

Competitiveness of Thailand's Manufacturing Sector

Bhanupong

Lecture 13

Course Syllabus

Lecture 13: **Industrial Competitiveness**

- This lecture provides an overview of Thailand's industry with references to the global competitiveness positioning of Thai manufacturing exports.
- We discuss Thailand's diversification of exports, competitive wage and exchange rates.

Key issues

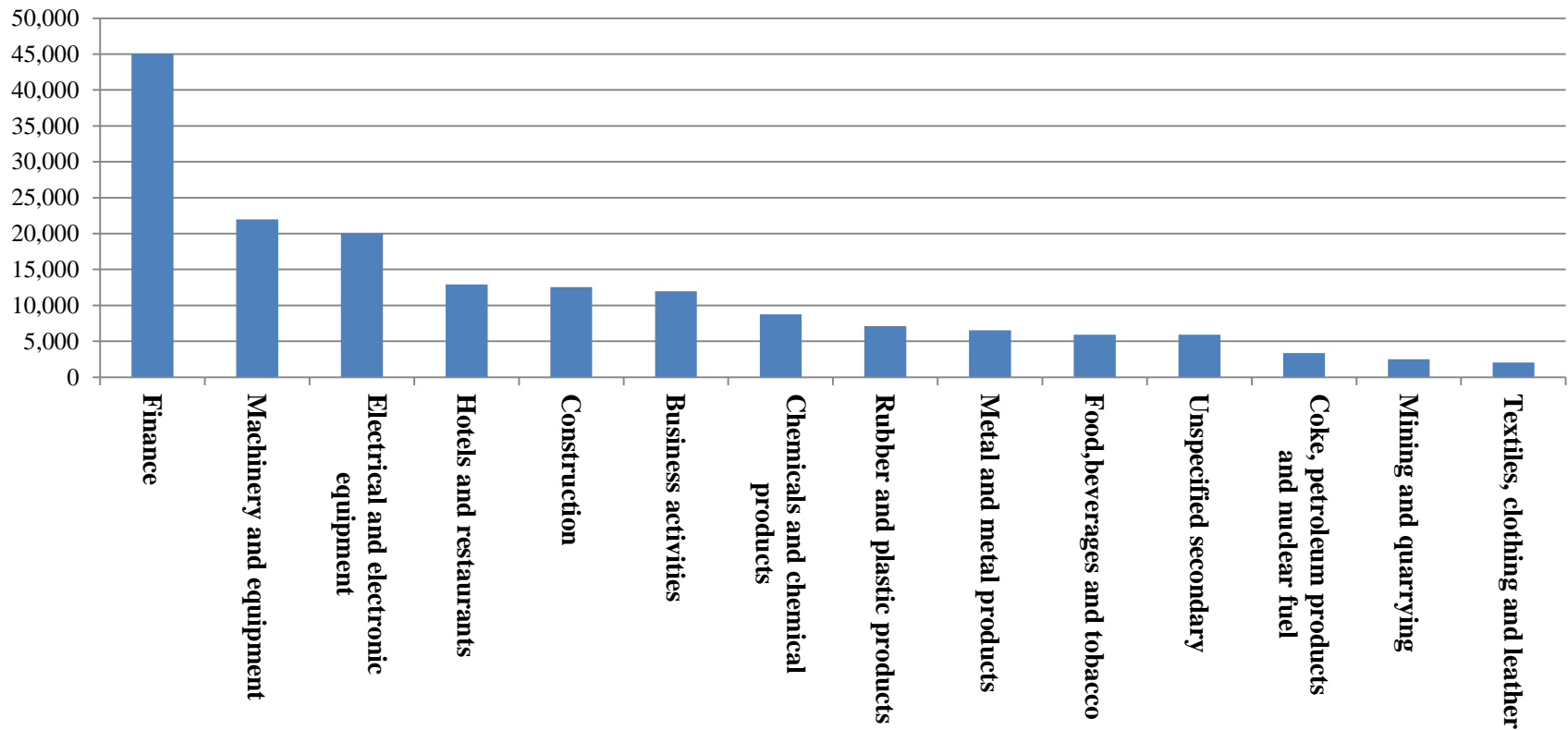
- The importance of FDI for industrial development
- Overview of Thailand's industry
- Global competitiveness
- Thailand's manufacturing sector
- Diversification of exports

The important role of FDI

- With strong value of the baht, rising wage rate, and political uncertainty, foreign direct investment has been directed to other countries in the region; thereby constraining capacity output growth and competitiveness of the industries.
- FDI is the dominant factor determining the success of Thailand's manufactured exports

Manufacturing capital stock deepening through FDI

Thailand's Sectoral FDI stock in 2012
(USD million)

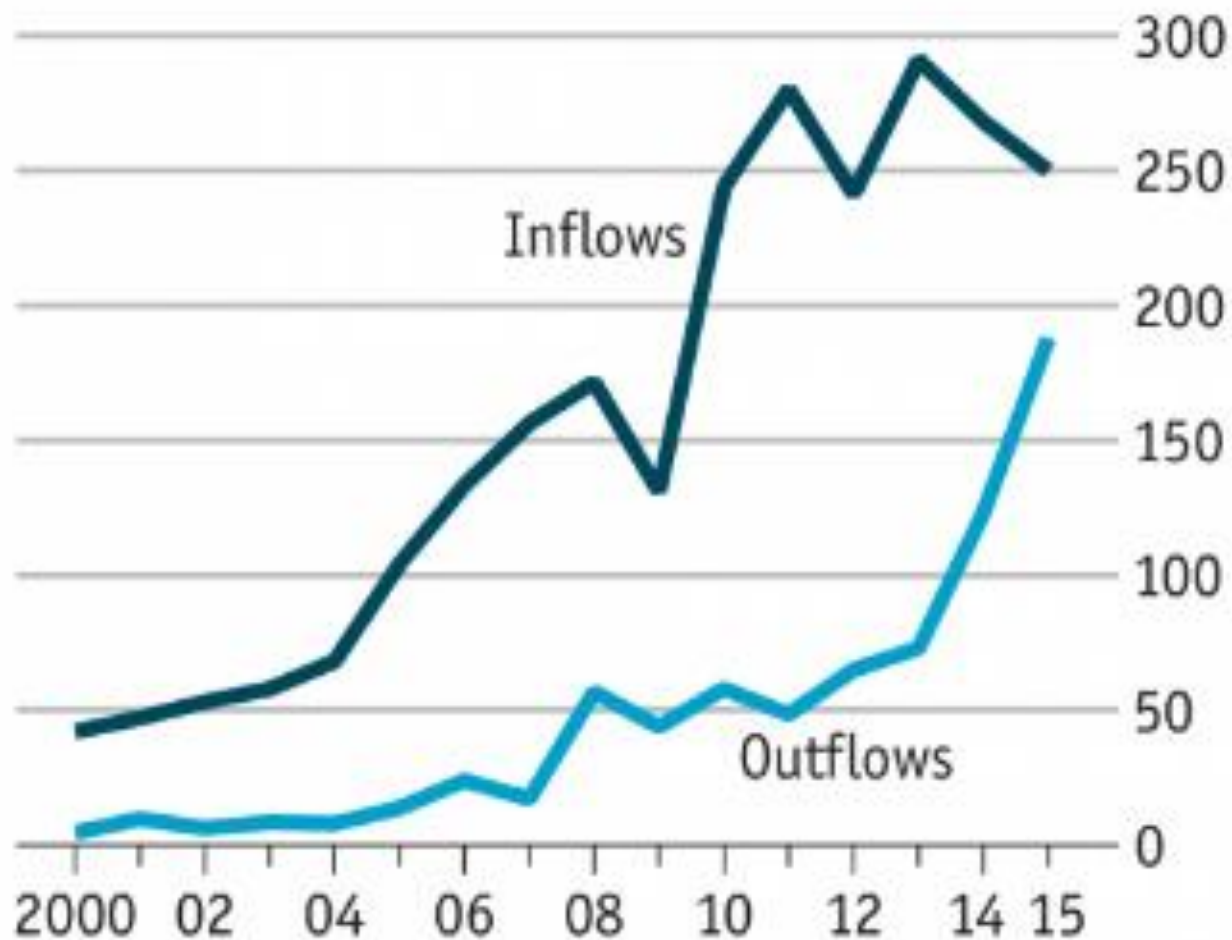


China's inflows of foreign investment

- For two decades, foreign direct investment flooded into China at an astonishing clip.
- But after reaching a peak of some \$300 billion in 2013, foreign inflows have cooled just as Chinese direct investment overseas has skyrocketed.
- To win back jittery investors, China's leaders have promised to liberalize investment laws.
- Several much-heralded revisions to China's foreign-investment laws has come into force. Leaders promise a shift from a regime reliant on politicized administrative approvals to a registration system involving just a short "negative list" of forbidden investments.

Not so hot

China, foreign direct investment, \$bn



Source: World Bank

Damp squib: China's foreign investment inflows

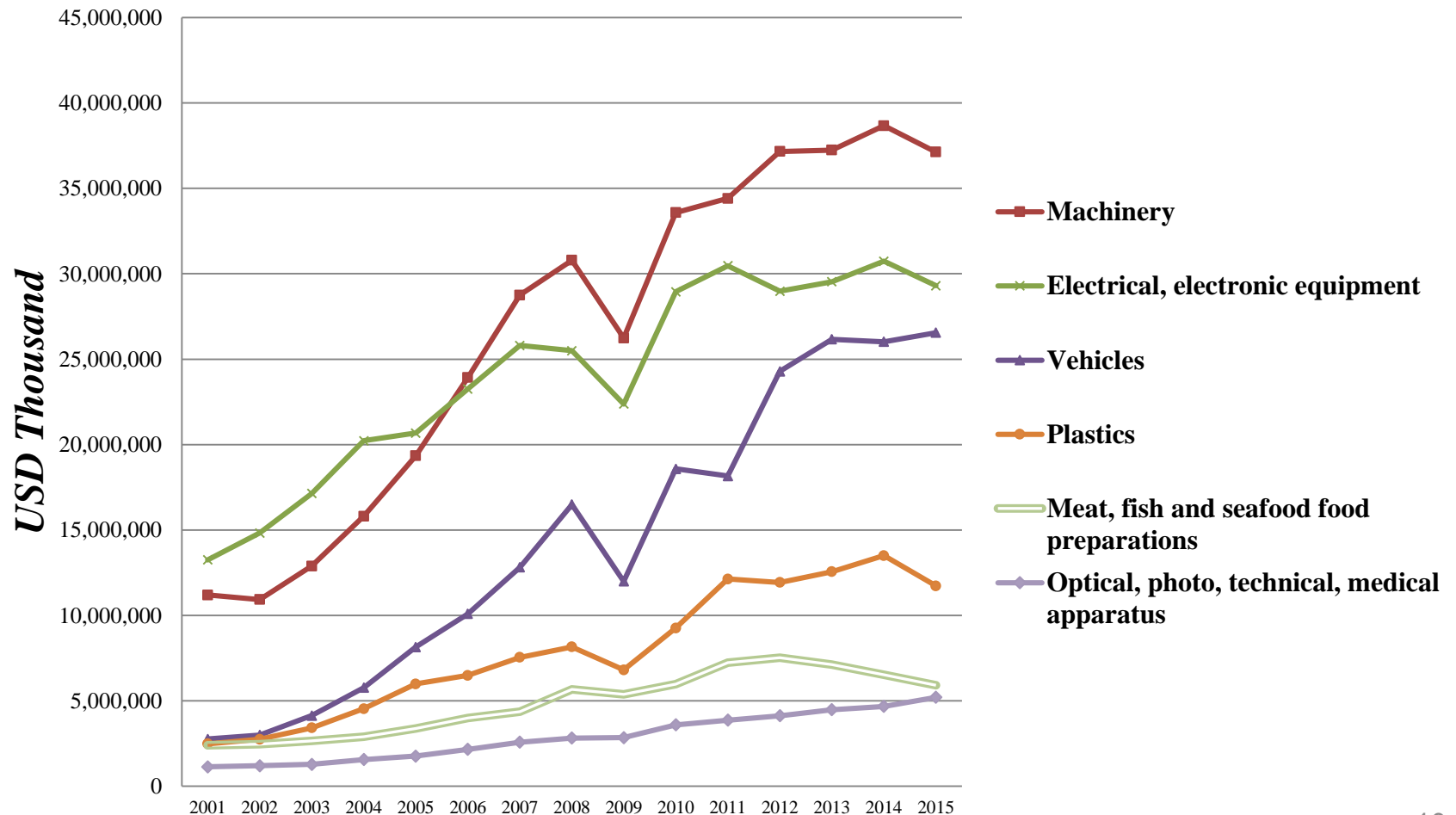
- Sadly there is less to the latest reforms than meets the eye.
- Nothing in them puts foreign firms on an equal legal footing with local ones, for example.
- Also, there are already signs of bureaucratic resistance to the shift to a registration system.
- Chinese leaders must do more if they want to persuade foreign investors the welcome mat is out.

1. Overview of Thailand's industries

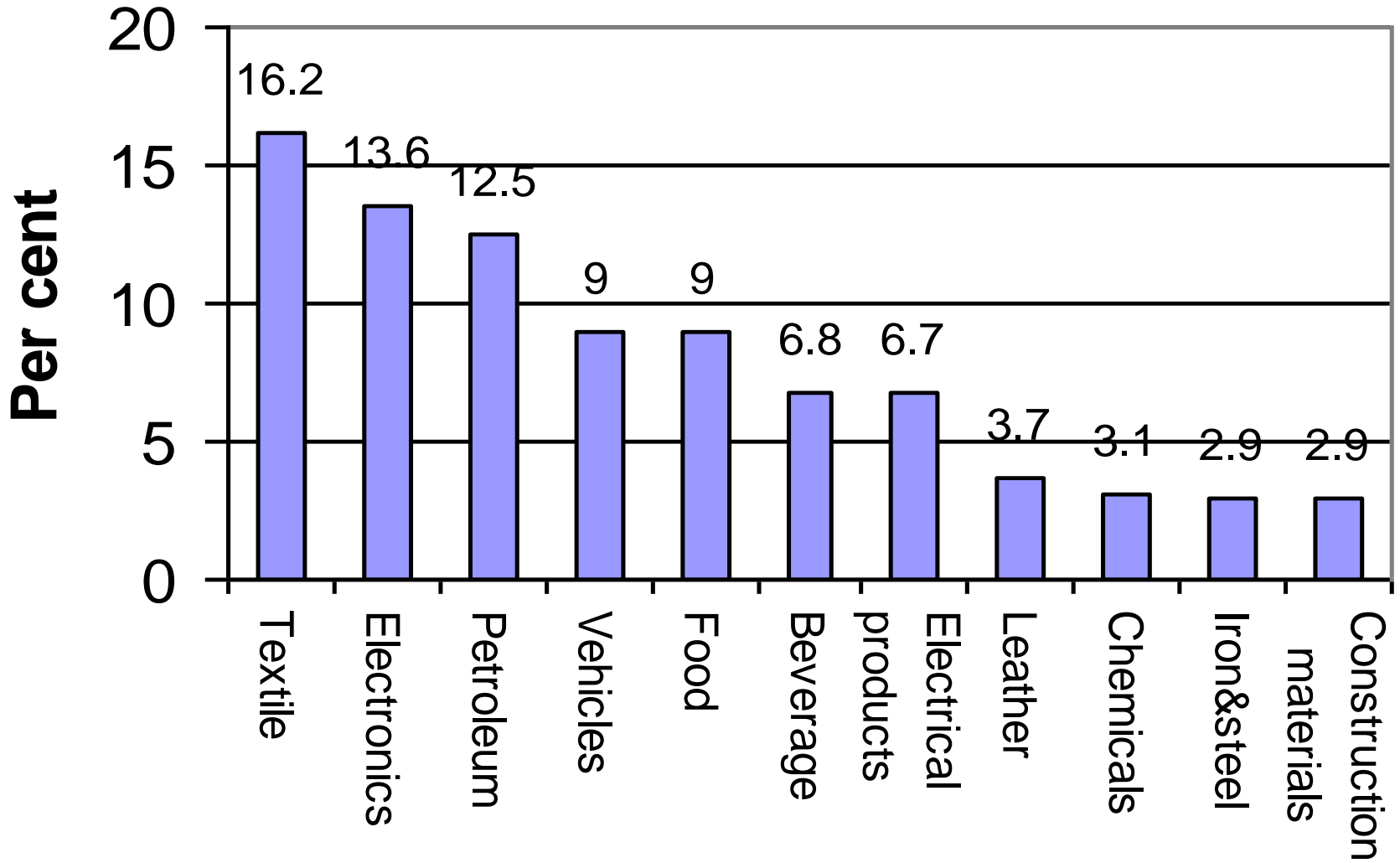
- The growth of Thailand's industry is largely determined by external demand. The world business cycles are responsible for fluctuations in Thailand's manufactured exports.
- Thailand is a price taker in the world markets.
- On the supply side, capital stock of the industry accumulated from substantial flows of foreign direct investment contributed to spectacular export performance in the past.

Export supply is determined by capital stock, export demand by world prices and external demand

Thailand's major manufacturing exports

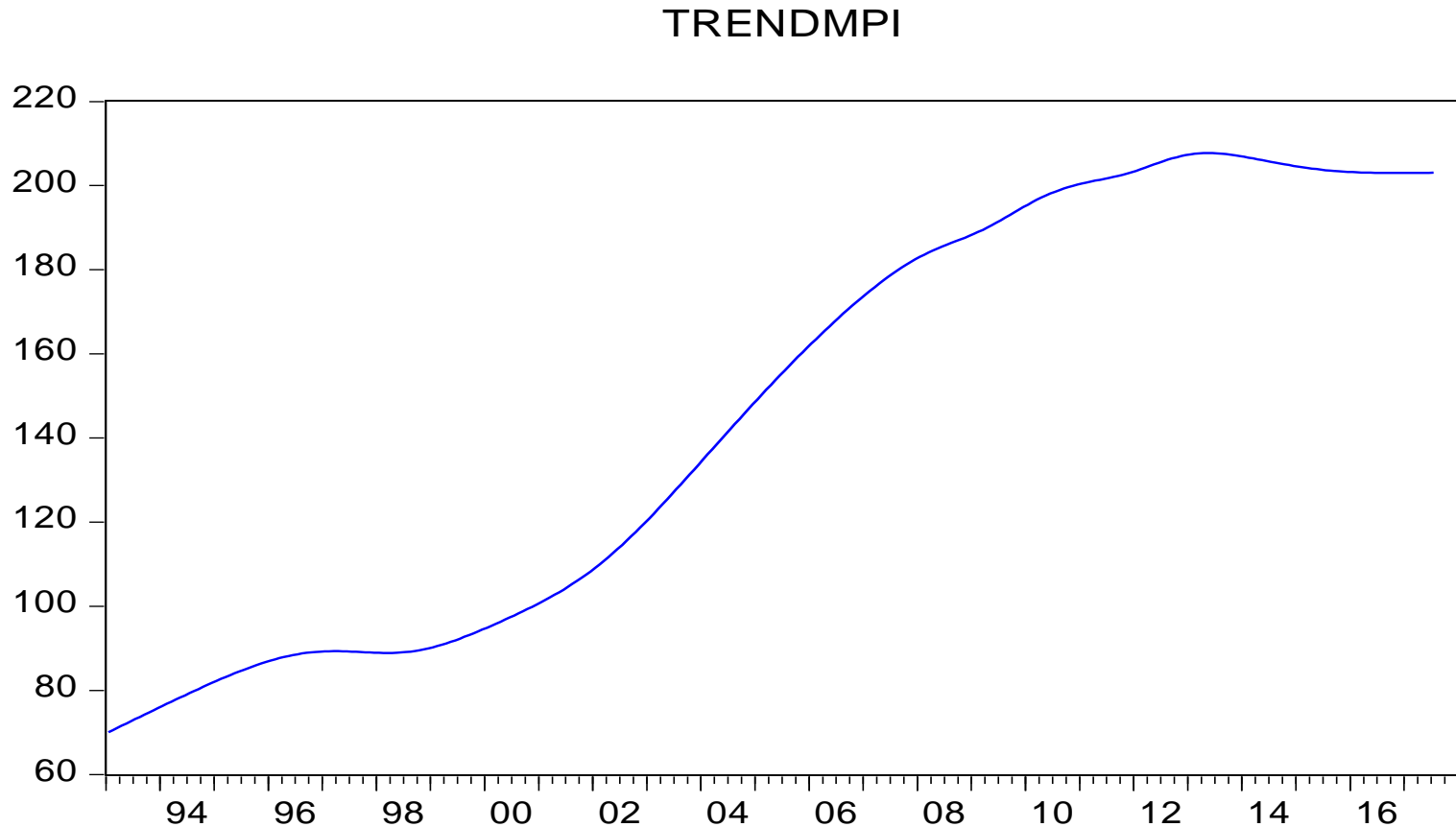


Weight in MPI



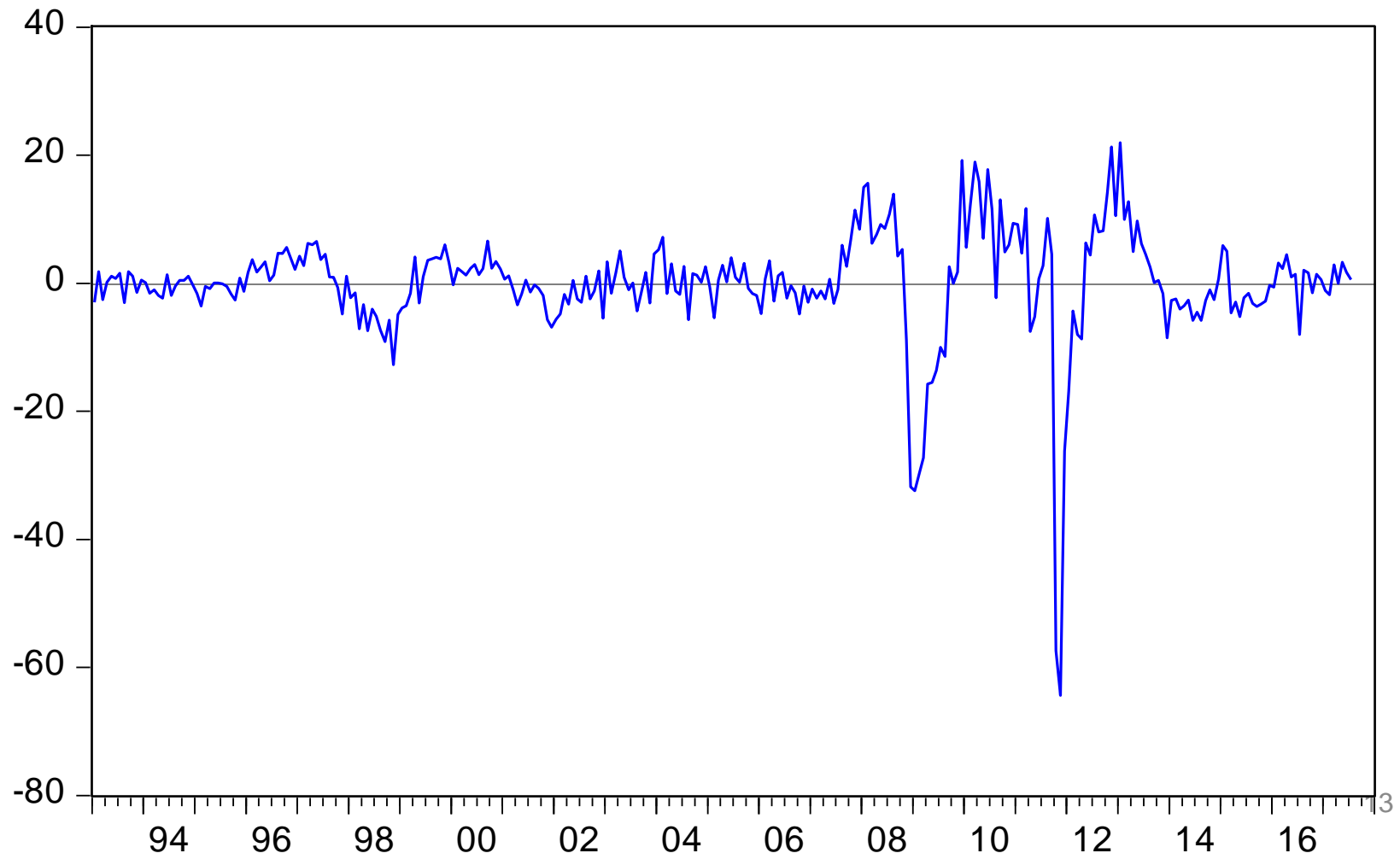
Manufacturing Production Index (MPI)

Long term path: permanent output



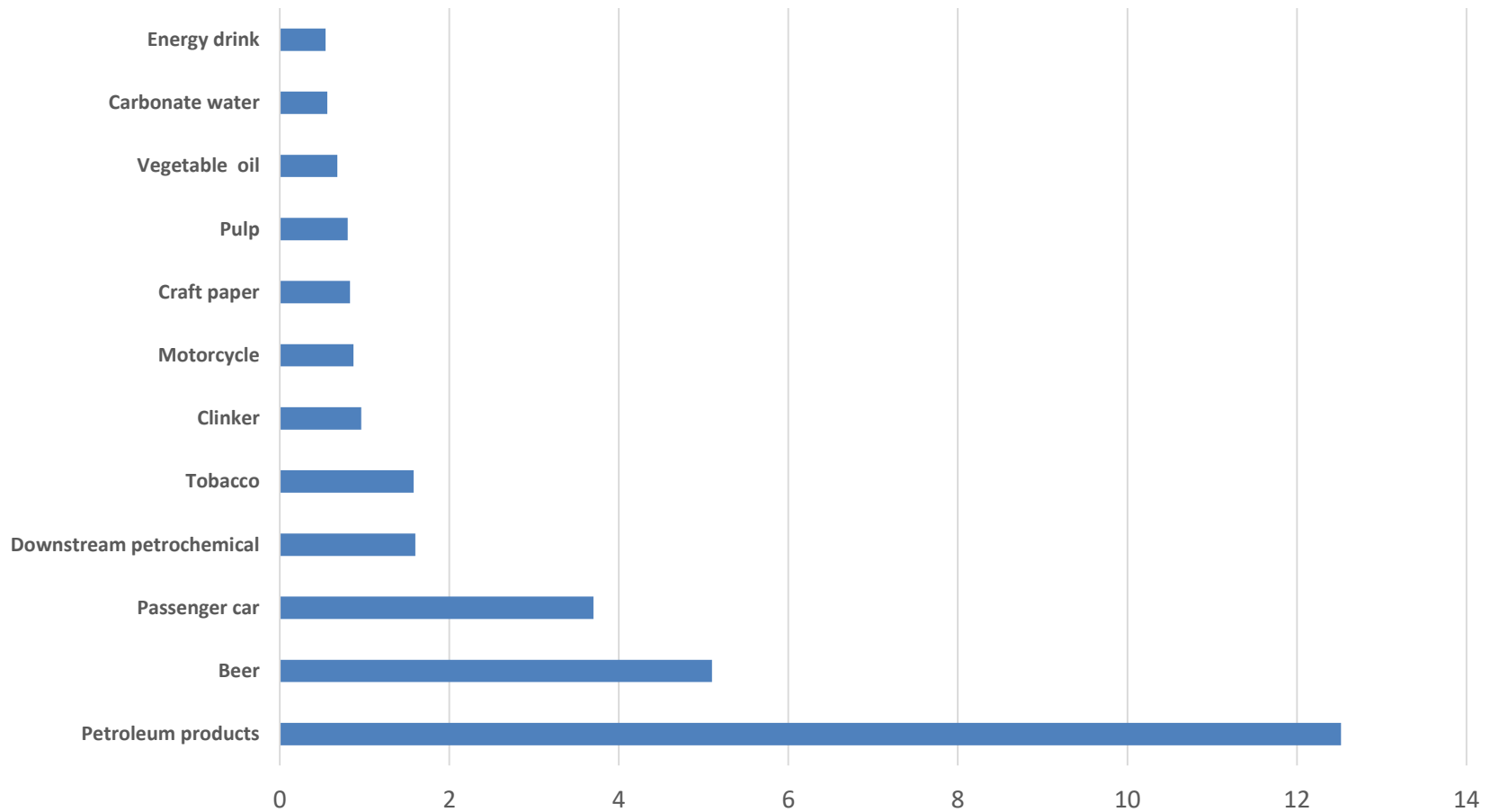
Deviation from the trend: Cyclical component of the actual MPI

CYCLEMPI



Domestic Oriented Industry (Export-output ratio < 0.3)

Weight in MPI (%)

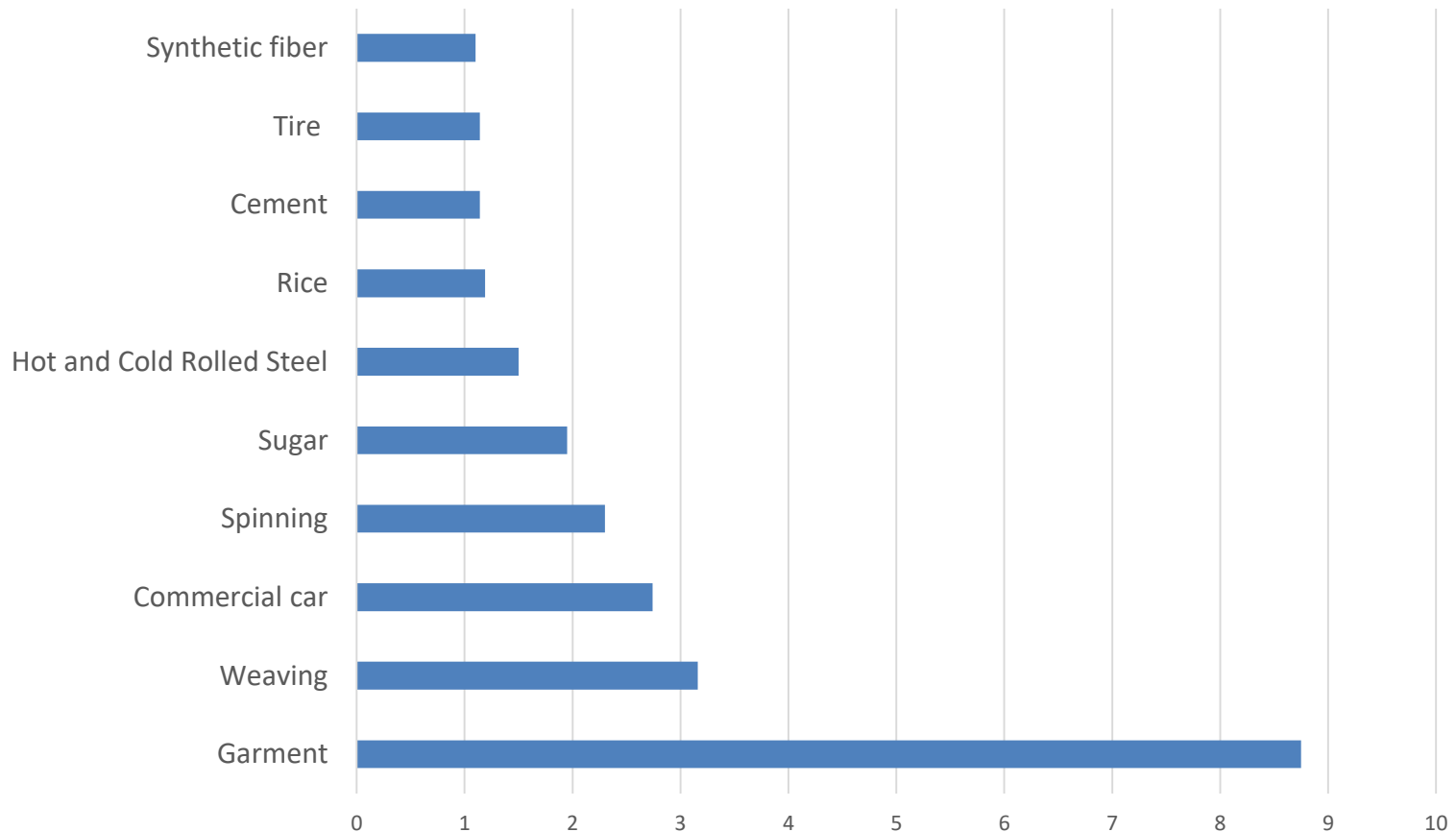


Export-oriented Industry:

$$0.3 < (X/Q) < 0.6$$

Weight in MPI (%)

Export Oriented: Weight in MPI

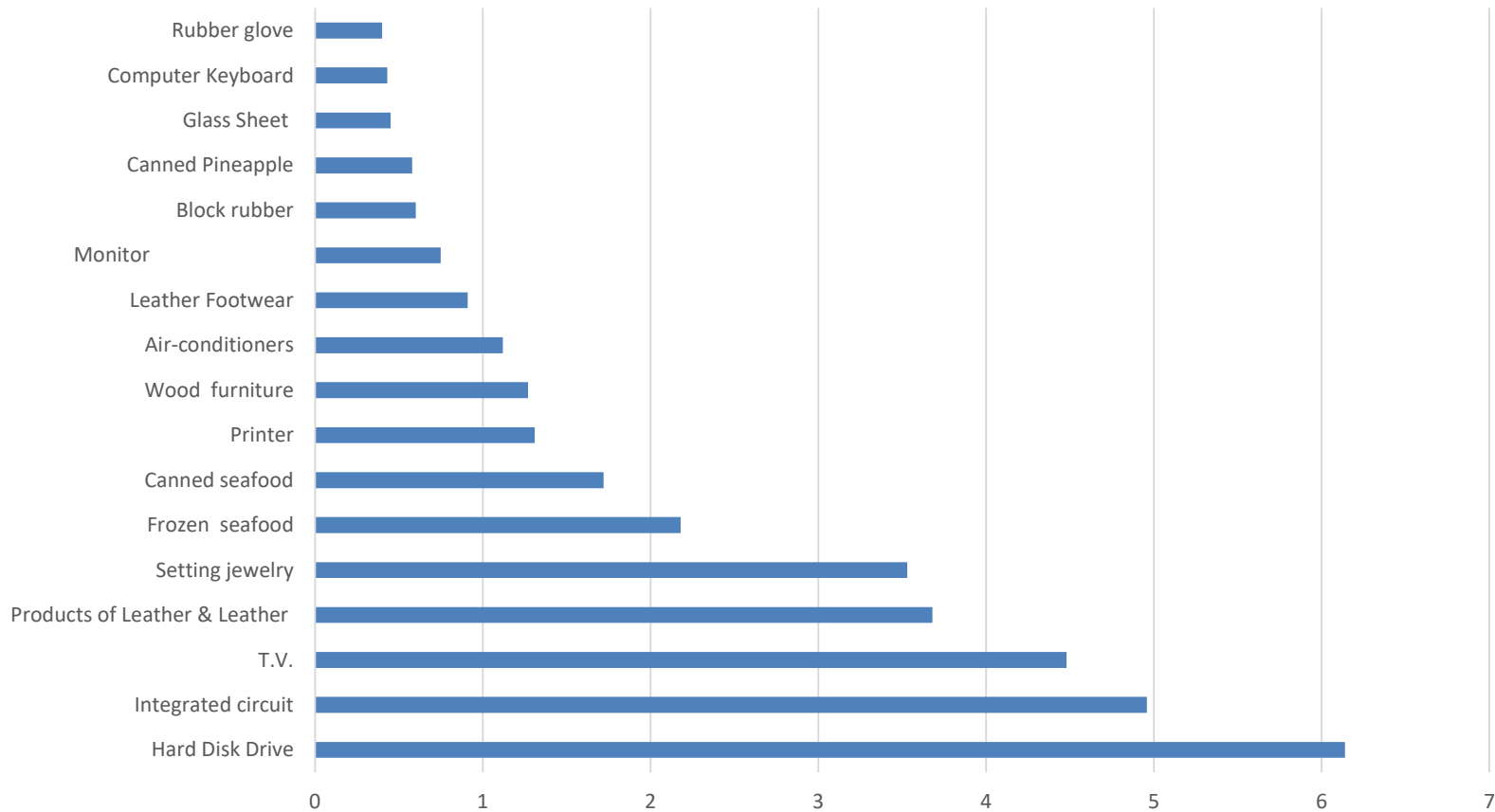


Ultra export-oriented Industry:

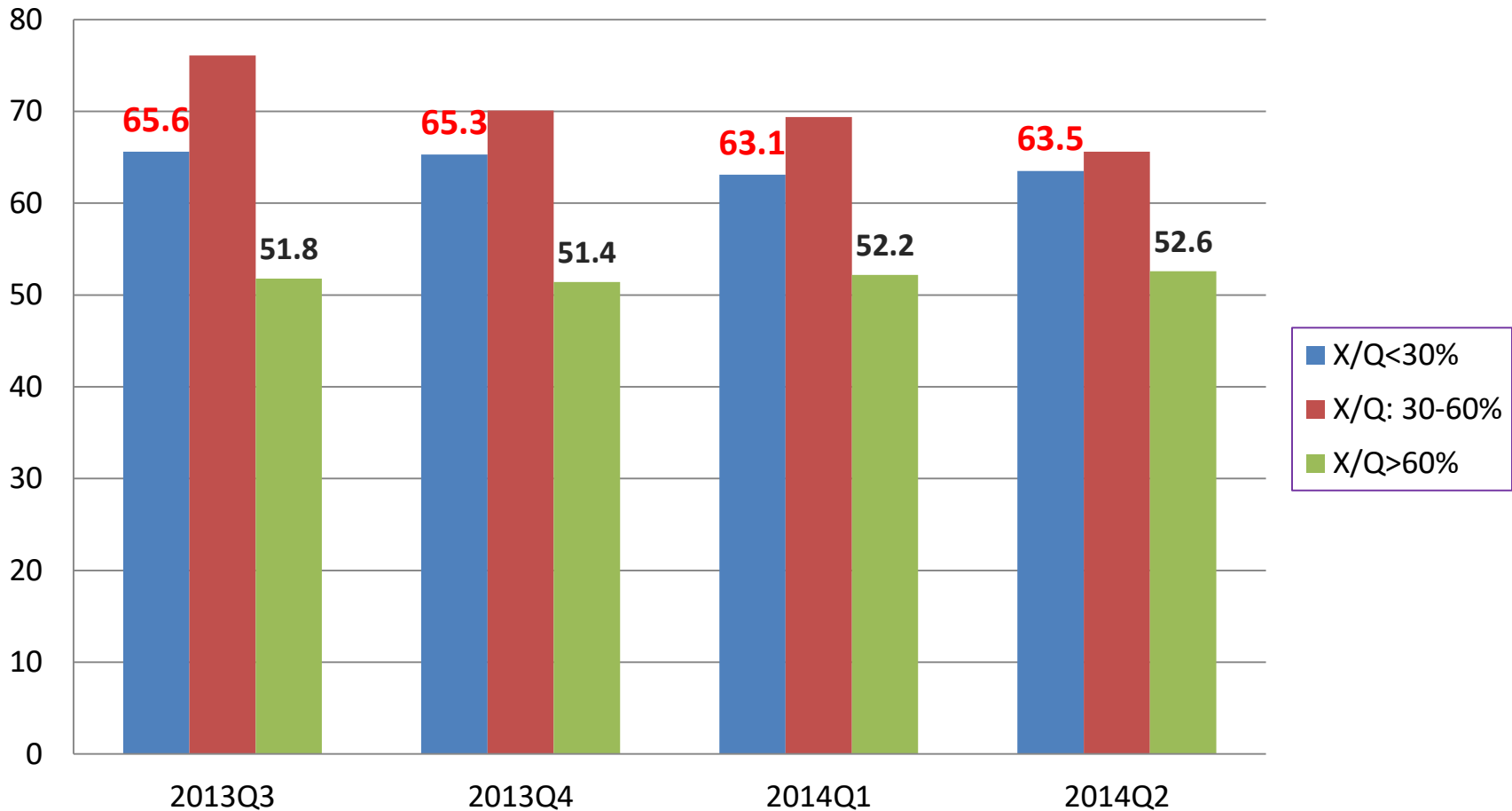
$$(X/Q) > 0.6$$

Weight in MPI (%)

Ultra Exported-Oriented Industry
Weight in MPI



Capacity utilization by type of market orientation



Exported-oriented industries experienced lower capacity utilization than domestic-oriented industries

2. Global Competitiveness

- A country's future prosperity depends on its **growth in productivity**, which government policies can influence.
- Nations compete to choose policies to promote higher living standards.
- International Institute for Management Development (IMD) and **World Economic Forum (WEF)** have their own ways of measuring competitiveness.

Krugman, Paul. "Competitiveness: a dangerous obsession."
Foreign affairs (1994): 28-44.

- International trade is **not** a zero-sum game.
- Countries do not compete in the same way as companies.
- When two countries compete through trade, they both win.
- Recall Adam Smith's gains from exchange and specialization
- "The concept of national competitiveness is elusive."

Paul Krugman

different in principle from asking whether General Motors is competitive in the North American minivan market.

In fact, however, trying to define the competitiveness of a nation is much more problematic than defining that of a corporation. The bottom line for a corporation is literally its bottom line: if a corporation cannot afford to pay its workers, suppliers, and bondholders,

it will go out of business. So when we say that a corporation is uncompetitive, we mean that its market position is unsustainable—that unless it improves its performance, it will cease to exist. Countries, on the other hand, do not go out of business. They may be happy or unhappy with their economic performance, but they have no well-defined bottom line. As a result, the concept of national competitiveness is elusive.



A trade surplus may be a sign of national weakness, a deficit a sign of strength.

Competitiveness and GDP growth relationship

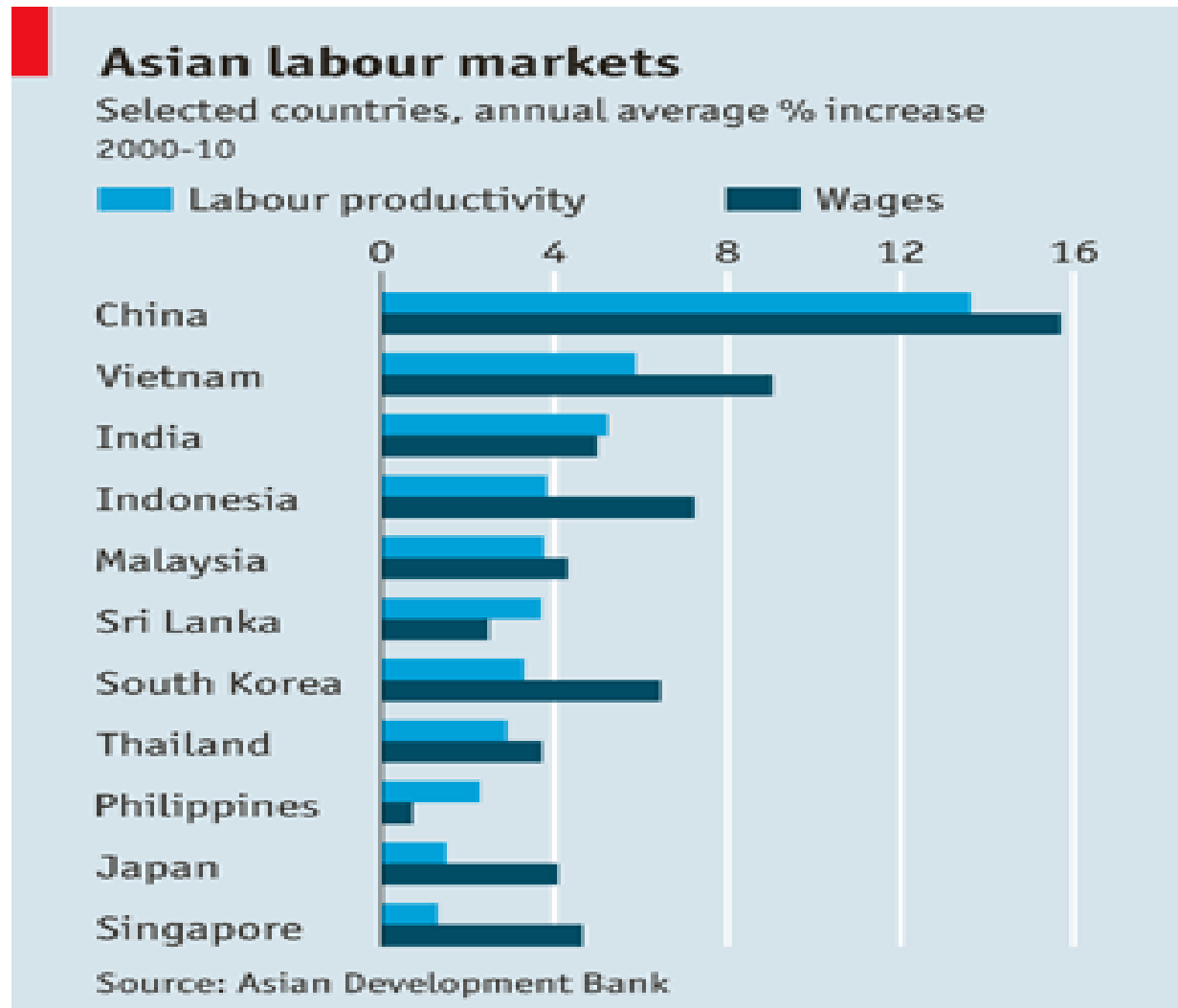
- Is “Competitiveness” a meaningless word?
- Jeffrey Sachs found a fairly **strong correlation** between recent growth rates and the competitiveness index.

Sachs’ definition of competitiveness:

The ability of a country to achieve sustained high rates of growth in GDP per capita.

- Critique: Correlation between the two variables does not guarantee that the competitive index will be a good predictor of economies’ future growth prospects.

Labor productivity growth and wage hikes

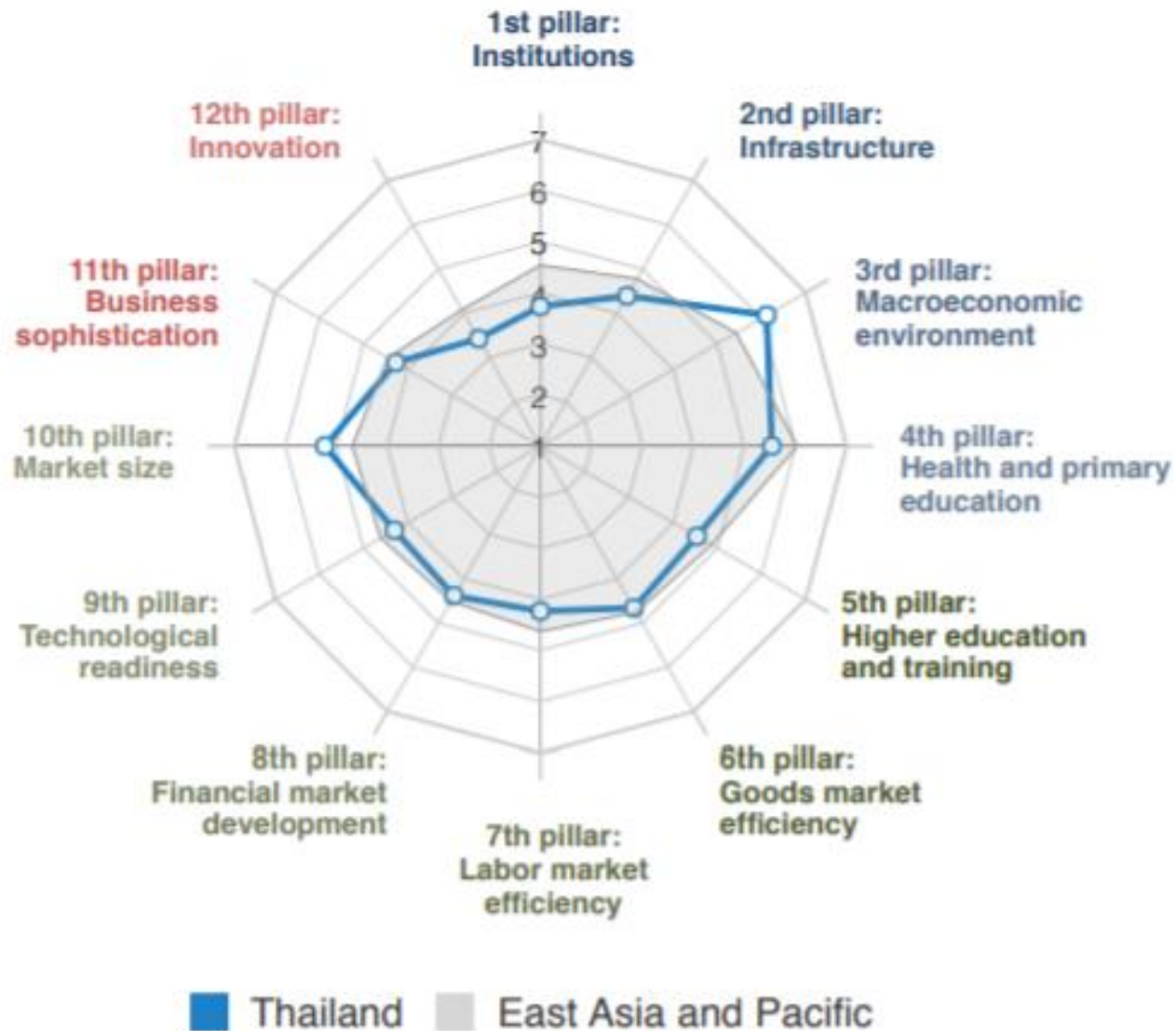


The Global Competitiveness Report 2016-2017

- The Global Competitiveness Report 2016-2017 assesses the competitiveness landscape of 138 economies, providing insight into the drivers of their productivity and prosperity.
- This year's edition highlights that ***declining openness*** is threatening growth and prosperity.
- It also highlights that monetary stimulus measures such as quantitative easing are not enough to sustain growth and must be accompanied by **competitiveness reforms**.
- Key finding points to the fact that updated business practices and investment in **innovation** are now as important as infrastructure, skills and efficient markets.

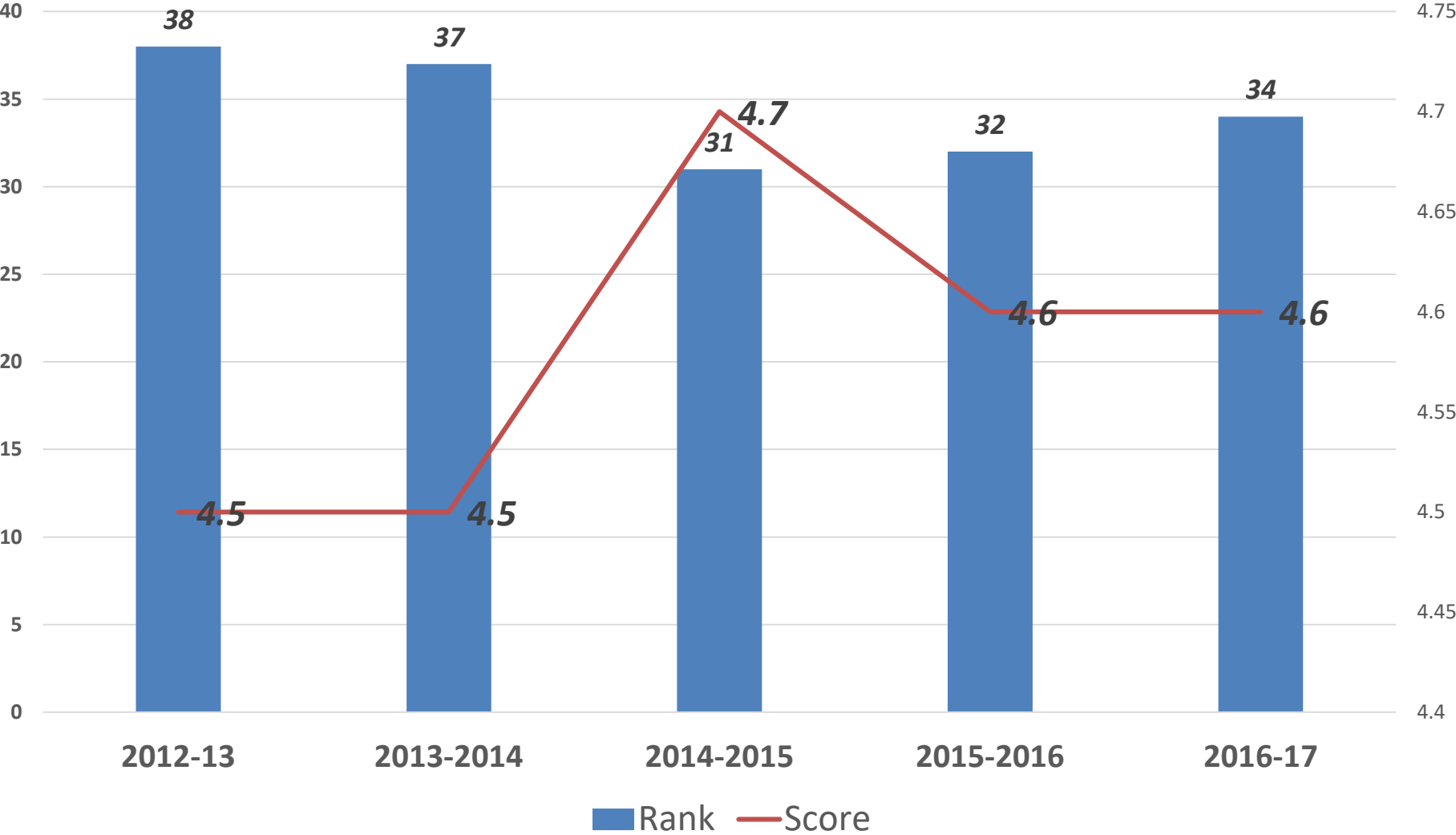
The Global Competitiveness Report 2016-2017

- Switzerland, Singapore and the United States remain the three world's most competitive economies.
- “Declining openness in the global economy is harming competitiveness and making it harder for leaders to drive sustainable, inclusive growth,” said **Klaus Schwab**, Founder and Executive Chairman, World Economic Forum.



Thailand's Global Competitiveness Index: Rank 34

Source: World Economic Forum

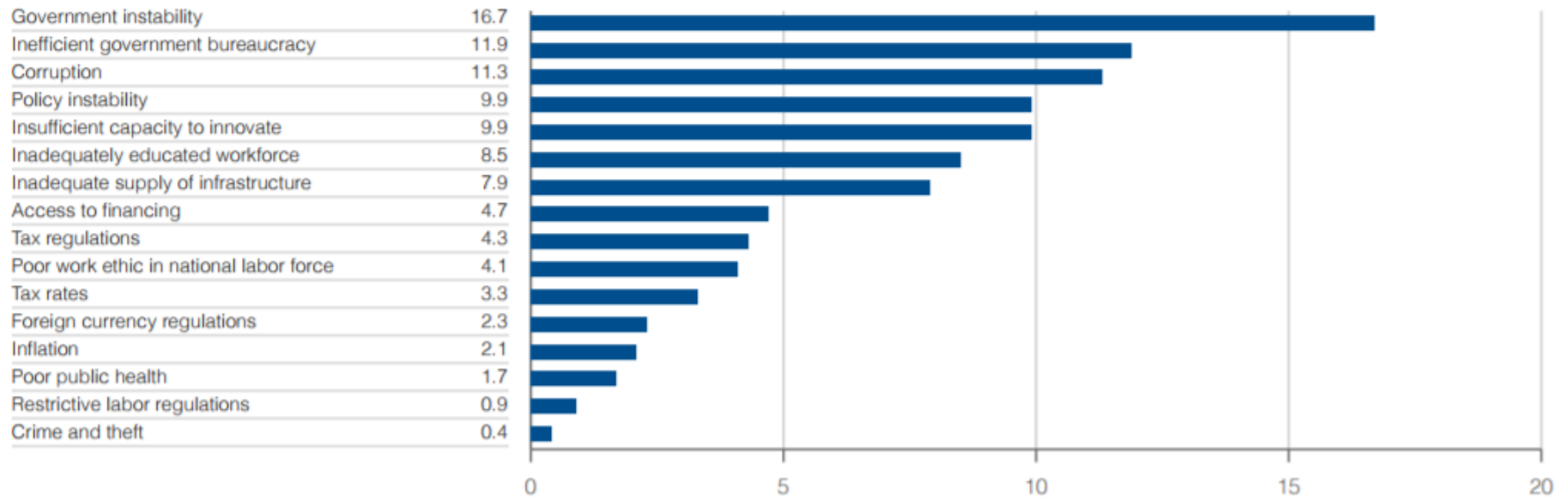


Thailand's problems

Government instability, inefficient bureaucracy, corruption, policy instability, insufficient capacity to innovate, inadequately educated workforce, inadequate supply of infrastructure

Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2016

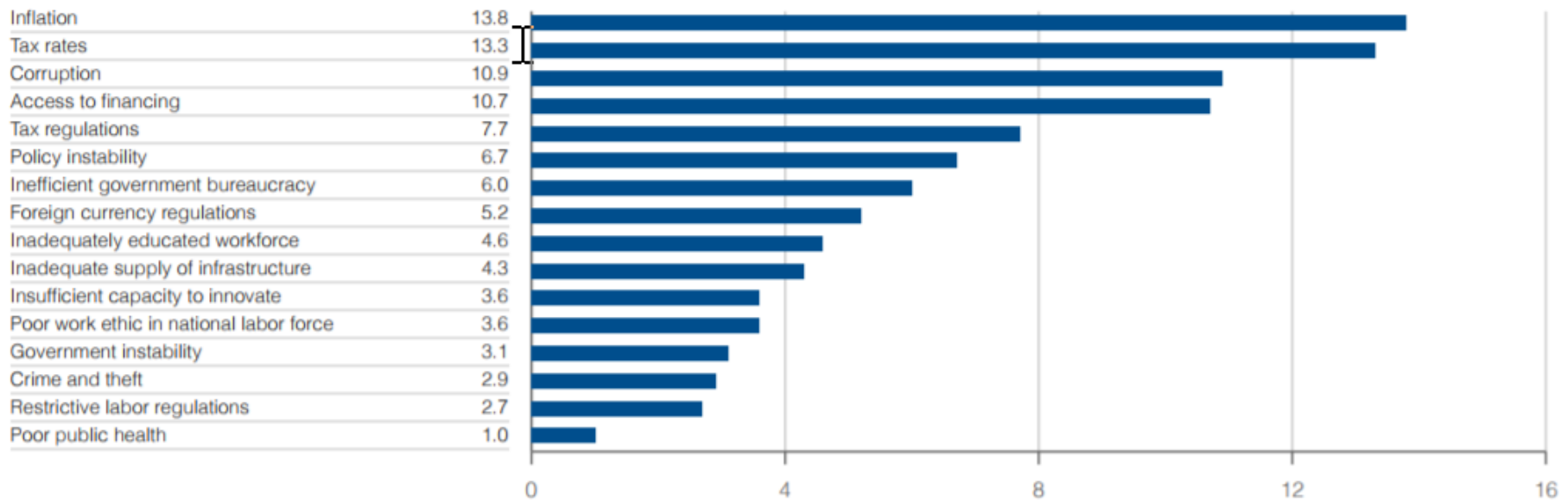


A country rank 43th, with score 4.5

Russian Federation

Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2016



Singapore: 2nd Rank: score 5.7

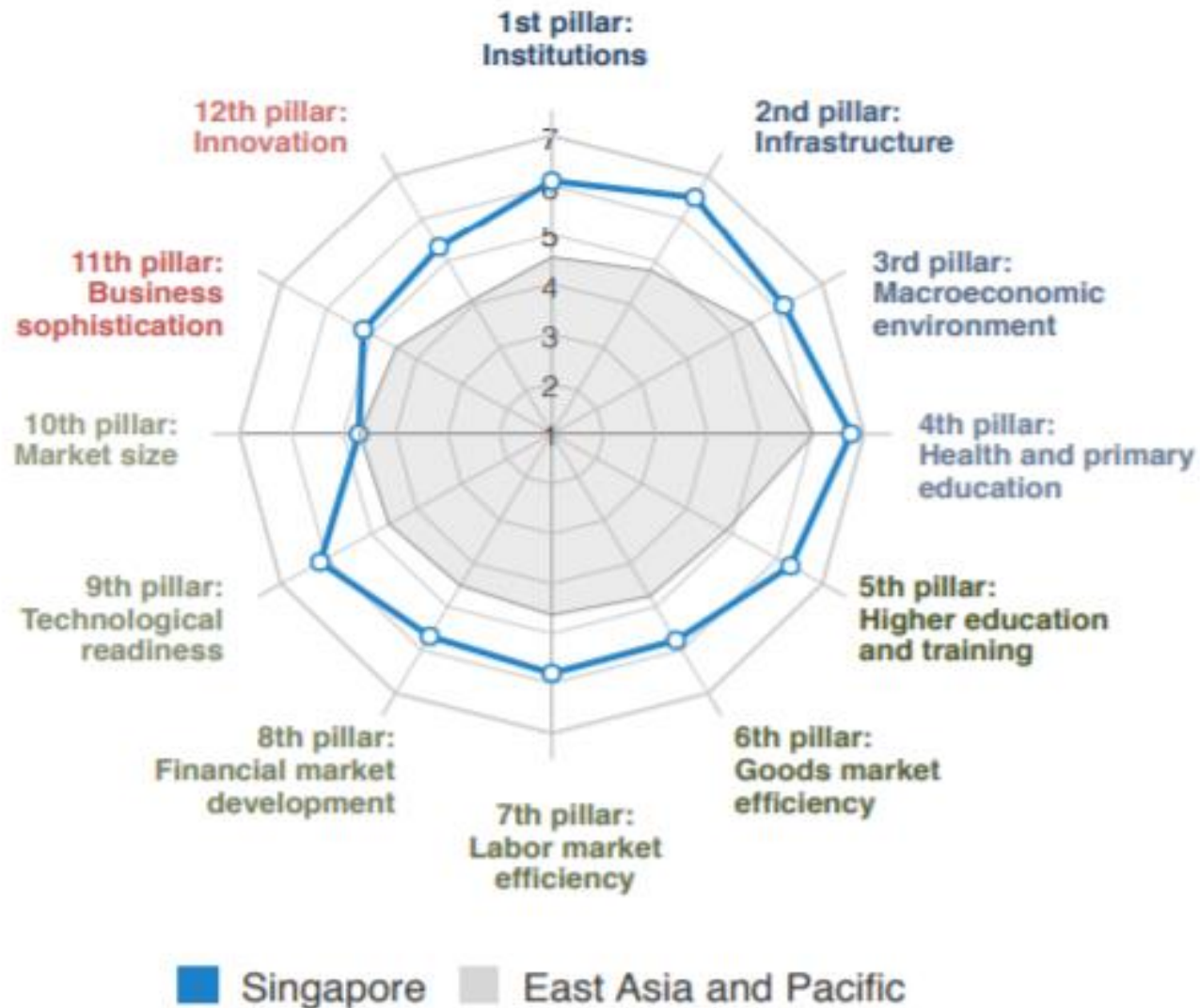


Table 1: The Global Competitiveness Index

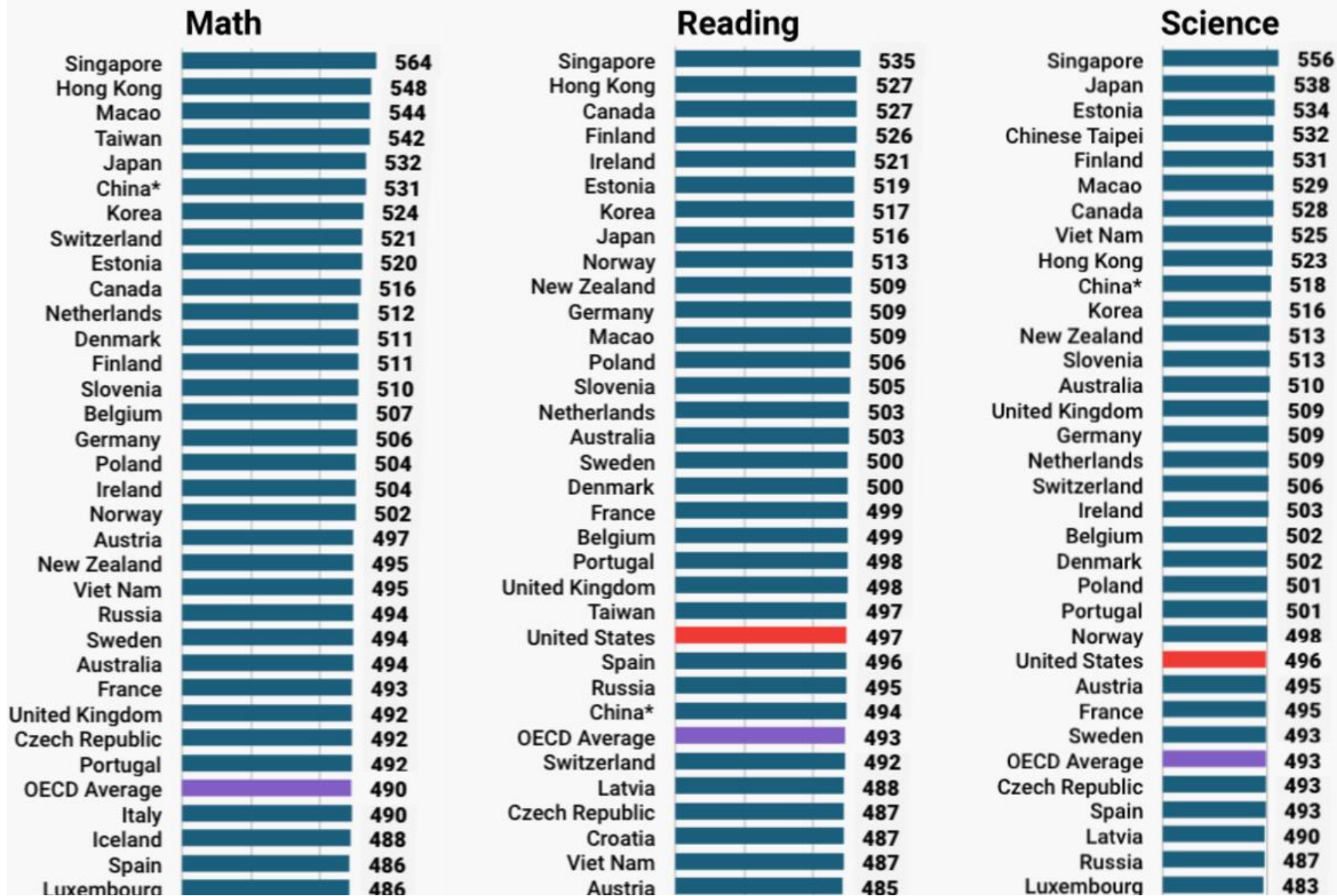
2016-2017

Country/Economy	OVERALL INDEX	
	Rank	Score
Switzerland	1	5.81
Singapore	2	5.72
United States	3	5.70
Netherlands	4	5.57
Germany	5	5.57
Sweden	6	5.53
United Kingdom	7	5.49
Japan	8	5.48
Hong Kong SAR	9	5.48
Finland	10	5.44

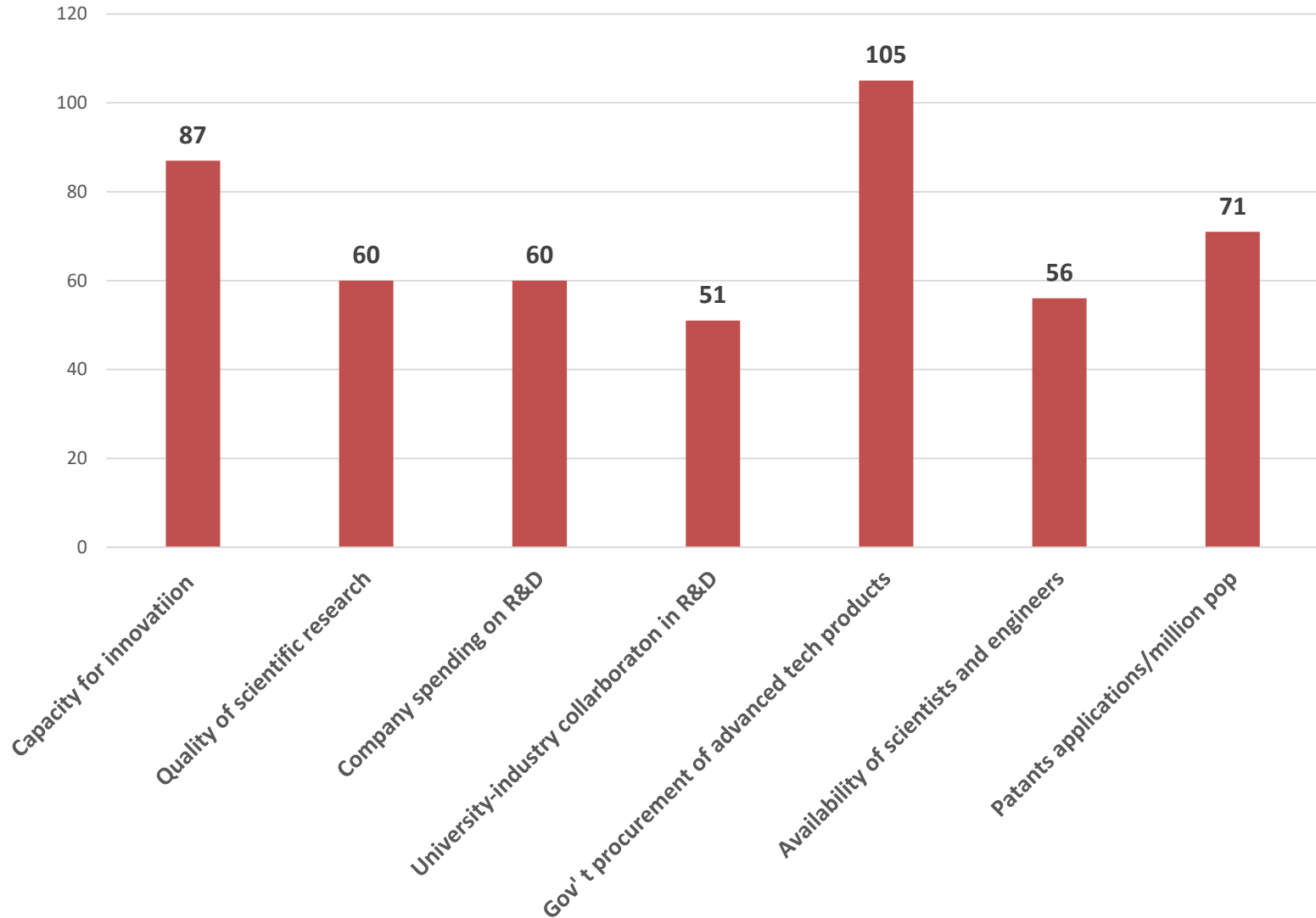
WEF's recommendations for Thailand

- The country needs to be concerned about sustained growth, and pay attention to more complex areas of competitiveness, where the shortcomings are.
- Despite having come up with the "Thailand 4.0" policy in order to focus more on *innovation and technology*, it would take some time for the necessary development to take place and move the country out of the middle-income trap.
- The WEF recommended Thailand attach high importance to and seriously develop its *human resources* related to the education system, focusing on the quality of primary education, internet use in schools, future workforce skills, school life expectancy, and *critical thinking in teaching*.

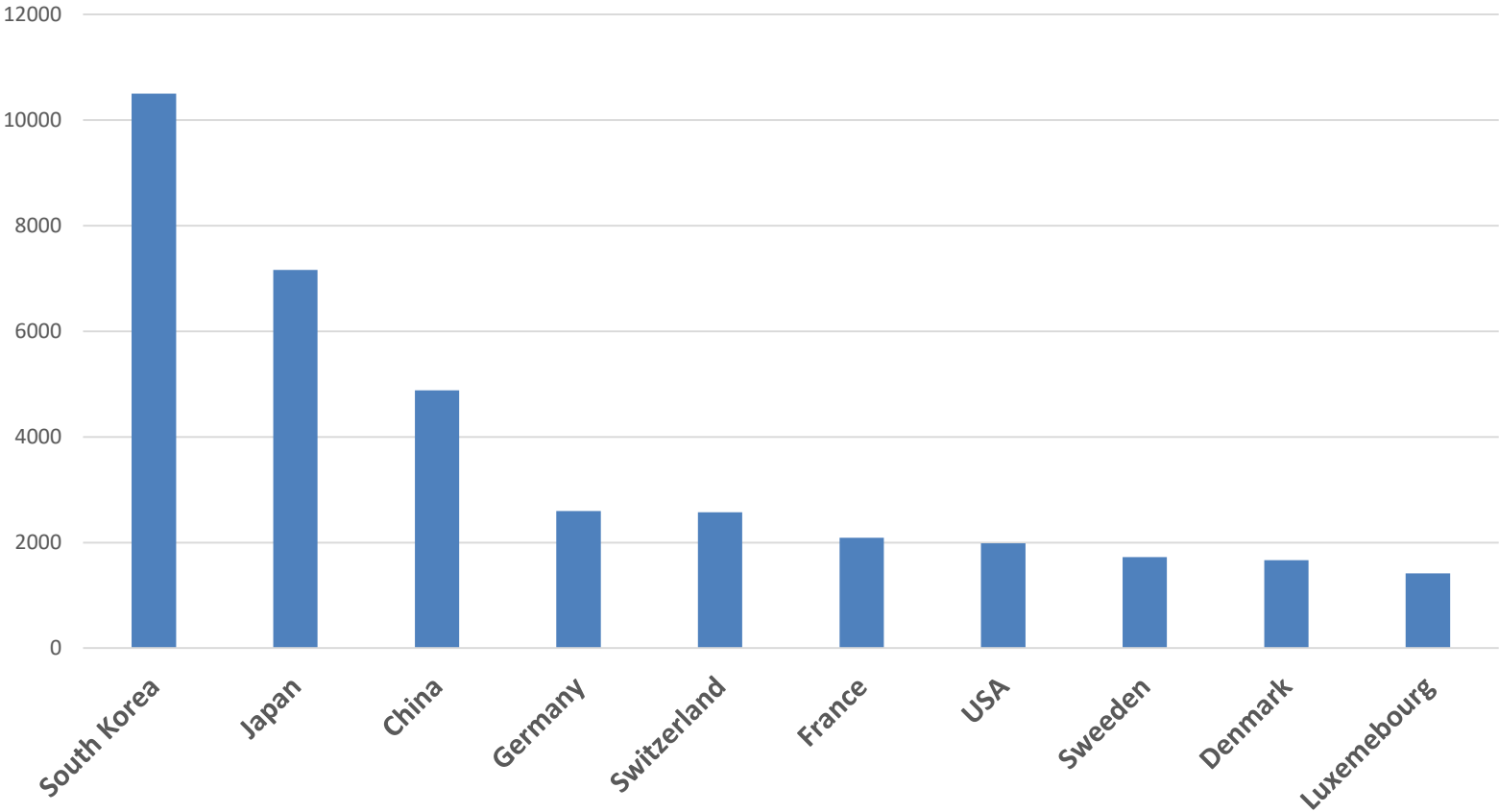
2015 PISA AVERAGE SCORES



Thailand's Rank of Innovation: among 148 countries



Number of patents per GDP (2012)



3. Competitiveness of Thai Manufacturing sector via BCG model

- Boston Consulting Group (BCG) model
- Export the commodities which are growing faster than world trade volume (high income elasticity of demand)
- Manufacture commodities which gain the world market share (revealing competitiveness)

Competitive Positioning

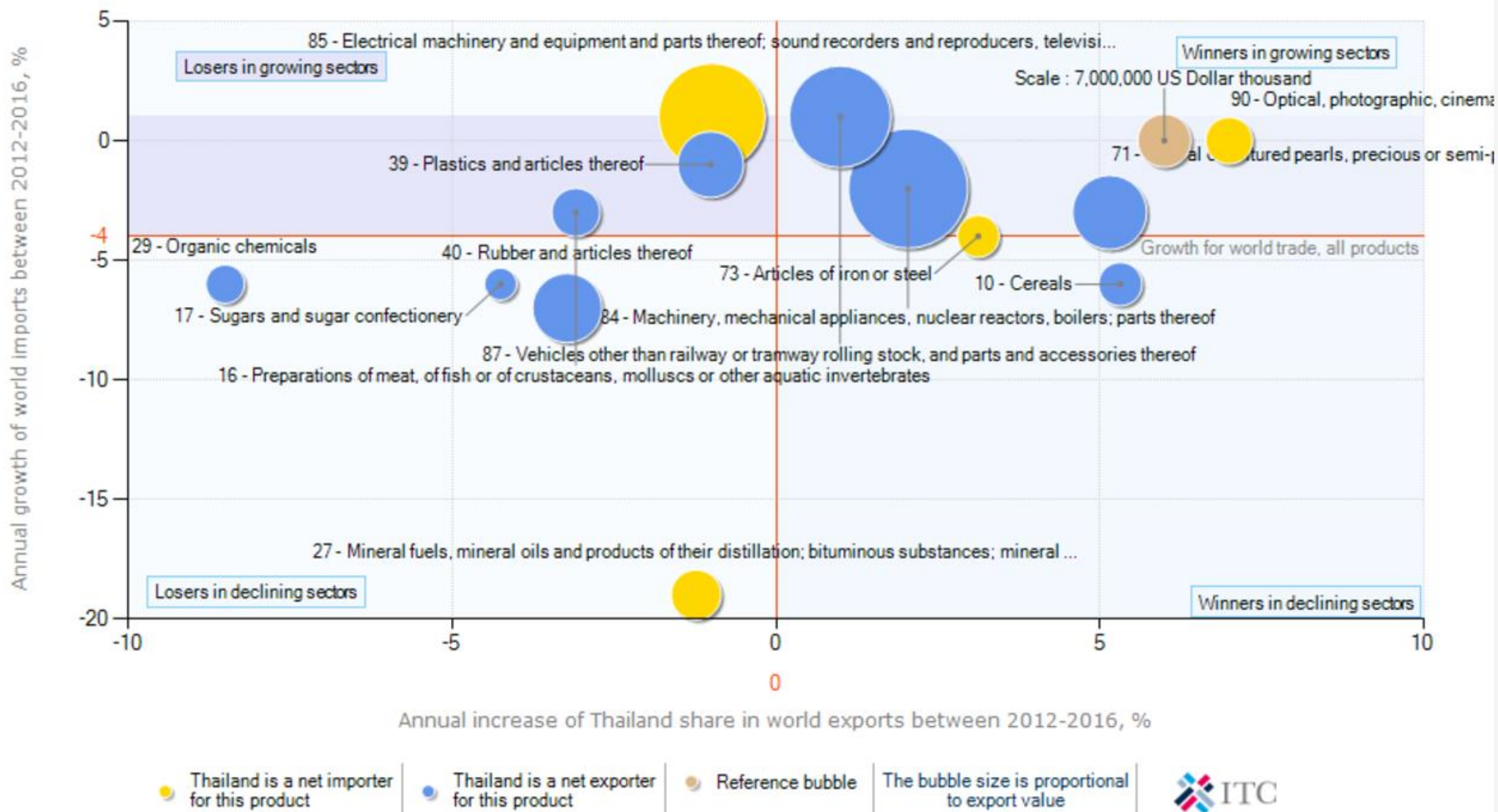
Revealed competitiveness ($\dot{Z} > 0$) and income elasticity of demand (η)

Export the right commodity

Export the commodity right

	Declining share of that product in world trade ($\eta < 1$) Declining sectors	Rising share of that product in world trade ($\eta > 1$) Growing (dynamic sectors)
Gaining world market share ($\dot{Z} > 0$) Winners	Falling stars (Cash Cows)	Rising stars (Stars)
Losing world market share ($\dot{Z} < 0$) Losers	Retreat (Dog) (A good idea to move to other growing industry)	Lost Opportunity (Problem Child, requiring helping hand, despite growing rapidly)

Growth of national supply and international demand for products exported by Thailand in 2016



Michael Porter (1990)

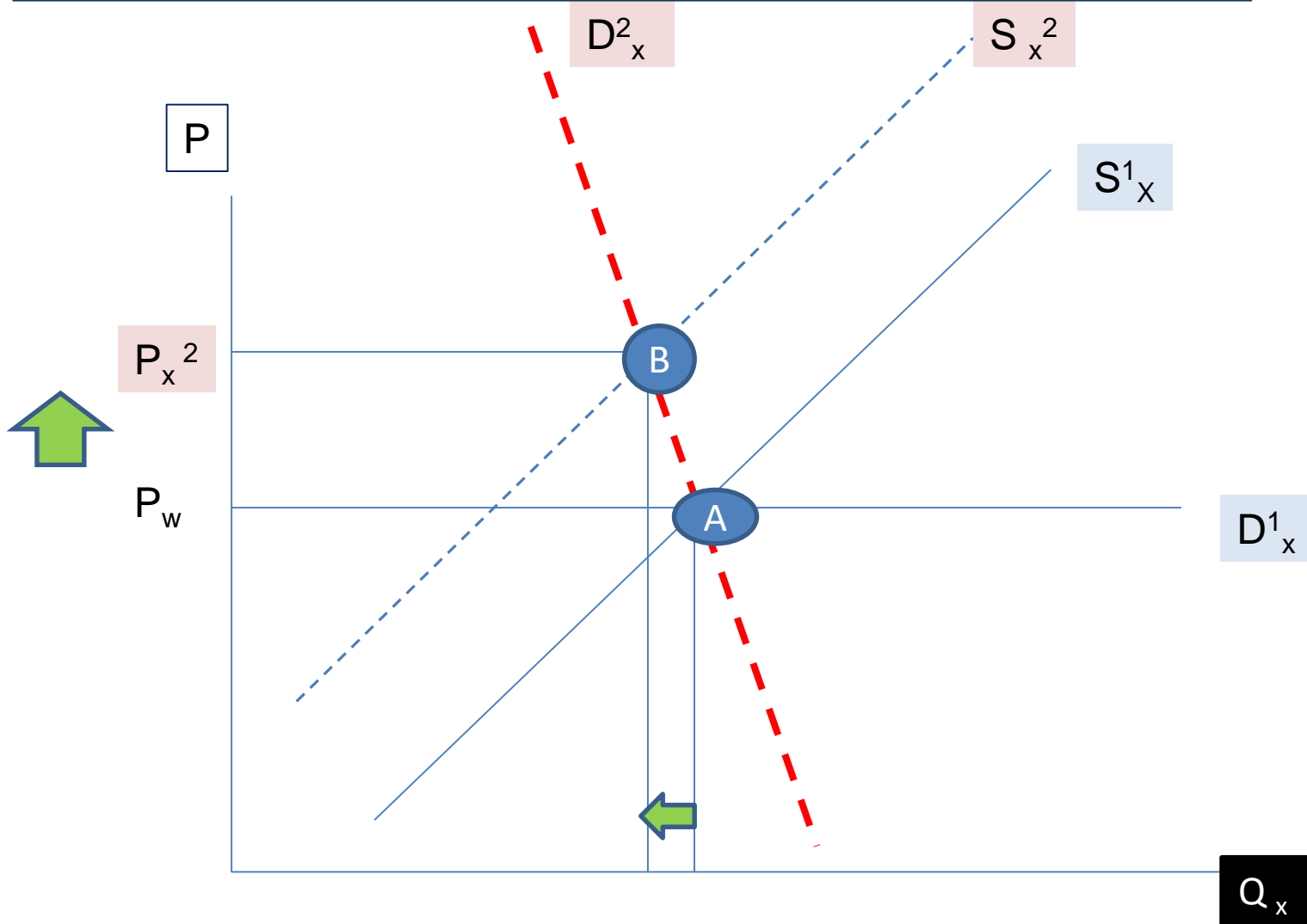
The Competitive Advantages of Nations

- There are two basic types of competitive advantages: **lower cost** and **product differentiation**.
- **Pure cost advantages** are less sustainable than **product differentiation**: Any new comer with lower costs can nullify a firm's cost advantage.
- Differentiation is the ability to provide ***unique and superior value to buyers*** in terms of product quality, special features, or after-sale service.
- Examples: differentiation in services provided by banks, supermarkets, and gasoline stations.

More advices from Michael Porter

- **Differentiation** allows a firm to command a **premium price**, which leads to superior profitability provided costs are comparable to those of competitors.
- Pure cost advantages are more vulnerable because new product designs or product **differentiation can eliminate** cost advantage.
- The government can raise the probability of gaining competitive advantage but lacks the power to create advantage by itself.

Innovation raises unit cost of the product, but it can fetch higher product prices, as the demand become **less** inelastic



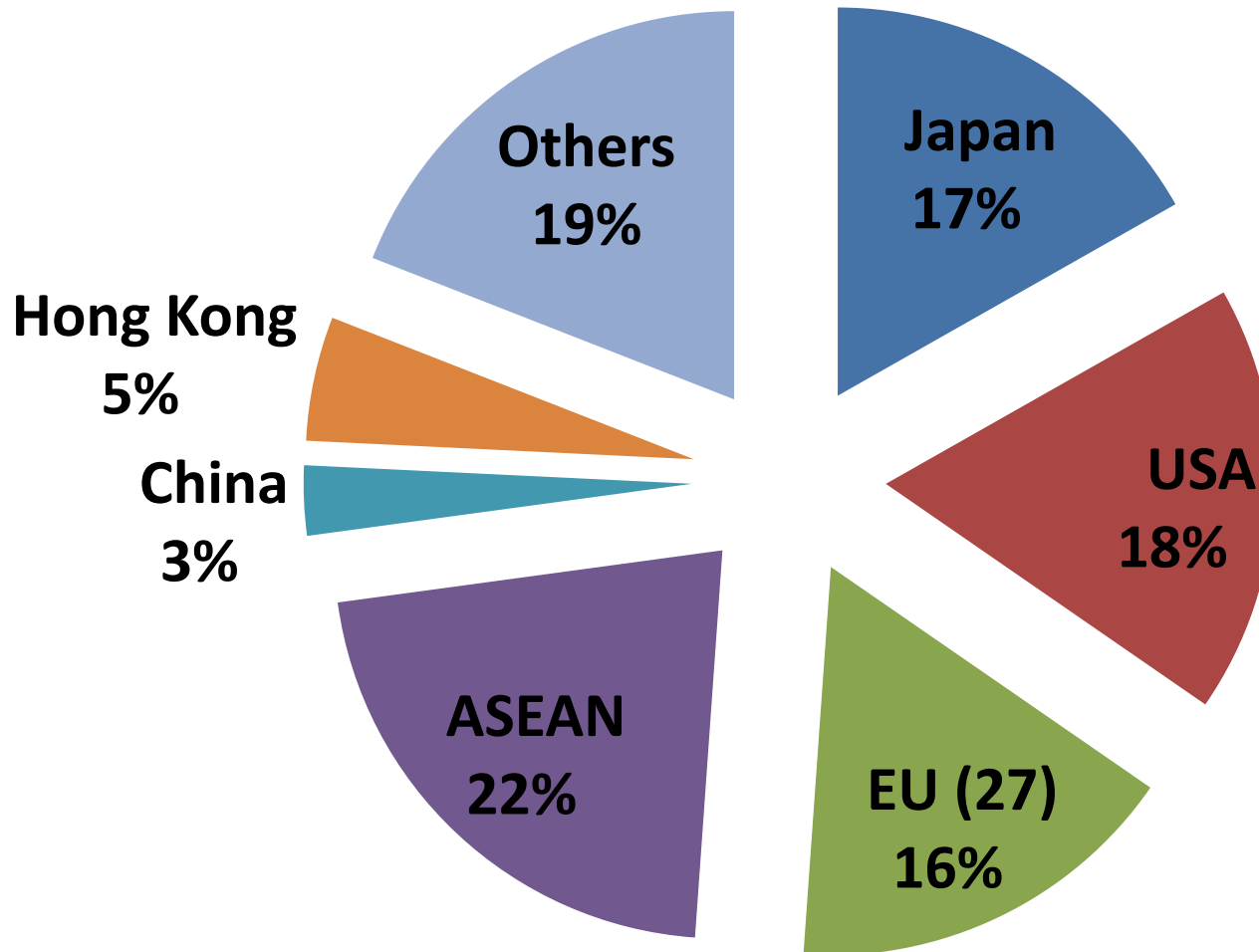
Higher export values, despite lower quantity of exports
Due to product differentiation through innovation

4. Diversification of Thai exports

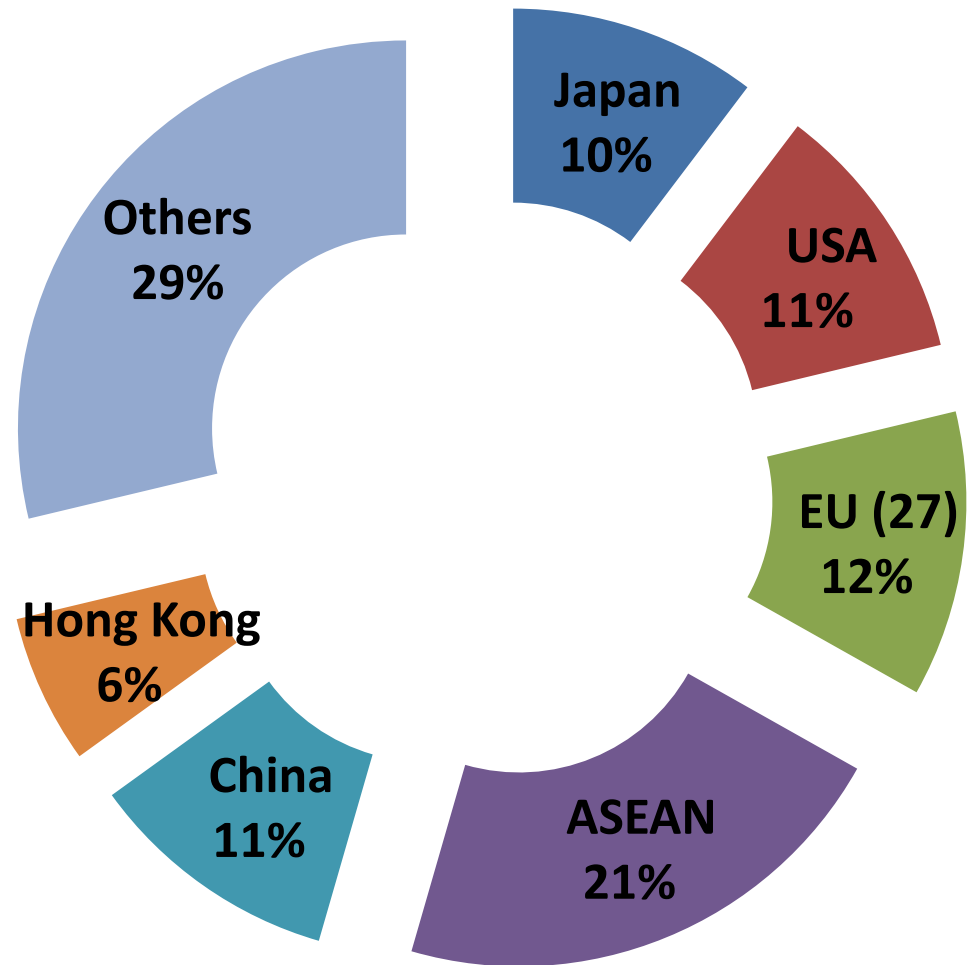
Product and market diversification

- A country is considered competitive in products in which it is increasing its world market share.
- An export product is considered dynamic in world trade if it is *growing faster* than the average for all products (either rising or falling stars).
- Thailand's exports were in the rising stars category for 54% in 1996, but they *fell* to 15% by 2000.
- Ten years after this study, the figures were totally different in 2006.
- Thailand did not do as well as its major competitors during the 1996-2000 boom in electronic exports.
- Thus the share of loss opportunity category *increased* from 3% to 43% of total exports.

Exports market diversification: 1995

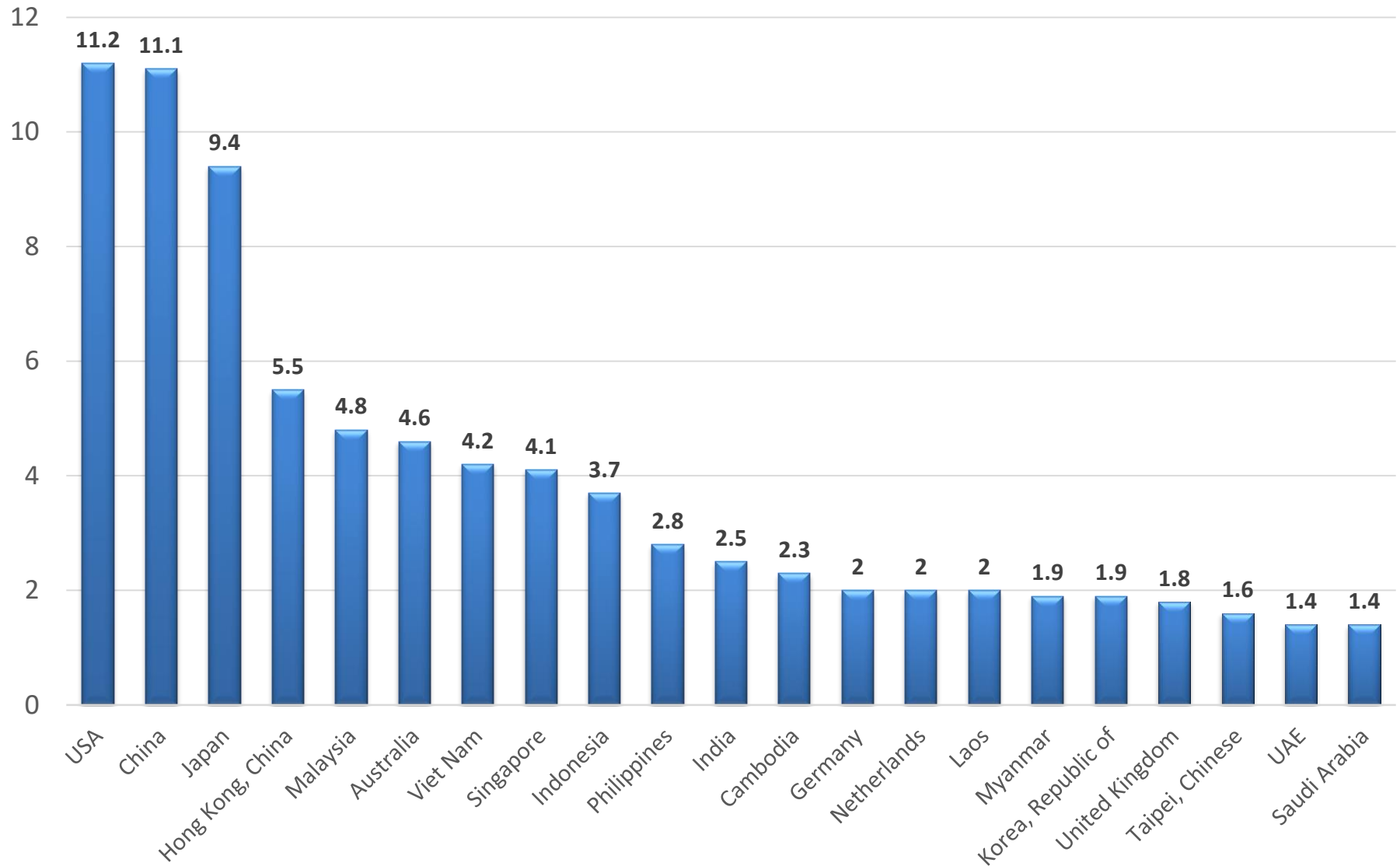


Export market diversification in 2009

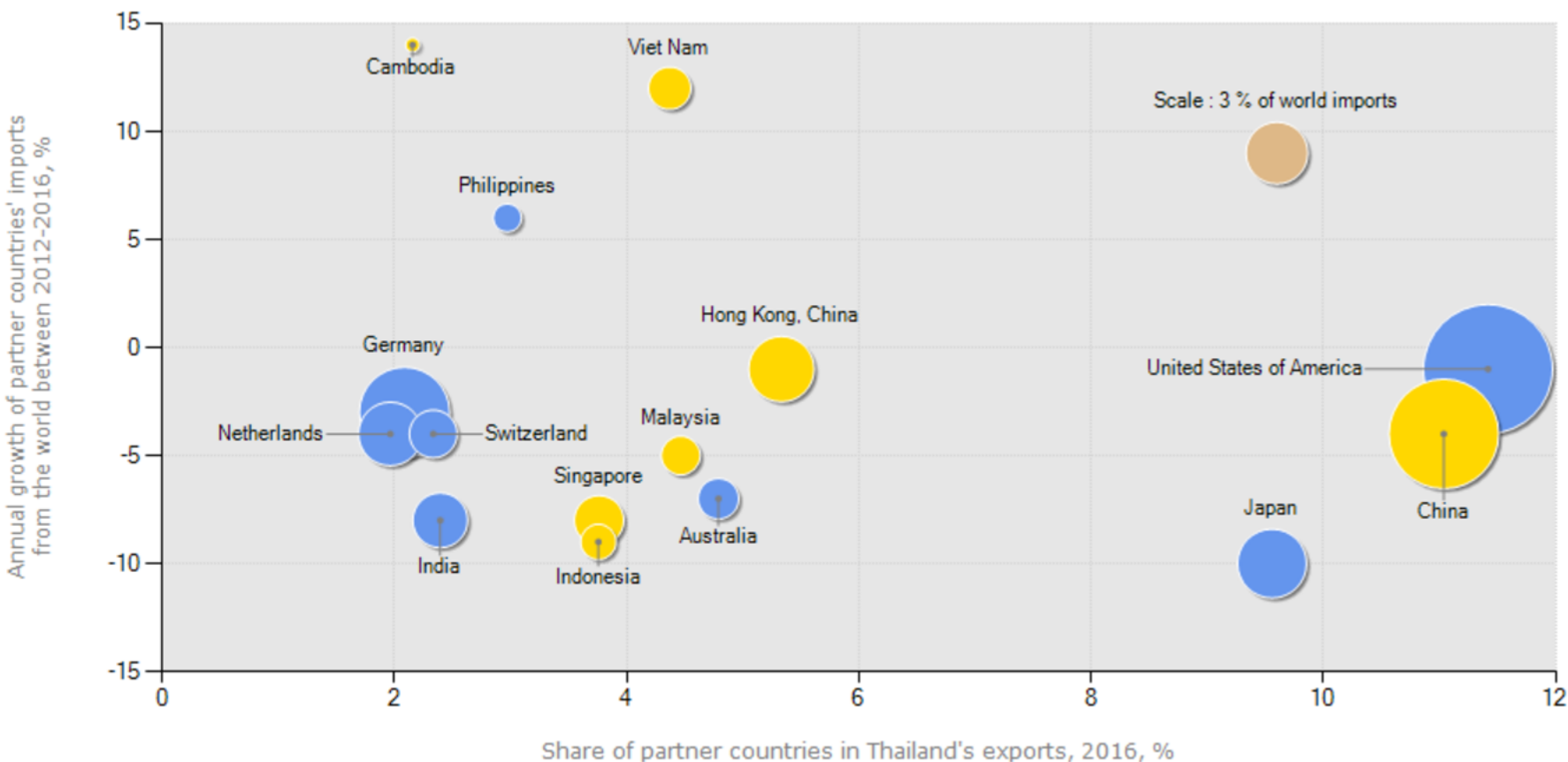


Thailand's export market diversification

Share in Thailand's exports: 2015



Prospects for market diversification for a product exported by Thailand in 2016
 Product : TOTAL All products



● Thailand export growth to partner < Partner import growth from the world

● Thailand export growth to partner > Partner import growth from the world

● Reference bubble

The bubble size is proportional to the share in world imports of partner countries for the selected product



Review Questions

- *What was the geographical diversification of Thai exports in 2016?*
- *How was the manufacturing sector affected by the 2009 global recession and global growth slowdown in 2016?*
- *What went wrong with Thailand's exports in between 2014 and 2016?*
- *Would Thai exports resume its growth path in 2017?*