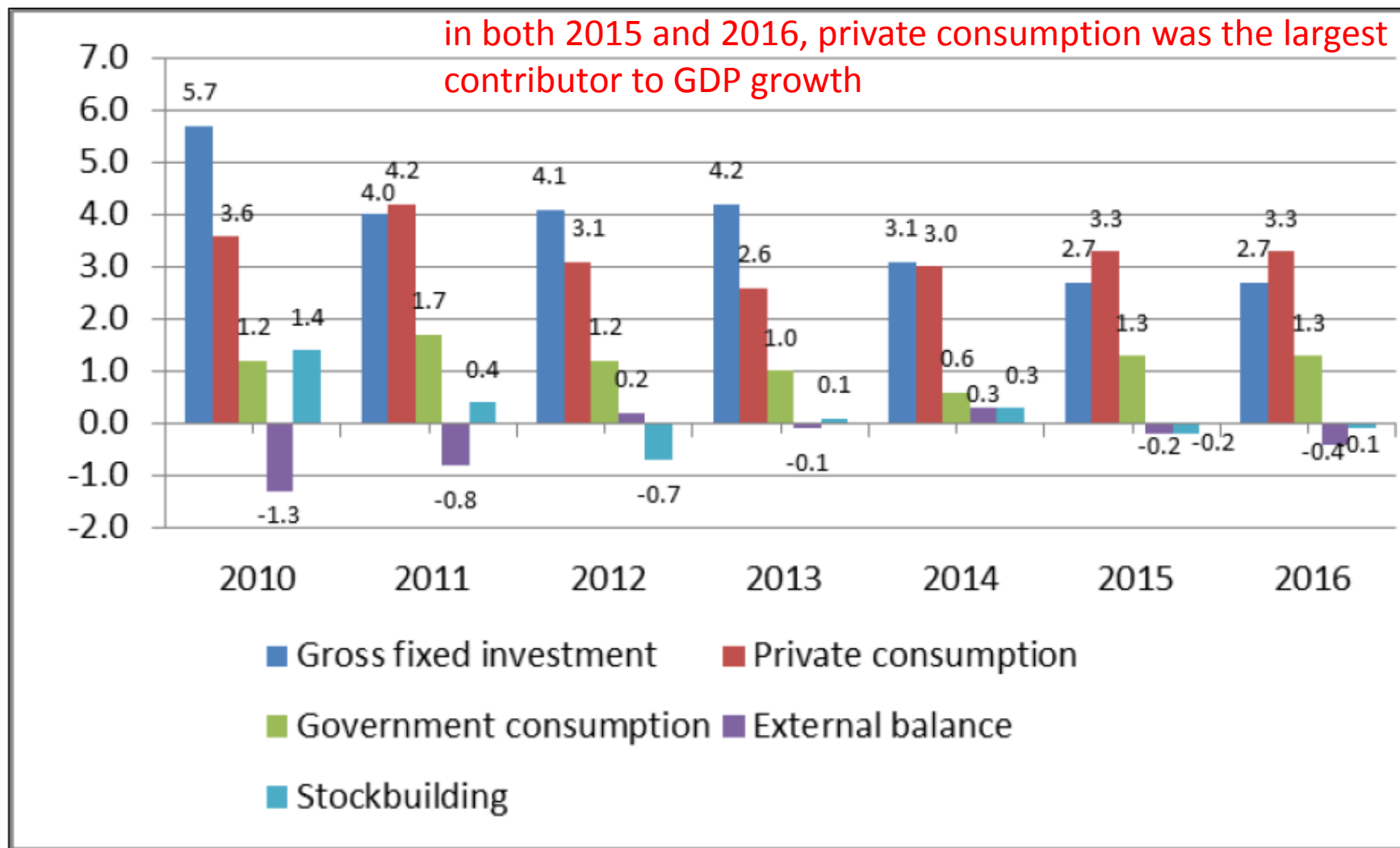
Notes: Long-range economic projections should be viewed with caution. EIU's projections differ from those of the IMF in Figure 4.

A new growth model is developed...

- The Chinese government has embraced slower economic growth, referring to it as the “**new normal**” and acknowledging the need for China to embrace a new growth model.
- The new drivers of economic growth are **private consumption, services, and innovation**.
- A more “smart” economic growth, which seeks to reduce reliance on energy-intensive and high-polluting industries and rely more on high technology, green energy, and services.
- China also has indicated it wants to obtain more balanced economic growth.

Some Indicators of Rebalancing: fixed investment and private consumption

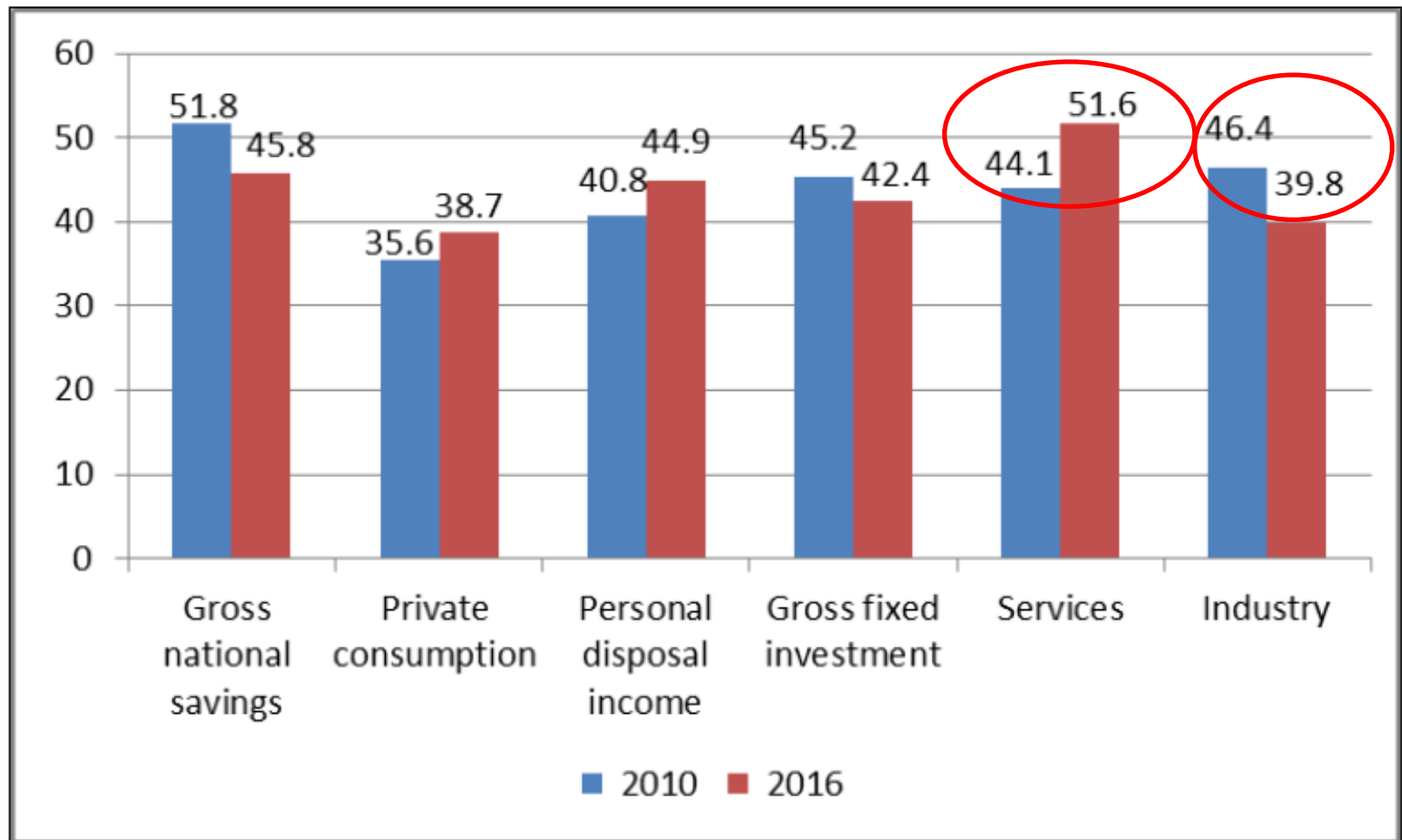
Sources of Chinese GDP Growth:2010-2016: Percentage Points



Source: Economist Intelligence Unit.

Some Indicators of Rebalancing: sector composition

Summary of Chinese Economic Rebalancing: 2010 Versus 2016
(percentage of GDP)



Source: Economist Intelligence Unit.

Some Indicators of Rebalancing: sector composition

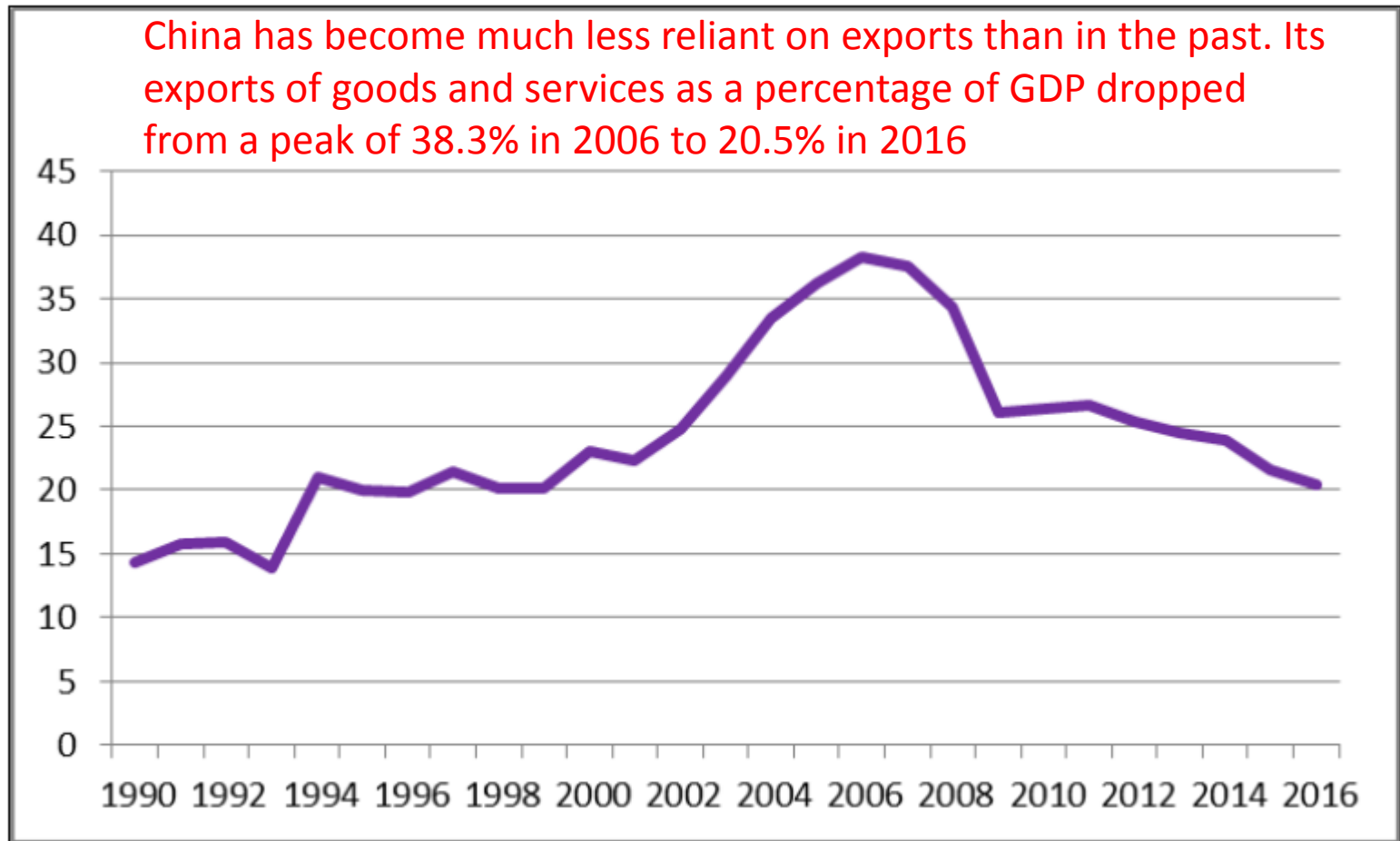
China: Structure of the Economy													
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Distribution of GDP (%)													
Primary Sector	12.9%	11.6%	10.6%	10.3%	10.3%	9.8%	9.5%	9.4%	9.4%	9.3%	9.1%	8.9%	8.6%
Secondary Sector	45.9%	47.0%	47.6%	46.9%	46.9%	45.9%	46.4%	46.4%	45.3%	44.0%	43.1%	40.9%	39.8%
Tertiary Sector	41.2%	41.3%	41.8%	42.9%	42.8%	44.3%	44.1%	44.2%	45.3%	46.7%	47.8%	50.2%	51.6%
Distribution of Labor (%)													
Primary Sector	46.7%	44.8%	42.6%	40.8%	39.6%	38.1%	36.7%	34.8%	33.6%	31.4%	29.5%	28.3%	27.7%
Secondary Sector	22.5%	23.8%	25.2%	26.8%	27.2%	27.8%	28.7%	29.5%	30.3%	30.1%	29.9%	29.3%	28.8%
Tertiary Sector	30.6%	31.4%	32.2%	32.4%	33.2%	34.1%	34.6%	35.7%	36.1%	38.5%	40.6%	42.4%	43.5%
State Sector*	9.0%	8.7%	8.6%	8.5%	8.5%	8.5%	8.6%	8.8%	8.9%	8.3%	8.2%	8.0%	8.0%

Source: China Statistical Yearbook 2017

*State-owned units (urban employed persons) exclude townships and village enterprises

Some Indicators of Rebalancing: Trade

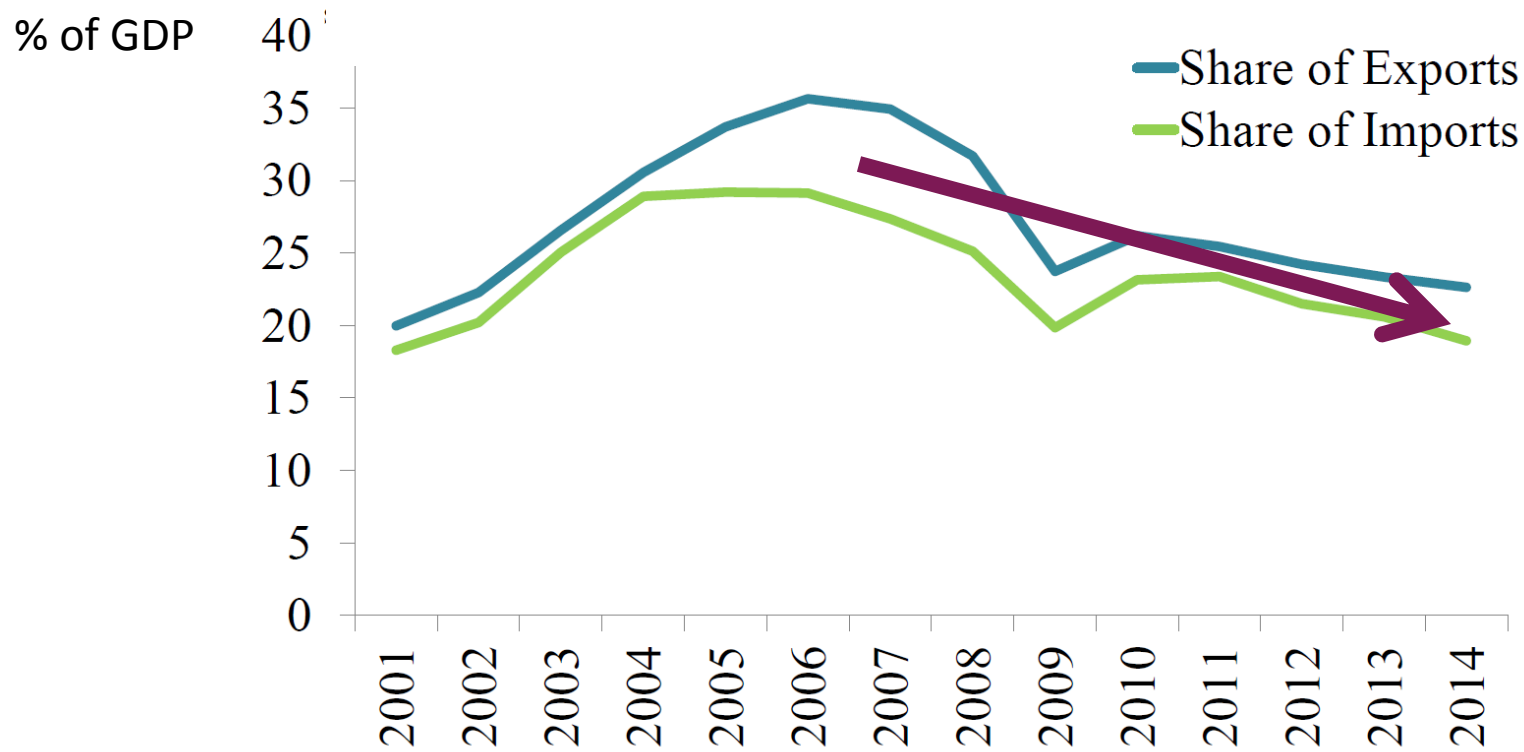
Chinese Exports of Goods and Services: 1990-2016 Percentage of GDP



Source: Economist Intelligence Unit.

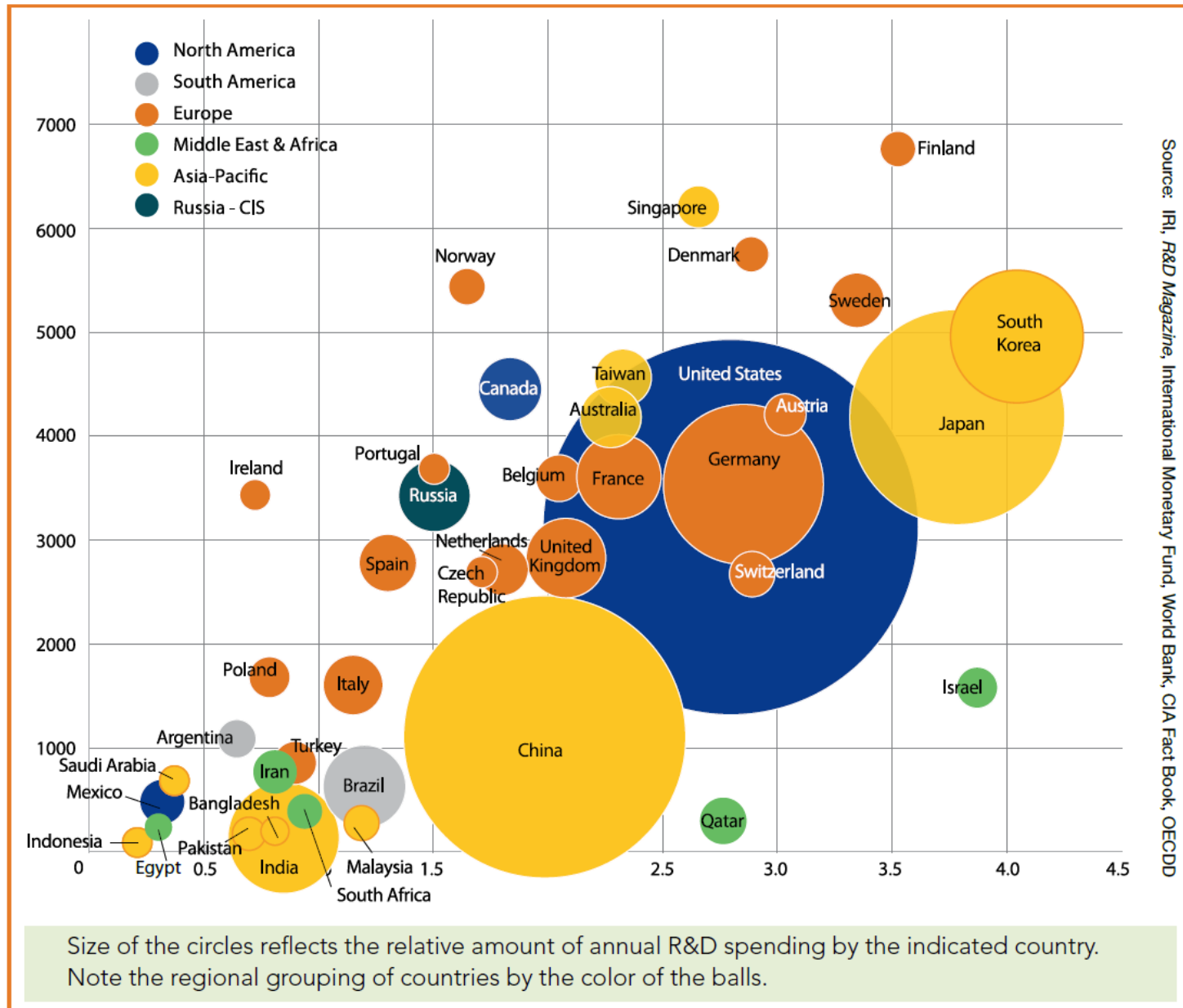
Trade's relative importance in China has peaked, in part because services are less trade-intensive than manufacturing.

Imports and Exports, 2001 – 2014



Source: Nicholas Lardy

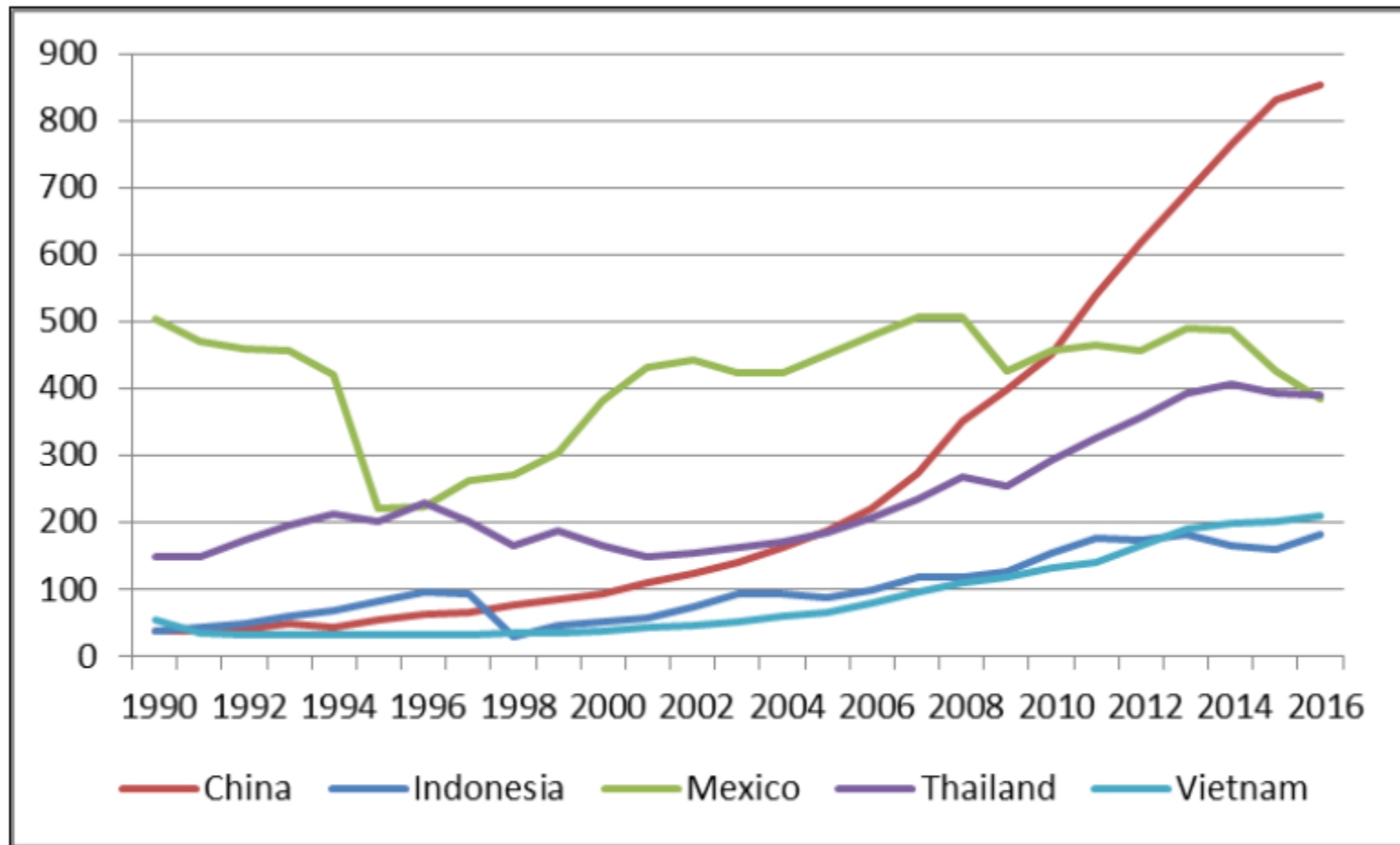
Some Indicators of Rebalancing: Innovation



Reasons for China's growth slow-down

- Natural convergence (though far from complete)
 - Rising costs of labor & land
 - Services have a lower rate of productivity growth
 - Technical catch-up
 - Capital/labor ratio
 - Rural urban migration
- Demographic challenges
 - One child policy and the size of Chinese workforce
 - Aging
- Environmental challenges

Average Monthly Wages for China and other Selected Countries: 1990-2016 (nominal U.S. dollars)



Source: Economist Intelligence Unit.

Notes: Because data are listed in U.S. dollars rather than local currency, changes to wages may also partially reflect changes to exchange rates with the U.S. dollar. However, such data may reflect average labor costs in dollars that U.S.-invested firms might face in their overseas operations.

Avoiding the Middle-Income Trap

- Several developing economies (notably in Asia and Latin America) experienced rapid economic development and growth during the 1960s and 1970s by implementing some of the same policies that China has utilized to date to develop their economies, such as measures to boost exports and to promote and protect certain industries.
- However, at some point in their development, several of these countries began to experience economic stagnation (or much slower growth compared to previous levels) over a sustained period of time.
- While several developing economies transitioned to a middle-income economy, defined by the World Bank as per capita gross national income (GNI) in 2016 of \$1,006-\$12,235 (using average exchange rates, adjusted for inflation), only a handful of economies (such as Japan and South Korea) have maintained rapid economic growth long enough to become “high-income” countries (per capita GNI of \$12,236 or more).
- China, which is currently a “high middle-income country,” with a per capita GNI of \$8,250, may be at a crossroads.

Avoiding the Middle-Income Trap

- The Chinese government's 19th Party Congress outlined a number of initiatives to boost productivity and to make China a “country of innovators.”
 - Made in China 2025
 - Belt and Road Initiative
- As a result, the government projects that China can cross the high-income threshold by 2025.